

**FLOOR PLAN DETAIL**

**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 10mm $\Phi$  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
- Partition Wall of WC and Bath, toilet and passage shall be constructed till full height after slab casting
- Any discrepancy in the structural drawings should be correlated with architectural drawing.
- Refer DWG-2 to DWG-5 for earthquake resistance and structural detail.

**Schedule of Door & Windows**

Name	Lintel	Width	Sill lvl	Description
D1	2.10	0.90	--	
D2	2.10	0.75	--	
W1	2.10	1.76	0.60	
W2	2.10	1.50	0.60	
W3	2.10	1.20	1.20	
V	2.10	0.60	1.65	

**NOTES:-**

Clear height of DU = 2.85 m  
 Earthquake resistance structure as per site condition  
 Confinement Column sizes : C1 - 230 mm X 230 mm,  
 C2 - 230 mm X 150 mm,  
 C3 - 115 mm X 115 mm

\* All the Dimensions in m

**DRG. No. - NIT/CED/2017/PMAY -OP3-CMB-SR-ZIV,V/DWG-1**

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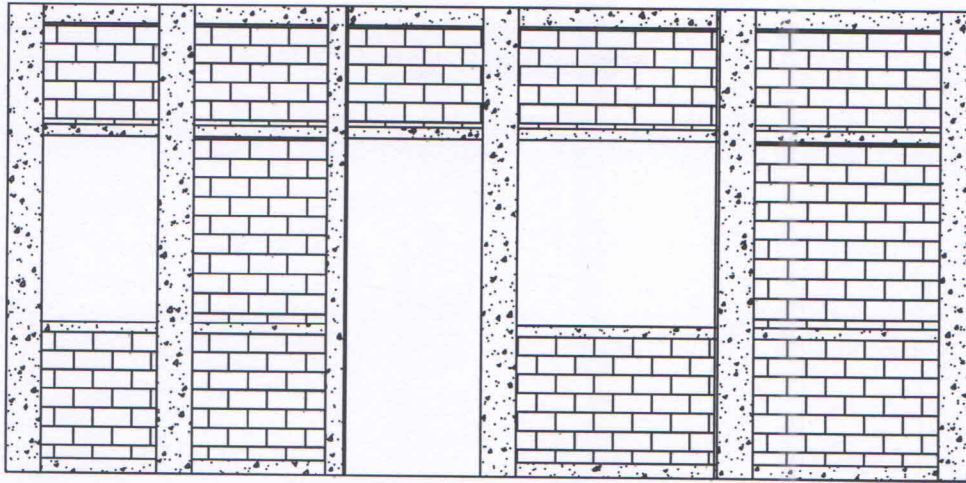
**BUILDING NAME:  
 PMAY HFA  
 OPTION 3  
 CONFINED MASONRY  
 BUILDING  
 SLOPING ROOF  
 ZONE IV,V**

**DRAWING TITLE:  
 FLOOR PLAN**

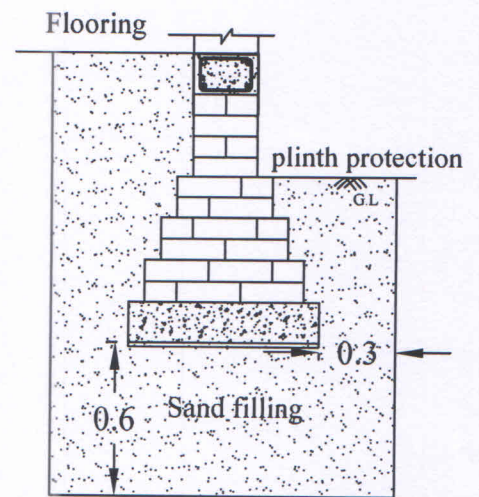
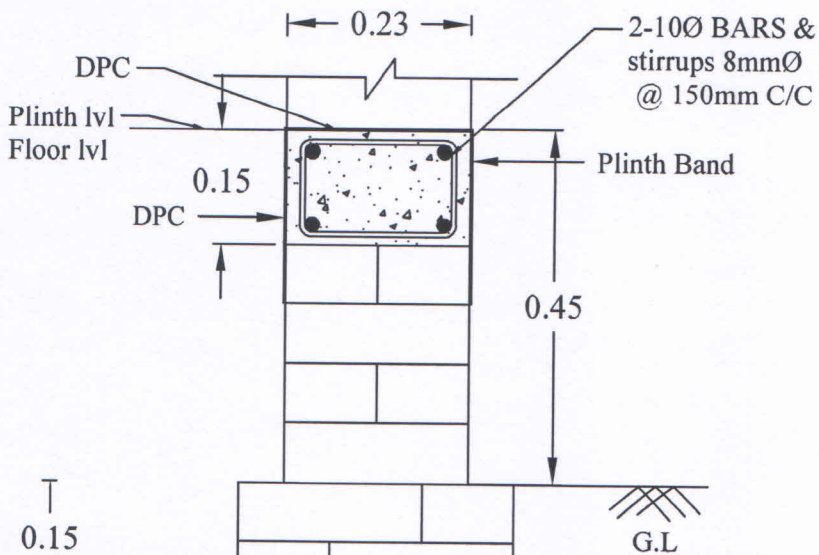
**DESIGNED BY:  
 Dr. Pardeep Kumar  
 Dr. Hemant Kumar Vinayak**

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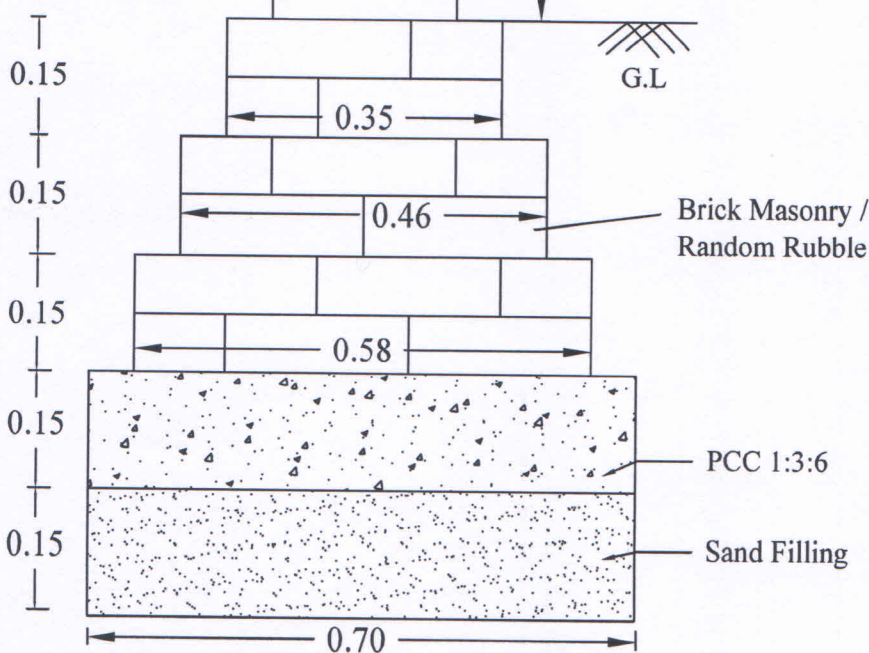
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**ELEVATION**



• In case of foundation to be constructed in expansive soil



**FOOTING DETAILS**

• All dimensions are in meter

**DRG. No. - NIT/CED/2017/PMAY-OP3-CMB-SR-ZIV,V/DWG-2**

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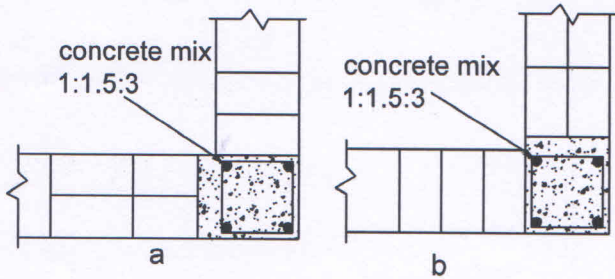
**BUILDING NAME:  
PMAY HFA  
OPTION 3  
CONF.MASONRY  
BUILDING  
SLOPING ROOF  
ZONE IV,V**

**DRAWING TITLE:  
FOOTING DETAIL &  
ELEVATION**

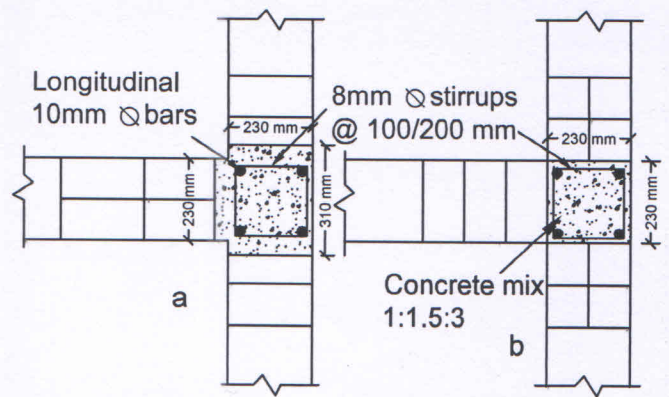
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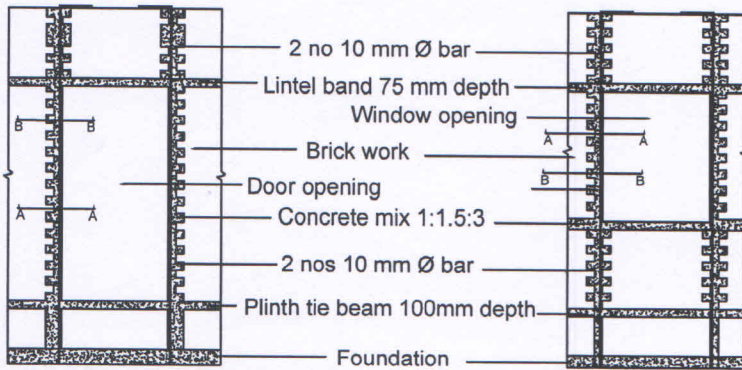
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**CORNER VERTICAL STEEL**  
a & b :- alternate courses in one brick wall

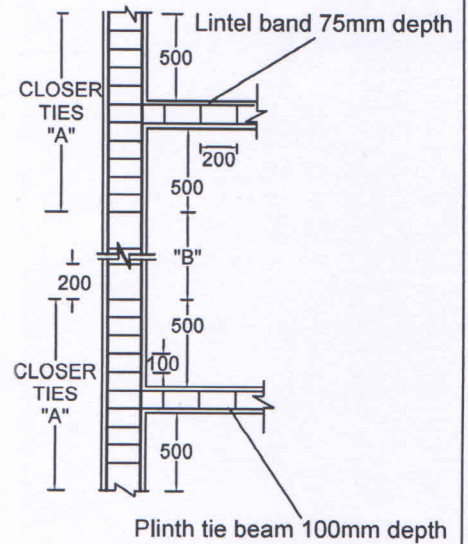


**INTERMEDIATE VERTICAL STEEL**  
a & b :- alternate courses in one brick wall

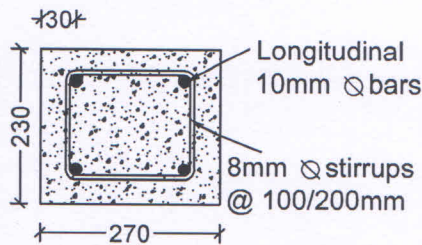


**DETAIL OF CONFINED R/F OF DOOR**

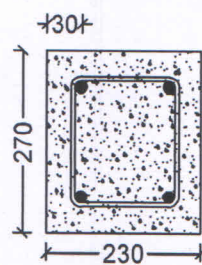
**DETAIL OF CONFINED R/F OF WINDOW**



**DETAILS CONFINED COLUMN JUNCTION**



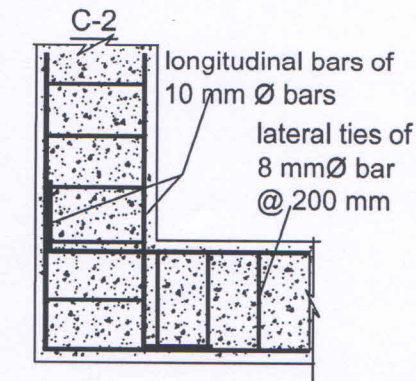
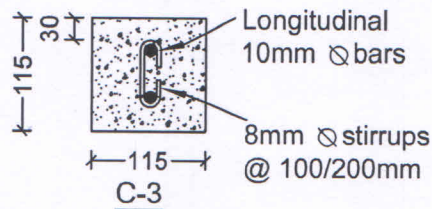
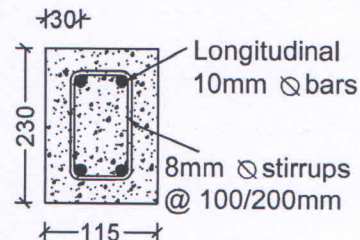
**cross section of corner confined column course -a**



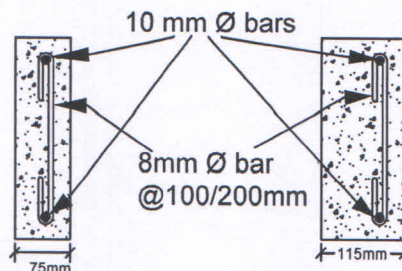
**cross section of corner confined column course -b**

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

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



**DETAILS OF PLINTH/LINTEL BAND**



**SECTION A-A**

**SECTION B-B**

DRG. No. - NIT/CED/2017/PMAY-OP3-CMB-SR-ZIV,V/DWG-3

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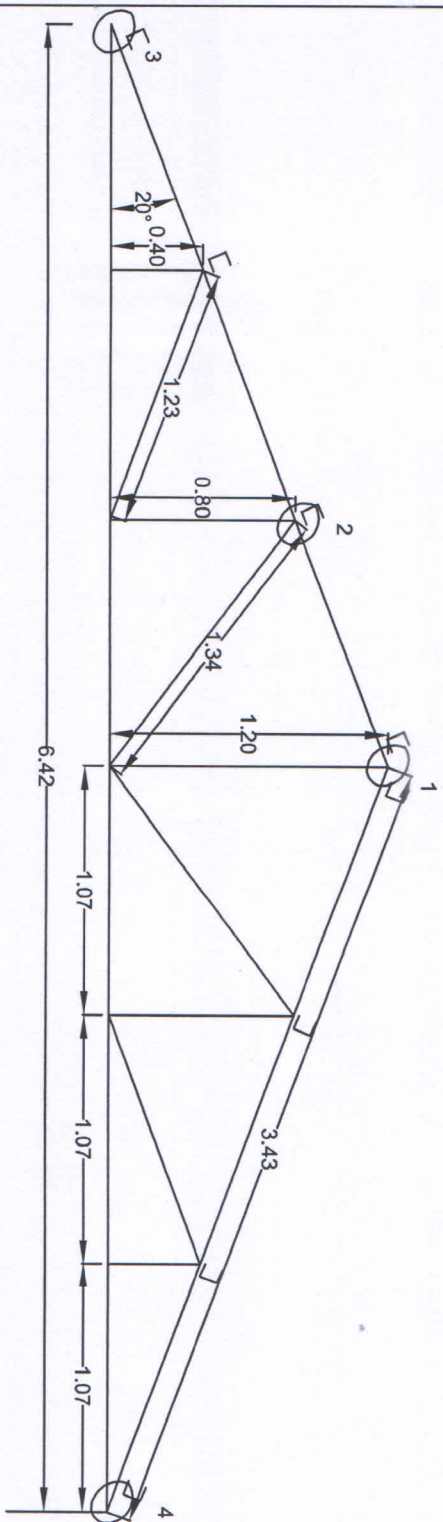
**BUILDING NAME:**  
PMAY HFA  
OPTION 3  
CONF. MASONRY BUILDING  
SLOPING ROOF  
ZONE IV,V

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

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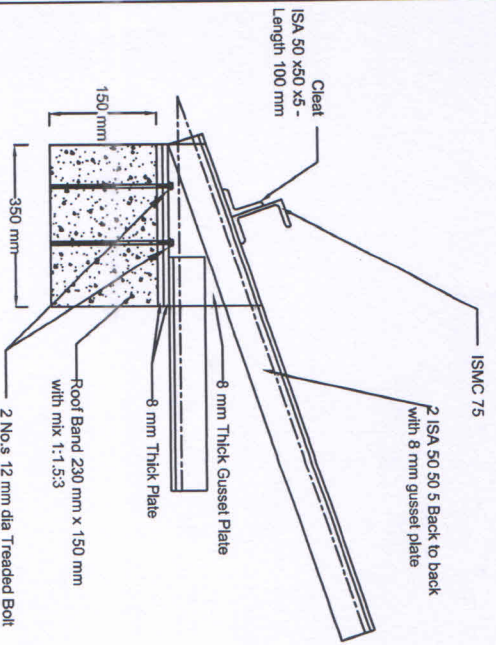


**ELEVATION OF TRUSS**

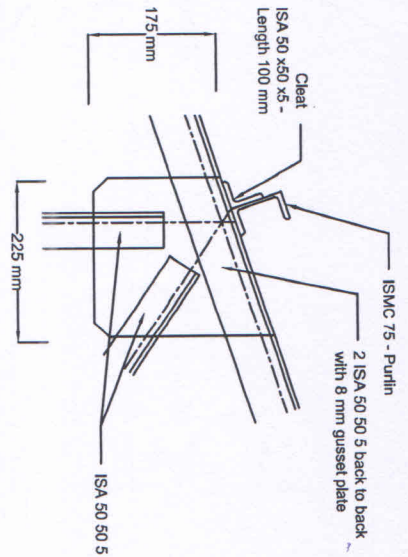
<b>DRG. No. - NIT/CED/2017/PMAY -OP3-CMB-SR-ZIV, V/DWG-4</b>
<b>NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR</b>
<b>BUILDING NAME: PMAY HEA OPTION 3 CONFINED MASONRY BUILDING SLOPING ROOF ZONE IV, V</b>
<b>DRAWING TITLE: ELEVATION OF TRUSS</b>
<b>DESIGNED BY: Dr. Pardeep Kumar Dr. Hemant Kumar Vinayak</b>

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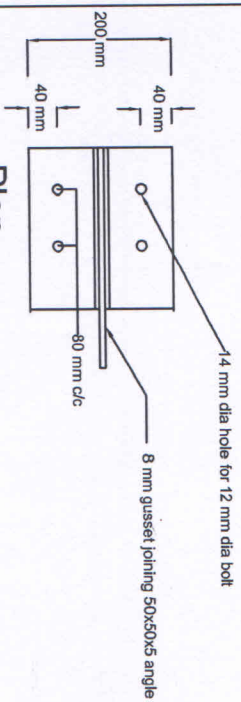
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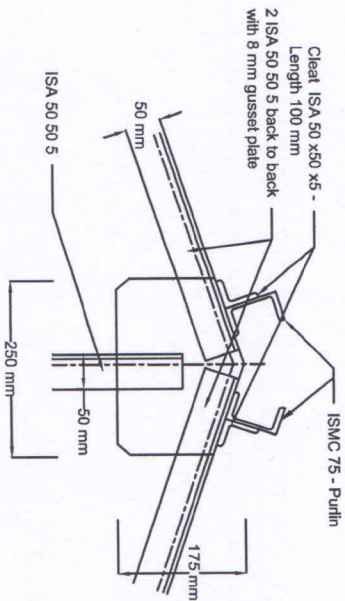
**Elevation Detail 3**



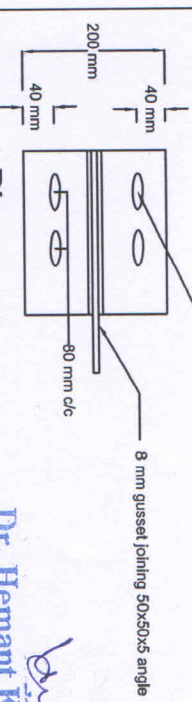
**Detail 2**



**Plan Detail 3**



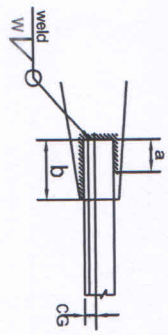
**Detail 1**



**Plan Detail 4**

Sr.No. **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.
3. Grade of concrete M:20.
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.
- 7.



ANGLE SIZE	WELD THK W. mm	a(mm)	b(mm)	GUSSET THK mm
L 50 x 50 x 5	6	50	90	8

TYPICAL DETAILS OF WELD LENGTH

**DRG. No. - NIT/CED/2017/PMAY -OP3-CMB-SR-ZIV, V/DWG-5**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR**

**BUILDING NAME: PMAY HRA OPTION 3 CONFINED MASONRY BUILDING SLOPING ROOF ZONE IV, V**

**DRAWING TITLE: CROSS SECTION OF TRUSS**

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