

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

Table No. : BH 24

State : BIHAR

MUNGER

Wall / Roof		Census Houses		Level of Risk under								
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
				100				100				7.1
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	61,414	20.7									
	Urban	14,163	4.8									
	Total	75,577	25.5		H				H			VH
A2 - Stone Wall not packed with mortar	Rural	1,651	0.6									
	Urban	1,132	0.4									
	Total	2,783	1.0		H				M			VH
Total - Category - A		78,360	26.4									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	117,103	39.4									
	Urban	61,235	20.6									
	Total	178,338	60.0		M				M			H/M
Total - Category - B		178,338	60.0									
C1 - Concrete Wall	Rural	2,792	0.9									
	Urban	1,755	0.6									
	Total	4,547	1.5		L				VL			L/ VL
C2 - Wood wall	Rural	753	0.3									
	Urban	163	0.1									
	Total	916	0.4		L				H			H
Total - Category - C		5,463	1.8									
X - Other Materials	Rural	32,302	10.9									
	Urban	2,790	0.9									
	Total	35,092	11.8		VL				H			VH
Total - Category - X		35,092	11.8									
TOTAL HOUSES*		297,253										

ROOF												
R1 - Light Weight Sloping Roof	Rural	77,989	26.2									
	Urban	13,527	4.6									
	Total	91,516	30.8		M				VH			VH
R2 - Heavy Weight Sloping Roof	Rural	46,169	15.5									
	Urban	15,696	5.3									
	Total	61,865	20.8		M				M			H
R3 - Flat Roof	Rural	91,857	30.9									
	Urban	52,015	17.5									
	Total	143,872	48.4		Damage Risk as per that for the Wall supporting it							
TOTAL HOUSES*		297,253										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 655 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