

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

Table No. : MP 42

State : MADHYA PRADESH

ASHOKNAGAR

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 %					
WALL								100		100			
A1 - Mud & Unburnt Brick Wall	Rural	106,959	53.8										
	Urban	9,502	4.8										
	Total	116,461	58.6					<i>L</i>		<i>H</i>			
A2 - Stone Wall not packed with mortar	Rural	18,304	9.2										
	Urban	3,749	1.9										
	Total	22,053	11.1					<i>L</i>		<i>M</i>			
Total - Category - A		138,514	69.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	34,035	17.1										
	Urban	19,830	10.0										
	Total	53,865	27.1					<i>VL</i>		<i>M</i>			
Total - Category - B		53,865	27.1										
C1 - Concrete Wall	Rural	428	0.2										
	Urban	284	0.1										
	Total	712	0.3					<i>VL</i>		<i>VL</i>			
C2 - Wood wall	Rural	780	0.4										
	Urban	185	0.1										
	Total	965	0.5					<i>VL</i>		<i>H</i>			
Total - Category - C		1,677	0.8										
X - Other Materials	Rural	4,020	2.0										
	Urban	557	0.3										
	Total	4,577	2.3					<i>VL</i>		<i>H</i>			
Total - Category - X		4,577	2.3										
TOTAL HOUSES*		198,633											

ROOF													
R1 - Light Weight Sloping Roof	Rural	26,401	13.3										
	Urban	4,320	2.2										
	Total	30,721	15.5					<i>VL</i>		<i>VH</i>			
R2 - Heavy Weight Sloping Roof	Rural	126,414	63.6										
	Urban	19,371	9.8										
	Total	145,785	73.4					<i>VL</i>		<i>M</i>			
R3 - Flat Roof	Rural	11,711	5.9										
	Urban	10,416	5.2										
	Total	22,127	11.1	Damage Risk as per that for the Wall supporting it									
TOTAL HOUSES*		198,633											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 513 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