

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

Table No. : CT 02

State : CHHATTISGARH

SURGUJA

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 %				
						68.2	31.8			100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	471,468	83.9									
	Urban	21,861	3.9									
	Total	493,329	87.8			M	L			M		
A2 - Stone Wall not packed with mortar	Rural	518	0.1									
	Urban	395	0.1									
	Total	913	0.2			M	L			L		
Total - Category - A		494,242	88.0									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	28,345	5.0									
	Urban	33,325	5.9									
	Total	61,670	10.9			L	VL			L		
Total - Category - B		61,670	11.0									
C1 - Concrete Wall	Rural	267	-									
	Urban	440	0.1									
	Total	707	0.1			VL	VL			VL		
C2 - Wood wall	Rural	412	0.1									
	Urban	55	-									
	Total	467	0.1			VL	VL			M		
Total - Category - C		1,174	0.2									
X - Other Materials	Rural	3,589	0.6									
	Urban	1,131	0.2									
	Total	4,720	0.8			VL	VL			M		
Total - Category - X		4,720	0.8									
TOTAL HOUSES*		561,806										

ROOF												
R1 - Light Weight Sloping Roof	Rural	75,063	13.4									
	Urban	10,195	1.8									
	Total	85,258	15.2			L	VL			H		
R2 - Heavy Weight Sloping Roof	Rural	412,204	73.4									
	Urban	22,248	4.0									
	Total	434,452	77.4			L	VL			L		
R3 - Flat Roof	Rural	17,332	3.1									
	Urban	24,764	4.4									
	Total	42,096	7.5	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		561,806										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **496 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