

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

Table No. : UP 58

State : UTTAR PRADESH

KUSHINAGAR

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				.5	99.5			29.0	
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	31,176	4.1											
	Urban	1,065	0.1											
	Total	32,241	4.2		H			VH	H				VH	
A2 - Stone Wall not packed with mortar	Rural	6,432	0.8											
	Urban	350	-											
	Total	6,782	0.8		H			H	M				VH	
Total - Category - A		39,023	5.1											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	407,548	53.3											
	Urban	33,046	4.3											
	Total	440,594	57.6		M			H	M				H/M	
Total - Category - B		440,594	57.6											
C1 - Concrete Wall	Rural	2,125	0.3											
	Urban	168	-											
	Total	2,293	0.3		L			L	VL				L/VL	
C2 - Wood wall	Rural	2,945	0.4											
	Urban	206	-											
	Total	3,151	0.4		L			VH	H				H	
Total - Category - C		5,444	0.7											
X - Other Materials	Rural	275,318	36.0											
	Urban	4,056	0.5											
	Total	279,374	36.5		VL			VH	H				VH	
Total - Category - X		279,374	36.5											
TOTAL HOUSES*		764,435												

ROOF												
R1 - Light Weight Sloping Roof	Rural	342,162	44.8									
	Urban	6,881	0.9									
	Total	349,043	45.7		M			VH	VH			VH
R2 - Heavy Weight Sloping Roof	Rural	45,624	6.0									
	Urban	1,682	0.2									
	Total	47,306	6.2		M			H	M			H
R3 - Flat Roof	Rural	337,758	44.2									
	Urban	30,328	4.0									
	Total	368,086	48.2	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		764,435										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **530 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