

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

**Table No. : UP 10**

**State : UTTAR PRADESH**

**GAUTAM BUDDHA NAGAR**

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				89.1	10.9			39.9	
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	6,143	1.5											
	Urban	6,329	1.5											
	Total	12,472	3.0		H			VH	H				VH	
A2 - Stone Wall not packed with mortar	Rural	2,640	0.6											
	Urban	6,505	1.6											
	Total	9,145	2.2		H			H	M				VH	
Total - Category - A		21,617	5.2											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	134,893	32.7											
	Urban	236,106	57.2											
	Total	370,999	89.9		M			H	M				H/M	
Total - Category - B		370,999	90.0											
C1 - Concrete Wall	Rural	1,746	0.4											
	Urban	5,824	1.4											
	Total	7,570	1.8		L			L	VL				L/VL	
C2 - Wood wall	Rural	179	-											
	Urban	514	0.1											
	Total	693	0.1		L			VH	H				H	
Total - Category - C		8,263	2.0											
X - Other Materials	Rural	5,749	1.4											
	Urban	5,804	1.4											
	Total	11,553	2.8		VL			VH	H				VH	
Total - Category - X		11,553	2.8											
TOTAL HOUSES*		412,432												

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	27,835	6.7									
	Urban	19,338	4.7									
	<b>Total</b>	<b>47,173</b>	<b>11.4</b>		M			VH	VH			VH
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	77,503	18.8									
	Urban	54,232	13.1									
	<b>Total</b>	<b>131,735</b>	<b>31.9</b>		M			H	M			H
<b>R3 - Flat Roof</b>	Rural	46,012	11.2									
	Urban	187,512	45.5									
	<b>Total</b>	<b>233,524</b>	<b>56.7</b>	Damage Risk as per that for the Wall supporting it								
<b>TOTAL HOUSES*</b>		<b>412,432</b>										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **550 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