

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

Table No. : GJ 11

State : GUJARAT

PORBANDAR

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												
A1 - Mud & Unburnt Brick Wall	Rural	2,410	1.5									
	Urban	439	0.3									
	Total	2,849	1.8					<i>M</i>		<i>VH</i>		
A2 - Stone Wall not packed with mortar	Rural	14,062	8.7									
	Urban	4,445	2.8									
	Total	18,507	11.5					<i>M</i>		<i>H</i>		
Total - Category - A		21,356	13.3									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	63,388	39.4									
	Urban	67,218	41.7									
	Total	130,606	81.1					<i>L</i>		<i>H</i>		
Total - Category - B		130,606	81.1									
C1 - Concrete Wall	Rural	2,953	1.8									
	Urban	3,938	2.4									
	Total	6,891	4.2					<i>VL</i>		<i>L</i>		
C2 - Wood wall	Rural	328	0.2									
	Urban	181	0.1									
	Total	509	0.3					<i>VL</i>		<i>VH</i>		
Total - Category - C		7,400	4.6									
X - Other Materials	Rural	952	0.6									
	Urban	759	0.5									
	Total	1,711	1.1					<i>VL</i>		<i>VH</i>		
Total - Category - X		1,711	1.1									
TOTAL HOUSES*		161,073										

ROOF												
R1 - Light Weight Sloping Roof	Rural	5,735	3.6									
	Urban	3,589	2.2									
	Total	9,324	5.8					<i>L</i>		<i>VH</i>		
R2 - Heavy Weight Sloping Roof	Rural	55,299	34.3									
	Urban	34,378	21.3									
	Total	89,677	55.6					<i>L</i>		<i>H</i>		
R3 - Flat Roof	Rural	23,059	14.3									
	Urban	39,013	24.2									
	Total	62,072	38.5					<i>Damage Risk as per that for the Wall supporting it</i>				
TOTAL HOUSES*		161,073										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sq.km. is 888 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