

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

Table No. : BH 01

State : BIHAR

PASHCHIM CHAMPARAN

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			18.5
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	49,352	5.4										
	Urban	7,466	0.8										
	Total	56,818	6.2		H				H				VH
A2 - Stone Wall not packed with mortar	Rural	3,019	0.3										
	Urban	1,215	0.1										
	Total	4,234	0.4		H				M				VH
Total - Category - A		61,052	6.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	290,469	31.7										
	Urban	60,070	6.6										
	Total	350,539	38.3		M				M				H/M
Total - Category - B		350,539	38.2										
C1 - Concrete Wall	Rural	2,602	0.3										
	Urban	609	0.1										
	Total	3,211	0.4		L				VL				L/VL
C2 - Wood wall	Rural	3,673	0.4										
	Urban	768	0.1										
	Total	4,441	0.5		L				H				H
Total - Category - C		7,652	0.8										
X - Other Materials	Rural	477,611	52.1										
	Urban	20,066	2.2										
	Total	497,677	54.3		VL				H				VH
Total - Category - X		497,677	54.3										
TOTAL HOUSES*		916,920											

ROOF												
R1 - Light Weight Sloping Roof	Rural	485,951	53.0									
	Urban	28,965	3.2									
	Total	514,916	56.2		M				VH			VH
R2 - Heavy Weight Sloping Roof	Rural	191,047	20.8									
	Urban	21,433	2.3									
	Total	212,480	23.1		M				M			H
R3 - Flat Roof	Rural	149,728	16.3									
	Urban	39,796	4.3									
	Total	189,524	20.6	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		916,920										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **542 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