

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

**Table No. : UP 27**

**State : UTTAR PRADESH**

**RAE BAREIL**

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 %				
						95.1	4.9		100			25.2
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	234,750	31.8									
	Urban	5,212	0.7									
	Total	239,962	32.5			M	L		H			VH
A2 - Stone Wall not packed with mortar	Rural	5,344	0.7									
	Urban	930	0.1									
	Total	6,274	0.8			M	L		M			VH
Total - Category - A		246,236	33.4									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	360,337	48.8									
	Urban	53,236	7.2									
	Total	413,573	56.0			L	VL		M			H/M
Total - Category - B		413,573	56.1									
C1 - Concrete Wall	Rural	3,783	0.5									
	Urban	469	0.1									
	Total	4,252	0.6			VL	VL		VL			L/VL
C2 - Wood wall	Rural	620	0.1									
	Urban	262	-									
	Total	882	0.1			VL	VL		H			H
Total - Category - C		5,134	0.7									
X - Other Materials	Rural	66,802	9.1									
	Urban	5,978	0.8									
	Total	72,780	9.9			VL	VL		H			VH
Total - Category - X		72,780	9.9									
TOTAL HOUSES*		737,723										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	305,162	41.4									
	Urban	9,842	1.3									
	<b>Total</b>	<b>315,004</b>	<b>42.7</b>			L	VL		VH			VH
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	20,203	2.7									
	Urban	3,017	0.4									
	<b>Total</b>	<b>23,220</b>	<b>3.1</b>			L	VL		M			H
<b>R3 - Flat Roof</b>	Rural	346,271	46.9									
	Urban	53,228	7.2									
	<b>Total</b>	<b>399,499</b>	<b>54.1</b>	Damage Risk as per that for the Wall supporting it								
<b>TOTAL HOUSES*</b>		<b>737,723</b>										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **630 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