

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

**Table No. : WB 10**

**State : WEST BENGAL**

**NADIA**

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		102.280 5622	.1			96.0
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	101,949	6.8									
	Urban	18,818	1.3									
	Total	120,767	8.1			M		VH	H			VH
A2 - Stone Wall not packed with mortar	Rural	3,518	0.2									
	Urban	2,179	0.1									
	Total	5,697	0.3			M		H	M			VH
Total - Category - A		126,464	8.4									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	431,544	28.8									
	Urban	300,130	20.0									
	Total	731,674	48.8			L		H	M			H/M
Total - Category - B		731,674	48.8									
C1 - Concrete Wall	Rural	27,578	1.8									
	Urban	20,544	1.4									
	Total	48,122	3.2			VL		L	VL			L/VL
C2 - Wood wall	Rural	2,756	0.2									
	Urban	1,900	0.1									
	Total	4,656	0.3			VL		VH	H			H
Total - Category - C		52,778	3.5									
X - Other Materials	Rural	485,882	32.4									
	Urban	102,705	6.8									
	Total	588,587	39.2			VL		VH	H			VH
Total - Category - X		588,587	39.3									
TOTAL HOUSES*		1,499,503										

ROOF												
R1 - Light Weight Sloping Roof	Rural	412,355	27.5									
	Urban	131,681	8.8									
	Total	544,036	36.3			L		VH	VH			VH
R2 - Heavy Weight Sloping Roof	Rural	382,608	25.5									
	Urban	106,682	7.1									
	Total	489,290	32.6			L		H	M			H
R3 - Flat Roof	Rural	258,264	17.2									
	Urban	207,913	13.9									
	Total	466,177	31.1	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		1,499,503										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **524 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