

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

HIMACHAL PRADESH

Wall / Roof		Census Houses		Level of Risk under									
		No. of Houses	%	EQ Zone				Wind Velocity m/s			Flood Prone Area in %		
				V	IV	III	II	55 & 50	47	44 & 39	33		
STATE - HIMACHAL PRADESH				35.3	64.7			1.1		98.9			
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	518,775	20.1										
	Urban	12,709	0.5										
	Total	531,484	20.6	VH	H			VH		M			
A2 - Stone Wall not packed with mortar	Rural	275,229	10.7										
	Urban	5,362	0.2										
	Total	280,591	10.9	VH	H			H		L			
Total - Category - A				812,075	31.5								
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	1,430,444	55.5										
	Urban	229,507	8.9										
	Total	1,659,951	64.4	H	M			H		L			
Total - Category - B				1,659,951	64.4								
C1 - Concrete Wall	Rural	18,189	0.7										
	Urban	4,130	0.2										
	Total	22,319	0.9	M	L			L		VL			
C2 - Wood wall	Rural	37,745	1.5										
	Urban	2,911	0.1										
	Total	40,656	1.6	M	L			VH		M			
Total - Category - C				62,975	2.4								
X - Other Materials	Rural	34,780	1.4										
	Urban	6,166	0.2										
	Total	40,946	1.6	M	VL			VH		M			
Total - Category - X				40,946	1.6								
TOTAL HOUSES*		2,575,947											

ROOF												
R1 - Light Weight Sloping Roof	Rural	459,928	17.9									
	Urban	72,940	2.8									
	Total	532,868	20.7	M	M			VH		H		
R2 - Heavy Weight Sloping Roof	Rural	1,032,745	40.1									
	Urban	19,199	0.7									
	Total	1,051,944	40.8	H	M			H		L		
R3 - Flat Roof	Rural	822,489	31.9									
	Urban	168,646	6.5									
	Total	991,135	38.4	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		2,575,947										

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