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

Table No. : HP 11　　　　**State : HIMACHAL PRADESH**　　　　**SHIMLA**

Wall / Roof		Census Houses No. of Houses	Census Houses %	EQ Zone V	EQ Zone IV	EQ Zone III	EQ Zone II	Wind Velocity 55 & 50	Wind Velocity 47	Wind Velocity 44 & 39	Wind Velocity 33	Flood Prone Area in %
				Area in %				Area in %				
				.0	100.0					100		
WALL												
A1 - Mud &	Rural	20,676	6.6									
Unburnt Brick Wall	Urban	1,928	0.6									
	Total	**22,604**	**7.2**	VH	H					M		
A2 - Stone Wall	Rural	33,602	10.8									
not packed with mortar	Urban	1,302	0.4									
	Total	**34,904**	**11.2**	VH	H					L		
Total - Category - A		**57,508**	**18.5**									
B - Burnt Bricks Wall	Rural	161,434	51.9									
& Stone wall packed	Urban	67,493	21.7									
with mortar	*Total*	**228,927**	**73.6**	H	M					L		
Total - Category - B		**228,927**	**73.6**									
C1 - Concrete Wall	Rural	2,904	0.9									
	Urban	653	0.2									
	Total	**3,557**	**1.1**	M	L					VL		
C2 - Wood wall	Rural	15,268	4.9									
	Urban	988	0.3									
	Total	**16,256**	**5.2**	M	L					M		
Total - Category - C		**19,813**	**6.4**									
X - Other Materials	Rural	2,867	0.9									
	Urban	2,109	0.7									
	Total	**4,976**	**1.6**	M	VL					M		
Total - Category - X		**4,976**	**1.6**									
TOTAL HOUSES*		**311,224**										
ROOF												
R1 - Light Weight	Rural	104,251	33.5									
Sloping Roof	Urban	44,336	14.2									
	Total	**148,587**	**47.7**	M	M					H		
R2 - Heavy Weight	Rural	92,090	29.6									
Sloping Roof	Urban	2,053	0.7									
	Total	**94,143**	**30.3**	H	M					L		
R3 - Flat Roof	Rural	40,410	13.0									
	Urban	28,084	9.0									
	Total	**68,494**	**22.0**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**311,224**										

Probable Maximum Precipitation at a Station of the district in 24 hrs is　720 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