

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

Table No. : JD 13

State : JHARKHAND

PALAMU

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	258,295	66.3										
	Urban	13,768	3.5										
	Total	272,063	69.8					<i>M</i>				<i>M</i>	
A2 - Stone Wall not packed with mortar	Rural	1,521	0.4										
	Urban	354	0.1										
	Total	1,875	0.5					<i>M</i>				<i>L</i>	
Total - Category - A		273,938	70.3										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	73,501	18.9										
	Urban	32,375	8.3										
	Total	105,876	27.2					<i>L</i>				<i>L</i>	
Total - Category - B		105,876	27.2										
C1 - Concrete Wall	Rural	704	0.2										
	Urban	598	0.2										
	Total	1,302	0.4					<i>VL</i>				<i>VL</i>	
C2 - Wood wall	Rural	353	0.1										
	Urban	56	-										
	Total	409	0.1					<i>VL</i>				<i>M</i>	
Total - Category - C		1,711	0.4										
X - Other Materials	Rural	7,426	1.9										
	Urban	848	0.2										
	Total	8,274	2.1					<i>VL</i>				<i>M</i>	
Total - Category - X		8,274	2.1										
TOTAL HOUSES*		389,799											

ROOF													
R1 - Light Weight Sloping Roof	Rural	69,112	17.7										
	Urban	6,435	1.7										
	Total	75,547	19.4					<i>L</i>				<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	219,432	56.3										
	Urban	14,726	3.8										
	Total	234,158	60.1					<i>L</i>				<i>L</i>	
R3 - Flat Roof	Rural	53,256	13.7										
	Urban	26,838	6.9										
	Total	80,094	20.6					<i>Damage Risk as per that for the Wall supporting it</i>					
TOTAL HOUSES*		389,799											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 533 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