

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

Table No. : OR 05

State : ODISHA

SUNDARGARH

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													
A1 - Mud & Unburnt Brick Wall	Rural	236,421	41.0										
	Urban	35,276	6.1										
	Total	271,697	47.1					<i>M</i>	<i>L</i>			<i>H</i>	<i>M</i>
A2 - Stone Wall not packed with mortar	Rural	13,619	2.4										
	Urban	3,187	0.6										
	Total	16,806	3.0					<i>M</i>	<i>L</i>			<i>M</i>	<i>L</i>
Total - Category - A		288,503	50.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	98,310	17.1										
	Urban	156,575	27.2										
	Total	254,885	44.3					<i>L</i>	<i>VL</i>			<i>M</i>	<i>L</i>
Total - Category - B		254,885	44.2										
C1 - Concrete Wall	Rural	7,763	1.3										
	Urban	7,348	1.3										
	Total	15,111	2.6					<i>VL</i>	<i>VL</i>			<i>VL</i>	<i>VL</i>
C2 - Wood wall	Rural	4,144	0.7										
	Urban	1,777	0.3										
	Total	5,921	1.0					<i>VL</i>	<i>VL</i>			<i>H</i>	<i>M</i>
Total - Category - C		21,032	3.7										
X - Other Materials	Rural	7,115	1.2										
	Urban	4,666	0.8										
	Total	11,781	2.0					<i>VL</i>	<i>VL</i>			<i>H</i>	<i>M</i>
Total - Category - X		11,781	2.0										
TOTAL HOUSES*		576,201											

ROOF													
R1 - Light Weight Sloping Roof	Rural	40,118	7.0										
	Urban	85,482	14.8										
	Total	125,600	21.8					<i>L</i>	<i>VL</i>			<i>VH</i>	<i>H</i>
R2 - Heavy Weight Sloping Roof	Rural	304,130	52.8										
	Urban	42,621	7.4										
	Total	346,751	60.2					<i>L</i>	<i>VL</i>			<i>M</i>	<i>L</i>
R3 - Flat Roof	Rural	23,124	4.0										
	Urban	80,726	14.0										
	Total	103,850	18.0	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		576,201											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 665 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