

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

Table No. : UP 37

State : UTTAR PRADESH

HAMIRPUR

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		31.4
A1 - Mud & Unburnt Brick Wall	Rural	135,495	46.6									
	Urban	11,506	4.0									
	Total	147,001	50.6					<i>L</i>		<i>H</i>		<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	2,501	0.9									
	Urban	551	0.2									
	Total	3,052	1.1					<i>L</i>		<i>M</i>		<i>VH</i>
Total - Category - A		150,053	51.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	93,771	32.3									
	Urban	33,569	11.5									
	Total	127,340	43.8					<i>VL</i>		<i>M</i>		<i>H/M</i>
Total - Category - B		127,340	43.8									
C1 - Concrete Wall	Rural	872	0.3									
	Urban	325	0.1									
	Total	1,197	0.4					<i>VL</i>		<i>VL</i>		<i>L/ VL</i>
C2 - Wood wall	Rural	139	-									
	Urban	65	-									
	Total	204	-					<i>VL</i>		<i>H</i>		<i>H</i>
Total - Category - C		1,401	0.5									
X - Other Materials	Rural	9,256	3.2									
	Urban	2,646	0.9									
	Total	11,902	4.1					<i>VL</i>		<i>H</i>		<i>VH</i>
Total - Category - X		11,902	4.1									
TOTAL HOUSES*		290,696										

ROOF												
R1 - Light Weight Sloping Roof	Rural	41,005	14.1									
	Urban	5,684	2.0									
	Total	46,689	16.1					<i>VL</i>		<i>VH</i>		<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	141,182	48.6									
	Urban	12,697	4.4									
	Total	153,879	53.0					<i>VL</i>		<i>M</i>		<i>H</i>
R3 - Flat Roof	Rural	59,847	20.6									
	Urban	30,281	10.4									
	Total	90,128	31.0	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		290,696										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 558 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