

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

Table No. : OR 28

State : ODISHA

NABARANGAPUR

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								100			100		
A1 - Mud & Unburnt Brick Wall	Rural	236,441	65.8										
	Urban	7,986	2.2										
	Total	244,427	68.0					<i>L</i>			<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	3,147	0.9										
	Urban	559	0.2										
	Total	3,706	1.1					<i>L</i>			<i>L</i>		
Total - Category - A		248,133	69.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	63,152	17.6										
	Urban	15,382	4.3										
	Total	78,534	21.9					<i>VL</i>			<i>L</i>		
Total - Category - B		78,534	21.9										
C1 - Concrete Wall	Rural	1,278	0.4										
	Urban	759	0.2										
	Total	2,037	0.6					<i>VL</i>			<i>VL</i>		
C2 - Wood wall	Rural	10,696	3.0										
	Urban	317	0.1										
	Total	11,013	3.1					<i>VL</i>			<i>M</i>		
Total - Category - C		13,050	3.6										
X - Other Materials	Rural	17,678	4.9										
	Urban	1,786	0.5										
	Total	19,464	5.4					<i>VL</i>			<i>M</i>		
Total - Category - X		19,464	5.4										
TOTAL HOUSES*		359,181											

ROOF													
R1 - Light Weight Sloping Roof	Rural	160,905	44.8										
	Urban	13,165	3.7										
	Total	174,070	48.5					<i>VL</i>			<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	162,087	45.1										
	Urban	6,939	1.9										
	Total	169,026	47.0					<i>VL</i>			<i>L</i>		
R3 - Flat Roof	Rural	9,400	2.6										
	Urban	6,685	1.9										
	Total	16,085	4.5	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		359,181											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 627 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 chocked 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