

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

Table No. : HR 05

State : HARYANA

KAITHAL

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 %				
						100		100				17.9
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	11,434	4.0									
	Urban	2,450	0.9									
	Total	13,884	4.9			M		VH				VH
A2 - Stone Wall not packed with mortar	Rural	2,789	1.0									
	Urban	2,223	0.8									
	Total	5,012	1.8			M		H				VH
Total - Category - A		18,896	6.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	197,268	69.3									
	Urban	59,781	21.0									
	Total	257,049	90.3			L		H				H/M
Total - Category - B		257,049	90.3									
C1 - Concrete Wall	Rural	3,420	1.2									
	Urban	2,192	0.8									
	Total	5,612	2.0			VL		L				L/VL
C2 - Wood wall	Rural	170	0.1									
	Urban	156	0.1									
	Total	326	0.2			VL		VH				H
Total - Category - C		5,938	2.1									
X - Other Materials	Rural	2,254	0.8									
	Urban	589	0.2									
	Total	2,843	1.0			VL		VH				VH
Total - Category - X		2,843	1.0									
TOTAL HOUSES*		284,726										

ROOF												
R1 - Light Weight Sloping Roof	Rural	128,861	45.3									
	Urban	22,196	7.8									
	Total	151,057	53.1			L		VH				VH
R2 - Heavy Weight Sloping Roof	Rural	21,558	7.6									
	Urban	4,465	1.6									
	Total	26,023	9.2			L		H				H
R3 - Flat Roof	Rural	66,916	23.5									
	Urban	40,730	14.3									
	Total	107,646	37.8	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		284,726										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 280 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