

**ONE BRACE 104-65VB**

W	14 3/16 x 1/2
F	14 9/16 x 3/4

SHOP NOTE:  
SURFACE PREP AND PRIME PAINT PER SC CLASS B  
SEE OFFICE FOR SPECS

NO PAINT THIS DRWG EXCEPT AS NOTED

### BILL OF MATERIAL

ADVANCE	SEQ.	SEQ.	MARK	QUAN.	SHAPE	LENGTH	REMARKS	WT.	WEIGHT	
MILL #	NO.	QUAN.	TOTAL					UNIT	TOTAL	
43-1	104	1	104-65VB	ONE	BRACE			1891	1891	
			104-65VB	1	W14x99	18	8 3/8	A572-50	1851	1851
			f352	4	FL 1/2 x 10	0	7	A572-50	10	40
					FIELD BOLTS					
			56	TC 7/8 Dia	A325SC	0	3	1HD WASH		

Total weight : 1891

### REVISION & DISTRIBUTION BOX

REV.	DATE	DESCRIPTION	BY	TO APP'L	TO SHOP	TO FIELD
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DRAWINGS ARE SUBMITTED FOR APPROVAL IN ACCORDANCE WITH AISC MANUAL NINTH EDITION - PAGE 5-229 PARAGRAPH 4.2 AND PAGE 5-250 SECTION 4.

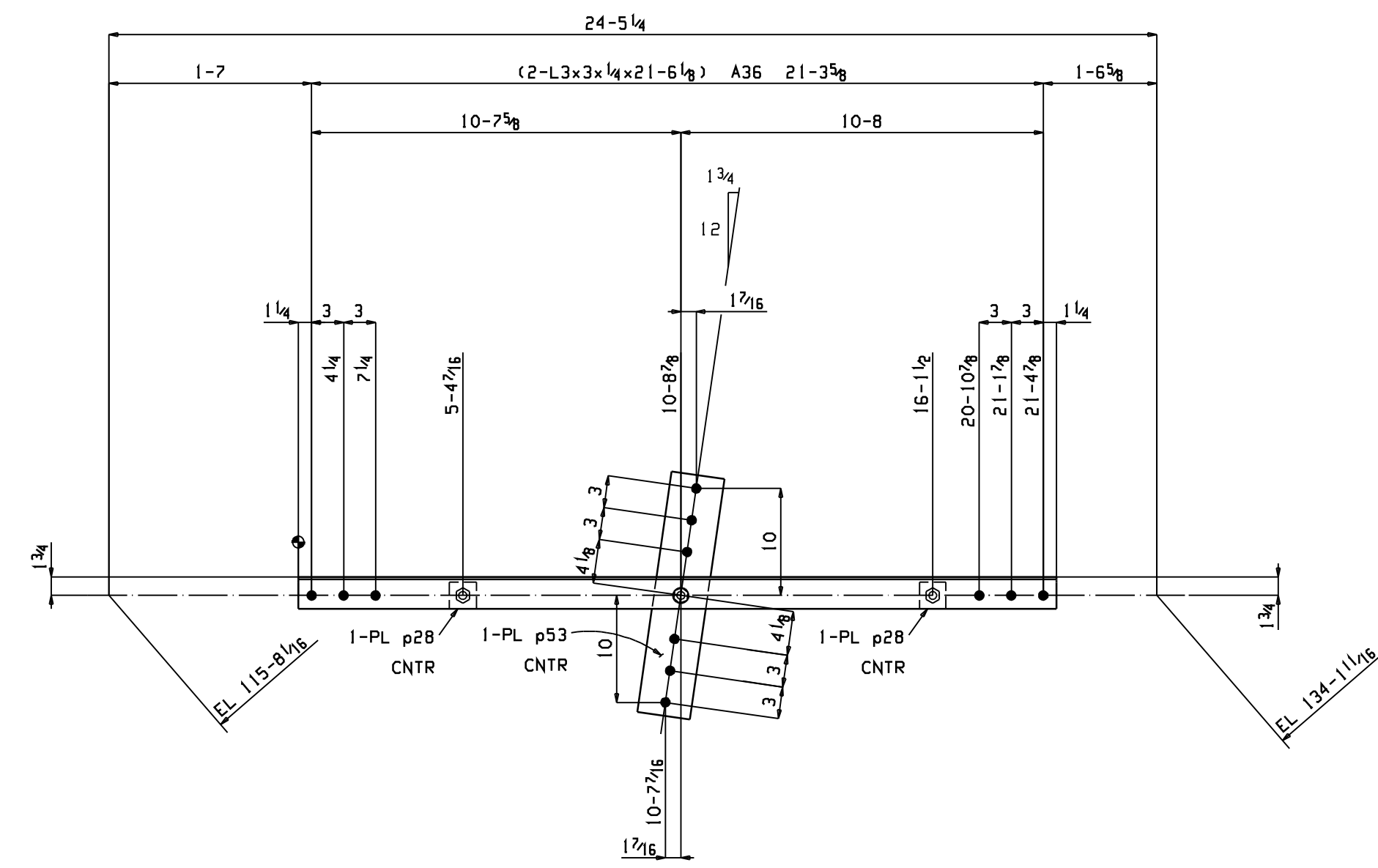
### SHOP NOTES

- ALL RUNNING DIMENSIONS ARE TAKEN FROM THE  $\odot$  LINE.
  - ALL GAS RE-ENTRANT CUTS WILL HAVE A RADIUS OF 1/2" UNLESS NOTED
  - ALL SHOP BOLTS SHALL BE SNUG TIGHT UNLESS NOTED
- MATERIAL: ASTM A572-50 UNLESS NOTED  
WELD: E70XX-LH ELECTRODES  
OPEN HOLES: 15/16 UNLESS NOTED
- PAINT: PREP:  
PRIME:  
FINISH:
- BOLTS: A325, BLACK, HEX HEAD TENSION CONTROL (U.N.O.)

DWG. DESCRIPTION: BRACING REF. ERECTION DWG:

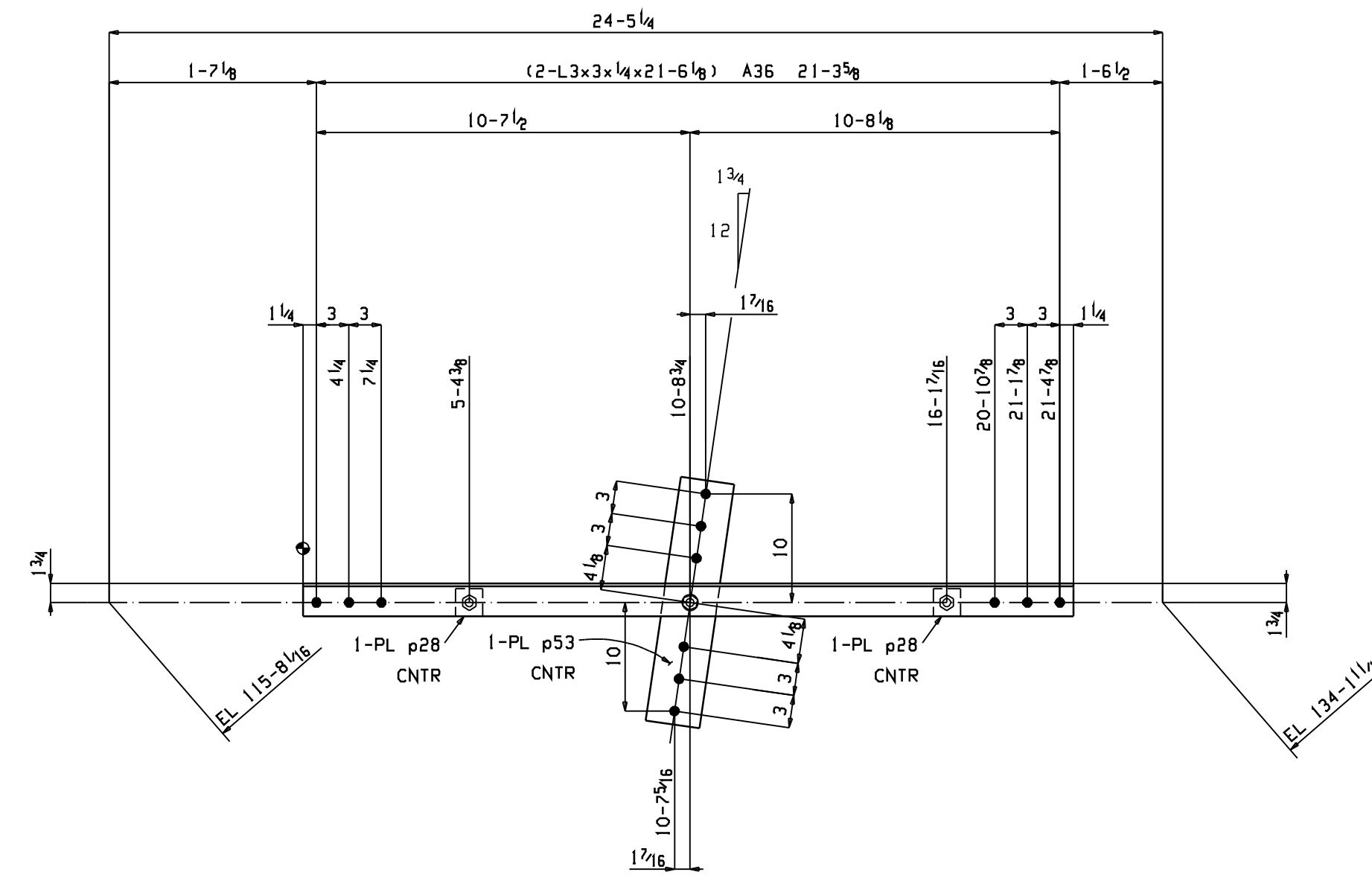
CUSTOMER:	DWG. NO.
JOB TITLE:	104-65
LOCATION:	JOB. NO.
DRAWN BY:	DATE:
CHK'D BY:	DATE:





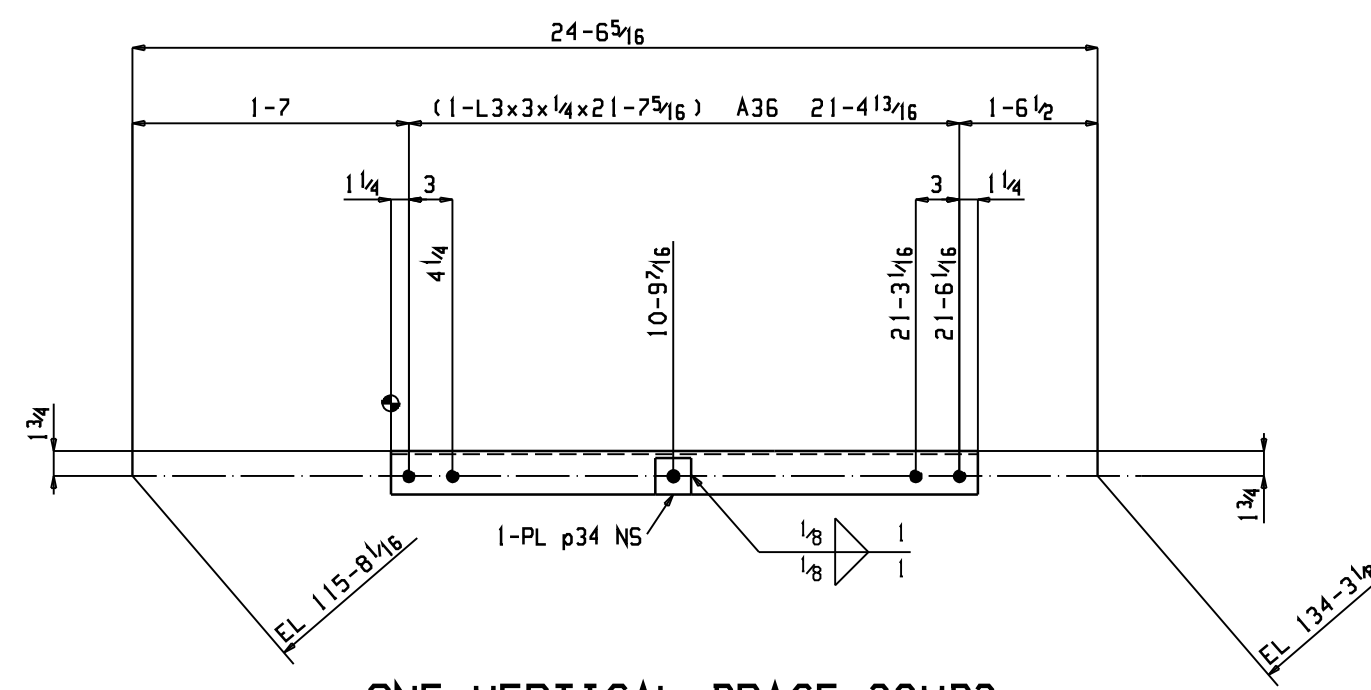
**ONE VERTICAL BRACE 28VB1**

SHOP BOLTS:  
3-3/4 x 2 1/4 A325N w/1HD WASH



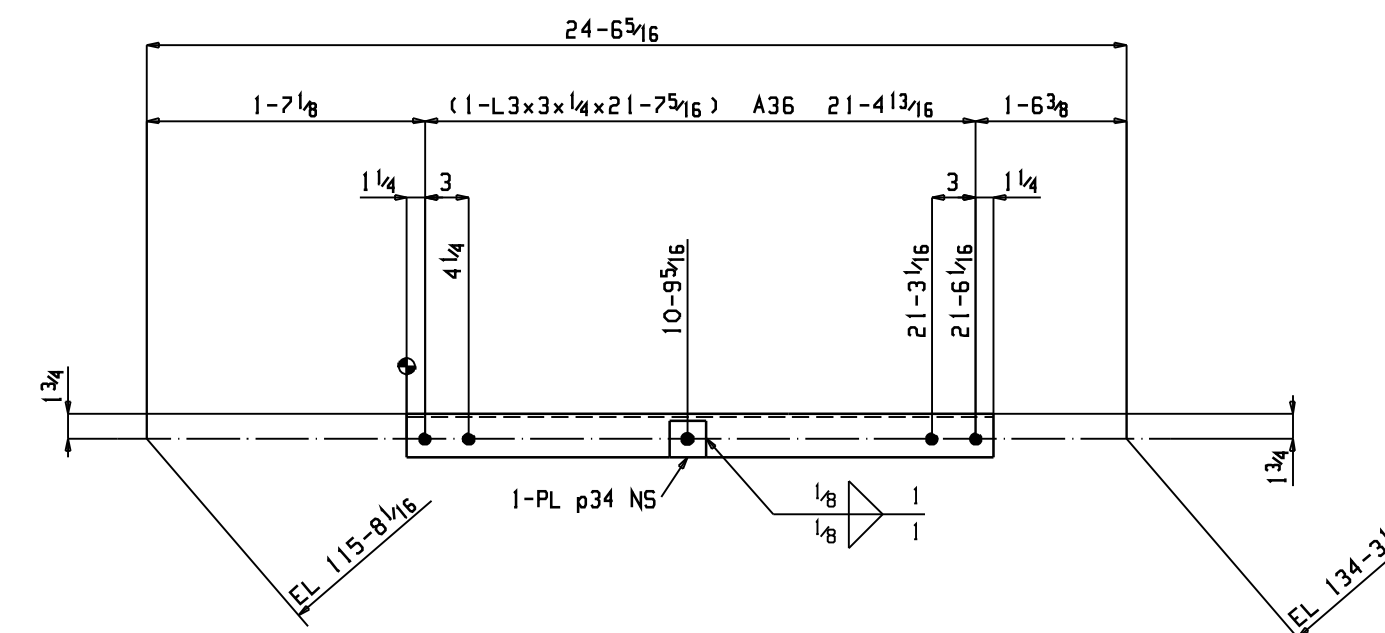
**ONE VERTICAL BRACE 28VB4**

SHOP BOLTS:  
3-3/4 x 2 1/4 A325N w/1HD WASH



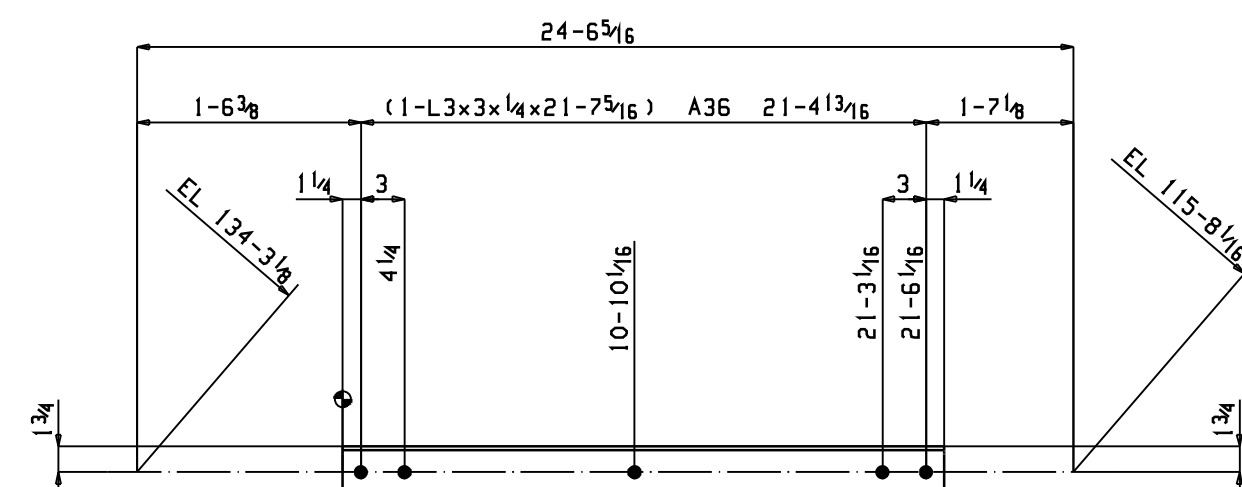
**ONE VERTICAL BRACE 28VB2**

SHOP NOTE:  
TOE DIRECTION FAR SIDE



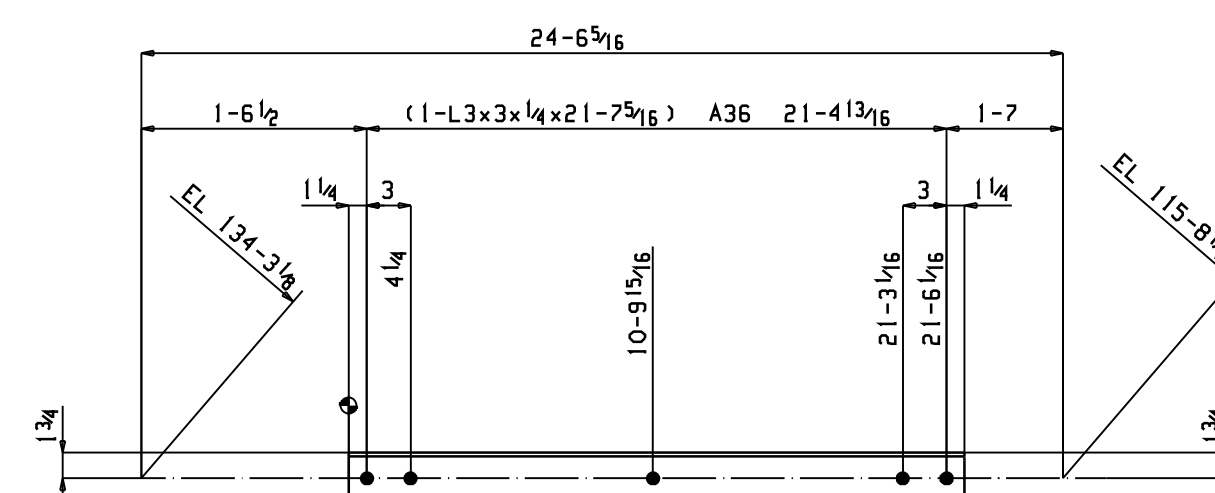
**ONE VERTICAL BRACE 28VB5**

SHOP NOTE:  
TOE DIRECTION FAR SIDE



**ONE VERTICAL BRACE 28VB3**

SHOP NOTE:  
TOE DIRECTION NEAR SIDE



**ONE VERTICAL BRACE 28VB6**

SHOP NOTE:  
TOE DIRECTION NEAR SIDE

**BILL OF MATERIAL**

MARK	QUAN.	SHAPE	LENGTH	REMARKS	WT.	WEIGHT
TOTAL					UNIT	TOTAL
28VB1	ONE	VERTICAL BRACE			235	234
28VB1R	1	L3x3x1/4	21 6 1/8	A36	105	105
28VB1L	1	L3x3x1/4	21 6 1/8	A36	105	105
p53	1	PL 5/8 x 5	1 10 3/4	A36	20	20
p28	2	PL 5/8 x 2 1/2	0 2 1/2	A36	1	2
	3	3/4 Dia A325N	0 2 1/4	1HD WASH	1	2
		FIELD BOLTS				
	3	3/4 Dia A325N	0 2 1/4	1HD WASH		
	3	3/4 Dia A325N	0 2 1/2	1HD WASH		
28VB2	ONE	VERTICAL BRACE			107	107
28VB2	1	L3x3x1/4	21 7 5/16	A36	106	106
p34	1	PL 3/8 x 2 1/2	0 2 1/2	A36	1	1
		FIELD BOLTS				
	1	3/4 Dia A325N	0 2	1HD WASH		
	4	3/4 Dia A325N	0 1 3/4	1HD WASH		
28VB3	ONE	VERTICAL BRACE			106	106
28VB3	1	L3x3x1/4	21 7 5/16	A36	106	106
		FIELD BOLTS				
	4	3/4 Dia A325N	0 1 3/4	1HD WASH		
28VB4	ONE	VERTICAL BRACE			235	235
28VB4R	1	L3x3x1/4	21 6 1/8	A36	105	105
28VB4L	1	L3x3x1/4	21 6 1/8	A36	105	105
p53	1	PL 5/8 x 5	1 10 3/4	A36	20	20
p28	2	PL 5/8 x 2 1/2	0 2 1/2	A36	1	2
	3	3/4 Dia A325N	0 2 1/4	1HD WASH	1	3
		FIELD BOLTS				
	3	3/4 Dia A325N	0 2 1/2	1HD WASH		
	3	3/4 Dia A325N	0 2 1/4	1HD WASH		
28VB5	ONE	VERTICAL BRACE			107	107
28VB5	1	L3x3x1/4	21 7 5/16	A36	106	106
p34	1	PL 3/8 x 2 1/2	0 2 1/2	A36	1	1
		FIELD BOLTS				
	1	3/4 Dia A325N	0 2	1HD WASH		
	4	3/4 Dia A325N	0 1 3/4	1HD WASH		
28VB6	ONE	VERTICAL BRACE			106	106
28VB6	1	L3x3x1/4	21 7 5/16	A36	106	106
		FIELD BOLTS				
	4	3/4 Dia A325N	0 1 3/4	1HD WASH		

Total weight : 894

**NOTES**  
 MATERIAL: ASTM A36 UNLESS NOTED  
 WELD: E70XX- ELECTRODES  
 OPEN HOLES: 1 3/16 UNLESS NOTED  
 PAINT: PREP: SP3  
 PRIME: GRAY 2 MIL, DFT  
 FINISH:  
 SHOP BOLTS SNUG TIGHT (U.N.O.)  
 BOLTS: A325 BLACK HEX HEAD (U.N.O.)

DRAWINGS ARE SUBMITTED FOR APPROVAL IN ACCORDANCE WITH  
 AISC MANUAL NINTH EDITION - PAGE 5-229 PARAGRAPH 4.2  
 AND PAGE 5-250 SECTION 4.

REV NO	DATE	DESCRIPTION	BY
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BY	CHKD	APPD	DATE	JOB NUMBER	SHEET NO.	28