

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

Table No. : PN 14

State : PUNJAB

PATIALA

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 %				
					25.1	74.9		100				94.2
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	13,654	2.9									
	Urban	3,705	0.8									
	Total	17,359	3.7		H	M		VH				VH
A2 - Stone Wall not packed with mortar	Rural	2,779	0.6									
	Urban	1,231	0.3									
	Total	4,010	0.9		H	M		H				VH
Total - Category - A		21,369	4.5									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	244,866	51.3									
	Urban	175,995	36.8									
	Total	420,861	88.1		M	L		H				H/M
Total - Category - B		420,861	88.1									
C1 - Concrete Wall	Rural	16,686	3.5									
	Urban	13,008	2.7									
	Total	29,694	6.2		L	VL		L				L/VL
C2 - Wood wall	Rural	274	0.1									
	Urban	323	0.1									
	Total	597	0.2		L	VL		VH				H
Total - Category - C		30,291	6.3									
X - Other Materials	Rural	2,899	0.6									
	Urban	2,187	0.5									
	Total	5,086	1.1		VL	VL		VH				VH
Total - Category - X		5,086	1.1									
TOTAL HOUSES*		477,607										

ROOF												
R1 - Light Weight Sloping Roof	Rural	43,980	9.2									
	Urban	13,724	2.9									
	Total	57,704	12.1		M	L		VH				VH
R2 - Heavy Weight Sloping Roof	Rural	63,594	13.3									
	Urban	7,700	1.6									
	Total	71,294	14.9		M	L		H				H
R3 - Flat Roof	Rural	173,584	36.3									
	Urban	175,025	36.6									
	Total	348,609	72.9	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		477,607										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 400 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