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

Table No. : AP 02 **ANDHRA PRADESH** **VIZIANAGARAM**

Wall / Roof		Census Houses		Level of Risk under								
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
							100	55.0	45.0			4.3
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	109,193	16.4									
	Urban	9,993	1.5									
	Total	***119,186***	***17.9***				*L*	*VH*	*H*			*VH*
A2 - Stone Wall not packed with mortar	Rural	3,138	0.5									
	Urban	1,594	0.2									
	Total	***4,732***	***0.7***				*L*	*H*	*M*			*VH*
Total - Category - A		***123,918***	***18.6***									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	356,620	53.5									
	Urban	119,814	18.0									
	Total	***476,434***	***71.5***				*VL*	*H*	*M*			*H/M*
Total - Category - B		***476,434***	***71.4***									
C1 - Concrete Wall	Rural	3,154	0.5									
	Urban	1,769	0.3									
	Total	***4,923***	***0.8***				*VL*	*L*	*VL*			*L/VL*
C2 - Wood wall	Rural	9,202	1.4									
	Urban	1,921	0.3									
	Total	***11,123***	***1.7***				*VL*	*VH*	*H*			*H*
Total - Category - C		***16,046***	***2.4***									
X - Other Materials	Rural	45,668	6.8									
	Urban	4,895	0.7									
	Total	***50,563***	***7.5***				*VL*	*VH*	*H*			*VH*
Total - Category - X		***50,563***	***7.6***									
TOTAL HOUSES*		**666,961**										
ROOF												
R1 - Light Weight Sloping Roof	Rural	170,648	25.6									
	Urban	23,414	3.5									
	Total	***194,062***	***29.1***				*VL*	*VH*	*VH*			*VH*
R2 - Heavy Weight Sloping Roof	Rural	81,165	12.2									
	Urban	15,422	2.3									
	Total	***96,587***	***14.5***				*VL*	*H*	*M*			*H*
R3 - Flat Roof	Rural	275,162	41.3									
	Urban	101,150	15.2									
	Total	***376,312***	***56.5***	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**666,961**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **849 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