

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

Table No. : PN 03

State : PUNJAB

JALANDHAR

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				100				86.4
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	11,328	1.9									
	Urban	8,017	1.3									
	Total	19,345	3.2		<i>H</i>			<i>VH</i>				<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	2,819	0.5									
	Urban	2,854	0.5									
	Total	5,673	1.0		<i>H</i>			<i>H</i>				<i>VH</i>
Total - Category - A		25,018	4.1									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	254,658	41.7									
	Urban	290,241	47.5									
	Total	544,899	89.2		<i>M</i>			<i>H</i>				<i>H/M</i>
Total - Category - B		544,899	89.2									
C1 - Concrete Wall	Rural	12,801	2.1									
	Urban	23,239	3.8									
	Total	36,040	5.9		<i>L</i>			<i>L</i>				<i>L/VL</i>
C2 - Wood wall	Rural	191	-									
	Urban	385	0.1									
	Total	576	0.1		<i>L</i>			<i>VH</i>				<i>H</i>
Total - Category - C		36,616	6.0									
X - Other Materials	Rural	2,479	0.4									
	Urban	2,147	0.4									
	Total	4,626	0.8		<i>VL</i>			<i>VH</i>				<i>VH</i>
Total - Category - X		4,626	0.8									
TOTAL HOUSES*		611,159										

ROOF												
R1 - Light Weight Sloping Roof	Rural	26,488	4.3									
	Urban	21,766	3.6									
	Total	48,254	7.9		<i>M</i>			<i>VH</i>				<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	50,036	8.2									
	Urban	19,819	3.2									
	Total	69,855	11.4		<i>M</i>			<i>H</i>				<i>H</i>
R3 - Flat Roof	Rural	207,752	34.0									
	Urban	285,298	46.7									
	Total	493,050	80.7		<i>Damage Risk as per that for the Wall supporting it</i>							
TOTAL HOUSES*		611,159										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 440 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