

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

Table No. : OR 21

State : ODISHA

KANDHAMAL

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 %				
							100		27.9	72.1		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	73,438	32.6									
	Urban	4,431	2.0									
	Total	77,869	34.6				L		H	M		
A2 - Stone Wall not packed with mortar	Rural	1,803	0.8									
	Urban	326	0.1									
	Total	2,129	0.9				L		M	L		
Total - Category - A		79,998	35.5									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	62,692	27.8									
	Urban	14,549	6.5									
	Total	77,241	34.3				VL		M	L		
Total - Category - B		77,241	34.3									
C1 - Concrete Wall	Rural	1,208	0.5									
	Urban	124	0.1									
	Total	1,332	0.6				VL		VL	VL		
C2 - Wood wall	Rural	49,847	22.1									
	Urban	1,125	0.5									
	Total	50,972	22.6				VL		H	M		
Total - Category - C		52,304	23.2									
X - Other Materials	Rural	14,848	6.6									
	Urban	813	0.4									
	Total	15,661	7.0				VL		H	M		
Total - Category - X		15,661	7.0									
TOTAL HOUSES*		225,204										

ROOF												
R1 - Light Weight Sloping Roof	Rural	171,595	76.2									
	Urban	13,867	6.2									
	Total	185,462	82.4				VL		VH	H		
R2 - Heavy Weight Sloping Roof	Rural	23,663	10.5									
	Urban	1,027	0.5									
	Total	24,690	11.0				VL		M	L		
R3 - Flat Roof	Rural	8,578	3.8									
	Urban	6,474	2.9									
	Total	15,052	6.7	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		225,204										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **606 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