

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

Table No. : JD 18

State : JHARKHAND

JAMTARA

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	113,909	64.3										
	Urban	4,090	2.3										
	Total	117,999	66.6					<i>M</i>		<i>H</i>	<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	652	0.4										
	Urban	29	-										
	Total	681	0.4					<i>M</i>		<i>M</i>	<i>L</i>		
Total - Category - A		118,680	67.0										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	39,971	22.6										
	Urban	14,061	7.9										
	Total	54,032	30.5					<i>L</i>		<i>M</i>	<i>L</i>		
Total - Category - B		54,032	30.5										
C1 - Concrete Wall	Rural	907	0.5										
	Urban	105	0.1										
	Total	1,012	0.6					<i>VL</i>		<i>VL</i>	<i>VL</i>		
C2 - Wood wall	Rural	206	0.1										
	Urban	22	-										
	Total	228	0.1					<i>VL</i>		<i>H</i>	<i>M</i>		
Total - Category - C		1,240	0.7										
X - Other Materials	Rural	3,058	1.7										
	Urban	168	0.1										
	Total	3,226	1.8					<i>VL</i>		<i>H</i>	<i>M</i>		
Total - Category - X		3,226	1.8										
TOTAL HOUSES*		177,178											

ROOF													
R1 - Light Weight Sloping Roof	Rural	35,089	19.8										
	Urban	1,316	0.7										
	Total	36,405	20.5					<i>L</i>		<i>VH</i>	<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	101,431	57.2										
	Urban	5,968	3.4										
	Total	107,399	60.6					<i>L</i>		<i>M</i>	<i>L</i>		
R3 - Flat Roof	Rural	22,183	12.5										
	Urban	11,191	6.3										
	Total	33,374	18.8										
													<i>Damage Risk as per that for the Wall supporting it</i>
TOTAL HOUSES*		177,178											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 651 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