

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

**Table No. : NG 04**

**State : NAGALAND**

**WOKHA**

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					38.0		62.0		
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	3,879	8.7										
	Urban	183	0.4										
	Total	4,062	9.1	VH				VH		M			
A2 - Stone Wall not packed with mortar	Rural	110	0.2										
	Urban	68	0.2										
	Total	178	0.4	VH				H		L			
Total - Category - A		4,240	9.5										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	3,856	8.6										
	Urban	3,689	8.2										
	Total	7,545	16.8	H				H		L			
Total - Category - B		7,545	16.9										
C1 - Concrete Wall	Rural	346	0.8										
	Urban	204	0.5										
	Total	550	1.3	M				L		VL			
C2 - Wood wall	Rural	7,578	16.9										
	Urban	1,200	2.7										
	Total	8,778	19.6	M				VH		M			
Total - Category - C		9,328	20.9										
X - Other Materials	Rural	21,574	48.2										
	Urban	2,051	4.6										
	Total	23,625	52.8	M				VH		M			
Total - Category - X		23,625	52.8										
TOTAL HOUSES*		44,738											

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	36,768	82.2									
	Urban	6,095	13.6									
	<b>Total</b>	<b>42,863</b>	<b>95.8</b>	M				VH		H		
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	325	0.7									
	Urban	322	0.7									
	<b>Total</b>	<b>647</b>	<b>1.4</b>	H				H		L		
<b>R3 - Flat Roof</b>	Rural	250	0.6									
	Urban	978	2.2									
	<b>Total</b>	<b>1,228</b>	<b>2.8</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>44,738</b>										

**Probable Maximum Precipitation at a Station of the district in 24 hrs is 400 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