

Distribution of Houses by Predominant Materials of Roof and Wall and Level of Damage Risk

Table No. : BH 18

State : BIHAR

VAISHALI

Wall / Roof		Census Houses		Level of Risk under								Flood Prone Area in %	
		No. of Houses	%	EQ Zone				Wind Velocity m/s					
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
					100					100			
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	127,860	17.4										
	Urban	6,422	0.9										
	Total	134,282	18.3		H				H				
A2 - Stone Wall not packed with mortar	Rural	5,162	0.7										
	Urban	602	0.1										
	Total	5,764	0.8		H				M				
Total - Category - A		140,046	19.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	346,429	47.3										
	Urban	34,646	4.7										
	Total	381,075	52.0		M				M				
Total - Category - B		381,075	52.0										
C1 - Concrete Wall	Rural	6,216	0.8										
	Urban	888	0.1										
	Total	7,104	0.9		L				VL				
C2 - Wood wall	Rural	2,913	0.4										
	Urban	181	-										
	Total	3,094	0.4		L				H				
Total - Category - C		10,198	1.4										
X - Other Materials	Rural	196,422	26.8										
	Urban	4,992	0.7										
	Total	201,414	27.5		VL				H				
Total - Category - X		201,414	27.5										
TOTAL HOUSES*		732,733											

ROOF												
R1 - Light Weight Sloping Roof	Rural	337,844	46.1									
	Urban	14,320	2.0									
	Total	352,164	48.1		M				VH			
R2 - Heavy Weight Sloping Roof	Rural	141,786	19.4									
	Urban	8,996	1.2									
	Total	150,782	20.6		M				M			
R3 - Flat Roof	Rural	205,372	28.0									
	Urban	24,415	3.3									
	Total	229,787	31.3	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		732,733										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **523 mm**

Housing Category : Wall Types

Category - A : Buildings in field-stone, rural structures, unburnt brick houses, clay houses

Category - B : Ordinary brick building; buildings of the large block & prefabricated type, half-timbered structures, building in natural hewn stone

Category - C : Reinforced building, well built wooden structures

Category - X : Other materials not covered in A,B,C. These are generally light.

Notes : 1. Flood prone area includes that protected area which may have more severe damage under failure of protection works. In some other areas the local damage may be severe under heavy rains and choked drainage.

2. Damage Risk for wall types is indicated assuming heavy flat roof in categories A, B and C (Reinforced Concrete) building

3. Source of Housing Data : Census of Housing, GOI, 2011

Housing Category : Roof Type

Category - R1 - Light Weight (Grass, Thatch, Bamboo, Wood, Mud, Plastic, Polythene, GI Metal, Asbestos Sheets, Other Materials)

Category - R2 - Heavy Weight (Tiles, Stone/Slate)

Category - R3 - Flat Roof (Brick, Concrete)

EQ Zone V : Very High Damage Risk Zone (MSK > IX)

EQ Zone IV : High Damage Risk Zone (MSK VIII)

EQ Zone III : Moderate Damage Risk Zone (MSK VII)

EQ Zone II : Low Damage Risk Zone (MSK < VI)

Level of Risk : VH = Very High; H = High;

M = Moderate; L = Low; VL = Very Low

* Total No.of Houses excluding Vacant/Locked Houses