

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

Table No. : OR 20

State : ODISHA

GAJAPATI

Wall / Roof		Census Houses		Level of Risk under									
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %	
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	43,499	27.6										
	Urban	2,951	1.9										
	Total	46,450	29.5					<i>L</i>	<i>VH</i>	<i>H</i>	<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	9,932	6.3										
	Urban	295	0.2										
	Total	10,227	6.5					<i>L</i>	<i>H</i>	<i>M</i>	<i>L</i>		
Total - Category - A		56,677	36.0										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	48,129	30.6										
	Urban	14,447	9.2										
	Total	62,576	39.8					<i>VL</i>	<i>H</i>	<i>M</i>	<i>L</i>		
Total - Category - B		62,576	39.8										
C1 - Concrete Wall	Rural	886	0.6										
	Urban	420	0.3										
	Total	1,306	0.9					<i>VL</i>	<i>L</i>	<i>VL</i>	<i>VL</i>		
C2 - Wood wall	Rural	19,659	12.5										
	Urban	578	0.4										
	Total	20,237	12.9					<i>VL</i>	<i>VH</i>	<i>H</i>	<i>M</i>		
Total - Category - C		21,543	13.7										
X - Other Materials	Rural	15,274	9.7										
	Urban	1,271	0.8										
	Total	16,545	10.5					<i>VL</i>	<i>VH</i>	<i>H</i>	<i>M</i>		
Total - Category - X		16,545	10.5										
TOTAL HOUSES*		157,341											

ROOF													
R1 - Light Weight Sloping Roof	Rural	107,282	68.2										
	Urban	9,236	5.9										
	Total	116,518	74.1					<i>VL</i>	<i>VH</i>	<i>VH</i>	<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	4,044	2.6										
	Urban	1,147	0.7										
	Total	5,191	3.3					<i>VL</i>	<i>H</i>	<i>M</i>	<i>L</i>		
R3 - Flat Roof	Rural	26,053	16.6										
	Urban	9,579	6.1										
	Total	35,632	22.7	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		157,341											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 669 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