

Schedule of Door & Windows				
Name	Lintel	Width	Sill Wt	Description
D1	2.10	0.90	-	PVC DOOR
D2	2.10	0.75	-	
W1	2.10	2.00	0.90	
W2	2.10	1.50	0.90	
W3	2.10	1.40	1.20	
V	2.10	0.60	1.65	

NOTES:-  
 Clear height of DU = 2.85 m  
 Earthquake resistance structure as per **Dr. Hemant Kumar Vinayak**  
 \* 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 (L<sub>d</sub>) for 8mmφ Is 400 mm
- Second class brick must be used
- Mortar 1:5 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.
- Refer DWG-2 to DWG-5 for earthquake resistance and structural detail.

DRG. No. - NIT/CED/2017/PMAY-OP2-RCC-FR-ZIV/DWG-1  
 NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR  
 BUILDING NAME: PMAY HEA OPTION 2  
 RCC BUILDING FLAT ROOF ZONE IV  
 DRAWING TITLE: FLOOR PLAN  
 DESIGNED BY: Dr. Pardeep Kumar  
 Dr. Hemant Kumar Vinayak

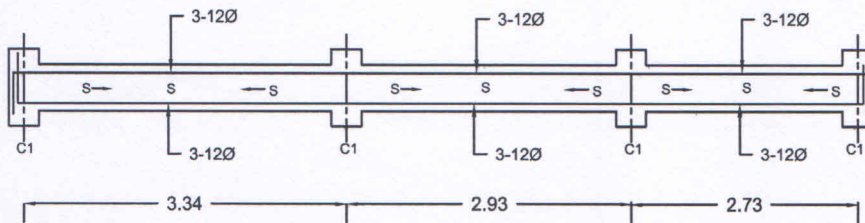
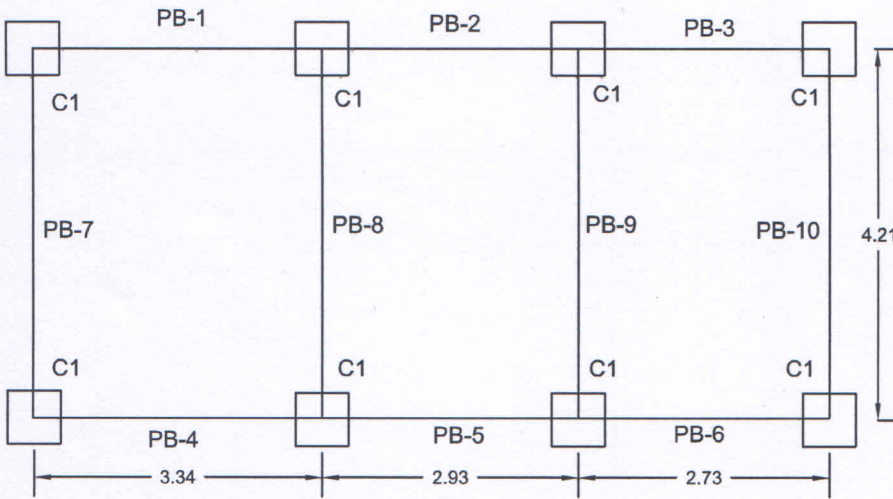
**Dr. Pardeep Kumar**  
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**Dr. Hemant Kumar Vinayak**  
 Assistant Professor  
 Department of Civil Engineering  
 National Institute of Technology,  
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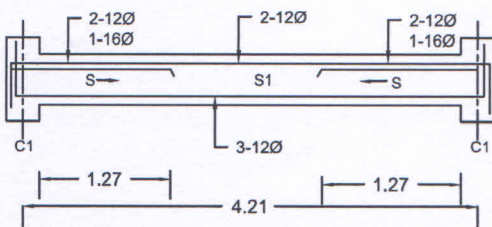


## DETAILED DRAWING OF REINFORCEMENT OF BEAMS AT PLINTH LEVEL

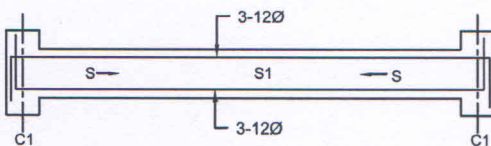
S - 8 mm dia bars @ 100 mm c/c



BEAM DETAIL FOR BEAM PB-1 to PB-6



BEAM DETAIL FOR BEAM PB-7 & PB-10



BEAM DETAIL FOR BEAM PB-8 & PB-9

### NOTES :

- All dimensions are in meters, 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.
- Size of Beam is 250 X 250 mm.
- Grade of concrete shall be M20.
- All reinforcement shall be of grade Fe 415 conforming to IS:1786-2008.
- Clear Cover to reinforcement shall be 25 mm.
- Bending and fixing of reinforcement shall be as per is:2502-1963.
- Lap length and anchorage length shall be 57 times the bar diameter
- Further refer notes from the drawing of 'Detail of footings'.

**DRG. No. - NIT/CED/2017/OP-2-RCC-FR Z-IV/DWG-3**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR**

**BUILDING NAME :  
PMAY HFA  
OPTION 2  
REINFORCED CONCRETE  
BUILDING  
FLAT ROOF  
ZONE IV**

**DETAIL OF PLINTH BEAM**

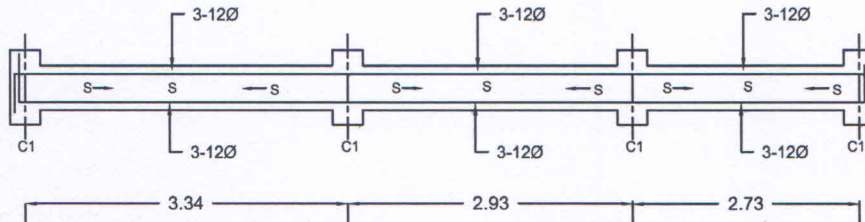
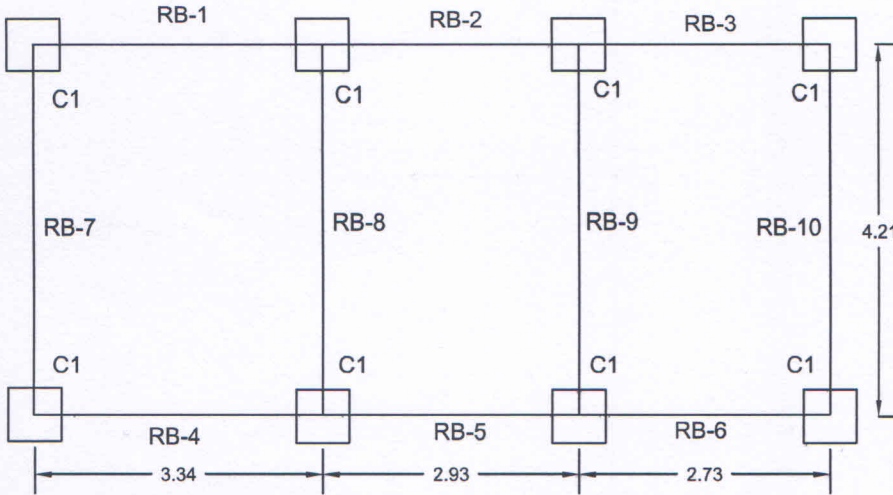
**DESIGNED BY:  
Dr. Pardeep Kumar  
Dr. Hemant Kumar Vinayak**

*Hemant Vinayak*  
**Dr. Hemant Kumar Vinayak**  
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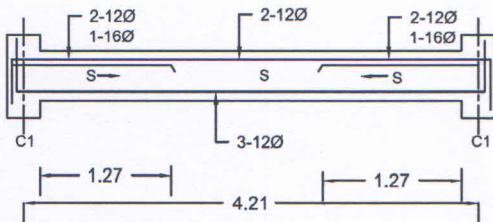
*Pardeep Kumar*  
**Dr. Pardeep Kumar**  
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## DETAILED DRAWING OF REINFORCEMENT OF BEAMS AT ROOF LEVEL

S - 8 mm dia bars @ 100 mm c/c



BEAM DETAIL FOR BEAM RB-1 to RB-6



BEAM DETAIL FOR BEAM RB-7 TO RB-10

### NOTES :

- All dimensions are in meters, 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.
- Size of Beam is 250 X 250 mm.
- Grade of concrete shall be M20.
- All reinforcement shall be of grade Fe 415 conforming to IS:1786-2008.
- Clear Cover to reinforcement shall be 25 mm.
- Bending and fixing of reinforcement shall be as per is:2502-1963.
- Lap length and anchorage length shall be 57 times the bar diameter
- Further refer notes from the drawing of 'Detail' of footings'.

DRG. No. - NIT/CED/2017/OP-2-RCC-FR Z-IV/DWG-4

NATIONAL INSTITUTE OF  
TECHNOLOGY HAMIRPUR

**BUILDING NAME :**  
PMAY HFA  
OPTION 2  
REINFORCED CONCRETE  
BUILDING  
FLAT ROOF  
ZONE IV

**DETAIL OF ROOF BEAM**

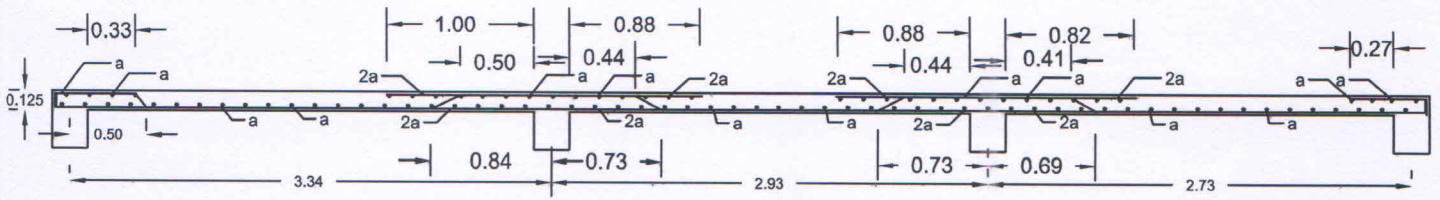
**DESIGNED BY:**  
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Dr. Hemant Kumar Vinayak

*Hemant*

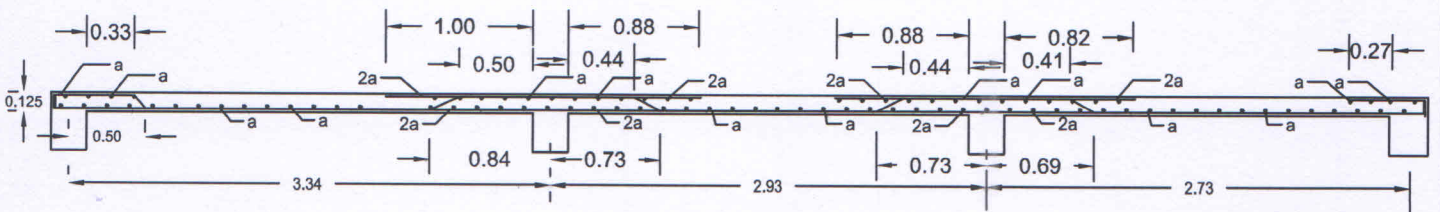
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*Pardeep*

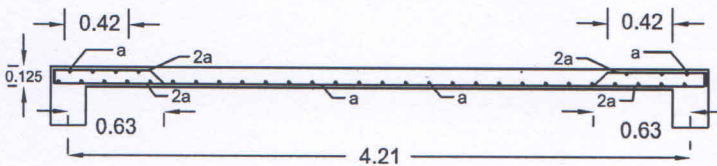
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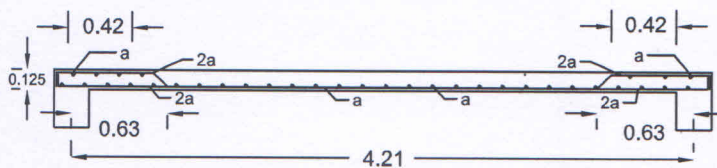
Section 1-1



Section 2-2



Section 3-3



Section 4-4

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

**SCHEDULE OF BARS**

a. 8 mm Ø @ 150 mm c/c

DRG. No. - NIT/CED/2017/PMAY  
-OP2-RCC-FR-ZIV/DWG-5

NATIONAL INSTITUTE OF  
TECHNOLOGY HAMIRPUR

BUILDING NAME:  
PMAY HFA  
OPTION 2  
REINFORCED CONCRETE  
BUILDING  
FLAT ROOF  
ZONE IV

DRAWING TITLE:  
SLAB DETAILS

DESIGNED BY:  
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