

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

Table No. : JD 02

State : JHARKHAND

CHATRA

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 %				
						99.8	.2			100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	133,804	65.7									
	Urban	3,315	1.6									
	Total	137,119	67.3			M	L			M		
A2 - Stone Wall not packed with mortar	Rural	554	0.3									
	Urban	26	-									
	Total	580	0.3			M	L			L		
Total - Category - A		137,699	67.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	54,402	26.7									
	Urban	9,013	4.4									
	Total	63,415	31.1			L	VL			L		
Total - Category - B		63,415	31.1									
C1 - Concrete Wall	Rural	570	0.3									
	Urban	122	0.1									
	Total	692	0.4			VL	VL			VL		
C2 - Wood wall	Rural	70	-									
	Urban	4	-									
	Total	74	-			VL	VL			M		
Total - Category - C		766	0.4									
X - Other Materials	Rural	1,545	0.8									
	Urban	212	0.1									
	Total	1,757	0.9			VL	VL			M		
Total - Category - X		1,757	0.9									
TOTAL HOUSES*		203,637										

ROOF												
R1 - Light Weight Sloping Roof	Rural	23,929	11.8									
	Urban	1,944	1.0									
	Total	25,873	12.8			L	VL			H		
R2 - Heavy Weight Sloping Roof	Rural	122,994	60.4									
	Urban	3,470	1.7									
	Total	126,464	62.1			L	VL			L		
R3 - Flat Roof	Rural	44,022	21.6									
	Urban	7,278	3.6									
	Total	51,300	25.2	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		203,637										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **698 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