

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

Table No. : MP 20

State : MADHYA PRADESH

DEWAS

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													
A1 - Mud & Unburnt Brick Wall	Rural	106,613	30.0										
	Urban	18,713	5.3										
	Total	125,326	35.3					<i>M</i>	<i>L</i>		<i>H</i>	<i>M</i>	
A2 - Stone Wall not packed with mortar	Rural	2,503	0.7										
	Urban	832	0.2										
	Total	3,335	0.9					<i>M</i>	<i>L</i>		<i>M</i>	<i>L</i>	
Total - Category - A		128,661	36.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	109,045	30.6										
	Urban	64,342	18.1										
	Total	173,387	48.7					<i>L</i>	<i>VL</i>		<i>M</i>	<i>L</i>	
Total - Category - B		173,387	48.7										
C1 - Concrete Wall	Rural	2,047	0.6										
	Urban	4,703	1.3										
	Total	6,750	1.9					<i>VL</i>	<i>VL</i>		<i>VL</i>	<i>VL</i>	
C2 - Wood wall	Rural	7,442	2.1										
	Urban	325	0.1										
	Total	7,767	2.2					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>M</i>	
Total - Category - C		14,517	4.1										
X - Other Materials	Rural	34,264	9.6										
	Urban	5,094	1.4										
	Total	39,358	11.0					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>M</i>	
Total - Category - X		39,358	11.1										
TOTAL HOUSES*		355,923											

ROOF													
R1 - Light Weight Sloping Roof	Rural	86,976	24.4										
	Urban	33,780	9.5										
	Total	120,756	33.9					<i>L</i>	<i>VL</i>		<i>VH</i>	<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	139,709	39.3										
	Urban	17,600	4.9										
	Total	157,309	44.2					<i>L</i>	<i>VL</i>		<i>M</i>	<i>L</i>	
R3 - Flat Roof	Rural	35,229	9.9										
	Urban	42,629	12.0										
	Total	77,858	21.9	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		355,923											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 400 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