

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

Table No. : UP 36

State : UTTAR PRADESH

LALITPUR

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 %				
WALL								100		100		
A1 - Mud & Unburnt Brick Wall	Rural	96,766	34.3									
	Urban	6,571	2.3									
	Total	103,337	36.6					<i>L</i>		<i>H</i>		
A2 - Stone Wall not packed with mortar	Rural	8,372	3.0									
	Urban	396	0.1									
	Total	8,768	3.1					<i>L</i>		<i>M</i>		
Total - Category - A		112,105	39.7									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	128,892	45.7									
	Urban	30,992	11.0									
	Total	159,884	56.7					<i>VL</i>		<i>M</i>		
Total - Category - B		159,884	56.7									
C1 - Concrete Wall	Rural	1,077	0.4									
	Urban	656	0.2									
	Total	1,733	0.6					<i>VL</i>		<i>VL</i>		
C2 - Wood wall	Rural	768	0.3									
	Urban	45	-									
	Total	813	0.3					<i>VL</i>		<i>H</i>		
Total - Category - C		2,546	0.9									
X - Other Materials	Rural	6,669	2.4									
	Urban	837	0.3									
	Total	7,506	2.7					<i>VL</i>		<i>H</i>		
Total - Category - X		7,506	2.7									
TOTAL HOUSES*		282,041										

ROOF												
R1 - Light Weight Sloping Roof	Rural	38,076	13.5									
	Urban	4,214	1.5									
	Total	42,290	15.0					<i>VL</i>		<i>VH</i>		
R2 - Heavy Weight Sloping Roof	Rural	193,345	68.6									
	Urban	22,145	7.9									
	Total	215,490	76.5					<i>VL</i>		<i>M</i>		
R3 - Flat Roof	Rural	11,123	3.9									
	Urban	13,138	4.7									
	Total	24,261	8.6	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		282,041										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 503 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