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

Table No. : TN 22   **State : TAMIL NADU**   **MADURAI**

Wall / Roof		Census Houses No. of Houses	%	EQ Zone V	IV	III	II	Wind Velocity m/s 55 & 50	47	44 & 39	33	Flood Prone Area in %
				Area in %				Area in %				
							100		1.5	98.5		
WALL												
A1 - Mud &	Rural	107,314	11.7									
Unburnt Brick Wall	Urban	40,863	4.4									
	Total	*148,177*	*16.1*				L		H	M		
A2 - Stone Wall	Rural	8,200	0.9									
not packed with mortar	Urban	7,360	0.8									
	Total	*15,560*	*1.7*				L		M	L		
Total - Category - A		163,737	17.8									
B - Burnt Bricks Wall	Rural	192,714	20.9									
& Stone wall packed	Urban	390,363	42.4									
with mortar	*Total*	*583,077*	*63.3*				VL		M	L		
Total - Category - B		583,077	63.3									
C1 - Concrete Wall	Rural	36,033	3.9									
	Urban	104,941	11.4									
	Total	*140,974*	*15.3*				VL		VL	VL		
C2 - Wood wall	Rural	1,197	0.1									
	Urban	912	0.1									
	Total	*2,109*	*0.2*				VL		H	M		
Total - Category - C		143,083	15.5									
X - Other Materials	Rural	21,496	2.3									
	Urban	9,272	1.0									
	Total	*30,768*	*3.3*				VL		H	M		
Total - Category - X		30,768	3.3									
TOTAL HOUSES*		920,665										
ROOF												
R1 - Light Weight	Rural	79,602	8.6									
Sloping Roof	Urban	49,827	5.4									
	Total	*129,429*	*14.0*				VL		VH	H		
R2 - Heavy Weight	Rural	145,813	15.8									
Sloping Roof	Urban	101,743	11.1									
	Total	*247,556*	*26.9*				VL		M	L		
R3 - Flat Roof	Rural	141,539	15.4									
	Urban	402,141	43.7									
	Total	*543,680*	*59.1*	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		920,665										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.   469 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