

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

Table No. : JD 09

State : JHARKHAND

DHANBAD

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 %				
						100			25.8	74.2		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	113,256	18.6									
	Urban	71,961	11.8									
	Total	185,217	30.4			M			H	M		
A2 - Stone Wall not packed with mortar	Rural	2,124	0.3									
	Urban	5,495	0.9									
	Total	7,619	1.2			M			M	L		
Total - Category - A		192,836	31.7									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	122,603	20.1									
	Urban	273,387	44.9									
	Total	395,990	65.0			L			M	L		
Total - Category - B		395,990	65.1									
C1 - Concrete Wall	Rural	1,814	0.3									
	Urban	7,360	1.2									
	Total	9,174	1.5			VL			VL	VL		
C2 - Wood wall	Rural	409	0.1									
	Urban	996	0.2									
	Total	1,405	0.3			VL			H	M		
Total - Category - C		10,579	1.7									
X - Other Materials	Rural	3,795	0.6									
	Urban	5,330	0.9									
	Total	9,125	1.5			VL			H	M		
Total - Category - X		9,125	1.5									
TOTAL HOUSES*		608,530										

ROOF												
R1 - Light Weight Sloping Roof	Rural	28,924	4.8									
	Urban	71,429	11.7									
	Total	100,353	16.5			L			VH	H		
R2 - Heavy Weight Sloping Roof	Rural	120,652	19.8									
	Urban	85,668	14.1									
	Total	206,320	33.9			L			M	L		
R3 - Flat Roof	Rural	94,425	15.5									
	Urban	207,432	34.1									
	Total	301,857	49.6	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		608,530										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **671 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