

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

Table No. : JD 23

State : JHARKHAND

PASHCHIMI SINGHBHUM

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		48.6	51.4		
A1 - Mud & Unburnt Brick Wall	Rural	271,202	72.1										
	Urban	15,629	4.2										
	Total	286,831	76.3					<i>L</i>		<i>H</i>	<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	11,057	2.9										
	Urban	963	0.3										
	Total	12,020	3.2					<i>L</i>		<i>M</i>	<i>L</i>		
Total - Category - A		298,851	79.5										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	29,342	7.8										
	Urban	36,172	9.6										
	Total	65,514	17.4					<i>VL</i>		<i>M</i>	<i>L</i>		
Total - Category - B		65,514	17.4										
C1 - Concrete Wall	Rural	474	0.1										
	Urban	887	0.2										
	Total	1,361	0.3					<i>VL</i>		<i>VL</i>	<i>VL</i>		
C2 - Wood wall	Rural	4,056	1.1										
	Urban	818	0.2										
	Total	4,874	1.3					<i>VL</i>		<i>H</i>	<i>M</i>		
Total - Category - C		6,235	1.7										
X - Other Materials	Rural	4,299	1.1										
	Urban	1,173	0.3										
	Total	5,472	1.4					<i>VL</i>		<i>H</i>	<i>M</i>		
Total - Category - X		5,472	1.5										
TOTAL HOUSES*		376,072											
ROOF													
R1 - Light Weight Sloping Roof	Rural	44,586	11.9										
	Urban	16,145	4.3										
	Total	60,731	16.2					<i>VL</i>		<i>VH</i>	<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	264,182	70.2										
	Urban	20,415	5.4										
	Total	284,597	75.6					<i>VL</i>		<i>M</i>	<i>L</i>		
R3 - Flat Roof	Rural	11,662	3.1										
	Urban	19,082	5.1										
	Total	30,744	8.2					<i>Damage Risk as per that for the Wall supporting it</i>					
TOTAL HOUSES*		376,072											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 679 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