

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

Table No. : SK 04

State : SIKKIM

EAST 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	4,761	6.4										
	Urban	1,118	1.5										
	Total	5,879	7.9		H				H				
A2 - Stone Wall not packed with mortar	Rural	1,628	2.2										
	Urban	511	0.7										
	Total	2,139	2.9		H				M				
Total - Category - A		8,018	10.8										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	6,366	8.6										
	Urban	22,849	30.8										
	Total	29,215	39.4		M				M				
Total - Category - B		29,215	39.4										
C1 - Concrete Wall	Rural	5,947	8.0										
	Urban	8,039	10.8										
	Total	13,986	18.8		L				VL				
C2 - Wood wall	Rural	10,515	14.2										
	Urban	1,938	2.6										
	Total	12,453	16.8		L				H				
Total - Category - C		26,439	35.6										
X - Other Materials	Rural	7,846	10.6										
	Urban	2,655	3.6										
	Total	10,501	14.2		VL				H				
Total - Category - X		10,501	14.2										
TOTAL HOUSES*		74,173											

ROOF												
R1 - Light Weight Sloping Roof	Rural	30,451	41.1									
	Urban	14,992	20.2									
	Total	45,443	61.3		M				VH			
R2 - Heavy Weight Sloping Roof	Rural	408	0.6									
	Urban	708	1.0									
	Total	1,116	1.6		M				M			
R3 - Flat Roof	Rural	6,204	8.4									
	Urban	21,410	28.9									
	Total	27,614	37.3	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		74,173										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 720 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