

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

Table No. : PN 17

State : PUNJAB

RUPNAGAR

Wall / Roof		Census Houses		Level of Risk under								
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %								
				100				74.6		25.4		60.9
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	6,699	3.6									
	Urban	1,070	0.6									
	Total	7,769	4.2		<i>H</i>			<i>VH</i>		<i>M</i>		<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	1,538	0.8									
	Urban	189	0.1									
	Total	1,727	0.9		<i>H</i>			<i>H</i>		<i>L</i>		<i>VH</i>
Total - Category - A		9,496	5.1									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	119,386	64.3									
	Urban	46,184	24.9									
	Total	165,570	89.2		<i>M</i>			<i>H</i>		<i>L</i>		<i>H/M</i>
Total - Category - B		165,570	89.2									
C1 - Concrete Wall	Rural	4,961	2.7									
	Urban	2,087	1.1									
	Total	7,048	3.8		<i>L</i>			<i>L</i>		<i>VL</i>		<i>L/ VL</i>
C2 - Wood wall	Rural	113	0.1									
	Urban	31	-									
	Total	144	0.1		<i>L</i>			<i>VH</i>		<i>M</i>		<i>H</i>
Total - Category - C		7,192	3.9									
X - Other Materials	Rural	2,402	1.3									
	Urban	895	0.5									
	Total	3,297	1.8		<i>VL</i>			<i>VH</i>		<i>M</i>		<i>VH</i>
Total - Category - X		3,297	1.8									
TOTAL HOUSES*		185,555										

ROOF												
R1 - Light Weight Sloping Roof	Rural	20,451	11.0									
	Urban	3,386	1.8									
	Total	23,837	12.8		<i>M</i>			<i>VH</i>		<i>H</i>		<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	8,481	4.6									
	Urban	2,255	1.2									
	Total	10,736	5.8		<i>M</i>			<i>H</i>		<i>L</i>		<i>H</i>
R3 - Flat Roof	Rural	106,167	57.2									
	Urban	44,815	24.2									
	Total	150,982	81.4		<i>Damage Risk as per that for the Wall supporting it</i>							
TOTAL HOUSES*		185,555										

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