

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

**Table No. : AR 04**

**State : ARUNACHAL PRADESH**

**PAPUM PARE**

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						100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	425	1.0									
	Urban	456	1.0									
	Total	881	2.0	VH						M		
A2 - Stone Wall not packed with mortar	Rural	259	0.6									
	Urban	888	2.0									
	Total	1,147	2.6	VH						L		
Total - Category - A		2,028	4.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	3,340	7.6									
	Urban	8,570	19.4									
	Total	11,910	27.0	H						L		
Total - Category - B		11,910	27.0									
C1 - Concrete Wall	Rural	1,258	2.9									
	Urban	6,605	15.0									
	Total	7,863	17.9	M						VL		
C2 - Wood wall	Rural	604	1.4									
	Urban	344	0.8									
	Total	948	2.2	M						M		
Total - Category - C		8,811	20.0									
X - Other Materials	Rural	12,155	27.6									
	Urban	9,208	20.9									
	Total	21,363	48.5	M						M		
Total - Category - X		21,363	48.4									
TOTAL HOUSES*		44,112										

ROOF												
R1 - Light Weight Sloping Roof	Rural	16,169	36.7									
	Urban	17,323	39.3									
	Total	33,492	76.0	M						M		
R2 - Heavy Weight Sloping Roof	Rural	432	1.0									
	Urban	1,295	2.9									
	Total	1,727	3.9	M						H		
R3 - Flat Roof	Rural	1,440	3.3									
	Urban	7,453	16.9									
	Total	8,893	20.2	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		44,112										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **587 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