

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

Table No. : MP 43

State : MADHYA PRADESH

SHAHDOL

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 %						
						87.7	12.3			100				
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	184,247	66.4											
	Urban	14,368	5.2											
	Total	198,615	71.6					<i>M</i>	<i>L</i>			<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	910	0.3											
	Urban	420	0.2											
	Total	1,330	0.5					<i>M</i>	<i>L</i>			<i>L</i>		
Total - Category - A		199,945	72.1											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	36,204	13.1											
	Urban	35,379	12.8											
	Total	71,583	25.9					<i>L</i>	<i>VL</i>			<i>L</i>		
Total - Category - B		71,583	25.8											
C1 - Concrete Wall	Rural	292	0.1											
	Urban	596	0.2											
	Total	888	0.3					<i>VL</i>	<i>VL</i>			<i>VL</i>		
C2 - Wood wall	Rural	854	0.3											
	Urban	42	-											
	Total	896	0.3					<i>VL</i>	<i>VL</i>			<i>M</i>		
Total - Category - C		1,784	0.6											
X - Other Materials	Rural	2,917	1.1											
	Urban	1,129	0.4											
	Total	4,046	1.5					<i>VL</i>	<i>VL</i>			<i>M</i>		
Total - Category - X		4,046	1.5											
TOTAL HOUSES*		277,358												

ROOF													
R1 - Light Weight Sloping Roof	Rural	41,890	15.1										
	Urban	12,372	4.5										
	Total	54,262	19.6					<i>L</i>	<i>VL</i>			<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	164,440	59.3										
	Urban	17,761	6.4										
	Total	182,201	65.7					<i>L</i>	<i>VL</i>			<i>L</i>	
R3 - Flat Roof	Rural	19,094	6.9										
	Urban	21,801	7.9										
	Total	40,895	14.8	Damage Risk as per that for the Wall supporting it									
TOTAL HOUSES*		277,358											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 401 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