

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

Table No. : JD 12

State : JHARKHAND

PURBI 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	22.3	77.7			
A1 - Mud & Unburnt Brick Wall	Rural	177,739	32.0										
	Urban	39,957	7.2										
	Total	217,696	39.2					<i>L</i>	<i>VH</i>	<i>H</i>			
A2 - Stone Wall not packed with mortar	Rural	1,731	0.3										
	Urban	2,870	0.5										
	Total	4,601	0.8					<i>L</i>	<i>H</i>	<i>M</i>			
Total - Category - A		222,297	40.0										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	59,583	10.7										
	Urban	245,597	44.2										
	Total	305,180	54.9					<i>VL</i>	<i>H</i>	<i>M</i>			
Total - Category - B		305,180	55.0										
C1 - Concrete Wall	Rural	1,663	0.3										
	Urban	6,899	1.2										
	Total	8,562	1.5					<i>VL</i>	<i>L</i>	<i>VL</i>			
C2 - Wood wall	Rural	677	0.1										
	Urban	1,373	0.2										
	Total	2,050	0.3					<i>VL</i>	<i>VH</i>	<i>H</i>			
Total - Category - C		10,612	1.9										
X - Other Materials	Rural	8,771	1.6										
	Urban	8,275	1.5										
	Total	17,046	3.1					<i>VL</i>	<i>VH</i>	<i>H</i>			
Total - Category - X		17,046	3.1										
TOTAL HOUSES*		555,135											
ROOF													
R1 - Light Weight Sloping Roof	Rural	92,705	16.7										
	Urban	59,250	10.7										
	Total	151,955	27.4					<i>VL</i>	<i>VH</i>	<i>VH</i>			
R2 - Heavy Weight Sloping Roof	Rural	116,183	20.9										
	Urban	55,241	10.0										
	Total	171,424	30.9					<i>VL</i>	<i>H</i>	<i>M</i>			
R3 - Flat Roof	Rural	41,276	7.4										
	Urban	190,480	34.3										
	Total	231,756	41.7					Damage Risk as per that for the Wall supporting it					
TOTAL HOUSES*		555,135											

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