

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

WEST BENGAL

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 %						
STATE - WEST BENGAL				3.2	31.0	56.1	9.7	35.1	63.0	1.9		45.5		
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	5,880,154	24.3											
	Urban	572,219	2.4											
	Total	6,452,373	26.7	VH	H	M	L	VH	H	M		VH		
A2 - Stone Wall not packed with mortar	Rural	64,022	0.3											
	Urban	70,276	0.3											
	Total	134,298	0.6	VH	H	M	L	H	M	L		VH		
Total - Category - A		6,586,671	27.2											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	5,502,576	22.7											
	Urban	5,758,558	23.8											
	Total	11,261,134	46.5	H	M	L	VL	H	M	L		H/M		
Total - Category - B		11,261,134	46.5											
C1 - Concrete Wall	Rural	383,637	1.6											
	Urban	589,974	2.4											
	Total	973,611	4.0	M	L	VL	VL	L	VL	VL		L/ VL		
C2 - Wood wall	Rural	139,682	0.6											
	Urban	62,480	0.3											
	Total	202,162	0.9	M	L	VL	VL	VH	H	M		H		
Total - Category - C		1,175,773	4.9											
X - Other Materials	Rural	4,444,978	18.3											
	Urban	769,573	3.2											
	Total	5,214,551	21.5	M	VL	VL	VL	VH	H	M		VH		
Total - Category - X		5,214,551	21.5											
TOTAL HOUSES*		24,238,129												

ROOF													
R1 - Light Weight Sloping Roof	Rural	8,968,984	37.0										
	Urban	1,631,114	6.7										
	Total	10,600,098	43.7	M	M	L	VL	VH	VH	H		VH	
R2 - Heavy Weight Sloping Roof	Rural	4,766,668	19.7										
	Urban	2,247,709	9.3										
	Total	7,014,377	29.0	H	M	L	VL	H	M	L		H	
R3 - Flat Roof	Rural	2,679,397	11.1										
	Urban	3,944,257	16.3										
	Total	6,623,654	27.4					Damage Risk as per that for the Wall supporting it					
TOTAL HOUSES*		24,238,129											

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