

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF

DRAWING USAGE

**CUSTOMER** 

81

01

**CHECKED BY** 

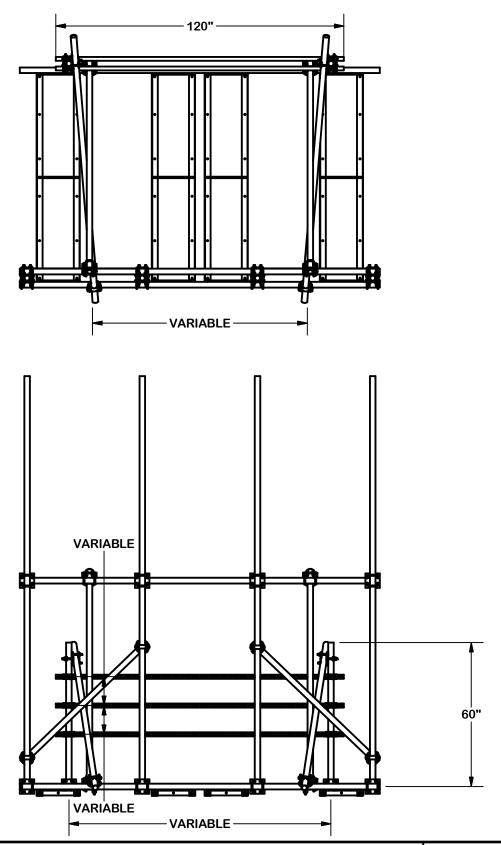
4/24/2015

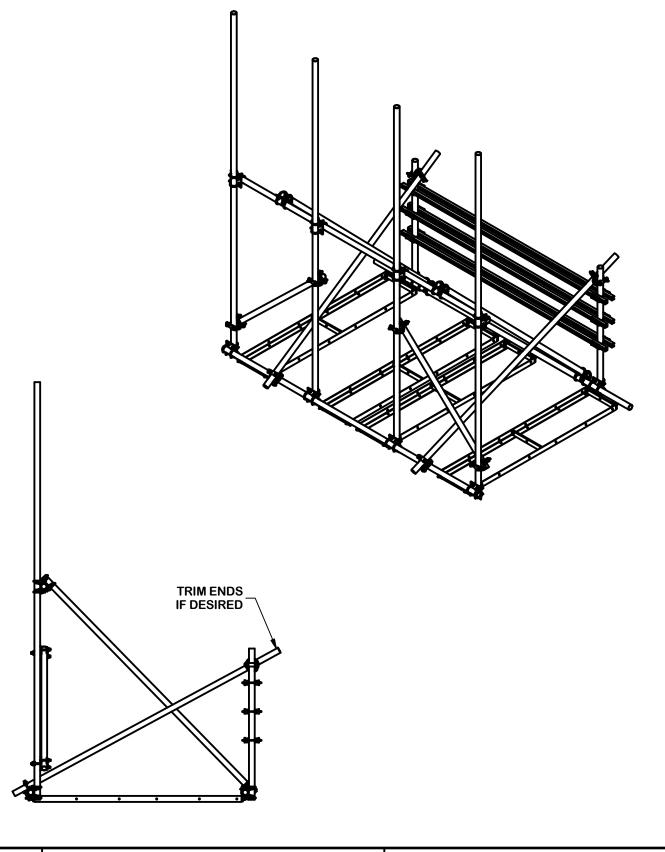
**BMC** 

DWG. NO.

RTP12-3RRU

OF 3





# **TOLERANCE NOTES**

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION

CUSTOMER

81

3 LEVEL RRU / EQUIPMENT RACK FOR RTP FRAMES



A valmont **COMPANY** 

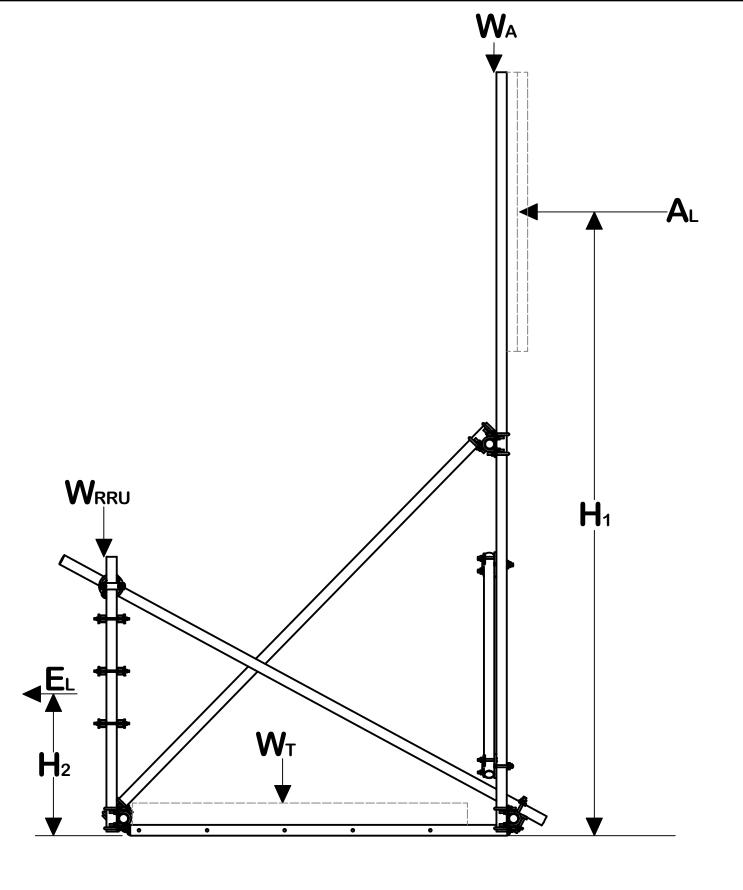
Engineering Support Team: 1-888-753-7446 Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

PD N	О.	DRAWN BY	ENG. APPROVAL
		CEK 4/23/2015	
ASS	SUB	DRAWING USAGE	CHECKED BY

BMC 4/24/2015

RTP12-3RRU DWG. NO. RTP12-3RRU

OF PAGE



# RTP FRAMES & RTP-RRU BALLAST EQUATIONS

#### BALLAST EQUATION WITH 1.5 SAFETY FACTOR:

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

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

## BALLAST EQUATION WITH REV. G LOADING:

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

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

$$W = WT / 4$$

BMC 4/24/2015

EL	= EQUIPMENT LOAD (NON-FACTORED)	lbs
AL	= ANTENNA LOAD (NON-FACTORED)	lbs
H <sub>1</sub> & H <sub>2</sub>	= HEIGHT FROM ROOFTOP	ft
W⊤	= TOTAL BALLAST WEIGHT	lbs
W	= BALLAST WEIGHT PER TRAY	lbs
<b>W</b> RRU	= 200 + EQUIPMENT WEIGHT	lbs
WA	= 260 + ANTENNA WEIGHT	lbs

## **TOLERANCE NOTES**

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030")

DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030")

ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF

DESCRIPTION

01

81

3 LEVEL RRU / EQUIPMENT RACK FOR RTP FRAMES



Engineering Support Team: 1-888-753-7446

New York, NY
Atlanta, GA
Los Angeles, CA
Hymouth, IN
Salem, OR
Dallas, TX

 CPD NO.
 DRAWN BY
 ENG. APPROVAL
 PART NO.

 CEK
 4/23/2015
 CHECKED BY
 DWG. NO.

CUSTOMER

PART NO. RTP12-3RRU

RTP12-3RRU

OF 3