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

Table No. : TN 02 **State : TAMIL NADU** **CHENNAI**

Wall / Roof		Census Houses		Level of Risk under								
				EQ Zone				Wind Velocity m/s				Flood Prone Area in %
		No. of Houses	%	V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
						100		100				
WALL												
A1 - Mud &	Rural		-									
Unburnt Brick Wall	Urban	18,848	1.5									
	Total	***18,848***	***1.5***			*M*		*VH*				
A2 - Stone Wall	Rural		-									
not packed with mortar	Urban	26,290	2.1									
	Total	***26,290***	***2.1***			*M*		*H*				
Total - Category - A		***45,138***	***3.6***									
B - Burnt Bricks Wall	Rural		-									
& Stone wall packed	Urban	882,697	70.0									
with mortar	***Total***	***882,697***	***70.0***			*L*		*H*				
Total - Category - B		***882,697***	***70.0***									
C1 - Concrete Wall	Rural		-									
	Urban	308,345	24.5									
	Total	***308,345***	***24.5***			*VL*		*L*				
C2 - Wood wall	Rural		-									
	Urban	959	0.1									
	Total	***959***	***0.1***			*VL*		*VH*				
Total - Category - C		***309,304***	***24.5***									
X - Other Materials	Rural		-									
	Urban	23,159	1.8									
	Total	***23,159***	***1.8***			*VL*		*VH*				
Total - Category - X		***23,159***	***1.8***									
TOTAL HOUSES*		**1,260,298**										

ROOF												
R1 - Light Weight	Rural		-									
Sloping Roof	Urban	159,502	12.7									
	Total	***159,502***	***12.7***			*L*		*VH*				
R2 - Heavy Weight	Rural		-									
Sloping Roof	Urban	88,158	7.0									
	Total	***88,158***	***7.0***			*L*		*H*				
R3 - Flat Roof	Rural		-									
	Urban	1,012,638	80.3									
	Total	***1,012,638***	***80.3***	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**1,260,298**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 667 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