

1         2         X-VFAW         SUPPORT ARM           2         1         X-HDCAMTBW         CLAMP WELDMENT FOR BCAM-HD	JNIT WT. 71.41 33.86	NET WT. 142.81
2 1 X-HDCAMTBW CLAMP WELDMENT FOR BCAM-HD		142.81
	33.86	
		33.86
3 1 X-MHTPHD MULTI-HOLE TAPER PLATE WELDMENT	36.24	36.24
4 1 X-HDCAMSS ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD	16.39	16.39
5 2 X-VFAPL4 VFA-HD PIVOT PLATE 12 in	15.88	31.77
6 2 X-LCBP4 BENT BACKING PLATE 13 in	19.00	38.01
7 4 X-SPTB SLIDING PIPE TIE BACK PLATE 5 1/2 in	5.87	23.49
8 1 X-HDCAMSP POSITIONING PLATE WELDMENT FOR BCAM-HD	2.58	2.58
9 4 X-TBCA TIE BACK CLIP ANGLE	2.01	8.02
10         10         SCX2         CROSSOVER PLATE         7 in	4.80	47.96
11 4 MCP CLAMP HALF 1/2" THICK, 11-5/8" LONG 12 1/16 in	3.59	14.37
12 8 DCP 1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF 8 1/8 in	2.36	18.90
13 2 P2126 2-3/8" X 126" (2" SCH. 40) GALVANIZED PIPE 126 in	40.75	81.50
14 2 P30150 2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE 150 in	76.94	153.87
15 4 A34212 3/4" x 2-1/2" UNC HEX BOLT (A325) 2 1/2 in	0.48	1.92
16 4 G34FW 3/4" HDG USS FLATWASHER	0.06	0.24
17 4 G34LW 3/4" HDG LOCKWASHER	0.04	0.17
18 4 G34NUT 3/4" HDG HEAVY 2H HEX NUT	0.21	0.85
19 8 G58R-18 5/8" x 18" THREADED ROD (HDG.)	1.57	12.54
20 4 G58R-12 5/8" x 12" THREADED ROD (HDG.)	1.05	4.18
21 4 G58R-8 5/8" x 8" THREADED ROD (HDG.)	0.70	2.79
22 4 X-UB5300 5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)	1.15	4.60
23 8 X-UB5258 5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)	1.00	8.00
24 2 G5807 5/8" x 7" HDG HEX BOLT GR5 FULL THREAD 7 in	0.70	1.41
25 1 G5806 5/8" x 6" HDG HEX BOLT GR5 FULL THREAD 6 in	0.62	0.62
26 8 G5804 5/8" x 4" HDG HEX BOLT GR5	0.44	3.55
27 4 G5802 5/8" x 2" HDG HEX BOLT GR5	0.27	1.08
28 8 A582114 5/8" x 2-1/4" HDG A325 HEX BOLT 2 1/4 in	0.31	2.50
29 25 G58FW 5/8" HDG USS FLATWASHER 1/8 in	0.07	1.76
30 66 G58LW 5/8" HDG LOCKWASHER	0.03	1.72
31 71 G58NUT 5/8" HDG HEAVY 2H HEX NUT	0.13	9.22
32 48 X-UB1300 1/2" X 3" X 5" X 2" GALV U-BOLT	0.74	35.45
33 20 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" GALV. U-BOLT	0.66	13.13
34 80 G12FW 1/2" HDG USS FLATWASHER 3/32 in	0.03	2.73
35 80 G12LW 1/2" HDG LOCKWASHER 1/8 in	0.01	1.11
36 80 G12NUT 1/2" HDG HEAVY 2H HEX NUT	0.07	5.73
37 5 P30120 2-7/8" x 120" (2-1/2" SCH. 40) GALVANIZED PIPE 120 in	58.07	290.33
TO	TAL WT. #	1055.41

**TOLERANCE NOTES** 

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

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

PROPRIETARY NOTE:
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VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION 12' 6" HEAVY DUTY V-FRAME ASSEMBLY W/ 2 STIFF ARMS & MOUNT PIPES

CSL 1/25/2017

CUSTOMER

CHECKED BY

вмс

DRAWN BY

DRAWING USAGE

CPD NO.

87 02

SP1

CLASS SUB

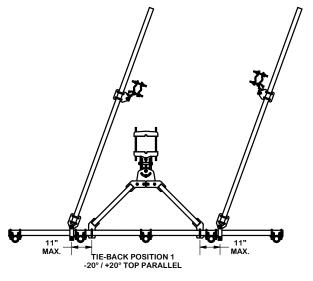


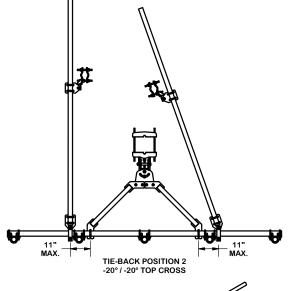
Engineering
Support Team:
1-888-753-7446
Salem, OR
Dallas, TX

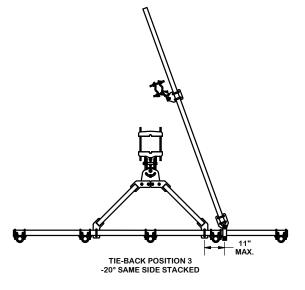
Α	UPDATED BCAM VERSION 1 TO BCAM VERSION 2	SP1	CSL	7/2/2018
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
	REVISION HISTORY			

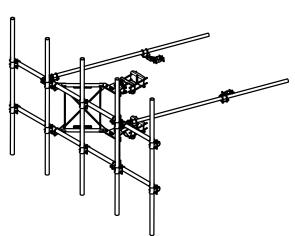
ENG. APPROVAL PART NO. VFA12-WLL-30120 PAGE OF 5 DWG. NO. VFA12-WLL-30120 5/3/2018

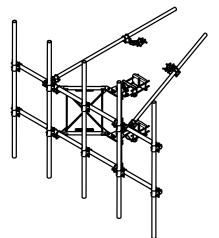
# **TIE-BACK POSITIONS**

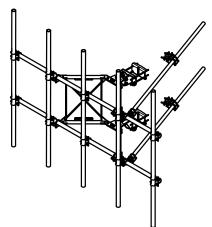












## **TOLERANCE NOTES**

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ROPRIETARY NOTE:	
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IDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE	MITUOLIT THE CONCENT OF
	MILITOUT THE CONSERT OF
ALMONT INDUSTRIES IS STRICTLY PROHIBITED.	

DESCRIPTION 12' 6" HEAVY DUTY V-FRAME ASSEMBLY

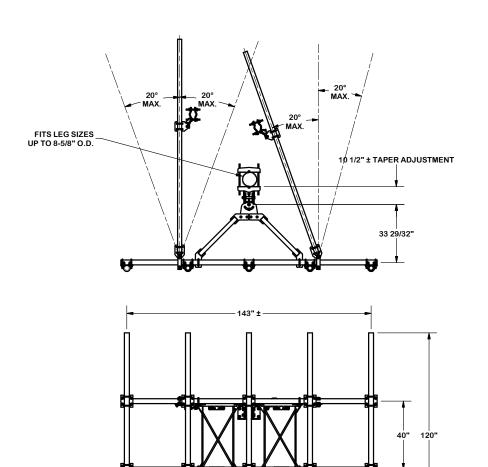
W/ 2 STIFF AR & MOUNT PIP		
BY	ENG. APPROVAL	
1/25/2017		

SITE PRO

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

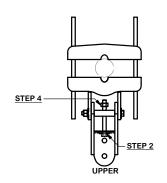
Α	UPDATED BCAM VERSION 1 TO BCAM VERSION 2	SP1	CSL	7/2/2018
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
	REVISION HISTORY			

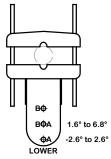
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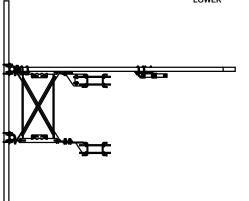


## **ANGLE CALIBRATING PROCEDURE:**

- 1. MEASURE TOWER TAPER AND PICK LOWER BRACKET HOLE:
  - HOLE A = -2.6° TO 2.6°
  - HOLE B = 1.6° TO 6.8°
- 2. USE CALIBRATING BOLT TO ADJUST FRAME TO **DESIRED TAPER**
- 3. TORQUE LOCKING BOLTS TO 100 ft.-lbs.
- 4. ADVANCE LOCKING NUT TO POSITIONING PLATE. THEN TIGHTEN.







## **TOLERANCE NOTES**

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BENDS ARE ± 1/2 DEGREE ALL OTHER MACHINING (± 0.030")

ALL OTHER ASSEMBLY (± 0.060")

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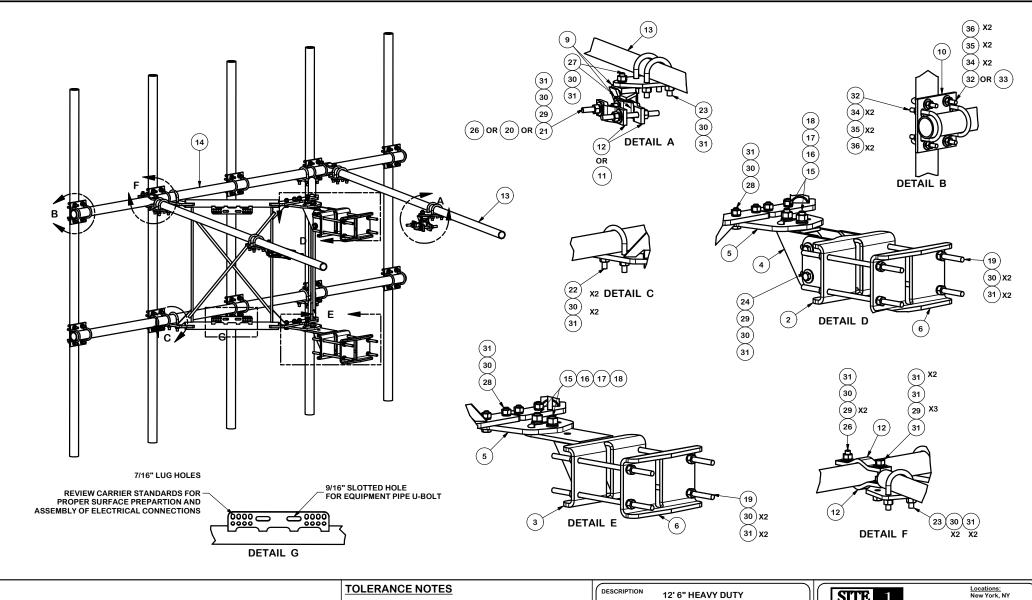
DESCRIPTION 12' 6" HEAVY DUTY V-FRAME ASSEMBLY W/ 2 STIFF ARMS

& MOUNT PIPES

Locations: New York, NY Atlanta, GA Engineering Atlanta, GA
Support Team: Los Angeles, CA
1-888-753-7446 Plymouth, IN Dallas, TX

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A UPDATED BCAM VERSION 1 TO BCAM VERSION 2 SP1 CSL 7/2/2018 REV DESCRIPTION OF REVISIONS CPD BY REVISION HISTORY



### A UPDATED BCAM VERSION 1 TO BCAM VERSION 2 SP1 CSL 7/2/2018 REV DESCRIPTION OF REVISIONS CPD BY DATE REVISION HISTORY

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (\$ 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (\$ 0.030") - NO CONING OF HOLES

BENDS ARE ± 1/2 DEGREE

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

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V-FRAME ASSEMBLY W/ 2 STIFF ARMS

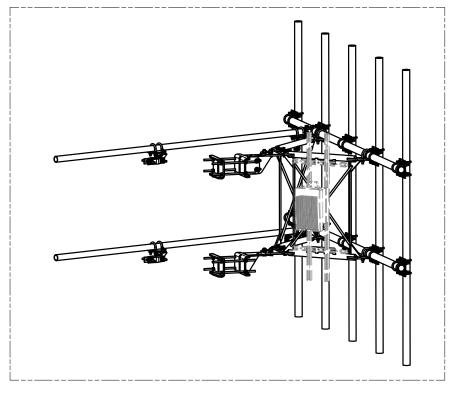
& MOUNT PIPES

A valmont **COMMAN** 

Engineering Support Team: 1-888-753-7446

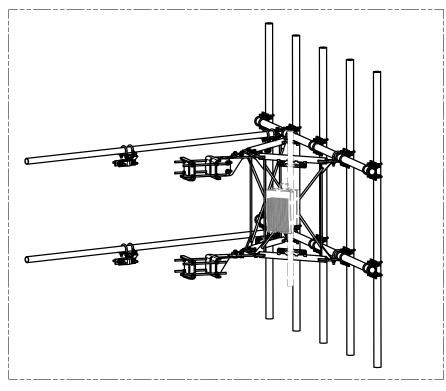
Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

CPD NO		DRAWN BY CSL 1/25/2017	ENG. APPROVAL	\\F\12\\\  \ 2012\\	4 0 2
CLASS 87	SUB 02	DRAWING USAGE CUSTOMER	CHECKED BY <b>BMC</b> 5/3/2018	DWG. NO.	AGE OF 5
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UNISTRUT AND HARDWARE SOLD SEPARATELY.

**REQUIRES 3/8" HARDWARE** 



**EQUIPMENT PIPE AND HARDWARE** SOLD SEPARATELY.

**REQUIRES 1/2" HARDWARE** AND 2-3/8" TO 4-1/2" O.D. PIPE

					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")	CPD N		DRAW
A	UPDATED BCAM VERSION 1 TO BCAM VERSION 2	SP1	CSL	7/2/2018				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE	PROPRIETARY NOTE: THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT	CLASS		DRAWI
	REVISION HISTORY				INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF	87	02	С

**TOLERANCE NOTES** 

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:

DESCRIPTION 12' 6" HEAVY DUTY V-FRAME ASSEMBLY W/ 2 STIFF ARMS & MOUNT PIPES

	SITE PRO	
-		

Engineering Support Team: 1-888-753-7446 Salem, OR Dallas, TX

	CPD NO.		DRAWN BY CSL 1/25/2017	ENG. APPROVAL		PART NO.	VFA12-WLL-30120	5 0
LMONT	CLASS 87	SUB 02	DRAWING USAGE CUSTOMER	CHECKED BY BMC 5/	3/2018	DWG. NO.	VFA12-WLL-30120	F 5
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