

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

Table No. : HR 02

State : HARYANA

AMBALA

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 %					
				89.3	10.7			100				75.7	
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	6,981	2.4										
	Urban	4,307	1.5										
	Total	11,288	3.9			H	M			VH		VH	
A2 - Stone Wall not packed with mortar	Rural	1,882	0.6										
	Urban	2,704	0.9										
	Total	4,586	1.5			H	M			H		VH	
Total - Category - A		15,874	5.5										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	147,044	50.8										
	Urban	111,650	38.6										
	Total	258,694	89.4			M	L			H		H/M	
Total - Category - B		258,694	89.3										
C1 - Concrete Wall	Rural	4,716	1.6										
	Urban	5,856	2.0										
	Total	10,572	3.6			L	VL			L		L/ VL	
C2 - Wood wall	Rural	181	0.1										
	Urban	292	0.1										
	Total	473	0.2			L	VL			VH		H	
Total - Category - C		11,045	3.8										
X - Other Materials	Rural	2,509	0.9										
	Urban	1,453	0.5										
	Total	3,962	1.4			VL	VL			VH		VH	
Total - Category - X		3,962	1.4										
TOTAL HOUSES*		289,575											

ROOF												
R1 - Light Weight Sloping Roof	Rural	49,939	17.2									
	Urban	13,638	4.7									
	Total	63,577	21.9			M	L			VH		VH
R2 - Heavy Weight Sloping Roof	Rural	30,123	10.4									
	Urban	9,303	3.2									
	Total	39,426	13.6			M	L			H		H
R3 - Flat Roof	Rural	83,251	28.7									
	Urban	103,321	35.7									
	Total	186,572	64.4			Damage Risk as per that for the Wall supporting it						
TOTAL HOUSES*		289,575										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 520 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