

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

**Table No. : AR 07**

**State : ARUNACHAL PRADESH**

**EAST SIANG**

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 %				
				100				43.6		56.4		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	226	0.8									
	Urban	357	1.3									
	Total	583	2.1	VH				VH		M		
A2 - Stone Wall not packed with mortar	Rural	106	0.4									
	Urban	142	0.5									
	Total	248	0.9	VH				H		L		
Total - Category - A		831	3.1									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	957	3.6									
	Urban	792	3.0									
	Total	1,749	6.6	H				H		L		
Total - Category - B		1,749	6.5									
C1 - Concrete Wall	Rural	1,572	5.9									
	Urban	1,951	7.3									
	Total	3,523	13.2	M				L		VL		
C2 - Wood wall	Rural	2,329	8.7									
	Urban	407	1.5									
	Total	2,736	10.2	M				VH		M		
Total - Category - C		6,259	23.4									
X - Other Materials	Rural	13,446	50.3									
	Urban	4,442	16.6									
	Total	17,888	66.9	M				VH		M		
Total - Category - X		17,888	66.9									
TOTAL HOUSES*		26,727										

ROOF												
R1 - Light Weight Sloping Roof	Rural	18,207	68.1									
	Urban	7,060	26.4									
	Total	25,267	94.5	M				VH		M		
R2 - Heavy Weight Sloping Roof	Rural	170	0.6									
	Urban	161	0.6									
	Total	331	1.2	M				VH		H		
R3 - Flat Roof	Rural	259	1.0									
	Urban	870	3.3									
	Total	1,129	4.3	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		26,727										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **517 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