

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

Table No. : TN 05

State : TAMIL NADU

TIRUVANNAMALAI

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 %				
						66.4	33.6	1.6	.4	97.9	.1	
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	156,245	23.5									
	Urban	19,551	2.9									
	Total	175,796	26.4			M	L	VH	H	M	L	
A2 - Stone Wall not packed with mortar	Rural	16,071	2.4									
	Urban	3,791	0.6									
	Total	19,862	3.0			M	L	H	M	L	VL	
Total - Category - A		195,658	29.4									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	300,859	45.2									
	Urban	93,941	14.1									
	Total	394,800	59.3			L	VL	H	M	L	VL	
Total - Category - B		394,800	59.4									
C1 - Concrete Wall	Rural	27,934	4.2									
	Urban	16,738	2.5									
	Total	44,672	6.7			VL	VL	L	VL	VL	VL	
C2 - Wood wall	Rural	1,373	0.2									
	Urban	273	-									
	Total	1,646	0.2			VL	VL	VH	H	M	L	
Total - Category - C		46,318	7.0									
X - Other Materials	Rural	24,265	3.6									
	Urban	3,863	0.6									
	Total	28,128	4.2			VL	VL	VH	H	M	L	
Total - Category - X		28,128	4.2									
TOTAL HOUSES*		664,904										

ROOF												
R1 - Light Weight Sloping Roof	Rural	180,285	27.1									
	Urban	20,627	3.1									
	Total	200,912	30.2			L	VL	VH	VH	H	M	
R2 - Heavy Weight Sloping Roof	Rural	129,596	19.5									
	Urban	28,123	4.2									
	Total	157,719	23.7			L	VL	H	M	L	VL	
R3 - Flat Roof	Rural	216,866	32.6									
	Urban	89,407	13.4									
	Total	306,273	46.0	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		664,904										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 566 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