

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

Table No. : SK 03

State : SIKKIM

SOUTH DISTRICT

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					
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	4,026	11.5										
	Urban	261	0.7										
	Total	4,287	12.2		<i>H</i>				<i>H</i>				
A2 - Stone Wall not packed with mortar	Rural	1,360	3.9										
	Urban	17	-										
	Total	1,377	3.9		<i>H</i>				<i>M</i>				
Total - Category - A		5,664	16.2										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	4,493	12.9										
	Urban	4,394	12.6										
	Total	8,887	25.5		<i>M</i>				<i>M</i>				
Total - Category - B		8,887	25.4										
C1 - Concrete Wall	Rural	3,248	9.3										
	Urban	935	2.7										
	Total	4,183	12.0		<i>L</i>				<i>VL</i>				
C2 - Wood wall	Rural	9,468	27.1										
	Urban	490	1.4										
	Total	9,958	28.5		<i>L</i>				<i>H</i>				
Total - Category - C		14,141	40.4										
X - Other Materials	Rural	6,066	17.3										
	Urban	206	0.6										
	Total	6,272	17.9		<i>VL</i>				<i>H</i>				
Total - Category - X		6,272	17.9										
TOTAL HOUSES*		34,964											

ROOF													
R1 - Light Weight Sloping Roof	Rural	25,068	71.7										
	Urban	2,273	6.5										
	Total	27,341	78.2		<i>M</i>				<i>VH</i>				
R2 - Heavy Weight Sloping Roof	Rural	318	0.9										
	Urban	94	0.3										
	Total	412	1.2		<i>M</i>				<i>M</i>				
R3 - Flat Roof	Rural	3,275	9.4										
	Urban	3,936	11.3										
	Total	7,211	20.7		<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		34,964											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 673 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