

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

MADHYA PRADESH

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 - MADHYA PRADESH						34.6	65.4		46.4	53.6			
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	7,269,030	41.7										
	Urban	844,994	4.8										
	Total	8,114,024	46.5			M	L		H	M			
A2 - Stone Wall not packed with mortar	Rural	418,391	2.4										
	Urban	69,119	0.4										
	Total	487,510	2.8			M	L		M	L			
Total - Category - A		8,601,534	49.4										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	4,329,335	24.8										
	Urban	3,387,463	19.4										
	Total	7,716,798	44.2			L	VL		M	L			
Total - Category - B		7,716,798	44.3										
C1 - Concrete Wall	Rural	60,201	0.3										
	Urban	119,018	0.7										
	Total	179,219	1.0			VL	VL		VL	VL			
C2 - Wood wall	Rural	126,260	0.7										
	Urban	17,964	0.1										
	Total	144,224	0.8			VL	VL		H	M			
Total - Category - C		323,443	1.9										
X - Other Materials	Rural	662,463	3.8										
	Urban	123,231	0.7										
	Total	785,694	4.5			VL	VL		H	M			
Total - Category - X		785,694	4.5										
TOTAL HOUSES*		17,427,469											

ROOF												
R1 - Light Weight Sloping Roof	Rural	2,612,332	15.0									
	Urban	993,870	5.7									
	Total	3,606,202	20.7			L	VL		VH	H		
R2 - Heavy Weight Sloping Roof	Rural	8,957,268	51.4									
	Urban	1,379,878	7.9									
	Total	10,337,146	59.3			L	VL		M	L		
R3 - Flat Roof	Rural	1,296,080	7.4									
	Urban	2,188,041	12.6									
	Total	3,484,121	20.0	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		17,427,469										

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