

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

Table No. : GJ 13

State : GUJARAT

AMRELI

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			31.2		68.8	
A1 - Mud & Unburnt Brick Wall	Rural	66,456	17.1									
	Urban	9,048	2.3									
	Total	75,504	19.4				<i>M</i>		<i>VH</i>		<i>M</i>	
A2 - Stone Wall not packed with mortar	Rural	14,028	3.6									
	Urban	2,739	0.7									
	Total	16,767	4.3				<i>M</i>		<i>H</i>		<i>L</i>	
Total - Category - A		92,271	23.8									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	196,029	50.5									
	Urban	86,775	22.4									
	Total	282,804	72.9				<i>L</i>		<i>H</i>		<i>L</i>	
Total - Category - B		282,804	72.9									
C1 - Concrete Wall	Rural	4,544	1.2									
	Urban	1,633	0.4									
	Total	6,177	1.6				<i>VL</i>		<i>L</i>		<i>VL</i>	
C2 - Wood wall	Rural	1,293	0.3									
	Urban	264	0.1									
	Total	1,557	0.4				<i>VL</i>		<i>VH</i>		<i>M</i>	
Total - Category - C		7,734	2.0									
X - Other Materials	Rural	4,341	1.1									
	Urban	1,020	0.3									
	Total	5,361	1.4				<i>VL</i>		<i>VH</i>		<i>M</i>	
Total - Category - X		5,361	1.4									
TOTAL HOUSES*		388,170										

ROOF												
R1 - Light Weight Sloping Roof	Rural	12,845	3.3									
	Urban	4,626	1.2									
	Total	17,471	4.5				<i>L</i>		<i>VH</i>		<i>H</i>	
R2 - Heavy Weight Sloping Roof	Rural	174,191	44.9									
	Urban	34,206	8.8									
	Total	208,397	53.7				<i>L</i>		<i>H</i>		<i>L</i>	
R3 - Flat Roof	Rural	99,655	25.7									
	Urban	62,647	16.1									
	Total	162,302	41.8				<i>Damage Risk as per that for the Wall supporting it</i>					
TOTAL HOUSES*		388,170										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sq.km. is 883 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