

Schedule of Door & Windows				
Name	Lintel	Width	Sill lvl	Description
D1	2.10	0.90	--	PVC DOOR
D2	2.10	0.75	--	
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 X 115 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<sub>d</sub>) for 10 mm  $\Phi$  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
- 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-5 for earthquake resistance and structural detail.

DRG. No. - NIT/CEID/2017/PMAY  
 -OP2-CMB-SR-ZIV,V/DWG-1

NATIONAL INSTITUTE OF  
 TECHNOLOGY HAMIRPUR

BUILDING NAME:  
 PMAY HFA  
 OPTON 2  
 CONFINED MASONRY  
 BUILDING  
 SLOPING ROOF  
 ZONE IV, V

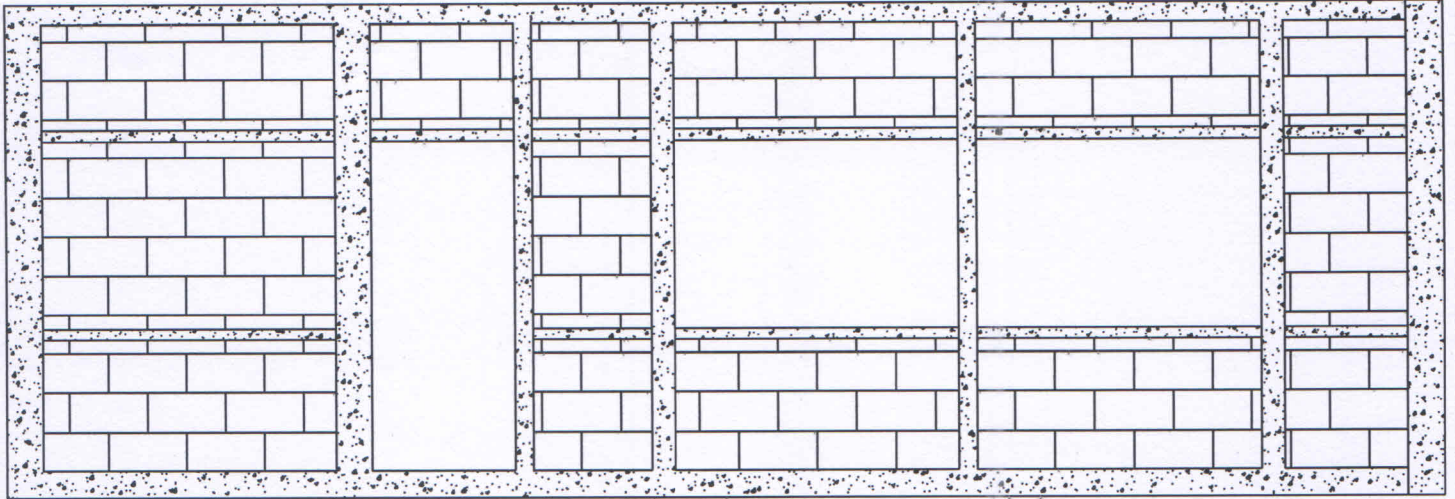
DRAWING TITLE:  
 FLOOR PLAN

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

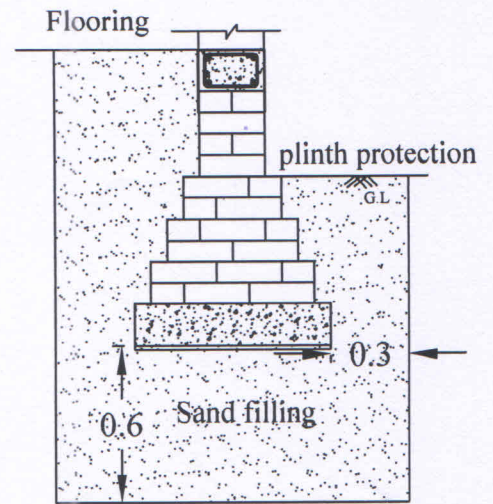
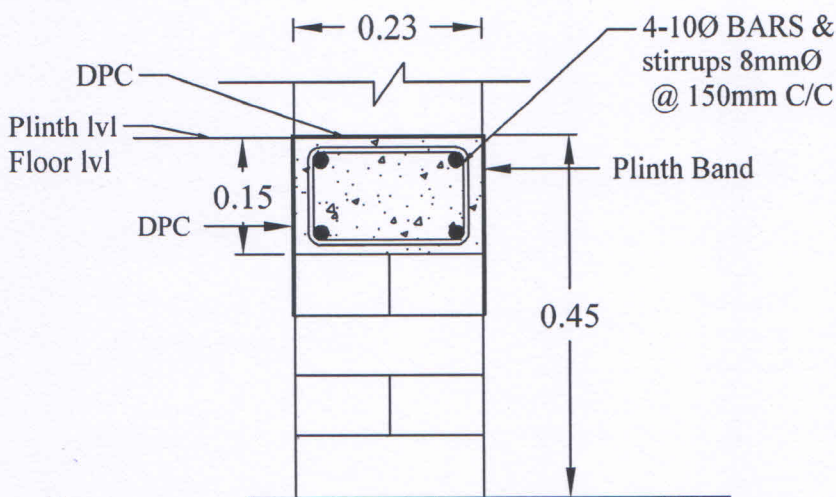
*(Signature)*

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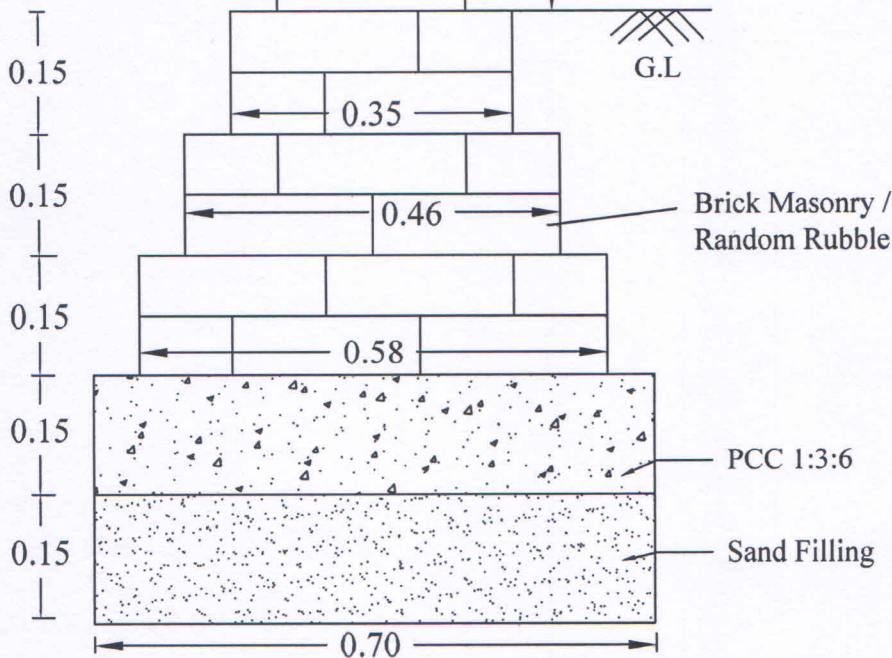
**Dr. Pardeep Kumar**  
 Associate Professor (Structural Engg.)  
 Civil Engineering Department  
 NIT, Hamirpur (H.P.)-177005



**ELEVATION**



• In case of foundation to be constructed in expansive soil



**FOOTING DETAILS**

DRG. No. - NIT/CED/2017/PMA-OP2-CMB-SR-ZIV,V/DWG-2

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

BUILDING NAME:  
PMAY HFA  
OPTION 2  
CONF. MASONRY BUILDING  
SLOPING ROOF  
ZONE IV,V

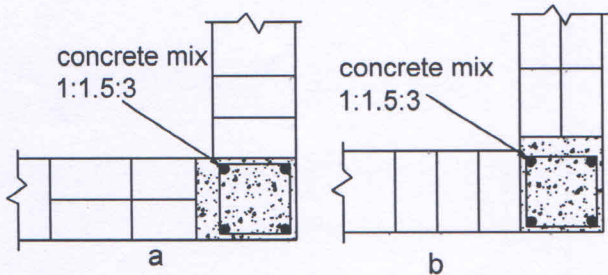
DRAWING TITLE:  
FOOTING DETAIL &  
ELEVATION

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

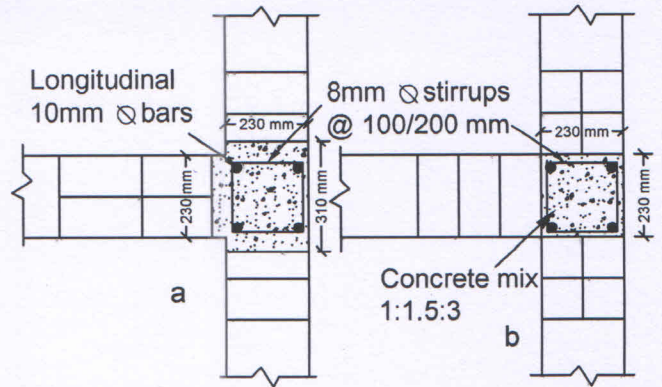
• All dimensions are in meter

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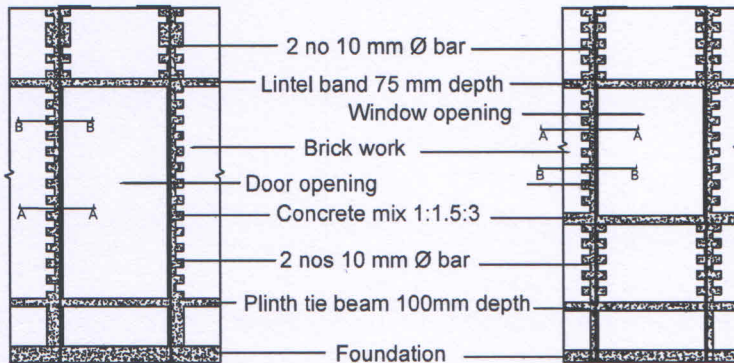
**Dr. Pardeep Kumar**  
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**CORNER VERTICAL STEEL**  
a & b :- alternate courses in one brick wall

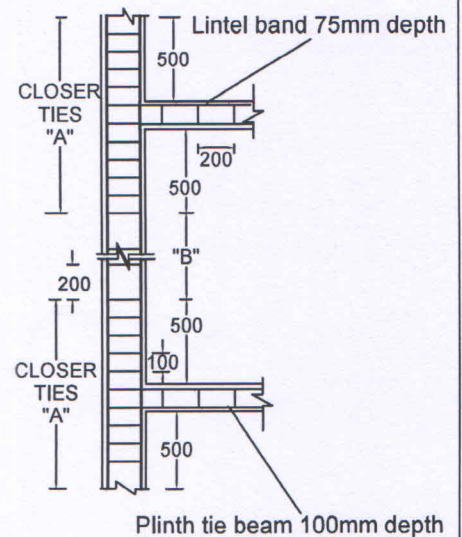


**INTERMEDIATE VERTICAL STEEL**  
a & b :- alternate courses in one brick wall

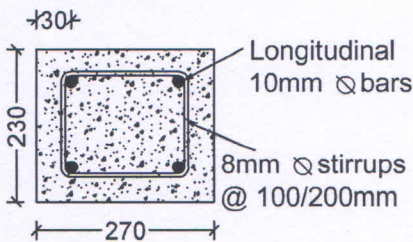


**DETAIL OF CONFINED R/F OF DOOR**

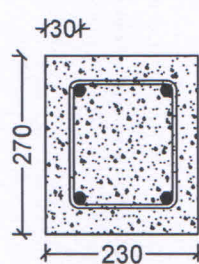
**DETAIL OF CONFINED R/F OF WINDOW**



**DETAILS CONFINED COLUMN JUNCTION**



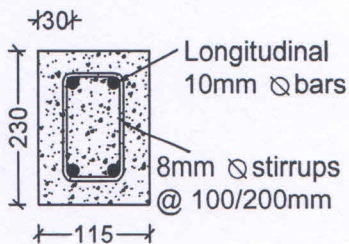
**cross section of corner confined column course -a**



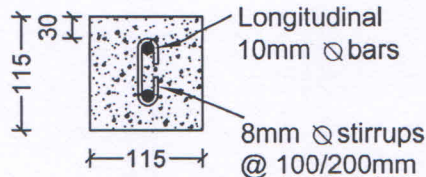
**cross section of corner confined column course -b**

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

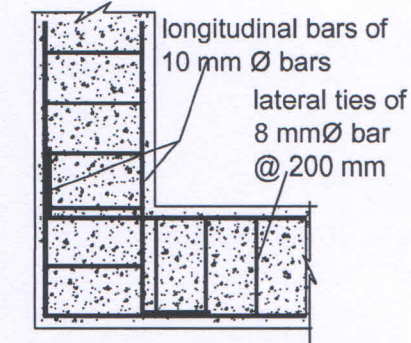
"B"=Spacing of hoops @ 200mm c/c



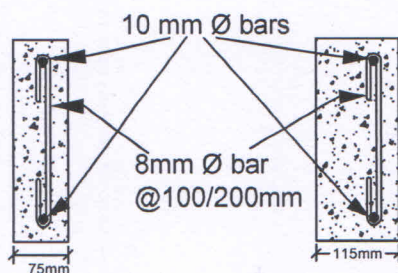
**C-2**



**C-3**



**DETAILS OF PLINTH/LINTEL BAND**



**SECTION A-A**

**SECTION B-B**

**DRG. No. - NIT/CED/2017/PMAY-OP2-CMB-SR-ZIV,V/DWG-3**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR**

**BUILDING NAME:  
PMAY HFA  
OPTION 2  
CONF. MASONRY BUILDING  
SLOPING ROOF  
ZONE IV,V**

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

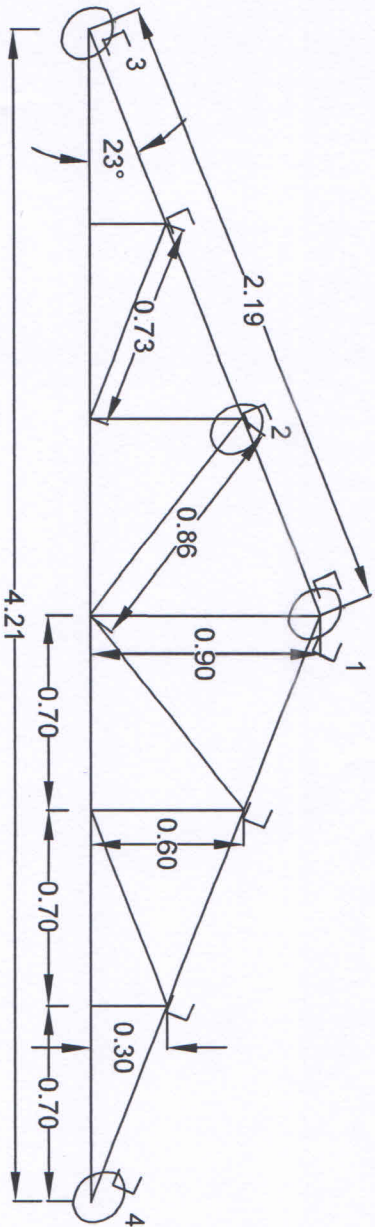
**DESIGNED BY:  
Dr. Pardeep Kumar  
Dr. Hemant Kumar Vinayak**

**Dr. Hemant Kumar Vinayak**

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**Dr. Pardeep Kumar**

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## ELEVATION OF TRUSS

*Vinayak*

**DRG. No. - NIT/CED/2017/  
PMAY -OP2-CMB-SR-  
ZIV,V/DWG-4**

**NATIONAL INSTITUTE OF  
TECHNOLOGY HAMIRPUR**

**BUILDING NAME:  
PMAY HFA  
OPTION 2  
CONF. MASONRY  
BUILDING  
SLOPING ROOF  
ZONE IV,V**

**DRAWING TITLE:  
ELEVATION OF TRUSS**

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

**Dr. Hemant Kumar Vinayak**

Assistant Professor

Department of Civil Engineering

National Institute of Technology,

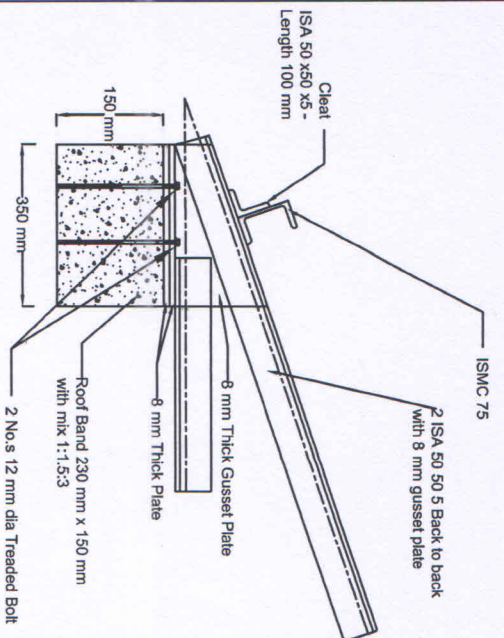
Hamirpur -177005 (H.P.)

**Dr. Pardeep Kumar**

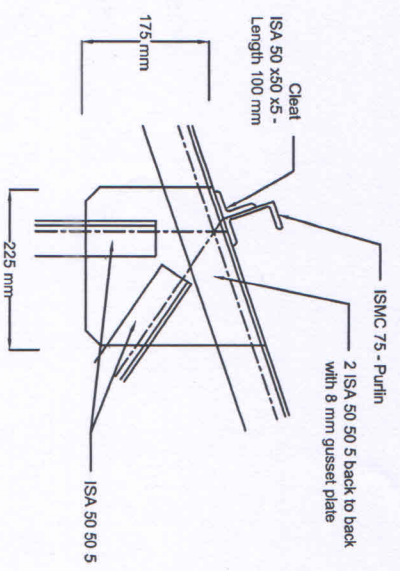
Associate Professor (Structural Engg.)

Civil Engineering Department

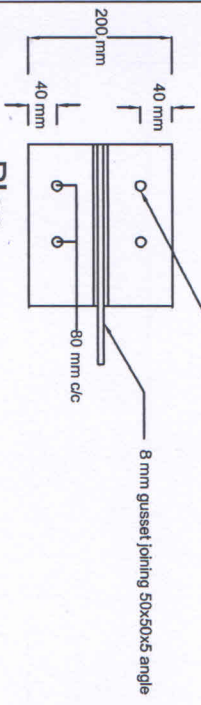
NIT, Hamirpur (H.P.)-177005



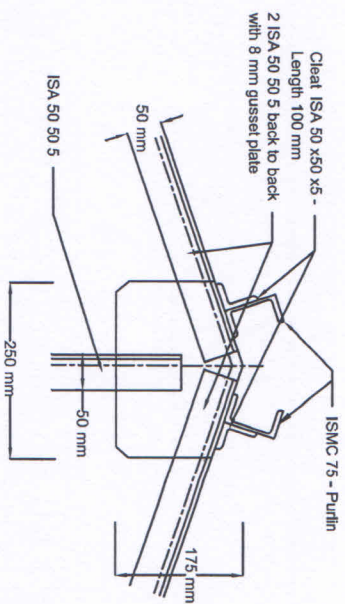
**Elevation  
Detail 3**



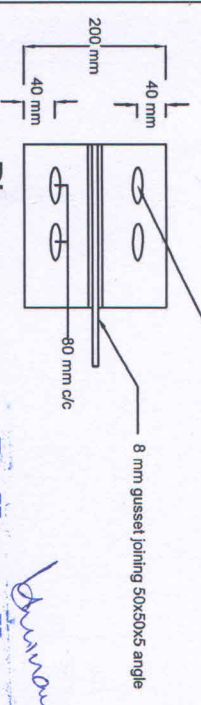
**Detail 2**



**Plan  
Detail 3**



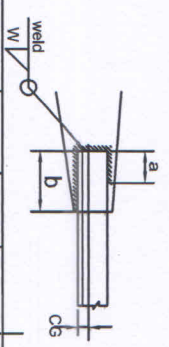
**Detail 1**



**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  
-OP2-CMB-SR-ZIV, V/DWG-5**

**NATIONAL INSTITUTE OF  
TECHNOLOGY HAMIRPUR**

**BUILDING NAME:  
PMAY HFA**

**OPTION 2  
CONF. MASONRY BUILDING  
SLOPING ROOF  
ZONE IV, V**

**DRAWING TITLE:  
CROSS SECTION OF TRUSS**

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

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