| Schedule of Door & Windows | | | | |
|---|---|---|---|---|
| Name | Lintel | Width | Sill lvl | Description |
| D1 | 2.10 | 0.90 | -- | |
| D2 | 2.10 | 0.75 | -- | PVC DOOR |
| W1 | 2.10 | 1.65 | 0.90 | |
| V | 2.10 | 0.90/1.00 | 1.80 | |

NOTES:-

Clear height of DU = 2.85 m

Earthquake resistance structure as per site condition

* All the Dimensions in m

Confinement Column sizes : C1 - 230 mm X 230 mm, C2 - 230 mm X 150 mm, C3- 115 mm X115 mm

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 ($L_d$) for 10 mm Φ is 500 mm
- Second class brick must be used
- Mortar 1:4 according to 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.
- Partition Wall of WC and Bath, Bath and Entry Passage wall shall be constructed till full height after slab casting
- Refer DWG-2 to DWG-4 for earthquake resistance and structural detail.

**DRG. No. - NIT/CED/2017/PMAY -OP2-CMB-FR-ZIV,V/DWG-1**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR**

**BUILDING NAME:**
**PMAY HFA**
**OPTION 2**
**CONFINED MASONRY**
**BUILDING**
**FLAT ROOF**
**ZONE IV,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

ELEVATION

FOOTING DETAILS

- In case of foundation to be constructed in expansive soil

- All dimensions are in meter

| |
|---|
| **DRG. No. - NIT/CED/2017/PMAY -OP2-CMB-FR-ZIV,V/DWG-2** |
| **NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR** |
| **BUILDING NAME:**<br>**PMAY HFA**<br>**OPTION 2**<br>**CONF. MASONRY BUILDING**<br>**FLAT ROOF**<br>**ZONE IV,V** |
| **DRAWING TITLE:**<br>**FOOTING DETAIL & ELEVATION** |
| **DESIGNED BY:**<br>**Dr. Pardeep Kumar**<br>**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

CORNER VERTICAL STEEL

a & b :- alternate courses in one brick wall

INTERMEDIATE VERTICAL STEEL

a & b :- alternate courses in one brick wall

DETAIL OF CONFINED R/F OF DOOR

DETAIL OF CONFINED R/F OF WINDOW

DETAILS CONFINED COLUMN JUNCTION

cross section of corner confined column course -a

cross section of corner confined column course -b

"A"=Closer ties=Spacing of hoops @ 100mm c/c

"B"=Spacing of hoops @ 200mm c/c

C-2

C-3

DETAILS OF PLINTH/LINTEL BAND

SECTION A-A

SECTION B-B

| |
|---|
| DRG. No. - NIT/CED/2017/PMAY -OP2-CMB-FR-ZIV,V/DWG-3 |
| NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR |
| BUILDING NAME: PMAY HFA OPTION 2 CONF. MASONRY BUILDING FLAT ROOF ZONE IV,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 |


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

Section 1-1

Section 2-2

Section 3-3

Section 4-4

- Clear cover for the slab should be 20 mm.
- All dimensions are in meter

SCHEDULE OF BARS

a. 8 mm Ø @ 150 mm c/c

DRG. No. - NIT/CED/2017/PMAY -OP2-CMB-FR-ZIV&V/DWG-4

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

BUILDING NAME:
PMAY HFA
OPTION 2
CONFINED MASONRY BUILDING
FLAT ROOF
ZONE IV & V

DRAWING TITLE:
SLAB DETAILS

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