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

Table No. : SK 01 **State : SIKKIM** **NORTH DISTRICT**

Wall / Roof		Census Houses		Level of Risk under — EQ Zone				Level of Risk under — Wind Velocity m/s				Flood Prone Area in %
		No. of Houses	%	V	IV	III	II	55 & 50	47	44 & 39	33	
					Area in % 100				Area in % 100			
WALL												
A1 - Mud &	Rural	357	3.2									
Unburnt Brick Wall	Urban	25	0.2									
	Total	**382**	**3.4**		H				H			
A2 - Stone Wall	Rural	513	4.7									
not packed with mortar	Urban	11	0.1									
	Total	**524**	**4.8**		H				M			
Total - Category - A		**906**	**8.2**									
B - Burnt Bricks Wall	Rural	826	7.5									
& Stone wall packed	Urban	757	6.9									
with mortar	*Total*	**1,583**	**14.4**		M				M			
Total - Category - B		**1,583**	**14.4**									
C1 - Concrete Wall	Rural	1,315	11.9									
	Urban	548	5.0									
	Total	**1,863**	**16.9**		L				VL			
C2 - Wood wall	Rural	3,627	32.9									
	Urban	213	1.9									
	Total	**3,840**	**34.8**		L				H			
Total - Category - C		**5,703**	**51.8**									
X - Other Materials	Rural	2,665	24.2									
	Urban	160	1.5									
	Total	**2,825**	**25.7**		VL				H			
Total - Category - X		**2,825**	**25.6**									
TOTAL HOUSES*		**11,017**										
ROOF												
R1 - Light Weight	Rural	8,114	73.6									
Sloping Roof	Urban	760	6.9									
	Total	**8,874**	**80.5**		M				VH			
R2 - Heavy Weight	Rural	317	2.9									
Sloping Roof	Urban	7	0.1									
	Total	**324**	**3.0**		M				M			
R3 - Flat Roof	Rural	872	7.9									
	Urban	947	8.6									
	Total	**1,819**	**16.5**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**11,017**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.   342 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 chocked 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