

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

**Table No. : HP 06**

**State : HIMACHAL PRADESH**

**HAMIRPUR**

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						100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	77,759	41.5									
	Urban	1,570	0.8									
	Total	79,329	42.3	VH						M		
A2 - Stone Wall not packed with mortar	Rural	2,705	1.4									
	Urban	147	0.1									
	Total	2,852	1.5	VH						L		
Total - Category - A		82,181	43.9									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	91,179	48.7									
	Urban	10,613	5.7									
	Total	101,792	54.4	H						L		
Total - Category - B		101,792	54.4									
C1 - Concrete Wall	Rural	851	0.5									
	Urban	24	-									
	Total	875	0.5	M						VL		
C2 - Wood wall	Rural	371	0.2									
	Urban	45	-									
	Total	416	0.2	M						M		
Total - Category - C		1,291	0.7									
X - Other Materials	Rural	1,715	0.9									
	Urban	217	0.1									
	Total	1,932	1.0	M						M		
Total - Category - X		1,932	1.0									
TOTAL HOUSES*		187,196										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	7,604	4.1									
	Urban	779	0.4									
	<b>Total</b>	<b>8,383</b>	<b>4.5</b>	M						H		
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	101,370	54.2									
	Urban	2,276	1.2									
	<b>Total</b>	<b>103,646</b>	<b>55.4</b>	H						L		
<b>R3 - Flat Roof</b>	Rural	65,606	35.0									
	Urban	9,561	5.1									
	<b>Total</b>	<b>75,167</b>	<b>40.1</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>187,196</b>										

**Probable Maximum Precipitation at a Station of the district in 24 hrs is 520 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