

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

Table No. : HP 01

State : HIMACHAL PRADESH

CHAMBA

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 %					
				60.9	39.1						100		
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	15,016	8.6										
	Urban	318	0.2										
	Total	15,334	8.8	VH	H						M		
A2 - Stone Wall not packed with mortar	Rural	43,994	25.1										
	Urban	569	0.3										
	Total	44,563	25.4	VH	H						L		
Total - Category - A		59,897	34.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	100,955	57.5										
	Urban	10,310	5.9										
	Total	111,265	63.4	H	M						L		
Total - Category - B		111,265	63.4										
C1 - Concrete Wall	Rural	409	0.2										
	Urban	27	-										
	Total	436	0.2	M	L						VL		
C2 - Wood wall	Rural	2,055	1.2										
	Urban	260	0.1										
	Total	2,315	1.3	M	L						M		
Total - Category - C		2,751	1.6										
X - Other Materials	Rural	1,519	0.9										
	Urban	164	0.1										
	Total	1,683	1.0	M	VL						M		
Total - Category - X		1,683	1.0										
TOTAL HOUSES*		175,596											

ROOF												
R1 - Light Weight Sloping Roof	Rural	61,240	34.9									
	Urban	3,513	2.0									
	Total	64,753	36.9	M	M					H		
R2 - Heavy Weight Sloping Roof	Rural	72,449	41.3									
	Urban	2,306	1.3									
	Total	74,755	42.6	H	M					L		
R3 - Flat Roof	Rural	30,259	17.2									
	Urban	5,829	3.3									
	Total	36,088	20.5	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		175,596										

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