

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

Table No. : OR 12

State : ODISHA

CUTTACK

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 %				
						75.0	25.0	83.5	16.5			22.1
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	161,954	21.7									
	Urban	12,466	1.7									
	Total	174,420	23.4			M	L	VH	H			VH
A2 - Stone Wall not packed with mortar	Rural	15,612	2.1									
	Urban	3,510	0.5									
	Total	19,122	2.6			M	L	H	M			VH
Total - Category - A		193,542	25.9									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	295,446	39.5									
	Urban	159,241	21.3									
	Total	454,687	60.8			L	VL	H	M			H/M
Total - Category - B		454,687	60.8									
C1 - Concrete Wall	Rural	2,821	0.4									
	Urban	7,644	1.0									
	Total	10,465	1.4			VL	VL	L	VL			L/VL
C2 - Wood wall	Rural	9,320	1.2									
	Urban	3,433	0.5									
	Total	12,753	1.7			VL	VL	VH	H			H
Total - Category - C		23,218	3.1									
X - Other Materials	Rural	70,547	9.4									
	Urban	5,986	0.8									
	Total	76,533	10.2			VL	VL	VH	H			VH
Total - Category - X		76,533	10.2									
TOTAL HOUSES*		747,980										

ROOF												
R1 - Light Weight Sloping Roof	Rural	335,450	44.8									
	Urban	66,459	8.9									
	Total	401,909	53.7			L	VL	VH	VH			VH
R2 - Heavy Weight Sloping Roof	Rural	32,430	4.3									
	Urban	6,754	0.9									
	Total	39,184	5.2			L	VL	H	M			H
R3 - Flat Roof	Rural	187,820	25.1									
	Urban	119,067	15.9									
	Total	306,887	41.0	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		747,980										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **760 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