

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

Table No. : MP 47

State : MADHYA PRADESH

JHABUA

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	90,465	39.8										
	Urban	4,221	1.9										
	Total	94,686	41.7					<i>M</i>	<i>L</i>		<i>H</i>	<i>M</i>	
A2 - Stone Wall not packed with mortar	Rural	8,977	3.9										
	Urban	116	0.1										
	Total	9,093	4.0					<i>M</i>	<i>L</i>		<i>M</i>	<i>L</i>	
Total - Category - A		103,779	45.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	81,391	35.8										
	Urban	16,548	7.3										
	Total	97,939	43.1					<i>L</i>	<i>VL</i>		<i>M</i>	<i>L</i>	
Total - Category - B		97,939	43.1										
C1 - Concrete Wall	Rural	469	0.2										
	Urban	359	0.2										
	Total	828	0.4					<i>VL</i>	<i>VL</i>		<i>VL</i>	<i>VL</i>	
C2 - Wood wall	Rural	5,748	2.5										
	Urban	17	-										
	Total	5,765	2.5					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>M</i>	
Total - Category - C		6,593	2.9										
X - Other Materials	Rural	18,561	8.2										
	Urban	414	0.2										
	Total	18,975	8.4					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>M</i>	
Total - Category - X		18,975	8.3										
TOTAL HOUSES*		227,286											

ROOF													
R1 - Light Weight Sloping Roof	Rural	31,461	13.8										
	Urban	5,335	2.3										
	Total	36,796	16.1					<i>L</i>	<i>VL</i>		<i>VH</i>	<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	158,284	69.6										
	Urban	5,037	2.2										
	Total	163,321	71.8					<i>L</i>	<i>VL</i>		<i>M</i>	<i>L</i>	
R3 - Flat Roof	Rural	15,866	7.0										
	Urban	11,303	5.0										
	Total	27,169	12.0	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		227,286											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 492 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