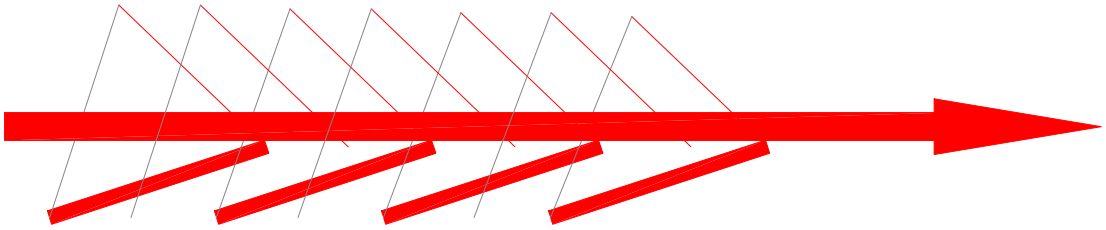
SHEAR 97 & ShearCAD

< SYSTEM MANUAL >



Manual Updated May 2022

Note: Installation and Setup Instructions are in the last section of this manual.

COLUMBIA BASIN REBAR INC

JOB NAME: FORUM PLACE
CUSTOMER: cavan construction
DESCRIPTION: FOUNDATION AND SLABS

RELEASE/LOAD SYMBOL: F5
Printed 06/15/08 12:27 PM

SHEAR 97 Tag Style 38 color laser printer tag (3 per 8.5x11 inch sheet)

12-00

JOB #	RELEASE	MARK	SAC	CUSTOMER PO
T678	1		8624	T678

TAG NO	TOTAL PIECES	TOTAL BUNDLES	COMMENTS	CUSTOMER JOB NO
1	3	1	LABOR: THREAD LEFT	7537

QUANTITY	SIZE	LENGTH	GRADE	WEIGHT
3	#11	12-00	60	191LB

TAG NO 1 F5
QUANTITY 3
SIZE #11
GRADE 60
LENGTH 12-00
CUT LENGTH 12-00
MARK
JOB-REL T678-1
WEIGHT 191LB

COLUMBIA BASIN REBAR INC

JOB NAME: FORUM PLACE
CUSTOMER: cavan construction
DESCRIPTION: FOUNDATION AND SLABS

RELEASE/LOAD SYMBOL: F5
Printed 06/15/08 12:27 PM

TYPE 17

Angles 90-90

SPAC @ 6"

JOB #	RELEASE	MARK	SAC	CUSTOMER PO
T678	1	501	8624	T678

TAG NO	TOTAL PIECES	TOTAL BUNDLES	COMMENTS	CUSTOMER JOB NO
2	4	1		7537

QUANTITY	SIZE	LENGTH	GRADE	WEIGHT
4	#5	8-08	60	38LB

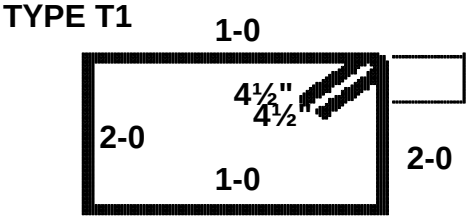
TAG NO 2 F5
QUANTITY 4
SIZE #5
GRADE 60
LENGTH 9-00
CUT LENGTH 8-08
MARK 501
JOB-REL T678-1
WEIGHT 38LB

COLUMBIA BASIN REBAR INC

JOB NAME: FORUM PLACE
CUSTOMER: cavan construction
DESCRIPTION: FOUNDATION AND SLABS

RELEASE/LOAD SYMBOL: F5
Printed 06/15/08 12:27 PM

TYPE T1



Angles 135-90-90-90-135

BM B2A TIES @ 8"

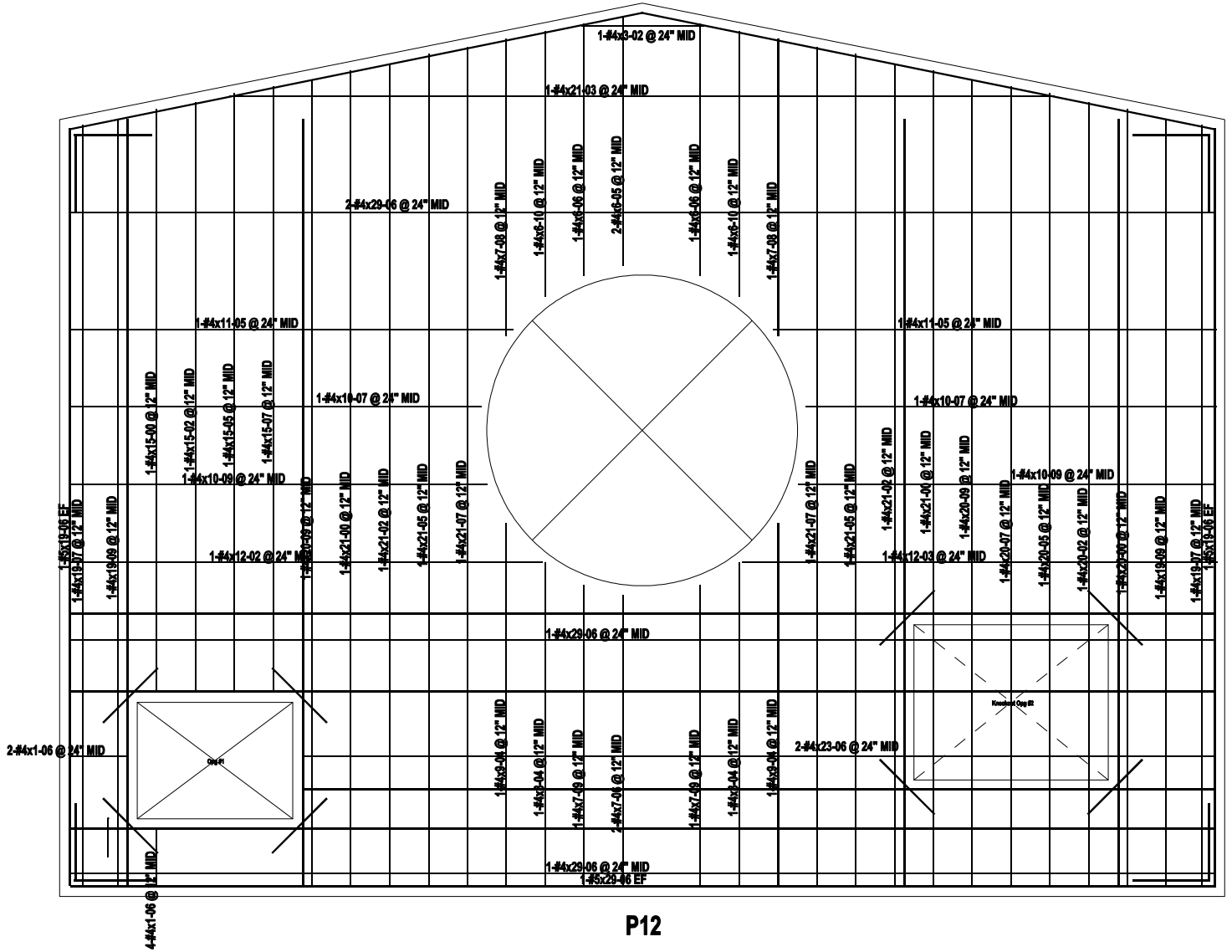
JOB #	RELEASE	MARK	SAC	CUSTOMER PO
T678	1	401	8624	T678

TAG NO	TOTAL PIECES	TOTAL BUNDLES	COMMENTS	CUSTOMER JOB NO
3	23	1	EPOXY COATED	7537

QUANTITY	SIZE	LENGTH	GRADE	WEIGHT
23	#4	6-05	60	104LB

TAG NO 3 F5
QUANTITY 23
SIZE #4
GRADE 60
LENGTH 6-09
CUT LENGTH 6-05
MARK 401
JOB-REL T678-1
WEIGHT 104LB

Tilt-Wall Panel automatically drawn by ShearCAD



P12

TILT-WALL PANEL P12			
QTY	SIZE	MK/LEN	NOTE
Panel # P12 Thickness = 7½" Knockout Opg 2			
2	#5	19-06	VERT EDGE LEFT 1EF
2	#5	19-06	VERT EDGE RIGHT 1EF
1	#4	19-07	VRT @ 12" LT OP
1	#4	19-09	VRT @ 12" LT OP
4	#4	1-06	VRT @ 12" BLW OP
1	#4	15-00	VRT @ 12" ABV OP
1	#4	15-02	VRT @ 12" ABV OP
1	#4	15-05	VRT @ 12" ABV OP
1	#4	15-07	VRT @ 12" ABV OP
1	#4	20-09	VRT @ 12" BTW OP
1	#4	21-00	VRT @ 12" BTW OP
1	#4	21-02	VRT @ 12" BTW OP
1	#4	21-05	VRT @ 12" BTW OP
1	#4	21-07	VRT @ 12" BTW OP
2	#4	9-04	VRT @ 12" BLW OP
2	#4	7-08	VRT @ 12" ABV OP
2	#4	8-04	VRT @ 12" BLW OP
2	#4	6-10	VRT @ 12" ABV OP
2	#4	7-09	VRT @ 12" BLW OP
2	#4	6-06	VRT @ 12" ABV OP
2	#4	7-06	VRT @ 12" BLW OP
2	#4	6-05	VRT @ 12" ABV OP
1	#4	21-07	VRT @ 12" RT OP
1	#4	21-05	VRT @ 12" RT OP
1	#4	21-02	VRT @ 12" RT OP
1	#4	21-00	VRT @ 12" RT OP
1	#4	20-09	VRT @ 12" RT OP
1	#4	20-07	VRT @ 12" RT OP
1	#4	20-05	VRT @ 12" RT OP
1	#4	20-02	VRT @ 12" RT OP
1	#4	20-00	VRT @ 12" RT OP
1	#4	19-09	VRT @ 12" RT OP
1	#4	19-07	VRT @ 12" RT OP
2	#5	29-06	HORZ EDGE BOT 1EF
2	#5	503	HORZ EDGE TOP
1	#4	29-06	HOR @ 24" BLW OP
2	#4	1-06	HOR @ 24" LT OP
2	#4	23-06	HOR @ 24" RT OP
1	#4	29-06	HOR @ 24" BTW OP
1	#4	12-02	HOR @ 24" LT OP
1	#4	12-03	HOR @ 24" RT OP
1	#4	10-09	HOR @ 24" LT OP
1	#4	10-09	HOR @ 24" RT OP
1	#4	10-07	HOR @ 24" LT OP
1	#4	10-07	HOR @ 24" RT OP
1	#4	11-05	HOR @ 24" LT OP
1	#4	11-05	HOR @ 24" RT OP
2	#4	29-06	HOR @ 24" ABV OP
1	#4	21-03	HOR @ 24" SLOPING AREA
1	#4	3-02	HOR @ 24" SLOPING AREA
4	#5	29-06	OPG #1 HORIZ EXTRA 1EF
4	#5	19-09	OPG #1 VERT EXTRA 1EF
2	#5	23-06	OPG #2 HORIZ EXTRA 1EF
2	#5	29-06	OPG #2 HORIZ EXTRA 1EF
4	#5	19-09	OPG #2 VERT EXTRA 1EF
8	#5	504	CORNER BARS 1EF
16	#5	2-00	DIAG BARS
15	#3	302	Slab Dowels @ 24"

Your Logo Here

ALAMO IRON WORKS
DETAILING PLACEMENT LIST

LABEL	QTY	SIZE	LENGTH	MARK	TYP	A	B	C	D	E	F/R	G	J	O	H	K
Panel Thickness = 7½" Opg 2 is a knockout opg																
3	2	#5	19-07										VERT EDGE LEFT 1EF			
4	2	#5	19-07										VERT EDGE RIGHT 1EF			
5	1	#4	19-07										VRT @ 12" LT OP			
6	1	#4	19-11										VRT @ 12" LT OP			
7	4	#4	1-06										VRT @ 12" BLW OP			
8	1	#4	15-02										VRT @ 12" ABV OP			
9	1	#4	15-05										VRT @ 12" ABV OP			
10	1	#4	15-08										VRT @ 12" ABV OP			
11	1	#4	15-11										VRT @ 12" ABV OP			
12	1	#4	21-03										VRT @ 12" BTW OP			
13	1	#4	21-06										VRT @ 12" BTW OP			
14	1	#4	21-09										VRT @ 12" BTW OP			
15	1	#4	22-00										VRT @ 12" BTW OP			
16	1	#4	22-03										VRT @ 12" BTW OP			
17	2	#4	9-04										VRT @ 12" BLW OP			
18	2	#4	8-05										VRT @ 12" ABV OP			
19	2	#4	8-04										VRT @ 12" BLW OP			
20	2	#4	7-08										VRT @ 12" ABV OP			
21	2	#4	7-09										VRT @ 12" BLW OP			
22	2	#4	7-04										VRT @ 12" ABV OP			

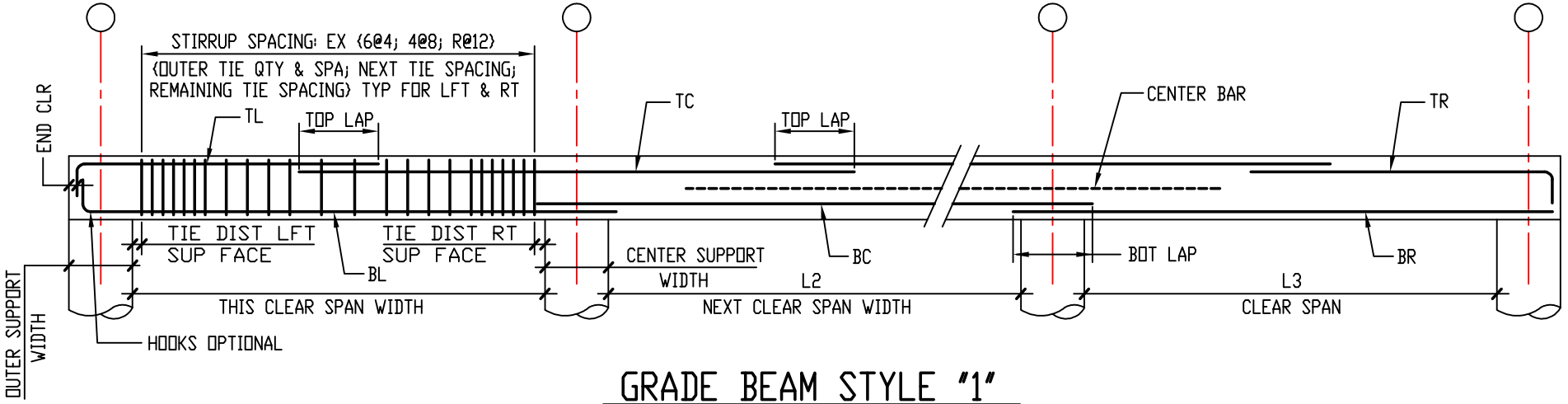
#2
#3
#4 = 208
#5 = 82
#6
#7

#8
#9
#10
#11
OTHER
SHEET = 290
LOAD = 1272

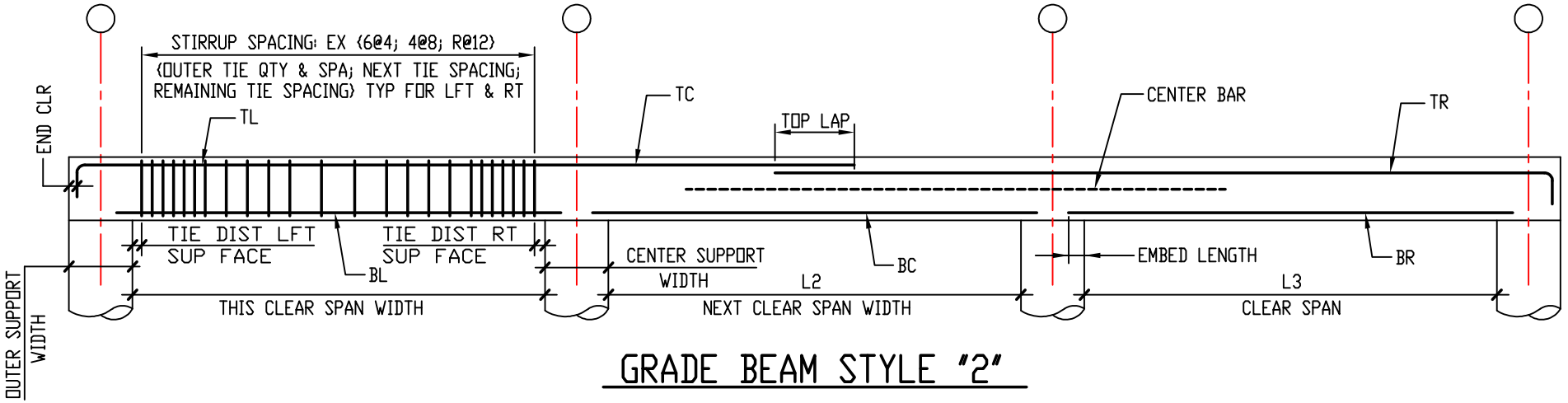
CUSTOMER: Jones Construction
JOB: TEST JOB
LOCATION:
CITY:
PO/JOB NO:
TEL NO.

SHIP:

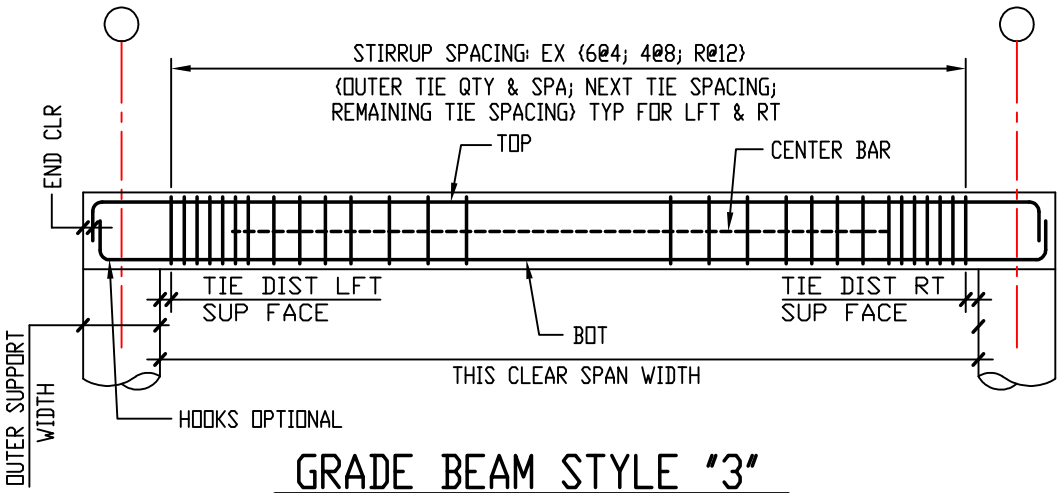
JOB NO: T678-26
DR: **DATE:** 11-14-2004
REVISED:
REF. SH:
SHEET 1 OF 4



GRADE BEAM STYLE "1"



GRADE BEAM STYLE "2"



GRADE BEAM STYLE "3"

ALAMO IRON WORKS
943 Coliseum Road
San Antonio, TX 78219
Ph. (210) 223-6161
Fax (210) 704-8232

Contractor: JONES CONSTRUCTION
Project: TEST JOB
Location:
Material For:
Material:

Job No.: T678
Release No.: 26
SAC code:
P.O. No.:
Shipper No.:
Sheet No.: 1 of 2

D.O.T.:
D.O.T. ID#:
Fab Date:

Load Color:
Release Symbol:
Release Color:

Input By:
Detailer:
Phone:

WEIGHT SUMMARY (1271 LBS)

	HEAVY BENT		LIGHT BENT		STRAIGHT		TOTAL	
SIZE	Qty	Weight	Qty	Weight	Qty	Weight	Qty	Weight
#3 Gr 60			15	23			15	23
#4 Gr 60					61	576	61	576
#5 Gr 60	10	97			38	575	48	672
TOTALS	10	97	15	23	99	1151	124	1271

Longest bar is: size 5, Straight, 29-06 Stock Rebar lbs = 0 Non-Stock Rebar lbs = 1271

QTY	SZ/GR	LENGTH	MARK	TYP	A	B	C	D	E	F/R	G	J	O	H	K	LB
8	#5 Gr60	4-00	5CB1	17		2-00	2-00									33
2	#5 Gr60	30-07	5TEBP1	3		15-03¼	15-03¼						28-06¼	7-07¼	13-03	64
15	#3 Gr60	4-00	3DBP1	2	1-00	3-00										23

QTY	SIZE	LENGTH	MARK	LB
8	5	29-06		246
2	5	23-06		49
8	5	19-09		165
4	5	19-07		82
16	5	2-00		33

QTY	SIZE	LENGTH	MARK	LB
4	4	29-06		79
1	4	24-01		16
2	4	23-06		31
2	4	22-03		30

QTY	SIZE	LENGTH	MARK	LB
2	4	22-00		29
2	4	21-09		29
2	4	21-06		29
2	4	21-03		28
1	4	20-11		14

Just for Job Lines 32 thru 49

JOB #	CONTRACTS	START DATE	TONS	UNSH	SHPD
32 1351	RUTTURA & SONS KOREAN AIR CARGO TERMINAL	RICK PEA	138	138	0
33 23590	Franklin Fabricating Lafayette Theaters		1092	1091	1
34 DEMOW	ACME CONSTRUCTION Lincoln School		1	1	0
35 V0005	CLEVELAND CONSTRUCTION LOWE'S-NOTTINGHAM SQUARE		77	77	0
36 V0007	W.B. VENABLES NEW PUBLIC ARCHIVES		1	1	0
37 3151	THE SIX -M- CO.INC NOISE ABAT-B850-509-424-B		301	301	0
38 R2178	JC COMMERCIAL NRH20		0	0	0
39 0238	Quantum Construction Operating Shelter	Mike	6	0	6
40 548	SMITH CONSTRUCTION Optimum Shear Test njdot		0	0	0
41 PCSF	PACIFIC COAST FORMSAVERS PACIFIC COAST FORMSAVERS		1	0	1
42 V0069	BELFAST VALLEY 1234567890 POLICE/AUTO SHOP FAC.		0	0	0
43 U742	HARTFORD STEEL ERECTORS RECONSTRUCT RTE I-95	07/28/97	17	17	0
44 U764	ADVANCE STEEL REINF CO RECONSTRUCTION OF I-95	05/01/97	14	14	0
45 V0040	PERINI CONSTRUCTION INC RECONSTRUCTION OF I-95	JOE PROS	25	14	10
46 TESTMM	Acme Construction RECONSTRUCTION OF I-95		0	0	0
47 9956	 REFRIGERATED STORAGE FACI		317	303	13
48 541T	VETERANS ST/AMERICAN BR. REINF FOR TOP INVERT W.W.		91	91	0
49 612	POMEROY CORP RICHMOND SAN RAFAEL BRDG.		0	0	0
		TOTALS	2082	2050	32

ALAMO IRON WORKS
LOADING REPORT

Shipper Number : 98130
Project Name : WATER FACILITY Project
Contractor Name : CAVAN CONSTRUCTION
City :
Delivery Day TUESDAY Date 11/30/04 8:30 AM

ALAMO Job No: 6789
Load No: 67
Customer Job #: 7654
P.O. Number: po123
Deliver To:

Tested Job :
Fab Date : 11/22/04
Accessories : WIRE MESH
: CHAIRS
Special Instructions :
:

X 5

RELEASE #	SYM	MATERIAL FOR	SAC	COLOR	WEIGHT	SEQ
44		SLABS AND MASONRY			24370	1
DD		TILTUP PANEL			4921	2
		LOAD COLOR: BLUE		TOTAL	29291	

SIZE	STRAIGHT	HEAVY	LIGHT	TOTAL	LONG	MILL 1	MILL 2	MILL 3	LN. FT.
4GR60	1002			1002	5-00	345			1,500
5GR60	164	15		179	23-00	123			172
6GR60	24032			24032	32-00	2468			16,000
14GR60	298			298	13-00	3456			39
RW2.9	3780			3780					12
TOTALS	29276	15		29291	32-00				

ALAMO IRON WORKS
BILL OF LADING

Shipper Number : 98130
Project Name : WATER FACILITY Project
Address : Denver Airport
City :
Contractor Name : CAVAN CONSTRUCTION
Load Color : BLUE

ALAMO Job No: 6789
Load No: 67
Customer Job #: 7654
P.O. Number: po123
Date Ordered:

RELEASE #	SYM	MATERIAL FOR	SAC	COLOR	WEIGHT
44		SLABS AND MASONRY		1	24370
DD		TILTUP PANEL		2	4921
				TOTAL	29291

Accessories : WIRE MESH
: CHAIRS
Special Instructions :
:

Picked Up By_____ Company_____ Date_____
Trailer/Container No_____ Shipper_____

DELIVERY DAY TUESDAY DATE 11/30/04 8:30 AM

Received By:_____ Date_____ Time_____
Company_____

ALAMO IRON WORKS
INVOICE

Shipper Number : 98130
Project Name : WATER FACILITY Project
Contractor Name : CAVAN CONSTRUCTION
City :
Delivery Day TUESDAY Date 11/30/04 8:30 AM

ALAMO Job No: 6789
Load No: 67
Customer Job #: 7654
P.O. Number: po123
Deliver To:

Tested Job :
Fab Date : 11/22/04
Accessories : WIRE MESH
: CHAIRS
Special Instructions :
:

Quantity	Unit	Item	Description	Unit Price	Extension
1.79	CWT	5B	5B	42.50	76.08
2.98	CWT	14B	14B	40.75	121.44
240.32	CWT	6B	6B	41.50	9,973.28
10.02	CWT	4B	4B	43.50	435.87
12.00	Each	RW2.9	RW2.9	55.95	671.40
					11,278.07

ALAMO IRON WORKS
943 Coliseum Road
San Antonio, TX 78219
Ph. (210) 223-6161
Fax (210) 704-8232

Shipper Number : 98130

Customer Name : CAVAN CONSTRUCTION

Job Number : 6789 Load No: 67

Job Name : WATER FACILITY Project

Releases : 44 DD

Report Date: 11-20-2004

Material: REINFORCING STEEL

RECORD OF PHYSICAL AND CHEMICAL TEST REPORT

Mill Co.	Heat #	Size / Grade Description	C	MN	P	S	SI	CR	NI	CU	MO	V	CE	Yield-psi	Yield-Mpa	Tens-psi	Tens-Mpa	EL	BD	WT.%
TAMCO	345	4GR60	12.34	23.45	12.2	2.345	3.456	3.456	5.678	5.678	5.678	5.678	5.678	5.678	4.567	3.456	123456	1234	.567	93.2
TAMCO	123	5GR60	12.34	24.4	26.7															
tamco	2468	6GR60	.123	.234	.456	1.23	3.45													
TAMCO	3456	14GR60	12.34	23.45	12.2	2.345	3.456	3.456	5.678	5.678	5.678	5.678	5.678	5.678	4.567	3.456	123456	1234	.567	93.2

THE ABOVE MATERIAL DESCRIBED HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ASTM-A615 AND OR ASTM-A-706
WE HEREBY CERTIFY THE ABOVE DATA TO BE CORRECT AS CONTAINED IN OUR COMPANY RECORDS.
WE FURTHER CERTIFY ALL MANUFACTURING PROCESSES FOR REINFORCING STEEL IN THESE MATERIALS OCCURRED IN THE UNITED STATES OF AMERICA
ALAMO IRON WORKS

Printed Saturday, Nov 20 2004 03:05 PM **BY: _____**

Mill Co.	Heat #	Size-Gr	Entered	KIND	C	MN	P	S	SI	CR	NI	CU	MO	V	CE	Yldpsi	YldMpa	Tenpsi	TenMpa	EL	BD	WT.%	LBS	Date
TAMCO	234	3GR60	08/22/98	876543	12.30	.234	.123	.234	.345	.456	.678	.789	.123	.234	.345	123456	234567	345678	456789	.456	.567	94.0	876543	5/3/00
TAMCO	345	4GR60	08/23/98	864	12.34	23.45	12.2	2.345	3.456	3.456	5.678	5.678	5.678	5.678	5.678	5.678	4.567	3.456	123456	1234	.567	93.2	864	
TAMCO	123	5GR60	08/14/98		12.34	24.4	26.7																	
acme mill	456	7GR60	01/02/99	98.76	.1239	.234	.456	1.23	2.34	3.45	333	444	222	111	123	12	34	2	.23	13	OK	95.9	98.76	67.89
tamco	864	5GR60	08/25/98				.456	1.23	2.34															
tamco	123456789012	14 A - 706	08/27/98																					
tamco	2468	6GR60	04/01/99		.123	.234	.456	1.23	3.45															
TAMCO	2347	3GR60	05/07/00	05/07/00	12.3	.234	.123	.234	.345	.456	.678	.789	.123	.234	.345	123456	234567	345678	456789	.456	.567	94.0		05/07/00
TAMCO	3456	14GR60	05/07/00	34505/07	12.34	23.45	12.2	2.345	3.456	3.456	5.678	5.678	5.678	5.678	5.678	5.678	4.567	3.456	123456	1234	.567	93.2	345	05/07/00
TAMCO	8888	1/2"	05/07/00		45.55																			
tamco	i2134	5GR60	05/07/00		123.5																			

BENDING DETAILS

SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F/R	G	J	O	H	K
#5	3-01	5SWWV	S11									0-03	1-06	
#4	6-05	40SDC	7A	4-11		0-06	1-00					1-10½	0-03	0-05¼
#4	2-07	4BB1	S4	0-08	0-06	0-03	0-06			0-08				
#4	3-02	4CB1	8	0-08	0-06					2-00				
#4	40-06	4DTT1	2	1-06	37-06					1-06				
#4	1-07	4ES1	S7	0-04	0-03	1-00								
#4	2-07	4OSBBV	S4	0-08	0-06	0-03	0-06			0-08				
#4	11-02	4OSTA	17		2-08	8-06								
#4	4-02	4OSWV	17		1-06	2-08								
#4	40-06	4SWBT1	2	1-06	37-06					1-06				
#4	40-07	4SWBT2	2	1-06	37-07					1-06				
#4	3-02	4TD	2	1-08	1-06									
#4	23-02	4UCL1	6A		1-08	14-09	5-03			1-06		20-11	4-08	14-00
#4	38-10	4UCT1	2	0-08	37-06					0-08				
#3	7-03	3OSLB	17		1-02	6-01								

LABEL LIST

Release CMD366-4

LABEL	REQ	QTY	SIZE	MK/LGTH	NOTE
ALL REINFORCING SHALL BE A615, GRDE 60					
DETENTION POND					
INLET STRUCTURE					
SIDEWALK BOX					
		11	#4	4SWBT1	TRANSV. BOTT.@8"OC BOTT
123		11	#4	4SWBT2	TRANSV. TOP @8"OC TOP
B45		6	#4	4SWBT3	TRANSV.BOTT. @18"OC TOP
		12	#5	5SWBT4	TRANSV.TOP @7"OC BOTTOM
		36	#5	5SWWV	VERT. IN WALLS @ 10"OC
		162	#4	4SWL	LONGT. @ 12"OC
C22		10	#4	4SWD	DWLS. TO WALK EA.SIDE
		28	#4	4GD	DWLS. TO GUTTER @ 18"OC
		3	#4	4GC1	LONGT. IN GUTTER @12"OC
		3	#4	4GC1L	LAP 1'-8 WITH 4GC1
		4	#4	4GCT	TRANSV. @ ENDS
		38	#4	4TD	IN TOE DOWN @ 12"OC
DRAIN TRANSITION					
		9	#4	4DTT1	TRANSV. @12"OC
U-CHANNEL					
		22	#4	4UCT1	TRANSV. @ 12"OC
		39	#4	4UCL1	LONGT. @ 12"OC
BAFFLE BLOCKS (74 REQUIRED-LISTED FOR 74)					
	74	2	#4	4BB1	2 EA. BAFFLE BLOCK
	74	2	#4	4BB2	HORIZ. 2 EA. BLOCK
CHUTE BLOCKS (37 REQUIRED-LISTED FOR 37)					
	37	2	#4	4CB1	2 EA. CHUTE BLOCK
	37	8	#4	4CB2	HORIZ. @ 4"OC
END SILLS (12 REQUIRED-LISTED FOR 12)					
	12	3	#4	4ES1	@ 12"OC
	12	1	#4	4ESH	HORIZ. 1 EA. SILL

T678-1 || SMITH CONSTRUCTION || FORUM PLACE || FOUNDATION AND SLABS

LOAD #	BARS	STOCK	GR	CUTS	LENGTH	BIN-STOP	(REQ PCS)	TAG #	TAG	MTAG	LTNC	MARK	BEND	SCRAP/REMS	RELEASE#
1	6	30- 0	60	X 1	29- 5	1-59	(6) NEW	1	T+T	MT1	-			0- 7 SC	T678-1
2	1	20- 0	60	2	1-11	A	(16) NEW	21		MT9	18				T678-1
				X 1	15-11	9-39	(1) NEW	2	T+T	MT2	-	508	1	0- 3 SC	T678-1
3	2	60- 0	60	X 1	21- 5	1-53	(2) NEW	3	T+T	MT1	-				T678-1
				1	13- 5	0-17	(20) NEW	7		MT3	2	507-3			T678-1
				1	24-11	9-56	(4) NEW	4		MT2	1	503	2	0- 3 SC	T678-1
4	2	40- 0	60	X 1	24-11	9-56	(4)	4	TAG	MT2	-	503	2		T678-1
				1	14- 5	1-30	(17) NEW	9		MT4	4	507-7		0- 8 SC	T678-1
5	4	40- 0	60	1	13- 5	0-17	(20)	7		MT3	1	507-3			T678-1
				X 1	26- 7	9-60	(4) NEW	5	T+T	MT2	-	504	2		T678-1
6	4	40- 0	60	X 1	26- 7	9-60	(4) NEW	6	T+T	*MT2	-	505	2		T678-1
				1	13- 5	0-17	(20)	7		MT3	1	507-3			T678-1
7	5	40- 0	60	X 2	13- 5	0-17	(20)	7	TAG	MT3	-	507-3			T678-1
				1	13- 2	0-17	(21) NEW	11		MT3	4	507-2			T678-1

LOAD #	BARS	STOCK	GR	CUTS	LENGTH	BIN-STOP	(REQ PCS)	TAG #	TAG	MTAG	LTNC	MARK	BEND	SCRAP/REMS	RELEASE#
8	6	30- 0	60	2	14- 5	1-30	(17)	9		MT4	1	507-7		1- 2 SC	T678-1
9	1	40- 0	60	1	14- 5	1-30	(17)	9		MT4	1	507-7			T678-1
				X 1	14- 7	0-20	(1) NEW	8	T+T	MT3	-	507-8			T678-1
				1	10- 9	0-36	(13) NEW	13		MT5	1			0- 3 SC	T678-1
10	1	40- 0	60	1	10- 9	0-36	(13)	13		MT5	2				T678-1
				X 2	14- 5	1-30	(17)	9	TAG	MT4	-	507-7		0- 5 SC	T678-1
11	16	40- 0	60	X 1	12-11	0-16	(16) NEW	10	T+T	MT3	-	507-1			T678-1
				1	13- 8	1-27	(20) NEW	15		MT4	3	507-4			T678-1
				X 1	13- 2	0-17	(21)	11	TAG	MT3	-	507-2		0- 3 SC	T678-1
12	10	40- 0	60	X 1	19- 5	1-51	(10) NEW	12	T+T	MT1	-				T678-1
				1	9- 9	2-17	(13) NEW	14		MT6	1				T678-1
				1	10- 9	0-36	(13)	13		MT5	1			0- 1 SC	T678-1
13	1	40- 0	60	X 1	10- 9	0-36	(13)	13	TAG	*MT5	-				T678-1
				X 3	9- 9	2-17	(13)	14	TAG	MT6	-				T678-1

LOAD #	BARS	STOCK	GR	CUTS	LENGTH	BIN-STOP	(REQ PCS)	TAG #	TAG	MTAG	LTNC	MARK	BEND	SCRAP/REMS	RELEASE#
14	4	40- 0	60	X 1	13- 8	1-27	(20)	15	TAG	*MT4	-	507-4			T678-1
				3	8- 9	2-16	(13) NEW	16		MT6	1			0- 1 SC	T678-1
15	1	60- 0	60	X 1	8- 9	2-16	(13)	16	TAG	*MT6	-				T678-1
				2	13-11	0-17	(20) NEW	19		MT3	1	507-5			T678-1
				1	23- 5	1-55	(2) NEW	17		MT1	1				T678-1
16	1	40- 0	60	X 1	23- 5	1-55	(2)	17	TAG	*MT1	-				T678-1
				1	13-11	0-17	(20)	19		MT3	1	507-5		2- 8 RM	T678-1
17	9	20- 0	60	1	13-11	0-17	(20)	19		MT3	1	507-5			T678-1
				X 1	5-11	2-9	(9) NEW	18	T+T	*MT7	-			0- 2 SC	T678-1
18	4	30- 0	60	X 2	13-11	0-17	(20)	19	TAG	MT3	-	507-5		2- 2 SC	T678-1
19	5	30- 0	60	2	14- 2	0-20	(20) NEW	22		MT3	1	507-6		1- 8 SC	T678-1
20	8	20- 0	60	1	1-11	A	(16)	21		MT9	1				T678-1
				1	14- 2	0-20	(20)	22		MT3	1	507-6			T678-1
				X 1	3- 9	3-7	(8) NEW	20	T+T	*MT8	-	506	17	0- 2 SC	T678-1

LOAD #	BARS	STOCK	GR	CUTS	LENGTH	BIN-STOP	(REQ PCS)	TAG #	TAG	MTAG	LTNC	MARK	BEND	SCRAP/REMS	RELEASE#
21	2	20- 0	60	X 3	1-11	A	(16)	21	TAG	*MT9	-				T678-1
				X 1	14- 2	0-20	(20)	22	TAG	*MT3	-	507-6		0- 1 SC	T678-1

JOB NUMBER T678-1 HAS JUST BEEN COMPLETED.

****

SIZE 5 STATISTICS

SIZE 5 STATISTICS

	ORDERED	SHEARED	STK USED	REM>20 FT	REM<20 FT	SCRAP
NUMBER	240	240	93		1	77
LENGTH	3128-11	3128-11	3170- 0		2- 8	38- 5
WEIGHT	3263	3263	3306		3	40
PERCENT		98.70	100.00	.00	.08	1.21

TOTAL CUTS = 57 AVERAGE LENGTH PER BAR = 13.04 AVERAGE LTNC = 2.2 PS = 14 LONGEST SCRAP/REM = 2- 8, 1 piece

SHEAR 97 >> SYSTEM OVERVIEW

INFORMATION SHEETS FOLLOW . . .

Dear Rebar Professional:

I appreciate this opportunity to introduce our company, Application Software Inc., and our products to you. This includes the SHEAR 97 software with support for rebar fabricators and detailers. We have several SHEAR 97 modules which can benefit you and your business.

Here are a few good reasons to use the SHEAR 97 and ShearCAD rebar software:

1) We listen to our customer's needs; we do whatever it takes to make our customers happy with our software. As a result, our customer satisfaction level is very high.

2) We've developed these packages over 25 years of testing and refining. Every day, over 1000 Fabricators, Detailers, and Estimators use SHEAR 97 and ShearCAD to reduce their office, detailing, and production expenses.

3) SHEAR 97 is designed to run on your typical computer with Windows, so in most cases, new computer equipment is not required.

Please take some time to look over the enclosed information - I hope it is very informative for you.

Thanks again for your interest in SHEAR 97 and ShearCAD!

Sincerely,

Roger Welter
President

ANNOUNCING THE SHEAR 97 PACKAGES

ShearCAD Rebar Detailing (works with either AutoCAD or IntelliCAD)
SHEAR 97 modules: Estimating/Pricing , Barlisting, Tagging, Optimum Shearing, Detailing (Standalone), all modules fully-integrated.

> Used in over 1000 Installations each day by Rebar Fabricators, Detailers, and Estimators – Satisfaction level is *high*

> No " Maintenance" Fees - We are the *affordable* alternative

> 25 yrs specializing *only* in Rebar Software - Not a new or sideline business for us

> Free, *full-time* technical support - When you call, you can talk to a senior programmer

> Tags for our software are *inexpensive* - We don't force you to buy tags from us
Color Laser Tags, Thermal Printer Tags, dot-matrix. Industry standard Bar Codes.

> Our software can work with and download to *all brands* of fabricating equipment

> SHEAR 97 is a complete and extremely reliable rebar software system

- **>> *True* Windows Software - Windows 10, For Windows 8, For Windows 7**
- **>> Soft Metric, Imperial, Hard Metric - Conversion utilities, full *versatility***
- **>> Estimate & Detail in Metric *or* Imperial - Barlist, Tag, Fabricate in either**
- **>> SHEAR 97 will help you master the Metric challenges you may face**

> Call Application Software Inc. for more information & references in your area

A Baker's Dozen Reasons to Acquire Shear 97 Rebar Software

1 A genius once said “everything should be made as simple as possible, but no simpler”. We’re not geniuses, but we’ve worked hard to “right-size” Shear 97, giving you the power you need, but excluding unneeded, complicating “bells & whistles”.

2. There are currently over 1000 successful installations of Shear 97, indicating proven, tested, debugged, reliable rebar software.

3. Since 1982, we have a reputation of programming minor changes in our software, free of charge!

4. Shear 97 is a true Windows program; and works on 64-bit and 32-bit Windows.

5. Never a “maintenance fee”. If you buy something once, why should you be forced into paying for it forever?

6. Shear 97 has 42 different tag styles from which to choose, or we’ll be glad to program your own tag style to meet your needs.

7. Tags: we have 20 years of experience and knowledge of the tricks and traps of successful thermal tag printing. Industry-standard bar-coding or laser tags – no problem!

8. Shear 97 tags and barlist and report printouts have been widely acclaimed for their layout and professional look. Our landscape barlist has been called “the best looking barlist in the business”.

9. Shear 97 lets you create your own bend types with the “Shapemaster”.

10. Powerful macro formulas increase your detailing and estimating productivity.

11. Shear 97 modules include ShearCAD Detailing, Barlisting, Tagging, Interactive “Standalone” Detailing, Optimum Shearing, Estimating/Pricing, Invoicing/Bill of Lading, Quickbooks Accounting Interface

12. Shear 97 works well with all makes of shearlines and bender equipment, domestic and foreign brands.

13. Last, but definitely not least, the word around the industry is that we give the best support in the business, bar none. Our customers appreciate us, and we are devoted to our customers. We do whatever it takes to make sure you are productively using Shear 97 in your shop. We are always available to answer any question about Shear 97, free of charge.

SHEAR 97 PACKAGE SYSTEM OVERVIEW

There are several software program modules currently available for rebar fabricators and detailers. These include the following systems:

>> Estimating : Estimate and price a job by structure

>> Detailing : ShearCAD - CAD Detailing (works with either AutoCAD or IntelliCAD)

>> Detailing : Standalone (Interactive) Detailing - no CAD required

>> Barlisting : Enter bar line items, sort, print barlists

>> Tagging : Print laser tags, thermal tags, dot-matrix tags; print loadlist

>> Premium Tagging : Print industry standard PDF-417 bar codes on your tags

>> Optimum Shearing : Optimized cutlists and production reporting system

>> Quickbooks Interface: Automatically generate QB invoices from SHEAR 97 Barlists.

The Estimating/Pricing system generally stands by itself, but can be used for SHEAR 97 comparison reports on how a job was estimated versus how it was finally detailed. All other program modules send and share data with at least one of the other program modules.

The Barlisting system, for example, can send files to the optimum shearing system for shearing and (optimum shearing) tagging. The rebar detailing systems produce barlists, which are then used in Barlisting and Tagging. The rest of this manual will describe each of the above programs in greater detail.

Computer hardware: computers, printers, plotters, etc.

Here are example computer systems that work well with SHEAR 97/ShearCAD.
We'll be glad to consult further with you and your computer
and printer suppliers in greater detail regarding computer hardware.

> One Windows based Computer (This is the most common type).
For ShearCAD Detailing: INTEL PENTIUM 2.8 Ghz CPU with 4 Gig RAM
Or Dual Core or Quad Core at 2.0 Ghz or faster.
Production Computer (not for CAD Detailing): PENTIUM 2 Ghz (or faster)

> Minimum 200 gig hard drive. UPS power supply surge protection ($49)

> SHEAR 97: one monitor, minimum 19" monitor for production
> ShearCAD: dual monitors, one 19", the other 19" or bigger,

> Recommended are either Windows 10, Windows 7, Windows 8
SHEAR 97 and ShearCAD are network friendly, and will work with any network

You can have your local computer technician configure and build your computer;
Alternatively, Dell Computers will configure your computer with the features you need.
Just tell the Dell representative exactly what you want,
or call us and we'll be happy to talk to Dell on your behalf.
Also, you can visit **www.dell.com** to see the latest computer models and add-ons.

SHEAR 97 example: Dell "Precision T1700"
Intel Pentium, 2-4 Gig ram, 19" monitor,
CD-ROM, 80 to 160 gig hard drive, speakers,
Windows 10 or Windows 7, 3 Yr. warranty with 1 yr. on-site service
For under $1200, 36 month lease available ph 877-280-2299

> For reports, a laser or inkjet printer
example 1: Dell Laser Printer 1710n $239 from Dell
example 2: Hewlett-Packard HP LaserJet, about $250 from
CDW (Computer Discount Warehouse ph 800 726-4239)

> For Laser tag printing in color: consider HP Laser Printer or Okidata Printer
You can buy a good quality color laser printer, approximately $300 to $800.

> For Thermal tag printing: WASP WPL305 thermal printer, about $425 from
Integrated Document & Label, Craig Enerson 715-644-3510

> Tag suppliers: Integrated Document & Label, Craig Enerson 715-514-7373
Allen-Bailey Tag & Label, Lilian Larrabee 800 336-8247

> For CAD plotting: recommend HP plotters
example: Hewlett-Packard HP 430 A-D size $1200 (get with stand & feed)
Cadd/Engineering Supply ph 800 704-336-8247
or http://www.superwarehouse.com/HP_Plotters/b/110/c/145

SHEARCAD >> AUTOCAD DETAILING

INFORMATION SHEETS FOLLOW . . .

ShearCAD Detailing: The One you've been waiting for!

> Introducing ShearCAD, a revolutionary breakthrough in Rebar Detailing software. Guaranteed powerful, the easiest to use. Works with AutoCAD and IntelliCAD.

> ShearCAD represents a remarkable bargain for you. Very short learning curve. Increases your detailer's productivity, while saving you time and money.

> Automatically draws your structure as well as the bars to scale with the appropriate stock and lap for that bar size. If you pick any existing structure (rectangle, circle, octagon, hexagon, etc.), the typical bars are drawn for you, and the bars are automatically inserted into your detailing list.

> Tilt-wall panels: ShearCAD automatically draws the panel with typical mat bars, and inserts appropriate callouts. Indicates openings, draws edge bars, mat bars, corner bars, opening extra bars and diagonal bars. Allows up to 6 rectangular openings, or 5 rectangular and 1 circular opening. Optional sloping concrete at the top of the panel. In conjunction with the “Stiffener” column function, you can specify vertical zones from which the panel vertical mat bars are substituted with the stiffener columns.

> Range of bars (bars spaced evenly) over any irregular shape (polyline) with openings. Details and draws all bars for you. Allows 2 different bar sizes and/or 2 different spacings each way.

> Powerful Detailing Functions greatly increase your detailing speed. Powerful Macro Formulas, which you can customize.

> Details and draws many structures including continuous footings, footing pads, slabs, beams, masonry walls, columns, drilled piers, circular tanks, etc.

> With 2 clicks, you automatically insert bent bar pictures for just those bend types which are in this particular drawing.

> Bend Schedule and lap schedule is inserted into your drawing with a few clicks.

> With ShearCAD, you'll print professional-looking Placement Lists. Choose from among 4 different formats. "Required" prints in a separate column from "Quantity" of bars, avoiding confusion.

> You pick any arc in your drawing: the appropriate arc bar (type 9 or 37) is automatically inserted into your list. Pick any line in your drawing: the appropriate straight bar length is automatically inserted into your detailing list.

> ShearCAD seamlessly integrates with SHEAR 97. A true Windows program, (not DOS). Uses the latest Microsoft "ActiveX Automation".

> SHEAR 97 with ShearCAD give you a complete rebar system. Now you can have just one software vendor to supply all of your rebar software needs.

ShearCAD Detailing Functions (also see topics 6.10 through 6.80)

(1) = "NONE: YOU ENTER THE LENGTH OF THE BAR"
(2) = "Line: BARS COVER A RECTANGLE IN ONE DIRECTION"
(3) = "Grid: BARS COVER A RECTANGLE IN BOTH DIRECTIONS"
(4) = "Vary: VARIABLE LENGTH BARS BETWEEN TWO LENGTHS"
(5) = "Dnut: DONUT SHAPE (CONCENTRIC CIRCLES)"
(6) = "CIrc: CIRCULAR AREA SPANNED 1-WAY BY PARALLEL BARS"
(7) = "RAdi: BARS RADIATE OUT FROM THE CENTER OF A CIRCLE"
(8) = "Sprl: SPIRAL BARS COMPUTATION"
(9) = "Mesh: WIRE MESH COMPUTATION FOR SHEETS OR ROLLS"
(10) = "RTi : RECTANGULAR TIE (NOT SEISMIC)"
(11) = "RTIS: RECTANGULAR TIE (SEISMIC)"
(12) = "CTi : CIRCULAR TIE (NOT SEISMIC)"
(13) = "CTIS: CIRCULAR TIE (SEISMIC)"
(14) = "3rt : 3 RECTANGULAR TIES IN COMBINATION"
(15) = "3RTS: 3 RECTANGULAR TIES IN COMBINATION (SEISMIC)"
(16) = "BDt : BOX AND DIAMOND TIE (NOT SEISMIC)"
(17) = "BDTS: BOX AND DIAMOND TIE (SEISMIC)"
(18) = "COLv: COLUMN VERTICAL WITH LAP"
(19) = "Beam: GRADE BEAM DETAILING"
(20) = "Panl: TILT-UP WALLS WITH OPENING(S)"
(21) = "GRix: LIKE GRID BUT 2 SIZES OR SPACINGS"
(22) = "MLen: MULTIPLE LENGTHS ARE ADDED TOGETHER"
(23) = "Octa: RECTANGULAR GRID OVER OCTAGON W/EDGE BARS"
(24) = "CMuv: CONCRETE MASONRY WALL VERTICAL BARS"
(25) = "MAcr: MACRO FORMULA COMPUTATION (1-900)"
(26) = "C : COMMENT LINE ONLY (OTHERWISE, LINE IS EMPTY)"
(27) = "Hexa: RECTANGULAR GRID OVER HEXAGON W/EDGE BARS"
(28) = "Rang: RECTANGULAR GRID OVER ANY SHAPE (LWPLINE)"
(29) = "Elli: CONCENTRIC ELLIPSES (OVAL RUNS OF BARS)"
(30) = "DRpr: DRILLED PIER (CAISSON)"
(31) = "COlm: COLUMN VERTS,DOWELS,TIES"
(32) = "FCon: FTG CONT, W/CONT BARS, TRANSV, DWL, STANDEE"
(33) = "STif: STIFFENER CAGES FOR TILT-WALL PANELS"
(34) = "FPad: SPREAD FOOTING (FTG PAD) WITH STANDEE"

Note: All of the above ShearCAD functions (except for Range) are also available in the SHEAR 97 Standalone Detailing and SHEAR 97 Estimating modules.

ShearCAD Detailing works great with either AutoCAD or IntelliCAD.

AutoCAD is the "CADillac" of cad systems.
ShearCAD runs on all of these full versions of AutoCAD: 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2002, 2000.

AutoCAD is a particularly stable, dependable, and full-featured platform.
Where budgetary concerns are not an issue, AutoCAD is recommended.

IntelliCAD is an affordable cad engine, with a remarkably low price, under $300. IntelliCAD does not have all of the bells and whistles of AutoCAD. Currently, IntelliCAD is compatible with AutoCAD drawings (.dwg files).
The IntelliCAD version to get is the latest version of IntelliCAD Professional,
and can be purchased directly from website www.intellicadms.com

We encourage you to visit the websites of Autodesk and Cad Manufacturing Solutions, so that you can gain more information for your selection of your cad “engine”.
These sites are www.autodesk.com and www.intellicadms.com.
To buy AutoCAD, you can find AutoCAD Resellers in your area on the Autodesk website.

On the CMS web site, you can find the following excerpt:

CMS IntelliCAD is designed to give you **unrivaled compatibility with Autodesk AutoCAD**, and is fully programmable with hundreds of third party solutions. **CMS IntelliCAD** also offers a full suite of 2D and 3D AutoCAD compatible drawing tools.

COMPARISON CHART		
Comparison:	**CMS IntelliCAD PE+**	**AutoCAD 2012**
Native DWG support	**YES!**	**YES!**
DWG support for AutoCAD versions 2.5-2012	**YES!**	**YES!**
Support for AutoCAD Commands	**YES!**	**YES!**
Price	**$300**	**$3,900.00**

CMS IntelliCAD also provides a high degree (99%) of compatibility with the AutoCAD command set. That means you can use the AutoCAD files, commands and applications with which you are familiar.

ShearCAD Training Exercises for the new user.

_____

The following topics show some of the power of ShearCAD.

However, they are just a small fraction of the sum total of all of the powerful features available to the ShearCAD user!

TOPIC 1

Here is how to do a panel

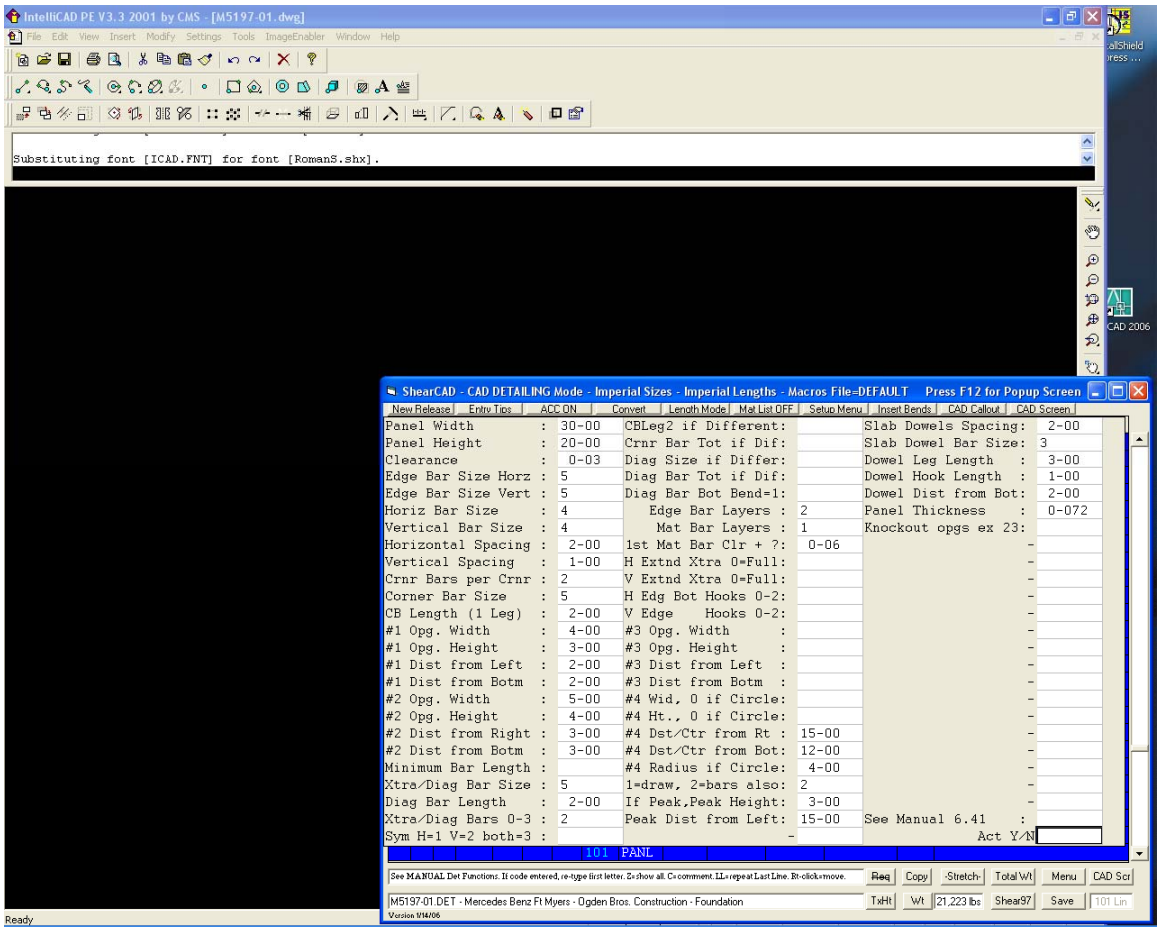
Run ShearCAD, enter text height as 4”, .75 text width scale factor, release T678-1

On a blank line, in the code field, type P

You will see the panel inputs

Enter the panel inputs as on the screen below

When you type Y for act Y/N, the blue screen will hide, and you will
Pick a point in the Intellicad screen (this is the LOWER left of the panel).
The panel will be drawn, and all Bar lines will appear on the blue screen,
In the order of Verts from left to right, followed be horizontals from bottom to top.



There are many text callout formats from which you can choose.
For a schedule of bars, on the blue screen, double click on the CA# Field of the line that has PANL in it.
Click on “Bend/Bar Schedule with quantity”
Click your insertion point (the UPPER left of this bar schedule),
And the schedule is drawn on your CAD screen.

TOPIC 2

How to use the quantity calculator.

Draw any closed polyline. This can be a rectangle, circle, octagon, or any arbitrarily
Shaped figure with any number of sides. To draw this, click on the Polyline icon
Which is near the Line icon at the top of the IntelliCAD screen.
Click several points, making sure you click Close for the final line segment.

On the blue screen, on a blank line, type Q in the quantity field.
Click YES – you want to pick from the drawing.
Click any edge of the Polyline. It computes the enclosed area
Click Okay and you see the quantity calculator.
Enter 4-0 spacing for your supports, and the quantity of supports is calculated.
Press your enter key until the computed quantity pops into the quantity on the blue screen.
Enter HC in the Size-Grade field (for high chairs), or you could proceed
To enter a standee, for example types 25, 26, 26A.

Now draw openings inside the polyline by clicking on the icons at the top of IntelliCAD.
These openings can be rectangles, circles, etc.

Now try the quantity calculator once again, picking this same outer polyline.
You see the area is much less, and fewer supports are computed.

TOPIC 3

How to use the Range function code (RANG).

You could use the same polyline with enclosed
Openings from Topic 2, or you could copy
that Polyline, or draw a new polyline with openings.

On a blank line, in the Code field, type R

Enter the bar size, for example, 4
You are asked to pick the edge of the outer polyline.
You will now see a white “toolbar” entry grid
Floating on the blue screen. Enter the spacing, example -18 (which is 1-6)

There are many input options, but for this demo, just hold your enter key down until you get to the field entitled “Act Y/N”. Now enter Y

All bars will be drawn, automatically skipping over the openings.

For a callout, on the blue screen, double click on the CA#
Field of the line that has RANG in it.
Click on “Rang Bars, Condensed”
Click your insertion point (the UPPER left of this callout),
And the text callout is drawn on your CAD screen.

TOPIC 4

How to enter a few bar lines, and call them out.

On a blank line, enter quantity 3, size 4, length 5-0, enter a note in the note field.
On the next line, enter quantity 4, size 5, mark 501, enter type 17, b=2-0,c=3-0, d=4-0.
Also, enter a note in the note field.

You could call these lines out separately, but for this demo, we will call them out together.
Single Click On the CA# field of the first line.
Now, Single Click On the CA# field of the second line.

If it is not already selected, click on the format “Detailing Style format”
When asked, leave the rotation at zero.
Pick a point in your drawing. It will let you do an adjustment (fine-tuning)
of the insertion point; right click when you are done adjusting this insertion point
Next you can pick a leader (with arrow) point, and then click back where
The callout is, and the leader will be drawn.

TOPIC 5

How to automatically do a Bend Schedule and Lap schedule text call out.

On the top right of the dark blue screen, click on “CAD Callout”
When asked “Do you want to Click the Line numbers”, click NO
Click on the “Bend Schedule” format at the top right
Click your insertion point (this point will be the UPPER left of this callout),
and the Bend Schedule text callout is drawn on your CAD screen.

The optional Lap schedule will be drawn just to the right of the Bend Schedule.

TOPIC 6A

How to draw any bar to scale.

On the next line, enter quantity 4, size 5, mark 502, enter type 17, b=1-0,c=2-2, d=0.

Single Right click On the type field of that line.

Pick a point in your drawing. You will be asked to pick a second point for the sake of aligning (rotating) the bar which will be drawn. Pick this point to the right.

Your bar will be drawn to scale. Note that the missing d leg is suppressed, as it should be. This also works for any straight bar, even though there is no bend type.

TOPIC 6B

Another feature related to this is to double left click on the type field of a barline.

This barline can be any line, as long as it is not part of a group of lines generated by a function code. Lines generated from function codes always have an asterisk (*) in the CA# field.

On the next line, enter quantity 5, size 6, mark 602, enter type 17, b=1-0,c=2-2, d=1-0

Double Left click On the type field of this new barline.

Pick a point in your drawing. You will be asked to pick a second point for the sake of aligning (rotating) the bar which will be drawn. Pick this point to the right.

Your bar will be drawn to scale. This drawn bar becomes the Callout for this line.

You will see an X in the C column, just to the right of the CA# column.
This X means that there exists a callout for this barline in the drawing.

Now click on “Stretch” on the bottom right of the dark-blue ShearCAD screen.

The ShearCAD screen will be temporarily hidden;
next click on the C leg of the bar in the drawing.

Now click on the right hand corner of the C leg when asked for the “base point”.
Now click on the a few feet out to the right of the base point
when asked for the “displacement point”.
The end result is that the c leg of this bar is increased (stretched),
and both the bar and the dimension in the ShearCAD dark-blue screen are updated.

Note that in addition to this 'Drawn Bar Callout' technique, the “Stretch” command also works for other functions, such as
LINE, GRID, GRIX, CMUV, CIRC, or Pre-Stretched RANG.

TOPIC 7

How to pick a length in your drawing.

Technique 1:

In your drawing, draw a line more than 100 feet long.
Now draw an arc which is less than a semicircle.
Also draw an arc which is more than a semicircle.

On a blank line, enter quantity 4, size 5P

This means the bar size is 5, but you want to pick the length.
Pick the straight line, and the length pops back into the blue screen.

Repeat this exercise using each of the 2 arcs.

Technique 2:

Any field where a length is expected, you can enter two minus keys - -
You will be asked to pick a drawing object; this could be a line, an arc, a polyline, etc.
And the length is returned in the Length Calculator. Enter clearances if you wish, also you could multiply this by 1.33 for example. Click Okay, and the length pops back into the field in which you started.

To pick 2 points (instead of a drawing object), click on nothing (any place on the CAD screen). You will be asked “Try Again”, click NO. Then you will be able to pick 2 points in succession to define this length.

Please refer to the topics in this manual following the page entitled:
"SHEAR 97 >> DATA ENTRY METHODS INFORMATION SHEETS FOLLOW . . ."

Always look for the prompt line at the bottom of the entry screen;
the prompt line gives helpful advice on what to enter in the current field.

Starting from the left side of the dark-blue ShearCAD screen:

Rel Field (on some computers this is the F field)

The REL field can indicate the Release number for a Selective Takeoff.
See topics .051 and .052 in this manual entitled
"SHEARCAD >> DETAILING SELECTIVE TAKEOFF 0.51"

Rt-click this field if you want to Color all of the cad drawing objects for all lines which match this same REL value.
If you are not going to split this release into 2 or more production barlists, it is okay to leave the REL field empty for all lines.

L Field

Labor code: Threading, End Prep, other labor code. The labor code is a one or two character code, for example TL can be "thread "left".

If you need to, you can add your own labor codes to the Material file, with category "L".

When the production barlist is created from this detailing file, end prep codes will be printed on the tags, for example "thread left" will print on the tags.
Generally, for most bar lines, the L field will be empty.

Ep Field

Epoxy code: This is where you indicate a material other than uncoated bar.
The acceptable values:
Empty (or B) is standard black, uncoated bar.
E for Epoxy, GA=galvanized, SS=Stainless, W=Weldable, FX=MMFX,
FR=FRP(FIBERGLASS)
PB= Pre-Bent Epoxy, G=Galvanized, FR=fibreglass

The EP field can be used to override the MAT field on the turquoise
releases screen.

Ca# Field

The Callout Number is an arbitrary, generally sequential number,
and this value is computed for you.
For a multiple line callout, the callout numbers will end up being the same.

Double click on a CA# to perform a Text Callout.

You can RIGHT Click on the CA# to make the callout BLINK in the drawing.
This helps you identify where the callout is in the drawing.

C Field

An X in this field means that this Text Callout has been placed in the Drawing.

If you want to remove the callout from the drawing, then you Right-Click
on the X and you can erase this Text Callout from the drawing.
When you do this, the barline on the dark-blue screen is not erased, but
rather the callout is completely removed from the CAD drawing screen.

X Field (Times Field)

The X field (Times field) is a Quantity multiplier.
Leave this field empty if this value is 1.
The effective Total piece count of this barline is = TIMES x REQ X QTY

If you type SS in this field, then the “span/spacing” computation will popup to help you compute, for example, a quantity of ties for a particular spacing (or even variable spacings).

If you type SSP in this field, then it works the same as SS, but in addition, you will pick either a line or 2 points to initialize the “span/spacing” popup with the span distance indicated by the line or points you just picked.

Rq Field

The Required field is a Quantity multiplier.
Leave this field empty if this value is 1.
The effective Total piece count of this barline is = TIMES x REQ X QTY

If you type SS in this field, then the “span/spacing” computation will popup to help you compute, for example, a quantity of ties for a particular spacing (or even variable spacings).

If you type SSP in this field, then it works the same as SS, but in addition, you will pick either a line or 2 points to initialize the “span/spacing” popup with the span distance indicated by the line or points you just picked.

Lin Field

The Line field is a sequential number indicating the line number of each barline in the dark-blue screen. The default is to show 25 lines at a time in the dark-blue screen, but there is a ShearCAD option which allows you to set this to view more lines, example 40 or 50 lines.

Every so many line numbers, you may see a > (“greater than sign”) directly after the line number.
If you use a Placement list which always prints the same number of lines per page, for example 32 lines per page, then you can set the SHEAR 97 setup preference on line 125 to: 32
In this case, you will see the > sign on lines 1, 33, 65, etc.
This can help you by letting you know as you add new lines to the dark blue screen which lines will be at the top of the page when the placement list is printed. For example, you could insert a few blank lines on the dark blue screen, so that a new structure starts on line 33.

Code Field

Leave this empty if you are typing in a barline.

If you want to type a comment line, enter: C
followed by your comment.

If you type LL, then the line above is copied to this line.

If you type Z, then you’ll see a list of all available Detailing functions.

If you already have a valid code entered into this line, then you can type any letter right over the top of what is already there, and you will see your inputs which you previously entered into this function.

If you right-click on a code which has either text callouts, or drawn bars and structures, or both, then you will be allowed to move either the text callouts, or drawn bars and structures, or both, after you click to indicate both a base point and a displacement point in your CAD drawing screen.

For those detailers who use “labeling” then this code field is where you type a label, examples L1, A, 123 etc.
There is a callout format which will include your labels; also, if you print a label list, they will appear there.

Qty Field

This is where you enter the quantity for this barline.
This could be for either a rebar item, smooth bar, mesh, or accessory item.

If you enter Q, then you get the quantity calculator popup.
This will let you figure, for example, the number of bar supports,
given a rectangular area and a spacing.
You will be asked if you want to pick from the drawing;
if you say yes, you click any arbitrarily shaped figure (polyline)
which may include openings. The square footage of the polyline
will be automatically calculated minus the enclosed openings,
and the suggested length and width inputs for the quantity calculator
will be the square root of that number. For example, if you
have a figure with 625 square feet, your suggested width and length inputs are 25 feet.

If you enter QS then you get the Quantity of Stock calculator popup.
You will be asked for the stock length, lap, quantity of runs, and run length.
For instance, if you type 40-00 , 2-05 , 1 , 9000-0 you will get 240 bars

If you enter MA then you get the Pop-up Macro input.
You will enter the quantity, bar size, and formula.
For example if you type: 22,4,S90+1.33X[23-6]+48D
you will get this barline: quantity 22 of #4 bars, type 2
with a 33-3 leg and the standard 90 hook length for a #4 bar.

If you enter, for example 23X11 you get the product, namely 253.
If you enter, for example 23.5/.75 you get 32 bars,
based on a span of 23.5 feet and a spacing of 9” (.75 feet)

If you enter SS or SSP you get the span/spacing calculator.
The SSP works like SS, but you can pick to indicate the span length.
For example, if you type 22-8,8” you get 35 bars based on
a span of 22ft 8 inches and a spacing of 8 inches.

If you type LL, then the line above is copied to this line.

If you type V then you get the varying bars routine.
For instructions on the varying bars routine, in this manual, see the topic
“SHEAR 97 >> VARYING BARS ROUTINE, STRAIGHT OR BENT 2.05”

If you type C then you can copy one or more lines.
For example, if you are on line 85, and you type C in the quantity field,
then you can copy, for instance lines 10 thru 20 to line 85 thru 104.
Lines 10 thru 20 remain unchanged.
M=Move moves lines 10 thru 20 to 85 thru 104, then deletes lines 10 thru 20.

Sz/Gr Field

This is where you enter the bar size for this barline.
If you press the enter key, then the size from the line above is accepted.

The size-grade field must be a valid “short name” from the Materials screen.
The “size mode” for this job is checked. For example, in a job with the size mode set to I (Imperial sizes), then you can enter size 3 but not size 35.

If you add the letter P to the size, then you will pick a length on the CAD screen, by clicking, for example a line or 2 points to indicate the length. In this case, then the length will automatically be inserted in the “length” field.

TagLen Field

This is where you enter the “tag length” (theoretical length) for this bar.

For example is you type 1234, you get 1234 ft
If you type 3.053 you will get 3 ft 5 3/4 inches,

If you type 48D and the bar size is #4, then you will get 48* time 4/8 = 48”

If you type W50, then you will get a length such that one bar will weigh 50 lbs.

If you type --, then you will get the “length calculator”, where, for example, you can pick 2 points or a line, and that length will automatically get inserted into the TagLen field.

If you Rt-click on the TagLen field, and you have, for example 10-6 in this line then all lines in the dark blue screen will get scanned, and you’ll be shown every line with a length that matches 10-6

Mark Field

This is where you enter the Mark from 1 to 8 characters (digits and/or letters).

If you enter a mark which already exists, you will be asked if you want to copy the bend dimensions for the pre-existing mark.

If you type either N or NN=next mark you will get the next mark.
In this manual, see the topic entitled
"SHEARCAD/SHEAR 97 >> NEXT MARK FEATURE 0.71"

If you Rt-click on the Mark field, and you have, for example 401A in this line then all lines in the dark blue screen will get scanned, and you'll be shown every line with a mark that matches 401A

Typ Field

This is where you enter the bend type (leave empty for straight).

If you enter, for example 51 you will get S1. (5 means S)
If you enter, for example 62 you will get T2. (6 means T)

If you enter period . then the bend type from the line above will be copied.

If you enter question mark ?
then the a popup will appear showing all bend types from which you can pick.

If you Rt-click on the Typ field, then you'll draw this bar to scale in the CAD screen. This works even for straight bars.

If you double left-click on the Typ field, then you can draw this bar to scale in the CAD screen along with a text label, and this becomes the true (not "documentation only") callout for this barline. This works for straight bars also. For this to work, the bar must not be derived from a function, nor can it be a line which is part of a multi-line callout.

Note Field

This is where you enter an optional note.

If you type a ^ (Shift-6) this indicates a Revised Line and
a triangle is printed on the left side of the barline in the Detailing List

If you Rt-click on the Note, then all lines in the dark blue screen will get scanned,
and you'll be shown every line with a note which matched the note on this line.

Bend Dimension Fields

This is where you enter the bend dimensions which are appropriate for this bend type.

If you type the letter P for a bend dimension, then you can pick
2 points or a line, and that length will automatically get inserted for that dimension.

For a standard hook length, type - (minus)

If you leave a bend dimension empty, for example the C dimension for a type 3,
and you fill in H and K, then the C dimension will automatically get computed.

If you type = for the H or K dimension for a type 3, then that dimension will get
computed from the C dimension and assumes a 45 degree angle.

If you type, for example, 30< for the H or K dimension for a type 3,
then that dimension will get computed from C assuming a 30 degree angle.

If you type --, then you will get the "length calculator", where, for example, you can pick
2 points or a line, and that length will automatically get inserted for the length in
this dimension field.

There are 2 main categories of callout which you can create in ShearCAD.
These are “Documentation Only” callouts and “NON-Documentation Only”.

Most of your callouts will be non-Documentation Only. The advantage of this type of callout is that ShearCAD establishes a “linkage” between the barline(s) on the dark-blue screen and the graphical CAD Drawing screen. Because of this linkage, ShearCAD has knowledge of the CAD entity ID names of the text in the drawing which corresponds to barline(s) on the dark-blue screen.

“NON-Documentation Only” callouts have these advantages:

> If the barline gets changed or erased in the dark-blue screen, then CAD drawing callout also changes or gets erased.

> You can right-click on the callout to blink the drawing callout to help find it in the drawing.

> Consider a single line callout consisting of the bar being drawn to scale which was created by double-clicking on the bend type.
For this style of callout, you can click on the “Stretch” button and stretch any dimension of the drawn bar, and that bend dimension will get stretched and adjusted in the dimensions in the dark-blue screen.

An example of a documentation only callout is a Bend Schedule.

Because it is documentation only, if one or more of the bent bars get altered the bend schedule will not get automatically adjusted.
That is why you should always create a bend schedule only after you are done with this detailing release.
Otherwise, if you add a new bent bar, or change an existing bar, you will have to erase the Bend Schedule and re-create it.

Another example of a documentation only callout is a “Bend/Bar Schedule with Quantity” format which can be used as a barlist to be dropped into your drawing.
Most, if not all, of the barlines in your list have probably already been called out before this point. Therefore, as you create this Barlist callout, you need to click on the checkbox entitled “Documentation Only” to prevent your numerous pre-existing callouts from getting replaced by this one (extremely long) callout.

Many times in ShearCAD Detailing, you will want to send out just part of the barlines on the dark blue screen to a file for fabrication. This topic discusses techniques for partial takeoffs (selective takeoffs). Selective takeoff splits a detailing file (which is stored as a .DET file, example 1234-001.det) into 2 or more production barlist files (which are stored as .DAT files, examples 1234-001A.dat 1234-001B.dat)

The ShearCAD preference on line 94 controls whether you have a 2 character F field as the left column of the dark blue ShearCAD screen, or a 4 character REL field. If you have the line 94 set to: Y then you have the 4 character REL field. In either case (F field versus REL field), these fields basically work the same. For the rest of this topic, it will be assumed you are using the REL field.

The purpose of the REL field is to help designate how a detailing file will get split into production barlists. For instance, if a file with 85 lines has 40 of the lines marked with “001A” and the rest of the lines marked with “001B”, then this detailing file is properly set to create 2 barlist files 1234-001A.dat and 1234-001B.dat.

Performing a selective takeoff is a 3-step process as follows:

Step 1) Setting the REL field with from 1 to 4 characters, example 001A

There are 3 methods to set 001A in the REL field.

Method 1) You can type 001A in the REL field of each line to be selected.

Method 2) At the bottom of the dark-blue ShearCAD screen, click “MENU”
Now click on “Set REL for Selective Takeoff”
Enter the Starting line number for a range of lines to be selected
Enter the Ending line number for a range of lines to be selected
Enter the characters to add/remove: enter 001A

Method 3) At the bottom of the dark-blue ShearCAD screen, click “MENU”
Now click on “Set REL by Select on Dwg screen”
The dark-blue ShearCAD screen will be temporarily hidden, and the focus is set to AutoCAD/IntelliCAD where you window one or more areas in the drawing for your takeoff. Any drawing item whether it be text callout or drawn bar or structure will be included (except for “Documentation Only” callouts).
You can optionally color all of the drawing objects you selected.
Enter the characters to add/remove: enter 001A
All drawing objects you just windowed which link to callouts in the dark-blue screen will be set in the REL field with: 001A

(continued on next page)

Step 2) Create the production barlist file, example 1234-001A

At the bottom of the dark-blue ShearCAD screen, click “MENU”
Now click on “Detailing Selective Takeoff”

There are 3 white boxes. Leave the middle box empty.

If you select "Automatically create all barlists per the Rel value",
then leave the 3 boxes alone; otherwise
In the top box, enter: 1234-001A
In the bottom box, enter 001A
Click Okay
ShearCAD will automatically scan all barlines, and select just those lines
with 001A in the REL field, and will create production barlist file 1234-001A.DAT
(This is stored where SHEAR 97 expects it to be found, namely in
X:\shear97\data\barlists\1234- 001A.DAT where X: is your data drive as
specified on line 2 of your SHEAR 97 setup preferences).

Step 3) Here is how to view the production barlist you just created.

Close out ShearCAD the way you normally do (click on the X in the top right
of the dark-blue ShearCAD screen.)

Run SHEAR 97.

Click on BARLISTING (not Standalone Detailing).

On the Jobmaster screen, double-click on job 1234

On the turquoise Release screen, on a blank line, enter: 1234-001A
in the release # field to create a new release line.
Enter the “material usage” field, and also the MAT and GRD fields,
as well as any other fields you want to fill in for this release.

Now double-click on any field in this release line, and you will see
all of the barlines which you selected in Step 1) of this procedure.

The SHEAR 97 setup preference on line 123 reads as follows:
>Barlist entry use N and NN for next mark Setup preference line 123

As long as this preference is not set to N, then the following applies:

>If you type N in the mark field, or if you type N when you leave a mark empty and ShearCAD asks you if you want to fill in marks automatically, then you get 301 302 401 402 303 etc.

>If you type NN in the mark field, or if you type NN when you leave a mark empty and ShearCAD asks you if you want to fill in marks automatically, then you get 301 302 403 404 305 etc.

> If for your first mark, you enter 3A001 then 4A002 then type NN for the next marks, you will get 3A003, 4A004 etc.

You can insert or remove the letter A or any letter of your choice as follows:

In ShearCAD, click on MENU in the lower right of the dark blue screen now click Apply/Strip a Mark prefix.

(ShearCAD only) Click on the checkbox to insert the letter to the right of size. then it will change 601 302 403 304 etc to 6A01 3A02 4A03 3A04 etc.

Also, you can remove the letter with the same menu choices.
For example, assume you copy in a release with marks such as 6A01 3A02 4A03 3A04 etc.
> First, you can remove the letter A and you get
601 302 403 304 etc
> Next, insert the letter B to the right of size and you get
6B01 3B02 4B03 3B04 etc.

SHEAR 97 >> DATA ENTRY METHODS

INFORMATION SHEETS FOLLOW . . .

BARLIST DATA ENTRY

This module is in many ways the 'heart' of the SHEAR package software; these are some of the things that it can do for you:

> Enter (type in) new jobs and barlists (bill of rebar materials), including rebar mesh, and accessories

> Automatically subtract bend deductions based on size and the angles in the particular bend type (shape of bar)

> Sort and rearrange all barlist lines by size and length, combining similar barlist lines into one line with the total quantity of bars.

> Print a barlist on the printer (hardcopy) in a variety of optional formats (layouts).

A barlist can be created in one of these ways: either by automatic generation from ShearCAD detailing, or from a detailer entering his bar lines into Standalone Detailing, or from a computer operator typing each bar list line into Barlisting. Particular job information may be common to the many barlist (releases) which all belong to this one job; this job data need only be typed once.

> How to Copy all barlines of a pre-existing file to a new file:

A new barlist can easily be created from an existing barlist with a few clicks.
This works in ShearCAD as well as in SHEAR 97 Standalone Detailing, SHEAR 97 Barlisting, and SHEAR 97 Estimating.
In SHEAR 97 Standalone Detailing and SHEAR 97 Barlisting, first create a new release on the turquoise Releases screen.
In SHEAR 97 Estimating, create a new job on the Job screen.
Double click on that new release or new job and go to the dark blue barline screen.
At the bottom right, click on “Menu”.
Barlisting: click “Copy SHEAR 97 Barlist file”. Enter the old release number, click Okay.
Std Det: click “Copy SHEAR 97 Detailing file”. Enter the old release number, click Okay.
Estimating: click “Copy SHEAR 97 Estimating file”. Enter the old job number, click Okay.
All barlines from the pre-existing file will be copied into this new file.

Many user-friendly features facilitate the entry of data. For bent bars, the taglength (the length of bar ordered by the customer) and the cutlength (the taglength minus the bend deduction) do not have to be entered, they are computed for you from the bending dimensions.

Your SHEAR 97 data is valuable. In the back of this manual, please read this topic:
“BACKING UP SHEAR 97 AND SHEARCAD Topic 20.09”

BARLIST DATA ENTRY (continued)

Other features that make data entry easier:

> Calculator feature: Enter 24 * 11 for quantity and you get 264.

> Varied lengths feature (see Topic 2.05): you can enter the starting and ending bars for a culvert for example and how many bars there are, then the computer will automatically generate all bars in between.

> For a particular mark, you only enter the bend dimensions once: for successive lines with the same mark, you just enter quantity, size and the mark, and all the other data is pulled in automatically.

> If the bar size (diameter) is the same as the previous line, then the bar size will be pulled in automatically for you.

> A, G, and J hooks are automatically generated for you with no typing.

> In a bent bar, if you have typed 2 of the 3 legs of a right triangle, the third leg is calculated for you; this occurs in many of the bent bar shapes.

> The overall 'O' dimensions is calculated for you whenever possible.

> Radius bars will be calculated: for example, if you type exactly two of the dimensions for a type 9 radius bar, the other 2 dimensions will be calculated for you.

SHEAR 97 >> ENTER NEW JOB 6789 OR FIND OLD JOB 6789 1.01

For Detailing and Barlisting, the recommended system for naming
jobs is to use four or five characters, example 1234
Then you can name all releases associated with this job as
1234-001 1234-002 etc., up to 1234-999

In SHEAR 97, you can have thousands of active jobs in the Jobmaster screen, and thousands of releases for each job (in the turqoise Releases screen).

The release screen shows all releases (barlists) associated with
this job.

Have a trained SHEAR 97 package operator assist you, if possible.
Our goal is either to find pre-existing job number 6789, or to
enter the new job 6789. You must learn to do this because the
only way to enter a barlist is thru a releases screen,
and the way to the releases screen is through
the job contracts (Jobmaster) screen.

1) turn the computer on; turn the printer on.

2) click on the icon for SHEAR 97
   you should see the SHEAR 97 master menu

3) click on either barlisting or detailing.

4) the job (contract) screen appears. Scan this screen to see if
   job 6789 is already there; if job 6789 is on the screen, go
   to step 6)

5) click on the next available empty line
   type job number: 6789 [enter]
   enter customer name: Washington construction [enter]
   project name: Jefferson high school [enter]
   type the date: 11/8/91 [enter]
   enter the size mode: I
   enter the length mode: I
   enter contract tons: 456 [enter]
   go to step 7)

6) scan the screen to locate the line for job 6789.

7) double-click anyplace on the line with job 6789.

8) you now see the releases screen for job 6789.

The goal is either to find release # 6789-001 under job 6789;
if it is not there, then you will enter it into the releases screen
for job 6789.

1) Perform all steps of 'enter/find job 6789'

2) You now see the releases screen for job 6789.

3) Scan this screen to make sure that rel # 6789-001 is
not already there; if it is there, go to step 6)

4) Click on the next available empty line
now type: 6789-001 [enter]
for material usage: foundation [enter]

The other fields are optional; leave them empty for now.

5) Double-click anyplace on the line with release 6789-001.

6) You now see the barlist screen or detailing screen for
release 6789-001.

SHEAR 97 >> ADDING BARLIST LINES 1.03

The goal is to enter or modify barlist 6789-001 by adding 2 lines, one bent bar line and the second straight.

1) Perform all steps of 'enter/find release 6789-001'

2) The barlist screen appears; it may have lines in it, or it may be empty.

3) Click on the next available barlist line.

for qty, type: 44 [enter]
for size-grade, type: 4 [enter]
now press [enter] twice
for mark, type: 401 [enter]

for bendtype: 2 [enter]
for a dimension: 1 [enter]
for b dimension: 6 [enter]
for g dimension: 1 [enter]

6) You are now ready to enter the next line:
type: 33 [enter]
type: 3 [enter]
type 33.11 [enter]
now press [enter] key 3 times.

7) Press the Esc key (or click on X in the upper right, the close box).

8) You will now be on the releases screen.

9) Press the Esc key.

10) You will be back to the job screen.

11) Press the Esc key.

12) You will be back to the master menu.

These tips on entering data apply throughout SHEAR 97.

You must use the Enter key (not the tab key) after typing each field!

A field is the small highlighted area which you type into.
Always look for the prompt line at the bottom of the entry screen;
the prompt line gives helpful advice on what to enter in this field.

The up and down arrow keys will work as you would expect them to.
the plus key + is the same as down arrow, indicating go to the
next line.

Enter feet, inches and quarter inches like this: 23.103 - this
is 23 feet, 10 and 3/4 inches.
(For Estimators, if the Setup Preference on line 158 is Y, then
period means decimal, so if you type 4.5 you get 4 feet, 6 inches).

Here are some tips for "navigating" around in SHEAR 97

The [HOME] key will take you to the top of the screen;
pressing [home] twice will take you to the first line of the file.

The [END] key goes to the last line of the screen; pressing [end]
twice will take you to the end of the file.

The [PGUP] key will take you to the preceding screen.

The [PGDN] key will take you to the next screen.

The down arrow will drop you down to the next line; up arrow goes
to the line above where you are.

The [BACKSPACE] key (not to be confused with the directional left
arrow) will erase the character just to the left of the cursor.

You should generally have the [CAPS LOCK] key on at all times.

Except in the estimating screens, lengths you enter will generally
be less than 99 feet.

You must use the ENTER key to end a field. (Don't use the Tab key).

The highlighted area indicates where your typing will next
appear on the screen.

SHEAR 97 >> ENTERING SIZE-GRADE 2.02

SHEAR 97 lets you key any material type or labor code into the Material file; this lets you expand your list of valid materials up to as many as 1500 different rebar/mesh/accessory items; your can also enter "labor codes" (end prep codes). What you type in for "sz/gr" (size) must match a so-called 'short name' in a line in the Materials file. Although you rarely may need to access The Materials file, it is accessible thru the SHEAR 97 Setup Menu, and also from the barlist entry screen.

Also, for category 'R' (rebar) items, you must match an item that has the same size mode as your release; for example, if the job you are in is imperial size mode, then size 22 is not a valid size (it is a soft metric size) - you would receive a warning message from the computer in this case. Therefore, please note that you may have 3 different size 10 rebar items, one for Imperial, one for Soft Metric, and one for Hard Metric. If you create new mesh items, it is very important that for the short name, you use the first letter of R for rolls of mesh, and the letter S for sheets of mesh.

Here are some examples of size-grade combinations that you might have in your materials file.

STEEL TYPE - SIZE	ENTRY EXAMPLE	DISPLAYS AS
GRADE 60, # 2-11, 14 18	3	3
GRADE 40 SIZES	14G	14G40
GRADE 75 SIZES	11G75	11G75
SMOOTH ROUNDS SZ 2 to12	12S	1 1/2"
WIRE MESH Rolls/Sheets	RW2.9	RW2.9

To delete a barlist or detailing line, position on the line number for that line, then press your Delete Key. This means that the white field highlighting rectangle is right around the Line number, the field with the heading "Lin".

Similarly, to insert a line, highlight the line number for that line, then press your Insert key. This will create and insert a blank line.

SHEAR 97 lets you enter accessories into a list, using two different techniques. Regardless of which method you use, these items will appear in Detailing Placement lists, Detailing callouts, Barlist printouts, and on your tags.

Method #1)
One way is to have an accessory code in the Materials file. for example, you could use a 'short name' of chcu for continuous high chair upper. This is under category 'A' for accessories in the Materials file. With this method, you can set prices for this item, just as you would for any material code. Using this method, you can have a 12 character 'long name', which will appear on those documents which have the room to print more than 6 characters. For Estimating in particular, this method is preferred, so that you can accurately get totals for, and optionally price accessories items.

Method #2)
The second technique is to use the 'free-form' accessories mode by clicking on the 'Acc On' button at the top of the barlisting screen. In this case, each line has 'acc' for size-grade. you now have a 5 character units field, as well as a 30 character description of this accessory line item. an optional weight field lets you key in the total weight for this line item. The advantage of this method is that you have many more characters to describe this accessory (30 characters as contrasted to 12 for method #1).

As a general rule, you should use the Method #1, particularly for Estimating/Pricing purposes.

For Detailing or Barlisting/Tagging you can use Method #2 if you prefer the longer, 30 character description for a particular accessory line.

SHEAR 97 >> VARYING BARS ROUTINE, STRAIGHT OR BENT 2.05

SHEAR 97 has a varying routine built into barlisting and also the standalone detailing entry screens. This routine is invoked from the QTY field (not the CODE field).

Do not confuse this varying "routine" with the VARY "function" which
is available in Detailing and Estimating by typing V in the CODE field.

Bent varying bars - follow these steps:

1) Enter the first line of a varying group, example

enter the bar like you normally would
2 #3 mk: 301 type: 17 b: 1-00 c: 2-00 d: 3-00

2) On the next line, enter the last line of this varying group, leaving the mark empty,
example: 2 #3 type 17 8-00 2-00 1-00

3) on the next (third) line, under the qty field, type: V

You are asked how many lines you are expecting;
this includes the above 2 lines. This is not the total number of bars, but rather how many different lengths you expect to generate. For example, suppose you expect 8 lines, you enter 8. Optionally, if the bars will be close together in length, you can enter the quantity followed by a comma and then the inches variance.
for example, you enter 8,0-4
this means if a bar being generated is within 4 inches of the previous shorter bar, the 2 lines will be grouped together (this will result in fewer than 8 lines).
Even when varying bars are grouped, SHEAR 97 will always generate one line of the shortest bar, and one line of the longest bar.

4) the bar lines are generated, along with marks which
will be as follows: 301-1 301-2 up to 301-8

If you have the SHEAR 97 setup preference on line 356 set to Y, then
for bent bars, you'll see a "Varying bars even increments feature" popup.
If you want, you can evenly increment a particular bend dimension
letter for this group of bars; to do so, follow the instructions in
the popup box (otherwise, just hit Enter).

Straight varying bars:

follow the same steps as bent bars (above)
even though the bars are straight, you can either
use a mark on the first line, or leave the mark empty.

SHEAR 97 >> BARLISTING FEATURES 3.01

The barlist program allows you to takeoff a barlist from a blueprint, type in a handwritten list, or to modify and update a barlist.

Barlist files can be automatically generated with ShearCAD detailing. These barlist files will then correspond with the callouts on a detailer's cad drawing. The detailer's Notes may print on your tags.

Once a takeoff is completed, the sort & accumulate feature will sum and condense (accumulate quantities) similar bars (like size and length/marks). For example, if you have 3 different lines of mark 401 with quantities of 3, 10, and 5, then the result will be one line for mark 401 with a quantity of 18. This will result in fewer lines in the barlist (.dat) file than in the Detailing (.det) file. Another reason there may be more lines in the detailing file, is that comment lines are allowed in detailing, but are excluded from the barlist.

There is a feature for 'varied lengths'. This will allow you to type the beginning and ending lines and allow the computer to graduate any number of lines between the two original lines. For instance, you can vary between 10 feet and 15 feet every 6 inches; this would produce 11 lines using the 'varied length' feature.

SHEAR 97 will only ask for the relevant dimensions for a given bend type. The bending dimensions are summed to automatically give a 'tag length', that length which the customer sees printed on his tags; a bend deduction is automatically subtracted, based on size and bend type.

Every valid line must have a size-grade; examples follow:
3, 18, 5g40, 10s, w3.5, 26 (soft metric), 55 (hard metric)

If you enter the number as 24x13 (or 24*13), the computer will substitute 312.

In estimating barlist entry, in the B = "bent" field,
0=straight, 1=heavy, 2=light bending, 3=millcut/stock.

Remember you enter lengths such as 24.112 (24 ft 11 2/4 inches).
you can use either a . (period) or - (minus) between ft and inches.
Enter metric lengths with no decimal, example1234 which is 1.234 meters = 1234 millimeters. Also, you may enter 3000 mm as 3. Or 3000

SHEAR 97 will sort & accumulate like sizes, marks and lengths.

once a mark has been entered, along with bend type and all bend dimensions, all you have to enter for new lines with this mark is: qty, size, mark

For bent bars, leave the (theoretical) “tag length” and the (bend deducted) “cut length” empty and they will be computed for you; the bend deduction file is automatically accesses by the computer, which subtracts a bend deduction from the tag length to give the cut length.

The mark can be from 1 to 8 characters or digits; do not embed a space or a comma in a mark.

For straight bars, leave the bend type empty; do not enter 0 (zero).

CRSI standard bend types are used, as well as many extra bend types, as well as 'form-saver' bend types

The bend type is from 1 to 3 characters; for special types, you can use bend type names such as: SPA, SPB, H23, L45, etc.

When a tag (or tags for 'split tags') are printed for a barlist line, then the computer automatically marks that line with the letter: T thereafter, when the computer sees 'T' on that line, the computer will not print another tag for that line.

You can mark a line yourself with either of these letters: T or S
S means suspend this item (omit it) from Optimum Shearing.

You can clear out one (or all) T or S marks from a file, in case you wish to retag a complete file again. You use the misc menu to clear the letter T or S from a group of lines.

You can use the letter S to suspend a line from tag printing; any line marked with an S will not get a tag printed for it. In order to tag these suspended lines, you must at some point 'unsuspend' the suspended lines by removing the S from them

(ALSO SEE PAGE 3.05)

This feature applies to Landscape Barlist (Tyle 4) and Portrait Barlist (Style 5).

Fields for customizing the barlist subheading

These are the nine fields in the box on page 1 of the printout,
just below the heading lines.

See lines 101-119 on setup preferences screen

J fields come from the job screen

J1 = JOB NUMBER
J2 = JOB NAME
J3 = CUSTOMER
J4 = SIZE MODE (I/S/H)
J5 = LENGTH MODE (I/M)
J6 = CONTRACT TONS
J7 = SHIPPED TONS
J8 = UNSHIPPED TONS
J9 = START DATE
J11= LOCATION 1
J12= LOCATION 2
J13= CITY STATE ZIP
J14= P.O. OR JOB NUMBER
J15= PHONE NUMBER
J16= D.O.T.
J17= IDENTIFICATION NUMBER
J18= INSPECTED BY
J19= CONTACT
J20= FABRICATION RULE
J31= CUSTOMER JOB NUMBER
J32= HIGHEST LOAD NUMBER (SHIPPER SUBSYSTEM)
J33= COMPANY INDEX (1 TO 50)
J34= JOB COLOR
J36= MTR (MILL TESTS REQUIRED)

(also see page 3.04)

Fields for customizing the landscape barlist subheading

These are the nine fields in the box on page 1 of the printout,
just below the heading lines.

See lines 101-119 on setup preferences screen

R fields come from the releases screen

R1 = RELEASE NUMBER
R2 = MATERIAL USAGE
R3 = MATERIAL CODE
R4 = GRADE
R5 = DATE ORDERED
R6 = DATE TAGGED
R7 = TOTAL TONS
R8 = TONS SHIPPED
R9 = TONS UNSHIPPED
R10= DRAWING NUMBER
R11= REVISION
R12= ORDER NUMBER
R13= DATE TO DELIVER
R14= DATE TO FABRICATE
R15= FAB LOCATION
R16= FAB INFO
R17= INPUT BY
R18 TO R27= NOTES 1 TO 10
R28= SHIPPER NUMBER
R29= RELEASE COLOR
R31= ALPHA DESCRIPTOR
R32= BID ITEM

SHEAR 97 >> BEND TYPES 4.01

There are more than 195 valid bend types built into SHEAR 97.
Additional SHEAR 97 bend types are added periodically for you to use.
If there is a bend type which isn't already in SHEAR 97, and you
anticipate that you will need that bend type often in the future, please call
and we'll be glad to add your new bend type into SHEAR 97.

If you are looking for a bend type, please consult the stapled sheets
(13 pages or more) of bend types which were shipped with your manual.
To create an up-to-date list of SHEAR 97 bend types: from the Master Menu,
Click on "Setup", then Click on "Bend Types", Click on "Print Bend Types"
Answer NO, then click OKAY, then pick your printer

In addition, you can use the SHAPEMASTER program which is included with
your software to add those special bend types which you may often need.

For rarely used bend types, you can choose your own name for the type
and enter it into SHEAR 97, and use any of the 12 bend dimensions.
In this case, the "tag length" (theoretical length) will be computed by
adding the bend dimensions A thru G

The following are some of the valid bend types you can use with SHEAR 97:

1 THROUGH 14 16 THRU 27 32 THRU 37 S1 THRU S12 T1 THRU T12

T99 and SP (SPIRAL) A=HEIGHT, B=DIAM, C=PITCH, D=TURNS
If you leave D empty, it is computed for you from A,B,C.
Length is automatically computed as B TIMES D * PI (PI=3.14159),
plus 3 turns (1 and 1/2 turns top and bottom).

Additional bend types you can use are:
10A 12A 12B 13A 14X 15 20A 26A 2A 2B 33A 39 3A
40 41 42 43 44 45 46
47 48 48A 49 4A 4B
5A 6A 6B 6C 6D 71 72 74 74A 74B 75 7A
80 81 82 82A 83 9A 9L B1 B2 B3 B4 B5
S19 S4A S9A S9B SP1
T14 T15 T17 T18 T19 T1A
T20 T21 T22 T23 T24 T26 T27 T28
T30 T31 T32 T33 T3A T3B T3C T3D T3E T3F T3G
T4A T7A T7B T7C T88

'FORM-SAVER' coupler bend types built into SHEAR 97:
A C D E G U M N RL RR P W DA AA UA DP AP UP
CB DAB DB DPB DT DTB DTT E G M N NC NCB NLT P RL RR

Shear 97 uses a mathematically computed bend deduction system which has proven to be very accurate over the years.

The bend deduction file can be modified to meet your exact needs. bend deduction values are set by you in the setup menu.

You decide exactly how much to take for each 90 degree bend; this is based on bar size, and whether the bar is in the heavy or light bent category. Heavy and light bent are industry standards, and are defined in the ACI and CRSI Manuals.

In the setup menu, you enter the bending pin diameters which you use in your shop for each size, and for heavy and light bending categories.

For angles other than 90 degrees (generally between 1 and 89 degrees), the bend deductions is computed using these criteria:

>> the angle, and

>> light or heavy category, and

>> the bending pin diameters for this bar size

SHEAR 97 >> SHAPE MASTER - CREATE YOUR OWN BEND TYPES 4.03

Shear 97 uses the ShapeMaster program, accessed from the shear 97 master menu, to allow you to create your own bend types.

>you specify the 1-3 character name of the bend type;
allowable characters are A thru Z and 0 thru 9

>you list the bend dimension letters allowed in this
bend type - allowable letters are A B C D E F G J O H K R

>you give a formula which gives the tag length, such
as a+b+g (if you leave this empty, the default formula
SHEAR 97 will use is a+b+c+d+e+f+g)

>you now enter all right triangles in this bend type;
you must enter the hypotenuse (long side) of the right triangle first. Examples chk ehk

>apart from right triangles, other formulas can be used
to compute other legs or dimensions which have not been
entered by you. Example o=b+d+f+2*k

>for bend deductions, you enter either each angle, or formulas for the angles. Be sure to enter these angles in order. For example, if the legs are bcde, then you will enter 3 formulas for the 3 angles: between b and c, between c and d, and between d and e.
examples are bc=90 cd=45 de=180-arctan(k/h)
when you entered degrees such as 90 or 45, they will be changed to "radian" measure.

>allowable operators and functions for any of the above formulas:
pi + - * / sin cos tan arcsin arccos arctan sqrt
for example, arctan(k/h) is defined as the angle in a right triangle where k is the side opposite the angle, and h is the side adjacent to the angle in question.
please call if you have any questions, or if you'd like help creating these formulas.

>If you are use SHEAR 97 but not ShearCAD, you don't have to bother entering any inputs after the "compute leg formula" inputs

For ShearCAD users, enter the bend directions for each of your angles starting on line 58. You will need to enter a bend direction for each of the angle formulas you specified on Shapemaster lines 8 thru 16.
This allows ShearCAD to draw this Shapemaster bend type bar to scale when you Rt-click or Double left click on the "typ" column on the dark ble ShearCAD screen.

>the final steps in creating your custom bend type is to create a drawing of your new bend type using any cad program, for example AutoCAD;

>> for AutoCAD, type wmfbkgnd and set it to 0 (off).
>> for all others, set the background color to white.

For example, let's assume your bend type is named H99

This creates the picture at the bottom of the entry screen
Draw a Red on black background picture of your shape.
Now choose file-export-wmfout. Make sure the bend type fills the whole drawing screen by zooming a window (even resize the drawing area if you need to).

save this drawing as a "wmf" (windows meta file).
>> Save this file in: c:\shear97\system\misc\bendswmf\H99.wmf

Now, we suggest you create 3 additional copies of your bend type H99

This creates the picture for printing on placing lists and barlist printouts:
set the CAD background color to white.
Copy your Red on black background picture in order to create a black on white picture of H99
>> Save this file in: c:\shear97\data\bending\listwmf\H99.wmf

>> For printing tags, also save this file in: c:\shear97\system\misc\bendswmx\H99.wmf

Also if you share your data on a file server, then
Save this file in: S:\shear97\data\bending\listwmf\H99.wmf
Substituting for S: whatever you have on line 2 of your Setup preferences

For the ShearCAD "Insert Bends" feature, these steps will create an AutoCAD drawing:
In AutoCAD, open the drawing which has your H99 shape.
Open a second drawing c:\shear97\system\misc\bendsblx\1.dwg
Make this second drawing the Active drawing on your screen.
Click File, SAVE AS. Save this as c:\shear97\system\misc\bendsblx\H99.dwg
Use edit copy to copy your previously drawn shape H99 from the first drawing.
Use edit paste to replace the bend shape "Type 1" with your "Type H99"
Close AutoCAD, saving the changes to c:\shear97\system\misc\bendsblx\H99.dwg

Distribute the above 4 files to the other SHEAR 97/ShearCAD users in your office, placing the above files into the same corresponding folders in their C: drive
If you are not using a shared data drive with the other SHEAR 97/ShearCAD users, then have each user run Shapemaster and add the H99 formulas.

SHEAR 97 >> FORM SAVER BEND TYPES - BEND DEDUCTIONS 4.05

Form saver bend types have their bend deductions computed
by summing the following adjustments 1) and 2) below:

1) The coupler adjustment in inches.

this could be zero, or add to, or subtract from the taglength

>TYPES: DTT DTH DPB DB CB DAB DTB NC NCB NLT
COUPLER ADJUSTMENT IS ZERO

>TYPES: C E N DT (MALE COUPLER)
SIZES 4,5 : ADD 1.0 INCH
SIZES 6 THRU 8 : ADD 1.5 INCH
SIZES 9 THRU 11 : ADD 2.0 INCH

>TYPES: DP AP UP (POSITION COUPLER) (SUBTRACT DOUBLE FOR UP)
SIZES 5,6 : SUB 2.5 INCH
SIZES 7 : SUB 3.5 INCH
SIZES 8 THRU 9 : SUB 4.0 INCH
SIZES 10 THRU 11: SUB 4.5 INCH

>TYPES: ALL OTHERS NOT REFERENCED ABOVE (FEMALE OR STANDARD)
(SUBTRACT DOUBLE FOR: U M UA)
SIZES 4,5 : SUB 1.0 INCH
SIZES 6 THRU 11 : SUB 2.0 INCH

2) The standard bend type adjustment.

for particular form saver bend types, a standard bend deduction
is computed from a similar (non-form saver) standard bend type

>TAKE SAME DEDUCT AS TYPE 2 FOR : A E M AA AP DTH

>TAKE SAME DEDUCT AS TYPE 1 FOR : N

>TAKE SAME DEDUCT AS TYPE 16 FOR: RL RR P

>TAKE SAME DEDUCT AS TYPE 36 FOR: W

>All others, take no standard bend type adjustment

Form saver bend types alternate 2 method:
bend deductions are computed the same as the method specified
in topic 4.05, but with the following exceptions:

1) THE COUPLER ADJUSTMENT IN INCHES.

>TYPES: C E N CB
COUPLER ADJUSTMENT IS ZERO

>TYPES: A D G RR RL DB
SIZES 4 THRU 7 : SUB 1.0 INCH
SIZES 8 THRU 9 : SUB 1.5 INCH
SIZES 10 THRU 11 : SUB 2.0 INCH

>TYPES: U M
SIZES 4 THRU 7 : SUB 2.0 INCH
SIZES 8 THRU 9 : SUB 3.0 INCH
SIZES 10 THRU 11 : SUB 4.0 INCH

2) THE STANDARD BEND TYPE ADJUSTMENT.

Follow the standard method as in topic 4.05

SHEAR 97 >> TAGGING

INFORMATION SHEETS FOLLOW . . .

Thermal tags and color laser tags are “hot-hot-hot”!

You can benefit greatly from using thermal or laser tags instead of old dot-matrix tags.

Thermal tags are better in these ways:

> Thermal tags print fast – about one per second (ten times faster than dot-matrix). You and your shop personnel never wait around for tags to print.

> Thermal tags are strong – you can’t tear them. The tag wire hole needs no special reinforcing disk, and the tag wire will never tear through the hole.

> Thermal printers are very quiet, which is a blessing if you’ve spent much time around a dot-matrix printer.

> Thermal printers utilize a single-use thin film ribbon - this guarantees an extremely dark and durable printed image for a professional looking tag. Thermal tags are very resistant to fading from sunlight; water will not smear them.

> Thermal printers have fewer mechanical parts than dot-matrix printers – this reduces the cost and hassle of taking your printer in for repair.

> SHEAR 97 has several thermal tag styles – choose your favorite from among these styles, and you pay no additional programming fees!

> Thermal tags are far superior to tyvek tags, yet are comparable in cost.

> You can buy a thermal printer for $450 (WASP brand, model WPL 305)

Curious? If you’d like to learn more about thermal tags, give me a call. Let’s discuss how thermal tags can benefit your rebar shop.

Laser Tags: Color Laser Tags have been coming on strong the last few years!

So, what's the latest? Tags printed on your (color) laser printer - this has turned out to be a very popular alternative to thermal tags. Tag style 38 prints on an 8.5 x 11 inch sheet, 3 tags per sheet, with tear-off stubs as proof the tagged item was shipped. “Tag style 38” tags can cost as little as 10 cents per tag. You can use a black (non-color) laser if you prefer. You can buy a color laser printer for between $200 and $600.

There are currently 42 different SHEAR 97 tag styles from which you can choose.

Printer types which you can use: Laser, Thermal (e.g. Zebra or WASP), Dot-matrix
You can design your own tag layout (requires a one-time programming fee)

Bender bar codes (industry standard PDF417 format) can contain all the information the bender needs to setup and produce this bent bar item.

Tags are printed in many optional formats, for example, tags can be printed with extra large "control code" characters, bar codes, bend angles required for this bar, and the detailing note.

Bent bars are pictured with the bend dimensions overlaying the picture.

Tags are printed for mesh and accessories items in SHEAR 97.

Once a line item is tagged, its file line is marked as 'T', and can not be tagged again (without override).
Also, for reporting, all line items with a T are included in the 'shipped' category and out of the 'unshipped' category.

SHEAR 97 can be modified to accommodate most any type of tag design which meets your needs.

Call Application Software Inc., phone 317-823-3525, to discuss recommended brands and types of printers, as well as sources and costs for tags.

> Uncrate the printer, remove all tape and packing material.
Refer to the printer manual, install the ribbon.

> Make sure the data cable from the computer is unattached.

> Important: note that your tags are loaded face-up, with the
bottom of the tag coming through the printer first.

> Some thermal printers will calibrate automatically. For those that don't:
Refer to the printer manual, perform the Calibration Procedure. This procedure is very important - if this procedure is not performed, your printer won't work right. Calibration should only need to be performed once for this printer (it doesn't cause a problem to do it a second time, however). If the lights don't appear EXACTLY as described in the procedure, the calibration was not successful. Do not proceed until this is completed. If you are having trouble at this point, call for assistance.
If calibration repeatedly fails, you may need to adjust the top and/or the bottom notch sensors (try the top sensor first).

> Install the 200 or 203 DPI Windows driver from the CD which
came with your printer.
Do not install any other DPI driver, except 200 or 203 DPI.

> Attach the data cable.

> Click Start-Settings-Printers.
Right click on the WASP or Zebra printer icon.
Left click on properties.
Click around on the properties page to find where you can set the
tag size. Although it various from one driver to the next, this may be accessed by:
click on the General tab; click on Printing Preferences; then click on Page Setup.
Create a new form, called it rebartags, and set the size, for example to
3.9 inches wide by 8.0 inches tall.
Increase the darkness setting to about halfway between medium and the darkest.
Turn off "dithering". Set the speed to 2 or 3 inches per second.

Try a Windows test page.

> Run SHEAR 97, click on Setup, Setup Preferences.
Set line 7 to your thermal tag style (call if you don't know).
Set line 22 to one of these names: Arial, Arial Black, 0 (zero)
Set line 23 to a font size such as: 12, 12.5, 13.0, 13.5
Set line 24 to your printer device name, example: Zebra 105SL 200DPI
Set line 27 to: 12 (or maybe 10 - see what you like best)
Setup lines 203, 204, 209, 276 adjust up/down, left/right
If you use tag style 14, set line 275 to a number such as: 22

When a large quantity is encountered in a barlist file on a single line, the program will split the bundle into 2 or more tags, based on these criteria which are in a computer file you can easily modify;
bar size, straight,bent, stirrups and tie type bends, standees,
and piece count per bundle as well as bundle weight.

You can split tags evenly or by a tag count. For example,
you can split an item into 2 tags with 100 and 50 pieces, or
you can split the item into 2 tags with 75 pieces each bundle.

You can tell SHEAR 97 to split designated stock length bars
at a piece count which you set (you could set the piece
count to be the quantity that typically are in a bundle of stock).

IMPORTANT NOTE: This should be set in any case, since SHEAR 97 decides which are "stock" bars based on these fields in the “default” bundling file.
For example, this can be used so that in the Estimating module, when function codes generate stock bars, these bars are automatically recognized as stock and total them as Stock in the printed Totals chart.
To set this up, Run SHEAR 97. Click on SETUP. Click on BUNDLING FILES.

You can have a custom bundling file for a particular job;
this custom file is created in the setup menu. If you don't have a
custom bundling file for a particular job, then the data in the
"default" bundling file will be used.

SHEAR 97 >> DET PLACEMENT LIST, 8.5 X 14 LANDSCAPE 6.08

For the heading of the 8.5 x 14 landscape detailing placement list, please refer to the following guide for heading variable field values. These settings determine the text values which will print in the heading of this placement list:

In Setup Preferences:

If the Setup preferences on lines 198 and 201 are filled in, then they will be printed in the top left box of the heading.

Release screen entries:

Release screen, note 1 is: Time

Release screen, note 2 is: Instructions #1

Release screen, note 3 is: Instructions #2

Release screen, By is: By

Release screen, Material Usage is: Location

Job screen entry:

Job screen, Job Location #1 is: Address

SHEAR 97 AND SHEARCAD DETAILING/ESTIMATING FUNCTIONS

INFORMATION SHEETS FOLLOW . . .

IMPORTANT NOTE: To see videos of all Detailing/Estimating Functions in action:
Go to the website **www.eRebar.com**
Click on “SHEAR 97 and ShearCAD Videos”
Click on each of the videos listed for a demonstration of that particular function.

Use these 3 functions for linear runs over a rectangular area. LINE is one way, GRID and GRIX are each way. Clearance affects not only run lengths, but also the span and spacing, because the span is decreased by 2 times clearance. The span and spacing function adds 1 bar for the outside (e.g. span 12-0, spacing 2-0 gives 7 bars, not 6).

Regarding where the first bar from the edge in particular structures will be placed:
For “LINE”, “GRID”, “GRIX”, “VARY” see the SHEAR 97 setup preference on line 442.
For “PANL” see the SHEAR 97 setup preferences on lines 405 and 442.

LINE Function

"Length" Length of run, concrete dimension.
"Span" If not empty, Quantity of bars is computed from
"Spacing" span and spacing; otherwise, Qty field is used.
"Stock" This comes from your currently activated stock and
"Lap" lap file index (#1 to #3) - see Setup Menu.
"Qty" Enter SS for span spacing popup.
If you want ShearCAD to draw the structure and bars, leave this Qty field zero (empty); use span and spacing instead.
"Hook #1" Enter "-" and you get the standard hook length.
"Hook #2"
"Clrance" Clearance lt, rt, top, bot.
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.
“StkRnd” Enter a length to substitute in place of a short bar (straight runs only).

GRID Function

Note: If the bar sizes each way are not the same or spacing differs, use “GRIX” instead

"Length" Inputs similar to LINE above
"Width"
"Spacing"
"Stock"
"Lap"
"LenHk#1" Lt or Bot hook on the bars running Lengthwise.
"LenHk#2" Rt or Top hook on the bars running Lengthwise.
"WidHk#1" Lt or Bot hook on the bars running Widthwise.
"WidHk#2" Rt or Top hook on the bars running Widthwise.
"Clrance" Clearance lt, rt, top, bot.
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.
“Layers” Leave empty or enter a maximum of 8

GRIX Function

"Length" Inputs similar to GRID above
"Width"
"LenSpac" Spacing of bars running Lengthwise.
"LenStk" Stock length of bars running Lengthwise.
"LenLap" Lap length of bars running Lengthwise.
"LenHk#1" Lt or Bot hook on the bars running Lengthwise.
"LenHk#2" Rt or Top hook on the bars running Lengthwise.
"WidHk#1" Lt or Bot hook on the bars running Widthwise.
"WidHk#2" Rt or Top hook on the bars running Widthwise.
"WidSize" Size of bars running Widthwise - empty if same size.
"WidSpac" Spa. of bars running Widthwise - empty if same spa.
"WidStk" Stock of bars running Widthwise.
"WidLap" Lap of bars running Widthwise.
"Clrance" Clearance lt, rt, top, bot.
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.
“Layers” Leave empty or enter a maximum of 8

VARY Function

Bars are spaced evenly over a span, and vary evenly in length.

Don’t confuse this VARY Function with the “Varying Bars Routine" (not a function)
(See topic “SHEAR 97 >> VARYING BARS ROUTINE, STRAIGHT OR BENT 2.05”)

"Length1" Enter either the shortest or longest length.
"Length2" Enter the other length.
"Span" Concrete dimensions of span.
"Spacing"
"Stock"
"Lap"
"Qty" Leave empty if you entered span and spacing.
"Clrance" Clearance lt, rt, top, bot.
"Hook #1" Optional hook, enter "-" for standard hook.
"Hook #2"
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.

DNUT Function

One or more concentric circles of type T3 bars, or type 9 bars lapped. You are warned if arc height is >7'4", and allowed to split the bars into additional arc bars. Bars are automatically shipped straight if they can be according to the "radial prefabrication" rules (see CRSI "Manual of Standard Practice".

"Radius1" Enter the shortest (inner) or longest (outer) radius.
"Radius2" Enter the other radius. Can be same as above radius; if it is, you get only one run of bars.
If there is just one radius, you can leave both "Radius2" and "Spacing" empty
"Spacing" Linear distance from one run of bars to the next.
"Stock"
"Lap"
"Clrance" If entered, this decreases the longer radius by clearance and increases the shorter radius by clearance.
For example: rad1=12-2, rad2=7-10, spac 2-0, clrance 0-2
gives you the same results as if you enter:
rad1=12-0, rad2=8-0, spac 2-0, clrance 0
In each case, you get three steel arc radiuses of 12-0, 10-0, 8-0
"Deg<360" If the arc bars are less than a complete circle, as for a "pie-shaped wedge" segment, then enter the degrees of this circular sector, example 120
"Clr<360" If you entered a value for "Deg<360" above, then enter the (optional) clearance, example 0-3
For negative clearance, use square brackets, example [0-4]
"BndALL1" If set to 1, all bars are bent. Otherwise, some bars may ship straight

CIRC Function

Bars are spaced evenly (one-way) over a circular slab.
Important note: you should set the **E.W. to 2**
(or, alternatively, you can set the Required field to 2)
in order to compute the grid of bars **each way** over this circle.
"Diametr" Concrete dimensions of this circular structure.
"Spacing" This input, along with the following 3 inputs, are similar to those of the LINE function.
"Stock"
"Lap"
"Clrance"
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.
"E.W. = 2" Enter 2 for each way (you'll usually enter 2 here)
"Layers" Leave empty or enter a maximum of 8
"CtrBar1" If you enter 1, there will be a bar at the center line; otherwise, the first bar(s) are half of a spacing from the center

RADI Function

Bars radiate out from the center point of a circle, like the spokes of a wheel.

"Radius"
"Spacing" Spacing between adjacent bars at the Perimeter of the circle.
"Stock"
"Lap"
"Clrance"
"InRad#1" Inner Radius 1,2,3. If any or all of these are non-zero,
"InRad#2" the result is 1, 2 or 3 runs of slightly different length.
"InRad#3" The bar run length is radius - clearance - inner radius.
“Deg<360” If these bars are filling a sector less than a complete circle, as for a “pie-shaped wedge” segment, then enter the degrees of this circular sector, example 120

SPRL Function

Important note: See setup preference on line 165. Set this to N if you fabricate spirals from coiled bar; otherwise, set it to Y to use stock lengths of straight bar. Using straight bar can greatly increase the computed amount of steel required for spirals, particularly if you use shorter stock, for example 20-0 instead of 60-0, because of the 3 extra turns added for each bar.

"Diametr" Diameter of each spiral.
"Height" Height of spiral (concrete dimension minus cover).
"Pitch"
"Turns" If left empty, this will be computed for you.
"Stock" Length of Stock bar (also see setup preference 165).
"Clrance" Effectively, the diameter is reduced by 2 * Clrance
“+-Turns” Adjust 3 extra turns by this many turns. Allowed -3 -2 -1 0 1 2 3
The above inputs results in this many extra turns: 0 1 2 3 4 5 6

MESH Function

Mesh covers a rectangular area.
Important note: See setup preferences on lines 11 and 12. Set
these values to the square footage of the rolls and sheets
which your shop uses. Also, you can set the square footage for individual mesh items in a field of the Materials file setup.

Regarding the "short" name in the Materials file, Mesh Category items that start with the letter "R" are assumed to be rolls, and those that start with "S" are computed as sheets; you must take this into account as you add new mesh items to your Materials file.

"Length" Length of the rectangular area to be covered.
"Width" Width of the rectangular area to be covered.
"Scrap" Scrap & Lap. Leave off the % sign; Example: 15
"Clrance" Clearance lt, rt, top, bot.

In ShearCAD, MESH allows you to pick any closed polyline with optional openings, and the net square footage is calculated automatically. Then, the square root of the square footage is taken and those are the suggested inputs for length and width. In this way, ShearCAD is approximating the mesh required for this arbitrary shape by substituting a square with the equivalent required square footage.

COLV Function

Note: For a comprehensive Column function with great power and flexibility, and which will compute all verts and ties, use the COLM function instead of this COLV function.

Vertical bars in a column with clearance. Quantity of bars
can be entered, or will be computed from span and spacing.

"Length"
"Span"
"Spacing"
"Stock"
"Lap"
"Qty"
"Clrance"

RTI, RTIS Function

Rectangular ties (RTI computes non-seismic hooks, while the RTIS function generates seismic hooks)

"Length" Vertical dimension of this tie
"Width" Width of this tie
Either enter the span and spacing and leave Qty empty, or leave span and spacing empty, and fill in the Qty.

CTI, CTIS Function

Circular ties (non-seismic hooks and seismic hooks)

3RT, 3RTS Function

This is a combination of 3 Rectangular ties. The first tie is the outer rectangle. The other 2 ties cross in the middle of this outer tie. Each inner tie extends across the outer tie, but the width is 1/3 of the length/width of the outer tie.

BDT, BDTS Function

This is a T4 diamond tie inside an outer rectangular T2 tie. BDTS gives you a seismic hook.

MLEN Function

MLEN is multiple lengths added together to give you one bar.

"Span" Either enter span and spacing to compute
"Spacing" the quantity of bars, or enter it below.
"Qty"
"Len1" thru "Len6" Add up from 1 to 6 lengths for total length.
"Clrance" Clearance lt, rt, top, bot.
“Hook” Enter minus sign (-) for standard 90,
or type S180 or S135, or leave empty
“L=2,H=3” Enter 2 to indicate Light bent, 3 for Heavy bent

OCTA, HEXA Functions

OCTA is bars spaced evenly each way over a regular octagon.
HEXA is bars spaced evenly each way over a regular hexagon.
Optional edge bars are overlapped bend type 3 bars with just dimensions C, D, and E; this forms a perimeter around the octagonal or hexagonal slab.
It is sufficient for you to enter only one of these values:
"Radi-OR" or "LenSide" or "Out-Out".

"Radi-OR" The distance from the center to a Vertex (point).
Note that Radi is LONGER than half of the Out-Out
"LenSide" The length of one side.
"Clrance"
"Spacing"
"Stock"
"Lap"
"MatLayrs" How many layers of mat bars (1 or 2, for example).
Default is one layer (this means one layer, bars each way)
"EdgSize" Edge bar size (leave empty for no edge bars).
"EdgLayrs" How many layers of edge bars (1 or 2, for example).
"EdgLap" Lap length for edge bars (C and E legs overlap).
"Out-Out" Distance from one face to the opposing face.

"Typ14=1" For OCTA only, if set to 1, you will get 2 bend type 14
edge bars per edge bar layer instead of 4 bend type 3 bars.

CMUV Function

Concrete Masonry Unit Vertical bars.

"WallHt" Height of the wall (example 20-0).
"Clr-top" Clearance at top of wall (example 0-3).
"Span" Enter span, spacing, or if not ShearCAD,
"Spacing" leave these empty and enter quantity of runs.
"Qty"
"LiftHt" Lift Height, Example 4-0.
"Lap" Lap, example 2-0.
"1or2bar" How many bars per cell (1 or 2).
"TopHook" Type "-" for standard hook at the top.
"Hk=0to2" Hook style: enter 0 for 90, 1 for 180, 2 for 135.

Also refer to the CMUV related SHEAR 97 setup preference on line 460

MACR Function

Applies one of your previously created "macro" functions.
An explanation of macros appears on the Macro function
creation screen.

"Span" Enter span, spacing, or if not ShearCAD,
"Spacing" leave these empty and enter quantity of bars.
"Qty"
"Mac ID" This is the Identifier (ID) of this macro, as
you defined it in the macro creation screen.
"L1 or ?" One of the variable length fields as you
defined it for this macro. If this macro has
fewer than 8 lengths, leave the last few empty.
If you enter question mark(?) for L1, then
the Macro Usage note will be displayed
"L2 Len"
.
.
"L8 Len"

C Comment Line Function

Enter C in the code field, and you can type a long comment
which will appear in Placement Lists, Estimate Printouts,
as well as Detailing callouts.

RANG Function (ShearCAD only)

Given any arbitrary shape, with numerous enclosed openings, bars are spaced evenly with stock and lap, if needed, along with optional hooks. Bars are automatically drawn in your AutoCAD or IntelliCAD drawing for you. RANG can be used for a variety of structures: slabs, walls, block walls with openings and elevation changes (step-up), etc.

" Horz bars SPACING :" Spacing of the horizontal runs of bars.
"Horz STOCK Length : " Stock length for the horizontal runs.
"Horz LAP Length : " Lap length for the horizontal runs.
"Hor Hk#1 (left) Len: " Lt hook length (optional).
"Hor Hk#2 (rt) Len: " Rt hook length.
"Vrt Hk#1 (bot) Len: " Bottom hook length.
"Vrt Hk#2 (top) Len: " Top hook length.
"Vrt Size, if differ: " Size of vertical bars (leave empty if same).
"Vrt SPAC, if differ: " Vertical Spacing (leave empty if same as horz).
"Vert STOCK Length : " Stock length for all vertical runs.
"Vert LAP Length : " Lap length for the vertical runs.
"Clr (L,R,B,T,Opgs) : " Clearance lt, rt, top, bot; also around openings.
If you enter any of the 5 clearances in square brackets, then that means negative clearance, and the bars will project out of the structure, example [0-4]
"Clr Left, Optional : " If you enter any of these next 4 clearances,
"Clr Rt, Optional : " then "Clrance" applies ONLY to openings.
"Clr Bot, Optional : " If you leave all 4 zero, "Clrance" is in effect.
"Clr Top, Optional : " If you enter at least one of these 4 inputs, then
you can leave from 1 to 3 of these empty (zero),
and the clearance will be zero for that entry.
"1=V only, 2=H only : " 1 for verts only, 2 for horiz only, empty=both.
"Horz Lap Max Length: " (Optional) If entered, and for example the horizontal lap is 2-6 and the HorzLapMax is 4-0 then on a graduated sloping structure the lap may be increased up to 4-0 then the short length on adjacent runs is the same.
"Vert Lap Max Length: " (Optional) Vertical Lap Maximum (similar to HorzLapMax)
"Hk:0=90 1=180 2=135: " Hook style: enter 0 for 90, 1 for 180, 2 for 135
"Opg Hook Horz, Len : " The hook length if you want hooks at the enclosed openings for horizontal bars in this structure.
"Opg Hk Horz, 0 1 2 : " For the above, Hook style: enter 0 for 90, 1 for 180, 2 for 135
"Opg Hook Vert, Len : " The hook length if you want hooks at the enclosed openings for vertical bars in this structure.
"Opg Hk Vert, 0 1 2 : " For the above, Hook style: enter 0 for 90, 1 for 180, 2 for 135
"BendTyp: 1 2 8 etc.: " Leave empty, or use one of these: 1, 2, 8, 24, 18, 17, 20
"1=R-L 2=T-B 3=BOTH: " 1 = verts are computed Right to Left instead of L-R
2 = horz are computed Top to Bottom instead of B-T 3 = R-L and T-B
"1= Ship Stock only : " If you enter 1,the bars are drawn in the drawing as usual, but there will be only one or two stock length bar lines generated on the dark-blue screen with the equivalent amount of stock required.
"Hor shortbar Len MAX: " Allows hor short bar to be longer than stock, may save a lap
"Vrt shortbar Len MAX: " Allows vrt short bar to be longer than stock, may save a lap

ELLI Function

One or more elliptical runs of bars, parallel to each other.
Ellipses inherently are defined as having 2 different radii.
The output of this function are type 9 radius bars
(straightened if allowed by radial prefabrication rules) with
varying radii, based on their position along the ellipse,
relative to the "long side" and "short side" of the ellipse.

"RadLong" The "long" radius of this ellipse.
"RadShrt" The short radius.
"Span" The span (concrete dim) of the elliptical
shaped "band" of bars.
"Spacing" Spacing between each parallel elliptical bar run.
"Stock"
"Lap"
"Clrance" Clearance lt, rt, top, bot.

PANL Function

"Panel Width : " Panel width (concrete dimensions).
"Panel Height : " Do not include height of slope at top
"Clearance : " Clearance applies to lt,rt,top,bot.
"Edge Bar Size Horz : " Edge bar size horz (empty=none).
"Edge Bar Size Vert : " Edge bar size vertical (lt and rt).
"Horiz Bar Size : " Mat bar size horizontal.
"Vertical Bar Size : " Mat bar size vertical.
"Horizontal Spacing : " Mat bar spacing, horizontally.
"Vertical Spacing : " Mat bar spacing, vertically.
"Crnr Bars per Crnr : " Enter 2 here, you get 8 corner bars total.
"Corner Bar Size : "
"CB Length (1 Leg) : " Enter 2-0, get a 4-0 "L" bar (type 17).
"#1 Opg. Width : " Rectangular opening #1 width.
"#1 Opg. Height : "
"#1 Dist from Left : " Distance from LEFT of panel to lt of opg.
"#1 Dist from Botm : "
"#2 Opg. Width : "
"#2 Opg. Height : "
"#2 Dist from Right : " Dist. from the RIGHT, not left - careful!
"#2 Dist from Botm : "
"Minimum Bar Length : " If you enter, for example 0-8, then
any bar less than 8" will be omitted.

"Xtra/Diag Bar Size : " The size for both extra (trim) bars
around the opening (top bot, lt, rt),
as well as straight "diagonal" bars at
all corners of each rectanglular opg.

"Diag Bar Length : "
"Xtra/Diag Bars 0-3 : " Enter 2 and you get 2 diagonal bars
at each corner of each rectangular
opening (e.g. for 2 openings,
you get 16 diagonal bars, and
16 extra (trim) bars (2 lt, 2 rt,
2 top, 2 bot of each opening).
"Sym H=1 V=2 both=3 : " For symmetry of placement of horz mat bars about a
horizontal center line, enter 1
For symmetry of vert mat bars about a
vertical center line, enter 2. For both, enter 3
If left empty, the mat bars are placed at multiples of spacing from the
first vert bar on the left, and from the first horz bar at the bottom.
If set to 3, then mat bars will be placed at equal distances
from the vertical and horizontal center lines of this panel.

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PANL Function (continued)

"CBLeg2 if Different: " If corner bar is not symmetric, then
enter the other leg length.
"Crnr Bar Tot if Dif: " If the total corner bars will not
be a multiple of 4 times the number
of openings, override that by entering
the total pieces here.
"Diag Size if Differ: " If diag size differs from the extra
bars, override the diag size here.
"Diag Bar Tot if Dif: " If the total diagonal bars will not
be a multiple of 4 times the number
of openings, override that by entering
the total pieces here.
"Diag Bar Bot Bend=1: " If you need the bottom of the diag
bars to bend up, enter 1.
Also see SHEAR 97 setup preferences 522

" Edge Bar Layers : " Example: 2 (leave empty if none).
" Mat Bar Layers : " Example: 1 layer of bars each way.
"1st Mat Bar Clr + ?: " The first mat bar is computed to be at
clearance. If you enter e.g. 0-6, the
first bar is set 6" in from clearance.
Also see SHEAR 97 setup preferences 405 and 442

"H Extnd Xtra 0=Full: " Horz extra bars will run the complete
width of the panel if this is 0 or empty.
Enter 900-0 and it will run the bars the
full width and hook both ends.
If you enter, for example, 7-0, then each
bar will extend 3-6 past each opening.
"V Extnd Xtra 0=Full: " Vert extra bars extension. See above input.
"H Edg Bot Hooks 0-2: " How many hooks on the horz bottom bars.
"V Edge Hooks 0-2: " How many hooks on the all edge bars.
"#3 Opg. Width : "
"#3 Opg. Height : "
"#3 Dist from Left : " Distance from the LEFT.
"#3 Dist from Botm : "

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PANL Function (continued)

"#4 Wid, 0 if Circle: " Width of rectangular opening; if this is a circular opening, leave this zero.

"#4 Ht., 0 if Circle: " Height of rectangular opening.
"#4 Dst/Ctr from Rt : " Distance from the RIGHT if rectangular opening; if circular opening, this is the distance to the center point from the right side of the panel.
"#4 Dst/Ctr from Bot: " Distance from bottom of the panel to the bottom of the rectangular opg, (or to the center point, if circular).
"#4 Radius if Circle: " If circular opening, enter the radius.
"1=draw, 2=bars also: " ShearCAD only. Enter 1 to draw the outline of the structure; 2 also draws the bars.
"If Peak,Peak Height: " The peak distance above the rectangular area of the panel. Example: if the panel is 20 feet tall, and it slopes up 2 feet above the 20 feet then enter 2-0
"Peak Dist from Left: " If the panel slopes gradually up to 2 feet on the right, and the panel is 30 feet wide, then enter 30-0. If the slope is high on the left, sloping to 0 on the right, enter 0 (or leave empty). If, for example, the peak is in the middle of a 30 foot wide panel, enter 15-0
"Slab Dowels Spacing: "
"Slab Dowel Bar Size: "
"Dowel Leg Length : " Length of the leg projecting towards slab
"Dowel Hook Length : "
"Dowel Dist from Bot: " Distance of the dowel leg from bot of panel
"Panel Thickness : " ex: -08 (Generates a comment with thickness)
"Knockout opgs ex 23: " ex: 23 means opgs #2 and #3 are knockouts
"Panel ID number : " Identified this panel – creates label in ShearCAD
"Non-std grade ex 75" Leave empty unless grade is not standard
"Zones enter 1 or ? : " enter ? and you'll see your options. If you enter 1 then the next 8 inputs are from 1 to 4 pairs of zone width, zone dist from left side of panel. For zone(s), vert mat, extra, and edge bars will automatically be removed from this panel
"#5 Opg. Width : "
"#5 Opg. Height : "
"#5 Dist from LEFT : " Distance from LEFT of panel to LEFT of opg #5
"#5 Dist from Botm : "
"#6 Opg. Width : "
"#6 Opg. Height : "
"#6 Dist from RIGHT : " Dist. from the RIGHT, not left - careful!
"#6 Dist from Botm : "

If you do not have zones, then you can have a fifth and sixth rectangular opening.

BEAM Function

BEAM details one span of a multi-span beam (styles 1 and 2).

Also, Multi-span beams can be detailed with a single beam function.
For instance, to detail a 3 span beam, make sure you input these:
End Clr, Outer/Cntr Supp Wid, This clear span, next clear span,
Span #2 Rt Supp Wid, Span #3 Clear Span, Span #3 Rt Supp Wid

Use Style 3 for a single-span beam, with or without supports;
style 3 uses continuous runs of bars, stock and lap if needed.
Please refer to your manual in the black notebook for pictures
of the styles of beam, particularly for styles 1 and 2.
For styles 1 and 2, each span is either an end span
(End Clr is non-zero) or else it is a "central span" (End Clr=0).
For identical repeating spans, enter the number of spans into
the Required field of this barline.

For example, suppose that there are 100 spans to this beam;
assume that the outer left span (span 1) and the rightmost
span (span 100) are identical; also assume that all spans in
the middle are identical. Then you enter 2 for Required and do
the leftmost span; next, set 98 required and do an inner span.

"GB#Style# (Ex. 52) : " This field combines the (optional) GB# (the span
number), with the style # (1,2, or 3).
Therefore, the entry in this field
will always be an (optional) number with a mandatory digit
of either 1,2, or 3 on the right. Don't
enter a dash or space in this field.
example: 11 (span 1 of style 1)
example: 72 (span 7 of style 2)
example: 3 (style 3, single-span beam)
"End Clr (0=Central): " Example 0-3 for end span. Leave zero for central span.
"Outer/Cntr Supp Wid: " If this is an outer span, then this is
the width of the outer span; otherwise it
is the width of the inner (Cntr) support.
"This Clear Span Wid: " The distance between the 2 support faces.
"Central Support Wid: " The width of the inner support.
"Top Bar Lap Length : "
"Bot Lap / Embed Len: " For style 1 and 3, this is bot lap;
For style 2, this is the embedment length.

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BEAM Function (continued)

"T Len Override Calc: " If (for any reason) you know that the length which will be computed would be inappropriate, then you can enter an overriding length here; otherwise, leave this field empty.

"Top Bar SZ 0=None : " Enter the top bar size. If there is no top bar (such as with style 1, for the span to the left of the rightmost outer span), then leave this empty (or 0).
"Bottom Bar SIZE : "

"Hook Len (Optional): "
"Next Clear Span Wid: " The length of the next inner span.

"Tie Bar SIZE : "
"GB Width (Tie Calc): " Concrete dimensions, grade beam width.
"GB Depth (Tie Calc): " Grade beam depth.
"L.S. Tie Clearance : " Left side tie clearance, example 0-2
"R.S. Tie Clearance : "
"Top Tie Clearance : "
"Bot. Tie Clearance : "

The next 4 entries are optional, and can be left empty.
"(OUTER) Tie QTY : " Example 2
"(OUTER) Tie Spacing: " Example 0-3
"NEXT Tie QTY : " Example 4
"NEXT Tie Spacing : " Example 0-6
"REMAINING Ties Spac: " The remaining tie spacing; this is mandatory (non-zero); example 0-10

">Span%, Ex 33 or 50: " Optional - if non zero, the top bar is the percent times whichever span of these is greater: the current span, prior span, or the next span; ex 33
" PRIOR Clear Span: " Enter this only if you entered a percentage in the above field.

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BEAM Function (continued)

If all of the next four entries are zero, then the initial and secondary tie spacing from the right will be computed to be the same as the tie spacing from the left side of the beam.

"(Outer RT) Tie QTY : " Optional - the initial tie quantity coming from the right side.

"(Outer RT) Tie Spac: " Optional - the initial tie spacing coming from the right side.

"NEXT Tie QTY RT: " Secondary tie qty from the right side.

"NEXT Tie Spacing RT: " Secondary tie spacing from the right.

" Top Bars QUANTITY: "

" Bot Bars QUANTITY: "

"Centr Bar Lap Mid=1: " If you enter 1, then the Center bars will be lapped at mid-span instead of over the supports.

" Hook Bot .001=none: " If you entered a top hook, then the bottom hook will be computed to be the same as the top hook if you leave this entry empty. However, entering .001 will give you no bottom hook.

"Non-std grade ex 75" Leave empty unless grade is not standard

"Centr Bars QUANTITY: "

" Center Bars SIZE: "

"Center Len Override: " Center bar length override, if needed; otherwise, leave this field empty.

"Cntr Bar LapLength : "

If you leave the next 4 empty, then the tie spacing will assume to be extended over both supports. Otherwise these will determine the quantity and spacing of the ties over the supports.

"Tie QTY over Lt sup: "

"Tie QTY over Rt sup: "

"Tie Dst Lt sup face: " The distance from the lt support face of the first tie over the clear span.

"Tie Dst Rt sup face: "

"1-5: T5 T9 2 1 T17 : " Optional: These are beam cap bars over the stirrups. Enter a number from 1 to 5 examples: 1 = type T5, 3 = type 2, 5 = type T17

"Not T2,T? 1,4,6,7,8: " The ties are assumed to be T2. If not T2, enter for example 1, you get T1 instead.

"Not T2,S? 1 thru 9 : " If you want a stirrup instead of a tie, enter, for example, 3 - you get an S3.

"1=draw, 2=bars also: " (ShearCAD only) draws beam and bars.

"Span #2 Rt Supp Wid": For style 1 and 2 multi-span beam, support width.

"Span #3 Clear Span":

etc. . . . this third entry column should either be empty, or end with a Rt Supp Wid

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DRPR Function - Drilled Pier (Caisson)

"Drilled Pier Length" Total length, excluding cap
"Clearance Top" From top of pier, not top of cap
"Clearance Bottom"
"Pier Diameter"
"Pier Clearance Side"
"Depth of Pier Cap" Leave 0 if none
"Vert Bar #1 QTY"
"Vert Bar #1 SIZE"
"VB#1 Dist from Top"
"VB#1 Stock Length" If excluded, will use Stk/Lap file
"VB#1 Lap" If excluded, will use Stk/Lap file
"VB#1 Coupler=1" If set to 1, Lap is zero
"VB#1 Len Override" Overrides computed length
"VB#1 Cap Projection"
"VB#1 Top Hook LEN"
"TPhk 90 91 180 181" 90 180 hook in, 91 181 hook out
"VB#1 Bot Hook LEN"
"BThk 90 91 180 181"
"Vert Bar #2 QTY" Same as Vert Bar #1, 0 if none
"Vert Bar #2 SIZE"
"VB#2 Dist from Top"
"VB#2 Stock Length"
"VB#2 Lap"
"VB#2 Coupler=1"
"VB#2 Len Override"
"VB#2 Cap Projection"
"VB#2 Top Hook LEN"
"TPhk 90 91 180 181"
"VB#2 Bot Hook LEN"
"BThk 90 91 180 181"
"Center Bar QTY" Similar to Vert Bar #1 entries.
"Center Bar SIZE"
"C.B. Dist from Top"
"C.B. Stock Length"
"C.B. Lap"
"C.B. Coupler=1"
"C.B. Len Override"
"C.B. Cap Projection"
"C.B. Top Hook LEN"
"C.B. Top Hk 90 180"
"C.B. Bot Hook LEN"
"C.B. Bot Hk 90 180"

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DRPR Function - Drilled Pier (Caisson) - continued

"Ties Spac/Pitch Top"
"T Spa/Pit Top Dist"
"T Spa/Pit Middle" This is the only required Tie spacing input
"T Spa/Pit Mid Dist"
If you fill in just the "T Spa/Pit Middle" and "T Spa/Pit Mid Dist"
and nothing else, the tie quantity will be computed from these inputs
If you fill in just the "T Spa/Pit Middle" and nothing else,
the quantity of ties will be computed from this input
and from a span equal to the "Drilled Pier Length"

"T Spa/Pit Bottom"
"T Spa/Pit Bot Dist"

"1=draw, 2=bars also: " (ShearCAD only) draws pier and bars

"Tie Spa/Pit Cap"
"Ties QTY Cap"
"T: 1-3,3A/B,4,12,99" Enter tie type, example: T3
"If T2/T12, SETS 1,2" If 2, this is for a rotated pair of ties
"Tie Bar SIZE"

"Dowel Bars QTY"
"Dowel Bars SIZE"
"D.B. Total Length" Includes projection len, excludes hook
"D.B. Projection Len"
"D.B. Top Hook Len"
"D.B. Top Hk 90/180"
"D.B. Bot Hook Len"
"D.B. Bot Hk 90/180"

"Alignment Bars QTY" Adds one barline as an accessory
"Non-std grade ex 75" Leave empty unless grade is not standard

COLM Function - Column (Rectangular)

"Col dimension x" Col. conc. dimension (front/rear face)
"Col dimension y" Col. conc. dimension (right/left face)
"Tie Clearance"
"NEXT col dim x" Next column above (front/rear face)
"NEXT col dim y" Next column above (right/left face)
"NEXT col offset RT" Offset NEXT col, offset of the front left
corner of NEXT column relative to the
front left corner of the current column
This is how far NEXT is shifted to the rt
"NEXT col offset LT" How far is NEXT col shifted to the left
"NEXT col offset TOP" How far is next column shifted towards
the back face of the current column
"NEXT col offset BOT" How far is next column shifted towards
the back face of the current column
"Dist FIN FL-FIN FL" Finish floor distance to next fin fl
"Vert bar #1 SIZE"
"VB1start abv FIN FL" Can be negative in square brackets,
example [2-6] for Pier dwls with bot hook
"VB1 Lap Loc abv NFF"
"VB1Crnk T below NFF" Top of crank below next finished floor
"VB1 LapLen .001=cpl" Lap length. If coupler, enter .001
"NEXT vb #1 bar SIZE" NEXT column, vert bar #1
"VB placement N*x,N=" N is how many bars front and rear faces
"VB placement M*y,M=" M is how many bars rt and lt faces
Example N=4, M=3 (4x,3y) is 4 bars
front and rear faces, 3 bars lt and rt
Total bar quantity is: 2 times the sum of N+M, minus 4
In this case, total vert bars is 2 x (4+3) - 4 = 10
"Vert bar #2 QTY" Vert bar #2 may be staggered (0=none)
"Vert bar #2 SIZE"
"VB2start abv FIN FL"
"VB2 Lap Loc abv NFF"
"VB2 LapLen .001=cpl"
"NEXT vb #2 bar SIZE"
"NEXT VB, N*x,N=" NEXT col, bars in front and rear faces
"NEXT VB, M*y,M=" NEXT col, bars in lt and rt faces
"NEXT vb #2 QTY"
"DWL embed below FF" If dowel is needed, embedment length
"Vert Clearance Top"
"Vert term. hk 90,91" 90 hooks in, 91 means 90 degree hook out
90 versus 91 affects how the bar looks in the drawing
90 = hooks pointing in towards center, 91 hooks point outwards.
"Vert Proj ABV FF"

COLM Function - Column (Rectangular) - continued

"V term Bot hk 90,91" This allows a bottom hook, only on terminating vert bars
90 = hooks pointing in towards center, 91 hooks point outwards.
can be used for Pier dwls with bot hook

"Tie Bar SIZE" Example: 4
"Tie Typ/Arrang CODE" Allowable COLM tie types are below:
T1 T2 T20 T21 B1 B2 B3 B4 B5 T1A T28

"First Tie DIST Bot" How far from bot is first tie?
"Tie Spacing Bottom" Bottom tie spacing
"T Bottom Distance" Distance of "bottom" ties
"T Spacing Remainder" The only required tie spacing entry
"Tie Spa over Lap"
"Tie Spa Lap Length"
"Tie Spa Below Crank"
"Tie Below Crank QTY"
"Tie Spacing Crank"
"Tie Crank QTY"
"T Spa Bm/Slab Above" Tie spacing over thru the beam or slab
"Bm/Slab Above Depth"
"Alignment Ties QTY" If alignment ties are needed, enter qty
“Non-std grade ex 75” Leave empty unless grade is not standard
"W-beam Designation Embedded struct steel W-beam (empty=none)
Example: W36X280
"W-beam VB Clr Dist" If W-beam, enter clearance between vert bars
Leave empty to space bars evenly

FCON – Continuous Footing

"Style A,B,C (1,2,3)" Enter either 1,2, or 3.

Style A is footing to slab, for
example a building with metal walls.

Style B is footing with Masonry wall.

Style C is for all other cases,
for example, a footing with poured wall.

"Footing Width" Concrete dimension of footing.

"Footing Depth"

"Top bars Cont QTY" Top Bars continuous with stock, lap.

"Top bars Cont SIZE" These top bars are optional.

"Top bars Cont STOCK" Enter minus (-) for default.

"Top bars Cont LAP" Enter minus (-) for default.

"Bot bars Cont QTY" Bot Bars continuous with stock, lap.

"Bot bars Cont SIZE"

"Bot bars Cont STOCK"

"Bot bars Cont LAP"

“If Ties, T? 1 or 2:” If you want to use ties instead of standees,
then for T1 or T2 ties, enter: 1 or 2

"Piece off round LEN" If you enter, for example, 60-0, then the
short bar will be replaced with stock.
If you enter, for example, 5-0, then the
short bar will be rounded up to the
next even multiple of 5 feet.

"Top bars Trans SIZE" Top Transverse bars (optional).

"Top bars Trans SPAC" Top Transverse bars bottom spacing.

"Bot bars Trans SIZE" Bot Transverse bars.

"Bot bars Trans SPAC"

"Clearance at Top"

"Clearance at Sides" Left and Right.

"Clearance at Bot"

"Dowels 1 face or 2"

"Dowel bars SIZE"

"Dowel bars SPAC"

"Dwl hk A dim LENGTH" Enter the A hook length here.
The dowel default bend type is 2.
(if dwl is straight, then set A to ¼ inch or 1 mm, and hk G to 0)

"Dwl B dim OVERRIDE" Leave empty and the dowel leg length
(B Dimension) will be computed for you.

"Length of Wall "

"Length of Footing "

"*A Top of Slab ELEV" For Style A only, this will be used
with the next input to compute
the dowel leg length.
For styles B and C, you can enter
the slab and ftg elevations, and the
drawing will reflect these values;
however, the dwl leg length will not
be computed from these elevations.

"*A Top of Ftg ELEV"

"*B*C dowel Project" Styles B,C only. This will be used to compute the dowel leg length.

"Dwl hk G dim LENGTH" Optional G hook length.

"Dwl bnd typ (1,2,8)" Default is bend type 2.

"Standee SIZE" Standees are optional.

"Standee SPAC"

"25,26,26A (1,2,3)"

"Type 25 Enter K dim" Mandatory - you must enter this for bend type 25.

"Height OVERRIDE" All standee dimensions except for K are computed for you. However, you can override any of these dimensions: H,B,F,D

"B,F Dim OVERRIDE"

"D dim 8"def OVERRIDE" The default is 8 inches for the standee D leg dimension.

“Non-std grade ex 75” Leave empty unless grade is not standard

A Keyway is an optional rectangular trench at the base of the footing, and runs the full length of the footing. It can have continuous bars and dowels.

"Keyway Dist from Rt" These 8 inputs allow for an optional
"Keyway Depth " keyway with continuous bars and dowels.
"Keywy bars Cont QTY"
"Keywy bars Cont SZ"
"Keywy Cont STOCK" Enter - for default stock length
"Keywy Cont LAP" Enter - for default lap length
"Keywy DOWEL bar SZ"
"Keywy DOWEL SPAC"

This function will let you compute (and draw with ShearCAD) panel stiffener cages. In general, these are 2 layers of vert bars with rectangular ties. You can drop the drawing of these stiffeners on top of a previously drawn ShearCAD panel. Besides panels, you can use this function either by itself, or in conjunction with other functions such as Range, etc.

The following inputs can be repeated for as many as 4 panel stiffeners.

"#1 V QTY bars/layer: "	How many bars for one face, example 4
"#1 STIF Width : "	Width of this stiffener
"#1 STIF Height : "	Height of stiffener (often panel height - clearance)
"#1 Dist from LEFT : "	For ShearCAD, use this to position for drawing
"#1 Dist from Botm : "	Same as above.
"Verticals Bar SIZE : "	Bar size for all verticals in these stiffeners.
"Vert Layers, def=2 : "	Often this is 2
"Vert EDGE SZ if Dif : "	The size of the vert bars on the L&R edge, if different
"Tie Bar SIZE : "	
“Non-std grade ex 75”	Leave empty unless grade is not standard
"Typ T?: 1,2,4,6,7,8: "	For type T1, enter 1 here (don't enter T1)
"Not T, S? 1 thru 9 : "	If line above is empty, enter 3 and you get S3
"1-5: T5 T9 2 1 T17 : "	Enter a number from 1 to 5. Caps for stirrups. Enter 1 and you get bend type T5 Enter 2 and you get bend type T9 Enter 3 and you get type 2 Enter 4 and you get type 1 Enter 5 and you get T17
"ST Depth (Tie Calc): "	This is needed to compute the ties or stirrups and caps
	You don't have to enter all of the next 9 inputs For qty, spacing, dist, enter exactly 2 of these inputs Example 1: bottom tie spacing = -06, bot dist = 12-0, mid spac = 4-0 Example 2: bottom tie spacing = 1-0, bot dist = 20-0, all others empty
"BOTTOM Tie QTY : "	
"BOTTOM Tie Spacing : "	
"BOTTOM Tie Distance: "	
"MIDDLE Tie QTY : "	
"MIDDLE Tie Spacing : "	
"MIDDLE Tie Distance: "	
"TOP Tie QTY : "	
"TOP Tie Spacing : "	
"TOP Tie Distance: "	

FPAD – Footing Pad

"Name, ex A or F4,0"	Footing identification name.
"Footing Width"	Concrete dimension of footing pad width.
"Footing Length"	Concrete dimension of footing pad length.
"Footing Depth"	Concrete dimension of footing pad depth.
"Top bars QTY"	Fill in QTY, or leave empty and use Top Bars SPAC
"Top bars SIZE"	
"Bot bars QTY"	Fill in QTY, or leave empty and use Bot Bars SPAC
"Bot bars SIZE"	
"Top bars SPAC"	If you entered Top bars qty above, then leave this empty
"Bot bars SPAC"	If you entered Bot bars qty above, then leave this empty
"1st Mat Bar Clr + ?"	If entered, the first mat bar will have this extra clearance
"Top Hk Type= 0 to 2"	Top bar hook. Leave empty or 0 = 90, 1=180, 2=135
"Bot Hk Type= 0 to 2"	Bot bar hook.
"Top hk LENGTH"	(Optional) Enter top bar hook length, or for standard, type: -
"Bot hk LENGTH"	(Optional) Enter top bar hook length, or for standard, type: -
"Clearance at Top"	Example: 0-2
"Clearance at Sides"	
"Clearance at Bot"	
"Standee SIZE"	
"Standee SPAC"	
"25,26,26A (1,2,3)"	Enter 1 for type 25, 2=type 26, 3=type 26A
"Type 25 Enter K dim"	Only if type 25, enter K dimension
"Height OVERRIDE"	If you leave the next 3 empty, they will be computed
"B,F Dim OVERRIDE"	automatically, or you can enter a length to “override”
"D dim 8" def OVERRIDE"	Leave empty for 8” default or enter a length
“Non-std grade ex 75”	Leave empty unless grade is not standard

SHEAR 97 >> ESTIMATING/PRICING

INFORMATION SHEETS FOLLOW . . .

PRICING/ESTIMATING

The estimator enters the bill of materials which he projects to be required for a job. There are costs on file which have been previously entered; these include material costs by total job tonnage; epoxy and size extra costs, bending extra, detailing and delivery costs, tax and markup. The estimator proceeds to apply these costs to the job material list, producing a pricing report which can be presented to the customer.

There are a number of user friendly computational shortcuts for tilt-up wall panels with up to 6 openings, grade beams, continuous footings, varied length bars, evenly spaced bars over rectangular areas with lap, wire mesh computations, etc. These features facilitate entering the Estimating barlist.

These are some of the features which are included:

> Enter an estimating bar list, broken out by structure.

> Price by structure and/or for the complete job.

> Sort & Print the estimating barlist with complete totals broken out by structure, light & heavy bending, by size.

> Enter (cost parameter file) pricing data for size extra CWT, bending extra, markups, and detailing & delivery fees.

> Price a job any number of times, save each pricing screen, and optionally print a pricing report (quote).

PRICING/ESTIMATING (continued)

All modules in the SHEAR Package have a unified, consistent user interface. That means that the person typing at the keyboard uses similar commands and data entry techniques to enter and access the data and produce reports and documents no matter which module he is in. The Pricing/Estimating module is no exception to the above rule. However, although the Pricing/Estimating module is accessed from the SHEAR Package master menu, it has no connection (interface) to any of the other modules - this module "stands alone". Primarily, this is because the estimating barlist generally bears little relation to the way a job is ultimately detailed for fabrication.

The functionality of this estimating module was formulated over several years during discussions with several leading estimators. This program has been very well-received over the years by hundreds of estimators throughout the United States.

The estimating & pricing system has these features:

you can setup your own pricing parameters in 3 different pricing files. In this way, the program fits your style of estimating.

This is the way that the quote figure is computed:

If the job totals more than 30 tons, or if you choose special pricing, then you enter the current mill base, markup, and freight to your yard. These are all cwt figures.

If special pricing is not chosen, then the base price is pulled from the parameter file, according to the job tons.

The detailing fee is pulled from the parameter file, based on job tons; if under 1 ton, a minimum dollar figure is used.

Delivery is based on local/distant, job tons, and truck capacity.

Size, and bending extras are weighted averages.

The estimating job file is a central control point for the main functions of the estimating system.

The job number field is especially important because it indicates the name of this job's associated barlist file.

Double-click on the estimating job line in order to enter/modify the associated barlist for this job estimate.

The price field 'zooms' you to the pricing menu.

You can have thousands of lines in a barlist. Every valid line must have a size-grade; examples are 3 18 5G40 10S RW2.1 SW2.9

The code field allows you to use detailing functions such as tilt-up wall panels, beams, rectangular or circular grids, etc. you can enter a single bar item. If you zoom on the code field, then you see a menu of structures for which the materials are calculated automatically. You can enter qty, or it can be computed from the span and spacing fields.

To delete a line, position the cursor on the line number field “LIN”, then press delete.

if you enter the number as 24x13 or 24*13 the computer will substitute the product, 312.

You can have up to 6-digit for quantity or for feet.
remember you can enter lengths such as 24.11 (24 ft 11 inches).
you can use a . Or - between ft and inches.
for whole feet, use a decimal point after, example 12345.

Enter m or h or l or nothing (or 3, 2, 1, or 0) for bending type.
m=mill cut, h=heavy bent, l=light bent, nothing=straight bars.

the (Function) code field allows you to pick from a variety of
functions for estimating your material requirements for this job.

the code field is a 'zoom field'; Enter Z to see a menu list of
all of the structure codes, from which you pick a code.

If you type a minus sign (-) in the EXIT field after you enter the inputs
for a function Code, then you will be able to view the barlines
which are being generated by this function code.

if you are at the end of the estimating barlist file, then to
duplicate the contents of the previous line, enter: LL

if you leave the code field empty, then you can enter a single bar item.

in most cases, if you leave qty empty, then the quantity will be
computed for you from span and spacing.

Here are some tips for pricing a job:

Remember that tax rate is not percent, so use .05 for example, not 5

There are 3 pricing parameter files which you can setup to reflect
the exact figures you want involved in your calculations.
Prior to the initial pricing for a job, remember to activate the particular
pricing parameter file (1,2 or 3) which you want to use for this job.

If you enter a value for quote, then the markup per cwt will be
adjusted, along with tax, subtotal, etc. This can be useful to
round off a quote, for example from 13459.63 to $13500. If you
leave this left hand side quote figure empty, the right hand quote
figure remains as the exact computed figure.

While entering data in the Estimating barlist, you
can, if you choose, create Structures and Substructures.
It isn't necessary to create structures, and if you don't,
the totals summary will be for the complete job.

If you create structures, then the totals printed on the
Estimating list will be broken out by structure, as well
as grand totals for all structures. What you decide to
define as a structure is completely up to you: examples are
BLDGA, WALLS, MASONRY, BLDGB
When you price this job, SHEAR 97 lets you print a pricing
sheet for each structure.

Substructures have the character ">" as the first letter:
>SLABS >MASONRY >FIRST FLOOR
If you use structures, you don't have to create substructures
for every structure. However, if you do use substructures,
SHEAR 97 assumes each substructure "belongs to" the most
recently defined structure. For instance, assume line 1 defines
structure BLDGA, and line 2 has >MASONRY, and line 10 has
>SLABS; in this case, both >MASONRY and >SLABS are substructures,
and each of these substructures "belong to" structure BLDGA.
When you print a list, you'll get a totals chart for BLDGA,
as well as a subtotals chart for each substructure
underneath BLDGA, namely >MASONRY and >SLABS.
Note that in the above example, if line 20 switched back
to >MASONRY, all of the >MASONRY substructures underneath
BLDGA get combined into one >MASONRY subtotal chart,

You can designate, in the A/D field of the same line that
defines that structure, an alternate add or deduct field.
Examples: A1, A15, D3 (A means Add, D for Deduct)
Alternate add structure totals are excluded from the base bid
(even though totals are printed), while deduct structures are
included in the base bid.

Shear 97 lets you key any material type or labor code into the material file; this lets you extend your list of valid materials. what you type in for size must match a line under the 'short name' in the materials file (see setup menu). so remember to always 'key on' the 'short name'

For category 'r' (rebar) items, you must match an item that has the same size mode as your release; for example, if you are in imperial size mode, then size 22 is not a valid size (it is a soft metric size) - you would receive a warning message from the computer in this case.

Mesh and accessories items: Since you will probably want to include these in a job regardless of whether it is designated as Imperial sizes or Soft Metric, you should leave the "Size Mode" column empty for these material line items.

Up to 1498 line items are allowed. All Rebar items should have a line number between 1 and 98. Mesh and accessories items can extend to line 1498.

Shear 97 relies on the material file in many ways. It is very important for all of your computers which run SHEAR 97 to have the exact same file contents for the material file; be sure that your in-house and outside detailers all have the identical material file in their computers.

If you or your detailer adds to or changes the material file, then you will need to copy the updated material file over your network, or by using a floppy disk. Here are two ways to accomplish this using a floppy disk, USB flash drive, or other device:

method 1) From the Materials File setup screen (preferred)

>> use the Copy To Floppy or Copy From Floppy command buttons

<<OR>>

>> use the Import & Merge command button to merge in additional lines from a Materials file sent by your detailer; this will permit you to add any new Materials items which your detailer has added, yet leave the remainder of your Material file unchanged.

method 2) Windows Explorer method

>> Right click on start then click Explore

>> click on c:, then click on shear97, then click on data, then click on material

>> scroll the left pane of windows explorer so that you can see the a: drive

>> to "drag-and-drop" the file to your floppy or flash drive, point to the material file (not the "bak" material file) and holding the left mouse button down, drag the material file and point to the a: drive icon, then let up on the left mouse button; the file will be copied to your a: drive

>> to copy the material file from the floppy or flash drive to a computer, you can again use windows explorer, but drag the file from the a: drive to the c:\shear97\data\material subdirectory

SHEAR 97 >> AUTOCAD CALLOUT INTERFACE 9.01

> This applies only to SHEAR 97 Standalone Detailing. ShearCAD Detailing does not need this interface. The interface described in topic 9.01 has been superceded by ShearCAD, which is easier to use and has much more functionality when it comes to callouts. If you have ShearCAD available to you, then it is strongly recommended you use ShearCAD for callouts instead of the interface method described here.

> You need to do this only once: add an additional Autocad support search path of c:\shear97\system\acad

> Start SHEAR 97 and AutoCAD running

> When you first start Autocad, do this to initialize:
In Autocad, type the following at the command line
(load "bsc")

> To insert callouts from SHEAR 97 to Autocad:
>> minimize Autocad, or alt-tab to switch to SHEAR 97 Detailing screen

>> click on the button on the top right "Autocad Call";

>> select your output format choices and line numbers if heading is present, it will be displayed on the chart - erase heading text if you do not want one

>> alt-tab to Autocad

>> at the Autocad command line, to insert your callouts, type BSC (or you can type bsc - lower case is okay)

>> hit enter, or (optional) alter heading row heights (only if there is a non-empty heading)

>> hit enter, or (optional) alter non-heading row heights

>> pick insert point for top left of callout(s)

>> callouts will be inserted into your Autocad Drawing

>> Call for a demo or assistance regarding this feature.

>> BSC interface works on all full versions of AutoCAD. BSC interface works on particular versions of IntelliCAD.

SHEAR 97 >> OPTIMUM SHEARING

INFORMATION SHEETS FOLLOW . . .

OPTIMUM SHEARING: A FEW FACTS TO CONSIDER . . .

1) Optimum Shearing usually pays for itself within one year due to higher production rates and/or reduced scrap.

2) Small and medium sized fabricators benefit from Optimum Shearing; it is not just for 'the big guys' with high yearly tonnage.

3) Most fabricators do not use Optimum Shearing for 100% of their jobs. Small 'emergency' lists may still be handled quickly and efficiently by the Shearman computing his own 'cut list' ('matching tags').

4) Many shops where Optimum Shearing is profitably being used do not currently own an Optimum Shearing Hardware Console for automatic shearing data 'downloading'. Instead, the Shearman works directly off the printed Shearing Schedule (Cut List) generated automatically by the computer.

OPTIMUM SHEARING FEATURES

This module can pay for itself in lower scrap and higher production.

Here are some of the benefits of optimum shearing:

> Mix one or several barlists to compute and print a shearing schedule with high production and low scrap.

> Use from 1 to 4 different stock lengths for each bar size.

> Print several reports including:

- shearing schedule gives all relevant data for the shearman to fill the customer's orders that have been combined in this 'run'
- crane operators report showing the stock bars required for this shearing schedule
- shakeout table report shows how many bars to shake for each load
- two different production reports(2) showing the the content of each tagged bundle
- tags are printed in the order that the shearman needs them; each job can have a unique identifying color for its tags.

> The shearing schedule data can be electronically downloaded and interfaced to all major shearing and bending equipment manufacturers in the United States and Europe.

OPTIMUM SHEARING FEATURES (continued)

Initiating an optimum shearing run is relatively easy. You type in the file numbers of the barlists which you want to 'mix' in this optimum shearing 'run'. You may include all bars in each list, or you can select a subgroup from each barlist. You can exclude items that you intend to process on an automatic bender, perhaps using coils.

After the computer determines an optimized cutting scheme and bin placement for the resultant bundles, the operator can look at the scrap and remnant statistics chart to see how good of a 'run' was just generated. If the run produced good scrap figures, the computer operator would then print optimum shearing tags and can optionally 'download' (send data) from the shear schedule to an optimum shearing console. If the bar lengths were not adequate to produce good cutting combinations, and thus poor statistics were generated, then the computer would not print tags, but might combine a different set of barlists to achieve more desirable results; the computer operator's and shop foreman's good judgement will come into play here.

OPTIMUM SHEARING FEATURES (continued)

The shear schedule information which is downloaded to the shearline hardware console (optional) makes for a comprehensive and user-friendly control of the shearing production process, with a minimum of shearman intervention required. All shakeout, cutting lengths, discharge stop and bin information, and 'crane calls' are automatically sent and displayed; this can expedite the shearing cycle, minimizing human errors.

If a shearline optimum shearing console has not yet been acquired, or if the shearing console is in 'manual mode' then the shearman can read the shearing schedule line-by-line in order to process the barlists which are being fabricated in this run. As in downloaded shearing, here again, low scrap and fewer drops of the shear are the result in this mode of operation, in contrast to the hit-and-miss method of the shearman 'matching tags' in an attempt to find good cutting combinations.

As you read this two-page guide which explains the columns on a printed Shear Schedule, please refer to the four-page SHEAR 97 Optimum Shearing Schedule example which you can find in the pages towards the front of this manual.

1) The second column from the left entitled 'bars' is the number of bars to shakeout for this load. The 'stock' and 'gr' columns just to the right of the 'bars' column tell you the stock length and the grade of the bars to shake. Note that for a given bar size, there can be 2 different stock lengths; i.e. the stock length is not always the same for every load within a shear schedule for a given bar size.

2) Approximately 3.0 " from the left side of the shear schedule: "x" means that a tag is to placed on the item in this line. (lines that do not have an 'x' are 'incompleted sub-bundle items' and have further cuts required to complete the item).

3) Approximately 9.2 " from the left side of the shear schedule: 'ltnc' stands for (l)oads (t)o the (n)ext (c)ut; how many loads from this load is this item next cut again? A '-' means that this item is completed on this line (tagged on this line), and is not cut again.

4) Approximately 8.6 " from the left side of the shear schedule: a '*' just before the 'mt' means that all items (all 'sub-bundles') in the master tag (master bundle) are complete in this line; the crane operator can remove this material from the bins.
every item belongs to a master bundle, which is identified with a master tag number.

'mt' in each line stands for master tag followed by a number; the letters 'mt' could be eliminated, since the column heading already says 'mt'

example: 'mt 51' is master bundle number 51; this item is included in master bundle #51 (and may be grouped with other tag numbered items in this same master bundle).

5) In some loads, you may see an a line such as this example: a 23-6 bar is cut at 20-0 for inventory; the 3-6 bar goes to scrap.

6) 'New' is a 'first cut' for this tag. (but if a bar list line has a large quantity, it will be split over several tags, so that this length or mark could conceivably have been cut before with a different tag number).

7) Approximately 6.0 " from the left side of the shear schedule: req pcs is always the total quantity ordered; this does not decrease as the item is processed.

8) The remnant is cut to the nearest 10 foot; so you will see 50-0, 40-0, 30-0, 20-0, and 10-0 foot bars sent to inventory.

9) Remnants are at least 48 times the bar diameter: example for size 4, 4/8 times 48 = 24" is the dividing line between scrap and remnants.

10) Approximately 8.2 " from the left side of the shear schedule: t+t means that this tagged item is started and finished in this one line of the shear schedule; the item can be tied and tagged at the shear. 'Tag' means that this item is to be tagged at this point (and has been cut in a prior line, which means it is not a t+t line).

> This file is set up for you. You shouldn't have to change it.

For each shearline you have 1,2,3, etc. there is a matching
bin allocation file c:\shear97\system\osd\jssa.1 (2,3,etc.)
If you want to understand the layout, please refer to
the sample fragmentary file (topic 10.12) depicting 10 bins
60 ft long (5 left, 5 right). As the shearman stands at the
shear looking towards the end of the shearline, the bins are
named 4,3,2,1,0 on the left side, and 5,6,7,8,9 on the right
(there are alternate naming conventions to this, however).

This naming convention holds if you have fewer than 10 pockets
example: 3 bins left and right would be called 2 3 4 5 6 7
example: 4 bin pockets on the right would be called 5 6 7 8
Now print out and refer to the topic sheet 10.12
Note that gaps in the file are indicated by periods (.).
The 205 in the first line indicates the total number of
bin assignment numbers in the file, the last being 999.
There are 10 "katrange" (computer geek name) length break
categories, separating the bars by length. The pairs of katrange
numbers indicate the index of the pairs of numbers. For example,
for the third "katrange" (>8 BUT <=10 FEET), the numbers are the
twentyfirst through the fortieth numbers (disregarding "205").

Short bar racks (first katrange) are presumed to exist.

They hold short bars which must be hand carried, because

they wont roll properly down the bin pocket assemblies.

These are numbered starting with 61, 62, etc.

If you have only 6 short bar racks, then use only 61 to 66.

All regular bins are numbered in this manner:

To the shearman's left:
1 thru 6 are 10 ft (or 3 meter) stops 10,20,. .60 in bin 0
7 thru 12 are 10 ft stops 10,20,30,40,50,60 in bin 1
13 thru 18 are 10 ft stops 10,20,30,40,50,60 in bin 2
19 thru 24 are 10 ft stops 10,20,30,40,50,60 in bin 3
25 thru 30 are 10 ft stops 10,20,30,40,50,60 in bin 4

To the shearman's right:
31 thru 36 are 10 ft stops 10,20,30,40,50,60 in bin 5
37 thru 42 are 10 ft stops 10,20,30,40,50,60 in bin 6
43 thru 48 are 10 ft stops 10,20,30,40,50,60 in bin 7
49 thru 54 are 10 ft stops 10,20,30,40,50,60 in bin 8
55 thru 60 are 10 ft stops 10,20,30,40,50,60 in bin 9

Example: 3 is the 30 ft stop in bin #0
Example: 8 is the 20 ft stop in bin #1
Example: 60 is the 60 ft stop in bin #9
Example: 67 is short bar rack #7

The program will scan within the length category,looking
for an empty bin. Bars will be discharged there. If there
are no empty bins, and bars can not be master bundled with
other tagged items, then a completed bundle is searched for,
and the crane operator gets a message to remove the bundle.

Bars will only be master bundled together if they belong to
the same release, and have the same bar size, and are either
both bent or both straight, and are about the same length
(28-0 and 24-6 bars can be bundled together, but 28-0 bars
and 6-0 bars will not be bundled together).

Please call for assistance, if you need help modifying
your bin allocation file, or if you have any questions
about the structure of this file.

```
205
REM <=1M  <=3 FEET
REM NEXT 8 ARE SHORT BAR RACKS A THRU H
61
.
.
68
REM >1M BUT <=2M     >3FT BUT <=8 FEET
13
.
.
19
REM >2M BUT <= 3M     >8 BUT <=10 FEET
14
.
.
.
REM >3M AND <=5M        >10 FT AND <=17
2
.
.
56
REM >5M AND <=6M     >17 BUT <=20 FEET
.
.
.

REM >6M AND <=8M     >20 BUT <=27 FEET
REM <=9M       <=30 FT
REM <=12M     <=40 FT
REM <=15M    <=50FT
REM  OVER 15M (UPTO 18.100 M OR MORE??)    <=60FT
999


REM START AND STOP DATA FOR KATRANGE CATEGORIES
1
12
13
20
.
.
.
204
```

SHEAR 97 >> QUICKBOOKS INTERFACE

INFORMATION SHEETS FOLLOW . . .

SHEAR 97 Quickbooks Interface Variation 1 Guidelines

SHEAR 97 Setup preference on line 418 must be set to: 1

This variation, Variation 1, creates an Invoice.

The parent-child naming feature is mandatory and fixed in Interface Variation 1
Do not use different names than these:

REBAR this is the top parent.
#10 REBAR (there is a single space after the zero) this is a subitem of REBAR
10B this is an item, namely #10 uncoated bar, subitem of #10 REBAR
10E this is an item, namely #10 epoxy bar, subitem of #10 REBAR
#4 REBAR (there is a single space after the 4) this is a subitem of REBAR
4B this is an item, namely #4 uncoated bar, subitem of #4 REBAR
4E this is an item, namely #4 epoxy bar, subitem of #4 REBAR

All barlist line items will be sorted and accumulated into like items.
All rebar, whether stock, bent, or straight will be accumulated.

Rebar Items

You must name your rebar items in Quickbooks as follows:
As stated above, these items are subitems of, for instance, #4 REBAR
#4 REBAR is a subitem of REBAR

Examples are for size 4 and 11

4B 11B (this is for black uncoated rebar)
4E is for #4 EPOXY

Any mesh or accessories item must use the “Long name” as found in
the Materials file.

For example, use SW2.1 6X6 instead of SW2.1
when you add this item to Quickbooks.

SHEAR 97 Quickbooks Interface Variation 1 Guidelines (continued)

Only with this Variation 1 will you see these 3 input boxes on the SHEAR 97 Invoice screen:

FREIGHT PRICE PER LB LUMPSUM

For a particular invoice, you have a choice:
You can leave all 3 boxes empty, they are optional.

However, if you fill in the Price Per Lb, then
the Lumpsum will be calculated by adding the Freight
to the extension of the price per lb times the lbs of this invoice.
You can also leave the price per lb empty, and fill in either
both the Freight and the Lumpsum, or just the Lumpsum.

If the lumpsum has a non-zero value, then the invoice will bill
the lumpsum value, and will show all of the rebar,
but each rebar line item will print with no price.

If the lumpsum is zero, then the invoice
will show all of the rebar with a price on each line item.

These need to be in your SHEAR 97 Setup Preferences
on lines 421 422 423 424.

RFBCD	QBI Item name for Rebar tot lbs ex RFBCD
FREIGHT	QBI Item for Freight Charge, ex FREIGHT
DRFBCD	QBI Item name for Rebar tot $ ex DRFBCD
DFREIGHT	QBI Item for Freight tot $, ex DFREIGHT

For Variation 1, you must add these items to Quickbooks:
RFBCD
FREIGHT
DRFBCD
DFREIGHT

END OF SHEAR 97 Quickbooks Interface Variation 1 Guidelines

SHEAR 97 Quickbooks Interface Variation 2 Guidelines

SHEAR 97 Setup preference on line 418 must be set to: 2

This variation, Variation 2, creates an Invoice.

The parent-child naming feature can not be used in Interface Variation 2

All barlist line items will be sorted and accumulated into like items.
All rebar, whether stock, bent, or straight will be accumulated.

Rebar Items

You must name your rebar items in Quickbooks as follows:

Examples are for size 4 and 11

4B 11B (this is for black uncoated rebar)

4E is for #4 EPOXY

Any mesh or accessories item must use the “Long name” as found in
the Materials file.

For example, use SW2.1 6X6 instead of SW2.1
when you add this item to Quickbooks.

END OF SHEAR 97 Quickbooks Interface Variation 2 Guidelines

SHEAR 97 Quickbooks Interface Variation 3 Guidelines

SHEAR 97 Setup preference on line 418 must be set to: 3

This variation, Variation 3, creates a Sales Order whereas
Variation 4 creates a Estimate.

Otherwise, Variation 3 is identical to Variation 4. Therefore,
for the features of Variation 3, please refer to the following pages on Variation 4.

SHEAR 97 Quickbooks Interface Variation 4 Guidelines

SHEAR 97 Setup preference on line 418 must be set to: 4

This variation, Variation 4, creates an Estimate.

This applies to Interface Variations 3, 4 and 5
The SHEAR 97 Job screen MTR field is where you enter
either D for Domestic or F for Foreign (Imported)

This applies to Interface Variations 4 and 5
The SHEAR 97 Job screen project name will automatically go
into the “Ship-To-Address” of the newly created Estimate.

The (optional) following parent-child feature applies to Interface Variations 1,3,4,5

If the SHEAR 97 Setup preference on line 425 is set to Y,
then Quickbooks “Parent-Child” item names are expected for rebar and mesh.
A “child” is also called a “sub item” in Quickbooks.
The SHEAR 97 Setup preference on line 426 is where you enter the
“parent” name for rebar. If empty, and the SHEAR 97 Setup preference
on line 425 is set to Y, then “REBAR” is assumed.
The SHEAR 97 Setup preference on line 427 is where you enter the
“parent” name for mesh. If empty, and the SHEAR 97 Setup preference
on line 425 is set to Y, then “MESH” is assumed.

If you use parents for Rebar and Mesh,
then they are assumed to have a parent name, so
add them as a “subitem” of the appropriate parent.

Accessories are assumed to not have a parent name, so do not
add them as a “subitem” of a parent.

SHEAR 97 Quickbooks Interface Variation 4 Guidelines (continued)

Rebar Items

You must name your rebar items in Quickbooks as follows:

Examples are for size 4 and 11

Stock bar is defined as:

Domestic: 40 foot bar

Foreign: 40 foot and 20 foot bar

The pattern is this:
Bar size (no # sign)
B for black (uncoated bar), E for epoxy, GA for galvanized, etc.
D for domestic bar, I for imported bar

SHEAR 97 Quickbooks Interface Variation 4 Guidelines (continued)

Stock Item examples:

4BD40 11BD60

Any bar that is not stock will need an item, examples

This is for all fabricated bar, whether bent or straight
4BDBENT 11BDBENT

The Ep field of the dark-blue barlist screen, if non-empty,
will be added to form the string which will expect to
find its match in the list of Quickbooks Items.
Therefore, for example, 4BDBENT for #4 uncoated domestic cut straight bar
becomes 4EDBEND for #4 epoxy domestic cut straight bar

SHEAR 97 Quickbooks Interface Variation 4 Guidelines (continued)

This applies to Interface Variations 3, 4 and 5
Accessories names can be overridden by the “Q’Books Item” field
in the SHEAR 97 Materials file. Otherwise, the “short name” is used.

For rebar items and for any accessory item with a “weight factor” of L
as specified in the Materials file, the quantity reported to Quickbooks is Lbs,
and will be multiplied by “rate” to get the dollar “Amount” on the Estimate.

For any accessory item with a “weight factor” of F
as specified in the Materials file, the quantity reported to Quickbooks is Linear Feet,
and will be multiplied by “rate” to get the dollar “Amount” on the Estimate.

If none of the above special cases apply, then for mesh and accessories the quantity is used instead of Lbs. and will be multiplied by “rate” to get the dollar “Amount” on the Quickbooks Estimate.

END OF SHEAR 97 Quickbooks Interface Variation 4 Guidelines

SHEAR 97 Quickbooks Interface Variation 5 Guidelines

SHEAR 97 Setup preference on line 418 must be set to: 5

This variation creates an Estimate.

This applies to Interface Variations 3, 4 and 5
The SHEAR 97 Job screen MTR field is where you enter
either D for Domestic or F for Foreign (Imported)

This applies to Interface Variations 4 and 5
The SHEAR 97 Job screen project name will automatically go
into the “Ship-To-Address” of the newly created Estimate.

The following parent-child feature applies to Interface Variations 1,3,4,5

If the SHEAR 97 Setup preference on line 425 is set to Y,
then Quickbooks “Parent-Child” item names are expected for rebar and mesh.
A “child” is also called a “sub item” in Quickbooks.
The SHEAR 97 Setup preference on line 426 is where you enter the
“parent” name for rebar. If empty, and the SHEAR 97 Setup preference
on line 425 is set to Y, then “REBAR” is assumed.
The SHEAR 97 Setup preference on line 427 is where you enter the
“parent” name for mesh. If empty, and the SHEAR 97 Setup preference
on line 425 is set to Y, then “MESH” is assumed.

If you use parents for Rebar and Mesh,
then they are assumed to have a parent name, so
add them as a “subitem” of the appropriate parent.

Accessories are assumed to not have a parent name, so do not
add them as a “subitem” of a parent.

SHEAR 97 Quickbooks Interface Variation 5 Guidelines (continued)

Rebar Items

You must name your rebar items in Quickbooks as follows:

Examples are for size 4 and 11

Stock bar is defined in the Default Bundling file

> Click on Setup
> Click on Bundling files
> For bar size 4, for example, if you want 20 and 40 foot to
Be considered stock, then put a quantity (you can use the
Same quantity that is in Str Quantity in the leftmost column)
You can define up to 5 stock lengths in this manner.

For instance

Stk Qty 1	Stk Len 1	Stk Qty 2	Stk Len 2
200	20-0	200	40-0

For each stock item, you must create that item in Quickbooks, following these patterns

The pattern is this:
Bar size (no # sign)
B for black (uncoated bar), E for epoxy, GA for galvanized, etc.
D for domestic bar, I for imported bar

SHEAR 97 Quickbooks Interface Variation 5 Guidelines (continued)

Stock Item examples:

4BD40 11BD60

Any straight bar that is not stock length will need an item, examples
This is a similar pattern to stock bar, but instead of 20 or 40 or 60, use STRT

4BDSTRT 11BDSTRT

Define Heavy bent items, examples
This is a similar pattern to straight bar, but use BNDH

4BDBNDH 11BDBNDH

Define Light bent items, examples
This is a similar pattern to straight bar, but use BNDL
4BDBNDL 11BDBNDL

The Ep field of the dark-blue barlist screen, if non-empty,
will be added to form the string which will expect to
find its match in the list of Quickbooks Items.
Therefore, for example, 4BDSTRT for #4 uncoated domestic cut straight bar
becomes 4EDSTRT for #4 epoxy domestic cut straight bar

SHEAR 97 Quickbooks Interface Variation 5 Guidelines (continued)

This applies to Interface Variations 3, 4 and 5
Accessories names can be overridden by the “Q’Books Item” field
in the SHEAR 97 Materials file. Otherwise, the “short name” is used.

For rebar items and for any accessory item with a “weight factor” of L
as specified in the Materials file, the quantity reported to Quickbooks is Lbs,
and will be multiplied by “rate” to get the dollar “Amount” on the Estimate.

For any accessory item with a “weight factor” of F
as specified in the Materials file, the quantity reported to Quickbooks is Linear Feet,
and will be multiplied by “rate” to get the dollar “Amount” on the Estimate.

If none of the above special cases apply, then for mesh and accessories the quantity is used instead of Lbs. and will be multiplied by “rate” to get the dollar “Amount” on the Quickbooks Estimate.

END OF SHEAR 97 Quickbooks Interface Variation 5 Guidelines

SHEAR 97

SETUP PREFERENCES FOLLOW . . .

START OF SHEAR 97 SETUP PREFERENCES

SHEAR 97 >> SETUP PREFERENCES (1 of 78) 12.11

>Enter system drive example C: Setup preference line 1

Files designated by SHEAR 97 as 'system' files are stored here. Most generally, it is best to set this to C:, even if your office uses a shared SHEAR 97 database on a network. The "system drive" does not indicate where the SHEAR 97 program (.EXE) files are stored (SHEAR 97 program files are always stored automatically in the C:\SHEAR97\ subdirectory on each computer running SHEAR 97).

>Enter data drive example H: Setup preference line 2

Files designated by SHEAR 97 as data files are stored here. This includes job files, release files, detailing files, estimate/pricing files, and barlist files.
Single user work stations not connected to a network should set this to C:.
Single user work stations which are connected to a network but do not plan to share data with other SHEAR 97 users should set this to C:.

If your office uses a shared SHEAR 97 database on a network:
do the following for each computer on the network which will be running SHEAR 97
> set data drive to whichever letter designates the network file server from this computer (this letter might vary from one workstation to the next).
> line 73 in setup preferences looks like this:
Multi-user file sharing, Use File Locks
set this line 73 in setup preferences to Y

>Enter one half character value Setup preference line 4
Enter one qtr character value Setup preference line 5
Enter 3 qtr character value Setup preference line 6

These fields are used to print 1/2, 1/4 and 3/4 on tags, and optionally on other printouts.
These fields should be set to 189 188 190.

>Enter your tag style# 1,2,etc. Setup preference line 7

If you have the one-across tag with pre-printed
headings and boxes and a tear off stub, enter: 1
If you have the two-across tag (blank) without
pre-printed headings and boxes 3"tall enter: 2

For all other styles (from 1 to 32) please call to find
out what number you should enter here.

>Heading for Detailing Printout Setup preference line 8

This is the heading title for detailing placement
lists (other than the Cut Sheet & Shipping List)

>Estimating Totals Percent V/H Setup preference line 9

If you enter V, then the percentages printed on the totals
page are based on the sizes (e.g. 25% by weight is size 4,
50% is size 5, 20% is size 6, 5% is size 11)

If you enter H, then the percentages printed on the totals
page are based straight,light bent, heavy bent, millcut/stock
(e.g. 35% by weight for this size is straight bar,
10% by weight for this size is light bent,
25% by weight for this size is heavy bent,
30% by weight for this size is millcut/stock)

>Automatically enter hooks Y/N Setup preference line 10

If you do not enter N here, then whenever you enter a minus
sign (-) the appropriate hook will be substituted based on the
bar size of the line you are on, as well as the fields you are
currently entering (A,G,J,etc);
also, for special bend types, you can enter S180 S135 or S90
to pull in the standard hook.

>Enter square ft per mesh roll 750 Setup preference line 11
Enter square ft per mesh sheet 160 Setup preference line 12

All mesh items in the Materials file must start off with either the letter R or S (for Rolls, Sheets) these two preferences (750, 160 or 120) are used for automatically computing the number of rolls or sheets for mesh during data entry in detailing and estimating

>Enter printer font size small Setup preference line 13

This font size determines the size of the characters on most portrait (8.5 inch wide by 11 inch tall) printouts. Appropriate values here are numbers such as 9.25, 8.75, 9.00, 9.5 etc. A bigger font might be more readable, but if it is set too big, in some cases it might start to spill outside the boxes on the sheet.

>Check that mark matches size Setup preference line 14

Setting this to N turns this feature off.
If this is not set to N, then if you enter, for example, mark 601 for a size #5 bar list line, the system will warn you immediately; when the system warns you, you have the choice to turn this feature off just for the duration of this "session" (i.e. until you exit SHEAR 97). One reason to turn this off is if you are entering marks such as A402 D503 etc.

>Round imperial taglen to inch Setup preference line 15
Round imperial cutlen to inch Setup preference line 16

Unless these are set to N, then "taglength" (theoretical length) and the "cutlength" (taglength minus bend deduction) will be rounded to the nearest inch.

>Split tags by quantity, evenly Setup preference line 17
This is set on the Bundling screen, but saved in the setup preferences screen. See the Bundling setup screen (accessed from the Setup Menu) for an explanation of this setting, or to change this setting.

>Show both Imperial/Soft Sizes on tags Setup preference line 18

Set this to Y and you the both Imperial and Soft Metric
sizes will print on the tags;
for example, #5/16mm

>Printer paper bin number Setup preference line 20

Generally, you can ignore this entry.
Only if your printer has more than one paper bin, and
you need to set the paper bin to a choice that is not
the default paper bin, then enter that number here

>Permit Union Recutting Algorithm Setup preference line 21

Generally, leave this empty.
SHEAR 97 has powerfull, built-in recutting capability.
Union recutting rules sometimes specify that bars of
small diameter and short length must be fabricated
in the field rather than in a fabrication shop.
Therefore, longer straight bars are shipped,
for cutting and bending in the field.
Only if you live in an area such as the New York City
metropolitan area where union recutting rules
are in effect for some of your fabrication jobs,
then set this to Y.

>Font name tag text normal size Setup preference line 22
Font size tag text normal size Setup preference line 23

For tags only, these values affect the normal (not large)
size text. You can choose the exact size and font style
to be used. Your particular printer driver may select
a font similar to the one you request, depending on the
capabilities of the printer and printer driver you use.
(The printer driver is usually setup automatically through
the Windows feature called "plug-and-play" (some skeptical
computer nerds call this feature "plug-and-pray"), and you
don't need to be concerned about it).

>Tag printer device name Setup preference line 24

This setup preference exists for the sole purpose of informing SHEAR 97 which printer is to be used most often for tag printing. You must type this in so as to exactly match the printer device name you want. To see all the printer device names, click START-Settings-Printers.
If you set this entry properly, when you start to print tags, and you are asked which printer to use, this entry will already be chosen; you can pick a different printer if you need to. Examples of entries in this field are:
Zebra 105SL (203 dpi), IBM Proprinter XL, Epson LQ-2550, Okidata ML 321
To vary the properties of this printer,
click START-Settings-Printers, right click on the printer,
then left click on Properties;
for most printers, you should make sure that the paper source is tractor, and that the paper size is custom (also called user-defined size); if it asks you the actual size of the custom paper, just accept the defaults (SHEAR 97 sets the exact size when it needs to).

>Tag printer port number Setup preference line 25

Virtually all printouts use the Windows print manager for flexibility and graphics power; generally, you need not bother entering any value here.

>Enter printer font name small Setup preference line 26

This font size determines the font (lettering) style of the characters on most portrait (8.5 inch wide by 11 inch tall) printouts. Arial seems to work well here, but you are welcome to try other styles. (Be sure to spell this as Arial, and not Ariel, who is the "Little Mermaid").

>Tag bend picture bar thickness Setup preference line 27

On your bent bar tags, there is drawn a bend type picture. This drawing represents the bar shape with lines of a certain width. You can vary the width of these lines with this entry. It is recommended that you do not set this number much lower than 8, nor much higher than 15. Good results are usually achieved with a setting of 8.

>Barlist printout style number Setup preference line 28

These are the barlist style printouts. These are rendered quickly and with excellent quality on any laser printer.

Portrait barlist with separate straight page(s).
Straight page has 3 columns of straight bar. Enter: 1
Portrait barlist with straight items following bent items on same page. Doesn't have 3 columns of straight bar. A good choice if a laser printer isn't available.Enter: 2
Portrait barlist on pre-printed form (dot-matrix) Enter: 3

Landscape barlist with separate straight page(s).
Straight page has 3 columns. Recommended choice. Enter: 4

Portrait 5 (has subheading similar to Landscape style 4) barlist with separate straight page(s). Doesn't have 3 columns of straight bar Enter: 5

Other printouts include a Unit Pricing List, Checklist, DOT style Barlist Printout, and a Bend Schedule only printout. These can be selected from the Barlist Choices screen at the time you start to print a barlist.

>Enter bend dimensions vertically Setup preference line 29

On the Barlist Mode and Detailing Mode barlist screen, you can set a toggle switch at the top of the screen which reads "Vert Dims On" or "Vert Dims Off". This button tells you what will happen the next time it is clicked; therefore, if it reads "Vert Dims On", this feature is currently off but will be turned on when you next click it. "Vertical Dimensions" means that the bend dimensions to be entered for this type will be entered in a vertical drop down box, and the shape will be displayed at the bottom of the screen. Otherwise, you will scroll out to the right side of the screen to view the rest of the dimensions for this bend type. The current value (on/off) is remembered here, but is set by clicking the toggle button on the barlist screen.

>Generate text file for detailing list Setup preference line 30
This field is no longer used; any value here is ignored.
This feature has been replaced by "Autocad Callout" (see topic 9.01).

>Estimating use 1 2 3 4 for STR L H M Setup preference line 31

If this is set to Y, then in the Estimating Mode
barlist entry field B (for bent),
if you type 1 (or leave empty) it means straight,
if you type 2 it means lt bent,
if you type 3 it means hvy bent,
if you type 4 it means millcut/stock

If this is set to N, then in the Estimating Mode
barlist entry field B (for bent),
if you type 0 (or leave empty) it means straight,
if you type 1 it means hvy bent,
if you type 2 it means lt bent,
if you type 3 it means millcut/stock

>Detailing Printout in LANDSCAPE Setup preference line 32

These are the Detailing Placement List style printouts.
They are rendered with excellent quality on any laser printer.
Placement lists are never sorted for printout (that is
done in the underlying production barlist file .dat).
Placement lists can contain comments and notes.

Portrait Detailing Placement List. Enter N
Landscape Detailing Placement List. Enter Y
"Cut Sheet & Shipping List" (recommended); Enter C
you can optionally rename this printout each time you print this report.

Landscape 11x17 Detailing Placement List. Enter 11x17
Landscape 8.5x14 Detailing Placement List. Enter 85x14
Label List for detailers who use a labeling system: on the
drawing they put labels with circles around them 1,2,3, etc.
and then schedule the bars with the label included in the
printed schedule. This system is also implemented in the
Autocad Callout interface.

Bending Details printout.

You can select the above printouts from the Detailing Printout
Choices screen at the time you start to print, so there is
no entry required for this preference.

>Misc. Reports medium font name Setup preference line 33
>Misc. Reports medium font size Setup preference line 34

This font size determines the size of the characters on most landscape (11 inch wide by 8.5 inch tall) printouts. Appropriate values here are numbers such as 10.5, 9.75, 10.00, 10.25 etc. A bigger font might be more readable, but if it is set too big, in some cases it might start to spill outside the boxes on the sheet.

>Print Boxes on misc. reports Setup preference line 35

Only set this to Y if you must use a dot-matrix printer for reports, and you want to speed-up the printing by omitting boxes on the reports.

>Sort Releases largest number first Setup preference line 36

Set to Y, this choice will sort the release numbers with the largest number first (descending) or set to N for the smallest number first (ascending).

>Barlist sequential numbering system Setup preference line 37
This field is no longer used; any value here is ignored.

>Cut Sheet printout heading title Setup preference line 38
You can set a name for the heading such as:
DETAILING PLACEMENT LIST
Also, you can optionally rename this printout each time you print this report (see "Cut Sheet type in title each time")

>Cut Sheet alternate totals layout Setup preference line 39

Most SHEAR 97 users will set this to N
This designates a particular, cutomized totals page (Alamo) layout with inventory item numbers.

>Load List lines per page (ex. 22) Setup preference line 40

If you are using a dot-matrix printer and want more load list lines per page, you can set this (do not go over 25)

>Rename 2S thru 12S to 1/4" thru 1 1/2" Setup preference line 41

Most SHEAR 97 users will set this to Y
If you enter the short name in the size-grade field
as 2S, you will get 1/4", for example.
Another example: Enter 4S and you will get 1/2 "

>Round PANEL taglengths 11"-1" to foot Setup preference line 42

For wall panel function computations (Detailing & Estimating),
any bar that is close to an even foot gets rounded to the ft

>Round PANEL 1/4", 2/4, 3/4 DOWN to inch Setup preference line 43

For wall panel function computations (Detailing & Estimating),
any bar that is a fraction of an inch gets rounded DOWN
If you do not set this preference to Y, bars will get rounded
in this way: 1/4" gets rounded down, 2/4 and 3/4 rounded UP

>Automatically copy Matching Mark note Setup preference line 44

If set to Y, when you copy a matching mark to a new
line, the note will also be copied.
If set to N, when you copy a matching mark to a new
line, everything but the note will be copied.

>Detailer Name or Initials ex. LBW Setup preference line 45
Detailer Phone Number ex. (123) 555-1212 Setup preference line 46

On some reports, the Detailer Initials/Phone # are pulled from
here and printed. (LBW stands for L.B. Welter, a future
detailer and/or vice-president of Application Software Inc.)

>Cut Sheet show req-qty-total pcs Setup preference line 47

For the Cut Sheet & Shipping List, a line with
8 required, quantity of 3 will print as: 8 3 24
underneath heading titles of : Req Qty Total

>Cut Sheet hide all weights Setup preference line 48

Option to suppress the printing of weights on each line.

>Tag style 3 move left inches example .7 1.0 Setup preference line 49

For this tag style, you can shift the printing left
(or right with a negative value)

>Cut Sheet printout heading color 0-15 Setup preference line 50

For inkjet or color laser printers, you are permitted
to pick any color for the Cut Sheet & Shipping List heading.
Black = 0 or empty, Blue=1, Green=2, Cyan=3, Red=4,
Magenta=5, Yellow=6

>Show and verify matching marks data Setup preference line 51

If you set this to Y (recommended), then whenever
you enter a mark which matches a mark already in the
list, you will be shown the previously entered data
and prompted before copying this matching mark data
to the new line you are on. If set to N, the mark
data will be copied without any prompting.

>Cut Sheet truncate all fractions Setup preference line 52

All fractions will be truncated (not shown) on this
Detailing file printout.

>Tag style 4 show cut length Setup preference line 53

Only for this thermal tag style, set this to either
print or not print the cutlength on the tag.
(The Tag length will always print, of course)

>Cut Sheet type in title each time Setup preference line 54

As an example of this preference, suppose you previously set
the name for the Cut Sheet & Shipping List heading such as:
DETAILING PLACEMENT LIST
Then, if this option is set to Y,
each time you start to print a Cut Sheet & Shipping List,
you will be prompted to enter the Title for this printout:
If you accept this default by pressing enter, then
the title will print as DETAILING PLACEMENT LIST; however,
you can override this Title for this one particular
printout by typing it, example: WALL PANELS PLACEMENT LIST

>Cut Sheet print diam. symbol for "Dia." Setup preference line 55

If you set this preference to Y, then whenever
you print a Cut Sheet & Shipping List with the
4 letters dia. in sequence, either in a note field
or in a comment line, then a circle with a diagonal
line through it will be printed instead. (Your screen
entry will not change - it will will show dia.).
These 4 letters can be lower case or upper case or
a mix of upper and lower case such as: Dia.
Remember to include the period.

>Activate shorthand feature \1 to \9 y/n Setup preference line 56

If you set this to Y, then when you are in a note or comment
field during barlist entry (Detailing Mode or Estimating Mode)
and you type for example \3, then the letters you
have set for shorthand phrase #3 will be substituted.
So if you type: \2 24"
and the letters for \2 are "ties at", then the result
will be ties at 24"
You can store up to 9 shorthand phrases \1 thru \9

>Estimating List page bottom 60-75 Setup preference line 66

You can vary how close you print to the bottom of the page on the Estimating list printout. It is recommended that you not use a number bigger than 65, because some printers react poorly to larger settings.

>Barlist totals scrap/waste %, ex 1.5 Setup preference line 67

It is strongly recommended that you leave this 0.
If you set a number here, barlist totals will be increased by the indicated percentage (with the intent of recouping losses from scrap).

>Sort Job Numbers largest number first Setup preference line 68

Set to Y, this choice will sort the job numbers with the largest number first (descending) or set to N for the smallest number first (ascending).

>Barlist autosave (-1 for no save) ex 5 Setup preference line 69

Every time you leave the quantity field of the barlist entry screen, SHEAR 97 checks to see how long it has been since your file was last saved to hard disk. If the time is greater than the number of minutes you specify in this preference, SHEAR 97 saves the file to disk.
If you set this number to -1, it turns this feature off.

>Barlist entry use size from line above Setup preference line 70

This will bring down the size/grade from the line above during barlist entry.
Most users of SHEAR 97 utilize this feature, and therefore they do not set this to N

>Barlist printout: RECEIVED BY and DATE Setup preference line 71

This will print on barlist printouts; someone at the job site can then sign that he received the material in this list.

>Jobmaster scrn: contractor left of job Setup preference line 72

Normally, the Job field is to the left of the Contractor field on the Jonmaster screen, but you can reverse that with this preference.

>Multi-user file sharing, Use File Locks Setup preference line 73

If you are sharing data with other SHEAR 97 users on a file serving computer, set this to Y
If this is set, it prevents the "clashing" of data by preventing two users from entering data into the same file at the same time. Several users can enter data at the same time, as long as they are in different jobs.

>Multi-user file sharing, Clear All Locks Setup preference line 74

SHEAR 97 file locks are removed as you exit a job.
Rarely, a Windows crash might leave a file lock still locked.
This preference was used to clear locks by setting it to Y
This preference is no longer needed; it is superceded by a command button on the Setup Menu.

>Tag style 4 always use Imperial tag len Setup preference line 76

For this thermal printer tag style, the taglen is always shown even for metric length files.

>Landscape barlist: Start bars on page 2 Setup preference line 77

This preference causes the bar items to start at the top of page 1; otherwise, bars will follow the totals on page 1

>Landscape barlist: Separate mesh/acc pg Setup preference line 78

This preference causes the mesh/accessories items to start at the top of a page ; otherwise, these bars will follow the straight bars page(s)

>Display message if a middle dim is 0 Setup preference line 79

If set to Y (strongly recommended), you will be warned. For example, you will get a warning message if you are entering a type 17 and you enter 1-0 for the B dimension and 2-0 for the D dimension, but leave the C dimension 0 If set to N, you will not be warned (a few detailers prefer not to be warned).

>Shipper System: Name of Coater Company Setup preference line 80

This name will be substituted on particular reports that are printed from within the Shipper System whenever bars are going to the coater.

>Shipper System: Highest stored shipper # 88911 Setup preference line 81

The Invoice/Shipper System automatically generates the next shipper number in sequence starting at this number. Generally, you don't change this number, it is stored and updated automatically. However, it is possible to set or reset this number by typing it here.

>Shipper System: Exclude from weight #1 Setup preference line 82
Shipper System: Exclude from weight #2 Setup preference line 83

Test bars for testing by either the state or by the coater should be excluded from total weights on particular Shipper System reports. If, for example, you Set these as CAL and FCO then any release number such as 1234-CAL or 1235-FCO will be excluded from the total weight.

>Rel screen: default mat,grade,ord#,By Setup preference line 85

If set to Y, you are prompted during Jobmaster entry
to default the material to Black, the grade to 60,
the order number to the release number, and the By to
the Detailer initials previously stored in the setup
preferences.

>Job number always exactly 3 characters Setup preference line 86

It is recommended you set this to N
Setting this to Y implements a system where the 8
character release number always consists of a
3 character job number followed by the (true)
release number (no dash needed). Example 12398765
where the job is 123 and the (true) release is 98765

>Landscape barlist: Substitute for "DOT" Setup preference line 87

In the landscape barlist (style #4) there is always
a subheading on page 1, below the heading.
It consists of up to 9 titles and 9 variables
pulled from the job/release you are printing.
If you enter, for example, CALTRANS, then those
letters will substitute where DOT would normally print.
This preference is superceded by a group of setup
preferences where you can totally modify this subheading.

See: LANDSCAPE BARLIST SUBHEADING - CUSTOMIZING 3.04,3.05

>Tag style 4 port map drive default=M: Setup preference line 88

This preference has special meaning only for those
printing tag style #4. This identifies on which drive
to look for the "map" designating which ports
will receive Customer versus "Shear" Tags and also
Epoxy versus Black Bar Tags. This map automatically
directs tag printing for a particular release to the
appropriate printer from among the bank of printers
driven by the printer server.

>Autocad Callout Detailing Format show MK Setup preference line 89

Using the Autocad/IntelliCAD 98 interface built into Standalone Detailing, one of the callout formats is named "Detailing Format". Setting this preference to Y will cause all marks sent to CAD to have the prefix MK for this one particular format.

>Tag Printing: set tag #=1 for each file Setup preference line 90

If set to Y, then when you print tags for example 3 files at once, and there are 20 tags for the first file, 15 for the second, and 30 for the third, then the tags will be numbered 1 thru 20 for the first file, 1 thru 15 for the second, and 1 thru 30 for the third file.
If set to N, then the tags will be numbered 1 thru 20 for the first file, 21 thru 35 for the second file, and 36 thru 65 for the third file.

>Barlist printout: Special totals page # Setup preference line 91

This applies only to one fabricator; it produces a customized totals printout which would not be useful to other fabricators.

>Tags: print "Tag x of y" x=tag#,y=total Setup preference line 92

On particular tag styles, this will print the tag number as well as the total number of tags in this run on every tag.

>Tag style 1,2 move left inches example .7 Setup preference line 93
Tag style 1 print tag # above Mark Setup preference line 94
Tag style 2 increase middle gap ex .5 1.2 Setup preference line 95
Tag style 6 increase middle gap ex .5 1.0 Setup preference line 96

This lets you adjust the printing on these tags styles.

>Tag Printing: blank tags after each file Setup preference line 97

Recommended: 1 or 0
If you are printing tags for several files,
then this number of blank tags will separate the
tags between each file.

>Tag Printing: blank tags after each run 1 Setup preference line 98

Recommended: 1 or 0
This many blank tags will be printed after each tag run.

>Allow importing of bent mark lines Setup preference line 100

If set to Y, for a new detailing or barlist you will be
allowed to import all bent mark lines from one or more
(or all) previously entered releases for this job. This
creates a Master mark system for matching marks.

>Landscape barlist use custom subheadings Setup preference lines 101-119

See: LANDSCAPE BARLIST SUBHEADING - CUSTOMIZING 3.04,3.05

>Barlist entry: prompt if size changes Setup preference line 120

Recommended: Y
If set to Y (recommended), then if you change the size
for a pre-existing bent line, then you will be warned.

>Landscape barlist switch left/middle hdg Setup preference line 121

See: LANDSCAPE BARLIST SUBHEADING - CUSTOMIZING 3.04,3.05

>Tag style 10 always show grade on tag Setup preference line 122

For this particular tag style only, if this preference
is set to N, then the grade will print only if it is
not 60.
If set to Y, grade always prints.

>Barlist entry use N and NN for next mark Setup preference line 123

If set to Y, then
If this line has bar size #5, and, for example, marks
501 and 502 already exist, you enter N for mark and get 503
If set to Y, then
If this line has bar size #3, and, for example, marks
601 and 402 already exist, you enter NN for mark and get 303

>Tag style 4 bundle sheartags as straight Setup preference line 124

Sheartags will bundle all items (even bent) as if they
are straight.

>Detailing: page break > lines (def.=22) Setup preference line 125

The Cut Sheet & Shipping prints exactly 22 lines per page;
setting this preference to 22 shows the page breaks on the
barlist screen just to the right of the line number 1,23,45,
etc with a ">" character.
For those who use the Portrait Placing list, set this to 35,
because this report prints exactly 35 lines per page.

>Detailing List: show Time Printed Setup preference line 126

Set this to N to suppress the printing on detailing lists
(the date will still show, though)

>Bend Deducts: Assume all #3 light bent Setup preference line 127

Set this to N if you want for example #3 type 17 to
be considered as heavy bent.

>Bend Deducts: Formsaver types deduct 0 Setup preference line 128

If you set this to Y, then Erico formsaver bend types
will take no bend deduction nor bend addition.

>Type T4 computation use Pythagorean only Setup preference line 129

If set to Y, then T4 computation will use only the right triangle calculation, with no adjustment for fitting this T4 into a box and diamond tie combination.

>Detailing Scrn Allow Label in Code field Setup preference line 130

If set to Y, this allows detailers to use a labeling system: Drawings have labels with circles around them 1,2,3, etc. and then bars are scheduled with the label included in the printed schedule. This system is also implemented in the Autocad Callout interface.

>Cut Sheet printout, print Label field Setup preference line 131

For detailers who use a labeling system (described above)

>Det/Barlist entry skip over Cutlen field Setup preference line 132

If set to Y (recommended), then as you enter from right to left on the barlist/detailing screen, the cutlen field is skipped (this field is computed for you anyway).

>Read Only Mode: for viewing only Setup preference line 133

This mode does not require a security key.
Most printouts and data entry is disallowed for this mode.

>Portrait Barlist hide wt on detail lines Setup preference line 134

Totals page will still be printed.

>Alt. sound to "TADA", .wav file pathname Setup preference line 135

If set to, for example, c:\windows\media\ding.wav, then the ding sound (which is of shorter duration than the TADA sound) will play when matching marks are found, for instance. To turn off all sound in SHEAR 97, enter: NONE

>Cut Sheet print fractions, not 1,2,3 Setup preference line 136

Instead of printing 1,2,3 , print 1/4 1/2 3/4 on this report.

>Zero fill imperial lengths under 1 foot Y Setup preference line 137

Instead of 4- 5, display and print 4-05

>Landscape barlist move heading down 1/2" Setup preference line 138
Landscape barlist - using dot matrix Setup preference line 139
Landscape barlist move dims right inches Setup preference line 140

These settings are usefull only if you are using a
dot-matrix printer for this report.

>Cut Sheet show req-qty-size Setup preference line 141

For the Cut Sheet & Shipping List, a line with
8 required, quantity of 3 will print as: 8 3
underneath heading titles of : Req Qty

>Cut Sheet show label-req-qty-size Setup preference line 142

For the Cut Sheet & Shipping List, a line with label 123
8 required, quantity of 3 will print as: 123 8 3
underneath heading titles of : Label Req Qty

>Bar Lists print fractions, not 1,2,3 Y Setup preference line 143

Instead of printing 1,2,3 , print 1/4 1/2 3/4 on these lists.

>Lists - don't print both met & imp sizes Setup preference line 144

When printing lists with soft metric sizes and metric lengths
in Imperial, do not show Imperial sizes (#5), not #5/16.

>Landscape barlist: Separate end prep pg Setup preference line 145

This preference causes the any line items with a labor code
such as thread right, as well as any Erico formsaver bend
types to print on separate page(s).

>Tag style 3 move body rt inches ex 1.1 1.1 Setup preference line 146

Adjusts the printing of this tag style.

>Comment/note: Plus key means end-of-line Setup preference line 147

Recommended: Set this to N
During barlist entry, the Plus key (+) usually acts just like the down arrow, and goes down to the start of the next line. However, sometimes a plus sign is part of a comment or note. If you set this to N, then + means end of line in all fields except for comments and notes.

>Det lists: print customer before project Setup preference line 148

If set to Y, this prints Customer above the Project Name.

>Tags: print detailing note on tag Y/N Setup preference line 149

Even though the detailing note field doesn't show on the barlist mode screen, for those who are licensed for Standalone Detailing the notes carry through to the production barlist, and these notes can be printed for most of the SHEAR 97 tag styles.

>Landscape barlist: wt top of total chart Setup preference line 150

The totals chart for this report prints the total weight at the bottom of the chart; this option will additionally print the total at the top.

>Bendtyp hi res print: 5-15, 15 is faster Setup preference line 151

If bend type printing is too slow for you, then set this number up for a somewhat lower resolution, but faster printing.

>Print bend types after list default: Y/N Setup preference line 152

You have the option of printing the pictures of just those bend types appearing in this list, on a page at the end of the printout. If you set this preference to Y, then the checkbox for bend type printing will be selected on the Barlist/Detailing List choices screen. If set to N, this checkbox will not be selected automatically. Of course, you can click this checkbox to override this default setting for the printing of a particular list.

>Bend Deducts: All bend types deduct 0 Setup preference line 153

If set to Y, no bend deductions (or bend additions) will be taken for any bend type.

>CutSheet print material usage in heading Setup preference line 154

If set to Y (recommended), the material usage will be printed in the heading of the Cut Sheet & Shipping List.

>Lookup contractor in CSV file: filepath= Setup preference line 155

see: CONTRACTOR LOOK-UP FILE (Topic 1.04)

>Barlist/Det warn if taglength over 40 ft Setup preference line 156

For all lines other than spirals, you are warned if the tag length is over 60 feet. This option provides for a warning if it is over 40 feet.

>Barlist Portrait #1:put checkbox on left Setup preference line 157

This will print a narrow checkbox on the left of the printout.

>Imperial length entry . is decimal feet Setup preference line 158

If set to Y, then 10.5 becomes 10-6;
otherwise, 10.5 becomes 10-5

>Printed Label List less tall heading y/n Setup preference line 161

This makes the LABEL LIST lettering in the printed label list heading not as tall, so that if you attach this to a drawing, it doesn't take as much room. (Recommend using Autocad/IntelliCAD 98 interface for drag and drop of the Label List, rather than printing and sticking it to the drawing).

>Drop-down material list to enter sz/gr Setup preference line 162

SHEAR 97 uses this as a holding place for the current setting of the variable for whether you want a drop-down list of materials to enter for size/grade. You change this by clicking the "Mat List" button at the top right of the barlist entry screen. See the next two preference settings below:

>Lookup materials in CSV file: filepath= Setup preference line 163

This is used if you want a drop-down list of materials to enter for size/grade. If these are left blank, then the drop-down materials list will be created from the Materials File.

TO SET THIS UP:

1) on line 163 of setup preferences, type the file path which will be used to lookup the materials
example 1: f:\peachw\lineitem.csv
example 2: c:\shear97\system\misc\material.txt

2) the structure of the above file can be generated automatically by an export from peachtree accounting

the structure of the file is as follows:
each line of this text file is for one inventory item

there are at least 2 fields (there can be many more),
a comma separates the fields in each line
the first field is a short name or id for the material
the maximum characters allowed in the short name is 6

the second field is the full material name
(fields after the second field are okay, but are ignored)

3) when you are in the size/grade field of barlist entry, a drop-down list will be displayed. This can be particularly useful during the entru of mesh and accessories items.

>Spirals: split at stock length Setup preference line 165

If set to Y, then the SPRL detailing and estimating function will generated more than one spiral from the stock length you specify. Set this to N if you are using continuous coil stock.

>Phrase # to print at bottom of B.O.L. Setup preference line 166

This specifies the index number of the custom phrase you want printed at the bottom of the Bill Of Lading report. Call if you would like your own custom message(s) on this report.

>Tag style 1: format variation (1,2,etc.) Setup preference line 167

Specifies a particular tag style variation, where a tag layout differs somewhat from the standard tag style 1.

>Print Preview: view documents beforehand Setup preference line 168

This lets you view all printouts before printing; also you can set the number of copies, and select all pages, or just particular pages to print.

>Printouts logo bmp/wmf to apply filepath Setup preference line 169
>Printouts logo width in inches ex 1.25 Setup preference line 170
>Printouts logo height in inches ex .75 Setup preference line 171

These preferences let you print your company logo on particular documents. You specify the actual size of the logo to be printed.

>Acad Call Det. Format omit REQ from qty Setup preference line 172

For the Autocad Callout format named "Detailing Format", set this to ignore the required value; instead of the quantity being equal to required times quantity, the quantity is equal to what is in the quantity field.

>Print Preview exit screen after printing Setup preference line 173

Unless this is set to N, you will automatically exit the Print Preview screen after printing pages. If set to N, you can stay in the screen, print other pages, etc., but you must click on the X in the upper right to exit this screen.

>Barlist Printouts: print how many copies Setup preference line 174
>Detailing Lists: print how many copies Setup preference line 175

You can use these to specify the usual number of copies that your company prints for these documents.

>Barlist style 1 & 2: cust before project Setup preference line 176

This will print the customer above the project name on the barlist style 1 and 2 printouts.

>Tag style 4 Sato BLK move up in. ex .15 Setup preference line 177
>Tag style 4 Sato notBLK move up ex .15 Setup preference line 178

These allow for +/- vertical adjustment of the SATO thermal tag printing for Tag Style 4.

>Acad Call Det. Format show REQ as: (x4) Setup preference line 179

Just for this format, display required as shown

>Barlist lengths plus key(+) = period (.) Setup preference line 180

If you are entering lengths on the barlist screen, then if you enter +, it will be treated as if you had entered a period. For Imperial lengths, this will be changed to a dash (unless the preference named "Imperial length entry . is decimal feet" is set to Y) For metric lengths, the + is changed to a period.

>Barlist bent bars enter taglen to verify Setup preference line 181

If you enter a bent bar tag length, then instead of recomputing the taglength from the bend dimensions, what you entered remains on the screen (in light blue). Whether this option is set to Y or N, however, you are always warned if the bend dimensions don't add up to an entered taglength.

>Data entry use REQ from prior line above Setup preference line 182

If this is set to N, then the required figure will not be carried forward from a previously entered line.

>Barlist/Det warn if taglength over xx ft Setup preference line 183

If you enter a number here, for example 68, then for all lines other than spirals, you are warned if and only if the tag length is over 68 feet.

>Show mesg going from BARLIST MODE to DET Setup preference line 184

Set this to N to suppress the popup message that you would normally see when goint from Barlist Mode to Detailing Mode

>Cut Sheet show x in front of Req count Setup preference line 185

If not set to N, will print Req count like this: x 16 on the "Cut Sheet" style Detailing Placement List

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>Same bent bar but different marks, warn? Setup preference line 186

If not set to N, you will get a warning in case the bent bar you are entering is the same as a previously entered bent bar and the marks are different. In any case, you can turn this feature off within the current SHEAR 97 session (until you exit SHEAR 97 completely).

>Tag printing suppress bundle x of y Setup preference line 187

If set to Y, then printed tags will not show the phrase, for example "3000 Reqd. Bundle 3 of 15"

>Tag printing suppress material & labor Setup preference line 188

If set to Y, then printed tags will not show the phrase, for example "Black, Thread Left"

>Det/Est Barlist scrn put macro in note field Setup preference line 189

If not set to N, then the popup macro formula will be placed into the note field in the line you entered the popup macro.

>Tag style 4 SHEAR+bend deduct top of tag Setup preference line 190

Only for this tag style, print "SHEAR" and the bend deduct at the top of bent tags.

>Job-releases report add a dwg # column Setup preference line 191

Adds a drawing # column to this report.

>Cutsheet and label list: circle labels Setup preference line 192

If not set to N, this will print a circle/ellipse around labels.

>Alternate Mill Cert layout number ex 2 Setup preference line 193

If set to a number, this will provide a different layout
than the standard, for the mill cert report.

>Co. Title replace w/logo bmp/wmf path Setup preference line 194
Co. Title replace width default 3.0 Setup preference line 195
Co. Title replace height default 1.0 Setup preference line 196

If set, this picture file (bitmap or wmf) replaces the five company title heading lines on most printouts. Therefore, your company name, address, and phone numbers should be included in this picture, along with your actual logo artwork.
You specify your preference for the size of the logo to be printed in (tenths of) inches. The full file pathname must be given so that
SHEAR 97 can find the picture to print.

Independent detailers who specify the company
name index from 1 to 10 in the job screen, can
specify the picture file with a *, like this:
c:\shear97\system\misc\title*.wmf
In this case, your hard drive has 10 picture
files named as follows:
c:\shear97\system\misc\title1.wmf
c:\shear97\system\misc\title2.wmf
etc.
SHEAR 97 will then print the picture corresponding
to the company index. That is, if this is company 7, then
picture c:\shear97\system\misc\title7.wmf is printed.

>Varying bars: round met len to 5 or 0 mm Setup preference line 197

If not set to N, metric length varying bars will be
rounded to the nearest 5 millimeters.

>Detailing Placement List 11x17 hdg#1 thru hdg #4 Setup pref lines 198-201

These are the heading lines for this particular
Detailing Placement List.

>Tag style 5 Sato move up in. ex .15 Setup preference line 202

This allows for +/- vertical adjustment of the
SATO thermal tag printing for Tag Style 5.

>Thermal tags move up in. ex .15 Setup preference line 203
Thermal tags move lt in. ex .15 Setup preference line 204

This allows for +/- vertical and horizontal adjustment of the thermal tag printing. A positive value moves the printing up or left, and a negative value moves it down or right.

>Sendfile drive job erase archive ex M: Setup preference line 205

For those using the Sendfile remote detailer barlist file sending system, when you are deleting old jobs, SHEAR 97 will allow you to (optionally) also delete the files in the detailer archive directory.

>Tag style 4 or 5: ask tag style each run Setup preference line 206

Facilitates switching between these 2 tag styles.

>Print stk, non-stk lb tot w/long bar msg Setup preference line 207

If set to Y, this will append the stock rebar weight in lbs along with the non-stock (fabbed) rebar lbs to the "long bar" message on the totals page.

>Automatic conversion of old shearpk file Setup preference line 208

If you create a new barlist in SHEAR 97, then if there is a correponding barlist file in the old Shear package with the same release number, then that file will be automatically converted and brought into SHEAR 97.

>Thermal tags Stub move up in. ex .15 Setup preference line 209

For the stub portion of thermal tags, this allows for +/- vertical adjustment for thermal tag printing.

>IntelliCAD/AutoCad dwg: circle labels Setup preference line 210

Labels which are pulled into a Cad drawing using the autocad call, detailing style, will be encircled on the drawing.

>Accounting Interface Peachtree 6.0 y/n Setup preference line 211-220
Accounting Interface Peachtree 7.0 y/n
Accounting Interface Quickbooks y/n
Acctg inter sales export ex c:\sales.csv

Acctg interface: Transact Period ex 17
Acctg interface: Transact # ex 123
Acctg interface: A/R account # ex 11000
Acctg interface: G/L account # ex 40000

All of the above settings influence the export interface of invoices sent from SHEAR 97 to your accounting software package, as well as the import of customer and material list information from your accounting software for use by SHEAR 97.

>Job-Releases report show order# not date Setup preference line 231

Substitute the order number for the order date for this report which is run from the releases screen

>Landscape barlist sheet nos skip tot pg Setup preference line 232

For the purpose of numbering sheets of a barlist, this skips the first page (totals page) of the landscape barlist report. Therefore, the second page of this barlist is numbered "Sheet 1 of X" where X is the total sheets excluding the first (totals) page.

>Tag printing suppress printing: "BLACK" Setup preference line 233

If set to Y, then the material designation "BLACK" will not be printed on the tag.

>Tag Style 1 print release color on tag Setup preference line 234

If set to Y, this enables the printing of the release color on tag style 1.

>Warn if start of Rel# doesn't match job# Setup preference line 235

If set to Y, warns you if the job number does not match the start of the release #, for example, if the job is 1234, and you enter release 1235-001.

>Acad Call: switch to cad after callout Setup preference line 236

If not set to N, you will automatically jump from SHEAR 97 to AutoCAD/IntelliCAD immediately after you perform your autocad callout.

>Detailing List: Totals Page default Y/N Setup preference line 237

If set to N, the default switch to indicate that you want a totals page is turned off. Of course, you can change this each time you print a detailing placement list.

>Tag printing: Print bend angles on tag Setup preference line 238

If set to Y, bend angles are printed on most tag styles.

>Tag style 10 variation number ex: 2 Setup preference line 239

If not empty, indicates variations for tag style 10.

>Jobmaster screen default size mode ex: I Setup preference line 240
Jobmaster scrn default length mode ex: I Setup preference line 241

When entering a new job, the indicated default size mode and default length mode will be suggested.

>Mark automatic generation method, ex. 1 Setup preference line 242

If set to 1:
enter - in the mark field, and the mark will be
generated as follows:
If straight rebar line item (not smooth bar, mesh, or acc),
then mark will be size and taglen combined. Examples follow:
#4 12-8 will be marked as 412-08
#11 2-10 will be marked as 1102-10
Note that if you use this method, you might want to
mark your varying bars (bent or straight) with a V, so that
these marks do not get confused with the above straight marks;
for example: varying bars V412-01 through V412-08

>Job number always exactly 5 characters Setup preference line 243

It is recommended you set this to N
Setting this to Y implements a system where the 8
character release number always consists of a
5 character job number followed by the (true)
release number (no dash needed). Example 12345001
where the job is 12345 and the (true) release is 001

>Utilize added rel fields: desc, bid item Setup preference line 244

If set to Y, this will add 2 release fields to
the right of the release number field on the
release screen. The added fields are a 1-3
character alpha description, and a 1-10 character
bid item.

>Enter Old dos shrpack data drive, ex. N: Setup preference line 245

If left empty, then C: is used. If you enter N:,
for example, then SHEAR 97 will look in N: in order
to locate your old dos shear package file data.

>Det/Est Function Toolbar show below line Setup preference line 246

If set to Y, the floating toolbar used to input function variables (for LINE, GRIX, MESH, etc.) will be displayed below the active line, rather than above the line.

>If T/S, disallow barlist create from det Setup preference line 247

If set to Y, then when you start to exit the detailing screen, and the production barlist file associated with this detailing file has a S or T (one or more lines have been tagged or suspended), then you will not be allowed to recreate the barlist file from the detailing file.

>Det Place List 11x17 lines/page, ex. 30 Setup preference line 248

The 11 by 17 placement list has a default of 32 bar line items on each page. If you set this to 30, for example, then the space at the bottom of the printout is increases by 2 lines = .5 inches.

>Det Place List 11x17 tab left, ex. .5 Setup preference line 249

This will increase the tab on the left of the 11 by 17 placement list. If you set this to .5, for example, then you will increase the space at the left of the printout by .5 inches.

>Landscape barlist combine notes 1 thru 9 Setup preference line 250

If set to Y, this will combine notes 1 thru 9 and print them in one line on the landscape barlist, rather than printing each note on a separate line.

>Barlist 1 & 2 print rel color, del date Setup preference line 251

For portrait barlist printout styles 1 and 2, this prints both the release color and delivery date in the heading of the report.

>Barlist,Loadlist use scrp markup per job Setup preference line 252

If set to Y, then the barlist and loadlist line weights are marked up by the percentage set in the Job field labeled "Scrap". Enter these numbers such as 5.125 or 3.5 on the job screen (do not use a percent sign %). Any scrap markup greater than 20 percent is ignored. The scrap markup can be zero for a particular job by leaving the Job Scrap field empty.

>Barlist/Det warn if lbs over, ex. 45000 Setup preference line 253

If not empty, for instance 45000, you will be warned (as you are exiting the barlist screen) if this detailing/barlisting release weighs over 45000 lb.

>Tag printing: Input tagdate each run y/n Setup preference line 254

If set to Y, you will be allowed to set the "tag date" to the date of your choice each time you print tags.

>PANEL: never compute stock/lap splices Setup preference line 255

If set to Y, then stock and lap will not be computed, (i.e. bars will not be lapped) even if a panel bar length exceeds the stock bar length.

>Accept matching marks data, default Y Setup preference line 256

If set to Y, then the default answer to accepting the matching mark data is Yes.

>Accept matching marks, jump to next line Setup preference line 257

If set to y, and if you verify and accept the matching mark data, the focus will be set to the leftmost column of the next line.

>Str bar, jump to next line after taglen Setup preference line 258

If set to y, and if you enter a (non-zero) taglength, the focus will be set to the leftmost column of the next line.

>Font tag text normal size, make it bold Setup preference line 259

If set to Y, the normal sized tag text (not the extra large characters) will be printed bold.

>Portrait Barlist #2 print size subtotals Setup preference line 260

For this barlist style, if set to Y, after each bar size, the weight subtotal for that size will print.

>SATO tags Enter one half char val ex 171 Setup preference line 261
SATO tags Enter one qtr char val ex 172 Setup preference line 262
SATO tags Enter 3 qtr char val ex 243 Setup preference line 263

For Sato thermal tags style 4 and 5, the "Customer" tags (not the "Shear" tags) will print these fraction characters in the tag length if you are not rounding the taglength (also refer to setup lines 15 and 16).

>Tag style 14: format variation (2,etc.) Setup preference line 264

Specifies the particular tag style variation, where a tag layout differs somewhat from the standard tag style 14. Variation 3 has been a popular choice here.

>Tag style 3: tag length is 3 inches + ? Setup preference line 265

If you use tag style 3, and if you, for example, enter .5 on this line, your tag will print as 3.5 inches tall.

>Landscape barlist input Barlist Date y/n Setup preference line 266

If set to Y, each time you print a landscape barlist, you can input the date you want printed in the heading of the barlist. The default date printed is today's date.

>Imp len entry . is dec feet round to qtr Setup preference line 267

For those who have set SHEAR 97 to accept a period as decimal feet for an Imperial length (see ">Imperial length entry . is decimal feet", example 4.5 becomes 4-6), set this to Y and SHEAR 97 will round the data entry field to the quarter inch rather than to the whole inch.

>Sendfile refresh rel info from detailer Setup preference line 268

If set to Y, for those using the Sendfile remote Detailer barlist order entry system, each time a remote detailer sends in file(s), the release line information sent by the detailer will automatically replace the release line data in the host (receiving) computer.

>Formsaver deducts alternate method, ex 2 Setup preference line 269

If a number is entered here (such as 2), then that particular alternative method for calculating formsaver bend deductions/additions is thereby implemented.

>Lists, suppress "SM" smooth bar suffix Setup preference line 270

If set to Y, on particular list printouts, this will prevent the prefix "SM" from printing. For example, for size 4 smooth bar, instead of: 1/2 " SM the printout will read: 1/2 "

>Barlist style #2: print mesh/acc first Setup preference line 271

This applies to portrait barlist style #2. If set to Y, then all mesh and accessories lines (non-rebar items) will be printed first, followed by all rebar items.

>Report Sz/Bend Stock, ex 20,30,40,60 Setup preference line 272

This is where SHEAR 97 stores your last input of your stock lengths from the "Size/Bend" Report which is accessible from the Job Screen.

>Allow text export from Loadlist Printout Setup preference line 273
>Text export path ex: c:\export\barlists\ Setup preference line 274

If set to Y, an ascii export of your loadlist will be exported to a file in the text export subdirectory. During this process, you are also given the option to mark all barlist lines as Tagged (T in Fab field). For example, if you are on release 1234-01, and your text export path is set to c:\export\barlists\, then an exported ascii text file is created, and its name is: c:\export\barlists\1234-01.TXT

>TagStyle 14 Var 3 qty-size-lgth font sz Setup preference line 275

For those using variation 3 on tag style 14, this sets the font size just for this line of print: the qty, size, length line on both the main portion of the tag as well as the stub.

>TagStyle 14 Var 3 qty-size-lgth vert adj Setup preference line 276

For those using variation 3 on tag style 14, this will move just this one line (on both the main portion of the tag as well as the stub) either up or down. Examples: .05 moves the line half of a tenth of an inch up, -.025 moves the line a quarter of a tenth of an inch down.

>Standard hooks metric exact match of imp Setup preference line 277

If set to Y, then the metric length of a standard hook, when printed with Imperial lengths, will result in an exact match of the Imperial standard hook. For example, a hook might be set to 483mm instead of 475mm, since 483 is an exact match for 1-7, but 475 is 1-063.

>Allow tagging a subset of a file by Code Setup preference line 278

If set to Y, then you are prompted to indicate which codes you want to print tags for. You set the codes (1,2,3, for example) in the F (fab) field on the barlist screen. This means during a particular tag printing, you could print tags for particular codes, but not for others. For instance, you could print tags for codes 1 and 3, yet ignore any lines without codes 1 or 3.

>Tags suppress words 'Mesh' 'Accessories' Setup preference line 279

If set to Y, then the words "Mesh Item", "Accessories Item", "Mesh/Accessories" will not print on the tag for those items which are category mesh (M) or accessory (A).

>Estimating using hi resolution 1024x768 Setup preference line 280

Some laptops can't be set to 800x600 screen resolution. Other laptops leave a large border if set to 800x600. For both of these cases, set this preference to Y, and the estimating barlist screen will fill your physical screen. Because of improvements in SHEAR 97, it is recommended to set this to N

>Vertical/Horz Dimensions switch enable Setup preference line 281

This switch on the barlist/detailing list entry screen is normally disabled, and permanently set to vertical dimensions. This displays your dimensions in a vertical entry box, rather than scrolling horizontally. Setting this line to Y allows you to toggle back and forth between vertical and horizontal dimension entry/display.

>Det do not move down for: note,johk Y/N Setup preference line 282

It is strongly recommended you always set this to Y. In detailing mode, any line that has a note as well as one or more of the dimensions j,o,h,k will automatically create a new line and put the note in it. Setting this preference to Y disables this process.

>Tag style 16: format variation (ex. 2) Setup preference line 283

For this tag style, variation 2 prints the tag number in larger characters towards the bottom of the tag. Also, you are prompted for the 4 large identifying characters to be printed at the bottom of the tag.

> Tag style 14 print tag # on stub Y/N Setup preference line 284

For this tag style, this will print the tag # on the tear-off stub.

> Barline wt calc: inch-round metric len Setup preference line 285

If set to Y, then for metric lengths only, this will compute the barlist line weight as if the metric length is rounded to the nearest inch. For fabricators cutting to the nearest inch, the result is that computed weights for metric bar lines closely matches the weight of the bar that is actually shipped.

>Recut: always ship this length ex: 20-0 Setup preference line 286

If you use union recutting, if you type a length here, this length will always be the "ship length" to send to the site.

>Type 36: Disallow the A dim entry Y/N Setup preference line 287

If set to Y, then for bend type 36, you will not see the A dimension in the vertical dimension data entry box.

>Portrait Barlist variation #, example 2 Setup preference line 288

This sets the format style variation for portrait barlists. Values allowed here are 1,2,3,5. (3 is seldom used).

>Type T3: Disallow the G dim entry Y/N Setup preference line 290

If set to Y, then for bend type T3, you will not see the G dimension in the vertical dimension data entry box.

>Loadlist: extra column to indicate "cut" Setup preference line 291

If set to Y, and extra underlined area is set to the left of the length, so that the operator can write in an X to indicate this bar has been cut.

>Tag style 4,5: permit metric bend dims Setup preference line 292

For tag styles 4 or 5, and for a metric length file, you will have the option at runtime to print the bend dimensions in metric rather than imperial.

>Port Barlist #2 heading separate job,rel Setup preference line 293

If set to Y, then for this barlist style, the job and release numbers will print as separate fields.

>Update prod barlist default answer Y/N/C Setup preference line 294

As you are leaving the Standalone Detailing screen, you are asked whether you want to update the production barlist.
If you set this to Y, then the default reponse will be Yes.
If you set this to N, then the default reponse will be No.
If you set this to C, then the default reponse will be Cancel.

>Bend deduct rounding: do not subtract .5 Setup preference line 295

The bend deduction system built into SHEAR 97 rounds Imperial length bar bend deductions, after first subtracting .5 inches.
If set to Y, then the .5 inches will not be subtracted.

>Allow rearranging columns: job,rel scrns Setup preference line 296

This allows you to rearrange the columns on the jobmaster, releases, and estimating job screens. Also, you can turn some of these columns to off - then they won't be visible.

>Alt. "BAD" sound, .wav file pathname Setup preference line 297

If set to, for example, c:\windows\media\ding.wav, then the ding sound will play as the "bad" sound, to indicate an erroneous data entry value, for instance.

>Port Barlist no blank line between sizes Setup preference line 298

For portrait barlist styles 1 and 2, there is normally a blank line printed whenever either the bar size changes, or if one line is straight and the next is bent. If you set this to Y, then there will be no blank lines.

>Port Barlist using 8.5x14 (legal) paper Setup preference line 299

For portrait barlist styles 1 and 2, the normal paper size is 8.5x11. If you set this to Y, then legal size paper will be utilized for this barlist printout.

>Cut Sheet heading note variation, ex 1 Setup preference line 300

This number indicates which custom note, if any, will print in the heading of page 1 of the Cut Sheet. If you do not enter a number here, then no note will be printed.

>Loading Report: linear ft instead of op. Setup preference line 301

If set to Y, then on the Loading Report (invoicing subsystem), within the totals chart by size, the linear feet will be printed instead of the operator's initials.

>Iron List: Implement custom programming Setup preference line 302

This is the 'master switch' to implement all changes
associated with the Iron List subsystem for precasters.

>KRB Straight-Cut Download Interface path Setup preference line 303

Leave this empty if you are not using the KRB Straight-Cut
equipment. Otherwise, fill in a valid 8 character per folder
path name where you want the download files stored.
Examples follow: A:\ C:\KRBSCFIL\ F:\KWLISTS\STRCUT\

>Job number always exactly 4 characters Setup preference line 304

It is recommended you set this to N
Setting this to Y implements a system where the 8
character release number always consists of a
4 character job number followed by the (true)
release number (no dash needed). Example 12349876
where the job is 1234 and the (true) release is 9876

>Tag style 18: format variation (2,etc.) Setup preference line 305

Specifies a particular tag style variation, where
a tag layout differs somewhat from the standard
tag style 18.

>Word path suffix ex Office10\winword.exe Setup preference line 306

SHEAR 97 may sometimes use Microsoft Word,
for instance if you want an Estimating Cover Sheet.
For this setup preference, you will type the
suffix of the pathname. SHEAR 97 assumes that the
start of the pathname is as follows:
C:\Program Files\Microsoft Office\
You can leave this preference empty if your full path is
C:\Program Files\Microsoft Office\Office10\winword.exe

>Vertical dim entry order ex ABCDEFGHJKOR Setup preference line 307

When entering bend dimensions using the vertical white drop-down boxes, the default order of the bend dimensions is: ABCDEFGJOHKR. You can change this order by entering it here. If you choose to enter a new ordering, it must be exactly 12 letters long, with no spaces, and contain all of the letters ABCDEFGJOHKR, typed in the order you want.

>Det Place List 11x17 show req-qty-total Setup preference line 308

For the Det Place List 11x17, a line with 8 required, quantity of 3 will print as: 8 3 24 underneath heading titles of : Req Qty Tot

>Tags: metric bend dims if Job Ln is 'M' Setup preference line 309

If set to 'Y', then for tag printing, for a metric length file, you'll always print the bend dimensions in metric.

>Suspend bars from op shr rule# (ex. 1,2) Setup preference line 310

If this preference is set to a number, such as 1, then if you're on the barlist entry screen, and you click on Menu, then click on "Scan for Errors/Adjustments", you will be asked if during the error scan, you want to automatically add "S" (suspend from optimum shearing) to the F column for all untagged lines that are either stock, or will be fabricated on an automatic stirrup bender (according to the set of logic rules indicated by the number you entered here).

>Suppress bad right triangle error mesg Setup preference line 311

If set to Y, then the error message you'd normally see for a barline with a right triangle with invalid dimensions is not shown.

>Portrait lists print in color, job color Setup preference line 313

If set to Y, then portrait placement lists and portrait barlists will be printed in the color specified in the job color field in the Job Master screen.

>Tag style #1 print text using rel color Setup preference line 314

If set to Y, tag style #1 will be printed using the color you specified in the REL COLOR field in the Releases screen.

>Det Place List 8.5x14 tab left, ex. .2 Setup preference line 315

This will increase the tab on the left of the 8.5 by 14 placement list. If you set this to .3, for example, then you will increase the space at the left of the printout by .3 inches.

>Estimating start in X (times) column Y/N Setup preference line 316

If set to Y, when leaving the previous line, you will start at the X (times) column, rather than Code field.

>List of bend types for zero bend deduct Setup preference line 317

If you enter one or more bend types, separated by a comma, then for just those bend types, the computed bend deduction will always be zero.

>Alternate tags move up in. ex .15 Setup preference line 318

If alternate tags are used, this allows for +/- vertical adjustment for tag printing.

>Tag choices screen suppress file list Setup preference line 319

If set to Y, then the list of file names on the Tag Choices screen will not be shown.

>Allow Bar Code sheets to be printed Y/N Setup preference line 320

If set to Y, then each time you begin to print tags,
you'll be given the option to print pages of bar codes
to your laser printer for the bars in this list.
Some benders which support bar coding can scan
and read in pages of bar codes into memory.
Many bar codes can be printed on a sheet of plain paper.

>Bar Code sheets: label rows per sheet Setup preference line 321
Bar Code sheets: label columns per sheet Setup preference line 322
Bar Code sheets: width of one label Setup preference line 323
Bar Code sheets: height of one label Setup preference line 324
Bar Code sheets: horz adjust left inch Setup preference line 325
Bar Code sheets: vert adjust up inch Setup preference line 326

The above preferences let you provide the layout
for a laser printed bar code sheet.
For a landscape 8.5x11 sheet, try these
values for the above 6 inputs:
11 3 2.7 1 -.25 -.4

>Bar code always print in Metric Y/N Setup preference line 327

Many benders are set to understand metric
millimeters (rather than inches),
so you should try setting this to Y

>Bar code straight bars Y/N Setup preference line 328

>Bar code only these sizes, example 3,4,5 Setup preference line 329

>Landscape barlist No Imp Chart if metric Setup preference line 330

For a metric barlist, set this to Y, and
the Imperial Totals Chart will be suppressed.

>Estimate Summary Report variation#, ex 2 Setup preference line 331

Allows for variation of the Estimate Summary Report.

>Est List Tot Page: double-space comments Setup preference line 332

If set to Y, comments on the Estimate List printout
are double-spaced, instead of single-spaced

>Detailing List 11x17 show sheet numbers Setup preference line 333

For this placement list, show the sheet
number on each page, e.g. "Sheet 1 of 3".

>Std Det data entry: skip over Code field Setup preference line 334

During Standalone Detailing data entry, set
this to Y to jump over the Code field, starting
on the next column after the Code field.

>Tag style 14 show bending as LB/HB/F Y/N Setup preference line 335

For this tag style, shows Light Bent, Heavy Bent,
Field Bent on the tag.

>Printed Label List bottom of page def=75 Setup preference line 336

Allows for adjusting how close to the bottom
of each page to print this Label List.

>Bend type FB, maintain taglen,cutlen Y/N Setup preference line 337

For FB, field bent, show both the taglength
and the cutlength.

>Landscape barlist: total wt include ACC Setup preference line 338

If set to Y, accessories are included in the total weight of this barlist printout.

>Update prod barlist without asking Y/N Setup preference line 339

If set to Y, then the Production barlist (.dat file) corresponding to this Detailing list (.det file) will be updated (re-created) without prompting you.

>Landscape Barlist detail lines, hide wt Setup preference line 340

If set to Y,the weight on each line of this barlist printout is not shown.

>Tag style 22: format variation (2,etc.) Setup preference line 341

This lets you choose which variation you want for this tag style.

>Est List: indent right inches example .2 Setup preference line 342

You can indent the left margin of the Estimating List (moves printing to the right).

>Truck width for arc bar split, def=7-4 Setup preference line 343

Arc bars will be split according to the value in this preference. If you leave this empty, then 7 feet 4 inches is used.

>Std Det: data entry skip over Note field Setup preference line 344

During Standalone Detailing data entry, set this to Y to jump over the Note field, starting on the next column after the Note field.

>Enter color,r,g,b values: Extra Color 1 Setup preference line 345-354

Lines 345 thru 354 are for from 1 to 10 additional colors. Examples follow
OLIVE,25,200,50
AQUA
the 3 numbers are the rgb values from 0 to 255, where r=red, g=green, b=blue
These 3 rgb numbers are optional
Enter color,r,g,b values: Extra Color 9
Enter color,r,g,b values: Extra Color 10

The above preferences allows for many more release and tag colors. RGB values let you specify the "mixing" of colors.

>Automatic add E,G,S (ep,galv,ss) to mark Setup preference line 355

When using the N or NN feature for automatically generating the next mark, this allows you to append the material designation of this barline to the mark: e.g. 403E for epoxy.

>Vary bars permit Even Increments feature Setup preference line 356

This allows you to set even inch increments for the bend dimensions during the automatic generation of Varying Bars.

>T1,T2: if G is 0, Automatically set to A Setup preference line 357

If set to Y, then G will be automatically set to the same value as A for the T1 and T2 bend types.

>Estimating List Hdg: print 1-4 est notes Setup preference line 358

Allow for Estimating Notes in the heading of the Estimating List.

>SZ Mode Hard Metric jobs: Use RSIC hooks Setup preference line 359

If set to Y, allows for the Canadian standard hook values to be automatically generated.

>Cut Sheet print item number on each line Setup preference line 360

Prints the line number of each line on the left side of each printed line.

>Landscape barlist alternate heading y/n Setup preference line 361

Allows for a different heading format for this barlist printout.

>Metric Lengths: round to 5 or 0 mm y/n Setup preference line 362

If set to Y, all metric lengths will be rounded to the nearest multiple of 5 millimeters.

>Spec bend type w/only A dim: print mesg Setup preference line 363

If this is a special bend type, and if there if only one dimension (the A dimension), then a message is printed on the barlist.

>Rect Colm discontinued bars: always str Setup preference line 364

If set to Y, then all discontinued vertical bars
in a rectangular column will be shipped straight,
versus "cranking" these bars in (bend type 3).

>Barcode on tags move up in. ex .15 Setup preference line 365
Barcode on tags move lt in. ex .15 Setup preference line 366

Allows for the adjustment of the placement of
bar codes for tag printing.

>EST: radius bars, compute as Light Bent Setup preference line 367

If set to Y, then for Estimating purposes,
all radius bars will be computed as Light Bent.

>Barcode on tags Bar Width ex 10 Setup preference lines 368-374
Barcode on tags Bar Height ex .04
Barcode on tags Columns
Barcode on tags Rows
Barcode on tags Correction Level
Barcode on tags Truncate (Y/N)
Barcode protocol variation number, ex: 2 Use the value 2 for MEP

For bar codes, these inputs allow for the
adjustment in the size, automatic
error correction factor, and truncation of
starting and ending bars.

>Suppress Soft Metric Sizes on label list Setup preference line 376

If set to Y, then instead of printing both
the Imperial and Soft Metric bar sizes,
only the Imperial size will be printed.

>Suppress (turn off) All Bar coding (Y/N) Setup preference line 377

If set to Y, then no bar codes will print

>Implement Network acceleration mechanism Setup preference line 378

Some networks will run SHEAR 97 much faster with this set to Y.

>Landscape Barlist, style 4 tags: eighths Setup preference line 379

For metric length files only, this permits the conversion and printing of eighth inches, instead of quarter inches.

>Port Barlist separate epoxy totals (Y/N) Setup preference line 380

Provides for an epoxy totals chart, separate from black bar (uncoated).

>Print multiple copies suppress collation Setup preference line 381

When multiple copies are printed, they are generally collated. This turns off the collation, if set to Y.

>Bill of Lading: ask each time if hide wt Setup preference line 382

If set to Y, then at runtime, you will be asked if you want to hide all weights.

>Same bar,marks differ, warn if varygroup Setup preference line 383

If a non-vary group bent bar is identical to another, you receive a warning. This will give the same warning for vary group bars.

>Metric bar sz use # prefix, not m suffix Setup preference line 384

If set to Y, then for example, you will get #35 instead of 35m

>Laser Tags Print Preview view then print Setup preference line 385

For laser tag styles, you can preview all tags before printing all (or a subset) of all tags.

>Estimating Totals: breakout by mat type Setup preference line 387

If set to Y, you will get a breakout
by material types: black, epoxy,
galvanized, stainless, weldable, etc

>Add this many qtr inch to std 180, ex 4 Setup preference line 388

If set to 4, for example, then all standard
180 hooks will add 4 quarter inches to
the value which is automatically pulled
in when you type "-" in a hook field

>DET copy TIMES value from the line above Setup preference line 389

If set to Y, then, for DETAILING, the TIMES field will keep
repeating on successive lines.

>EST copy TIMES value from the line above Setup preference line 390

If set to Y, then, for ESTIMATING, the TIMES field will keep
repeating on successive lines.

>Jobmaster: allow sort by company index Setup preference line 391

This allow you to sort the Jobmaster by
the company index field, which is
one of the job fields which indicates
the Fabricator's Company Name.

>Landscape barlist: Start str bars new pg Setup preference line 392

For Landscape barlist style 4, you will
get a new page when the straight bars start

>Landscape barlist: new pg at bent bar sz Setup preference line 393

For Landscape barlist style 4, you will
get a new page when a particular bar size starts

>Port Det Place List inch indent lt ex .2 Setup preference line 394

The left margin of the portrait detailing
placement list is indented, for example, by .2 inches.

>Landscape barlist print acc as free form Setup preference line 395

If set to Y, then all accessories, whether they come from "free-form" entry, or from the Materials file, will print in the "free form" format.

>CMUV extend top bar inches maximum ex 24 Setup preference line 396

If set, for example to 24, then instead of getting 4 6 ft bars and a 4-0 short bar (2 ft lap), your will get 3 6 ft bars and one 8 ft bar

>EST group with mill/stk if in def bdling Setup preference line 397

If set to Y, Estimating will utilize the default bundling file (stock qty#1, stock len#1,etc) to identify stock bars and include them in the Mill/Stock totals.

>EST printout totals exclude non-rebar wt Setup preference line 398

If set to Y, then the weight of mesh and accessories will be excluded from the Estimating total weight figures, even though they have weight as indicated in the Materials file.

>EST suppress automatic toolbar popup Setup preference line 399

If set to Y, when going from line to line in the code field, the function code toolbar will not automatically popup.

> Est PRICING, include mill/stk in totals Setup preference line 400

If set to Y, then, in Estimating, all Millcut/Stock bars will be Priced with the other rebar. If not set to Y, millcut/stock bars are priced separately.

> EST allow changing function code field Setup preference line 401

If set to Y, then, in Estimating, you will not have to delete a previously entered function code line in order to insert this different function code line.

>EST copy MULT value from the line above Setup preference line 402

If set to Y, then, for ESTIMATING, the decimal MULTiplier field will keep repeating on successive lines.

>LoadList: print how many copies Setup preference line 403

You can use this to specify the usual number of copies that your company prints for the Loadlist.

>Estimate List ask heading date each time Setup preference line 404

If set to Y, then, for each time you print an Estimating List, you can optionally alter the date from the default which is today's date.

>Panel w/edge bar, set 1st mat bar at spa Setup preference line 405

If set to Y, then the tilt-panel function (PANL) will set the first mat bar at clearance plus spacing if there are edge bars.

>Tag style 14 print shipper # on tag Y/N Setup preference line 406

If set to Y, then for this tag style, the shipper (invoice) number from the shipper system will print on the tag.

>Save deleted files in \data\deleted\ Y/N Setup preference line 407

If not set to N, then all jobs and releases you delete in the SHEAR 97 system will get copied to this subfolder on the file server (or C:).

>Laser tags duplex back move lt in ex .15 Setup preference line 408

Duplex means you can print on the back of your tag. This setup allows for horizontal adjustment of the printing on the back of the color laser tag

>Tagging: ask Re-print the first tag Y/N Setup preference line 409

Re-printing the first tag allows you to adjust the printing on dot-matrix tags. Thermal and laser tagging don't need to be aligned, so this can be set to N

>Barlist #5 print both imp and met length Setup preference line 410

If set to Y, then for the portrait barlist style #5, an extra column is created so that the tag length can be printed in both imperial and metric formats.

>All Tags Print Preview: view, then print Setup preference line 411

If not set to N, then all tags to be printed will be previewed on the screen.

>Port Barlist #2 type in title each time Setup preference line 413

If set to Y, then you will be able to type in your own title each time you print a barlist.

>DNUT function: split arc bars evenly Y/N Setup preference line 414

If set to Y, then the arc bars will be a single length for a given diameter bar run. Otherwise, you will get stock bars along with one short bar.

>Barlist 2 or 5 print item # on each line Setup preference line 415

If set to Y, then each line will be sequentially numbered with very small letters on the left side of the sheet.

>Use Quickbooks Accounting Interface: Y/N Setup preference line 416

If set to Y, then the Quickbooks Interface master switch is set for this workstation (requires this module on your key).

>QBI ask link or not at SHEAR 97 startup Setup preference line 417

If set to Y, and the setup preference on line 416 is Y, then you will have the choice to utilize the Quickbooks Interface master for this session.

>Disallow changing Load# on Invoicing scr Setup preference line 436

For a new shipper (invoice) number, the Load # is generated automatically for you. If this preference is set to Y, then you will Not be allowed to alter the Load #.

>Entering Mark: suppress replace mode Y/N Setup preference line 437

Most fields on the dark blue screen automatically erase pre-existing data in the field when you start typing. If set to Y, the Mark field will not automatically erase when you start typing, but instead will leave the old data intact.

>Bar code: omit 3-dimensional bars Y/N Setup preference line 438

Many benders can not be automatically setup for standees and other 3-dimensional bars. If set to Y, then no bar code will be printed for these bars.

>Bar code 3-dimensional bars as 2D Y/N Setup preference line 439

If set to Y, then 3-dimensional bars will be bar coded as if all angles lie within a plane (2-dimensioanl).

>Loadlist printout: RECEIVED BY and DATE Setup preference line 440

If set to Y, then “RECEIVED BY and DATE” will print on the Loadlist printout.

>Tag style 32 use Portrait Y/N Setup preference line 441

Tag style 32 can be used for (color) laser printer tags.
If set to Y, then the Portrait rather than Landscape mode
will be assumed to be the proper setting for your laser printer.

>Qty calc first at x spac, def=.5, -1=off Setup preference line 442

The Quantity Calculator is invoked by enter Q
in the Quantity field of the dark blue screen.
The Quantity Calculator assumes you want
to set the first item (bar support, for example)
at half of the spacing. This lets you change
it to, for example, a quarter of the spacing: .25
If you enter -1 to turn this off; then the first item will be set at clearance.

>Det note suppress #of runs if no lap Y/N Setup preference line 443

If set to Y, then the note field of lines generated
by a detailing function will omit the quantity
of runs. For example, the words “5 runs” will be omitted.

>CODES below, set first at x spac, ex .5 Setup preference line 444

If you set a decimal fraction on line 444, .5 for example,
Then any of the eligible codes you type in lines 445-448
will automatically set the first mat bar that distance in from clearance.
For example, if you have .5 and PANL, and
the horizontal spacing is 1-6, then the
first horizontal mat bar will be set at 9” from clearance.

>For lines 445-448 type function code(s), Setup preference line 445
>1 or more per line to set the first bar Setup preference line 446
>at the fraction of spacing: see line 444 Setup preference line 447
>eligible codes: LINE GRID GRIX VARY PANL Setup preference line 448

Please refer to the prior explanation of the line 444 setup preference.
On any of the lines 445, 446, 447, and 448, you
can enter one or more of the eligible codes for
which you want this (extra) fractional clearance to apply.
It is okay to enter 2 or 3 of the codes on line 445, for example.

>For NEXT job, consider values less than Setup preference line 449

In the Jobmaster screen, you can type NEXT for the job number. If you enter a number in this preference, then the job number which may be automatically generated when you type NEXT will not be more than this number.

>Suppress asking Type 9 bar Ship Straight Setup preference line 450

According to the CRSI/ACI radial bar prefabrication rules, you are allowed to ship an arc bar as straight in some cases. If you enter Y for this preference, then SHEAR 97 will not ask you if you want to change this bar from bent to straight, and the bar will remain bent.

>Estimate List heading: cust before proj Setup preference line 451

If set to Y, then the Customer prints above the Project name instead of vice-versa.

>Tag style 5 Sato move lt in. ex .15 Setup preference line 452

Only for Tag style 5, adjusts left margin.

>Estimate List: hide the Mult field Y/N Setup preference line 456

If set to Y, then on the Estimating List printout, the Mult field is hidden.

>Same bar marks differ, automatic replace Setup preference line 457

If you enter a bent bar which is identical to a bar that is already in the barlist, but has a different mark, you will be asked if you want to change this new mark to be the same as the pre-existing mark. If set to Y, then the mark is changed without prompting you.

>Bill of Lading: print Order# not SAC Y/N Setup preference line 458

If set to Y, then the Order # will print instead of the SAC on the Bill of Lading

>Det Place List 8.5x14 add fabinfo to loc Setup preference line 459

If set to Y, then the Fab Info field from the turquoise Releases screen will be added to the 8.5x14 Placement List

>CMUV top bar max length, inches ex 84 Setup preference line 460

If set to a number such as 84, for example, then the CMUV function will allow the top bar to extend as long as 84 inches, and this may prevent an extra lapping bar.

>Estimating List suppress printing "Gr60" Setup preference line 461

If set to Y, then the characters “Gr60” will not be printed on the Estimating list.

>Type 25 show angles=90 on tags, barcode Setup preference line 462

If set to Y, then on printed tags and in the PDF 417 barcode, all angles will be computed and shown as 90

>Landscape barlist: total wt include MESH Setup preference line 463

If set to Y, then the Bar List Style 4 will print a single total line for all mesh lines combined

>Cut Sheet: lower left alternate layout # Setup preference line 464

If set to Y, when you start to print a “Cut Sheet and Shipping List” style of placement list, then you will be presented with a choice of 4 alternative “boilerplate” text phrases to print at the lower left of each page.

>Est screen after note, jump to next line Setup preference line 465

If set to Y, the cursor will jump down to the next line as you leave the Note field, instead of the cursor highlighting the Weight

>For Qty expression with / add this ex .5 Setup preference line 466

In the quantity field for data entry, you can type, for example 125/.75 which will result in a quantity of 167, or if you enter .5 in this preference, you'll get 168 This value gets added in before rounding.

>Tag style 21 (from CODE col) print Label Setup preference line 467

If set to Y, then for tag style 21, the Label prints on the tag.

>Printed Label List: print TIMES colm Y/N Setup preference line 501

If set to Y, then on the "Label List" printout, a Times column will be included.

>Est PRICING, exclude Delivery from tax Setup preference line 502

If set to Y, then in the Pricing within the Estimating program, the Delivery fee will not be included in the computed tax.

>Allow rel scr order# update from shipper Setup preference line 503

If set to Y, then if you change the Order # within the Invoice/Shipper entry screen, then the turquoise Release screen order # field will be changed.

>Est PRICING PARAMETERS save on datadrive Setup preference line 504

If set to Y, then instead of saving your Pricing Parameters file within your C:\shear97\system\ folder, the file will be saved on the Data Drive as specified on line 2 of your setup preferences, so that the Pricing Parameters will be shared by all users of SHEAR 97.

>Functions auto mark Straight bars, also Setup preference line 505

The function codes built into Detailing
will generate marks automatically
for the bent lines produced by the function.
If set to Y, then straight bars also will get marks.

> For LASER tags, Tag printer device name Setup preference line 506

This lets you specify the laser printer
driver you want to use for Tag Printing.
If left empty, the system default system driver
will be used. You can copy and paste the name
of this driver from the “Printers and Faxes”
screen within Windows. Also, if needed,
you can add a (second) driver to the same physical
printer, but set it up with driver Properties which
will work well with your color laser tags.

>Disallow Sorting Releases screen Setup preference line 507

If set to Y, then you will unable to sort
the releases on the turquoise screen

>Disallow Sorting Jobmaster screen Setup preference line 508

If set to Y, then you will unable to sort
the Jobs on the Jobmaster screen

>Barlist printout: APPROVED BY and DATE Setup preference line 509

If set to Y, then “APPROVED BY and DATE”
will be printed at the end of the barlist.

>Rel screen allow entry of shipper, load# Setup preference line 510

If set to Y, then you can enter both the
shipper # and load# field on the turquoise
Releases screen. Otherwise, these
fields are locked out, and can’t be changed.

>Estimate List: hide the Weight field Y/N Setup preference line 511

If set to Y, then the Weight field is hidden
on the printed Estimate List.

>Co. Title logo print in Loadlist heading Setup preference line 512

If set to Y, then the company logo
will print on the Loadlist

>Load List: print cover sheet with totals Setup preference line 513

If set to Y, then a separate cover sheet
will be printed for each loadlist.

>Load List: alternate format, example 2 Setup preference line 514

If set to 2 or 3, then alternate Load List
printout formats will be printed.

>Tags: stirrups/ties print dims as inches Setup preference line 515

If set to Y, then on your printed tags
for stirrups and ties, SHEAR 97 will print,
for example, 14” instead of 1-2

>Std Det place MACR after generated lines Setup preference line 516

If set to Y, then when you use a macro formula
in Standalone Detailing, then the macro
formula line you started with automatically will
be moved to the line right AFTER the generated lines.

>Placement List force bend type sheet Y/N Setup preference line 517

If set to Y, then a sheet of the pictures of those
bend types found in this list automatically will print

>At startup, ask to select Data Drive Y/N Setup preference line 518

If set to Y, then each time that SHEAR 97
starts running, you will be asked if
you want to choose an alternate to
the default data drive as specified on
line 2 of your setup preferences.

>Enter default Alternate data drive ex H: Setup preference line 519

See preference 518 above. If, at SHEAR 97 startup, you want to select an alternate, then this is the suggested alternate, although you can browse and choose a different drive.

>BEAM automarks use standard marks not GB Setup preference line 520

If set to Y, then automatically generated grade beam marks will appear as, for example, 405 instead of 4GB1-1

>DNUT don't increase short bar length Y/N Setup preference line 521

The DNUT function (radial bars) often produces stock bars and one short bar for a given radius. This short bar will usually get rounded up to length which divides evenly into the stock length. For instance, a 9-3 bar will round up to 10 ft If set to Y, this short length will not be changed.

>PANL Diag bars always ship straight Y/N Setup preference line 522

Panel diagonal bars at the corner of openings could get bent if the opening is near an edge of the panel. If set to Y, then a diag bar will be straight, and never bent.

>Estimating use 1 2 3 4 for STR H L M Setup preference line 523

In the Estimating data entry screen, there is a field named “B” where you designate a line item as straight, heavy bent, light bent, or millcut/stock. If set to Y, then you can enter 1,2,3,4 respectively, for straight, heavy bent, light bent, millcut/stock. You can stay on the number keypad, and don’t have to enter H or L or M.

>Estimating entry: skip over to QTY field Setup preference line 524

If set to Y, then during Estimating
data entry when you enter a new line
the SHEAR 97 hops over fields CODE, X, +
and the QTY field will be highlighted.

>Estimating List page up for Grand Totals Setup preference line 525

If set to Y, then the printer will “page up”
to print the Grand Totals at the top
of the next printed page.

>Det/Est non-popup macID put in note Y/N Setup preference line 526

If set to Y, then a Macro (MACR was
entered in the CODE field) will
embed the Macro ID in the Note field.

>Det Place List 8.5x14 alt. heading, ex 2 Setup preference line 527

This preference provides for an alternate heading
for the printed 8.5x14 Placement List.

>When barlist dat is tagged set read only Setup preference line 528

If set to Y, then if this list has had tags printed,
then the production barlist (dat)
data entry screen will be “read only”
and barlines can not be altered

>Barlists, Est List suppress Time Printed Setup preference line 529

If set to Y, then on the Barlist and Estimating
list printouts, the time will not be printed.

>Suppress notes if splitting long str run Setup preference line 530

If you enter, for example, a length
of 135 feet, then SHEAR 97 will ask you
“do you want to split this bar?”.
When it splits, it generated a note automatically,
If this preference is set to Y, the note will not show.

>File Server make daily backups of Jobmas Setup preference line 531

If set to Y, then once a day, the file which contains
your Job screen data will be copied to a backup file.

>Estimate Screen: hide the Mult field Y/N Setup preference line 532

If set to Y, then on the (dark-blue) data entry screen
for Estimating, the Mult field will not show.

>Data Entry scrn: move EP col to rt of SZ Setup preference line 533

If set to Y, then on the (dark-blue) data entry screen
the EP (epoxy field) will appear to the right
of the Size-Gr field.

>Landscape list: mesh/acc in totals chart Setup preference line 534

If set to Y, then for Barlist style 4, the
mesh and accessories items will appear
in the printed Totals Chart.

>Landscape list separate epoxy totals Y/N Setup preference line 535

If set to Y, then for Barlist style 4, the
totals chart will print separate totals
for the non-standard bar (Epoxy,
Galvanized, Stainless, MMFX, etc)

>Est PRICING: Default to Special Pric Y/N Setup preference line 536

In the Pricing portion of Estimating, for any
job over 30 tons “Special Pricing” is mandatory
Also you can specify special pricing for
a job under 30 tons if you wish.
Special pricing, instead of a single “Base price”
for rebar, breaks the base into 3 values:
Base price CWT, Markup CWT and Mill
delivery to your yard CWT
If set to Y, then the default screen value
for Special Pricing will be: Y

>TagStyle 14 Var 3 LGTH horz tab adjust Setup preference line 537

Only for Tag style 14 variation 3, this allows you to set the tab for the Length field left or right. Example -.25 moves the length to the right by .25 inches.

>FCON subtract bot bar diam from dwl len Setup preference line 538

If set to Y, then the diameter of the bottom bars will be subtracted from the dowel length by the FCON (footing continuous) function.

>PANL automarks use standard marks Y/N Setup preference line 539

If set to Y, then automatically generated Panel marks will appear as, for example, 506 instead of 5TEBP1

>Using Rel Order # method: next ord # is Setup preference line 540

If this preference is, for example, 1234 then the next Order # (Turqoise releases screen) will be suggested to be: 1234 when you first highlight the next empty Order # column.

>Tag style 38 duplex to print on back Y/N Setup preference line 541

If set to Y, then for color laser tag style 38 then for each sheet of tags printed, SHEAR 97 will print a second page and assumes you have previously set the Windows driver property for this printer to be duplex. The second page will print on the back of the tag

>Port Det Place List show tot qty not req Setup preference line 542

If set to Y, then the Portrait Detailing Placement list will be printed with a totals bar quantity column instead of the Required column.

> Est PRICING report totals/sz print ln ft Setup preference line 543

If set to Y, then the Estimating Pricing report will include the linear feet for each bar size in the totals chart.

>Det Place List 8.5x14 use "Mult", "Each" Setup preference line 544

If set to Y, then the 8.5x14 Detailing Placement list will be printed with a “Mult” and “Each” column.

> Landscape list totals chart Stock column Setup preference line 545

If set to Y, then the Landscape style 4 Barlist will include a Stock column in the totals chart.

>Barlist if cutlen, line wt is for cutlen Setup preference line 546

When you print a barlist, you have the option of printing (bend deducted) Cut Lengths instead of the (theoretical) Tag Lengths. If you set preference 546 to Y, then the weights which will be printed are computed from the Cut Length instead of the Tag Length.

>Port BarList inch indent lt ex .2 Setup preference line 547

The left margin of the portrait bar list printout is indented, for example, by .2 inches.

>Function note spa,lap stack fraction Y/N Setup preference line 548

If set to Y, then for Notes which are automatically generated by functions, the spacing and lap will contain inches and a possible stacked fraction such as ¼ ½ ¾ For example 2-083 will be replaced with 32¾”

>Stiffener note use 'Zone' instead Y/N Setup preference line 549

If set to Y, then the stiffener notes will substitute the word “zone” for the term “stiffener”

>Placing lists: allow sort of line ranges Setup preference line 550

In most cases, Placing Lists are not sorted.
If set to Y, then you will be asked each time
a placing list is printed to specify one or more groups
of line ranges to be sorted for the printout.
For each group, the lines will be sorted and accumulated.

>Placing lists: print bend pics Y/N/A=ask Setup preference line 551

If set to Y, then the bent picture will be
printed within each bent line on the Placing List.
If set to A, then each time you start to print a placing list,
you will be asked if you want to include these pictures.

>Tag style 38 tag 2/3 +- vert adjust inch Setup preference line 552

For tag style 38, this allows for a vertical adjustment
of the second of the 3 tags on each sheet.

>Tag style 38 tag 3/3 +- vert adjust inch Setup preference line 553

For tag style 38, this allows for a vertical adjustment
of the third of the 3 tags on each sheet.

>Disallow det to bar create suffix ex MAS Setup preference line 554

If set to Y, then if, for example, you have MAS entered
for this preference, then you will not be allowed to create
a production barlist for this release name.
This is for the purpose of establishing a master detailing file,
1234-MAS, for example, which will be selectively taken off
to create barlist releases 1234-001, 1234-002, etc.

>Dark-blue entry screen lines max, def=25 Setup preference line 555

If set to 50, for example, then on the dark blue
Barlist entry screen for SHEAR 97 Barlisting,
Standalone Detailing, and Estimating,
you will get 50 lines instead of 25.
If SHEAR 97 will automatically determine if 50
will fit on the screen; if not it will try 45 or 40 0r 35, etc.

>Cut Sheet show MTR, DOMESTIC if MTR=Y/D Setup preference line 556

If this preference is Y, then if the MTR field on the Job screen has a Y entered, then “MTR’S REQUIRED” will print on the Cut Sheet & Shipping List style of placing list. If a D was entered in the MTR column, then both “MTR’S REQUIRED” and “DOMESTIC” will print.

>Est PRIC print grand tot wt bar+mesh+acc Setup preference line 557

If set to Y, then in the Estimating module, on the Pricing sheet printout, the grand totals weight of all rebar plus mesh plus accessories will print.

>Barlist choices default to CUTLENGTH Y/N Setup preference line 558

As you start to print a barlist you always see the Barlist Choices. The Barlist Choices screen normal default is “Tag Length” If set to Y, then the default choice will initially be set to “Cut Length”.

>Tags: print dims for special bend types Setup preference line 559

If set to Y, then, for special bend types, all bend dimensions will be printed on the tags. Example: A=8” B=3-10 G=8”

>PANL automark all bars with ID # Y/N/A Setup preference line 560

If set to Y, the PANL function in both ShearCAD and SHEAR 97 Standalone Detailing will mark all bars, bent and straight. For example, assume that the Panel ID has been set to P24 Then each barline will be marked with P24-1, P24-2, P24-3, etc. If set to A, you will be asked each time you run PANL if you want this marking system applied to this panel.

>BEAM detailing notes variation example 2 Setup preference line 561

If set to 2, for example, then for the BEAM function a variation of the automatically generated detailing notes will be substituted in place of the standard notes

>Tags,Loadlist: hide weights default Y/N Setup preference line 562

As you start to print either Tags or a Loadlist you always see the Tag or Loadlist Choices screen. If this preference is Y, the Hide Weights check box on the Choices screen will initially be checked.

>Tags: No color. Print all in black Y/N Setup preference line 563

Particular tag styles built into SHEAR 97 such as tag style 38 use color for some of the printed fields. If set to Y, then only black lettering will be printed on the tags.

>Coupler/Labor: utilize alternate pix Y/N Setup preference line 564

If set to Y, then you can implement a system of couplers on bend types. The standard bend types are used, but alternate pictures are substituted if a labor code is used. Example: 33-FM is a standard bend type 33 with FM typed in the labor code field. This indicates a Female coupler on the B end of the bar and a Male coupler on the D end of this type 33.

>Hide print preview screen while printing Setup preference line 565

You should set this to Y. This may improve the quality of printouts for particular computer and printer driver combinations

>Job and Release screen lines max, def=25 Setup preference line 566

If you set this to a number from 30 to 50, then you will see more than 25 lines per screen while you are viewing the Jobmaster or Releases screens

>MACR L field # for LAP (minus key), ex 8 Setup preference line 567

If you set this to a number such as 8, then in a previously created macro, if you type the minus key (-) in the L8 field, you get the lap.

>EST list: if Structure, also print Note Setup preference line 568

If set to Y, then if there is a note in the Barline
where a structure starts, then that note will also be printed

>Det/Est non-popup mac: put Usage in note Setup preference line 569

If set to Y, then for a stored macro, the usage field
from the macro definition will be inserted in the line's note field

>Tag style 38 main body taglen not cutlen Setup preference line 570

For tag style 38, if set to Y, then in the main part of the tag,
the Taglength instead of the Cutlength will be printed.

>Adobe exe ex Acrobat 7.0\Reader\AcroRd32 Setup preference line 571

To read the SHEAR 97 manual as well as millcert pdf files, SHEAR 97
needs to know the path of your adobe reader. Setup 571 is where you
enter the suffix of the path to your acrobat reader
C:\Program Files\Adobe\ is assumed to be the first part of this path.

>Rel suffix RS_ means return to stock Y/N Setup preference line 572

If set to Y, then any release number which ends with the
letters RS_ is assumed to contain bars which are returned
to stock, and are subtracted instead of added to job/release report totals.

>Det Selective Takeoff: default to Append Setup preference line 573

The normal default choice is to create a particular barlist,
and erase and replace the barlist it it already has barlines in it.
If setup 573 is Y, then the new barlines will be added to any existing lines.

>Tags print in reverse (requires preview) Setup preference line 574

Depending on your printer and tag style and if you have
"fan-folded" tags, your might wish to reverse the order of the
tag printing, so that you don't have to reverse the folds
to get your tags in order starting with the first tag.

>Placement Lists: omit fcn code lines Y/N Setup preference line 575

If set to Y, all function code lines (where the function starts)
will be excluded form the Placing List.

>Landscape barlist suppress note printing Setup preference line 576

If set to Y, then for the Landscape barlist (style 4)
any “release” notes from the release screen will not be printed.

>Rel screen: default material (ex B E GA) Setup preference line 577

If set to E, for example, then the suggested default
for the Material field on the turquoise release screen will be E (epoxy)

>GRID,GRIX,LINE <=#6 short extend stk Y/N Setup preference line 578

If set to Y, then instead of lapping the last stock bar with a very short bar, the last stock bar will be “extended” 5 feet for #5 bar and under, and 6 feet for #6 for these three functions. For example, instead of lapping a 4 foot bar with a 20 ft stock bar (assume a 3 foot lap), the last bar will be: 21 ft

>Placing lists: print F/REL col Y/N/A=ask Setup preference line 579

See setup 551 and setup 580. If set to A, then when you start to
print a placing list, you can either print one of these three:
the bent picture or the REL column, or the Weight

>Placing lists print weight col Y/N/A=ask Setup preference line 580

See setup preferences 551 and 579.
Set this to A and you’ll be asked which you want to print:
the bent picture or the REL column, or the Weight.

> Comments turn off copying fields above Setup preference line 581

In the dark-blue barline entry screen, non standard material codes (Epoxy), as well as the Times field and the Estimating “Mult” field are copied from the line above. If this preference is set to Y, then an intervening comment line will turn off the copying of these fields from the barline above. Otherwise, these fields will be copied from the most recent valid barline above.

> Bill of Lading: print how many copies Setup preference line 582

Determines the default number of copies of Bill of Lading will print from the “Shipper/Invoice Subsystem”.
Default is one copy. If set to 2, for example, then two copies will print.

> Loadlist print override T by default Y/N Setup preference line 583

In SHEAR 97 Tagging, the loadlist printout will normally not include any barline which has been tagged (T is on the line). If this preference is set to Y, then all barlines will be included on the Loadlist printout.

> Barcode Tag bar pic scale factor ex .75 Setup preference line 584

For particular tag styles, it is necessary to make the bent bar picture that is printed on the tag print smaller. Default is .5.
If set to .75, for example, the picture is printed 75% as big as full-size.

> Plac List: sz totals by material ask Y/N Setup preference line 585

If set to Y, then when you start to print a placing list, then you will be asked if you want the totals chart to be separated by material type (epoxy, galvanized, stainless, etc.).

> Tag printing: ask style #, variation Y/N Setup preference line 586

If set to Y, then as you start to print tags, you will be allowed to enter an alternate tag style and tag style variation number.

> Tag large characters save in Rel note #9 Setup preference line 587

If set to Y, then for most tag styles, the large identifying characters will be save on the turquoise releases screen in the field note # 9

> Est dark-blue screen increase width ex.3 Setup preferences line 588 and 589
Est dark-blue move scrollbar right ex .3

The above two setup preferences allow for adjustments of the screen width and the scrollbar location on the Estimating barline screen.

> Port Placing List: item # on each line Setup preference line 590

If set to Y, the line # of the barline placing screen will print on the Portrait Placing List.

> Landscape Barlist Totals show # of lines Setup preference line 591

If set to Y, then the totals will indicate the barlines count for each bar size subtotal.

> Estimate export to Excel alternate path Setup preference line 592

This allows you to change the default path folder for exporting to Excel.

> Add qtr inches to Cutlen per 180, ex 4 Setup preference line 593

If set to for example 4, then 4 quarter inches will be added to the Cut Length for each 180 hook in a barline.

> Tags: Print Release # LARGE on each tag Setup preference line 594

If set to Y, then for some tag styles, the Release # will print using a larger font.

> Cut Sheet totals: add Stock column Y/N Setup preference line 595

If set to Y, then Stock items will have a separate totals column.

> Cut Sheet totals with stk col, use % Y/N Setup preference line 596

If set to Y, then the Cut Sheet style of placing list will show the % breakout.

> Barline entry scrn: White bkgnd not Blue Setup preference line 597

If set to Y, then the Barline screen background is White instead of blue.

> LIN# column color or R,G,B ex. 30,190,30 Setup preference line 598

This allows you to set the line number column of the barline screen to RED, for example, so that you don't confuse the line number with a quantity or multiplier.

> BEAM Style #2 Bot bar: use Lap not Embed Setup preference line 599

If set to Y, then the BEAM function uses a LAP instead of EMBED for the bottom bar for BEAM style 2.

> Det Entry Scrn order: Code Rq X Qty Y/N Setup preference line 600

If set to Y, then the order of these columns on the detailing screen is changed.

> Use ZIP files for saving data files Y/N Setup preference line 601

If set to Y, then the Job file, Release files, Materials File, and Setup Preferences are compressed before they are saved on the hard drive.

> RAM drive to use for temp. files ex. R: Setup preference line 602

Set this to R: if you want to use a ram drive for faster network performance. You can download the free DATARAM program to create this drive.

> ACADLIST.TXT Copy to rel# within folder Setup preference line 603

For Standalone Detailing, the CSV text file of the most recent AutoCAD callout file is saved in the path folder you specify here.

> Tag: Master Bdl List, Mast Tags (Y/N/A) Setup preference line 604

For particular tag styles, if set to Y, then a Master Bundle List and Tags will print.
For particular tag styles, if set to A, then you choose each time to print or not.

> Barlist entry, fill in next mark Y/N Setup preference line 605

If set to Y, then the next mark will automatically be generated for you.

> Barlist entry, warn if taglength is zero Setup preference line 606

If set to Y, then if the taglength field is zero, you will receive a warning popup.

> EST screen, printout, for X, 1 not blank Setup preference line 607

If set to Y, then if the X fields is empty, then 1 will print on the printout.

> Plac list: if job Sz=H Ln=I, def. wt LBS Setup preference line 608

If set to Y, then for a placing list printout choices, if the Size mode is H
and the Length Mode is I, then the deafault choice for weight is LBS.

> Printer device name: Barlists, Loadlists Setup preference line 609

If this preference is set to a valid printer device name, then Barlists and Loadlists will use this as the printer.

> GRID,GRIX,LINE NOTE show len not 'SHORT' Setup preference line 610

If set to Y, then the Note field will show the Length and not the word ‘SHORT’.

> Placement lists fit on one page (Y/N/A) Setup preference line 611

If set to Y, then if placement lists including totals will print on one page, if possible.
If set to A, then you will be asked if you want to print it using just one page.

> Omit the word 'Accessories' from lists Setup preference line 612

If set to Y, then the word ‘Accessories’ will not print on barlists or placement lists.

> Barline highlight color or R,G,B -1=Off Setup preference line 613

If set to -1, then the barline screen highlighting of the current line will be disabled.
If set to a RGB value, then the barline screen highlighting will use that color.

> Barlines lbs round off alternate method Setup preference line 614

Specifies the alternate round off method. 2 = Round up. Empty is round half up.

> Bar code always print CUT Length Y/N Setup preference line 615

If set to Y, then bar codes will have the cut length, not tag length, embedded.

> PANL function: add line with this Note BAR SUPPORTS Setup preference line 616

If set to Y, then this Note will be added to the end of the PANL: BAR SUPPORTS

END OF SHEAR 97 SETUP PREFERENCES

SHEARCAD

SETUP PREFERENCES FOLLOW . . .

START OF SHEARCAD SETUP PREFERENCES

ShearCAD >> SETUP PREFERENCES (1 of 22) 14.11

>ShearCAD Test mode only ShearCAD preference line 1

Leave this preference empty or N, because
it is only for system testing and analysis.

>Show message for callout events ShearCAD preference line 2

Some events will display a message in large
characters on the screen. Recommended
setting is N

>After Zooming callout, delay seconds ShearCAD preference line 3

If the ShearCAD preference on line 27 is set
to N, then after a callout is created,
ShearCAD will zoom in on the callout;
this line 3 specifies the duration of
the time delay of this zoom.

>ShearCAD drawing file directory pathname ShearCAD preference line 4

Recommended setting is
C:\SHEAR97\DATA\CADDWGS\
However, for shared data on a centralized
file server, then you may want to use, for example:
S:\SHEAR97\DATA\CADDWGS\
where your SHEAR 97/ShearCAD file server is S:

>Callouts: Use fraction instead of 1,2,3 ShearCAD preference line 5

Recommended setting is Y
If set to N, then lengths which appear
in your callouts will look like
12-103 for 12 feet 10 and 3/4 inches

>Callouts: Value to use for Fraction 1/4 ShearCAD preference line 6

Always leave this set to 188

>Callouts: Value to use for Fraction 1/2 ShearCAD preference line 7

Always leave this set to 189

>Callouts: Value to use for Fraction 3/4 ShearCAD preference line 8

The following 2 callout formats show bend dimensions:
Bend Schedule and Bend/Bar Schedule with Qty.
If you set the ShearCAD Setup preference
on lines 53 and 54 to a Font which has 3/4,
then set this to 190, otherwise use 189.
You can access the Character Map thru
Clicking on Start, click on Programs,
click on Accessories, Click on System tools.
Then look for the name of a font which has 3/4.
For example, if you put Arial on line 53
and Arial.shx on line 54, and set this
preference to 190, then you get 3/4.
Note: if you use IntelliCAD, you must
first make sure that Arial is a text style
which is in your drawing, so you may
want to add it to your prototype drawing.
For intelliCAD, click on Settings,
click on Explore Text Styles, click on Edit, click new
this will allow you to add the new style Arial.

>Calls: Det and Rang Formats, show 'MK' ShearCAD preference line 10

For the Detailing format callout as well
as the Rang format callout:
If set to Y, then the letters MK will be
automatically displayed in your callout
in front of the mark from your list.
Example: 401 becomes MK401 in
your drawing callout.

>Callout Det. Format omit REQ from qty ShearCAD preference line 11

For the Detailing format callout:
If set to Y, then the callout ignores
the required field value.

>Callout Det. Format show REQ as: (x4) ShearCAD preference line 12

For the Detailing format callout:
If set to Y, then the callout shows the
required separate from the quantity.

>Callout Det. Format alternate #, ex. 2 ShearCAD preference line 13

For the Detailing format callout:
Set to either empty, or 2 or 3 or 4.
Try these different values and see which
format meets your needs the best.

>Draw bars: Qty to show as typical ShearCAD preference line 14

When ShearCAD automatically draws
bars for a function code such as
grid, then if you set this to a value
of 1, then only 1 typical bar is drawn each way.
You can set this to values such as 2 or 3 . .
You can set this to 99999 if you want to
draw every bar, but this takes up space
in the drawing

>Draw bars: RANG Qty to show as typical ShearCAD preference line 15

Applies only to the RANG function.
See the explanation for the
ShearCAD preference line 14

>RANG bars: accumulate if within x inches ShearCAD preference line 16

For the RANG function, if you set this to 2,
for example, then bars automatically
will be grouped towards the shorter bar
if they are close in length; for example
a 13-4 bar will be grouped with a 13-3 bar
It is recommended this value not exceed 3 inches

>RANG bars: skip any bar less than x inch ShearCAD preference line 17

For the RANG function, if you set this to 6,
for example then any bar which is computed
to be less than 6 inches is ignored and
excluded from your barlist.

>Callouts: text style name ShearCAD preference line 19

Set this to be the font you want to
use for your callouts.
Example Arial Bold
Also see ShearCAD preferences 53 and 54.

>Callouts: text style fontfile ShearCAD preference line 20

Example ARIALBD.TTF

>Insert Bend Blox: multiple of textheight ShearCAD preference line 22

When you click the 'Insert Bends' button
at the top of the ShearCAD screen, then
blocks of the bend shapes are inserted
in your drawing. Their relative size
is determined by this value, as well
as your current ShearCAD text height.
Example value: 4

>Using AutoCAD, not IntelliCAD (Y/N) ShearCAD preference line 24

Set this to Y if you are using AutoCAD,
or N if you are using IntelliCAD.

>Call Det. Format gap between lines 1-6 ShearCAD preference line26

This will allow you to increase/decrease the
vertical distance from one line to the
line below it when calling out several
lines together.

>Limit Zooming after creating callout ShearCAD preference line 27

If this ShearCAD preference is set
to N, then after a callout is created,
ShearCAD will zoom in on the callout.

>Call use Rang if this many lines, def=10 ShearCAD preference line 28

If this is a RANG function callout,
Then ShearCAD assumes you want
use the Range format callout if there
are at least this many lines.
The default is 10 lines.

>Callouts: text height default, ex. 12 ShearCAD preference line 29

For a 1/8 inch scale drawing, then
you may want to set this to a number
between 6 and 12.

>Use extra spaces in det style callout ShearCAD preference line 30

For the Detailing format callout:
If you set this to Y, then the callout
will be less compact on the drawing.

>Bent Blk width multiple of textht def=12 ShearCAD preference line 31

This setup preference is not being
used at this point in time.

>Bent Block width to height ratio def=2 ShearCAD preference line 32

This setup preference is not being
used at this point in time.

>Save each dwg file in its job# subfolder ShearCAD preference line 36

It is strongly recommended you set to Y
If set to Y, then the drawing release
6789-01, for example, will be saved
in the folder c:\shear97\data\caddwgs\6789\
If set to N, then the drawing release
6789-01, for example, will be saved
in the folder c:\shear97\data\caddwgs\

>Popup Screen lines: 2 to 10, default = 5 ShearCAD preference line 37

If you press your the F12 key at the top
of your keyboard, then the ShearCAD
screen becomes a much smaller
screen with the number of lines you
specify in this preference.
This is not useful if you are using dual
monitors, which is strongly recommended
for all ShearCAD users.

>Suppress labeling bars on drawing Y/N ShearCAD preference line 38

ShearCAD generally labels the bars
it draws in your Cad drawing with either
the length, or the bar mark.
If you set this to Y, then the labeling is
turned off until you set this back to N

>Text width scale factor default, ex .75 ShearCAD preference line 39

The standard width of your text callout
characters is 1, so setting this to .75,
for example, gives you a little bit
narrower characters, saving room on
your drawing.

>Draw bars: OCTA HEXA CIRC, etc typ count ShearCAD preference line 40

For particular functions such as
OCTA HEXA CIRC, when
ShearCAD automatically draws
bars for these function codes, then if you set this
to a value of 1, then only 1 typical bar is
drawn each way. The recommended setting is 1
You can set this to values such as 2 or 3 .
Also, you can set this to 99999 if you want to
draw every bar, but this will take up
more space in the drawing

>Call Det. format do automatic leader Y/N ShearCAD preference line 41

For the Detailing format callout:
If you set this to Y, then you will be
prompted to draw a leader to this calllout.

>Call Det. format do automatic adjust Y/N ShearCAD preference line 42

For the Detailing format callout:
If you set this to Y, then you will be
prompted to adjust the callout's position.

>Label bars text ht override factor ex .8 ShearCAD preference line 43

Can be set to zero. If non zero, such as .8
then the text height of the length/mark labels
for the drawn bars will be .8 times the current
text height.

>Automark bars: sequential, use no hyphen ShearCAD preference line 44

When a particular function code such as
GRID generates bent bars, they will
marked one of 2 ways.
If this is set to Y, then the bars will be
marked, for example, as 401 402
If this is set to Y, then the bars will be
marked, for example, as 401-1 and 401-2

>Automatic Callout Notes: Force uppercase ShearCAD preference line 45

When a particular function code such as
GRID generates bar lines on your blue screen,
if you set this to Y, then the note will be uppercase.

>Call Det. format ask angle each time Y/N ShearCAD preference line 46

For the Detailing format callout:
If you set this to Y, then you will be
prompted for a rotation angle for the
text callout which is about to be
generated in your cad screen.

>Bend Schedule chart: Force RomanS font ShearCAD preference line 47

For the Bend Schedule format callout only,
if set to Y, this will override the ShearCAD
setup preference on line 19.

>Labels: float above bar, factor 0 to 1 ShearCAD preference line 48

If set to non-zero, this will adjust the
vertical position of the length/mark
label drawn next the bar in your drawing.

>Rect Column Section cut dwg scale factor ShearCAD preference line 49

For the rectangular column function (COLM),
if set to 4, for example, you will get a larger
drawing of the section cut view.

>Version Identifier string, example .16 ShearCAD preference line 50

For AutoCAD versions 2000 and 2002, set this to: .15 and use ShearCAX
For AutoCAD versions 2004 thru 2006, set this to: .16 and use ShearCAD
For AutoCAD versions 2007 thru 2009, set this to: .17 and use ShearCAZ
For AutoCAD version 2010 or 2012 32-bit, set this to: .18 and use ShearCAW
For AutoCAD version 2010 or 2012 64-bit, set this to: .18 and use ShearCAY
For AutoCAD version 2014 or 2013 32-bit, set this to: .19 and use ShearCAU
For AutoCAD version 2014 or 2013 64-bit, set this to: .19 and use ShearCAT
For AutoCAD version 2016 or 2015 set this to: .20 and use ShearCAS
For AutoCAD version 2017 set this to: .21 and use ShearCAR
For AutoCAD version 2018 set this to: .22 and use ShearCAQ
IntelliCAD ignores this setting. With IntelliCAD, you will use ShearCAD

>Calls: Det and Rang,use dash - after qty ShearCAD preference line 51

For these callout formats, if set to Y
then a dash will be inserted after the quantity.

>Draw bar thickness to scale, not as line ShearCAD preference line 52

ShearCAD draws all bars to scale. For example
a #6 bars is drawn to be .75 inches thick
in your drawing. If set to N, however,
all bars are drawn as (thin) lines.

>Bend Sched and Bend/Bar Sched text style ShearCAD preference line 53
>Bend Sched and Bend/Bar Sched fontfile ShearCAD preference line 54

The following 2 callout formats show bend dimensions:
Bend Schedule and Bend/Bar Schedule with Qty.
If you set the ShearCAD Setup preference
on lines 53 and 54 to a Font which has 3/4,
then set Setup preference on line 8 to 190,
otherwise set it to: 189.
You can access the Character Map thru
Clicking on Start, click on Programs,
click on Accessories, Click on System tools.
Then look for the name of a font which has 3/4.
For example, if you put Arial on line 53
and Arial.shx on line 54, and set setup
preference on line 8 190, then you get 3/4.
Note: if you use IntelliCAD, you must
first make sure that Arial is a text style
which is in your drawing, so you may
want to add it to your prototype drawing.
For intelliCAD, click on Settings,
click on Explore Text Styles, click on Edit, click new
this will allow you to add the new style Arial.

>Calls: ALL Callout Formats, show 'MK' ShearCAD preference line 55

For all callout formats,
if set to Y, then the letters MK will be
automatically displayed in your callout
in front of the mark from your list.
Example: 401 becomes MK401 in
your drawing callout.

>Suppress function automatic notes Y/N ShearCAD preference line 56

If set to N, then the automatic notes
which are generated for most functions,
will not be generated (will be empty).

>Call Det. format use no extra spaces Y/N ShearCAD preference line 57

For the Detailing format callout:
If set to Y then this callout format is
compacted with a minimum of spaces.

>Functions substitute type 17, 20 for 2,8 ShearCAD preference line 58

Many detailing functions may generate
a bend type 2 or bend type 8.
If set to Y, then you will get types 17 or 20
instead of bend type 2 or bend type 8.

>Call Det format use space not x after sz ShearCAD preference line 59

For the Detailing format callout:
If set to Y then this callout format will
look like the following example: 3 #4 5-0
instead of 3 x #4 5-0

>Leader arrowhead size: use dwg setting ShearCAD preference line 60

For the Detailing format callout:
If set to N, then
when ShearCAD draws a leader to your
callout, it is proportional to your text height
If set to Y, then
when ShearCAD draws a leader to your
callout, it is the size specified in your cad
program "entity creation" menu.

>RANG bars: permit hooking stock bar Y/N ShearCAD preference line 61

If set to Y, then a particular linear run generated
by the RANG function may have, for example (50 foot run)
will generate a 38-0 bar with a 2-0 hook will be lapped 2-0
along with a short bar of 16-0 (14-0 with a 2-0 hook.)
instead of one straight 40-0 stock bar with 2 bent bars,
each 9 feet (7-0 with a 2-0 hook), and 2 laps of 2-0.

>Call Det format if S,M embed imp. values ShearCAD preference line 62

For the Detailing format callout:
If set to Y and this is a soft metric size
and metric length job, then the
Imperial size and Imperial length will be
embedded in the callout within square brackets,
example [#4] [14-6]

>Call Det. Format: shift rt spaces ex .5 ShearCAD preference line 63

For the Detailing format callout:
If set to .5 for example, then the callout
will be placed one half a space to the
right of where you clicked, so that you
can snap to a line, but not set the left
side of the callout on top of the line.

>Call Det Format use [*] for nonblack bar ShearCAD preference line 64

For the Detailing format callout:
If set to Y , then [*] will be
embedded in the callout.

>Callout Headings swap 'Times' with 'Req' ShearCAD preference line 65

For the Detailing format callout:
If set to Y , then the Times and the Req
will be swapped within the drawing callout.

>Call Det format: if Imp sz, embed Met sz ShearCAD preference line 66

For the Detailing format callout:
If set to Y and this is an Imperial size
job, then the Metric size will be
embedded in the callout within square brackets,
example [#4] [13m]

>Scroll, not page up, at bottom of screen ShearCAD preference line 67

If set to Y, then as you add each new line at the bottom
of the dark blue screen, the screen will scoll up one line.
Otherwise, the screen will “page up” to the next 25 lines.

>For lines 68-70 enter 1 or more function ShearCAD preference line 68
>codes on each line to Reverse their ShearCAD preference line 69
>normal callout line order: ex. CMUV FCON ShearCAD preference line 70

For any function codes you specify on lines 68, 69, and 70,
the normal order of the lines in the generated callout will be reversed.
For example, since the CMUV function generates the short bar last on
the dark blue screen, you may want to use this preference to reverse the
order of the callout lines so that the short bar, which will be placed at the top of the
wall, appears first (“at the top of”) the lines to be called out on the drawing.

>Rt-click draw bar: do dwg text label Y/N ShearCAD preference line 71

You can Right-click on the type field of any
barline in ShearCAD to draw the bar to scale.
This is a “documentation” style of drawing a bar.
Also, you can double left-click on the type field of a
barline which has not been derived from a function
and is not part of a multiple-line callout;
in this case ShearCAD draws the bar to scale,
and this is the “callout” for this bar. If you change
the barline dimensions on the dark-blue screen,
then the drawing of the bar will be erased then
redrawn to match the changed dimensions.
If you set this preference to “Y” then, in either case,
a text label will be put on the drawing of the bar.

>Rt-click draw bar: text sz factor def=.5 ShearCAD preference line 72

See the above explanation of setup line 71.
The setup on line 72 determines the text
height of the label in the drawing affixed to the bar.
The default is .5, which will make the text
be half the height of the current text height.
If you set this preference to 1, then the text
height will be the same as the current text height.

>RANG Label bars str include bar size Y/N ShearCAD preference line 73

If set to Y, then the when the RANG function
draws a text label for a bar, the bar size will be
included as part of that label.

>Tot wt box refresh every x minutes, ex 3 ShearCAD preference line 74

The weight box at the bottom of the ShearCAD
will refresh (recompute and display the barlist total weight)
if you click the gray button labeled “Wt”.
If you set this preference to, for example, 3 then
the weight box will automatically refresh itself
every 3 minutes without clicking the “Wt”

>Rt-click draw bar: Remove space after Mk ShearCAD preference line 75

If set to Y, there will be no space after the letters MK in the label on the drawn bar. Example Mk401 instead of Mk 401

>Label bent bars with Mark instead of Len ShearCAD preference line 76

If set to Y, then bent bars which are drawn will have a label including the Mark instead of the length of the bar.

>Rt-click draw bar label show size if str ShearCAD preference line 77

If set to Y, then straight bars which are drawn will have a label which includes the Bar size.

>If ShearCAD setup 58 is Y use 2,8 if H1E ShearCAD preference line 78

If the ShearCAD preference on line 58 is Y, and if the preference on line 78 is Y, then bend types 17 and 20 will not be substituted for types 2 and 8 if there is a hook on only one end.

>Dwg Color Index 1-255: concrete outline ShearCAD preference line 79

Refer to the color chart built into AutoCAD and IntelliCAD for preferences 79, 80, and 81.

If you enter a color number in this preference then that color will be used for the: concrete outline

>Dwg Color Index 1-255 for Text color ShearCAD preference line 80

If you enter a color number in this preference then that color will be used for the: Text

>Dwg Color Index 1-255 for Rebar color ShearCAD preference line 81

If you enter a color number in this preference then that color will be used for the: Rebar

>Auto saves or click Save: save dwg also ShearCAD preference line 82

SHEAR 97 and ShearCAD can be
set to save automatically, for example
every 5 minutes. See the SHEAR 97
(not ShearCAD) preference on line 69.
Also, although it is never necessary to click
on the Save button at the bottom of the
ShearCAD screen, if you do click the Save
button, your barlines are saved to the hard drive.
If you set this preference to Y, then
whenever the barlines are saved,
your cad drawing (dwg) file is also saved.

>Rt-click draw bar label show: Qty and Sz ShearCAD preference line 83

If set to Y, then the drawn bars label
will include the Quantity and the Size.

>Some Fcns draw bar label show Qty and Sz ShearCAD preference line 84

Most functions built into ShearCAD will draw
the bars generated from the function.
If set to Y, then these labels
will include the Quantity and the Size.

>CAD Regens perform manually (Y/N) ShearCAD preference line 85

The recommended choice here is: Y
This will avoid the time delays which
may occur if you allow ShearCAD
to perform regens automatically.

>RANG popup show how many vert/horz runs ShearCAD preference line 86

If set to Y, then after the RANG function
is completed, then a popup window informing you of
the number of vertical and horizontal runs,
in case you want to ship dowel bars.
For example, if there are 7 vertical
and 11 horizontal runs, you could
ship 2 times (11+7) = 36 dowel bars.

>Panel draw bar label: add spa, mid or EF ShearCAD preference line 87

If this preference is set to Y, then when
the Panel function draws and labels bars,
the label will add the spacing as well
as MID if there is one mat bar layer,
or EF if there are two mat bar layers.

>Call Det. Format: shift up factor ex .5 ShearCAD preference line 88

If set to .5, for examplem then the Detailing Format style of
callout will have its text moved up by half of the text height.

>Dwg Color Callouts Index 1-255 for Epoxy ShearCAD preference line 89

See ShearCAD preference for line 79.
If this is set to a green color number, for example, then
epoxy drawing callouts will be colored green.

>Dwg Color Callouts neither black nor ep ShearCAD preference line 90

See ShearCAD preference for line 79.
If this is set to a particular color number, then
bars that are neither uncoated nor epoxy
(galvanized, stainless, mmfx, etc.) will result in
drawing callouts which have that particular color.

>RANG Condensed def. call title, or: NONE ShearCAD preference line 91

The RANG Condensed drawing callout format
has a default heading of: SLAB
If you want to change that, enter the name here.
If you want the default to be empty, enter: NONE

>Startup: Ask if ShearCAD READ ONLY Mode ShearCAD preference line 92

If this is set to Y, then each time ShearCAD starts running
you will be asked if you want to run in “read only mode”.
If you answer yes, then neither the barlines nor the drawing
can be altered; this is just for viewing, while guarding your
data against being altered.

>Rt-click draw bent label: Only qty, mark ShearCAD preference line 93

Refer to ShearCAD setup 71 (above).
If this preference is set to Y, then only the
quantity and mark will appear on a bent bar label.

>ShearCAD not 2 char F but 4 char REL Y/N ShearCAD preference line 94

If set to Y, then instead of a maximum of 2
characters in the F field for selective takeoff purposes,
you can have 4 characters in the “REL” column.

>Call Bend/Bar Sched w/Qty: add line# Y/N ShearCAD preference line 95

If set to Y, then the callout format named
Bend/Bar Schedule with Quantity will include
a column for the line number each barline is on.

>FCON, LINE show run length in first note ShearCAD preference line 96

If set to Y, then for the FCON and LINE
functions, then the first barline generated
will embed the run length in the note field

>Warn if Bend Sched exists, mark changed ShearCAD preference line 97

If set to Y, then if a Bend Schedule previously
has been placed in the drawing, and one or
marked bent lines have changed, then
as you start to close out ShearCAD, or
if you click on the “New Release” button,
then you will receive a pop-up warning.

>Warn if Bend type is about to be changed ShearCAD preference line 98

If set to Y, then if you try to change an
existing bend type to a different bend type,
then you will receive a pop-up warning.

>CAD window width inc/dec ex -.75 or .33 ShearCAD preference line 99

This will let you increase or decrease the initial width
of the CAD window when ShearCAD starts.
For example, -.75 decrease the width by .75 inches,
while .33 increases the width by .33 inches.

>Panel draw mat bar: all typ move % ex 25 ShearCAD preference line 100

If a panel is drawn and all of either the horizontal
or vertical bars are all the same, and this setup is
for example, 25, then the drawn typical vert bar is moved
to the right by a distance equal to 25% of the panel width.
Similarly, the typical horz bar is moved up 25% of the panel height.

>Click draw bar to scale: chamfer angles ShearCAD preference line 101

If set to Y, then these drawn bars will have
rounded corners, indicative of the reality that they
are bent around round pins.

>ShearCAD screen extend it full width Y/N ShearCAD preference line 102

If set to Y, then the ShearCAD dark blue screen will
fill the monitor from the left to the right.

>Panel draw bar: Edge bars show label Y/N ShearCAD preference line 103

If this preference is set to Y, then when
the Panel edge bars are drawn, they will have a label.

>ShearCAD Screen lines: 25 to 50 def = 25 ShearCAD preference line 104

If set to Y, then the ShearCAD dark blue screen will
contain more lines, expanding from 25 lines
to for example 35 or 40.

>Panel draw mat bar: not typ move % ex 50 ShearCAD preference line 105

If a panel is drawn and for example the vertical
bars are NOT all the same, and this setup is
for example, 50, then the drawn typical vert bar is moved
to the right by a distance equal to 50% of the gap in which it resides.
Non typical horizontal bars will be treated similarly.

>BEAM drawing: also draw plan view Y/N ShearCAD preference line 106

If set to Y, then ShearCAD, in addition to
drawing the elevation and side view,
will also draw a plan view.

>Click draw bar label: include code-label ShearCAD preference line 107

If set to Y, then text from the Label field of a barline
will be included in the text on the drawn bar.

>Click draw bar label: include times, req ShearCAD preference line 108

If set to Y, then text from the Times and Required field values of a barline
will be included in the text on the drawn bar.

> Allow multiple call nos in a single Call ShearCAD preference line 109

If set to Y, then, for example, you are allowed to combine what
normally would be individual callouts into a single callout.
For example, several FPAD or FCON or LINE
functions back-to-back can be called out at one time.

> RANG bars: combine REQ into the QTY Y/N ShearCAD preference line 110

If set to Y, then when a RANG function automatically generated barlines,
instead of using the REQ field in particular lines, for all lines
the total quantity of bars is combined into Quantity.

> LIN# column color or R,G,B ex. 30,190,30 ShearCAD preference line 111

This lets you specify a unique color of your choosing
for the Line number column on the ShearCAD dark-blue screen.
You designate the color you want be giving the relative mix
of RGB (red-green-blue) color values.

> Call Rang Cond: do adjust and leader Y/N ShearCAD preference line 112

If set to Y, then you when you insert a Rang Condensed style
of text callout into your drawing, you will be asked if you want to
adjust the position of the callout and also draw a leader.
This is the same feature which you can utilize with the
“Detailing Callout” format of text callout.
See ShearCAD Preferences 41 and 42

> Call Det Format alt 4 always show length ShearCAD preference line 113

If set to Y, then for the alternate 4 style (see ShearCAD setup line 13)
of the text callout format which is named the Format: Detailing Callout,
the length will be shown in the callout for both straight and bent marked bars.
If set to N, the length will be shown in the callout only for straight bars,
and only the mark will be shown for bent bars.

> FCON drawing: also draw plan view Y/N ShearCAD preference line 114

If set to Y, then ShearCAD, in addition to
drawing the elevation view, will also draw a plan view.

> Call If Include Times include REQ in QTY ShearCAD preference line 115

If set to Y, then for particular callout formats, if the “Include Times” button
is set in the middle column of the Callout Choices screen, then,
the REQ will be grouped with the QTY instead of with the Times

> RANG function copy previous rang Ask Y/N ShearCAD preference line 116

If not set to N, then when you do a new RANG function,
you will be asked if you want to copy the inputs from
the previous RANG (found in the lines above).

>Repeat typical runs indicate span on dwg ShearCAD preference line 117

If set to Y, then ShearCAD draws the one typical run of bars
and spaces it midway in the structure where the identical runs belong

>RANG Label bars: include Spacing Y/N ShearCAD preference line 118

If set to Y, then the label over the bars in the structure includes the spacing.

>RANG combined labels: Y=only N=no A=also ShearCAD preference line 119

If set to Y then all bar labels in a run are combined and grouped together,
instead of a bar label over each bar in the run.
If set to A then all bar labels in a run are combined and grouped together,
in addition to a bar label over each bar in the run.

>Repeat typ run show span suppress leader ShearCAD preference line 120

When setup 117 is set to Y, then normally, ShearCAD draws dimension lines
to indicate the width of the span. If setup 120 is Y, these lines are suppressed.

> RANG: show line on dwg with sz, spa, lap ShearCAD preference line 121

If not set to N, then a text line will be added to the drawing
at the top left of the structure you picked for this RANG function.

> RANG Label bars: suppress quantity Y/N ShearCAD preference line 122

If set to Y, then the quantity will be excluded from the
label attached to the bars drawn for this RANG function.

> Layer Name: ShearCAD CONCRETE OUTLINES ShearCAD preference line 123

If non-empty, then this preference will be the layer name for
the concrete outlines which ShearCAD draws for particular functions.
If that layer name does not exist in the drawing , it will be created automatically.

> Layer Name: ShearCAD TEXT, ex REBAR-TEXT ShearCAD preference line 124

If non-empty, then this preference will be the layer name for
the rebar text which ShearCAD draws.
If that layer name does not exist in the drawing , it will be created automatically.

> Layer Name: ShearCAD REBAR, ex REBAR-BAR ShearCAD preference line 125

If non-empty, then this preference will be the layer name for
the rebar pictures which ShearCAD draws for particular functions
If that layer name does not exist in the drawing , it will be created automatically.

> Draw Lap sched next to Bend Sched Y/N/A ShearCAD preference line 126

If set to Y, then a lap schedule will also be drawn next to the Bend Schedule.
If set to N, then a lap schedule will not be drawn next to the Bend Schedule.
If set to A, then a lap schedule will be optional each time a Bend Schedule is drawn.

> Call Label style, all rq=1, erase RQ col ShearCAD preference line 127

If set to Y, then for the Label format callout, if all callout lines have a RQ=1 then
the RQ column will be eliminated from the callout.

> Call Det Format default to Include Times ShearCAD preference line 128

If set to Y, then for the Det Format of callout, Times will be a default choice.

> Call leaders, utilize Spline instead Y/N ShearCAD preference line 129

If set to Y, then a SPLINE will be used for leaders, not straight line segments.

> If changes made, show Takeoff Chart Y/N ShearCAD preference line 130

If set to Y, then if changes were made to this release, as you exit this release, you will be asked if you want to view/print the Takeoff Chart.

> Comment line color or R,G,B ex. 255,0,0 ShearCAD preference line 131

If set to an RGB value, then the barline screen will show comments using this color.

> Vert Dims entry make + act the same as - ShearCAD preference line 132

If set to Y, then the minus key (-) will have the same effect as if you enter plus (+).

> 'Panel above:' text note in drawing Y/N ShearCAD preference line 133

If set to Y, then the text note ‘Panel above’ will appear under the drawn panel.

> ShearCAD screen Hide 'Cutlen' column Y/N ShearCAD preference line 134

If set to Y, then the Cutlen will not show on the ShearCAD barline entry screen.

> Text callouts make Boxes Wider %, ex. 10 ShearCAD preference line 135

If set to 10, for example, then the boxes around the text callouts will be wider.

> Click draw bar: allow plan view, 3D Y/N ShearCAD preference line 136

If set to Y, then if you click to draw a bar, you will have the added options of 3D and Plan View.

> RANG Label bars: include LAP Y/N ShearCAD preference line 137

If set to Y, then the labels which are automatically drawn by the RANG function will include the lap in the text for the label.

> Bend/Bar Schedules 2' 5" instead of 2-05 ShearCAD preference line 138

If set to Y, then Bend/Bar Schedule and Bend Schedules will use, for example, 2' 5" instead of 2-05 to show lengths.

END OF SHEARCAD SETUP PREFERENCES

OPTIMUM SHEARING

SETUP PREFERENCES FOLLOW . . .

START OF OPTIMUM SHEARING SETUP PREFERENCES

Optimum Shearing >> SETUP PREFERENCES (1 OF 11) 14.51

>Shear Schedule: Print to Laser Opt. Shearing preference line 1

It is strongly recommended you set this preference to: Y
If set to Y, then it is assumed that the Shear Schedule printout will not be printed on a dot-matrix printer, but on a laser printer.

>Shear Schedule: Lines Per Page Opt. Shearing preference line 2

This preference should be set based on how many Shear Schedule lines can fit on your page.

>Shear Schedule: Dot Matrix Port Number Opt. Shearing preference line 3

This preference generally will not be used.

>Shear Schedule: Dot Matrix Comp. Code Opt. Shearing preference line 4

This preference generally will not be used.

>Shear Schedule Laser: Portrait Opt. Shearing preference line 7

It is recommended you set this preference to: N
If set to N, then the Shear Schedule will print in landscape mode.

>Shear Schedule Laser: Font Size Opt. Shearing preference line 8

Determines the font size for the Shear Schedule, example 10

>Shear Schedule Laser: Page Width Inches Opt. Shearing preference line 9

For landscape, the recommended setting is: 10

>Op Shr Reports: Print to Laser Opt. Shearing preference line 11

It is strongly recommended you set this preference to: Y
If set to Y, then it is assumed that all reports other than the Shear Schedule printout will not be printed on a dot-matrix printer, but on a laser printer.

>Op Shr Reports: Lines Per Page Opt. Shearing preference line 12

This preference should be set based on how many report lines
can fit on your page.

>Op Shr Reports: Dot Matrix Port Number Opt. Shearing preference line 13

This preference generally will not be used.

>Op Shr Reports: Dot Matrix Comp. Code Opt. Shearing preference line 14
This preference generally will not be used.

>Op Shr Reports Laser: Portrait Opt. Shearing preference line 17

It is recommended you set this preference to: N
If set to N, then the Optimum Shearing reports will print in landscape mode.

>Op Shr Reports Laser: Font Size Opt. Shearing preference line 18

For landscape, the recommended setting is: 10

>Op Shr Reports Laser: Page Width Inches Opt. Shearing preference line 19

For landscape, the typical recommended setting is: 10

>Alternative database style number Opt. Shearing preference line 21
This preference generally will not be used.

>Alternative database filename with path Opt. Shearing preference line 22
This preference generally will not be used.

>Scrap/Remnant factor (default=48) Opt. Shearing preference line 23

On the Shear Schedule, this determines the dividing line
between what is “scrap” and what are remnants.
If this number is set to 48 for example, then
for bar size 4 the dividing line is 4/8 * 48 = 24 inches.
Then, a 23 inch #4 bar is scrap, but a 25 inch bar is a remnant.
For bar size 8 the dividing line is 8/8 * 48 = 48 inches.

>Download console KRB=0 RMS=1 KRB-New=2 Opt. Shearing preference line 24

If you own a downloadable console, then
for an old KRB console, enter: 0
for an new KRB console, enter: 2
for an RMS (black box) console, enter: 1
Other download formats can be programmed to meet your exact needs.

>Alternative download subdirectory path Opt. Shearing preference line 25

This will redirect the output of the downloadable output file to,
for example the path: C:\RMSOUTPUT\
You can also download to any device or path,
for example a USB “flash drive” (stick drive).

>Reset Load Number to 1 for each bar size Opt. Shearing preference line 26

If set to Y, then the first load for a bar size will be: 1
If set to N, then the load numbers for bar size #3 might be loads 1 thru 12
and the load numbers for bar size #4 would then be loads 13, 14, etc.

>Shear Sch job lines only on first page Opt. Shearing preference line 27

If set to Y, then only the first page of a Shear Schedule will print
the job and release info for each release being cut in this Optimum Shearing run.
If set to N, then every page of a Shear Schedule will repeat these lines.

>Shear Schedule show Tot Req from barlist Opt. Shearing preference line 28

If set to Y, then each line in the Shear Schedule will print a field
showing the original total quantity of the barline in the barlist file.

>Opt Shr Tags show Tot Req from barlist Opt. Shearing preference line 29

If set to Y, then each tag will print a field
showing the original total quantity of the barline in the barlist file.

>Opt Shr All inputs & outputs Hard Metric Opt. Shearing preference line 31

Set this to Y only if all of your Optimum Shearing will be using
hard metric for all printouts. For shops in the United States of America, set this to: N

>Opt Shr Hard Metric only barsize dia #1 Opt. Shearing preferences line 32 thru 43

If the Optimum Shearing preference on line 31 is Y,
then use these lines to specify as many as 12 bars size,
one on each line.
For example, on line 32: 10
For example, on line 33: 15
etc.

>Default set Undercut straight bars Y/N Opt. Shearing preference line 45

The CRSI allows a one inch allowance on straight bars.
There is a checkbox on the “Calculations Screen” where you
turn on or off the “undercutting”.
If this is turned on, then the cut length on a 6-8 straight bar, for example
will be 6-7.
(Bent bars are already bend deducted, and will be cut to the “Cut length”
If you set preference 45 to Y, then when a Runid is first initialized,
the checkbox will be checked as the default choice for this new runid.

>Shear Sched print line between loads Y/N Opt. Shearing preference line 46

If set to Y, then the Shear Schedule printout hardcopy will
leave a blank line after the lines of a load are printed.
For example, there will be a blank line after load #1,
and just before load #2.

>Optimum Shearing Reports, Company Name Opt. Shearing preference line 47

Fill this in with your company name, and then
your company name will print in the heading of
Optimum Shearing reports.

>Disallow adjustment of Bin stops Y/N Opt. Shearing preference line 48

The Shear Schedule printout may adjust the discharge stop for a group of bars which will be dropped in the bins. For instance, a group of 16 foot long bars may get centered such that instead of discharging at stop 30, they get placed at stop 28, so that they are centered within the 20 foot area of the bins between stop 10 and 30. If preference 48 is set to Y, then this kind of automatic stop adjustment will not be performed.

>Crane Op Report: extend unit prices, Y/N Opt. Shearing preference line 49

If set to Y, then the default unit price file will be used to extend out a price for each of the stock items in the Crane Operator's Report. For example:

Size 4 Grade 60 100 BARS OF 40- 0 STOCK REQD 2672 LB @ 65.0 per CWT = $ 1736.80

>Suppress shake extra bar to complete tag Opt. Shearing preference line 50

A tagged item is called "completed" if all bars have been Optimum Sheared at a particular load in a shear schedule. You have already told SHEAR 97 the maximum bars that your shear can cut for a given bar size. For example, suppose your shear can cut as many as 12 #6 bars. For bar sizes 8 and under, an extra bar will be added, if an item could be completed. For instance, if 13 #6 bars could complete an item, the the shear schedule will add that extra bar, and you shake 13 bars. If the preference on line 50 is set to Y, then an extra bar will not be added.

>Shear Sch Dump Stop: subtract bar length Opt. Shearing preference line 51

If set to Y, then the dump stop is adjusted by subtracting the bar length. For example, if a 14-6 bar would have been dumped at stop 40, instead it will be sent to 40 ft – 15 ft = stop 25

>Statistics Only Rep: Include Rem Summary Opt. Shearing preference line 52

The "Statistics Only Report" is a report showing a summary of the Optimum Shearing for this runid for each bar size: stock used, remnants, scrap, etc. If preference on line 52 is set to Y, then a list of all remnants will be appended to the Statictics report.

>OS Tag per each rel; wait for tag reload Opt. Shearing preference line 53

If set to Y, then if more than one release has been mixed in this run, then tags are printed in order for one release; then the printer will pause and you will receive a message to load a different color of tag for the second release, if you wish.

>Download send rems to bin, example: 9 Opt. Shearing preference line 54

See preference 55 below.
If set to 9, for example, then remnants will be sent to be discharged in bin 9.

>Download send rems to stop, example: 30 Opt. Shearing preference line 55

See preference 54 above
If set to 30 for instance and setup 54 is set to 9, then remnants will be sent to be discharged in bin 9, stop 30.

>RMS download port, example LPT2: Opt. Shearing preference line 56

The RMS (Rebar Machine Service) uses a “black box” for saving Run information to take the electronic version of a Shear Schedule to their downloadable shearline controller. This preference allows you to specify the port on your SHEAR 97 workstation from which you will copy these data files to the black box.

>Shear Sch suppress cols 1-18, ex 5,8,14 Opt. Shearing preference line 57

There are 18 columns of information printed on a Shear Schedule. If this preference is set to 5,8,14 for example then the information in columns 5, 8, and 14 will be hidden, and won’t be printed on the Shear Shedule hardcopy.

>Bin these bend types together ex 9,37,T3 Opt. Shearing preference line 58

If this preference is set to 9,37,T3 for example then these bend types will get placed together in an area of the bins, and no other types of bent bars will get dumped with them.

>Assume bins are emptied after each size Opt. Shearing preference line 59

If set to Y, then it is assumed that all of your bins are emptied after you finish the last load of a particular bar size. In this case, SHEAR 97 is free to place the bars for the next bar size in any bins, since they will be empty to start this next bar size.

>Let longer T+T dump in bin with open bdl Opt. Shearing preference line 60

A T+T item is an item that is started and completed in
a single line item in the Shear Schedule.
If preference on line 60 is not set to N, then a “T + T”,
item can get dumped in with other tagged items,
one of which is still “open” (not completed – more bars to come) ,
as long as this T + T item is longer than the bars already in the bin.

>If Undercut, undercut bent bars also Y/N Opt. Shearing preference line 61

See the preference on line 45 above.
If set to Y, then not only straight bars,
but bent bars also will be undercut (one inch less).

>RMS download multiple cuts suppress "x" Opt. Shearing preference line 62

For the RMS download format, if this preference is set to Y,
then an item which has more than one cut will not show
the letter “x” in the download data file.

>Crane Op Report show suspended coils Y/N Opt. Shearing preference line 63

If set to Y, then a list of suspended coil items will be
appended to the normal Crane Operator’s Report

>Master Bundle: allow only T+T subbundles Opt. Shearing preference line 64

A Master Bundle is a grouping of different length bars which are either
all bent or all straight and which are relatively the same length, and come
from the same release number.
Normally, master bundles can contain 2 or more items,
as long as each item is completed before steel for a new
item is added to this master bundle.
If setup preference 64 is set to Y, then any item which is
not T+ T will not be grouped with other items in a master bundle.

>Loadlist suppress columns 1-11, ex 1,7 Opt. Shearing preference line 65

There are 11 columns of information printed on a Opt. Shearing Load List.
If this preference is set to 1,7 for example then the
information in columns 1 and 7 will be hidden,
and won’t be printed on the Load List hardcopy.

>Master tags move up inches, example .25 Opt. Shearing preference line 66

Setup preference 66 let you adjust the printing on your master tags vertically.
If this is .25 for example, then the printing will be moved .25 inches left.
If this is -.2 for example, then the printing will be moved .2 inches right.

>Master tags move left inches, example.25 Opt. Shearing preference line 67

Setup preference 67 let you adjust the printing on your master tags horizontally.
If this is .25 for example, then the printing will be moved .25 inches up
If this is -.2 for example, then the printing will be moved .2 inches down.

>Shear Sch condense, less blank lines Y/N Opt. Shearing preference line 68

The Shear Schedule normally prints blank lines for readability.
To save paper by having fewer blank lines in a Shear Schedule,
change this preference to: Y

>Shear Sch minimize extra page breaks Y/N Opt. Shearing preference line 69

The Shear Schedule normally occasionally starts a new page,
for example when starting the next bar size.
To save paper by having fewer pages in a Shear Schedule,
change this preference to: Y

>Shear Sch eliminate size statistics Y/N Opt. Shearing preference line 70

The Shear Schedule normally prints the bar size statistics when
all of the cutting detail lines are completed for a particular bar size.
To not print these bar size statistics, change this preference to: Y

>Shakeout report condense, less space Y/N Opt. Shearing preference line 71

The Shakeout Report normally contains empty areas (white space) for readability.
To save paper by having less white space in a Shakeout Report,
change this preference to: Y

>Master tags: style variation number Opt. Shearing preference line 72

Try setting this to 1, 2, or 3, or empty to print variations
of layout for Master Tags.

>Override every T, include barline in run Opt. Shearing preference line 73

Normally, the Optimum Shearing calculate screen will
ignore any line with a T (indicates a Tagged item)
If you set this preference to Y, then lines marked
with T will be cut (will not be ignored).

>Shear Sch suppress Op checkoff lines Y/N Opt. Shearing preference line 74

Operator Checkoff lines in the printed Shear Schedule tell
the crane operator when a bin needs to be emptied
in order to accomodate new master bundles.
If this preference is set to Y, then these lines are not printed.

>Shear Calcs: Use Repeated Trials system Opt. Shearing preference line 75

If set to Y, then the Repeated Trials system is in effect.
Repeated trials is an iterative process where a variety
of trials are computed, each trial with a different “PS”.
“PS” stands for Permissible Scrap, and is a control of
the tradeoff between low scrap and fewer cuts (drops) of the shear.
This is basically an automatic varying of the
“Production versus Scrap Control” found on the “Calculations” screen.
When you start to calculate, you are asked “how many trials?”
After all calculations are complete, you are shown a selection screen,
where you can accept the computer’s choice for the best trial
(X marks this choice) or you can click to choose a different “winner”.
After you make your selection for each bar size, then one more
final iteration of calculations is computed before you print your reports.

>Repeated Trials system starting PS def 0 Opt. Shearing preference line 76

See the explanation for setup preference 75 (above).
If prefernce 76 is set to 0, for example, and the setup preference on line 77 is 3,
for example, and your trial repeat count is 4, then repeated trials
will be calculated with a PS of 0 then 3 then 6 then finally 9.

>Repeated Trials PS increment value def 3 Opt. Shearing preference line 77

See the explanation for setup preferences 75 and 76 (above).

>Loadlist show bend type on each line Y/N Opt. Shearing preference line 78

If this preference if not set to N, then for each line of the Optimum Shearing load list shows a picture of the bend type shape on that line.

>Suspend all lines with large qty ex 5000 Opt. Shearing preference line 79

If set to 2000 for example, then any barline item with a quantity equal to or exceeding 2000 pieces automatically will be suspended, and excluded from the Optimum Shearing calculations.
However, all suspended items normally will be listed during the printing of the various Optimum Shearing reports (usually at the end).
There is a checkbox on the Calculation Screen entitled:
"Print Tags for Mesh, Accessories, Suspended lines.
As long as this checkbox is checked (which is the normal default setting), then when the Optimum Shearing tags are printed, tags for suspended items will also be printed.

> Suppress bar code from all but suspended Opt. Shearing preference line 80

If this preference is set to Y, then when Optimum Shearing tags are printed, bar codes will print only on suspended items.

> Loadlist print material recv'd lines Y/N Opt. Shearing preference line 81

If this preference is set to Y, then when the Optimum Shearing Loadlist is printed, the printout includes lines where the customer at the job site can sign when this shipment is delivered.

> Master Bundle: if same job, mix rels Y/N Opt. Shearing preference line 82

If this preference is set to Y, then tagged items from different releases can be placed in the same master bundle, as long as the releases belong to the same job.

> OS Tags: Utilize Tag Run Identifier, Y/N Opt. Shearing preference line 83

If this preference is set to Y, and your tag style is 38, and the setup preference on line 305 (tag variation number) is set to 383, then the tags from Optimum Shearing can have the "run identification" information printed on them.

> OS Tags Also Print tags for Remnants Y/N Opt. Shearing preference line 84

If this preference is set to Y, then tags for remnants will be printed along with all other tags.

> Shear Sch reverse "BIN-STOP" text Y/N Opt. Shearing preference line 85

If this preference is set to Y, then on the Shear Schedule, “BIN-STOP” will be replaced by “STOP-BIN”, and the “stop” will be printed before the “bin” number.

> Master tag variation 3, color band value Opt. Shearing preference line 86

If you print Optimum Shearing master tags and you use master tag variation 3 (see Opt. Shearing preference line 72, above) and if you want to print a color band on the tags suggested values are 5308415 (which is yellow) or 12955 (which is orange)

>Crane Op Report show suspended items Y/N Opt. Shearing preference line 87

If set to Y, then the suspended items will be printed at the end of the Crane Operator’s Report.

>OS Tags Print T.O. on Suspended tags Y/N Opt. Shearing preference line 88

If set to Y, then tags for items which were suspended from Optimum Shearing in this run will have the text “T.O.” printed on them.

> Master Bundle: utilize wire laydown Y/N Opt. Shearing preference line 89

If set to Y, then the Shear Schedule will indicate to the shearman when to lay down a wire for a particular master bundle. This will result in fewer master bundles and fewer crane lifts.

> Loadlist suppress bent str shear subtots Opt. Shearing preference line 90

If set to Y, then for the Optimum Shearing Loadlist printout, the bent and straight subtotals will not be printed.

> Rems save in barlist file name ex REMS-1 Opt. Shearing preference line 91

If this preference is non-empty, then all remnants will be added to the end if the specified barlist file at the time that Optimum Shearing tags are printed.

> Shear Sched use load sort alternate Y/NY Opt. Shearing preference line 92

If this preference is set to Y, the loads are rearranged using a different algorithm.

> Crane Op Rep: show suspended wt per sizeY Opt. Shearing preference line 93

If set to Y, the weight of the suspended items are shown per bar size.

> Reports: add rel color to release line Opt. Shearing preference line 94

If set to Y, the release color will be added to the Release line for Optimum Shearing reports.

> Reports: print rel lines in order picked Opt. Shearing preference line 95

If set to Y, then the reports will print the release lines in the order they were selected for this RUNID.

> Reports: add rel weight to release line Opt. Shearing preference line 96

If set to Y, the release weight will be added to the Release line for Optimum Shearing reports.

> Shear Sch: reverse the order of the lods Opt. Shearing preference line 97

If set to Y, the Shear Schedule printout will reverse the normal order of the loads.

> Master Bundle: allow only STR subbundles Opt. Shearing preference line 98

If set to Y, then no Master Bunlde will contain more than 1 bent tagged item.

> Loadlist do not print MT if only one tag Opt. Shearing preference line 99

If set to Y, then if a MT has one tag, then that MT will not appear on the Loadlist.

> Master Tag omit if bundle has only 1 tag Opt. Shearing preference line 100

If set to Y, then if a MT has only one tag, then that Master Tag will not print.

> Master Tag include a list of tag numbers Opt. Shearing preference line 101

If set to Y, then each MT will include a list of tag numbers.

> Master Tag printer device name Opt. Shearing preference line 102

If set to a valid printer device, then Master Tags will print on this printer.

> Save the RUNID in rel scrn note # (1-10) Opt. Shearing preference line 103

If set to a number from 1 to 10, the RUNID will be saved in the Releases Screen for that note number.

> Allow group cutting end filemame w/G Y/N Opt. Shearing preference line 104

If set to Y, then during the Optimum Shearing calculations,for a RUNID, releases which end in the Letter “G” will be processed together.

> OS Loadlist use Loadlist Alternate 3 Y/N Opt. Shearing preference line 105

If set to Y, then the popular “Alternate 3” Loadlist format will print.

> Bin Map Printout: reverse the bin order N Opt. Shearing preference line 106

If set to Y, then the normal order of the bin numbers in the Bin Map Printout will be reversed.

END OF OPTIMUM SHEARING SETUP PREFERENCES

SHEAR 97 and SHEARCAD

UPGRADE MESSAGES SUMMARY

New SHEAR 97 Feature: the RELEASE NUMBER field (on the turqoise Releases screen) is now EXPANDED. You can have as many as 12 characters.

Every computer in your office must have this upgrade installed immediately!
If you are a fabricator, please notify your outside detailers to install this upgrade immediately!
If you are an outside detailer, please notify the fabricators you work with to install this upgrade immediately!

Remember, we STRONGLY RECOMMENDED you name each new release with the job-dash-release method, ex. 12345-001A where 12345 is the job #

New SHEAR 97 Feature: the Setup Preferences file is now EXPANDED from 400 to 800 line items.

You must immediately download and install upgrades for the following systems which you use:
SHEAR 97, ShearCAD, Shapemaster, Optimum Shearing, Job Scheduling, SendfileVPN

New SHEAR 97 Feature: files you choose to Delete (detailing/barlist releases and estimating lists) will be Saved.
Just before they're deleted, these files will be Saved in the folder:
\shear97\data\deleted\ in DATA DRIVE (see SHEAR 97 Setup preference line 2)

If, for some reason, you do not want this feature, change the SHEAR 97 Setup Preference on line 407 to: N

New SHEAR 97 Feature: the Macros formulas file is now EXPANDED from 50 to 900 macros.

Contract detailers/estimators who uses Macro formulas: please advise your fabricator customers to upgrade today!
Fabricators who uses Macro formulas: please advise your in-house and contract detailers/estimators to upgrade today!
Ask them to immediately download and install upgrades for the following systems which you use:
SHEAR 97 and ShearCAD Detailing

New SHEAR 97 and ShearCAD Feature: you can enter a formula in the QUANTITY field.

You can enter expressions such as 354.25/1.33 or 84/2
Although you will probably be using expressions such as those above, you can
use complex formulas with any of these operators: + - * X / SQRT SIN COS TAN ARCSIN ARCTAN.
Any expression which does not come out even will be rounded up.

For any formula which has / (division) in it, please
see the SHEAR 97 setup preference on line 466 to set a value such as .5 or 1 which
will be added to the calculated quantity BEFORE it is rounded up.

New SHEAR 97 and ShearCAD Feature: FPad Spread Footing (footing pad) function code.

You enter footing dimensions, along with the sizes for top and bottom bars,
and either the quantity of top & bottom bars or the spacing.
All bars (top & bottom bars, and Standees) are computed for you.
In ShearCAD, the Footing Pad is also drawn for you.

New SHEAR 97 and ShearCAD Feature: at startup, you can select an alternate DATA DRIVE.

For example, suppose that at work your DATA DRIVE as specified on line 2 of the SHEAR 97 Setup Preferences is S:
Suppose you change the SHEAR 97 Setup Preference on line 518 to: Y
and also change the SHEAR 97 Setup Preference on line 519 to: C:
Now close out SHEAR 97, exiting completely.
From now on, whenever you startup SHEAR 97 or ShearCAD, you'll be asked if you want to choose an alternate DATA DRIVE.
If, for example, you choose C: then your DATA DRIVE will be C: for the duration of your SHEAR 97 or ShearCAD session.

New SHEAR 97 Feature: You can transfer (archive) selected jobs.

On the Jobmaster screen, find the Archive Jobs button.
Here are two potential scenarios for using this feature:
Example 1) Working with SHEAR 97 away from the office.
At work, your data drive is a file server called S:
Before you leave work, you transfer job 1234 from S: to C: (local hard drive).
That evening, you continue working on job 1234 from your C: drive.
In the morning, when you get to work, you transfer the updated job 1234 from C: to S:

Example 2) Archiving inactive jobs to an archive drive.
You create an alternative (Archive) drive named V: (call for help with this)
You'll need to change the Setup Preference on line 518 to: Y
and on line 519 to: V:
You transfer a large number of inactive jobs to drive V:
At any time, you can view the inactive jobs on V:

New SHEAR 97 and ShearCAD Feature:

On the dark-blue Barline entry screen, you can duplicate the corresponding entry from the line above by typing 2 periods in a row ..
and then pressing your enter key

New SHEAR 97 and ShearCAD Feature:

On the dark-blue Barline entry screen, if in the quantity field you enter: QS
then SHEAR 97/ShearCAD will compute the total quantity of stock bars required given the following 4 values:
The Stock length (example 40-0)
The Lap length (example 2-6)
The Total quantity of bar runs (example 10)
The Length of one bar run (example 9000-0)

New SHEAR 97 and ShearCAD Feature:

ACI Tension Lap-Splice Lengths and Compression Lap-Splice lengths are now implemented.
In most any field where a length is expected (Macros, too), you enter a code for your lap as follows:
Optional Bar size, A or B for A-class, B-class
For compression lap, just enter C, or enter a bar size followed by C
For A and B class, follow with either letter T or O
and then 1 or 2 for Case 1 or 2 per the ACI manual
next add a single digit 3 thru 8 to indicate the PSI
last, you can enter an optional E or epoxy
usually, there is no need to enter the bar size and E for epoxy because
these are known by ShearCAD/SHEAR 97 based on the function inputs and Release screen or EP field

examples: 11C AT13 11BO28E (size 11, class B, Other, Case 2, 8000psi, Epoxy)
Important! Remember to enter LAP? in any function's lap field to view these instructions again.

New SHEAR 97 and ShearCAD Feature:

Panels can now have from 1 to 4 Vertical Zones which you can specify.
These vertical zones will be cleared of all vert bars. Horizontal bars remain the same.
To use zones, for the prompt entitled 'Zones enter 1 or ?', you enter 1

'# 5 Opg. Width' is where you will enter the Width of the first zone.
Instead of '# 5 Opg. Height', you enter the first zone Distance from the left of the Panel.
'# 5 Dist from Left' is where you will enter the second zone Width.
'# 5 Dist from Botm' is where you will enter the second zone Distance from the left of the Panel.

The next 2 inputs are used similarly for zone #3, if needed.
The next 2 inputs after that are used similarly for zone #4, if needed.

Important! Remember to enter ? for the input 'Zones enter 1 or ?' to view these instructions again.

New SHEAR 97 Feature:

The Millcut Report can help you identify barline lengths you may want to order special from the mill
At the bottom of the Jobmaster screen, click on 'Report', and for one or more selected jobs
you will have the option to add this report to the end of the Job report.
You can limit which Millcut report lines will be printed by excluding all lines less than a given minimum weight, such as 5000

New SHEAR 97 and ShearCAD Feature:

LINE, GRID, GRIX, CMUV, MLEN, RADI, CIRC, DNUT, VARY, COLV, MACR, 3RT, 3RTS, BDT, BDTS, CTI, CTIS, RTI, RTIS

For the above functions, in the toolbar input box for Spacing, you can now
optionally enter the Quantity of bars or runs, instead of the Spacing.
For Example, if in the Spacing input box of the function toolbar, you enter: Q10
then SHEAR 97 will automatically compute the appropriate spacing to generate 10 bars or runs of bars.

New SHEAR 97 and ShearCAD Feature:

You can print the particular bent shape within each line of the placing list for
the following Placing Lists: Cut Sheet & Shipping List, 8.5x14 Placing List, 11x17 Placing List
If you set the SHEAR 97 Setup Preference on line 551 to Y then the bend shapes automatically will print without asking you.
If you set the SHEAR 97 Setup Preference on line 551 to A then you will be asked each time you print a Placing List
whether or not you want to print the bend shapes.

New SHEAR 97 Feature:

Now you can have more than 25 lines on the dark-blue barline data entry screen.
This applies to SHEAR 97 Barlisting, Standalone Detailing, and Estimating.
For example, if you set the SHEAR 97 Setup Preference on line 555 to 40 then you will have 40 lines per screen for data entry.

New SHEAR 97 ESTIMATING Feature:

In any Estimating function, if you type a minus sign (-) in the EXIT box of the toolbar, then
you can view a pop-up screen with all of the barlines generated by this function.

New SHEAR 97 and ShearCAD Feature:

If you double-left click on a valid function code on the dark-blue screen, --OR--
If you type Z in the Code field and get the pop-up list of all of the Function Codes,
and you Right-Click instead of Left-Click to select a function code, then
you can view guidelines and instructions about that particular function code.

New SHEAR 97 Feature:
Now you can have more than 25 lines on the Jobmaster screen and the Releases screen.
For example, if you set the SHEAR 97 Setup Preference on line 566 to 40 then you will have 40 lines per screen for Jobs and Releases.

New SHEAR 97 and ShearCAD Feature:

This applies to ShearCAD Detailing, Estimating, and Standalone Detailing.
For any particular job, you can create a Stock and Lap file which applies just to that job.
You can do this on the Stock and Lap screen. On the Master Menu, click 'SETUP' then 'STOCK AND LAP FILE'.
A folder which will hold these job specific stock/lap files will be created automatically for you on your Data Drive;
this folder will be named X:\SHEAR97\DATA\STOCKLAP, where X: is your SHEAR 97 Data Drive.

New ShearCAD Feature: See <<<LINE 36>>> of ShearCAD Preferences
Save each dwg file in its job# subfolder
This will create a folder for each job
The job folder will be underneath folder: and your cad drawing file path
as specified in line 4 of your ShearCAD Preferences

New ShearCAD Feature: You can draw any (standard or non-standard) bent bar,
Shapemaster bent bar, or straight bar.
Single Right click on the bend type (even though it is empty for a straight bar).
You will be asked to click an insertion point and, for alignment, a second point.
Then, the bar will be drawn to scale for you.

New ShearCAD Feature: For the RANG function, the bar runs normally start on the left, then go towards the right.
After that, the bar runs are calculated starting at the bottom, then go towards the top.
Now, there is a new input on the toolbar named 'R-L/T-B', just to the left of 'ACT Y/N'.
If you enter 1 or 3 in this new input field, then the vertical runs will start on the Right and go towards the Left.
If you enter 2 or 3 in this new input field, then the horizontals will start at the Top and go towards the Bottom.

New ShearCAD Feature: For the RANG function, you can set any of the 5 clearances to be negative.
These RANG fields are: clearance, clearance left, clearance right, clearance bottom, clearance top.
Enclose a negative clearance in square brackets: examples are [0-2], [0-3], etc.

New ShearCAD Feature: You can set Colors of your choice for: Concrete outlines, Rebar, and Text.
You can set these on ShearCAD Preferences, lines 79, 80, and 81.
To help select color numbers, in your CAD screen click on: Settings - Colors - Select Color

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New SHEAR 97 & ShearCAD Feature: FPad Spread Footing (footing pad) function code.

You enter footing dimensions, along with the sizes for top and bottom bars,
and either the quantity of top & bottom bars or the spacing.
All bars (top & bottom bars, and Standees) are computed for you.
In ShearCAD, the Footing Pad is also drawn for you.

New ShearCAD Feature: Now for the RANG and PANL functions, the quantity of bars can be shown on the label which is displayed over the bar, when each bar is drawn for you.
To implement this feature, make sure you have the ShearCAD (not SHEAR 97) Preferences on lines 14 and 15 set to 1 Also, set the preference on line 84 to Y

New ShearCAD Feature: You can draw any (standard or non-standard) bent bar, Shapemaster bent bar, or straight bar.
Double Left click on the bend type (even though it is empty for a straight bar).
You will be asked to click an insertion point and, for alignment, a second point.
Then, the bar will be drawn to scale for you.
The bar line must be a valid rebar line, and must not be derived from a function code.
Please Note: How this is different from right-clicking on the type to draw a bar is that this drawn bar with text will serve as the new cad CALLOUT for this bar line.

New ShearCAD Feature: Available with this upgrade, there is an optional expanded Selective Takeoff column.
You can choose this feature by setting line 94 of the ShearCAD Preferences (not SHEAR 97 preference) to: Y
If you use this feature, you will see a column named REL in place of the old column named F.
For Selective Takeoff, this allows you to use 4 characters (instead of 2) to show which barlist Release a line was sent to.
Right after you change this particular setup on line 94, you must immediately exit ShearCAD completely, then restart ShearCAD.

New ShearCAD Feature: The STRETCH command button now applies to a 'drawn bar callout'.
A 'drawn bar callout' is a bar that was drawn to scale by double Left clicking on the bend type (even though it is empty for a straight bar).
To stretch a 'drawn bar callout', first click on the Stretch button at the bottom of the dark-blue ShearCAD screen.
Next, in the drawing, you will single click on the particular bar leg with you want to increase (or decrease).
Finally, you click a base point and displacement point, and automatically the appropriate dimension will be increased (or decreased) in length.

New ShearCAD Feature: You can now expand the ShearCAD dark blue entry screen lines to BETWEEN 30 AND 50 LINES.
You set this feature on line 104 of the ShearCAD Preferences; for example, enter: 40
Another new ShearCAD Feature: You can now expand the ShearCAD dark blue entry screen to be FULL WIDTH.
This is done by setting line 102 of the ShearCAD Preferences to: Y

New ShearCAD Feature: You will now be able to enter one or more jobs and/or one or more releases, by clicking on a button to access the Jobmaster and Releases screens directly from within ShearCAD.
For the new releases you add, as you exit the Releases screen, you will be given the option to create the Detailing (.det) file, which is required prior to working on a new release in ShearCAD Detailing.

New ShearCAD Feature: Now you are able to have pre-set layers to contain drawing objects (entities) which ShearCAD generates.
You can have separate drawing layers for: Concrete Outlines, Text callouts, and Rebar.
You choose these layer names and enter them on the ShearCAD preferences on lines 123, 124, and 125.
Example layer names follow (you can choose your own names): REBAR-OUTLINES REBAR-TEXT REBAR-BAR
If a named layer does not pre-exist in a particular drawing, then that layer name will automatically be added to the drawing for you.

New ShearCAD Feature: Whenever you click to draw a Bend Schedule, you also can have a Lap Schedule drawn next to it.
Please see the ShearCAD preference on line 126.
If the ShearCAD preference on line 126 is set to N, then a Lap Schedule will never be drawn.
If the ShearCAD preference on line 126 is set to Y, then a Lap Schedule will always be drawn without asking you.
If the ShearCAD preference on line 126 is set to A (or empty), then you will be asked each time if you want a Lap Schedule.

New SHEAR 97 Feature: The F1 Function key is now the 'Advance' key for taking you FORWARD through particular SHEAR 97 data screens.
This is similar in operation to how the ESC key takes you BACK in the other direction through screens.
Pressing F1 can advance you from the SHEAR 97 Master Menu to the Jobmaster to the Releases Screen to the Barlist screen.

New SHEAR 97 Feature: Each time you print tags, you choose the large identifying characters which you want printed on the tags. Your choices of large characters and color of characters are typically made on the 'Tag Choices Screen'.
With this upgrade, these character and color choices can be saved on the Release screen, in Note #9. If you'd like to implement this feature, remember to change the SHEAR 97 Setup Preference on line 587 to: Y

New SHEAR 97 and ShearCAD Feature: As you enter any bend dimension, add the letter H to 'hold' (FB=Field Bend) that bend dimension.
An example of this is 2-3H. You'll then see that dimension turn red on the dark-blue barline entry screen In any bent bar, you can optionally designate either one or two FB dimensions in this manner. Printouts such as Tags and Barlists and Placing Lists will prefix any such dimension with the letters 'FB'.

New SHEAR 97 and ShearCAD Feature:

As you enter any bend dimension, you can add the letter K to indicate a critical bend dimension (CR). An example of this is 2-3K. You'll then see that dimension turn blue-green on the dark-blue barline entry screen. In any bent bar, you can optionally designate either one or two critical bend dimensions in this manner. Printouts such as Tags and Barlists and Placing Lists will prefix any such dimension with the letters 'CR'.

New SHEAR 97 and ShearCAD Feature:

For the Barline entry screen (dark blue screen), you can now choose a White background instead of dark blue If you'd like to try the White background, remember to change the SHEAR 97 Setup Preference on line 597 to: Y

New SHEAR 97 ESTIMATING Feature:

In any Estimating function, if you type a minus sign followed by R (-R) in the EXIT box of the toolbar, then that function code line will be erased and replaced with all of the barlines generated by the function.

New SHEAR 97 and ShearCAD Feature: Type L to add up lengths or enter a formula in any Length field in any function code's input boxes.
This works for any function: LINE, GRID, GRIX, PANL, etc.
You can use expressions such as 12-6+2-2 and get 14-8
Another example is: S90+[12-6]-[2-2]+48D
One more example is: S90+1.33x[12-6]+60D (use * or x to multiply)
Although you will usually be using expressions such as those above,
you can use complex formulas with any of these operators below:
+ - * X / SQRT SIN COS TAN ARCSIN ARCTAN.

New ShearCAD Feature: When you add a new PANL function, you will have the option to click on the outline of a representative drawing of the panel on the AutoCAD/IntelliCAD drawing screen.
Then, the screen inputs for the PANL function automatically will be initialized from the panel you just clicked.
These PANL inputs include: Panel width, height, peak height, peak distance from the left, as well as the dimensions and placement of the circular opening and rectangular openings (up to 6 total openings).

New ShearCAD Feature: When you Draw a bar by either double-clicking or single right clicking on the bend type field, you now have the option (for most types), to draw the bar in Plan view instead of Section view.
If you choose Plan View, you can designate that the first hook be drawn with either a plus (+) or a minus (-).
This feature is now turned off. To use this new feature, please change the ShearCAD Preference on line 136 to: Y

SHEAR 97 and ShearCAD Feature: You just clicked the 'Mat List ON/OFF' button at the top of your screen.

This button is a 'toggle switch' which means that if you click it when it is OFF, it turns it ON; if you click it when it is ON, it turns it OFF.

When you are entering REBAR items, you want this to read 'Mat List OFF'
When you are entering MESH or ACCESSORIES items, you might like this to be ON, so that you get a drop-down list of mesh and accessories on the screen.
When this list of mesh/accessories appears, start typing the item name until the item you want rises to the top of the list, and then press ENTER. That item will then automatically appear in the SZ/GR field.

If you just now accidentally clicked the 'Mat List ON/OFF' button, first click OK below, and then single click the 'Mat List ON' button one more time

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SHEAR 97 and SHEARCAD

INSTALLATION & SETUP INSTRUCTIONS

Note: These steps should only be done once on your computer.
If they are done a second time, your data and setup preferences could be lost. To install again, see topic 20.011 or call us first.

1) For Windows 10, Windows 8, Windows 7:
Click on Start; Click on Control Panel, Click on "User Accounts". Click on "Change User Account Control Settings". Minimize the "User Account Control". The proper User Account Control setting is called "Never Notify". Now Reboot.

2) Download the SHEAR 97/ShearCAD 'Trial Version Only' from the "Downloads" page of website www.eRebar.com
Then double-click and run this download file (it is named setupex.exe)
You are asked if you want to install SHEAR 97. Click Yes

3) You will be prompted each step of the way through the SHEAR 97 installation. Accept all defaults; install to the C: drive.
Click on NEXT whenever you are prompted.

4) At the conclusion of the installation, you'll be asked to "Launch the Program" - do Not do this. Click 'Finish'.

5) If you know how, create a desktop shortcut for the file c:\shear97\S97Manual.pdf
If you don't know how, skip this step (it's optional); we can help you do this later.

6A) IF YOU DO NOT have a SHEAR 97 security license key:
Double click, and run "C:\SHEAR97\Sentinel Protection Installer .exe"
(this file will be found in the folder named SHEAR97 within your C: drive)
Proceed to do a "Complete Install" of this software, accepting all of the defaults.

6B) IF YOU DO have a SHEAR 97 security license key:
perform all steps in topic 20.02 "INSTALLATION OF A SECURITY KEY"

7) Click on START-SETTINGS-CONTROL PANEL-DISPLAY-SETTINGS; your screen resolution needs to be at least 800 x 600, (preferably 1024 x 768 or higher).
In Display properties, click Settings then Advanced: Font size needs to be: 96 DPI
Windows 7 calls this text size "Smaller". SHEAR 97 needs the "Smaller" text size.

8) If you will be using ShearCAD or if your screen resolution is 800x600 then:
Click on START-SETTINGS-TASKBAR; if "Always on Top" and "Autohide" are checked, then click Cancel; if not, click to make sure both "Always on Top" and "Autohide" are checked, then click Apply, then click OK.

9) Create a 'shortcut' for SHEAR 97 and ShearCAD (exe files in folder c:\shear97)

10) Click on the SHEAR 97 icon. You will see the SHEAR 97 MASTER MENU.
Now call 317 823-3525 if you'd like a 'guided tour' of SHEAR 97!

IMPORTANT: Your keys are valuable property, and are now in your possession.
You must insure your SHEAR 97 keys as you would any other business asset.
If a key is lost or stolen, immediately report this loss to the police and to your insurance company; you'll need to purchase a new replacement key which may cost the same (or even higher) than the original price.

Call if you would like assistance with this procedure.
Follow these steps to install a Security Key on your computer:
Important note: If you haven't installed SHEAR 97, perform steps 1 thru 5 in topic 20.01
If you have a (black) USB style key, do NOT attach it until step 8

1) These steps need to be done only once for each computer.
If you have previously performed steps 2 thru 5, skip to step 6

2) Click on "Start" button; click "RUN"; click "BROWSE"
Click the down arrow next to the Look In box; find and click on C:
Double click on the SHEAR97 folder in the box below

3) Double click, and run "C:\SHEAR97\Sentinel Protection Installer .exe"
(this file will be found in the folder named SHEAR97 within your C: drive)

4) Proceed to do a "Custom Install" of this software.
a) If you have a USB style key: choose USB driver
b) If you have a Parallel (printer port) style key: choose Parallel driver

5) After installing the above driver program,

6) Shutdown your system, so that the power is turned OFF.

7) This step applies to a standard parallel port key, not USB style key

The key attaches to the back of your computer to any printer (parallel) port; it works whether or not a printer is attached to the back of the key. There are more pins on one side of the key than the other - be very careful that you do not try to install the key upside down because this could physically damage the key by bending the pins.

Detach the printer cable where it plugs into your computer.
Double-check to make sure the key is not upside down!
Gently plug the key in with the pins facing the receptacle; not much force is required. Use a paper clip or small screwdriver to GENTLY tighten the key - DO NOT overtighten.
Attach the printer cable to the back of the key, using the screws on the printer cable to fasten it to the key.

8) If you have a USB style key, attach it now to a USB port

9) Now Power UP your computer

Call Application Software 317 823-3525 if you'd like assistance with this:
ShearCAD requires either AutoCAD or IntelliCAD, but you don't need both.
If you have a license for the full AutoCAD version (not LT), skip this page.

Follow these steps to install IntelliCAD on your computer:

1) Download the IntelliCAD installation file named ICAD6-6PsetupKEY.exe

2) Browse to the folder where you downloaded the file

3) Run the file named ICAD6-6PsetupKEY.exe to
   install IntelliCAD Professional edition

   As you install, accept all defaults, click "Next" whenever you see it.

4) On your desktop, you will see the IntelliCAD icon.

5) Double-click and run IntelliCAD.

6) Turn off the "Tip of the Day" feature.

7) Click Tools, then click Security; set the security to Very High.

8) Close IntelliCAD.

9) When you start ShearCAD, it will run and link-up with IntelliCAD automatically.
   Therefore, before you run ShearCAD, if IntelliCAD is running, close it out.

Note: All versions of ShearCAD work exactly the same for all AutoCAD versions. Here's how to setup for your particular version of AutoCAD:

The first step is to delete c:\shear97\system\parmscad.txt

For AutoCAD 2000, 2002

> establish a desktop shortcut to c:\shear97\shearcax.exe and rename c:\shear97\system\parmscad (ACAD 2000).txt to parmscad.txt

For AutoCAD 2004, 2005, 2006

> establish a desktop shortcut to c:\shear97\shearcad.exe and rename c:\shear97\system\parmscad (ACAD 2004).txt to parmscad.txt

For AutoCAD 2007, 2008, 2009

> establish a desktop shortcut to c:\shear97\shearcaz.exe rename c:\shear97\system\parmscad (ACAD 2007).txt to parmscad.txt

For AutoCAD 2010, 2011,2012

> create a shortcut to c:\shear97\shearcaw.exe (c:\shear97\shearcay.exe for 64-bit) and rename c:\shear97\system\parmscad (ACAD 2010).txt to parmscad.txt

For AutoCAD 2013, 2014

> create a shortcut to c:\shear97\shearcaT.exe (c:\shear97\shearcaU.exe for 32-bit) and rename c:\shear97\system\parmscad (ACAD 2013).txt to parmscad.txt

For AutoCAD 2015, 2016

> create a shortcut to c:\shear97\shearcaS.exe and rename c:\shear97\system\parmscad (ACAD 2015).txt to parmscad.txt

For AutoCAD 2017

> create a shortcut to c:\shear97\shearcaR.exe and rename c:\shear97\system\parmscad (ACAD 2017).txt to parmscad.txt

For AutoCAD 2018

> create a shortcut to c:\shear97\shearcaQ.exe and rename c:\shear97\system\parmscad (ACAD 2018).txt to parmscad.txt

Final Step: delete all other versions of ShearCAD from the C:\SHEAR97 folder except for the ShearCAD version which you'll be using.

Call if you would like assistance with this procedure.

Follow these steps to create a desktop icon for SHEAR 97:
(ShearCAD users should repeat this process for a ShearCAD icon)

1) This only needs to be done once for each computer running SHEAR 97.

2) Click on Start; click on Run; click the Browse button.

3) Click on the down arrow to the right of the Look In box.

4) Click on C:

5) You may need to scroll the large box to the right, but locate and double click on the yellow folder named SHEAR97

6) Double-click on SHEAR97

7) In the large box below, locate Shear97 (to the left you will see a white rectangle with a blue stripe);
Single RIGHT-click on the rectangle - you see a menu

8) (Left) Click on Create Shortcut

9) You will now see 'Shortcut to SHEAR 97'

10) As you point to this shortcut, hold your left mouse button down - do not let up on it. Still holding your left mouse button down, 'drag' your mouse to the right outside of this box and onto your desktop;
let up on your mouse button.

11) Cancel the Browse box; cancel the Run box.

SHEAR 97 >> MATCHING SHEAR 97 SETUP PREFERENCES 20.07

If you have just completed a first time installation of SHEAR 97 on a computer which has never had SHEAR 97 installed on it before, and there is another computer in your office which has had SHEAR 97 installed for some time and the setup preferences are set the way you want them to be, then it is likely you'll want to copy all of the SHEAR 97/ShearCAD Setup Preferences from the other computer to this new installation of SHEAR 97.

Here is how to do that:

Step 1) This will copy all of your setup preferences to a flash drive:

From the pre-existing SHEAR 97 computer installation,
Copy the folder named C:\SHEAR97\SYSTEM to any device
such as a flash drive or a CD

Step 2) This will copy all of your setup preferences to the new computer:
Place the flash drive or other device into the new computer.
For example, let's assume the flash drive is F:
Copy the folder named F:\SHEAR97\SYSTEM
and paste it to C:\SHEAR97 (say yes to : "Replace the existing folder?")
(Make sure you do not paste it to C:\SHEAR97\SYSTEM).

SHEAR 97 >> HOW TO DOWNLOAD & INSTALL AN UPGRADE 20.08

The latest SHEAR 97 and ShearCAD upgrades are free of charge;
go to web site www.eRebar.com, and click on "Downloads";
this will take you to our web site's Downloads page.
Now, from the Download page, click on "SHEAR 97 Upgrade".
Try to run the upgrade instead of saving it to disk - Go to step 2) below.
Alternatively, save the upgrade to your desktop or USB flash drive, then go to step 1)

The SHEAR 97 upgrade is a single "self-extracting" file named S97ZIP.EXE
Because this program is self-extracting, all that you need
to do is "run" the program S97ZIP.EXE.
ShearCAD users, should repeat this process with the appropriate ShearCAD upgrade.

Perform this procedure each time you finish downloading the SHEAR 97 upgrade.

1) Find the subdirectory where file the upgrade (S97ZIP.EXE) is located.
If you saved it to your desktop or to a disk device, this file will be very easy for you to find. If you need help finding S97ZIP.EXE, use 'Windows Explorer' to help find the folder it is in. Click on Tools; click on "Find - files" then search for S97ZIP.EXE starting from C:\ and be sure to "include all subfolders".
To install on other computers, either save the file to a network drive accessible to all SHEAR 97 users, or copy S97ZIP.EXE to a disk device, and proceed with step 2.

2) To install the SHEAR 97 upgrade:

>> If SHEAR 97 is running, stop it by exiting SHEAR 97.

>> Double-click on S97ZIP.EXE - it starts running.

From flash drive, assuming your flash drive is F::
Click Start-run, type F:S97ZIP.EXE
in the text window, click OK - S97ZIP will start running)

>> Next you will see a menu - **click on the UNZIP button.**
NOTE: it is **VERY IMPORTANT to not change the path from C:**
Each file automatically will be sent to its proper folder.
DO NOT unzip to any other folder, such as c:\shear97.

>> You'll see a message showing how many files were extracted.

>> Close out this program.

>> The next time that you run SHEAR 97, you will see a more recent date at the bottom right corner of the SHEAR 97 Master Menu. (Lower left of ShearCAD).

3) End of Procedure - call if you have any questions.

Backups should be done regularly. Your data is very valuable, so periodic backups are important.

It is not good enough to backup just the Barlists folder c:\shear97\data\barlists\
Likewise, it is not good enough to backup just the DATA folder c:\shear97\data\
You also need to backup this folder c:\shear97\system\ and all of its subfolders because that is where all of your (customized) setup preferences are.

For instructions on using Windows Explorer, See topic 20.75 in this manual, entitled "SHEAR 97 >> HOW TO MOVE FILES WITH WINDOWS EXPLORER 20.75"

1) If your data is on your C: drive,
   This will backup all of your data as well as your setup preferences:

   Use Windows Explorer to backup this folder c:\shear97\ and all of its subfolders
   You can use any device to accomplish this: USB flash drives (stick drive, travel drive), DVD burner, secondary hard drive, etc.

2) If your data is on a file server (not on your C: drive),
   This will backup all of your setup preferences:
   Use Windows Explorer to backup this folder c:\shear97\ and all of its subfolders

   Also, if your SHEAR 97 data is not automatically saved each night by a backup program (check with your computer technician to see if this is the case), then:
   This will backup all of your data:
   Use Windows Explorer to backup this folder X:\shear97\
   and all of its subfolders where you should substitute
   for X: the name of your Datadrive which you will find on line 2 of your SHEAR 97 setup preferences.

Note: Generally, SHEAR 97 should only be installed once on a given computer. Afterwards, only the Upgrades from **www.eRebar.com** should be installed.

However, if you are instructed by us (Application Software Inc.) to re-install SHEAR 97, here is how to do that:

For instructions on using Windows Explorer, See topic 20.75 in this manual, entitled "SHEAR 97 >> HOW TO MOVE FILES WITH WINDOWS EXPLORER 20.75"

1) For Windows 7 and Windows Vista: Click on Start; Click on Control Panel, Click on "User Accounts". Turn off the "User Account Control". Reboot.

2) Under C:, Create a temporary folder, example C:\SHEAR97TEMPFOLDER
Use Windows Explorer to copy the folder C:\SHEAR97 and paste it to the temp folder.
Go to the Windows Control Panel and uninstall SHEAR 97.
Next, Delete the folder C:\SHEAR97

3) If your Master CD is more than a few months old, throw it out and Download.

Insert your Master SHEAR 97 CD. Please wait several seconds . . .
and the CD will automatically run (this is called "autorun").

<<OR>>

Download the SHEAR 97/ShearCAD 'Trial Version Only'
from the "Downloads" page of website www.eRebar.com
Then double-click and run this download (it is named setupex.exe)
You are asked if you want to install SHEAR 97. Click Yes

4) You will be prompted each step of the way through the SHEAR 97 installation. Accept all defaults; install to the C: drive.
Click on NEXT whenever you are prompted.

5) At the conclusion of the installation, you'll be asked to "Launch the Program" - do Not do this. Click 'Finish'.

6) Copy the folder named C:\SHEAR97TEMPFOLDER\SHEAR97\DATA and paste it to C:\SHEAR97 (say yes to : "Replace the existing folder?")

7) Copy the folder named C:\SHEAR97TEMPFOLDER\SHEAR97\SYSTEM and paste it to C:\SHEAR97 (say yes to : "Replace the existing folder?")

SHEAR 97 >> HOW TO SETUP A COMPUTER AS THE FILE SERVER 20.12

If you have your computers networked, and would like to designate one computer to hold all of the SHEAR 97 data, then follow these steps. Call if you'd like assistance.

1) Permit resource sharing in your network.

2) On the file-server computer, either use the whole C: drive, or

create a new folder underneath C:\. Declare this folder a shared

network resource, granting "full read/write access" to all users, no password.

Name this, for example, S97 (meaning File Server SHEAR 97 folder).

Copy and paste the SHEAR97 folder and all subfolders from
any computer which already has SHEAR 97 installed on it
to the S97 folder (or C: drive).

3) On each computer which will tie into the file server:

> right-click on "Network Neighborhood" in order to

"MAP to shared drive folder S97". Check automatic

connect upon logon. Name this resource a letter such as K:

4) On the File-server, run SHEAR 97, go to setup preferences,

and make sure line 2 is C:

5) On all computers other than the File-server, run SHEAR 97,

go to setup preferences, and make sure line 2 is K:

6) For ShearCAD, on all computers other than the File-server, run ShearCAD,
go to ShearCAD Setup Preferences, change only the first letter of line 4 to K:
example: K:\SHEAR97\DATA\CADDWGS\
Now exit ShearCAD

7) On all computers including the File-server, run SHEAR 97,
go to setup preferences, and make sure line 73 is Y
Now exit SHEAR 97

8) End of Procedure

This procedure rarely will be needed. If your SHEAR 97 key is working well, there is no need to upgrade this driver.

However, if we suggest that you should upgrade this driver, here's how:

> On the Internet, go to: www.safenet-inc.com

> At the top of this 'Safenet' page, click Support; click Basic Support

> Click 'Sentinel Hardware Keys Downloads/Help Tips'

> Click 'Sentinel Protection Installer v7.6 (Download Driver)'
(Note: Over time, the version number may differ from “v7.6”)

> Download this file to your desktop

> now run this downloaded program, and follow the steps
which are described in this manual under the topic 20.02 entitled:

“SHEAR 97 >> INSTALLATION OF A SECURITY KEY 20.02”

For Tag printing using Windows XP or Windows Vista, you will need to perform this procedure once. This creates a custom page size for tag printing purposes. Call if you would like assistance with this procedure.

1) Start the Printer control process in this way:

(Start - Settings - Printer)

2) Make sure you currently have Administrator rights

3) Select Add Printer by clicking Once (not twice!)

You are not adding a printer, only activating the icon.

4) From the file menu, select "Server Properties" (this is Print server properties)

5) Click on the Forms tab

6) Click "Create a New Form" and add this information for your tag form, giving the form a name, such as: rebartags

Be sure you specify width and height of your tags;

For instance, for tag style 1, the width is 8.5 inches, and the height is 3.5 inches.

7) Click OK

8) Remember to click on Start - Settings - Printers,

right click on the tag printer's icon, left click on

properties, then set the paper size for the tag printer

to the form name you specified in step 6)

9) If step 8 does not let you choose your newly created

custom form name, then add a new printer driver for

the tag printer, and select your custom form name

for the paper size.

Step 1)

At any point in SHEAR 97 (or in any other program, for that matter), press the "Print Screen" key (it is near the "Scroll Lock" key on your keyboard).

Step 2)

This step will print the contents of the screen at the point when the Print Screen was last pressed. In SHEAR 97, click on Setup Menu. Now Click on Print Screen. Now click Okay. You will get a print preview of your screen shot, which you can then print.

From the SHEAR 97 Master Menu screen, if you click on SETUP, then you will see the Setup Menu screen. From the Setup Menu, you can initialize and customize:

> Setup Preferences:

Refer to the section starting with 12.01 earlier in this manual entitled:

"SHEAR 97 and SHEARCAD SETUP PREFERENCES FOLLOW . . ."

There are hundreds of different setup preferences which let you customize SHEAR 97 to your needs. When you receive your new SHEAR 97 system, these are already set for you, but you can modify these choices at any time.

> Material File: The material file lists all materials (Rebar, Mesh, and Accessories); also labor codes such as threading and end-preparation can be entered here. You can modify any item in this file, and also add your own mesh and accessories to this list.

> Bundling Files: This is where you tell SHEAR 97 what are the maximum piece counts and weights for each bundle you will ship. This is broken down by size as well as by straight bar, bent bar, stirrups/ties, and standees. Also, you can set your piece counts by size for stock bundles received from the mill; SHEAR 97 will then bundle that same quantity for any tagged item to be shipped which matches that stock length and size - you won't have to open the stock bundle.

> Bend Deduction File: You enter the bending pin diameters which you use by size and by heavy/light bending; also, for 90 degree bends, you enter the fractional inches of bend deduction to take for each 90 degree bend. SHEAR 97 will then automatically compute all bend deductions for you as you enter each line. Also, if you employ outside detailers, when you receive a bar list file from them, you can choose to scan the file (it takes about a second), recomputing all bend deducted "cutlengths"; this ensures that the bend deductions are accurate for your operation.

From the SHEAR 97 Master Menu screen, if you click on SETUP, then you will see the Setup Menu screen.
From the Setup Menu, you can initialize and customize:

> Company Name(s): You enter your company name and address, along with your phone and fax numbers. This company information will get printed automatically in the headings of your reports. For fabricators who fab some jobs for other fabricators, and for independent detailers, you can have up to 50 company names; for each job you setup, you set the company name index in that job; thereafter, the proper company name gets printed automatically on all reports for that particular job.

> Stock and Lap File: For the Detailing and Estimating functions, as well as for the automatic splitting of arc bars for maximum arc height limitations, you have 3 different schedules from which to pick for default stock lengths and lap lengths per bar size. These values are inserted automatically for you during detailing/estimating entry, yet can be overridden.
Also, you can create a custom stock/lap file for any particular job.

> Bent types: You can view and print the more than 130 bend types which are built into SHEAR 97.

> Unit Pricing Files: For each job, you can set the price for each material item, as well as straight, light and heavy bent, and for stock lengths. You can then print a Unit Pricing report to give you the extended price (up to 4 decimal places) for each line item in a barlist, along with the grand total.

SHEAR 97 >> HOW TO DOWNLOAD LIST(S) FROM THE INTERNET 20.41

(1) The following procedure should be performed each time you receive a SHEAR 97 barlist file(s) via the Internet.

(2) Your outside detailer or estimator sends you a barlist file(s), or a detailing file(s), or estimating file(s) by email over the Internet.

(3) For Detailing or Production Barlist, or Estimating files.
If your detailer/estimator DID NOT sent you a "zip" self-extracting file, then just save the files on your Desktop, and go to Step (5)

(4) If your detailer sent you a zip self-extracting file, then
> Run the self-extracting exe file, click the UNZIP button
Unzip to your 'Desktop'
> You see a message "xx files extracted" - click OK
> Close your zip program

(5) Run SHEAR 97

> If your detailer sent you one or more production barlist (.DAT) files, click on Barlisting. If detailing files (.DET), click on Standalone Detailing. If, instead, you received estimating files, click on Estimating.
> Only if you see a Modify Jobs button on the lower right of your Job screen, then click it to get permission to Modify jobs.
> Click on Import/Merge. Follow the procedure presented to you on screen.

(6) You are asked "Browse for Folder"?

If this is not the first time you've performed this procedure, click No, then click Okay and proceed. After the procedure is done, go to step (8)

If this is the first time, click Yes, and proceed with Step (7)

(7) Click and browse to the desktop folder
You will have to double click on C: in the lower right box, then Double click on Documents/Settings then double click on the proper user name, then double click on Desktop.
You will see the files to be imported in the box on the upper left.
Next, click Okay and proceed until the procedure is completed.

(8) When you go out to the release screen for this job, and then to the Detailing or Barlist screen, you should find the detailing or barlist lines.
If Estimating, your new job and estimating barlines are now in SHEAR 97.

(9) End of Procedure

SHEAR 97 >> HOW TO MOVE FILES WITH WINDOWS EXPLORER 20.75

Windows has a built-in utility program called Windows EXPLORER which is useful for a number of tasks. For instance, you might want to move one or more files from one subdirectory in your computer (or in your network) to another subdirectory.

The following example shows how you can move files from the subdirectory M:\BARLISTS\ROBISON\INBOX to the subdirectory C:\SHEAR97\DATA\BARLISTS. You will then remove these files from the first subdirectory.

1) Start Windows Explorer running by doing this:
   Click on START BUTTON.
   Click on PROGRAMS.
   Click on WINDOWS EXPLORER.

2) Double-click on M: (on the left side)
   Double-click on BARLISTS (left side box)
   Double-click on ROBISON (left side box)
   Double-click on INBOX (left side box)

3) In the left box, if C: has a minus sign (-), then single-click on the PLUS-SIGN (+) for C:

   Now single-click on the PLUS-SIGN (+) for SHEAR97
   Now single-click on the PLUS-SIGN (+) for DATA
   You should see a folder named BARLISTS (do NOT click on it)

4) Press CONTROL-A (hold the CTRL key while pressing A) - this will select all files in ROBISON's INBOX. These files will turn a different color.
   Drag them by pointing to the files and holding down the left button; drag them and point to the YELLOW FOLDER indicating BARLISTS (c:\shear97\data\barlists); now drop them by letting up on the left mouse button.

5) To erase these files from ROBISON's INBOX, repeat step 4), but drop them into the RECYCLE icon.

6) Close EXPLORER program.

7) End of Procedure.

SHEAR 97 >> COPY SHEAR 97 TO ANOTHER 'TARGET' COMPUTER 20.80

This assumes that SHEAR 97 has been installed previously on the 'target' computer.
This also assumes that your SHEAR 97 data folder is on the C: drive.
This copies all SHEAR 97 programs, data, and setup preferences.

COPYING FROM SOURCE COMPUTER TO FLASH DRIVE

> Close SHEAR 97 completely
> Plug in the Flash Drive
> Single right click on START (it is at the lower left of your Windows Desktop)
> Left Click on EXPLORE (this runs the 'Windows Explorer' program)
> On the left, look for "C:" (it may read "C: local hard drive")
> Underneath C:, look for the folder named "SHEAR97"
> Right click on the SHEAR97 folder
> Point to SEND TO, then click on E: or F: (whichever is your flash drive)
> If it says "SHEAR 97 folder already exists, click on YES TO ALL
> Wait until all files are copied
> On the Taskbar at the bottom of your screen, click on "Remove hardware"
> Click on E: or F: (whichever is the flash drive)
> Wait until you see the message "It is now safe to remove E: or F:"
> Unplug the flash drive
> End Of Procedure

COPYING FROM FLASH DRIVE TO TARGET COMPUTER

> Plug in the Flash Drive
> Single right click on START (it is at the lower left of your Windows Desktop)
> Left Click on EXPLORE (this runs the 'Windows Explorer' program)
> On the left, click on E: or F: (whichever is your flash drive)
> In the window on the right, look for the folder named "SHEAR97"
(note: This is the SHEAR97 folder which belongs to the flash drive, not the SHEAR97 folder which belongs to C:)
> Right click on the SHEAR97 folder
> Left click on COPY (note: nothing seems to happen when you do this)
> On the left, look for "C:" (it may read "C: local hard drive")
> Right click on the C: folder
> Left click on PASTE
> If it says "SHEAR 97 folder already exists, click on YES TO ALL
> Wait until all files are copied
> On the Taskbar at the bottom of your screen, click on "Remove hardware"
> Click on E: or F: (whichever is the flash drive)
> Wait until you see the message "It is now safe to remove E: or F:"
> Unplug the flash drive
> End Of Procedure