FLOOR PLAN DETAIL

Schedule of Door & Windows

<table>
<thead>
<tr>
<th>Name</th>
<th>Lintel</th>
<th>Width</th>
<th>Stil l/l</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>2.10</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>2.10</td>
<td>0.75</td>
<td></td>
<td>PVC DOOR</td>
</tr>
<tr>
<td>W1</td>
<td>2.10</td>
<td>1.50</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>W2</td>
<td>2.10</td>
<td>0.90</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>2.10</td>
<td>0.60</td>
<td>1.65</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:-
Clear height of DU = 2.85 m
Chajja projection over windows is 450 mm.
* All the Dimensions in m

NOTES:-
- All dimensions are in m. unless wherever specified diameter of the bars shown in mm
- Dimensions are not to be scaled out, only written dimensions may be taken as correct.
- Nominal mix concrete 1:1.5:3 according IS 456 Clause 9.3
- The reinforcement shall be of high strength deformed steel bars conforming to IS:1786-2008
- Lap length and development length (Ld) for 10 mm φ is 500 mm
- Second class brick must be used
- Mortar 1:4 as per Table 3 IS 4326-2013
- All walls are one Brick Thick Masonry walls or Autoclaved Aerated Block of Class 7.5
- Any discrepancy in the structural drawings should be correlated with architectural drawing.
- Refer DWG-2 to DWG-5 for earthquake resistance and structural detail.

DRC. No. - NIT/CED/2017/PMA
-OP1-MB-SR-ZV/DWG-1

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

BUILDING NAME:
PMAH IFA
OPTION I
MASONRY BUILDING
SLOPING ROOF
ZONE V

DRAWING TITLE:
FLOOR PLAN

DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak

Dr. Hemant Kumar Vinayak
Assistant Professor
Department of Civil Engineering
National Institute of Technology, Hamirpur -177005 (H.P.)

Dr. Pardeep Kumar
Associate Professor (Structural Engg.)
Civil Engineering Department
NIT, Hamirpur (H.P.)-177005
- In case of foundation to be constructed in expansive soil
- Clear cover for the reinforcement should be 30mm.

FOOTING DETAILS
- All dimensions are in meter

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Assistant Professor
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**DETAIL OF R/F AROUND DOOR**

- 1 nos 16mm Ø bar
- Lintel band 75mm depth
- Door opening:
  - Concrete mix 1:1.5:3
- 2 nos 8mm Ø +1 no 16mm Ø bar
- Brick work
- Plinth band 75mm depth

**SECTION A-A**

- 10 mm Ø bars
- 8mm Ø bar, @ 150mm
- 16mm Ø bar

**SECTION B-B**

- Lateral ties of 8 mmØ bar @ 150 mm

**DETAIL OF PLINTH/ LINTEL/ ROOF/GABLE BAND**

- Longitudinal bars of 10 mm Ø bars
- U stirrups of 8mm Ø bar @ 150mm

**PLAN OF SILL LEVEL R/F**

- 8mm Ø stirrups @ 150mm
- Longitudinal 10mm Ø bars
- 230
- 900mm

**SECTION OF PLINTH/LINTEL**

- A = 75 mm
- ROOF/GABLE A = 100 mm BAND

**INTERMEDIATE VERTICAL STEEL**

- a & b - alternate courses in one brick wall

- 1 nos 16mm Ø bar
- lintel band 75mm depth
- window opening
- concrete mix 1:1.5:3
- 2 nos 8mm Ø +1 no 16mm Ø bar
- Brick work

**DETAIL OF R/F AROUND WINDOW**

- Lap length and development length (La) for 10mmØ is 500 mm
- Clear cover for band should be 30mm.

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR**

**BUILDING NAME:**
PMAY HFA

**OPTION I**

**MASONRY BUILDING**

**SLOPING ROOF**

**ZONE V**

**DRAWING TITLE:**
DETAILS OF R/F AROUND WINDOW & DOOR,
VERTICAL R/F,
CROSS SECTION OF BAND

**DESIGNED BY:**
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak

**Assistant Professor (Structural Engg.)**
Civil Engineering Department
NIT, Hamirpur (H.P.)-177005
ELEVATION OF TRUSS
Elevation
Detail 3

Detail 2

Plan
Detail 3

Detail 1

Plan
Detail 4

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Dr. Pardeep Kumar

NOTES:-
1. All dimensions are in mm unless specified.
2. Dimensions are not to be scaled out, only written dimensions may be taken as correct.
4. Any discrepancy in structural Drawings should be correlated with Architectural drawing.
5. Scale: Not to scale
6. Truss has been designed for 0.3m snow depth

TYPICAL DETAILS OF WELD LENGTH

ANGLE SIZE | WELD THK | a(mm) | b(mm) | GUSET THK
---|---|---|---|---
L 50 x 50 x 5 | 6 | 50 | 90 | 8


NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

BUILDING NAME:
PMAY HFA
OPTION 1
MASONRY BUILDING SLOPING ROOF ZONE V

DRAWING TITLE:
CROSS SECTION OF TRUSS

DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak