

D

D

C

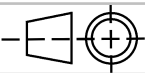
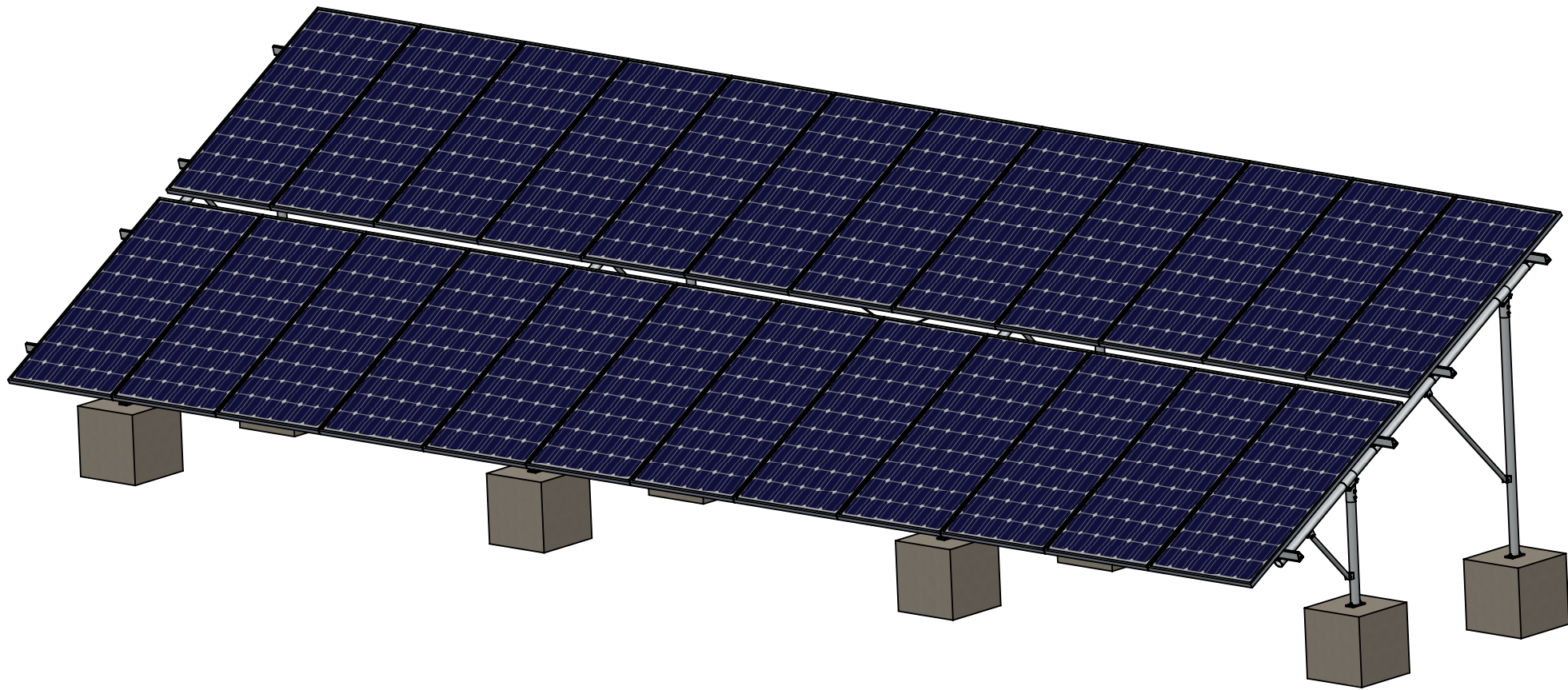
C

B

B

A

A



ALL DIMENSIONS IN MILLIMETRES  
DIMENSIONS WITHOUT  
TOLERANCE TO  
ISO 2768c

GEOMETRIC TOLERANCE  
BS:8888

CREATED BY: HW HUYSHAMEN  
DATE: 2025/02/18

PART CODE:  
**PGMS**

SHEET  
1 OF 8

SIZE  
A4

SCALE  
1:50

REVISION  
4.1

DESCRIPTION:  
Pipe Ground Mount Structure

-

6 5 4 3 2 1

D

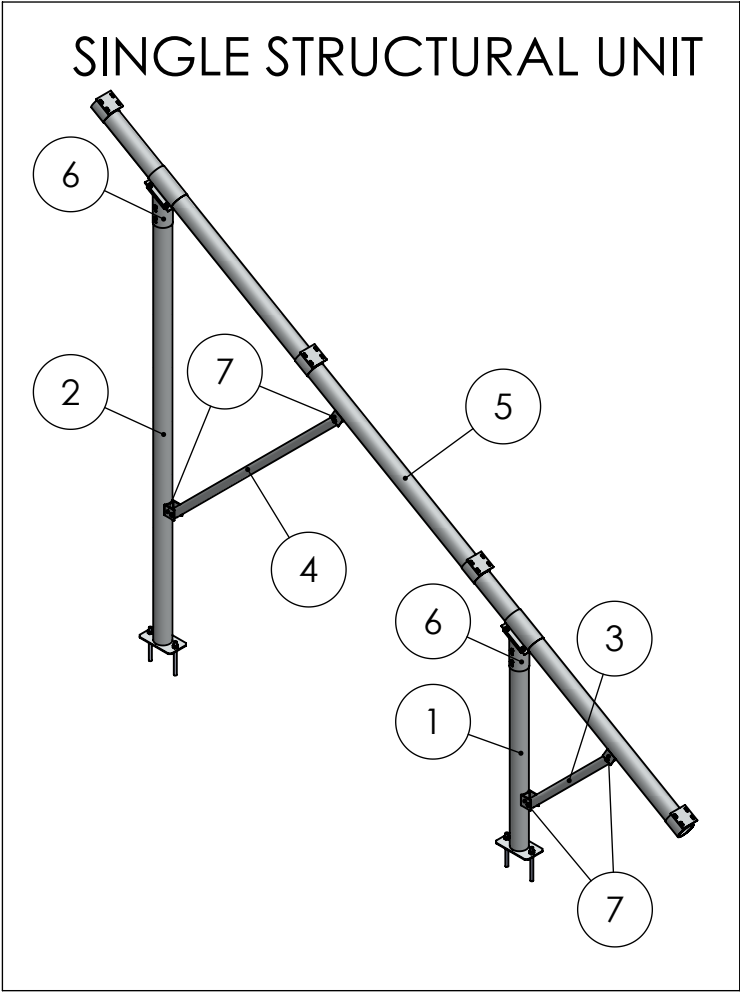
C

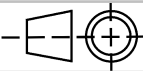
B

A

# BILL OF MATERIAL PER STRUCTURAL UNIT

| #  | DESCRIPTION                                                                  | QTY |
|----|------------------------------------------------------------------------------|-----|
| 1  | Short Column                                                                 | 1   |
| 2  | Long Column                                                                  | 1   |
| 3  | Short Brace                                                                  | 1   |
| 4  | Long Brace                                                                   | 1   |
| 5  | Rafter                                                                       | 1   |
| 6  | Pipe Angle Mount (30°, 25°, 20°, 15°)                                        | 2   |
| 8  | Ground mount Anchors (M12 x 160mm, Grade 8.8)                                | 4   |
| 9  | M8 x 100mm Bolt and Nut<br>(Used for PAM to Column Mounting)                 | 4   |
| 10 | M8 x 60mm Bolt and Nut<br>(Used for U-shape to Brace Mounting)               | 4   |
| 11 | M8 x 25mm Bolt and Nut<br>(Used for PAM to Rafter Mounting)                  | 8   |
| 12 | M8 x 14mm Bolt and Nut<br>(Used for Rafter to Triangular Extrusion Mounting) | 16  |

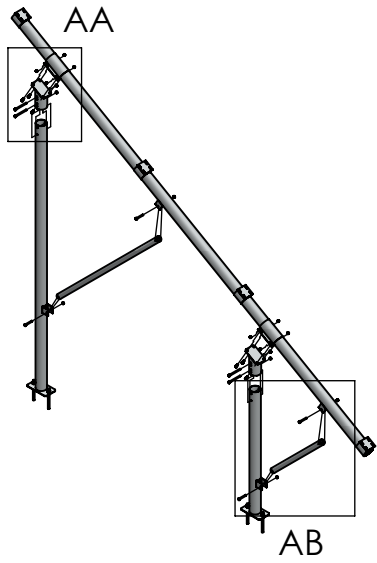
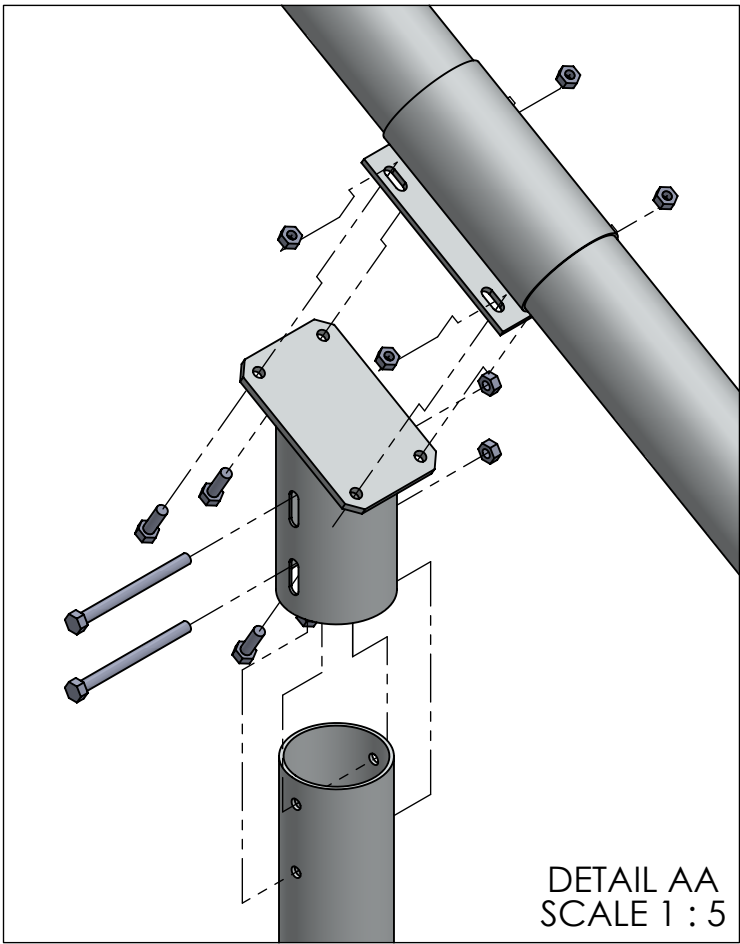


|                                                                                                                                                                                                             |                                             |                                                      |            |               |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------|------------|---------------|-----------------|
| <br>ALL DIMENSIONS IN MILLIMETRES<br>DIMENSIONS WITHOUT<br>TOLERANCE TO<br>ISO 2768c<br>GEOMETRIC TOLERANCE<br>BS:8888 | CREATED BY: HW HUYSAMEN<br>DATE: 2025/02/18 | SHEET<br>2 OF 8                                      | SIZE<br>A4 | SCALE<br>1:30 | REVISION<br>4.1 |
|                                                                                                                                                                                                             | PART CODE:<br><b>PGMS</b>                   | DESCRIPTION:<br>Bill of material per Structural Unit |            |               |                 |
|                                                                                                                                                                                                             |                                             | -                                                    |            |               |                 |

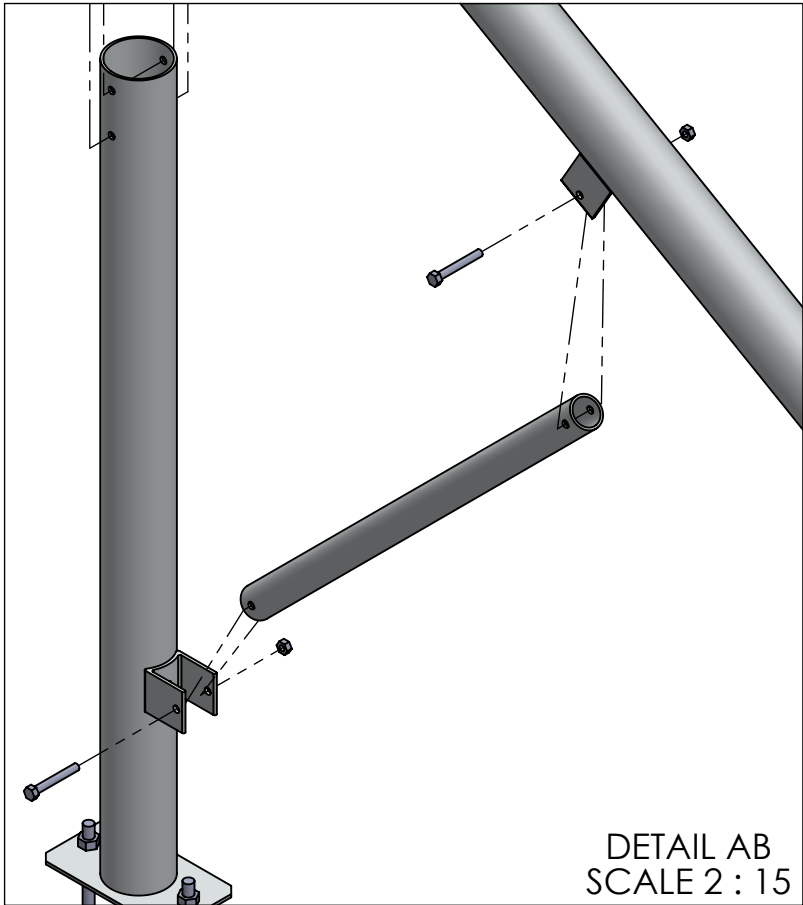
6 5 4 3 2 1

# STRUCTURAL UNIT ASSEMBLY

## COLUMN TO BEAM ASSEMBLY

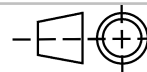
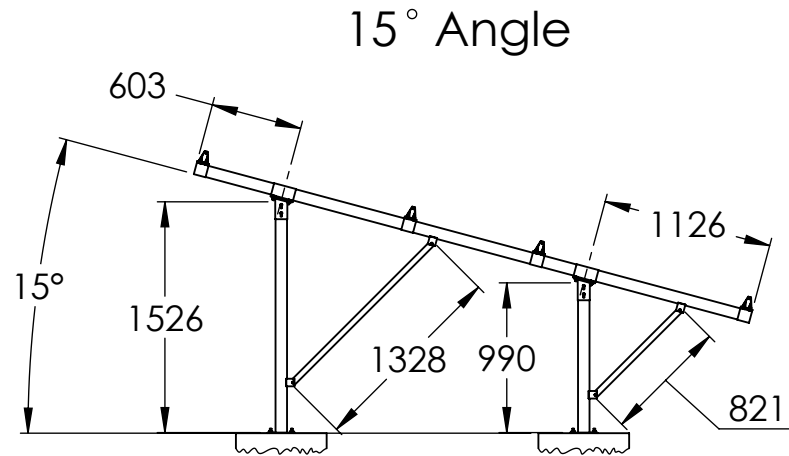
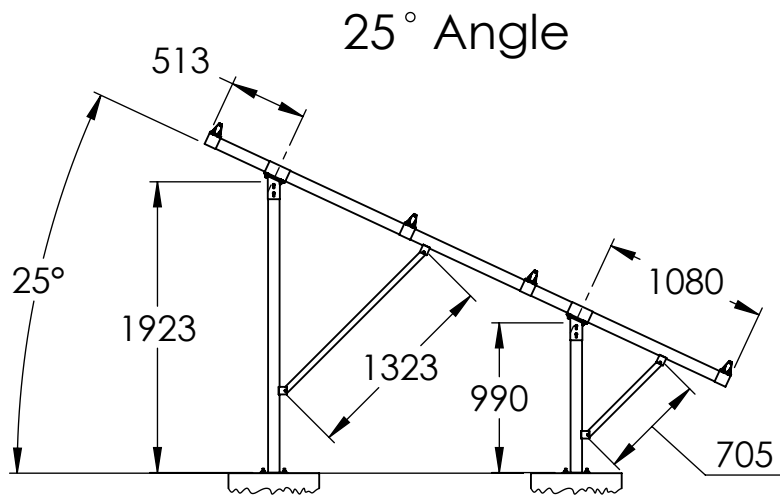
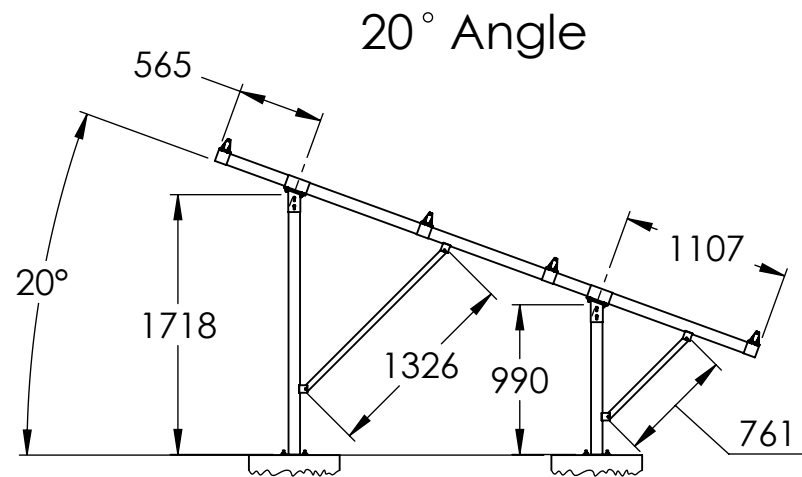
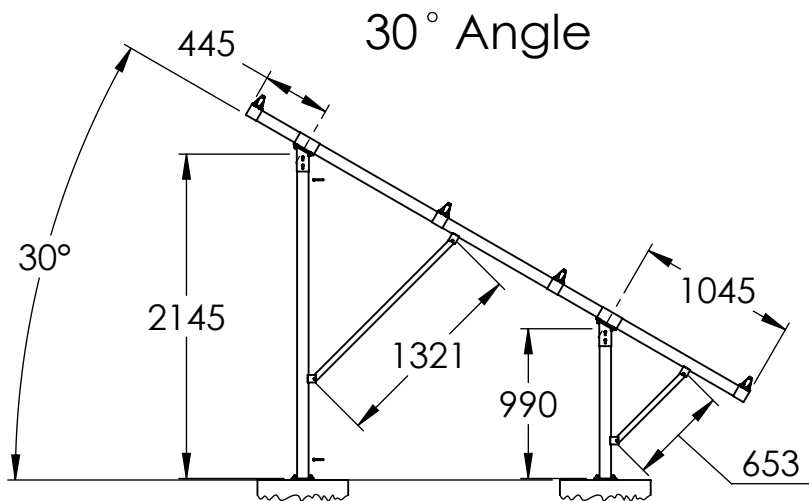


## BRACE ASSEMBLY



|                                |                          |                          |      |       |          |
|--------------------------------|--------------------------|--------------------------|------|-------|----------|
|                                | CREATED BY: HW HUYSHAMEN | SHEET                    | SIZE | SCALE | REVISION |
|                                | DATE: 2025/02/18         | 3 OF 8                   | A4   | 1:50  | 4.1      |
|                                | PART CODE:               | DESCRIPTION:             |      |       |          |
|                                | PGMS                     | Structural Unit Assembly |      |       |          |
| GEOMETRIC TOLERANCE<br>BS:8888 |                          | -                        |      |       |          |

# STRUCTURAL ANGLE CONFIGURATIONS



ALL DIMENSIONS IN MILLIMETRES  
DIMENSIONS WITHOUT  
TOLERANCE TO  
ISO 2768c

GEOMETRIC TOLERANCE  
BS:8888

CREATED BY: HW HUYSHAMEN  
DATE: 2025/02/18

PART CODE:  
**PGMS**

SHEET  
4 OF 8

SIZE  
A4

SCALE  
1:50

REVISION  
4.1

DESCRIPTION:  
Structural Angle Configurations  
30°, 25°, 20°, 15°

-

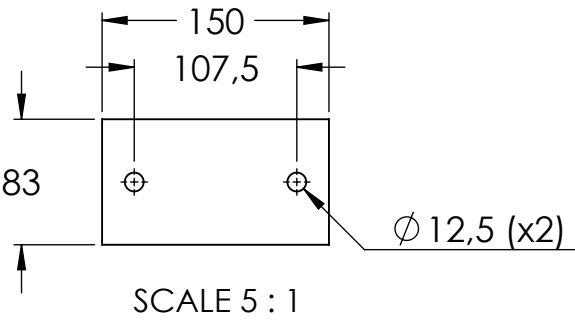


PREFABRICATED COLUMN UNITS

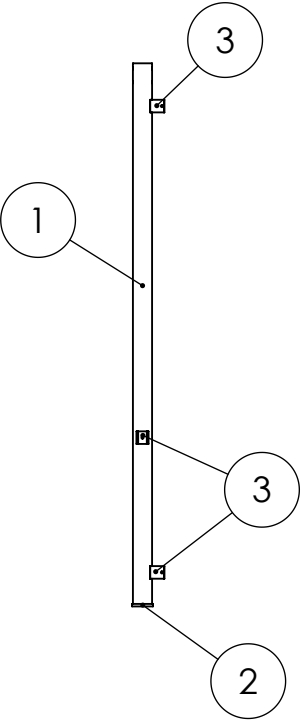
Column Unit Bill of Materials

| # | DESCRIPTION       | QTY |
|---|-------------------|-----|
| 1 | 76 x 3mm Tubing   | 1   |
| 2 | 10mm Base plate   | 1   |
| 3 | U-Shape Extrusion | 1-3 |

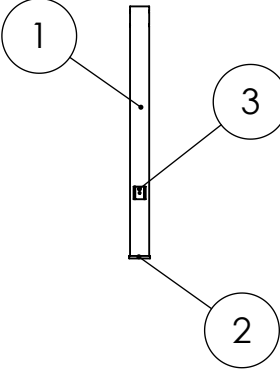
Base Plate  
(10mm thickness)



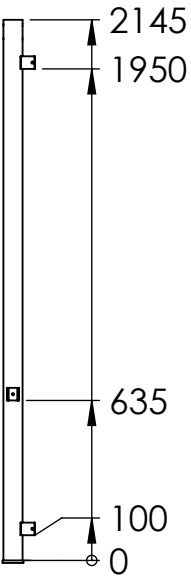
Long Column



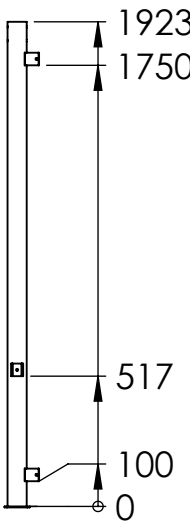
Short Column  
(30°, 25°, 20°, 15°)



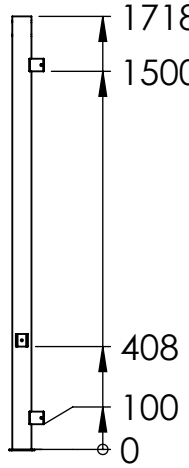
30° Angle



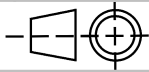
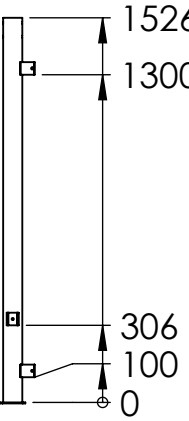
25° Angle



20° Angle



15° Angle



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ISO 2768c

GEOMETRIC TOLERANCE  
BS:8888

CREATED BY: HW HUYSHAMEN  
DATE: 2025/02/18

PART CODE:  
PGMS

SHEET  
5 OF 8

SIZE  
A4

SCALE  
1:30

REVISION  
4.1

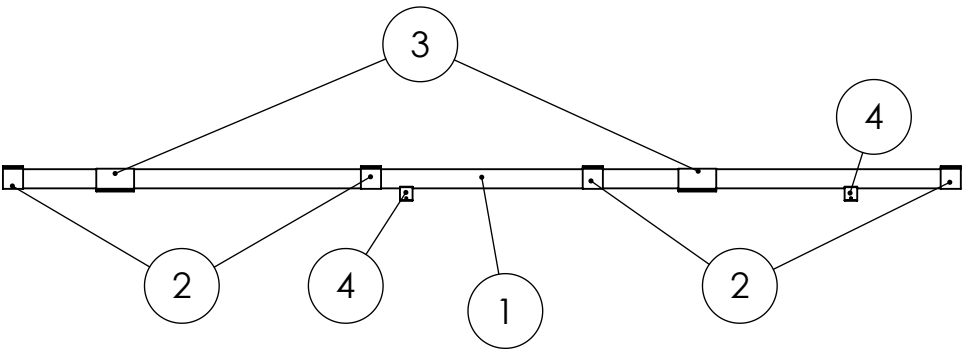
DESCRIPTION:  
Prefacricated Column units

-

PREFABRICATED RAFTER UNITS

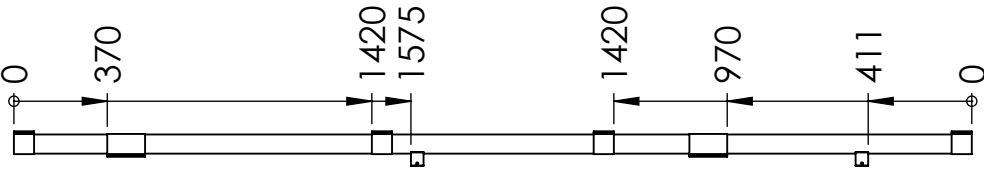
Rafter Unit Bill of Materials

| # | DESCRIPTION                                | QTY |
|---|--------------------------------------------|-----|
| 1 | 76 x 3 x 3800mm Tubing                     | 1   |
| 2 | Pipe Mount Bracket to Triangular Extrusion | 4   |
| 3 | Pipe Mount Bracket to Pipe Angle Mount     | 2   |
| 4 | U-Shape Extrusion                          | 2   |

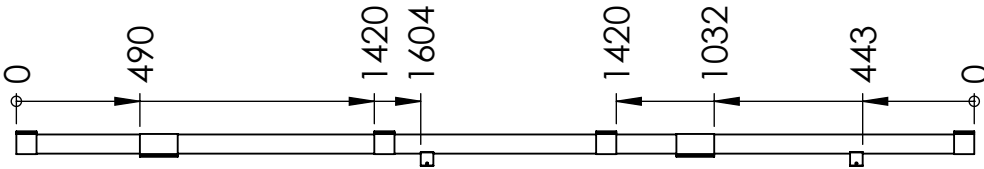


PART PLACEMENT ON BEAM UNIT FOR EACH ANGLE

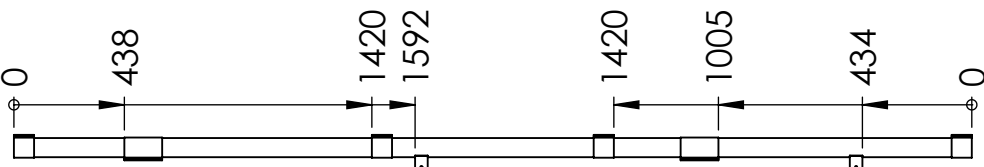
30° Angle



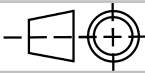
20° Angle



25° Angle



15° Angle



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GEOMETRIC TOLERANCE  
BS:8888

CREATED BY: HW HUYSHAMEN  
DATE: 2025/02/18

PART CODE:

PGMS

SHEET  
6 OF 8

SIZE  
A4

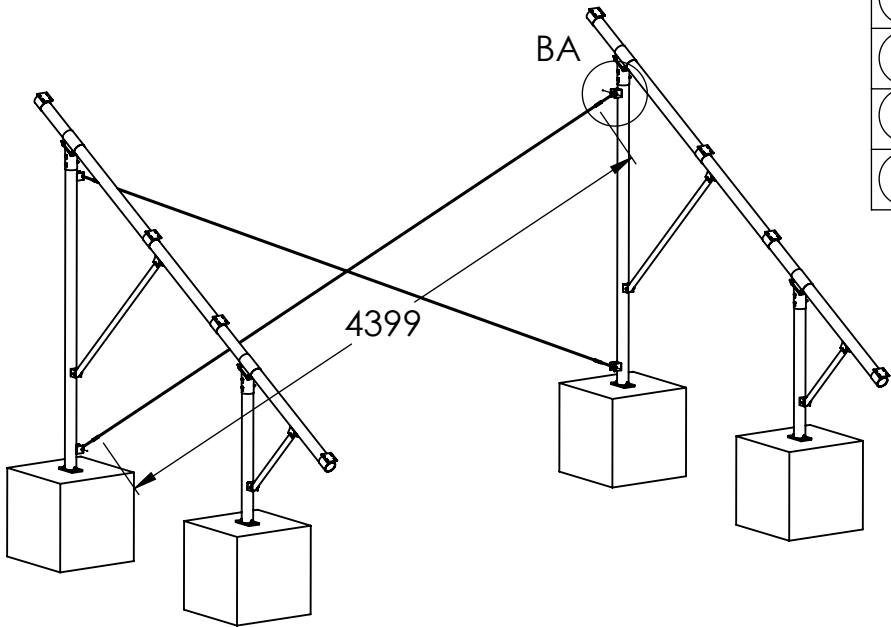
SCALE  
1:30

REVISION  
4.1

DESCRIPTION:

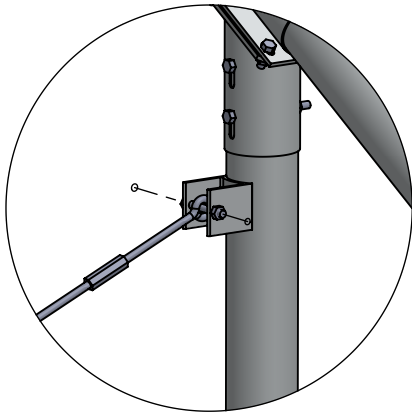
Prefabricated Rafter units

# STRUCTURAL UNIT CROSS BRACING

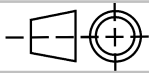


Cross bracing Unit Bill of Materials

| # | DESCRIPTION                | QTY |
|---|----------------------------|-----|
| ① | 4,4m x 8mm Rebar (Y8)      | 2   |
| ② | M8 x 120mm I-bolt          | 4   |
| ③ | M8 x 24 Studding Connector | 4   |
| ④ | M8 x 60mm Bolt and Nut     | 4   |



DETAIL BA  
SCALE 1 : 8



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DIMENSIONS WITHOUT  
TOLERANCE TO  
ISO 2768c

GEOMETRIC TOLERANCE  
BS:8888

CREATED BY: HW HUYSHAMEN  
DATE: 2025/02/18

PART CODE:  
**PGMS**

SHEET  
7 OF 8

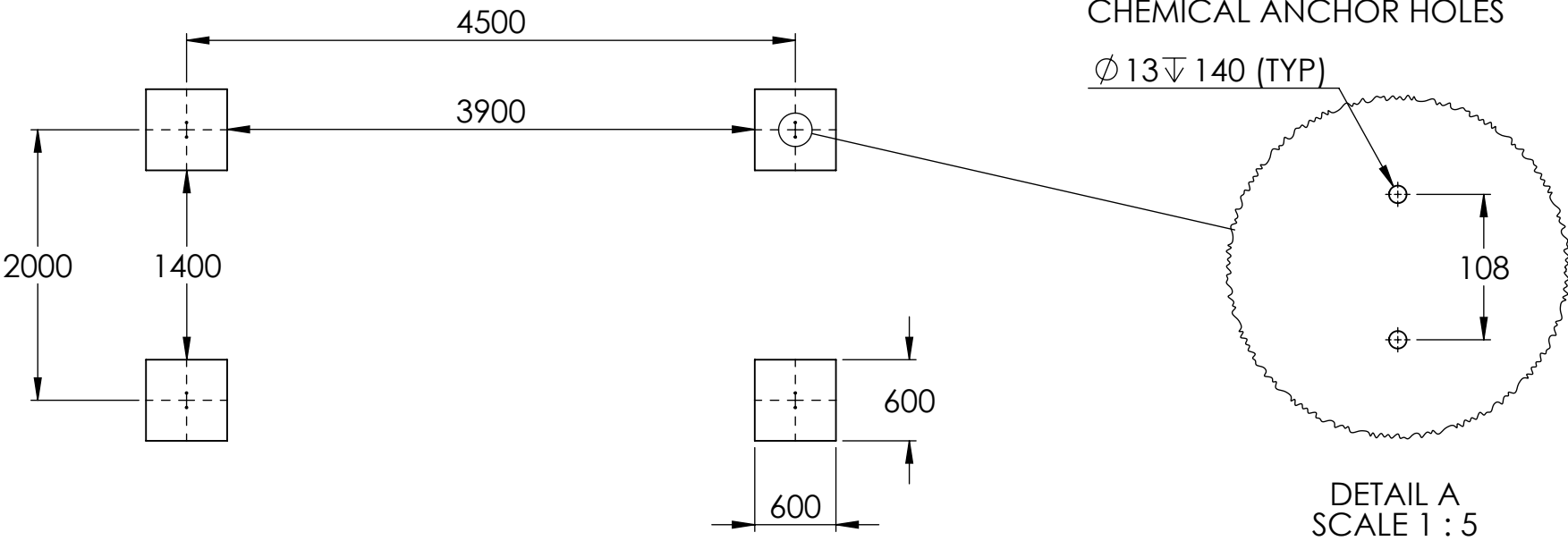
SIZE  
A4

SCALE  
1:50

REVISION  
4.1

DESCRIPTION:  
Pipe Ground Mount Structure -  
Foundation placement

# FOUNDATION PLACEMENT



|  |                                                                                  |                           |                                                                       |               |                 |
|--|----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------|---------------|-----------------|
|  | CREATED BY: HW HUYSHAMEN<br>DATE: 2025/02/18                                     | SHEET<br>8 OF 8           | SIZE<br>A4                                                            | SCALE<br>1:50 | REVISION<br>4.1 |
|  | ALL DIMENSIONS IN MILLIMETRES<br>DIMENSIONS WITHOUT<br>TOLERANCE TO<br>ISO 2768c | PART CODE:<br><b>PGMS</b> | DESCRIPTION:<br>Pipe Ground Mount Structure -<br>Foundation placement |               |                 |
|  | GEOMETRIC TOLERANCE<br>BS:8888                                                   |                           | -                                                                     |               |                 |