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

Table No. : TN 21 **State : TAMIL NADU** **SIVAGANGA**

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		36.0	64.0		
WALL												
A1 - Mud &	Rural	76,915	19.0									
Unburnt Brick Wall	Urban	15,363	3.8									
	Total	*92,278*	*22.8*				L		H	M		
A2 - Stone Wall	Rural	6,445	1.6									
not packed with mortar	Urban	2,491	0.6									
	Total	*8,936*	*2.2*				L		M	L		
Total - Category - A		*101,214*	*25.0*									
B - Burnt Bricks Wall	Rural	159,440	39.3									
& Stone wall packed	Urban	93,645	23.1									
with mortar	*Total*	*253,085*	*62.4*				VL		M	L		
Total - Category - B		*253,085*	*62.5*									
C1 - Concrete Wall	Rural	15,633	3.9									
	Urban	15,360	3.8									
	Total	*30,993*	*7.7*				VL		VL	VL		
C2 - Wood wall	Rural	1,028	0.3									
	Urban	386	0.1									
	Total	*1,414*	*0.4*				VL		H	M		
Total - Category - C		*32,407*	*8.0*									
X - Other Materials	Rural	16,273	4.0									
	Urban	2,279	0.6									
	Total	*18,552*	*4.6*				VL		H	M		
Total - Category - X		*18,552*	*4.6*									
TOTAL HOUSES*		**405,258**										
ROOF												
R1 - Light Weight	Rural	34,211	8.4									
Sloping Roof	Urban	8,684	2.1									
	Total	*42,895*	*10.5*				VL		VH	H		
R2 - Heavy Weight	Rural	157,072	38.8									
Sloping Roof	Urban	44,440	11.0									
	Total	*201,512*	*49.8*				VL		M	L		
R3 - Flat Roof	Rural	84,451	20.8									
	Urban	76,400	18.9									
	Total	*160,851*	*39.7*	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**405,258**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 530 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

BMTPC **Building Materials & Technology Promotion Council** **Peer Group, MoHUA, GOI**