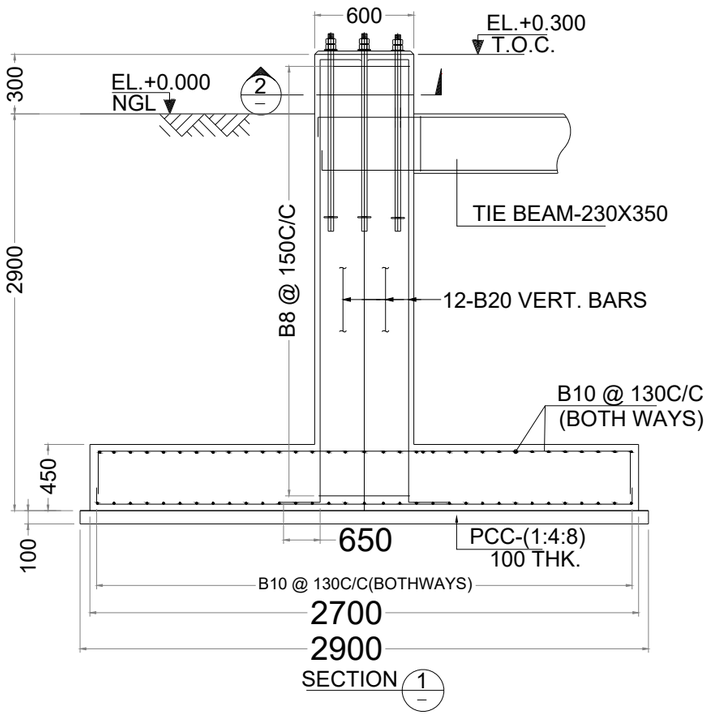
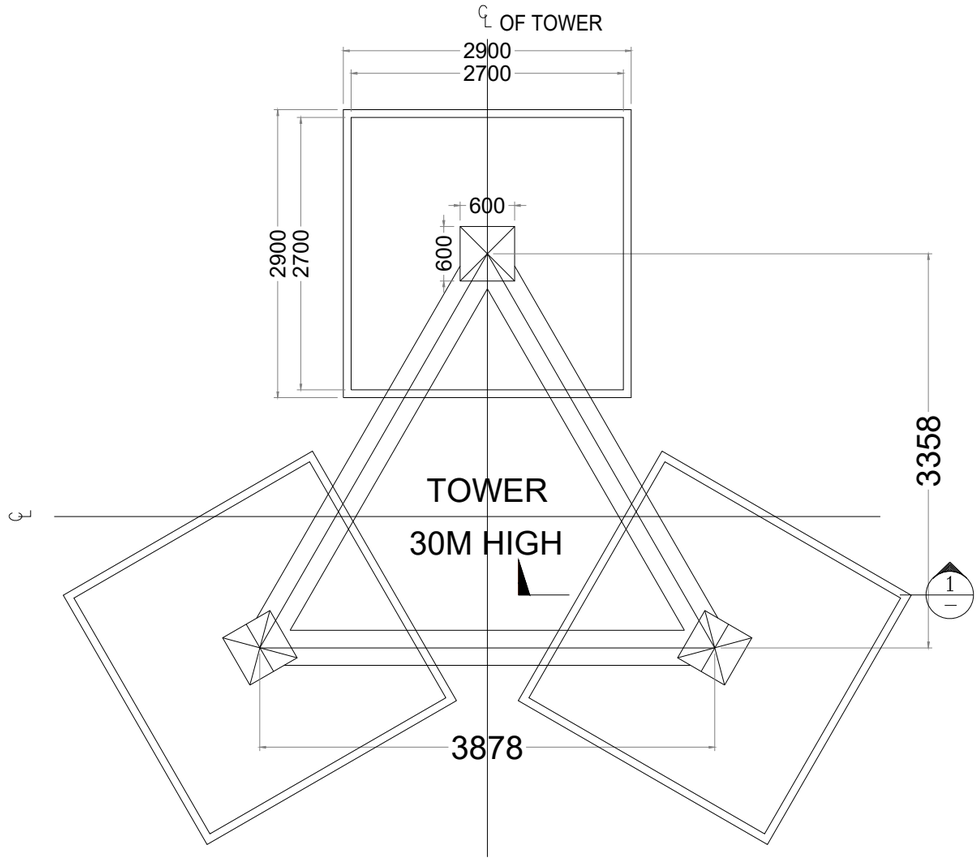
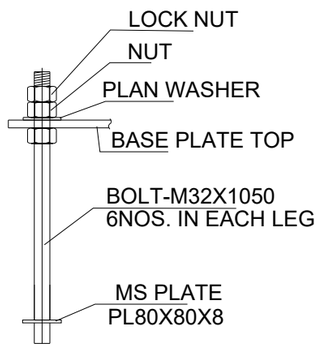
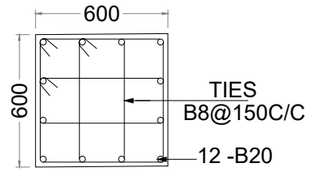


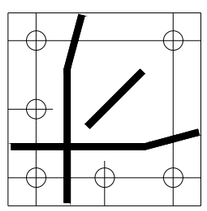




FOUNDATION KEY PLAN

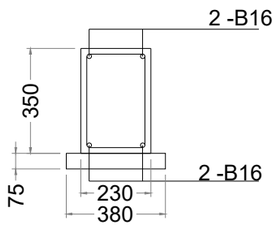


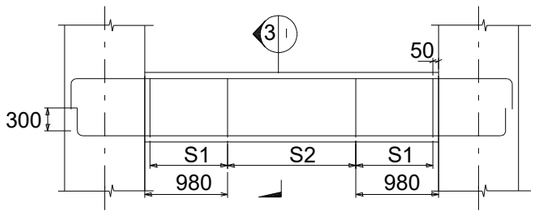

ANCHOR BOLT



BASE PLATE




STIRRUP DETAILS
S1:-2 LEGGED Y8 @ 100 C/C
S2:-2 LEGGED Y8 @ 200 C/C

## NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
2. USE M20 GRADE CONCRETE AND Fe 415 GRADE FOR STEEL.
3. CLEAR COVER TO MAIN REINFORCEMENT:-
   (a) 50MM FOR FOUNDATION (b) 25MM FOR BEAMS
   (c) 40MM FOR COLUMNS
4. PRIOR TO AND DURING CONCRETING ALL BOLTS SHALL BE SECURELY HELD IN POSITION BY USE OF TEMPLATE.
5. BEFORE COMMENCEMENT OF CONSTRUCTION USING THIS DESIGN, CLIENT/CONTRACTOR SHALL CARRY OUT DETAILED SOIL INVESTIGATION OF EVERY SITE.
6. THIS FOUNDATION DESIGN SHALL NOT BE USED IN CASE HIGHLY SOIL ARE FOUND AT ANY DEPTH DURING SOIL INVESTIGATION.
7. CONCRETE SHALL BE MECHANICALLY MIXED & VIBRATED.
8. SPLICING OF BARS SHALL NOT BE MORE THAN 50% AT ANY LOCATION.
9. PROPER CURING OF CONCRETE SHALL BE DONE.
10. BENDING OF BARS SHALL BE AS PER IS:2502.
11. ANY DISCREPANCY SHOULD BE BROUGHT TO THE CONSULTANT'S ATTENTION.

## GENERAL DETAILS

| S.No | DESCRIPTION | DETAILS |
|---|---|---|
| 1 | SOIL BEARING CAPACITY | 10.00 T/SQM |
| 2 | DRY DENSITY OF SOIL | 1.8 T/SQM |
| 3 | ANGLE OF REPOSE | 30.00 DEGREE |

## BILL OF MATERIALS

| ITEM | UNIT | TOTAL |
|---|---|---|
| EXCAVATION | CUM | 76.3 |
| PCC-(1:4:8) | CUM | 2.85 |
| RCC-M20 | CUM | 13.6 |
| STEEL-Fe415 | KG | 1200 |

CHAIRS SHALL BE PROVIDED WHEREEVER REQUIRED

## REVISION NOTES

| REV. NO. | DESCRIPTION | | DATE | SIGN. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| DRAWN | CHECKED | APPROVED | DATE | SCALE |
| S.K.Chauhan | MOHIT GUPTA | MOHIT GUPTA | 25-01-2024 | NTS |

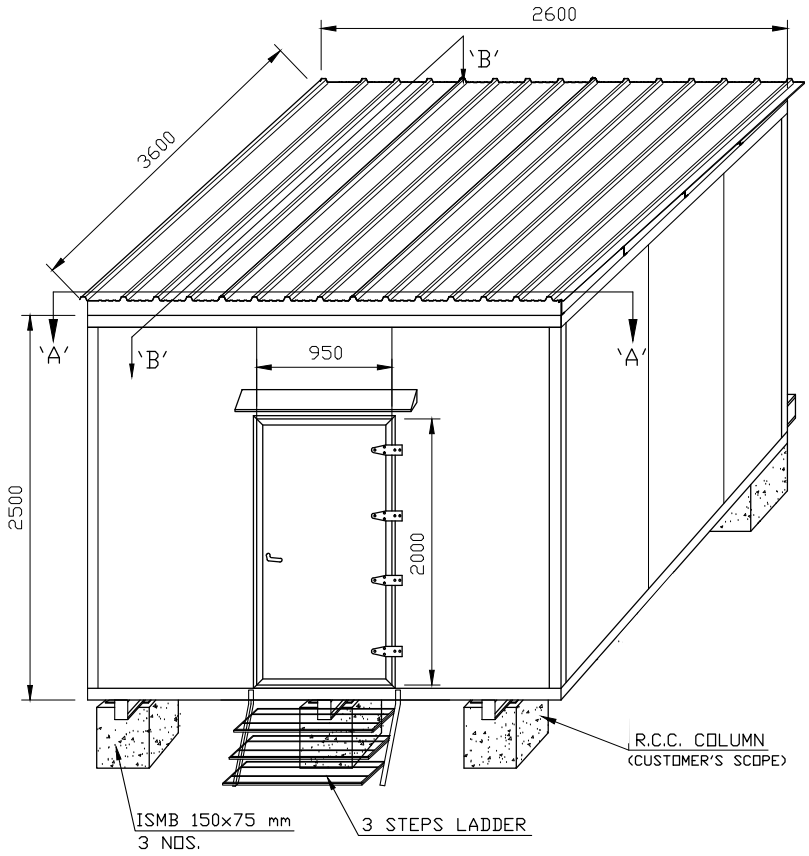
CLIENT: BHUTAN TELECOM LTD.
BHUTAN

DESIGN BY: ICON POWER SOLUTIONS PVT. LTD.
GURGAON

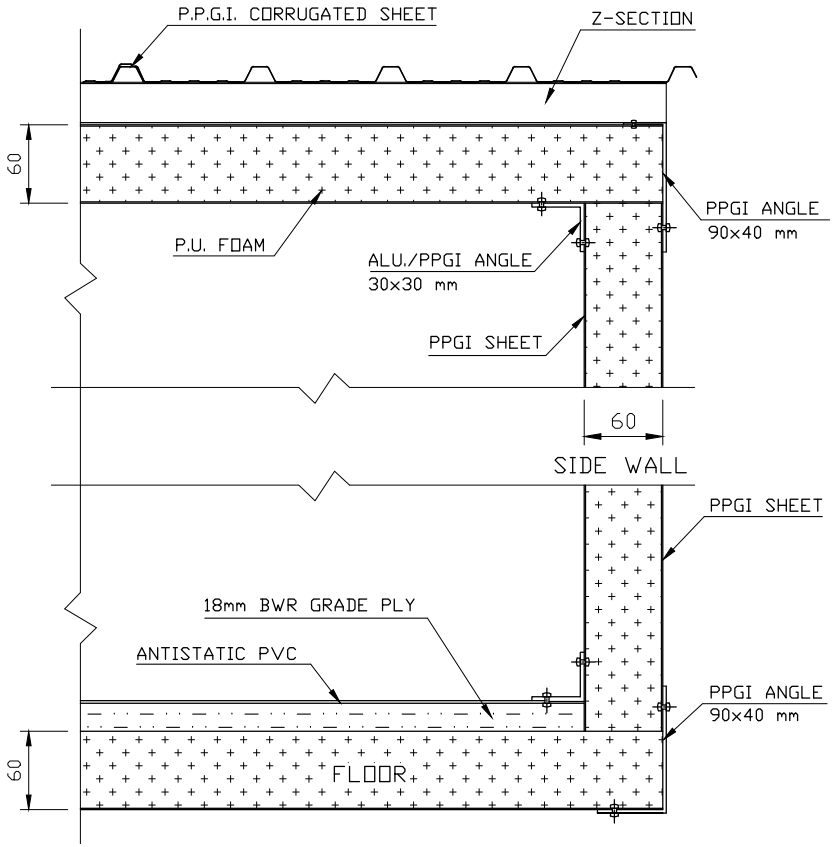
PROJECT: GENERIC ISOLATED FOUNDATION DESIGN
BHUTAN

TITLE : FOUNDATION DETAILS FOR 30M HIGH TRIANGULAR TOWER
SBC : 10 T/SQM

| DRAWING No. | SH. NO. | REV. |
|---|---|---|
| AGD-438 | | |



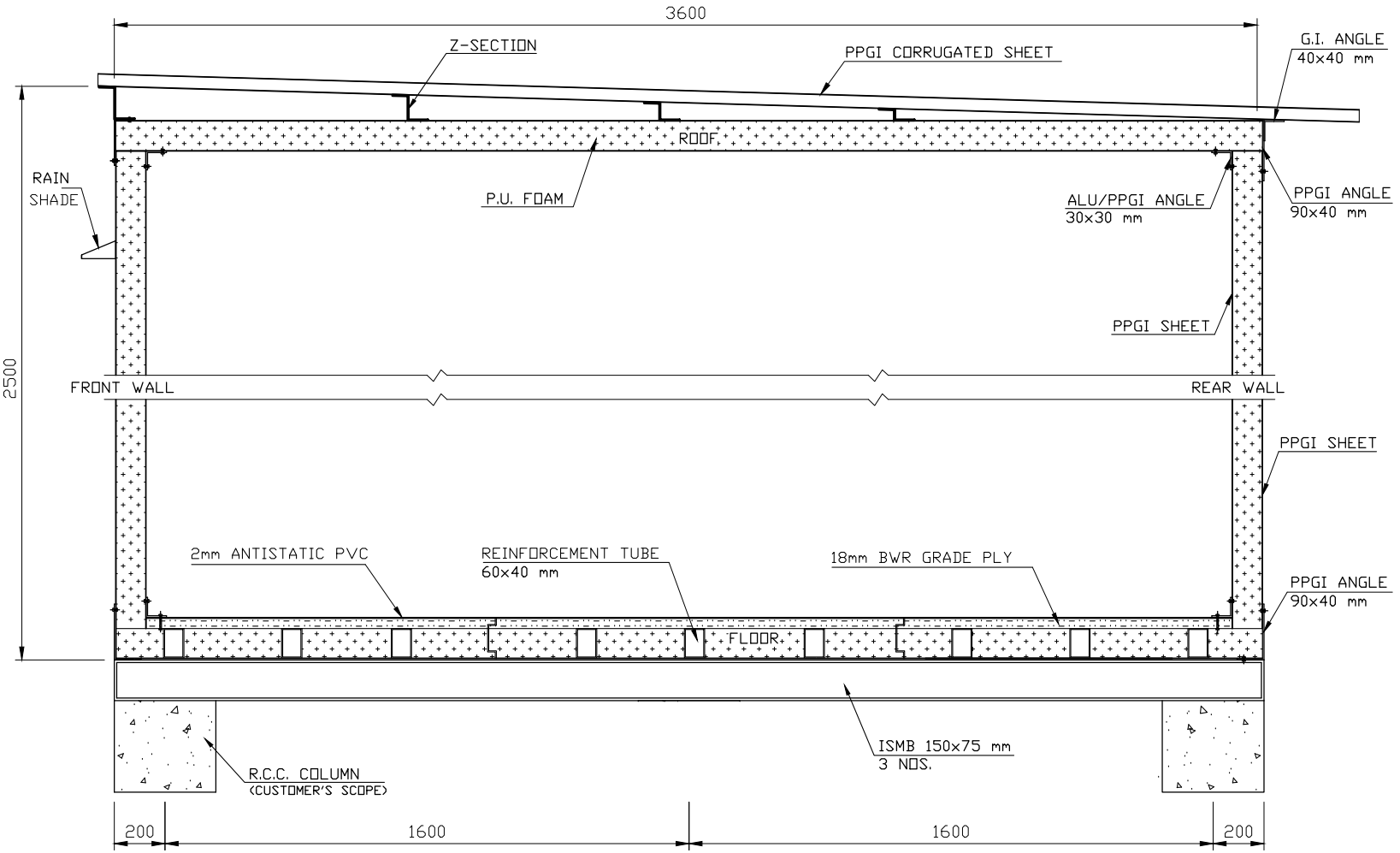

PERSPECTIVE VIEW




SECTION 'A-A'
SCALE 10:1

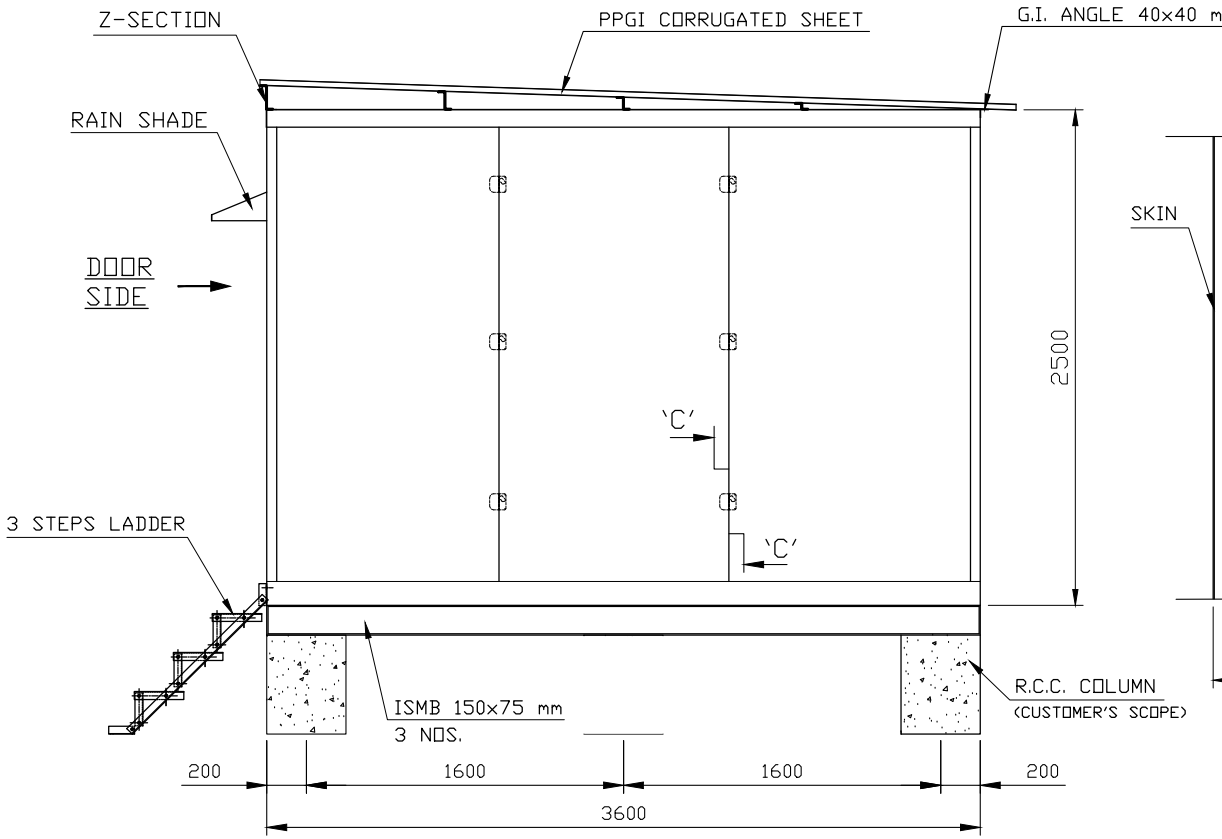
DIMENSION :
EXT : 3600x2600x2500 mm
INT : 3480x2480x2380 mm
PANEL THICKNESS : 60 mm
SKIN : 0.6mm P.C.S. AWT (OUTER)
: 0.6mm P.C.S. AWT (INNER)

ALL DIMENSIONS ARE IN mm

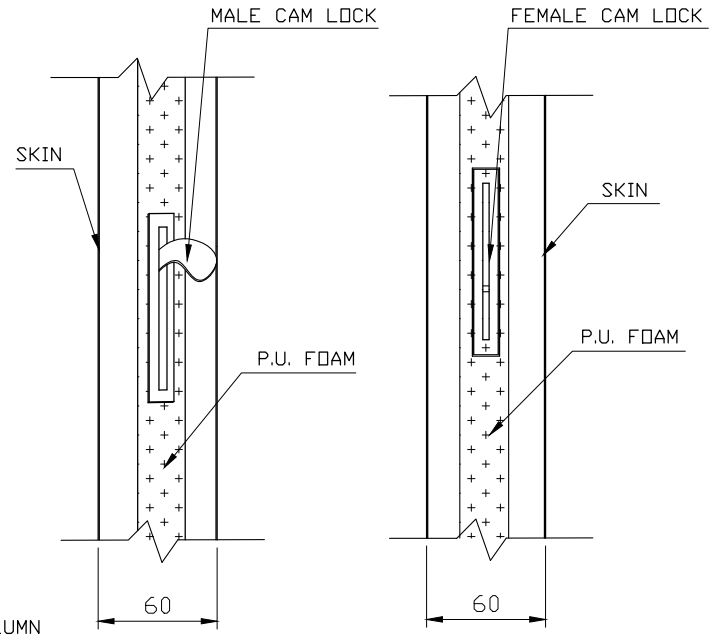



SECTION 'B-B'
SCALE 5:1

ALL DIMENSIONS ARE IN mm

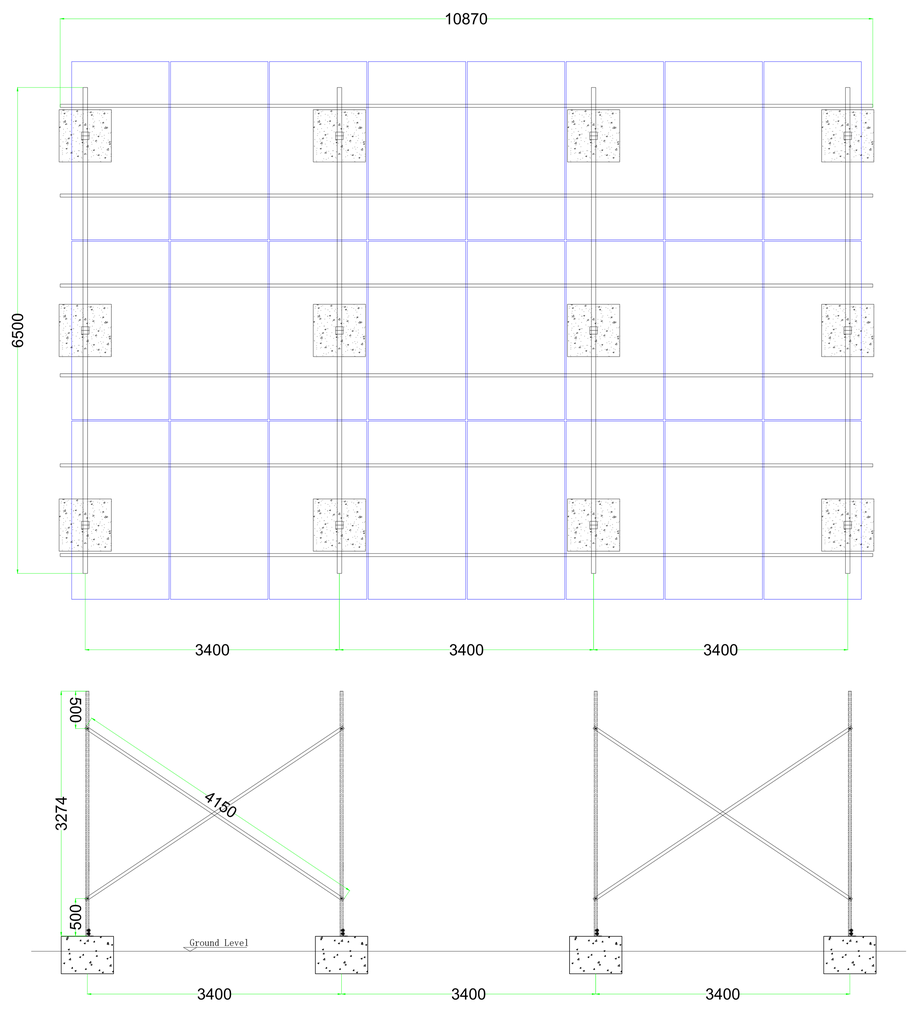


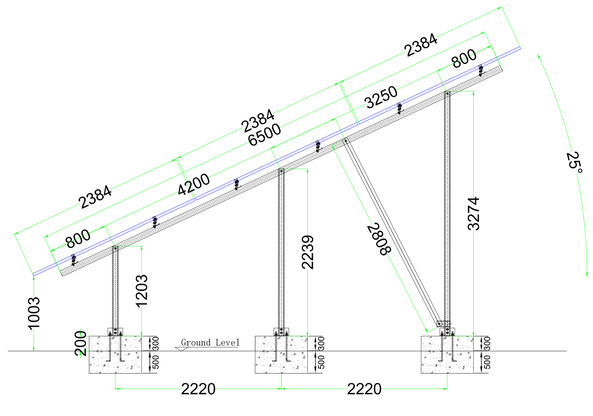

JOINT SIDE WALL
WITH CAM LOCK

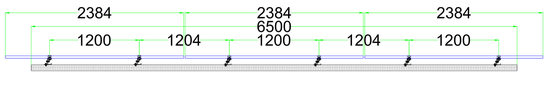


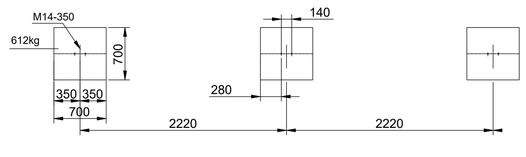

CROSS SECTION 'C-C'

ALL DIMENSIONS ARE IN mm



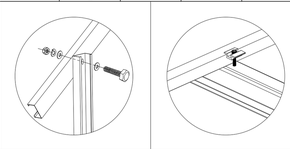



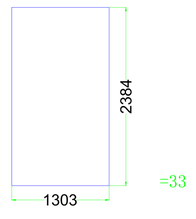




the foundation is PCC

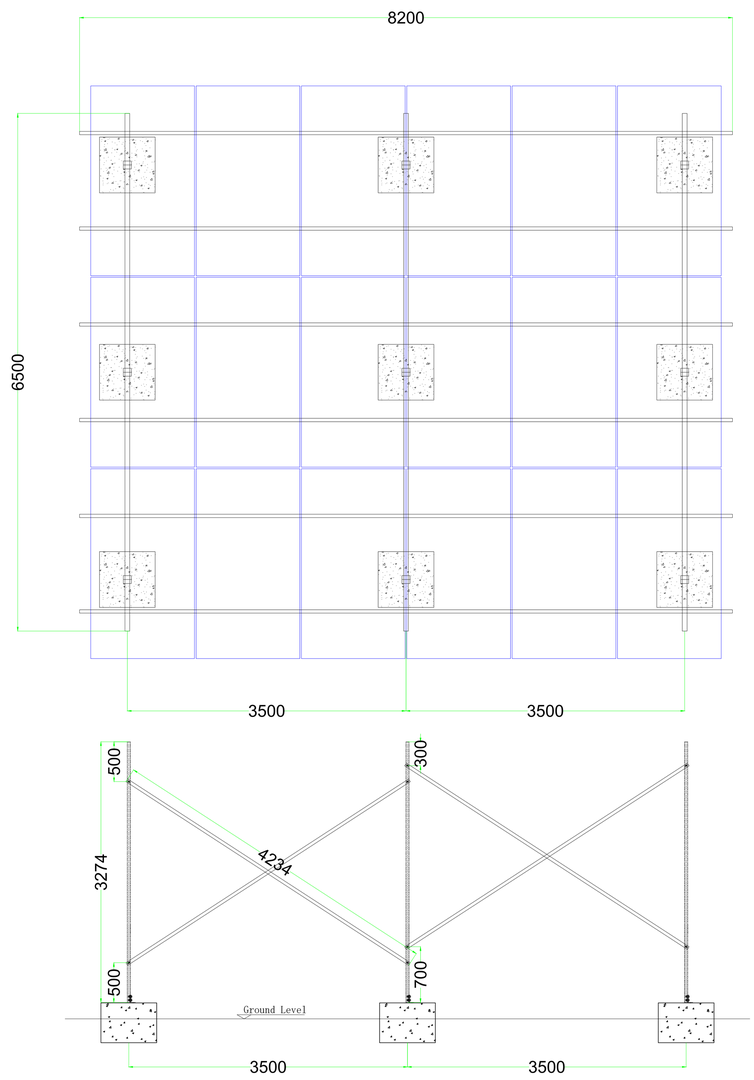
| | | | | |
|---|---|---|---|---|
| Project Name | | | | |
| Project Number | EPR-2502056 | | | |
| Design Standard | | | | |
| Design Conditions | Panel Size | 2384x1303x33 | | |
| | Panel Capacity | | Snow Load | 1.4kn/m2 |
| | Design Angle | 25° | Wind Speed | 42m/s |

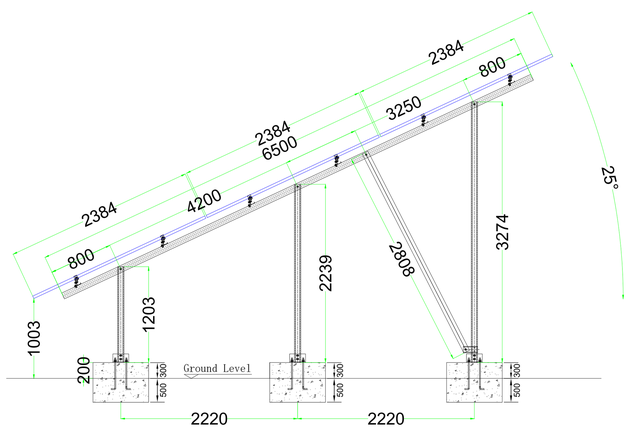


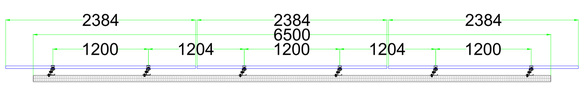


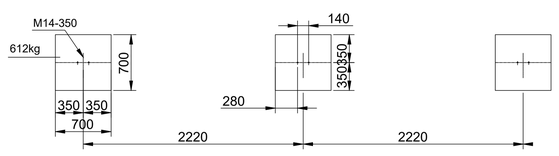

| | | | |
|---|---|---|---|
| Designed | | Chk'D | |
| Proofread | | Appv'D | |
| Scale | 1:1 | View | |
| Page | 2 | Version | V1.0 A3 |

Simply Solar- NextGen Energy Solution



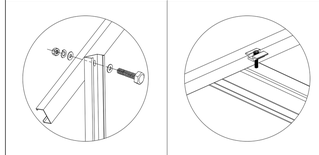



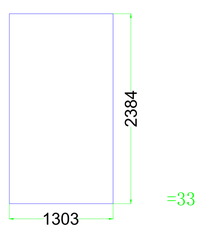




the foundation is PCC

| | | | | |
|---|---|---|---|---|
| Project Name | | | | |
| Project Number | EPR-2502056 | | | |
| Design Standard | | | | |
| Design Conditions | Panel Size | 2384x1303x33 | | |
| | Panel Capacity | | Snow Load | 1.4kn/m2 |
| | Design Angle | 25° | Wind Speed | 42m/s |

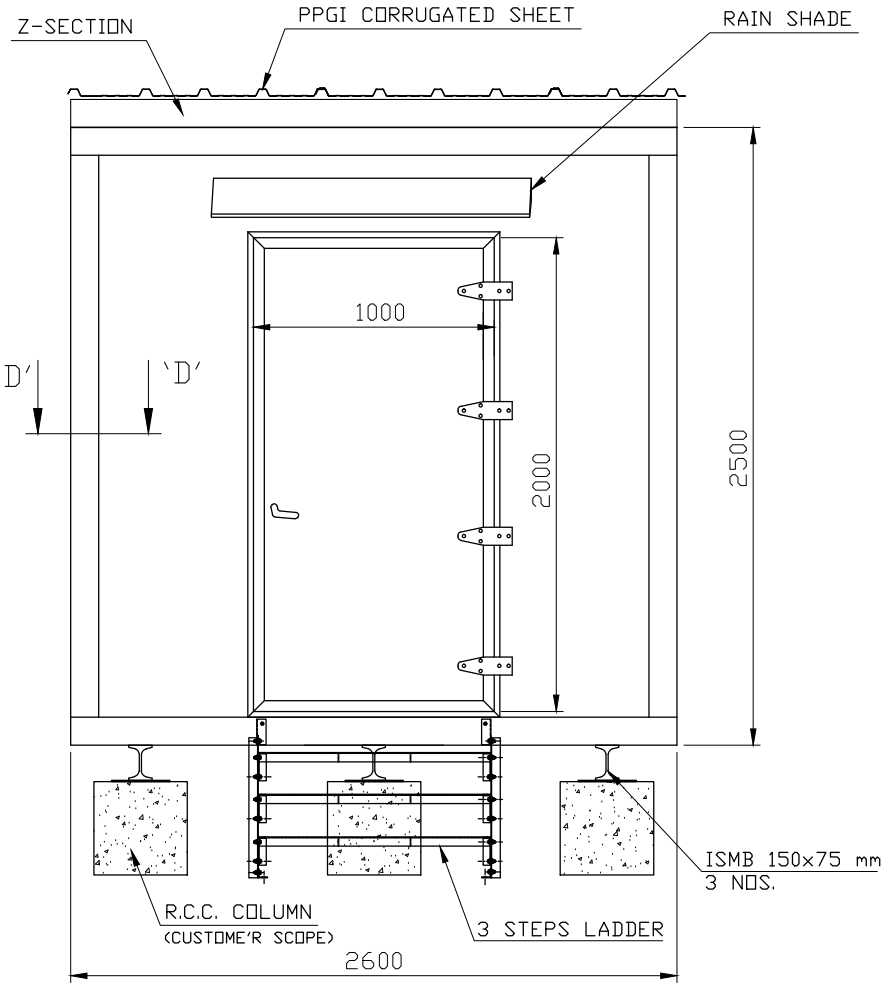




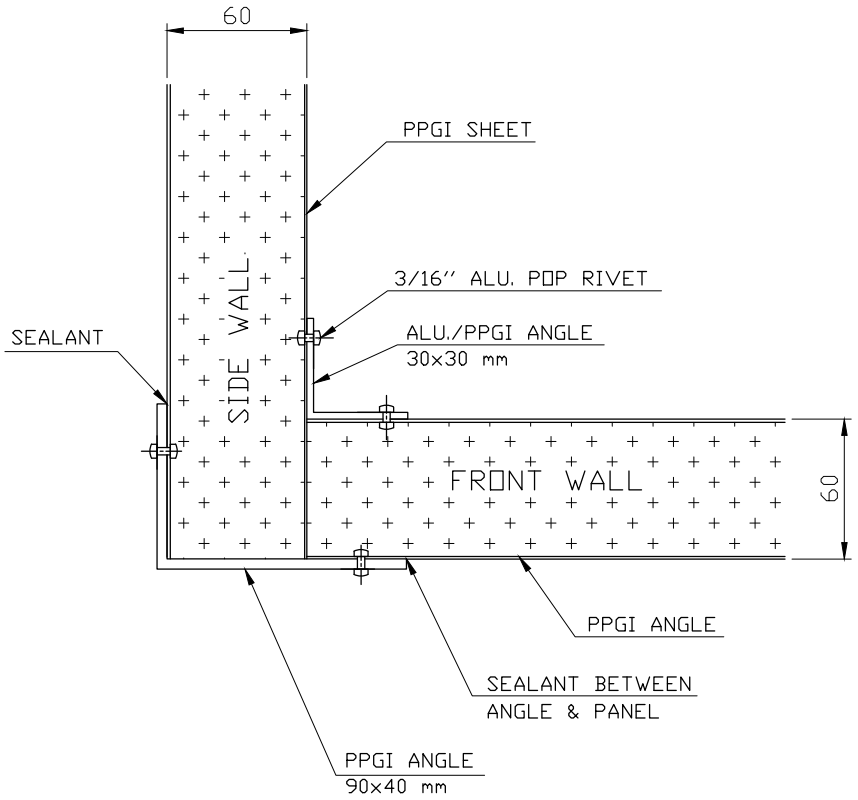

=33

| | | | |
|---|---|---|---|
| Designed | | Chk'D | |
| Proofread | | Appv'D | |
| Scale | 1:1 | View | |
| Page | 2 | Version | V1.0 A3 |

Simply Solar- NextGen Energy Solution

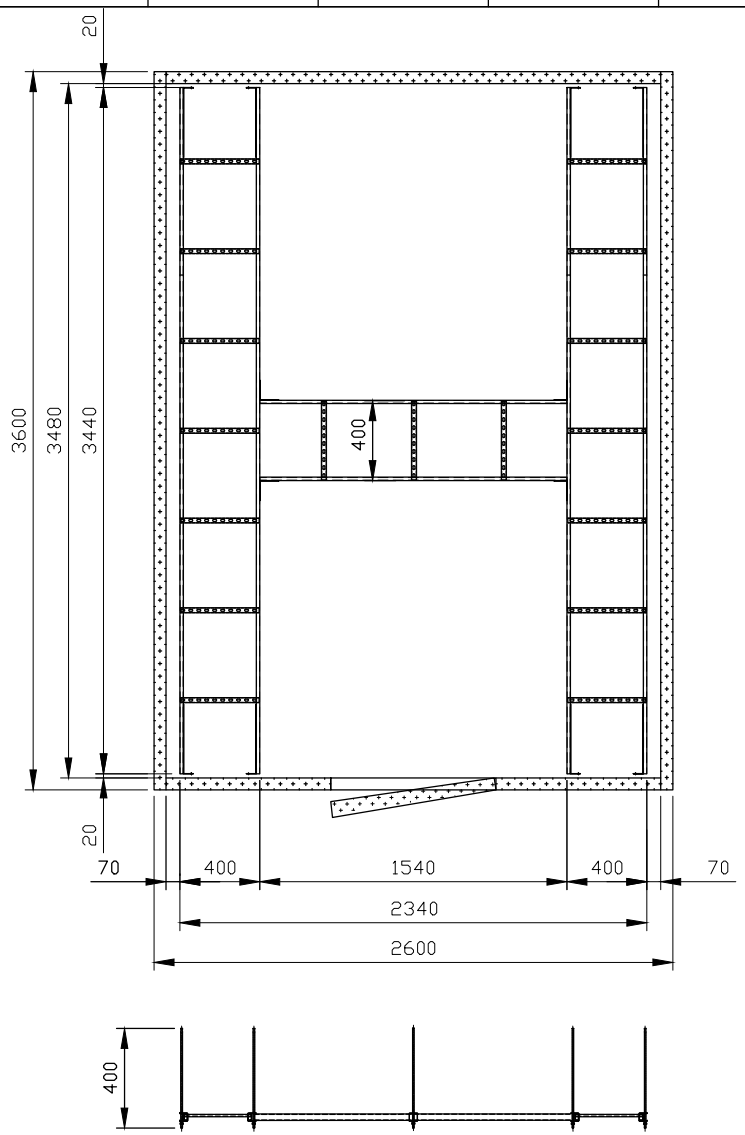



FRONT VIEW




SECTION 'D-D'
(SCALE 10:1)

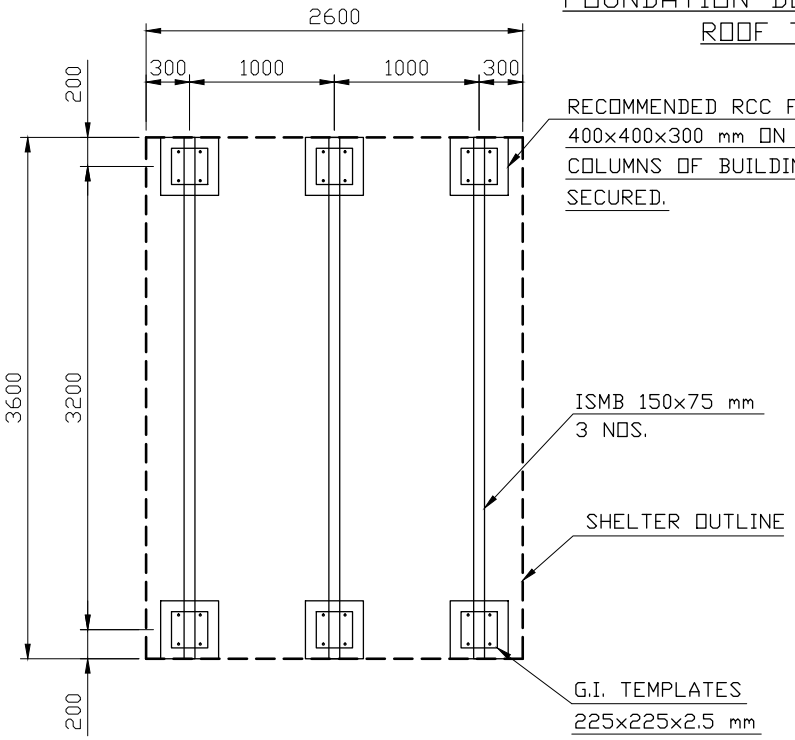
ALL DIMENSIONS ARE IN mm



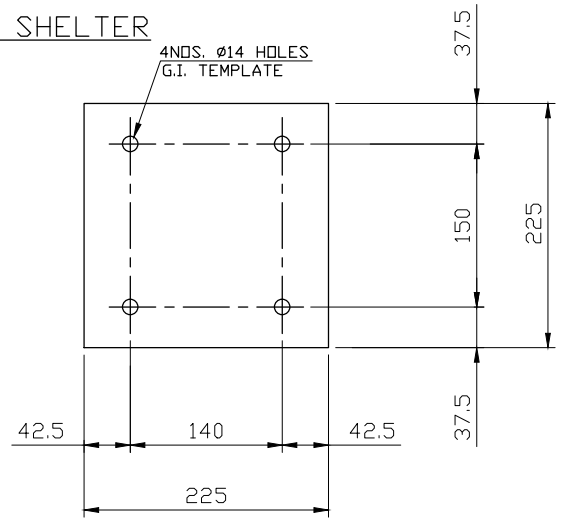

ALL DIMENSIONS ARE IN mm

# FOUNDATION DETAILS FOR PREFAB SHELTER

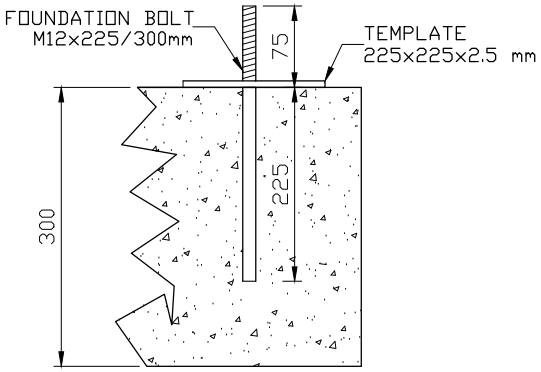
## ROOF TOP SHELTER




SKID MOUNTING ON R.C.C COLUMN



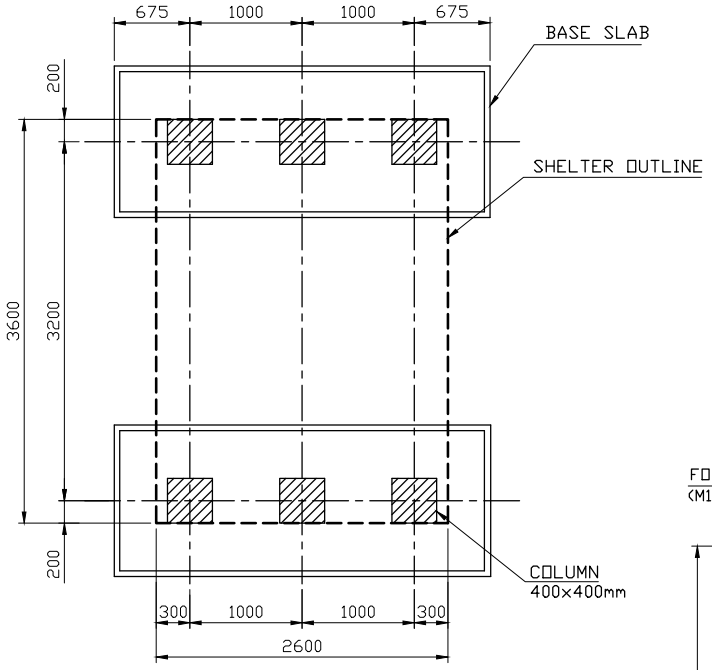

TEMPLATE 225x225x2.5 mm



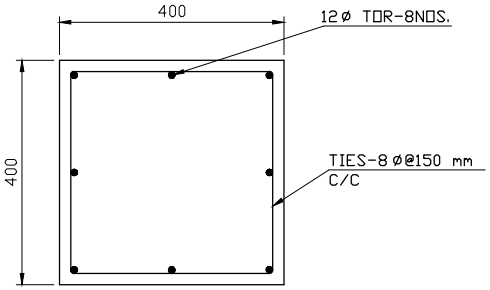

FOUNDATION BOLT
INSERTED IN R.C.C. COLUMN

ALL DIMENSIONS ARE IN mm

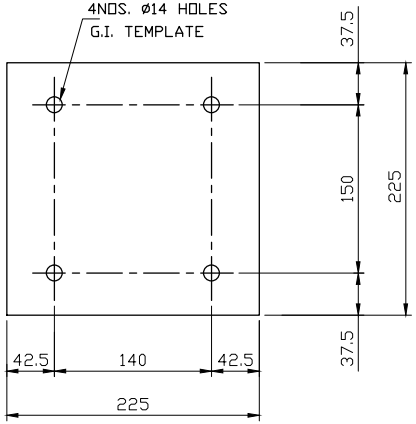
# FOUNDATION DETAILS FOR PREFAB SHELTER
## GROUND BASED SHELTER



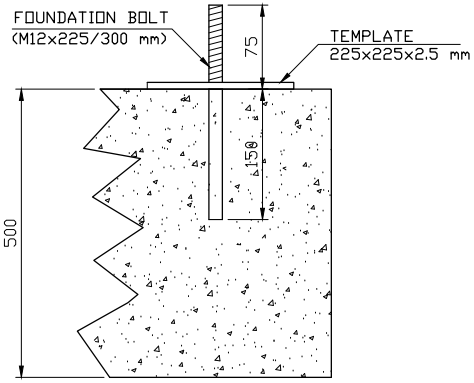

LAYOUT PLAN



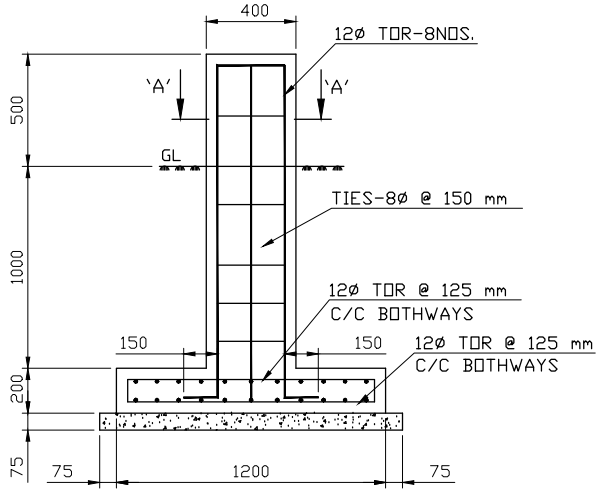

SECTION 'A-A'
COLUMN 400x400




TEMPLATE 225x225x2.5 mm




FOUNDATION BOLT
INSERTED IN R.C.C. COLUMN

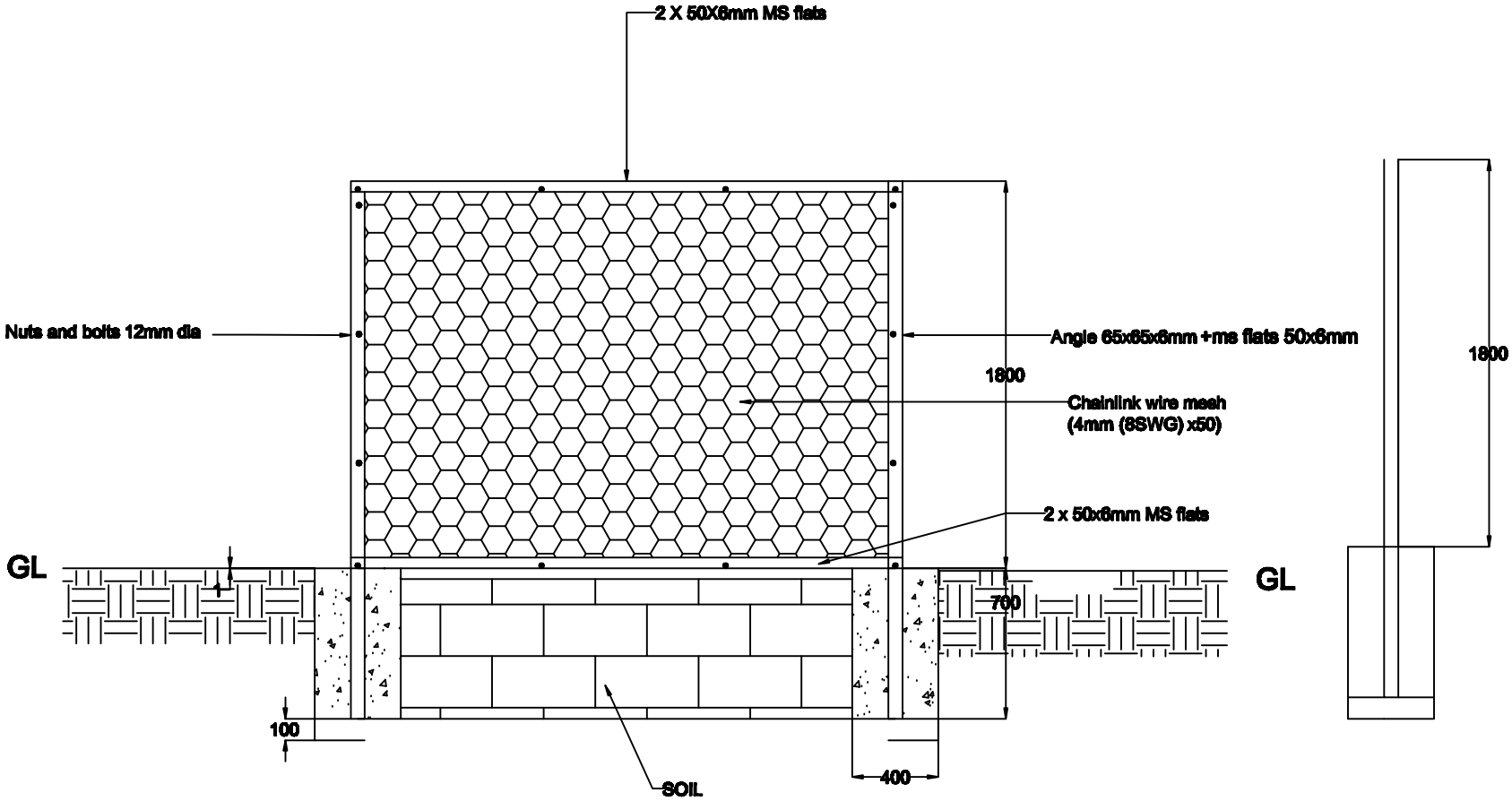



CROSS SECTION
(SCALE 2:1)

NOTES :-

1. PCC SHALL BE OF GRADE M10.
2. CONCRETE MIX SHALL BE OF GRADE M20 (1:1.5:3)
3. REINFORCEMENT SHALL BE TOR BARS OF GRADE FE415

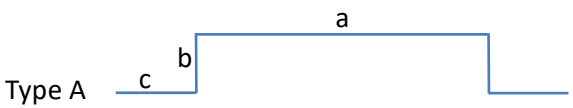
ALL DIMENSIONS ARE IN mm

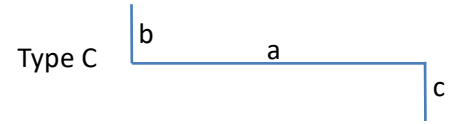

2 X 50X6mm MS flats
Nuts and bolts 12mm dia
Angle 65x65x6mm +ms flats 50x6mm
1800
Chainlink wire mesh
(4mm (8SWG) x50)
2 x 50x6mm MS flats
GL
GL
700
100
SOIL
400
1800

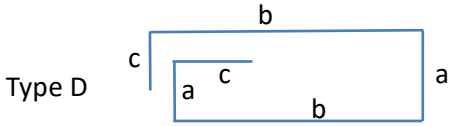
# ICON POWER SOLUTIONS PVT LTD

112 113, Sector 5, IMT Manesar, Gurgaon -122050, Haryana - INDIA

## 30 Mtr 3L Tower Bar Bending Schedule






Cover Slab 50 mm

Column 40 mm

Beam 25 mm

| Item | Position | Type | Dia. Of Rebar | Size a | Size b | Size c | Length | Qty in Nos both ways or total | Unit wt | Total Weight of |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mm) | (mm) | (mm) | (mm) | (mm) | | (kg/m) | (kg) |
| Raft Slab | Top | B | B10 | 2600 | 300 | - | 3200 | 126 | 0.62 | 249.98 |
| | Bottom | B | B10 | 2600 | 300 | - | 3200 | 126 | 0.62 | 249.98 |
| | | | | | | | | | | |
| Tie Beams | Top | B | B16 | 4378 | 300 | - | 4978 | 6 | 1.58 | 47.19 |
| | Bottom | B | B16 | 4378 | 300 | - | 4978 | 6 | 1.58 | 47.19 |
| | Strips | D | B8 | 180 | 300 | 80 | 1120 | 72 | 0.40 | 32.26 |
| Column | Main | C | B20 | 3100 | 480 | 650 | 4230 | 36 | 2.47 | 376.13 |
| | Ties | D | B8 | 512 | 512 | 80 | 2208 | 69 | 0.40 | 60.94 |
| | | D | B8 | 512 | 191 | 80 | 1566 | 132 | 0.40 | 82.68 |
| | | | | | | Total (Approx. 5% extra considered) | | | | 1200.00 |
| | | | | | | | | | | |

* Chairs Shall be Provided whenever required

Notes :

1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.