

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

**Table No. : TN 24**

**State : TAMIL NADU**

**VIRUDHUNAGAR**

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	75,008	11.6									
	Urban	35,017	5.4									
	Total	110,025	17.0				L			M		
A2 - Stone Wall not packed with mortar	Rural	5,771	0.9									
	Urban	4,137	0.6									
	Total	9,908	1.5				L			L		
Total - Category - A		119,933	18.5									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	205,902	31.8									
	Urban	263,988	40.7									
	Total	469,890	72.5				VL			L		
Total - Category - B		469,890	72.5									
C1 - Concrete Wall	Rural	17,707	2.7									
	Urban	27,842	4.3									
	Total	45,549	7.0				VL			VL		
C2 - Wood wall	Rural	741	0.1									
	Urban	655	0.1									
	Total	1,396	0.2				VL			M		
Total - Category - C		46,945	7.2									
X - Other Materials	Rural	7,025	1.1									
	Urban	4,218	0.7									
	Total	11,243	1.8				VL			M		
Total - Category - X		11,243	1.7									
TOTAL HOUSES*		648,011										
ROOF												
R1 - Light Weight Sloping Roof	Rural	54,398	8.4									
	Urban	50,860	7.8									
	Total	105,258	16.2				VL			H		
R2 - Heavy Weight Sloping Roof	Rural	105,974	16.4									
	Urban	64,245	9.9									
	Total	170,219	26.3				VL			L		
R3 - Flat Roof	Rural	151,782	23.4									
	Urban	220,752	34.1									
	Total	372,534	57.5	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		648,011										

**Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 444 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