

# 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								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			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											

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

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