

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

Table No. : JD 15

State : JHARKHAND

HAZARIBAGH

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	146,458	40.9										
	Urban	7,681	2.1										
	Total	154,139	43.0					<i>M</i>	<i>L</i>			<i>M</i>	
A2 - Stone Wall not packed with mortar	Rural	1,871	0.5										
	Urban	571	0.2										
	Total	2,442	0.7					<i>M</i>	<i>L</i>			<i>L</i>	
Total - Category - A		156,581	43.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	142,543	39.8										
	Urban	52,365	14.6										
	Total	194,908	54.4					<i>L</i>	<i>VL</i>			<i>L</i>	
Total - Category - B		194,908	54.4										
C1 - Concrete Wall	Rural	2,194	0.6										
	Urban	1,077	0.3										
	Total	3,271	0.9					<i>VL</i>	<i>VL</i>			<i>VL</i>	
C2 - Wood wall	Rural	404	0.1										
	Urban	188	0.1										
	Total	592	0.2					<i>VL</i>	<i>VL</i>			<i>M</i>	
Total - Category - C		3,863	1.1										
X - Other Materials	Rural	2,107	0.6										
	Urban	720	0.2										
	Total	2,827	0.8					<i>VL</i>	<i>VL</i>			<i>M</i>	
Total - Category - X		2,827	0.8										
TOTAL HOUSES*		358,179											

ROOF													
R1 - Light Weight Sloping Roof	Rural	29,068	8.1										
	Urban	11,007	3.1										
	Total	40,075	11.2					<i>L</i>	<i>VL</i>			<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	143,814	40.2										
	Urban	8,188	2.3										
	Total	152,002	42.5					<i>L</i>	<i>VL</i>			<i>L</i>	
R3 - Flat Roof	Rural	122,695	34.3										
	Urban	43,407	12.1										
	Total	166,102	46.4					<i>Damage Risk as per that for the Wall supporting it</i>					
TOTAL HOUSES*		358,179											

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