

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

Table No. : CT 09

State : CHHATTISGARH

RAJNANDGAON

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			100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	221,511	60.7									
	Urban	19,438	5.3									
	Total	240,949	66.0				L			M		
A2 - Stone Wall not packed with mortar	Rural	3,885	1.1									
	Urban	333	0.1									
	Total	4,218	1.2				L			L		
Total - Category - A		245,167	67.2									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	64,716	17.7									
	Urban	47,441	13.0									
	Total	112,157	30.7				VL			L		
Total - Category - B		112,157	30.7									
C1 - Concrete Wall	Rural	823	0.2									
	Urban	1,059	0.3									
	Total	1,882	0.5				VL			VL		
C2 - Wood wall	Rural	553	0.2									
	Urban	337	0.1									
	Total	890	0.3				VL			M		
Total - Category - C		2,772	0.8									
X - Other Materials	Rural	3,644	1.0									
	Urban	1,206	0.3									
	Total	4,850	1.3				VL			M		
Total - Category - X		4,850	1.3									
TOTAL HOUSES*		364,946										

ROOF												
R1 - Light Weight Sloping Roof	Rural	23,187	6.4									
	Urban	8,315	2.3									
	Total	31,502	8.7				<i>VL</i>			<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	232,252	63.6									
	Urban	28,047	7.7									
	Total	260,299	71.3				<i>VL</i>			<i>L</i>		
R3 - Flat Roof	Rural	39,693	10.9									
	Urban	33,452	9.2									
	Total	73,145	20.1	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		364,946										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **425 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