

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

Table No. : OR 17

State : ODISHA

KHORDHA

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 %				
						56.2	43.8	93.0	1.6	7.0		2.0
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	116,830	18.7									
	Urban	35,239	5.6									
	Total	152,069	24.3			M	L	VH	H	M		VH
A2 - Stone Wall not packed with mortar	Rural	17,128	2.7									
	Urban	6,835	1.1									
	Total	23,963	3.8			M	L	H	M	L		VH
Total - Category - A		176,032	28.1									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	146,146	23.4									
	Urban	240,919	38.5									
	Total	387,065	61.9			L	VL	H	M	L		H/M
Total - Category - B		387,065	61.9									
C1 - Concrete Wall	Rural	2,863	0.5									
	Urban	10,853	1.7									
	Total	13,716	2.2			VL	VL	L	VL	VL		L/VL
C2 - Wood wall	Rural	4,141	0.7									
	Urban	6,091	1.0									
	Total	10,232	1.7			VL	VL	VH	H	M		H
Total - Category - C		23,948	3.8									
X - Other Materials	Rural	24,217	3.9									
	Urban	14,139	2.3									
	Total	38,356	6.2			VL	VL	VH	H	M		VH
Total - Category - X		38,356	6.1									
TOTAL HOUSES*		625,401										

ROOF												
R1 - Light Weight Sloping Roof	Rural	205,401	32.8									
	Urban	126,095	20.2									
	Total	331,496	53.0			L	VL	VH	VH	H		VH
R2 - Heavy Weight Sloping Roof	Rural	15,061	2.4									
	Urban	9,980	1.6									
	Total	25,041	4.0			L	VL	H	M	L		H
R3 - Flat Roof	Rural	90,863	14.5									
	Urban	178,001	28.5									
	Total	268,864	43.0	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		625,401										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **763 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