

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

Table No. : HP 10

State : HIMACHAL PRADESH

SIRMAUR

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				3.0		97.0			
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	8,346	4.7											
	Urban	1,090	0.6											
	Total	9,436	5.3		H			VH		M				
A2 - Stone Wall not packed with mortar	Rural	27,715	15.7											
	Urban	481	0.3											
	Total	28,196	16.0		H			H		L				
Total - Category - A		37,632	21.3											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	114,448	64.9											
	Urban	16,187	9.2											
	Total	130,635	74.1		M			H		L				
Total - Category - B		130,635	74.0											
C1 - Concrete Wall	Rural	1,307	0.7											
	Urban	521	0.3											
	Total	1,828	1.0		L			L		VL				
C2 - Wood wall	Rural	1,444	0.8											
	Urban	42	-											
	Total	1,486	0.8		L			VH		M				
Total - Category - C		3,314	1.9											
X - Other Materials	Rural	4,682	2.7											
	Urban	179	0.1											
	Total	4,861	2.8		VL			VH		M				
Total - Category - X		4,861	2.8											
TOTAL HOUSES*		176,442												

ROOF												
R1 - Light Weight Sloping Roof	Rural	41,749	23.7									
	Urban	1,327	0.8									
	Total	43,076	24.5		M			VH		H		
R2 - Heavy Weight Sloping Roof	Rural	45,136	25.6									
	Urban	222	0.1									
	Total	45,358	25.7		M			H		L		
R3 - Flat Roof	Rural	71,057	40.3									
	Urban	16,951	9.6									
	Total	88,008	49.9	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		176,442										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 680 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