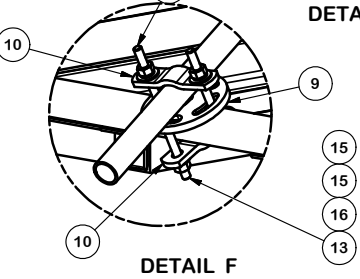
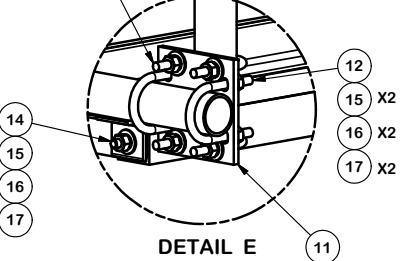
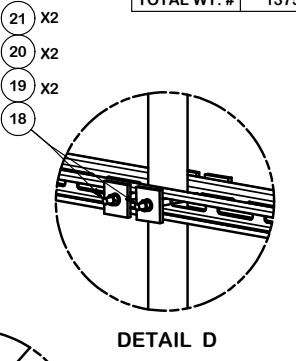
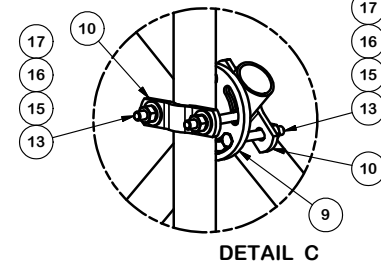
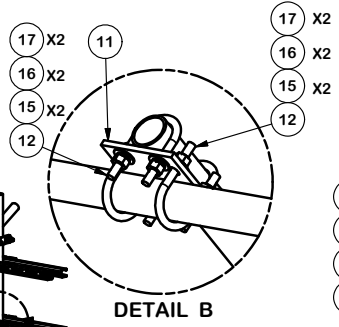
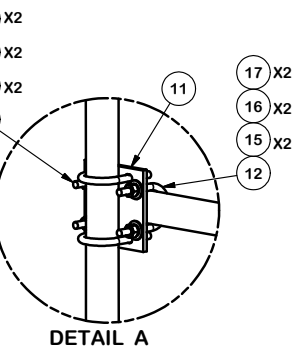


PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	5	P2174	2-3/8" OD X 174" SCH 40 GALVANIZED PIPE	174 in	55.75	278.73
2	3	P2126	2-3/8" OD X 126" SCH 40 GALVANIZED PIPE	126 in	40.75	122.26
3	2	P284	2-3/8" X 84" SCH 40 GALVANIZED PIPE	84 in	26.91	53.82
4	2	P263	2-3/8" X 63" SCH 40 GALVANIZED PIPE	63 in	20.18	40.37
5	2	P1126	1 1/4" X 126" SCH 40 PIPE (STIFF ARM)	126 in	25.12	50.23
6	6	X-232696	BALLAST TRAY WELDMENT - SITE PRO 1		66.53	399.19
7	2	X-RTP14	FRONT AND BACK HORIZONTAL TRAY SUPPORT WELDMENT		64.38	128.77
8	6	UNT10	UNISTRUT	120 in	20.38	122.27
9	8	X-127594	FLAT DISK CLAMP PLATE 4" CENTERS (GALV.)		2.51	20.05
10	16	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.91	14.61
11	16	SCX1	CROSSOVER PLATE 2-3/8" X 2-3/8"	6 in	3.71	59.34
12	64	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	40.01
13	32	G1204	1/2" x 4" HDG HEX BOLT GR5 FULL THREAD	4 in	0.27	8.64
14	24	G1202	1/2" x 2" HDG HEX BOLT GR5	2 in	0.18	4.22
15	184	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	6.27
16	184	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	2.56
17	184	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	13.18
18	12	SS38R-8	3/8" X 8" THREADED ROD (STAINLESS STEEL)		0.25	3.01
19	24	SQW38	3/8" SQUARE WASHER	2 in	0.29	6.94
20	24	SS38LW	3/8" SS LOCKWASHER		0.01	0.16
21	24	SS38NUT	3/8" SS HEX NUT		0.02	0.44
					TOTAL WT. #	1375.07

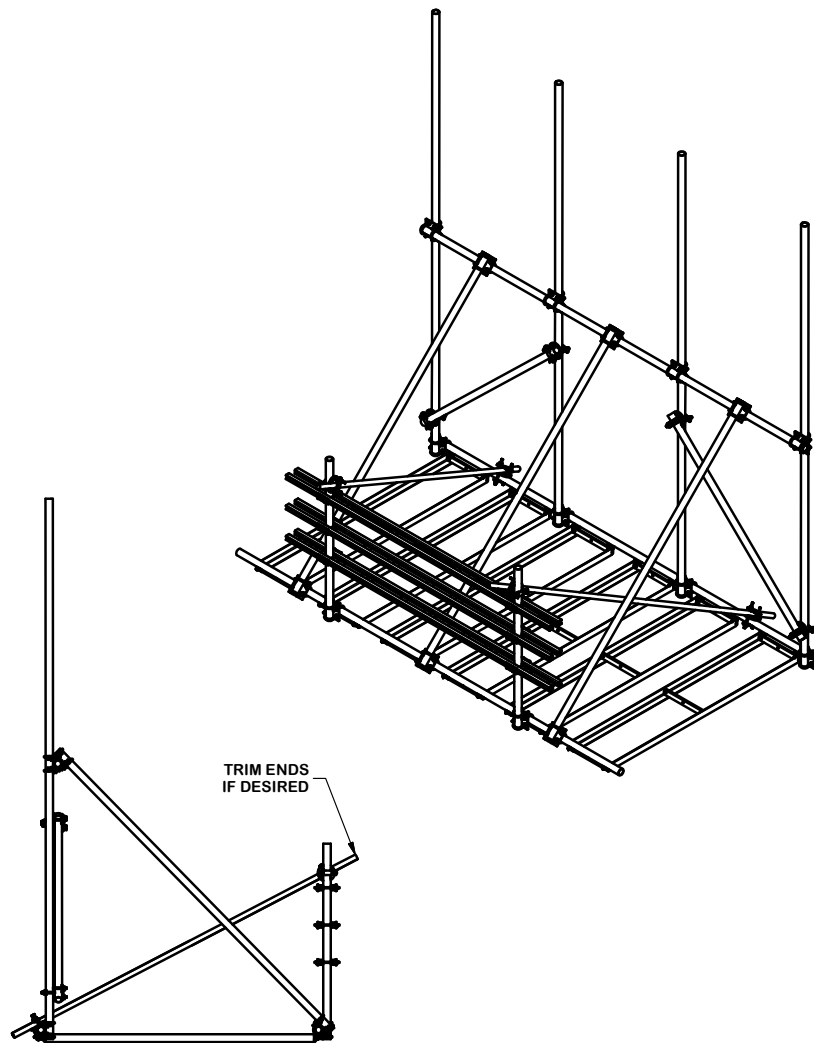
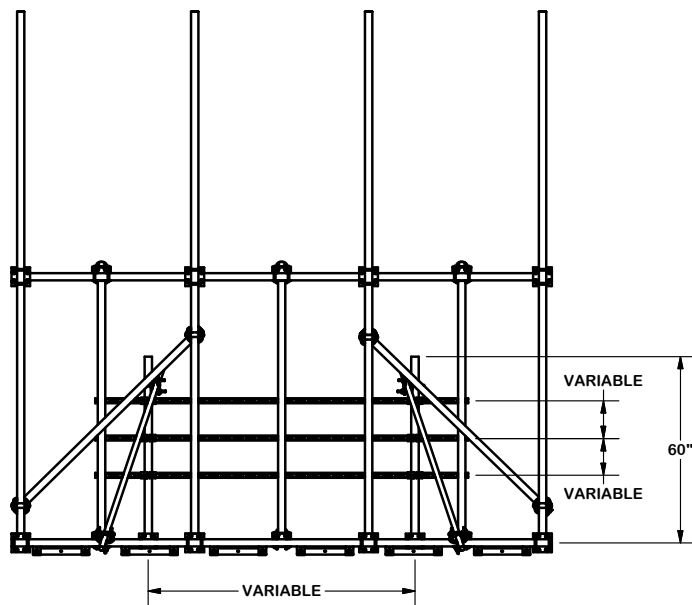
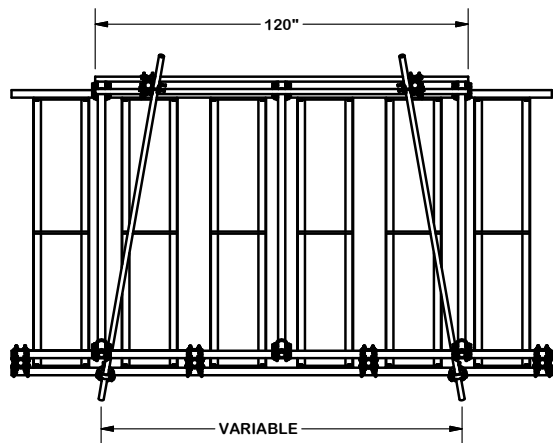


**TOLERANCE NOTES**  
 TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
 SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.030"$ )  
 DRILLED AND GAS CUT HOLES ( $\pm 0.030"$ ) - NO CONING OF HOLES  
 LASER CUT EDGES AND HOLES ( $\pm 0.010"$ ) - NO CONING OF HOLES  
 BENDS ARE  $\pm 1/2$  DEGREE  
 ALL OTHER MACHINING ( $\pm 0.030"$ )  
 ALL OTHER ASSEMBLY ( $\pm 0.060"$ )

**PROPRIETARY NOTE:**  
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DESCRIPTION		3 LEVEL RRU / EQUIPMENT RACK FOR RTP FRAMES	
CPD NO.	DRAWN BY	ENG. APPROVAL	
	CEK 4/23/2015		
CLASS	SUB	DRAWING USAGE	CHECKED BY
81	01	CUSTOMER	BMC 4/24/2015

 Engineering Support Team: 1-888-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	<b>Valmont COMPANY</b>
PART NO.	RTP14-3RRU
DWG. NO.	RTP14-3RRU



**TOLERANCE NOTES**

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DESCRIPTION  
**3 LEVEL  
 RRU / EQUIPMENT RACK  
 FOR RTP FRAMES**

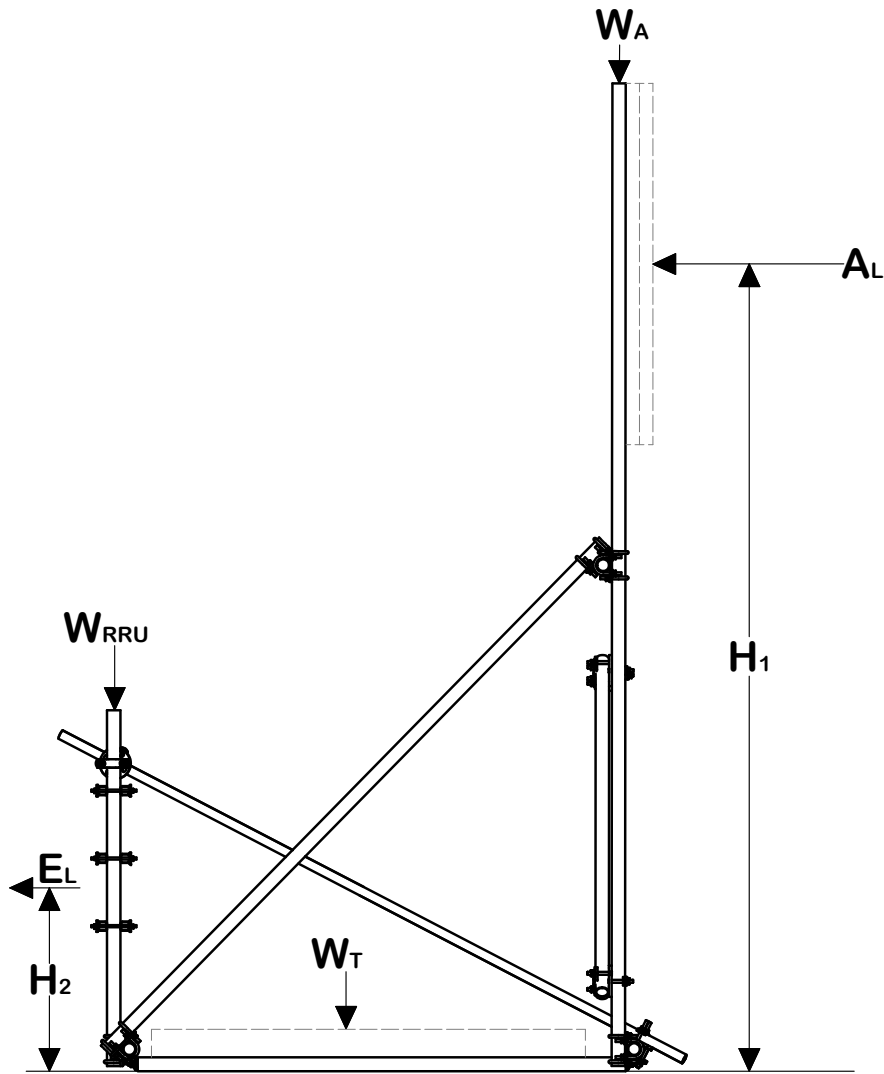
**SITE PRO 1**  
 A valmont COMPANY

Engineering Support Team:  
 1-888-753-7446

Locations:  
 New York, NY  
 Atlanta, GA  
 Los Angeles, CA  
 Plymouth, IN  
 Salem, OR  
 Dallas, TX

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CLASS	DRAWING USAGE	CHECKED BY
81	01	CUSTOMER
		BMC 4/24/2015

PART NO.	RTP14-3RRU
DWG. NO.	RTP14-3RRU



## RTP FRAMES & RTP-RRU BALLAST EQUATIONS

BALLAST EQUATION WITH 1.5 SAFETY FACTOR:

$$\text{FRONT WIND} = W_T = \frac{((A_L * H_1) + (E_L * H_2)) 1.5 - (W_A * 7.25)}{3.625}$$

$$\text{BACK WIND} = W_T = \frac{((A_L * H_1) + (-E_L * H_2)) 1.5 - (W_{RRU} * 7.25)}{3.625}$$

BALLAST EQUATION WITH REV. G LOADING:

$$\text{FRONT WIND} = W_T = \frac{((A_L * H_1) + (E_L * H_2)) 1.6 - (W_A * 7.25)}{3.625 (0.9)}$$

$$\text{BACK WIND} = W_T = \frac{((A_L * H_1) + (-E_L * H_2)) 1.6 - (W_{RRU} * 7.25)}{3.625 (0.9)}$$

$$W = W_T / 6$$

E <sub>L</sub>	= EQUIPMENT LOAD (NON-FACTORED)	lbs
A <sub>L</sub>	= ANTENNA LOAD (NON-FACTORED)	lbs
H <sub>1</sub> & H <sub>2</sub>	= HEIGHT FROM ROOFTOP	ft
W <sub>T</sub>	= TOTAL BALLAST WEIGHT	lbs
W	= BALLAST WEIGHT PER TRAY	lbs
W <sub>RRU</sub>	= 200 + EQUIPMENT WEIGHT	lbs
W <sub>A</sub>	= 260 + ANTENNA WEIGHT	lbs

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### DESCRIPTION

3 LEVEL  
 RRU / EQUIPMENT RACK  
 FOR RTP FRAMES



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PART NO.	RTP14-3RRU
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