

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

Table No. : OR 02

State : ODISHA

JHARSUGUDA

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	60,901	38.0										
	Urban	17,077	10.7										
	Total	77,978	48.7					<i>M</i>	<i>L</i>				<i>M</i>
A2 - Stone Wall not packed with mortar	Rural	1,863	1.2										
	Urban	775	0.5										
	Total	2,638	1.7					<i>M</i>	<i>L</i>				<i>L</i>
Total - Category - A		80,616	50.3										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	29,603	18.5										
	Urban	38,318	23.9										
	Total	67,921	42.4					<i>L</i>	<i>VL</i>				<i>L</i>
Total - Category - B		67,921	42.4										
C1 - Concrete Wall	Rural	2,085	1.3										
	Urban	6,160	3.8										
	Total	8,245	5.1					<i>VL</i>	<i>VL</i>				<i>VL</i>
C2 - Wood wall	Rural	363	0.2										
	Urban	301	0.2										
	Total	664	0.4					<i>VL</i>	<i>VL</i>				<i>M</i>
Total - Category - C		8,909	5.6										
X - Other Materials	Rural	1,697	1.1										
	Urban	1,186	0.7										
	Total	2,883	1.8					<i>VL</i>	<i>VL</i>				<i>M</i>
Total - Category - X		2,883	1.8										
TOTAL HOUSES*		160,329											

ROOF													
R1 - Light Weight Sloping Roof	Rural	15,731	9.8										
	Urban	19,343	12.1										
	Total	35,074	21.9					<i>L</i>	<i>VL</i>				<i>H</i>
R2 - Heavy Weight Sloping Roof	Rural	67,976	42.4										
	Urban	19,760	12.3										
	Total	87,736	54.7					<i>L</i>	<i>VL</i>				<i>L</i>
R3 - Flat Roof	Rural	12,805	8.0										
	Urban	24,714	15.4										
	Total	37,519	23.4	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		160,329											

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 chocked 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