

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

Table No. : OR 10

State : ODISHA

KENDRAPARA

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 %									
WALL															48.4		
A1 - Mud & Unburnt Brick Wall	Rural	237,793	56.4														
	Urban	6,136	1.5														
	Total	243,929	57.9					<i>M</i>	<i>L</i>	<i>VH</i>					<i>VH</i>		
A2 - Stone Wall not packed with mortar	Rural	976	0.2														
	Urban	38	-														
	Total	1,014	0.2					<i>M</i>	<i>L</i>	<i>H</i>					<i>VH</i>		
Total - Category - A		244,943	58.1														
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	139,540	33.1														
	Urban	14,240	3.4														
	Total	153,780	36.5					<i>L</i>	<i>VL</i>	<i>H</i>					<i>H/M</i>		
Total - Category - B		153,780	36.5														
C1 - Concrete Wall	Rural	1,451	0.3														
	Urban	286	0.1														
	Total	1,737	0.4					<i>VL</i>	<i>VL</i>	<i>L</i>					<i>L/ VL</i>		
C2 - Wood wall	Rural	3,866	0.9														
	Urban	434	0.1														
	Total	4,300	1.0					<i>VL</i>	<i>VL</i>	<i>VH</i>					<i>H</i>		
Total - Category - C		6,037	1.4														
X - Other Materials	Rural	16,090	3.8														
	Urban	680	0.2														
	Total	16,770	4.0					<i>VL</i>	<i>VL</i>	<i>VH</i>					<i>VH</i>		
Total - Category - X		16,770	4.0														
TOTAL HOUSES*		421,530															

ROOF															
R1 - Light Weight Sloping Roof	Rural	289,583	68.7												
	Urban	10,984	2.6												
	Total	300,567	71.3					<i>L</i>	<i>VL</i>	<i>VH</i>					<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	4,484	1.1												
	Urban	456	0.1												
	Total	4,940	1.2					<i>L</i>	<i>VL</i>	<i>H</i>					<i>H</i>
R3 - Flat Roof	Rural	105,649	25.1												
	Urban	10,374	2.5												
	Total	116,023	27.6	<i>Damage Risk as per that for the Wall supporting it</i>											
TOTAL HOUSES*		421,530													

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 716 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