

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

Table No. : UP 16

State : UTTAR PRADESH

FIROZABAD

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												11.8
A1 - Mud & Unburnt Brick Wall	Rural	33,421	6.5									
	Urban	6,083	1.2									
	Total	39,504	7.7					<i>M</i>	<i>L</i>		<i>H</i>	<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	2,434	0.5									
	Urban	2,858	0.6									
	Total	5,292	1.1					<i>M</i>	<i>L</i>		<i>M</i>	<i>VH</i>
Total - Category - A		44,796	8.8									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	286,746	56.2									
	Urban	161,627	31.7									
	Total	448,373	87.9					<i>L</i>	<i>VL</i>		<i>M</i>	<i>H/M</i>
Total - Category - B		448,373	87.9									
C1 - Concrete Wall	Rural	1,180	0.2									
	Urban	1,739	0.3									
	Total	2,919	0.5					<i>VL</i>	<i>VL</i>		<i>VL</i>	<i>L/ VL</i>
C2 - Wood wall	Rural	293	0.1									
	Urban	283	0.1									
	Total	576	0.2					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>H</i>
Total - Category - C		3,495	0.7									
X - Other Materials	Rural	11,565	2.3									
	Urban	2,091	0.4									
	Total	13,656	2.7					<i>VL</i>	<i>VL</i>		<i>H</i>	<i>VH</i>
Total - Category - X		13,656	2.7									
TOTAL HOUSES*		510,320										

ROOF												
R1 - Light Weight Sloping Roof	Rural	70,738	13.9									
	Urban	14,811	2.9									
	Total	85,549	16.8					<i>L</i>	<i>VL</i>		<i>VH</i>	<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	131,381	25.7									
	Urban	44,765	8.8									
	Total	176,146	34.5					<i>L</i>	<i>VL</i>		<i>M</i>	<i>H</i>
R3 - Flat Roof	Rural	133,520	26.2									
	Urban	115,105	22.6									
	Total	248,625	48.8	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		510,320										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 652 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