

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

Table No. : BH 12

State : BIHAR

SAHARSA

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 %					
				42.8	57.2				100			62.9	
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	45,487	9.9										
	Urban	6,806	1.5										
	Total	52,293	11.4	VH	H				H			VH	
A2 - Stone Wall not packed with mortar	Rural	1,057	0.2										
	Urban	349	0.1										
	Total	1,406	0.3	VH	H				M			VH	
Total - Category - A		53,699	11.6										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	147,531	32.0										
	Urban	25,042	5.4										
	Total	172,573	37.4	H	M				M			H/M	
Total - Category - B		172,573	37.4										
C1 - Concrete Wall	Rural	1,158	0.3										
	Urban	377	0.1										
	Total	1,535	0.4	M	L				VL			L/ VL	
C2 - Wood wall	Rural	1,460	0.3										
	Urban	162	-										
	Total	1,622	0.3	M	L				H			H	
Total - Category - C		3,157	0.7										
X - Other Materials	Rural	229,313	49.7										
	Urban	2,866	0.6										
	Total	232,179	50.3	M	VL				H			VH	
Total - Category - X		232,179	50.3										
TOTAL HOUSES*		461,608											

ROOF												
R1 - Light Weight Sloping Roof	Rural	257,307	55.7									
	Urban	8,096	1.8									
	Total	265,403	57.5	M	M				VH			VH
R2 - Heavy Weight Sloping Roof	Rural	103,637	22.5									
	Urban	12,591	2.7									
	Total	116,228	25.2	H	M				M			H
R3 - Flat Roof	Rural	65,062	14.1									
	Urban	14,915	3.2									
	Total	79,977	17.3			Damage Risk as per that for the Wall supporting it						
TOTAL HOUSES*		461,608										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 679 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