

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

Table No. : HP 07

State : HIMACHAL PRADESH

UNA

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	
				Area in %				Area in %				
				51.6	48.4			12.7		87.3		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	29,139	16.4									
	Urban	478	0.3									
	Total	29,617	16.7	VH	H			VH		M		
A2 - Stone Wall not packed with mortar	Rural	1,843	1.0									
	Urban	89	0.1									
	Total	1,932	1.1	VH	H			H		L		
Total - Category - A		31,549	17.7									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	123,997	69.7									
	Urban	15,347	8.6									
	Total	139,344	78.3	H	M			H		L		
Total - Category - B		139,344	78.4									
C1 - Concrete Wall	Rural	867	0.5									
	Urban	567	0.3									
	Total	1,434	0.8	M	L			L		VL		
C2 - Wood wall	Rural	352	0.2									
	Urban	47	-									
	Total	399	0.2	M	L			VH		M		
Total - Category - C		1,833	1.0									
X - Other Materials	Rural	4,529	2.5									
	Urban	579	0.3									
	Total	5,108	2.8	M	VL			VH		M		
Total - Category - X		5,108	2.9									
TOTAL HOUSES*		177,834										

ROOF												
R1 - Light Weight Sloping Roof	Rural	28,861	16.2									
	Urban	2,297	1.3									
	Total	31,158	17.5	M	M			VH		H		
R2 - Heavy Weight Sloping Roof	Rural	31,051	17.5									
	Urban	489	0.3									
	Total	31,540	17.8	H	M			H		L		
R3 - Flat Roof	Rural	100,815	56.7									
	Urban	14,321	8.1									
	Total	115,136	64.8	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		177,834										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 440 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