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

Table No. : HP 03   **State : HIMACHAL PRADESH**   **LAHUL & SPITI**

Wall / Roof		No. of Houses	%	EQ Zone V	EQ Zone IV	EQ Zone III	EQ Zone II	Wind 55 & 50	Wind 47	Wind 44 & 39	Wind 33	Flood Prone Area in %
				Area in %				Area in %				
				4.1	95.9			1.9		98.1		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	5,149	34.5									
	Urban		-									
	Total	5,149	34.5	VH	H			VH		M		
A2 - Stone Wall not packed with mortar	Rural	3,981	26.6									
	Urban		-									
	Total	3,981	26.6	VH	H			H		L		
Total - Category - A		9,130	61.1									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	5,542	37.1									
	Urban		-									
	Total	5,542	37.1	H	M			H		L		
Total - Category - B		5,542	37.1									
C1 - Concrete Wall	Rural	74	0.5									
	Urban		-									
	Total	74	0.5	M	L			L		VL		
C2 - Wood wall	Rural	27	0.2									
	Urban		-									
	Total	27	0.2	M	L			VH		M		
Total - Category - C		101	0.7									
X - Other Materials	Rural	169	1.1									
	Urban		-									
	Total	169	1.1	M	VL			VH		M		
Total - Category - X		169	1.1									
TOTAL HOUSES*		**14,942**										
ROOF												
R1 - Light Weight Sloping Roof	Rural	12,467	83.4									
	Urban		-									
	Total	12,467	83.4	M	M			VH		H		
R2 - Heavy Weight Sloping Roof	Rural	111	0.7									
	Urban		-									
	Total	111	0.7	H	M			H		L		
R3 - Flat Roof	Rural	2,364	15.8									
	Urban		-									
	Total	2,364	15.8	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**14,942**										

Probable Maximum Precipitation at a Station of the district in 24 hrs is   360 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 chocked 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