

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

**Table No. : GJ 05**

**State : GUJARAT**

**SABAR KANTHA**

Wall / Roof		Census Houses		Level of Risk under									Flood Prone Area in %
		No. of Houses	%	EQ Zone				Wind Velocity m/s					
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
				100		100		17.7		82.3	10.5		
<b>WALL</b>													
<b>A1 - Mud &amp; Unburnt Brick Wall</b>	Rural	203,359	35.4										
	Urban	11,569	2.0										
	<b>Total</b>	<b>214,928</b>	<b>37.4</b>				<i>M</i>			<i>H</i>	<i>M</i>	<i>VH</i>	
<b>A2 - Stone Wall not packed with mortar</b>	Rural	9,422	1.6										
	Urban	858	0.1										
	<b>Total</b>	<b>10,280</b>	<b>1.7</b>				<i>M</i>			<i>M</i>	<i>L</i>	<i>VH</i>	
<b>Total - Category - A</b>		<b>225,208</b>	<b>39.2</b>										
<b>B - Burnt Bricks Wall &amp; Stone wall packed with mortar</b>	Rural	237,476	41.3										
	Urban	84,301	14.7										
	<b>Total</b>	<b>321,777</b>	<b>56.0</b>				<i>L</i>			<i>M</i>	<i>L</i>	<i>H/M</i>	
<b>Total - Category - B</b>		<b>321,777</b>	<b>56.0</b>										
<b>C1 - Concrete Wall</b>	Rural	10,853	1.9										
	Urban	2,453	0.4										
	<b>Total</b>	<b>13,306</b>	<b>2.3</b>				<i>VL</i>			<i>VL</i>	<i>VL</i>	<i>L/ VL</i>	
<b>C2 - Wood wall</b>	Rural	1,223	0.2										
	Urban	389	0.1										
	<b>Total</b>	<b>1,612</b>	<b>0.3</b>				<i>VL</i>			<i>H</i>	<i>M</i>	<i>H</i>	
<b>Total - Category - C</b>		<b>14,918</b>	<b>2.6</b>										
<b>X - Other Materials</b>	Rural	10,620	1.8										
	Urban	1,846	0.3										
	<b>Total</b>	<b>12,466</b>	<b>2.1</b>				<i>VL</i>			<i>H</i>	<i>M</i>	<i>VH</i>	
<b>Total - Category - X</b>		<b>12,466</b>	<b>2.2</b>										
<b>TOTAL HOUSES*</b>		<b>574,369</b>											

<b>ROOF</b>													
<b>R1 - Light Weight Sloping Roof</b>		Rural	81,822	14.2									
		Urban	20,500	3.6									
		<b>Total</b>	<b>102,322</b>	<b>17.8</b>				<i>L</i>			<i>VH</i>	<i>H</i>	<i>VH</i>
<b>R2 - Heavy Weight Sloping Roof</b>		Rural	221,613	38.6									
		Urban	9,696	1.7									
		<b>Total</b>	<b>231,309</b>	<b>40.3</b>				<i>L</i>			<i>M</i>	<i>L</i>	<i>H</i>
<b>R3 - Flat Roof</b>		Rural	169,518	29.5									
		Urban	71,220	12.4									
		<b>Total</b>	<b>240,738</b>	<b>41.9</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>574,369</b>											

Probable Maximum Precipitation at a Station of the district in 24 hrs is 640 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