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

Table No. : PN 01   **State : PUNJAB**   **GURDASPUR**

Wall / Roof		No. of Houses	%	V	IV	III	II	55 & 50	47	44 & 39	33	Flood Prone Area in %
		Census Houses		*EQ Zone — Area in %*				*Wind Velocity m/s — Area in %*				
				8.7	91.3			71.5		28.5		67.2
WALL												
A1 - Mud &	Rural	27,039	4.8									
Unburnt Brick Wall	Urban	4,079	0.7									
	Total	*31,118*	*5.5*	VH	H			VH		M		VH
A2 - Stone Wall	Rural	3,608	0.6									
not packed with mortar	Urban	1,368	0.2									
	Total	*4,976*	*0.8*	VH	H			H		L		VH
Total - Category - A		**36,094**	**6.4**									
B - Burnt Bricks Wall	Rural	332,185	59.1									
& Stone wall packed	Urban	150,921	26.8									
with mortar	*Total*	*483,106*	*85.9*	H	M			H		L		H/M
Total - Category - B		**483,106**	**85.9**									
C1 - Concrete Wall	Rural	27,182	4.8									
	Urban	7,720	1.4									
	Total	*34,902*	*6.2*	M	L			L		VL		L/VL
C2 - Wood wall	Rural	320	0.1									
	Urban	373	0.1									
	Total	*693*	*0.2*	M	L			VH		M		H
Total - Category - C		**35,595**	**6.3**									
X - Other Materials	Rural	6,201	1.1									
	Urban	1,425	0.3									
	Total	*7,626*	*1.4*	M	VL			VH		M		VH
Total - Category - X		**7,626**	**1.4**									
TOTAL HOUSES*		**562,421**										
ROOF												
R1 - Light Weight	Rural	61,911	11.0									
Sloping Roof	Urban	13,706	2.4									
	Total	*75,617*	*13.4*	M	M			VH		H		VH
R2 - Heavy Weight	Rural	61,310	10.9									
Sloping Roof	Urban	6,160	1.1									
	Total	*67,470*	*12.0*	H	M			H		L		H
R3 - Flat Roof	Rural	273,314	48.6									
	Urban	146,020	26.0									
	Total	*419,334*	*74.6*	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**562,421**										

Probable Maximum Precipitation at a Station of the district in 24 hrs is   480 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