

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

Table No. : UP 05

State : UTTAR PRADESH

RAMPUR

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				100				22.2	
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	63,800	12.4										
	Urban	9,034	1.8										
	Total	72,834	14.2		<i>H</i>			<i>VH</i>				<i>VH</i>	
A2 - Stone Wall not packed with mortar	Rural	3,903	0.8										
	Urban	2,609	0.5										
	Total	6,512	1.3		<i>H</i>			<i>H</i>				<i>VH</i>	
Total - Category - A		79,346	15.4										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	285,275	55.3										
	Urban	115,122	22.3										
	Total	400,397	77.6		<i>M</i>			<i>H</i>				<i>H/M</i>	
Total - Category - B		400,397	77.7										
C1 - Concrete Wall	Rural	2,074	0.4										
	Urban	870	0.2										
	Total	2,944	0.6		<i>L</i>			<i>L</i>				<i>L/VL</i>	
C2 - Wood wall	Rural	759	0.1										
	Urban	407	0.1										
	Total	1,166	0.2		<i>L</i>			<i>VH</i>				<i>H</i>	
Total - Category - C		4,110	0.8										
X - Other Materials	Rural	27,940	5.4										
	Urban	3,705	0.7										
	Total	31,645	6.1		<i>VL</i>			<i>VH</i>				<i>VH</i>	
Total - Category - X		31,645	6.1										
TOTAL HOUSES*		515,498											

ROOF												
R1 - Light Weight Sloping Roof	Rural	192,826	37.4									
	Urban	27,515	5.3									
	Total	220,341	42.7		<i>M</i>			<i>VH</i>				<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	28,101	5.5									
	Urban	6,895	1.3									
	Total	34,996	6.8		<i>M</i>			<i>H</i>				<i>H</i>
R3 - Flat Roof	Rural	162,824	31.6									
	Urban	97,337	18.9									
	Total	260,161	50.5	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		515,498										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 525 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