

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

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

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