

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

**Table No. : TN 13**

**State : TAMIL NADU**

**TIRUCHIRAPPALLI**

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 %				
							100		100			
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	117,797	14.6									
	Urban	42,531	5.3									
	Total	160,328	19.9				L		H			
A2 - Stone Wall not packed with mortar	Rural	10,271	1.3									
	Urban	6,855	0.8									
	Total	17,126	2.1				L		M			
Total - Category - A		177,454	22.0									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	229,715	28.5									
	Urban	288,077	35.7									
	Total	517,792	64.2				VL		M			
Total - Category - B		517,792	64.2									
C1 - Concrete Wall	Rural	21,441	2.7									
	Urban	47,018	5.8									
	Total	68,459	8.5				VL		VL			
C2 - Wood wall	Rural	1,167	0.1									
	Urban	672	0.1									
	Total	1,839	0.2				VL		H			
Total - Category - C		70,298	8.7									
X - Other Materials	Rural	29,662	3.7									
	Urban	11,804	1.5									
	Total	41,466	5.2				VL		H			
Total - Category - X		41,466	5.1									
TOTAL HOUSES*		807,010										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	112,933	14.0									
	Urban	59,269	7.3									
	<b>Total</b>	<b>172,202</b>	<b>21.3</b>				VL		VH			
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	149,346	18.5									
	Urban	79,012	9.8									
	<b>Total</b>	<b>228,358</b>	<b>28.3</b>				VL		M			
<b>R3 - Flat Roof</b>	Rural	147,774	18.3									
	Urban	258,676	32.1									
	<b>Total</b>	<b>406,450</b>	<b>50.4</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>807,010</b>										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **578 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