

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

Table No. : GJ 07

State : GUJARAT

AHMADABAD

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		19.6	5.0	75.4		13.8
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	111,414	5.8									
	Urban	63,007	3.3									
	Total	174,421	9.1			M		VH	H	M		VH
A2 - Stone Wall not packed with mortar	Rural	2,095	0.1									
	Urban	5,397	0.3									
	Total	7,492	0.4			M		H	M	L		VH
Total - Category - A		181,913	9.5									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	178,421	9.3									
	Urban	1,490,401	78.0									
	Total	1,668,822	87.3			L		H	M	L		H/M
Total - Category - B		1,668,822	87.3									
C1 - Concrete Wall	Rural	3,183	0.2									
	Urban	36,216	1.9									
	Total	39,399	2.1			VL		L	VL	VL		L/VL
C2 - Wood wall	Rural	739	-									
	Urban	2,125	0.1									
	Total	2,864	0.1			VL		VH	H	M		H
Total - Category - C		42,263	2.2									
X - Other Materials	Rural	5,975	0.3									
	Urban	12,915	0.7									
	Total	18,890	1.0			VL		VH	H	M		VH
Total - Category - X		18,890	1.0									
TOTAL HOUSES*		1,911,888										

ROOF												
R1 - Light Weight Sloping Roof	Rural	88,500	4.6									
	Urban	375,667	19.6									
	Total	464,167	24.2			L		VH	VH	H		VH
R2 - Heavy Weight Sloping Roof	Rural	149,572	7.8									
	Urban	61,686	3.2									
	Total	211,258	11.0			L		H	M	L		H
R3 - Flat Roof	Rural	63,755	3.3									
	Urban	1,172,708	61.3									
	Total	1,236,463	64.6	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		1,911,888										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sq.km. is **552 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



Building Materials & Technology Promotion Council

Peer Group, MoHUA, GOI