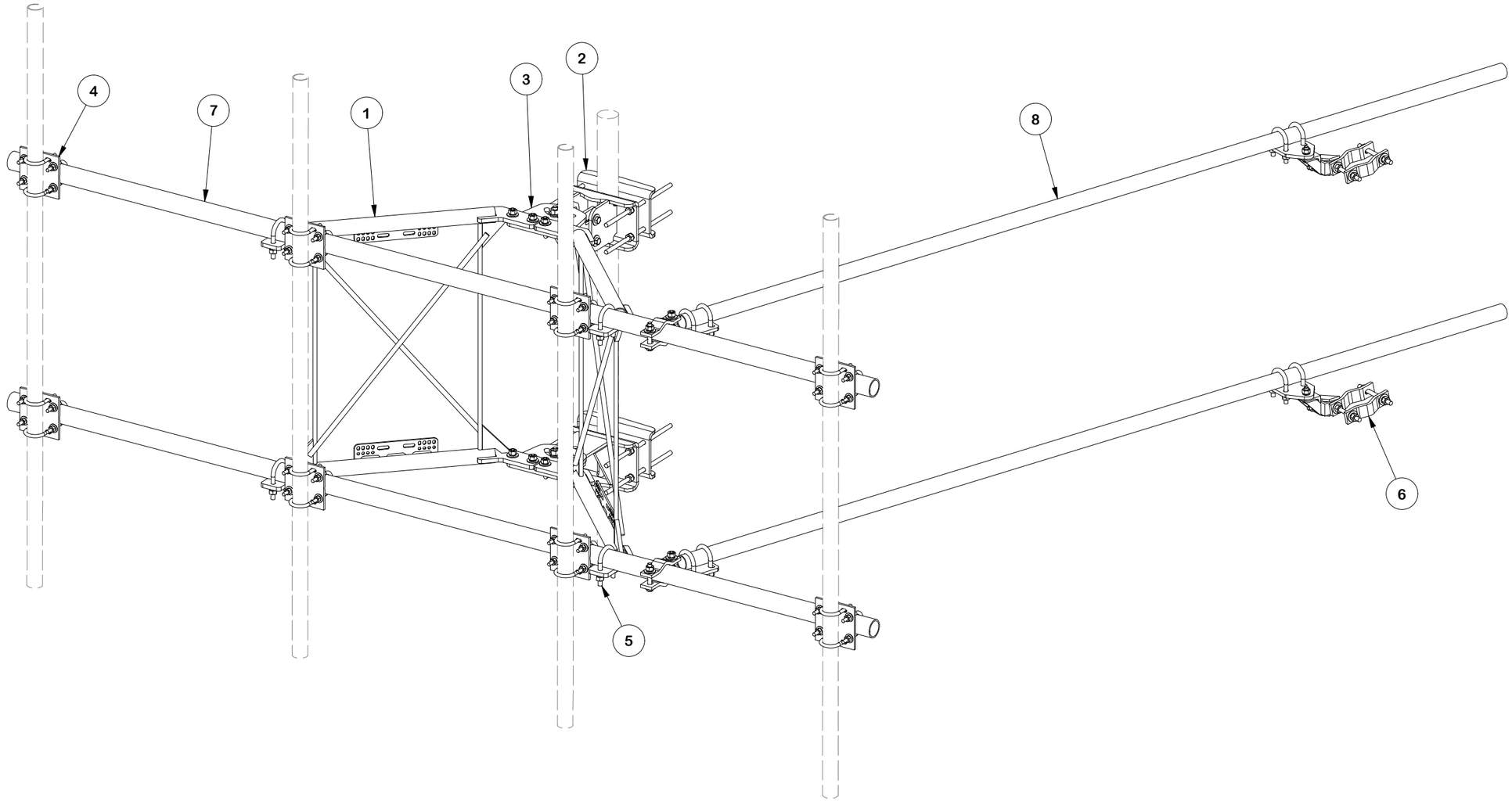
## PARTS LIST

| ITEM | QTY | PART NO. | BOX NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
|---|---|---|---|---|---|---|---|
| 1 | 2 | X-VFAW | | SUPPORT ARM | | 71.41 | 142.81 |
| 2 | 1 | BCAM-HD | | HEAVY DUTY BOLT CALIBRATED ANGLE MAINSTAY | | 147.01 | 147.01 |
| 3 | 1 | VFAPL4-K | P-VFAPL4-K | HD FRAME PIVOT PLATE KIT | | 39.25 | 39.25 |
| 4 | 8 | SCX2-K | P-SCX2-K | CROSSOVER PLATE KIT | | 8.84 | 70.73 |
| 5 | 1 | VFAHD-FACEHW | | HARDWARE KIT FOR VFA SECTOR FRAME | | 17.93 | 17.93 |
| 6 | 2 | SPTB-U-NP | | SLIDING TIE-BACK ASSEMBLY KIT | | 52.37 | 104.73 |
| 7 | 2 | P30156 | | 2-7/8" X 156" (2-1/2" SCH. 40) GALVANIZED PIPE | 156 in | 80.01 | 160.03 |
| 8 | 2 | P2156 | | 2-3/8" X 156" SCH. 40 GALVANIZED PIPE (A53 Gr.B Fy=35 ksi min.) | 156 in | 50.46 | 100.91 |
| | | | | | | TOTAL WT. # | 783.42 |




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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.

| REV | DESCRIPTION OF REVISIONS | CPD | BY | DATE |
|---|---|---|---|---|
| A | MADE SUPER ASSEMBLY & SWITCHED P30150 TO P30156 | NCS | ADB | 7/7/2025 |

REVISION HISTORY

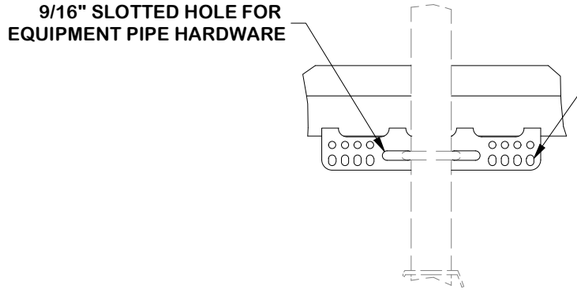
DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY

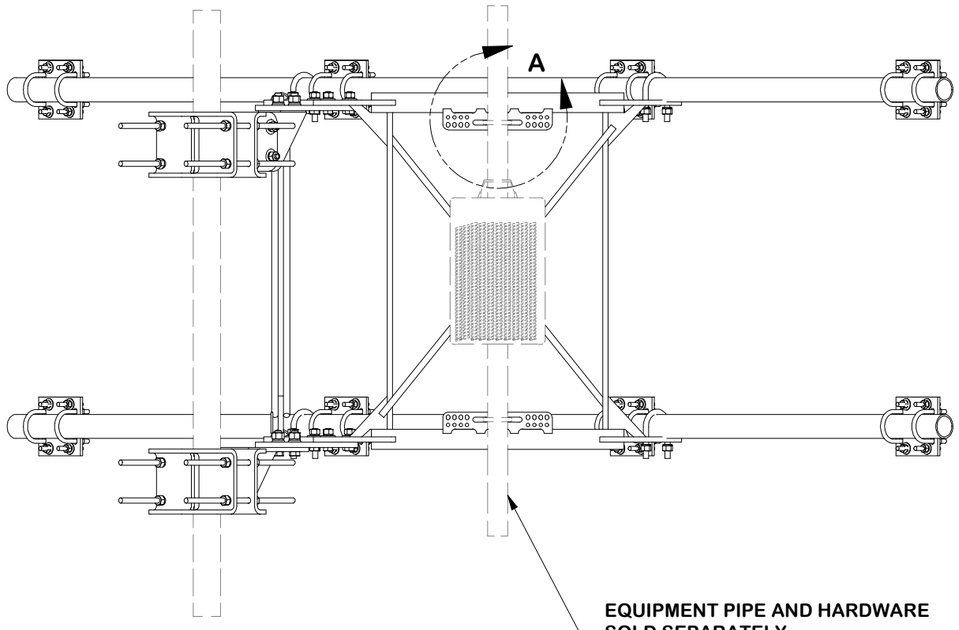
Engineering
Support Team:
sp1engineering@valmont.com

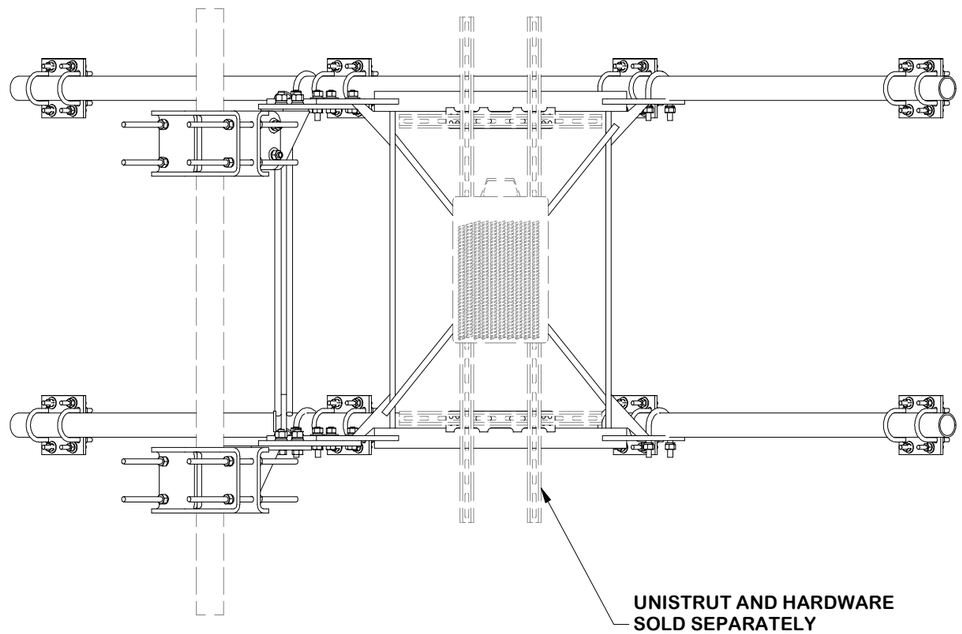
| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | VFA12-HD-TM1 |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |




**DETAIL A**




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

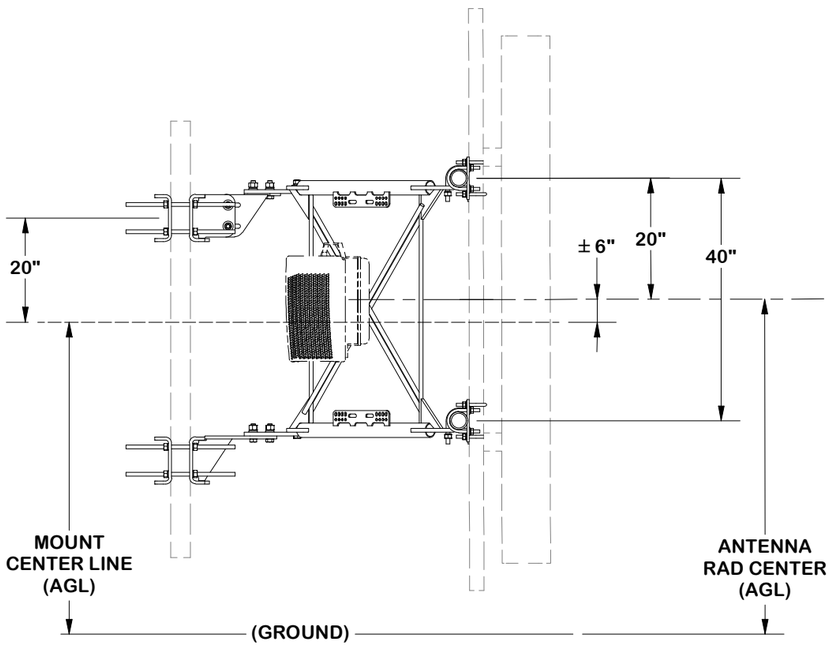
SITE PRO 1
A valmont COMPANY

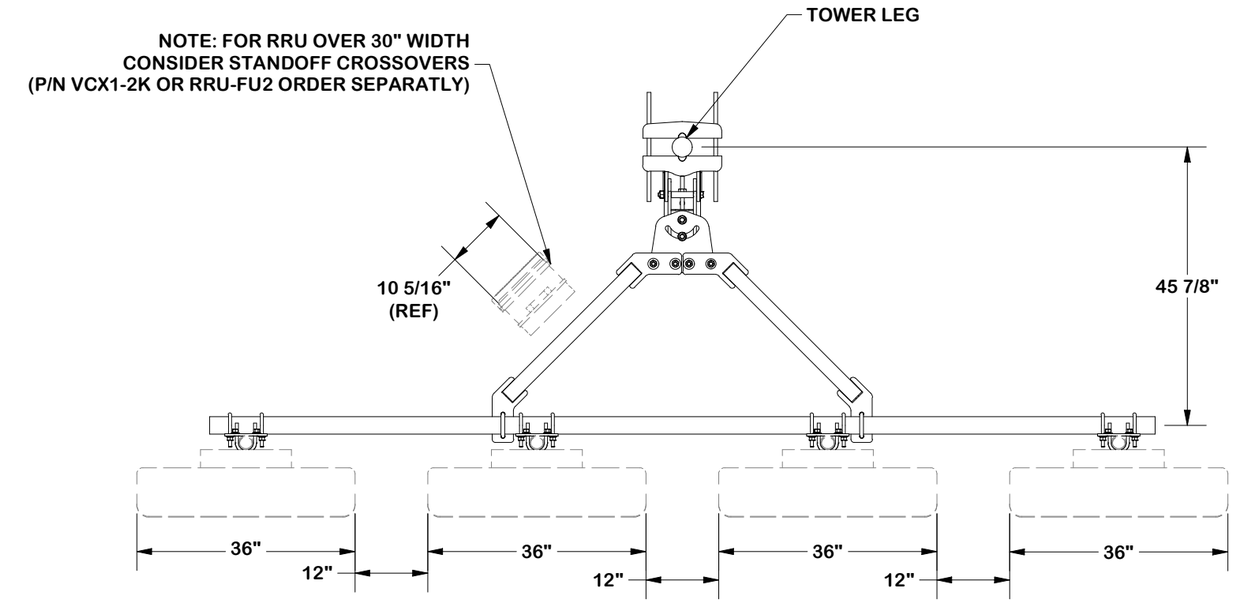
Engineering
Support Team:
sp1engineering@valmont.com

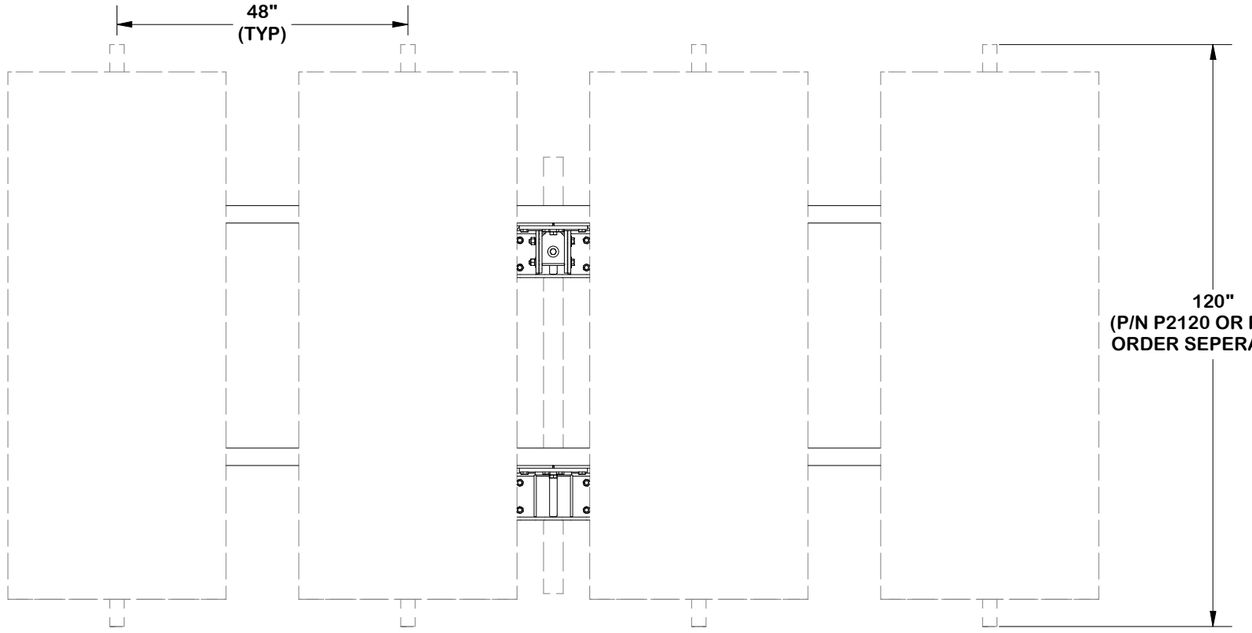
| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | VFA12-HD-TM1 |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

# 3 ANTENNA SECTOR FRAME LAYOUT




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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.

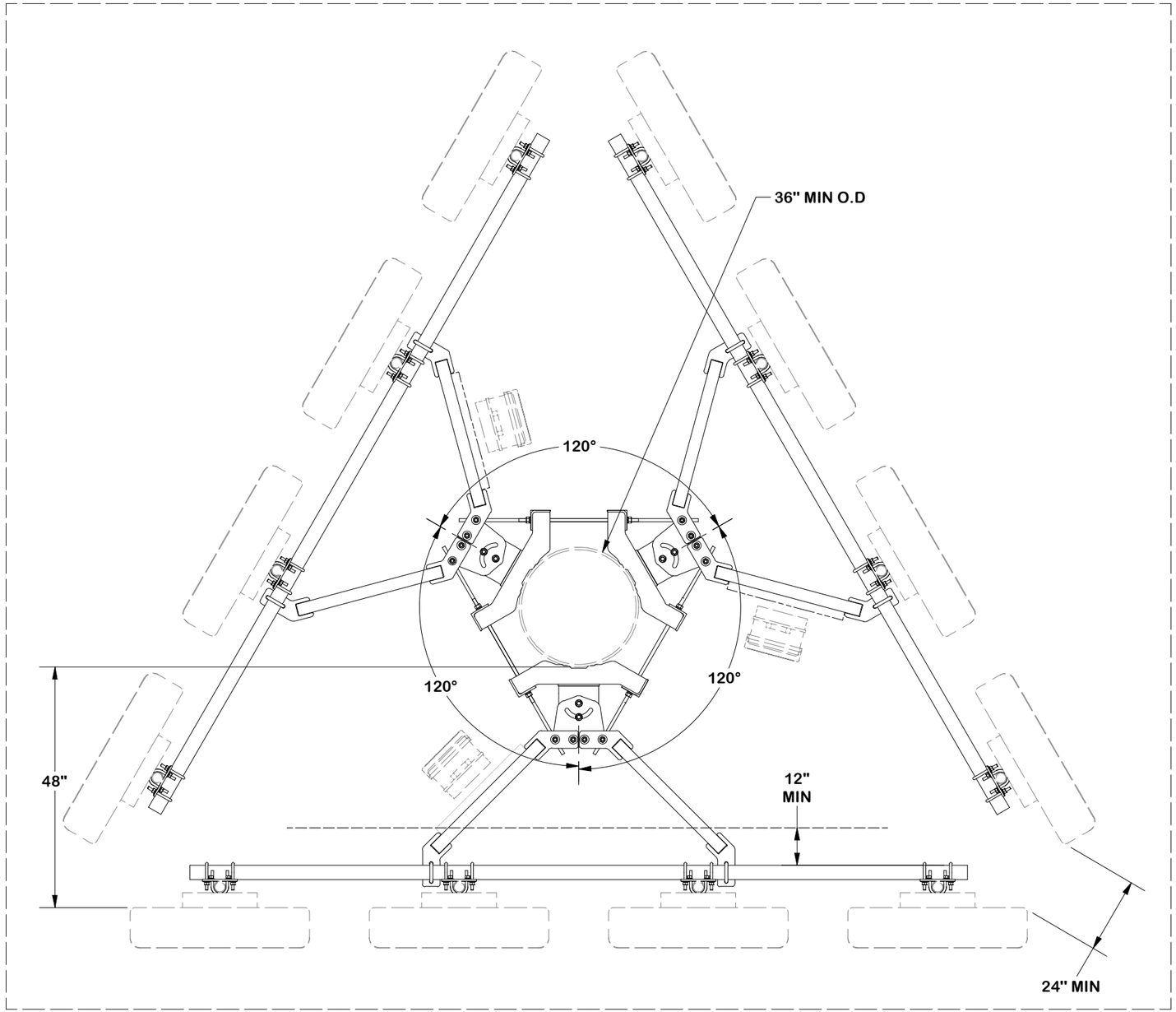
DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. | PAGE |
|---|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | VFA12-HD-TM1 | 3 OF 16 |
| CLASS / SUB: 87 / 02 | DRAWING USAGE: CUSTOMER | CHECKED BY: CSL 7/7/2025 | DWG. NO. VFA12-HD-TM1 | |

# MONOPOLE CORNER LAYOUT




NOTE: TIEBACKS OMITTED FOR CLARITY

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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.

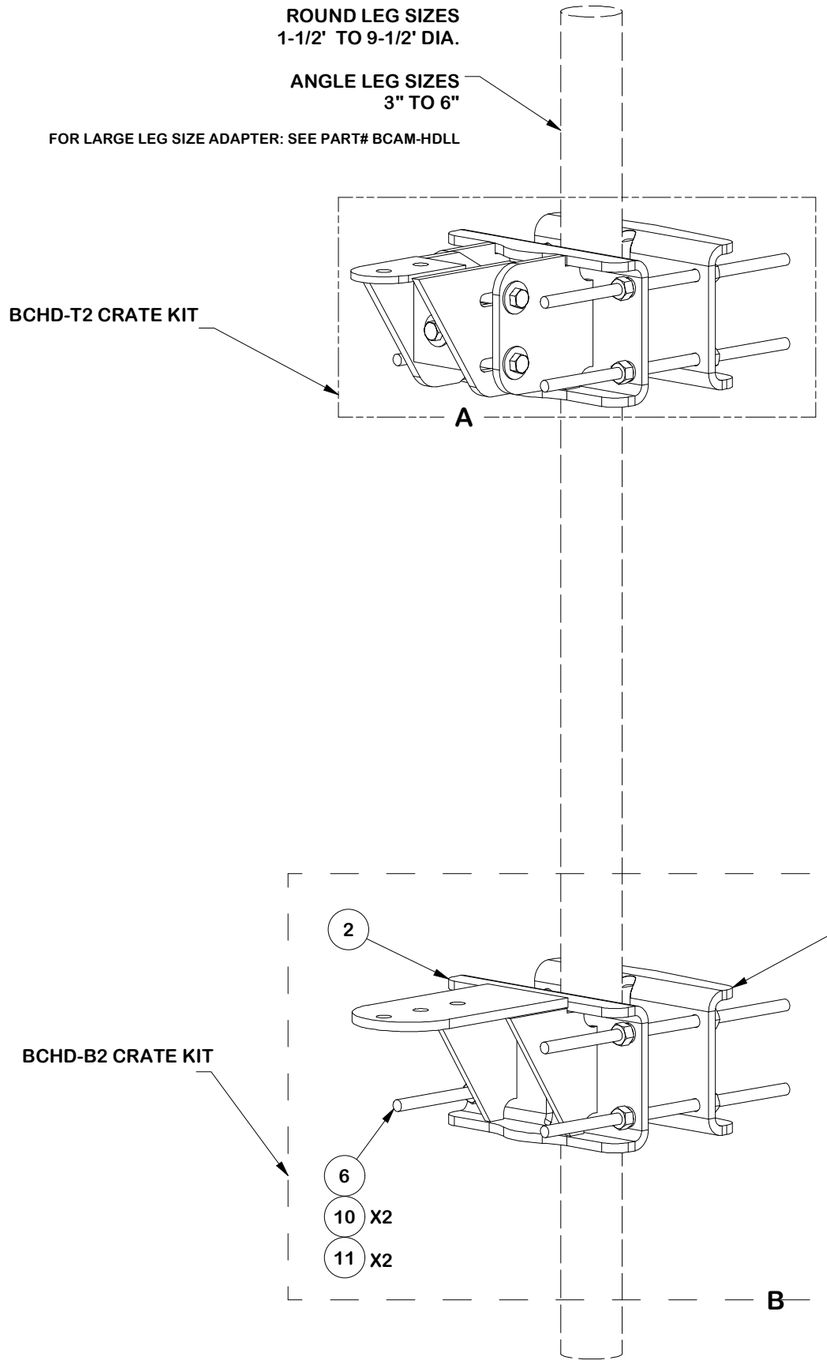
DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | CORNER LAYOUT |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |




| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 1 | X-HDCAMTBW | CLAMP WELDMENT FOR BCAM-HD | | 33.86 | 33.86 |
| 2 | 1 | X-MHTPHD | MULTI-HOLE TAPER PLATE WELDMENT | | 36.24 | 36.24 |
| 3 | 2 | X-LCBP4 | BENT BACKING PLATE | 13 in | 20.04 | 40.09 |
| 4 | 1 | X-HDCAMSS | ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD | | 16.39 | 16.39 |
| 5 | 1 | X-HDCAMSP | POSITIONING PLATE WELDMENT FOR BCAM-HD | | 2.58 | 2.58 |
| 6 | 8 | G58R-18 | 5/8" x 18" THREADED ROD (HDG.) | | 1.57 | 12.54 |
| 7 | 2 | G5807 | 5/8" x 7" HDG HEX BOLT GR5 FULL THREAD | 7 in | 0.70 | 1.41 |
| 8 | 1 | G5806 | 5/8" x 6" HDG HEX BOLT GR5 FULL THREAD | 6 in | 0.62 | 0.62 |
| 9 | 5 | G58FW | 5/8" HDG USS FLATWASHER | 1/8 in | 0.07 | 0.35 |
| 10 | 18 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.47 |
| 11 | 19 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 2.47 |
| | | | | | TOTAL WT. # | 147.02 |

** FOR DETAIL SEE PAGE 2**

| REV | DESCRIPTION OF REVISIONS | CPD | BY | DATE |
|---|---|---|---|---|
| A | REPLACED C CHANNEL BRKT WITH FORMED PLATE BRKT | SP1 | KC8 | 4/24/2018 |

REVISION HISTORY

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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.

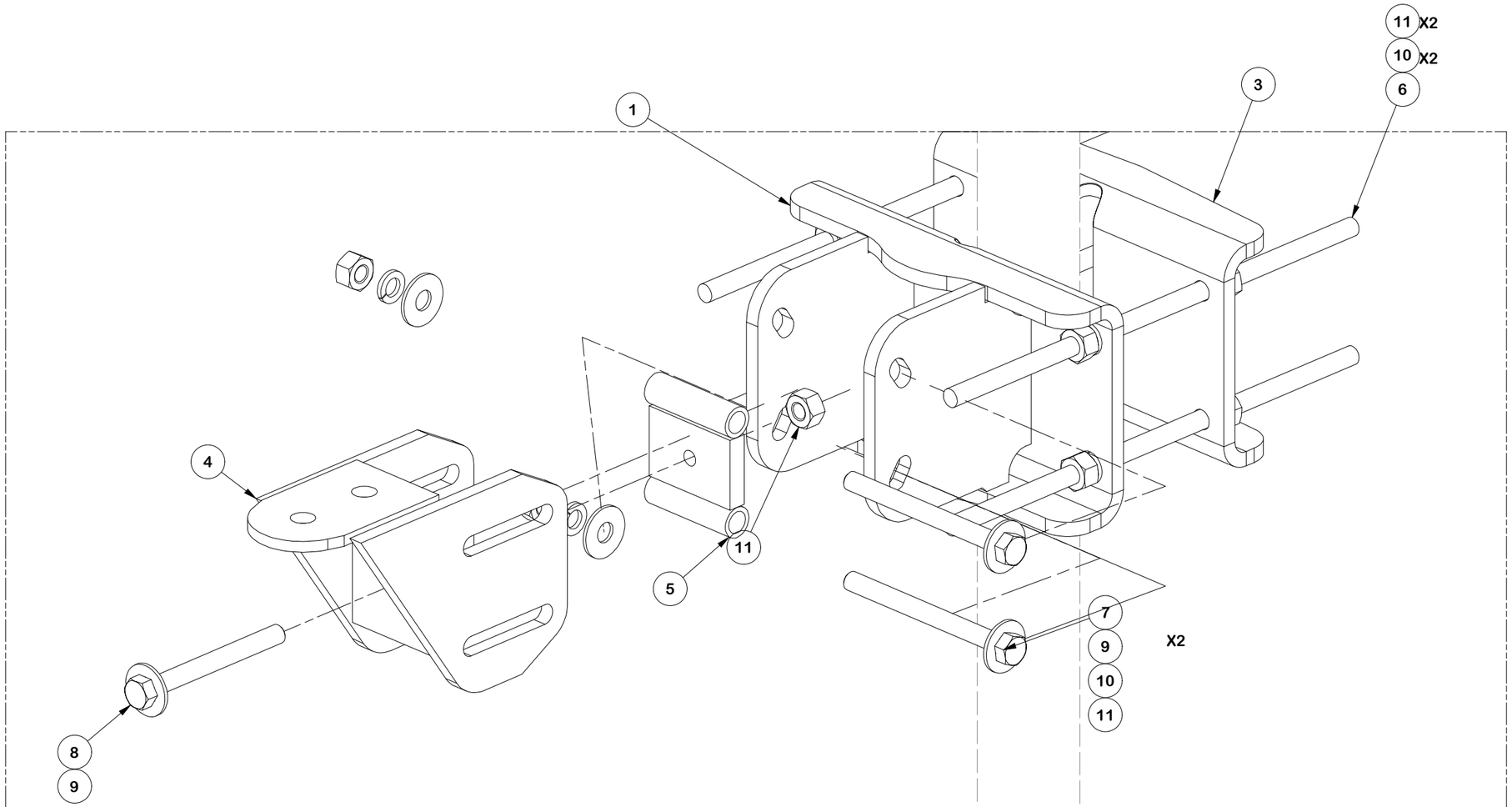
DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | BCAM-HD |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |




**VIEW A**

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | BCAM-HD |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

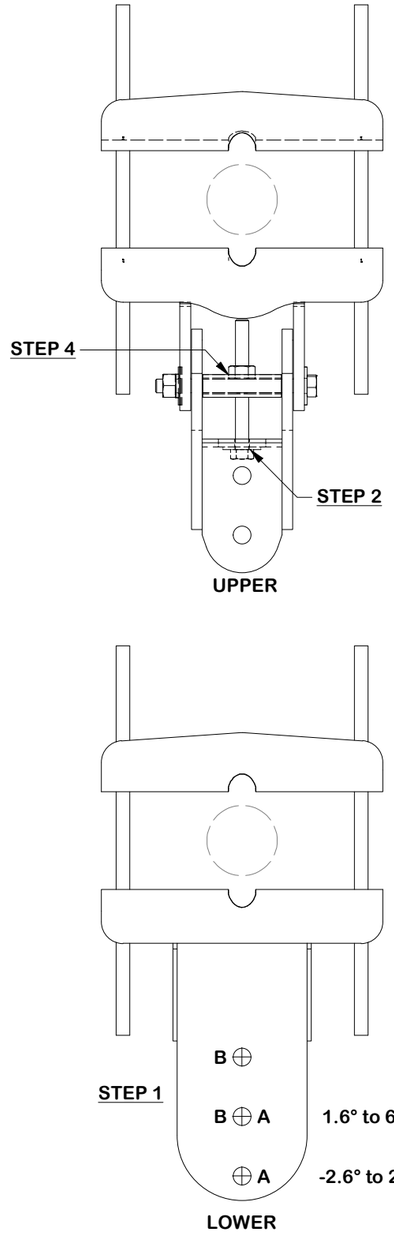
## ANGLE CALIBRATING PROCEDURE:

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

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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

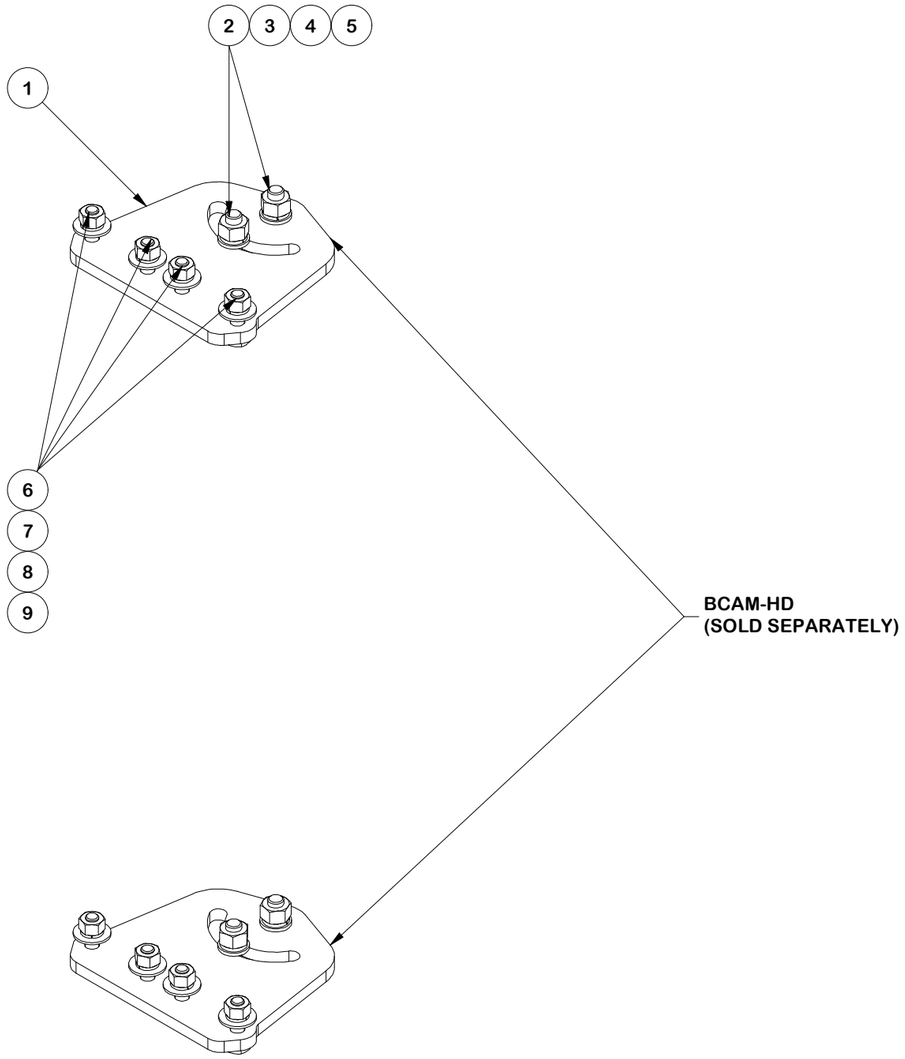
SITE PRO 1
A valmont COMPANY

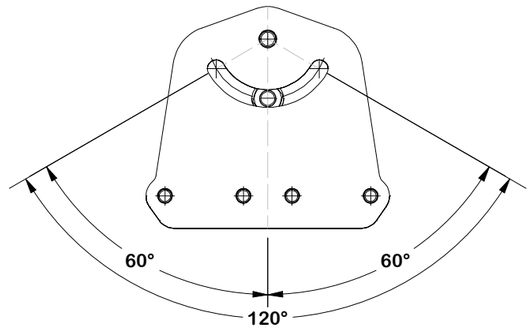
Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. | PAGE |
|---|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | BCAM-HD | 7 OF 16 |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 2 | X-VFAPL4 | VFA-HD PIVOT PLATE | 12 in | 15.88 | 31.77 |
| 2 | 4 | A34212 | 3/4" x 2-1/2" UNC HEX BOLT (A325) | 2 1/2 in | 0.48 | 1.92 |
| 3 | 4 | G34FW | 3/4" HDG USS FLATWASHER | | 0.06 | 0.24 |
| 4 | 4 | G34LW | 3/4" HDG LOCKWASHER | | 0.04 | 0.17 |
| 5 | 4 | G34NUT | 3/4" HDG HEAVY 2H HEX NUT | | 0.21 | 0.85 |
| 6 | 8 | A582114 | 5/8" x 2-1/4" HDG A325 HEX BOLT | 2 1/4 in | 0.31 | 2.50 |
| 7 | 8 | G58FW | 5/8" HDG USS FLATWASHER | 1/8 in | 0.07 | 0.56 |
| 8 | 8 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.21 |
| 9 | 8 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 1.04 |
| | | | | | TOTAL WT. # | 39.25 |




**PIVOT RANGE**

FINISH:
HOT DIP GALVANIZED.

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

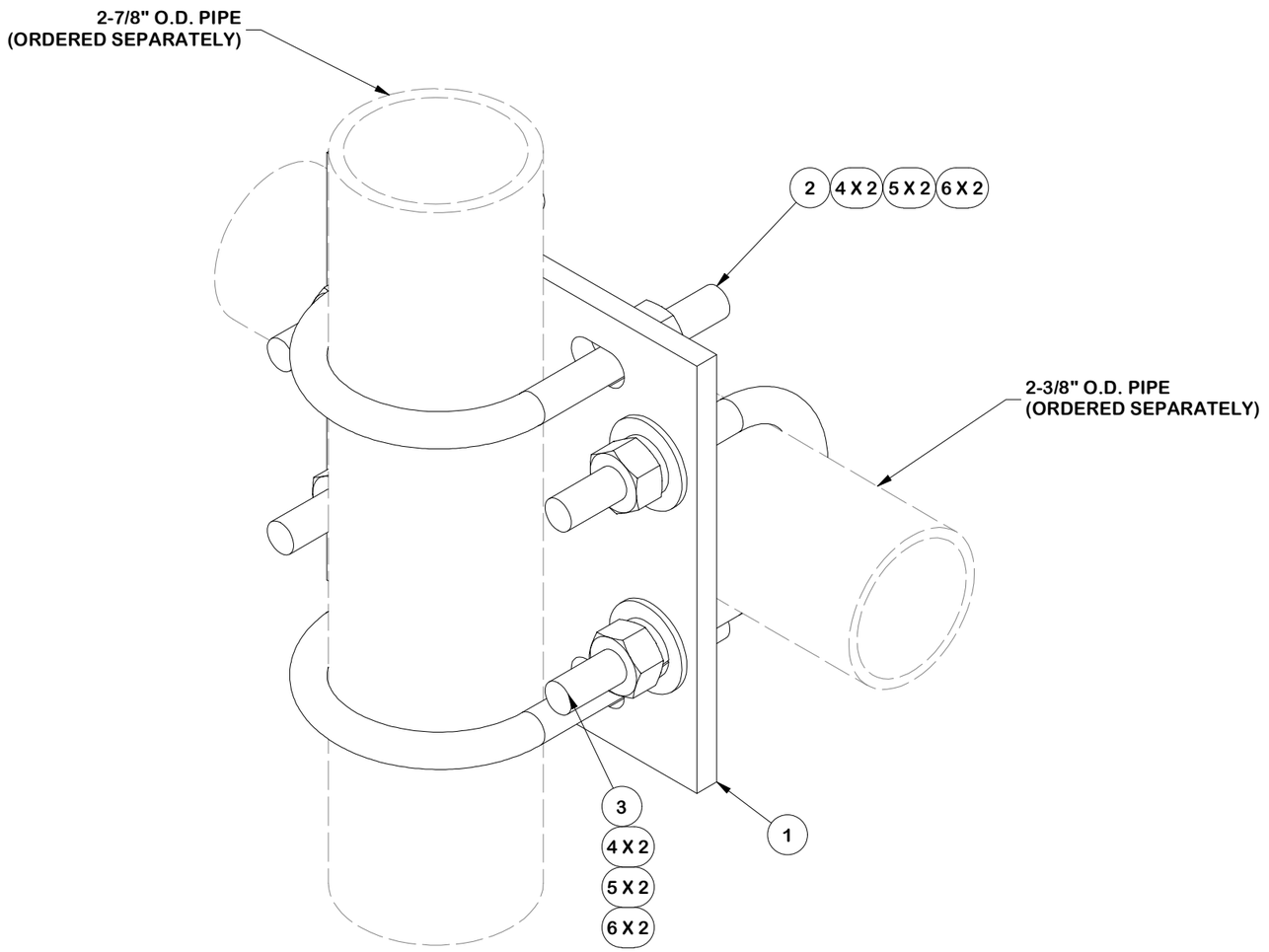
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | VFAPL4-K |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 1 | SCX2 | CROSSOVER PLATE | 7 in | 5.08 | 5.08 |
| 2 | 2 | X-UB1300 | 1/2 X 3" X 5" X 2" U-BOLT | 5 in | 0.74 | 1.48 |
| 3 | 2 | X-UB1212 | 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT | 4 1/2 in | 0.66 | 1.32 |
| 4 | 8 | G12FW | 1/2" HDG USS FLATWASHER | 3/32 in | 0.03 | 0.27 |
| 5 | 8 | G12LW | 1/2" HDG LOCKWASHER | 1/8 in | 0.01 | 0.11 |
| 6 | 8 | G12NUT | 1/2" HDG HEAVY 2H HEX NUT | 7/8 in | 0.07 | 0.57 |
| | | | | | TOTAL WT. # | 8.84 |




FINISH:
HOT DIP GALVANIZED.

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

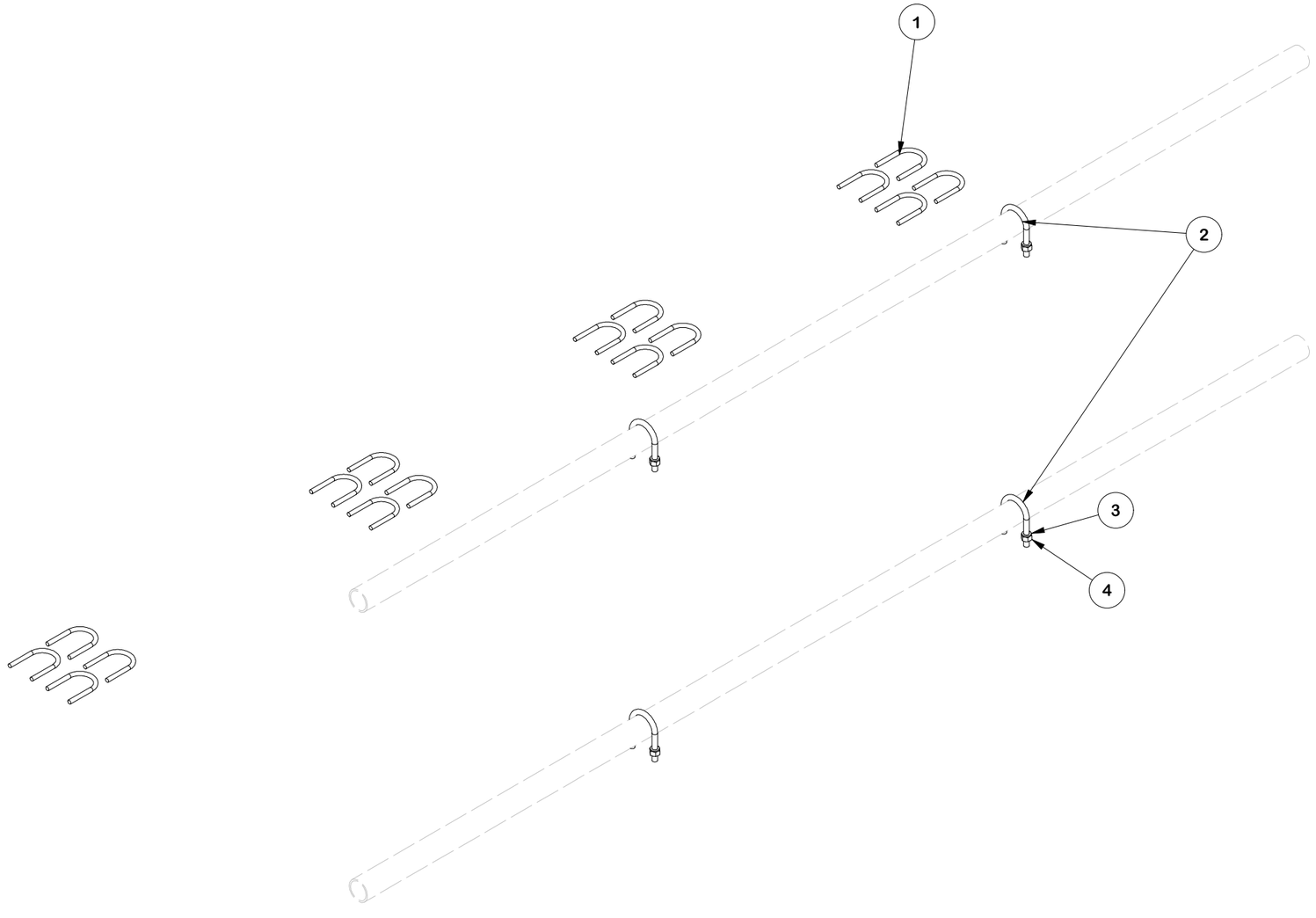
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SCX2-K |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 16 | X-UB1300 | 1/2 X 3" X 5" X 2" U-BOLT | 5 in | 0.74 | 11.82 |
| 2 | 4 | X-UB5300 | 5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT | 5 1/4 in | 1.22 | 4.87 |
| 3 | 8 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.21 |
| 4 | 8 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 1.04 |
| | | | | | TOTAL WT. # | 17.93 |




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

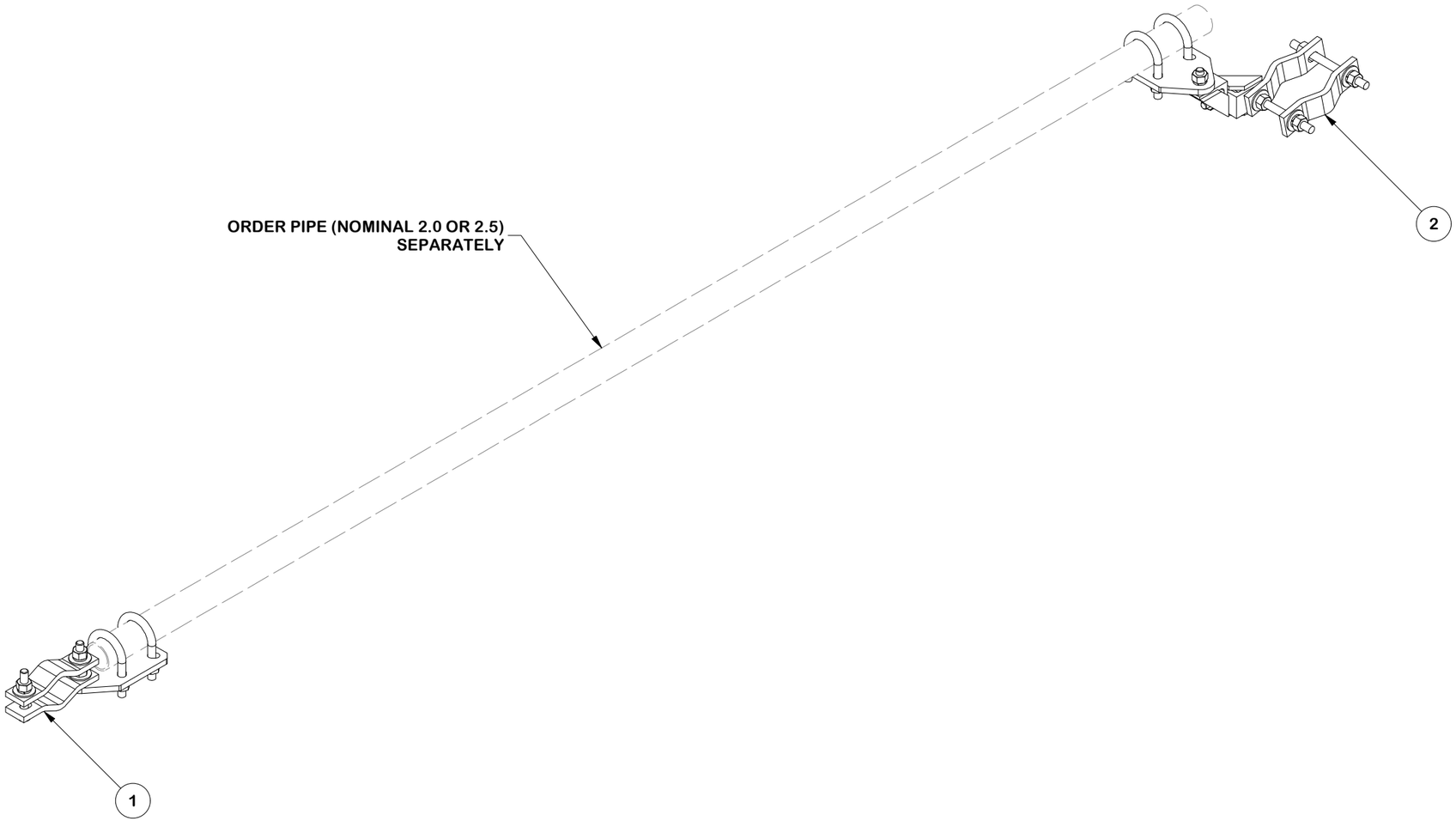
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | VFAHD-FACEHW |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | BOX NO. | PART DESCRIPTION | UNIT WT. | NET WT. |
| 1 | 1 | SPTB-U-F | P-SPTBU-F | UNIVERSAL SLIDING PIPE TIE BACK ASSEMBLY (FRONT CONNECTION ONLY) | 19.15 | 19.15 |
| 2 | 1 | SPTB-U-B | P-SPTBU-B | UNIVERSAL SLIDING PIPE TIE BACK ASSEMBLY (REAR CONNECTION ONLY) | 33.22 | 33.22 |
| | | | | | TOTAL WT. # | 52.37 |




| REV | DESCRIPTION OF REVISIONS | CPD | BY | DATE |
|---|---|---|---|---|
| A | UPDATED X-SPTB TO X-SPTB-U | NCS | ADB | 7/3/2025 |

REVISION HISTORY

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

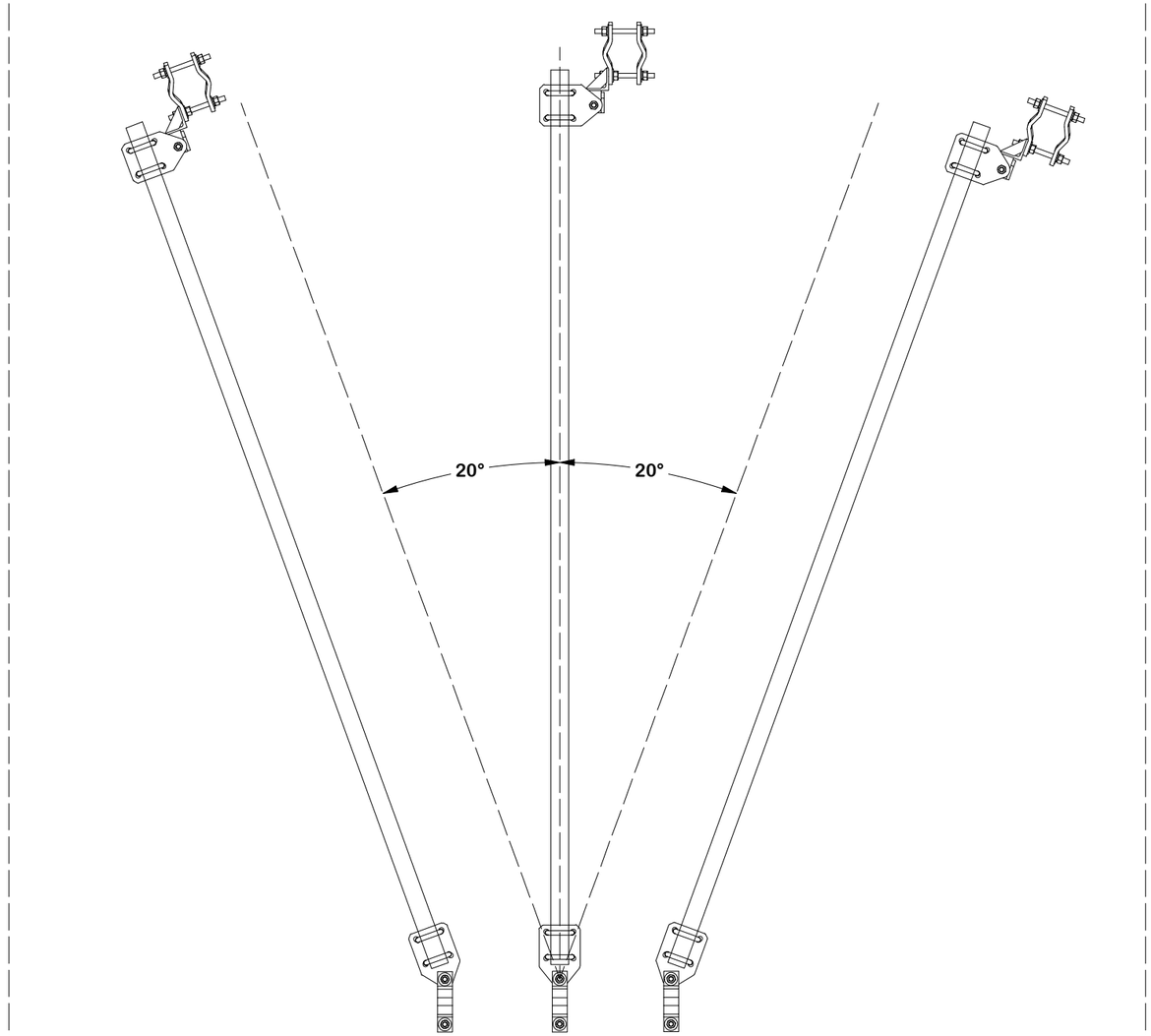
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-NP |

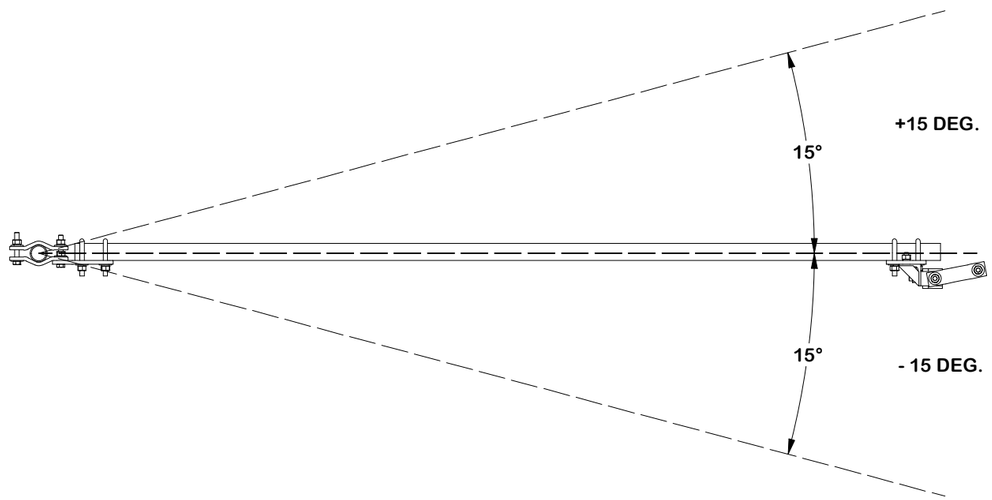
| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

## RECOMMENDED HORIZONTAL ADJUSTMENT - PIPE ORDERED SEPARATELY




- 20 DEG.  0 DEG.  + 20 DEG.

## RECOMMENDED VERTICAL ADJUSTMENT - PIPE ORDERED SEPARATELY




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
**12'-6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO 156" STIFF ARMS**

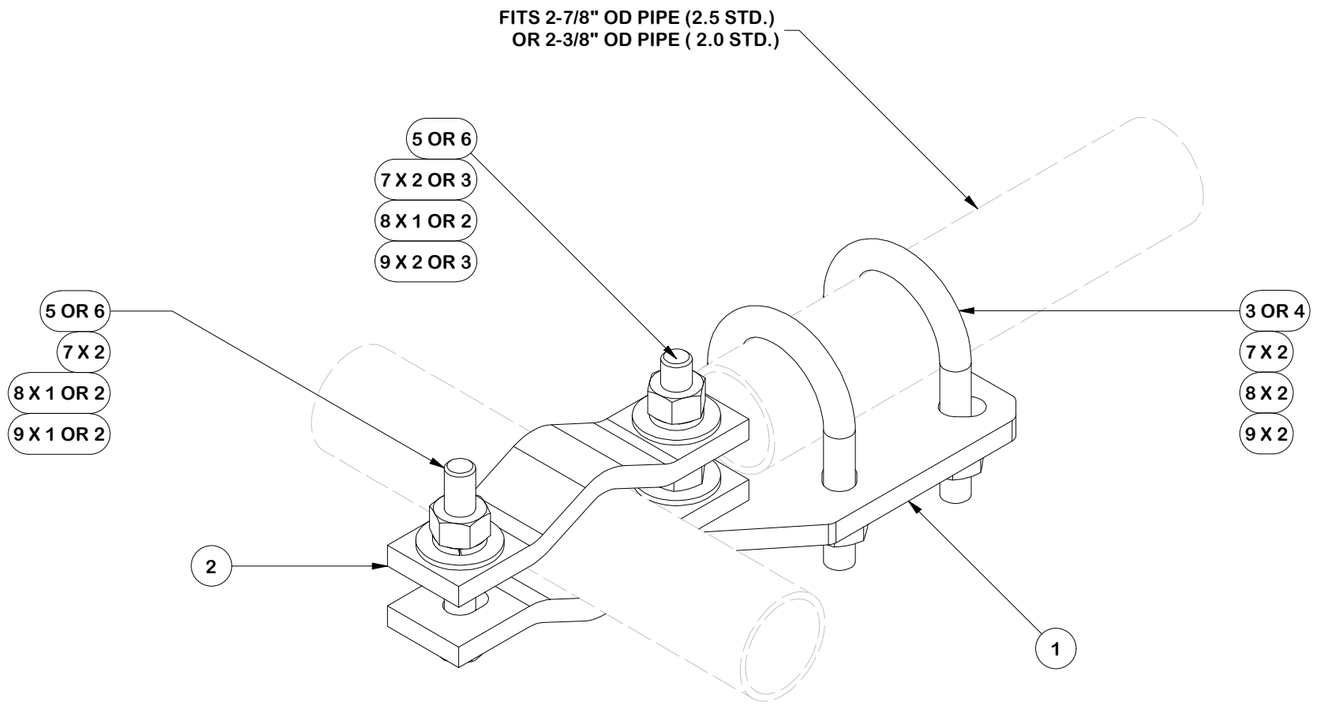
SITE PRO 1 — A valmont COMPANY

Engineering Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-NP |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 1 | X-SPTB-U | SLIDING PIPE TIE BACK PLATE | 5 1/2 in | 5.58 | 5.58 |
| 2 | 2 | DCP | 1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF | 8 1/8 in | 2.36 | 4.72 |
| 3 | 2 | X-UB5258 | 5/8 X 2-5/8" X 4-1/2" X 2" U-BOLT | 4 1/2 in | 1.06 | 2.12 |
| 4 | 2 | X-UB5300 | 5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT | 5 1/4 in | 1.22 | 2.43 |
| 5 | 2 | G58R-8 | 5/8" x 8" THREADED ROD (HDG.) | | 0.70 | 1.39 |
| 6 | 2 | G5804 | 5/8" x 4" HDG HEX BOLT GR5 | | 0.44 | 0.89 |
| 7 | 9 | G58FW | 5/8" HDG USS FLATWASHER | 1/8 in | 0.07 | 0.63 |
| 8 | 8 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.21 |
| 9 | 9 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 1.17 |
| | | | | | TOTAL WT. # | 19.15 |




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

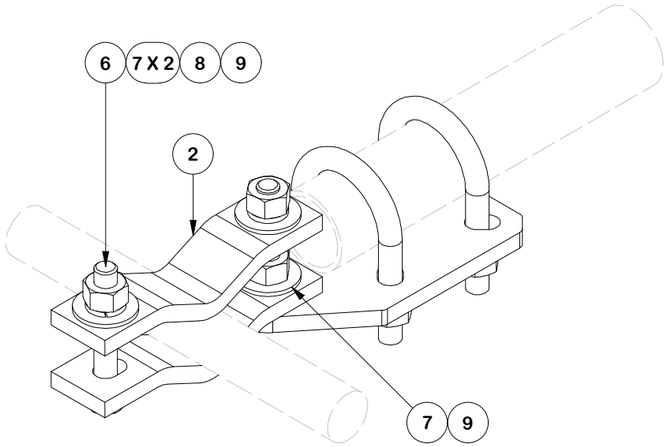
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

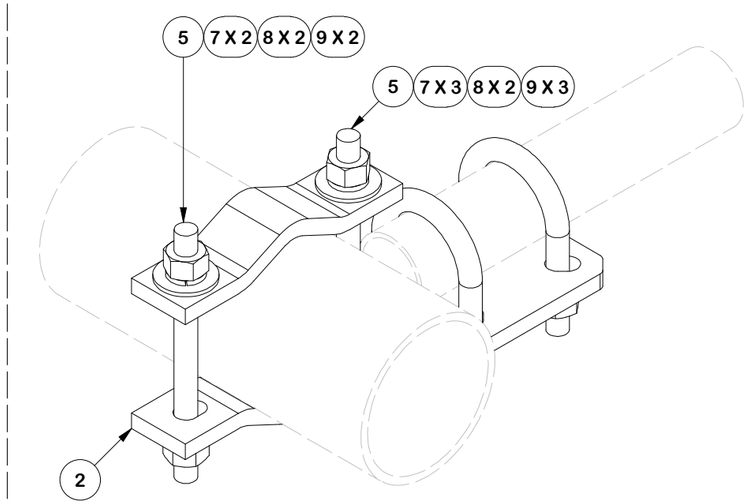
| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-F |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

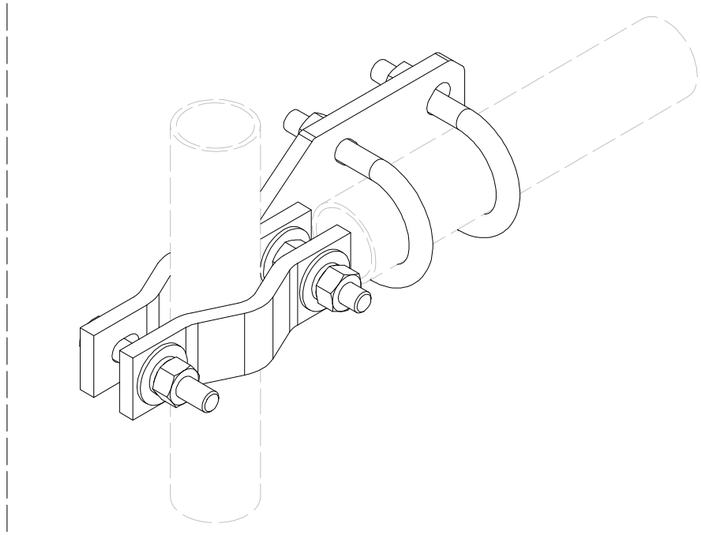
# FRONT FACE CONFIGURATIONS




**SMALL ATTACHMENT 1-1/2" TO 2-3/8"**
**NOTE: FLIP HALF BACK CLAMP**




**ATTACHMENT 2-3/8" TO 5"**
**HORIZONTAL ORIENTATION**



**ATTACHMENT 2-3/8" TO 5"**
**VERTICAL ORIENTATION**

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

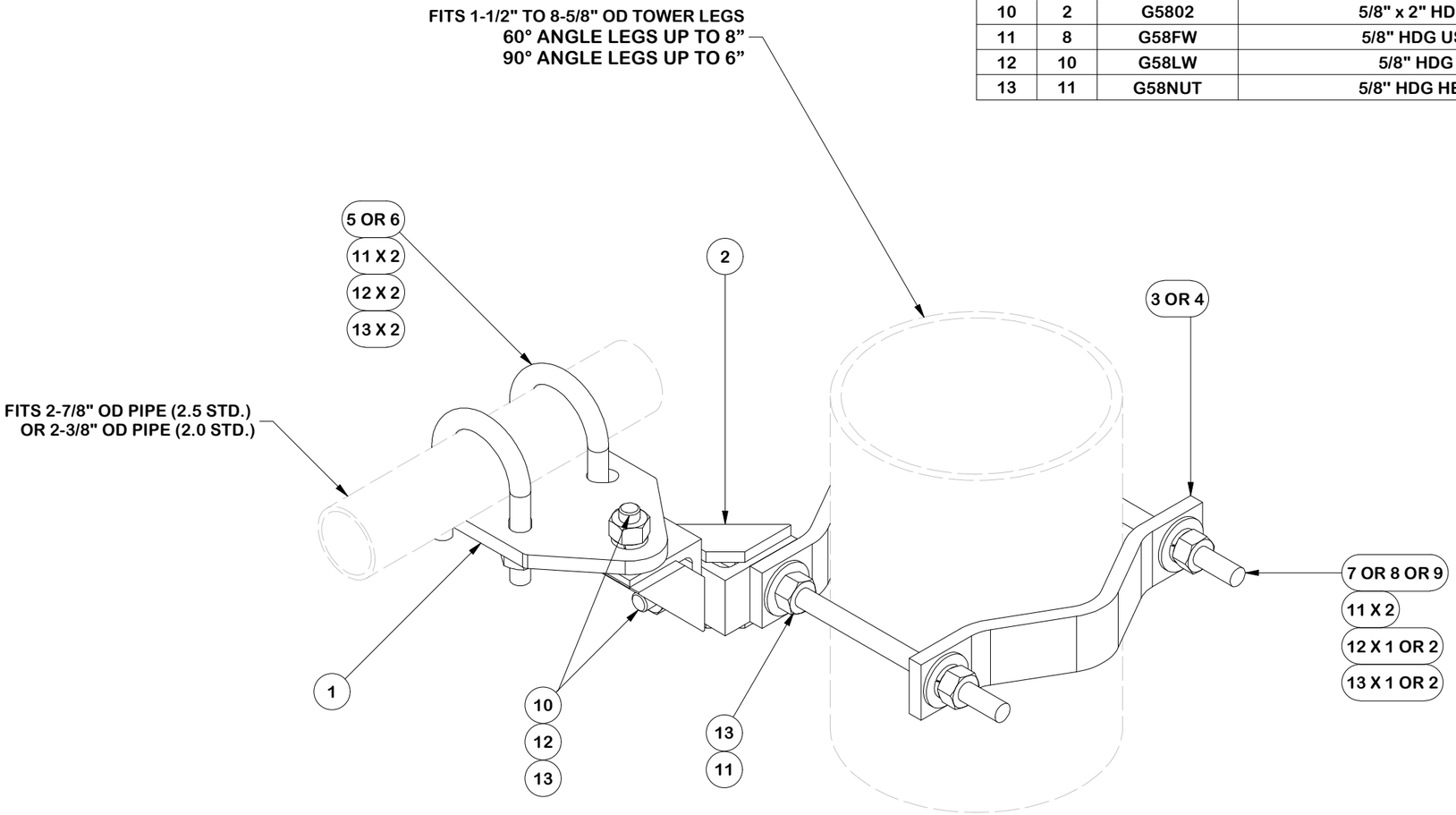
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-F |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

| PARTS LIST | | | | | | |
|---|---|---|---|---|---|---|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 1 | X-SPTB-U | SLIDING PIPE TIE BACK PLATE | 5 1/2 in | 5.58 | 5.58 |
| 2 | 2 | X-TBCA | TIE BACK CLIP ANGLE | | 2.01 | 4.01 |
| 3 | 2 | MCP | CLAMP HALF 1/2" THICK, 11-5/8" LONG | 12 1/16 in | 3.59 | 7.19 |
| 4 | 2 | DCP | 1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF | 8 1/8 in | 2.36 | 4.72 |
| 5 | 2 | X-UB5258 | 5/8 X 2-5/8" X 4-1/2" X 2" U-BOLT | 4 1/2 in | 1.06 | 2.12 |
| 6 | 2 | X-UB5300 | 5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT | 5 1/4 in | 1.22 | 2.43 |
| 7 | 2 | G58R-12 | 5/8" x 12" THREADED ROD (HDG.) | | 1.05 | 2.09 |
| 8 | 2 | G58R-8 | 5/8" x 8" THREADED ROD (HDG.) | | 0.70 | 1.39 |
| 9 | 2 | G5804 | 5/8" x 4" HDG HEX BOLT GR5 | | 0.44 | 0.89 |
| 10 | 2 | G5802 | 5/8" x 2" HDG HEX BOLT GR5 | | 0.27 | 0.54 |
| 11 | 8 | G58FW | 5/8" HDG USS FLATWASHER | 1/8 in | 0.07 | 0.56 |
| 12 | 10 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.26 |
| 13 | 11 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 1.43 |
| | | | | | TOTAL WT. # | 33.22 |




## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

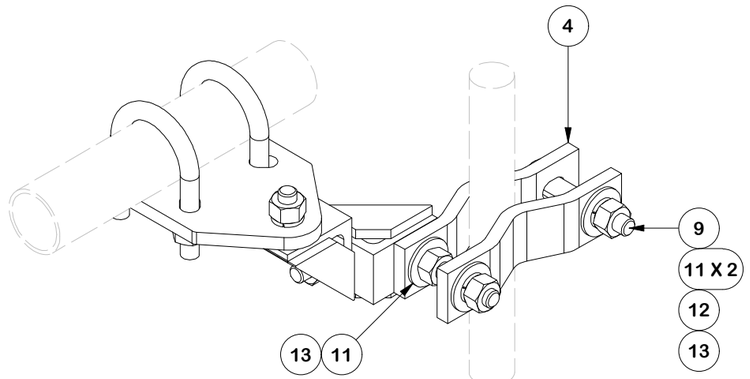
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
sp1engineering@valmont.com

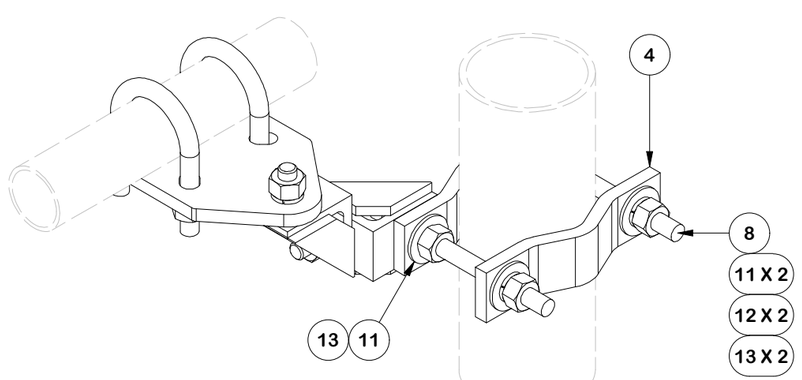
| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-B |

| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
|---|---|---|---|---|
| 87 | 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |

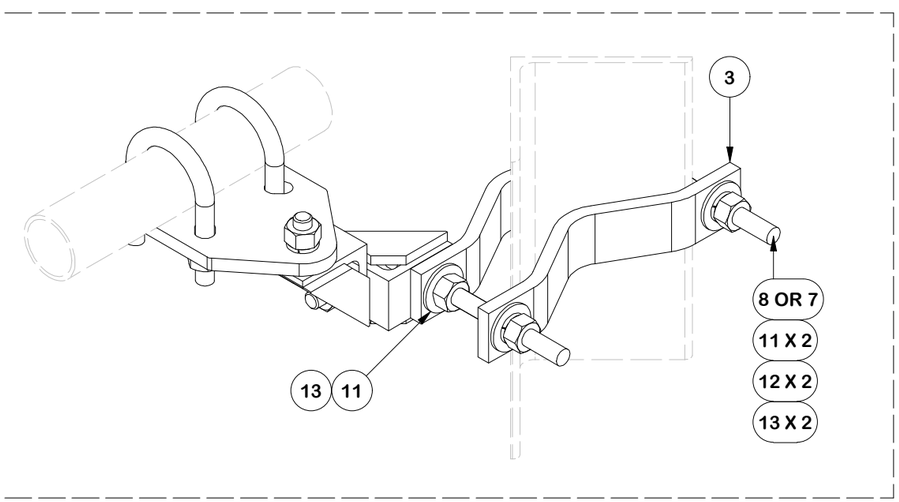
# TOWER LEG CONFIGURATIONS



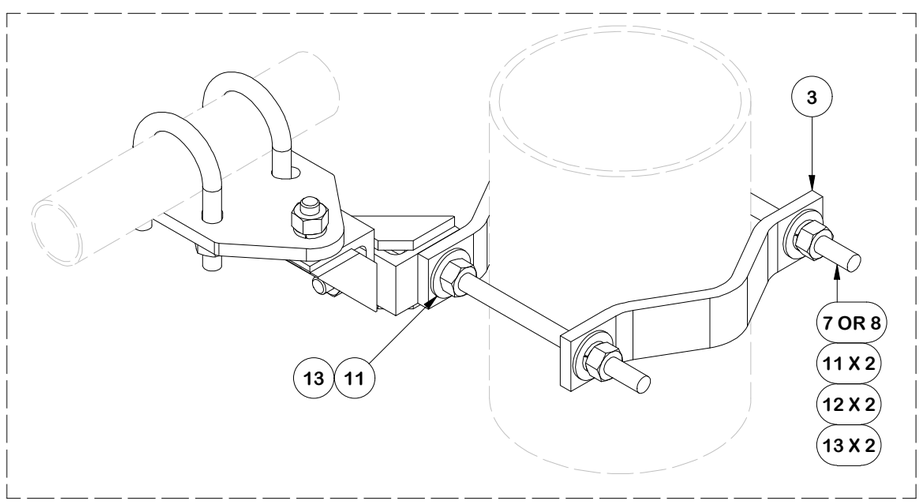

**SMALL LEGS 1-1/2" TO 2-3/8"**
**NOTE: FLIP HALF BACK CLAMP**




**MEDIUM LEGS 2-7/8" TO 5"**
**NOTE: FLIP HALF BACK CLAMP FOR ANGLE**




**LARGE LEGS UP TO 6" 90 DEG. 8" 60 DEG**
**NOTE: FLIP HALF BACK CLAMP**




**LARGE LEGS 5" TO 8-5/8" OD**

## 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 AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PATENT INFORMATION: WWW.SITEPRO1.COM/PATENTS

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
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO 156" STIFF ARMS

SITE PRO 1
A valmont COMPANY
Engineering
Support Team:
sp1engineering@valmont.com

| CPD NO. | DRAWN BY | ENG. APPROVAL | PART NO. |
|---|---|---|---|
| NCS | KC8 9/14/2022 | 7/7/2025 | SPTB-U-B |
| CLASS / SUB | DRAWING USAGE | CHECKED BY | DWG. NO. |
| 87 / 02 | CUSTOMER | CSL 7/7/2025 | VFA12-HD-TM1 |