

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

Table No. : RJ 24

State : RAJASTHAN

BHILWARA

Wall / Roof		Census Houses		Level of Risk under									Flood Pron e Area
		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	122,687	19.8										
	Urban	4,040	0.7										
	Total	126,727	20.5					<i>L</i>		<i>H</i>			
A2 - Stone Wall not packed with mortar	Rural	55,718	9.0										
	Urban	8,162	1.3										
	Total	63,880	10.3					<i>L</i>		<i>M</i>			
Total - Category - A		190,607	30.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	304,184	49.0										
	Urban	112,854	18.2										
	Total	417,038	67.2					<i>VL</i>		<i>M</i>			
Total - Category - B		417,038	67.2										
C1 - Concrete Wall	Rural	1,173	0.2										
	Urban	1,622	0.3										
	Total	2,795	0.5					<i>VL</i>		<i>VL</i>			
C2 - Wood wall	Rural	1,146	0.2										
	Urban	270	-										
	Total	1,416	0.2					<i>VL</i>		<i>H</i>			
Total - Category - C		4,211	0.7										
X - Other Materials	Rural	7,218	1.2										
	Urban	1,219	0.2										
	Total	8,437	1.4					<i>VL</i>		<i>H</i>			
Total - Category - X		8,437	1.4										
TOTAL HOUSES*		620,293											

ROOF													
R1 - Light Weight Sloping Roof	Rural	85,402	13.8										
	Urban	7,718	1.2										
	Total	93,120	15.0					<i>VL</i>		<i>VH</i>			
R2 - Heavy Weight Sloping Roof	Rural	375,276	60.5										
	Urban	76,667	12.4										
	Total	451,943	72.9					<i>VL</i>		<i>M</i>			
R3 - Flat Roof	Rural	31,448	5.1										
	Urban	43,782	7.1										
	Total	75,230	12.2	Damage Risk as per that for the Wall supporting it									
TOTAL HOUSES*		620,293											

Probable Maximum Precipitation at a Station of the district in 24 hrs is 480 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