

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

Table No. : GJ 16

State : GUJARAT

KHEDA

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		29.2
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	180,003	33.2									
	Urban	17,832	3.3									
	Total	197,835	36.5			M				M		VH
A2 - Stone Wall not packed with mortar	Rural	2,164	0.4									
	Urban	639	0.1									
	Total	2,803	0.5			M				L		VH
Total - Category - A		200,638	37.0									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	194,988	36.0									
	Urban	106,812	19.7									
	Total	301,800	55.7			L				L		H/M
Total - Category - B		301,800	55.7									
C1 - Concrete Wall	Rural	10,693	2.0									
	Urban	6,118	1.1									
	Total	16,811	3.1			VL				VL		L/VL
C2 - Wood wall	Rural	1,776	0.3									
	Urban	786	0.1									
	Total	2,562	0.4			VL				M		H
Total - Category - C		19,373	3.6									
X - Other Materials	Rural	17,718	3.3									
	Urban	2,377	0.4									
	Total	20,095	3.7			VL				M		VH
Total - Category - X		20,095	3.7									
TOTAL HOUSES*		541,906										

ROOF												
R1 - Light Weight Sloping Roof	Rural	122,603	22.6									
	Urban	38,127	7.0									
	Total	160,730	29.6			L				H		VH
R2 - Heavy Weight Sloping Roof	Rural	177,423	32.7									
	Urban	15,015	2.8									
	Total	192,438	35.5			L				L		H
R3 - Flat Roof	Rural	107,316	19.8									
	Urban	81,422	15.0									
	Total	188,738	34.8	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		541,906										

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