

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

Table No. : BH 23

State : BIHAR

BANKA

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 %					
				88.7	11.3			85.1	14.9			2.2	
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	218,703	50.8										
	Urban	4,462	1.0										
	Total	223,165	51.8		H	M			H	M		VH	
A2 - Stone Wall not packed with mortar	Rural	2,573	0.6										
	Urban	280	0.1										
	Total	2,853	0.7		H	M			M	L		VH	
Total - Category - A		226,018	52.5										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	159,106	37.0										
	Urban	11,012	2.6										
	Total	170,118	39.6		M	L			M	L		H/M	
Total - Category - B		170,118	39.5										
C1 - Concrete Wall	Rural	4,833	1.1										
	Urban	313	0.1										
	Total	5,146	1.2		L	VL			VL	VL		L/VL	
C2 - Wood wall	Rural	883	0.2										
	Urban	223	0.1										
	Total	1,106	0.3		L	VL			H	M		H	
Total - Category - C		6,252	1.5										
X - Other Materials	Rural	27,060	6.3										
	Urban	845	0.2										
	Total	27,905	6.5		VL	VL			H	M		VH	
Total - Category - X		27,905	6.5										
TOTAL HOUSES*		430,293											

ROOF												
R1 - Light Weight Sloping Roof	Rural	196,817	45.7									
	Urban	6,345	1.5									
	Total	203,162	47.2		M	L			VH	H		VH
R2 - Heavy Weight Sloping Roof	Rural	95,741	22.3									
	Urban	1,557	0.4									
	Total	97,298	22.7		M	L			M	L		H
R3 - Flat Roof	Rural	120,600	28.0									
	Urban	9,233	2.1									
	Total	129,833	30.1		Damage Risk as per that for the Wall supporting it							
TOTAL HOUSES*		430,293										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 665 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