

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

Table No. : HP 09

State : HIMACHAL PRADESH

SOLAN

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 %				
				3.1	96.9			3.1		96.9		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	29,392	14.0									
	Urban	951	0.5									
	Total	30,343	14.5	VH	H			VH		M		
A2 - Stone Wall not packed with mortar	Rural	8,370	4.0									
	Urban	282	0.1									
	Total	8,652	4.1	VH	H			H		L		
Total - Category - A		38,995	18.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	124,879	59.7									
	Urban	36,630	17.5									
	Total	161,509	77.2	H	M			H		L		
Total - Category - B		161,509	77.2									
C1 - Concrete Wall	Rural	2,285	1.1									
	Urban	419	0.2									
	Total	2,704	1.3	M	L			L		VL		
C2 - Wood wall	Rural	443	0.2									
	Urban	356	0.2									
	Total	799	0.4	M	L			VH		M		
Total - Category - C		3,503	1.7									
X - Other Materials	Rural	4,366	2.1									
	Urban	918	0.4									
	Total	5,284	2.5	M	VL			VH		M		
Total - Category - X		5,284	2.5									
TOTAL HOUSES*		209,291										

ROOF												
R1 - Light Weight Sloping Roof	Rural	59,538	28.4									
	Urban	5,709	2.7									
	Total	65,247	31.1	<i>M</i>	<i>M</i>			<i>VH</i>		<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	10,060	4.8									
	Urban	416	0.2									
	Total	10,476	5.0	<i>H</i>	<i>M</i>			<i>H</i>		<i>L</i>		
R3 - Flat Roof	Rural	100,137	47.8									
	Urban	33,431	16.0									
	Total	133,568	63.8	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		209,291										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 600 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