

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

## TAMIL NADU

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 %				
STATE - TAMIL NADU						28.4	71.6	6.9	37.3	48.9	6.9	
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	3,020,940	14.1									
	Urban	1,161,328	5.4									
	Total	4,182,268	19.5			M	L	VH	H	M	L	
A2 - Stone Wall not packed with mortar	Rural	387,952	1.8									
	Urban	257,224	1.2									
	Total	645,176	3.0			M	L	H	M	L	VL	
Total - Category - A		4,827,444	22.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	6,071,138	28.4									
	Urban	7,366,311	34.4									
	Total	13,437,449	62.8			L	VL	H	M	L	VL	
Total - Category - B		13,437,449	62.8									
C1 - Concrete Wall	Rural	564,592	2.6									
	Urban	1,301,542	6.1									
	Total	1,866,134	8.7			VL	VL	L	VL	VL	VL	
C2 - Wood wall	Rural	35,777	0.2									
	Urban	22,459	0.1									
	Total	58,236	0.3			VL	VL	VH	H	M	L	
Total - Category - C		1,924,370	9.0									
X - Other Materials	Rural	849,632	4.0									
	Urban	359,227	1.7									
	Total	1,208,859	5.7			VL	VL	VH	H	M	L	
Total - Category - X		1,208,859	5.6									
TOTAL HOUSES*		21,398,122										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	3,523,116	16.5									
	Urban	1,687,597	7.9									
	<b>Total</b>	<b>5,210,713</b>	<b>24.4</b>			L	VL	VH	VH	H	M	
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	3,734,847	17.5									
	Urban	2,524,340	11.8									
	<b>Total</b>	<b>6,259,187</b>	<b>29.3</b>			L	VL	H	M	L	VL	
<b>R3 - Flat Roof</b>	Rural	3,672,068	17.2									
	Urban	6,256,154	29.2									
	<b>Total</b>	<b>9,928,222</b>	<b>46.4</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>21,398,122</b>										

### 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