

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

**Table No. : HR 20**

**State : HARYANA**

**FARIDABAD**

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			28.3	71.7			42.9		
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	4,566	1.1											
	Urban	22,149	5.1											
	Total	26,715	6.2		H			VH	H					VH
A2 - Stone Wall not packed with mortar	Rural	2,064	0.5											
	Urban	10,943	2.5											
	Total	13,007	3.0		H			H	M					VH
Total - Category - A		39,722	9.2											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	73,551	17.0											
	Urban	302,417	70.0											
	Total	375,968	87.0		M			H	M					H/M
Total - Category - B		375,968	87.0											
C1 - Concrete Wall	Rural	543	0.1											
	Urban	10,150	2.3											
	Total	10,693	2.4		L			L	VL					L/VL
C2 - Wood wall	Rural	109	-											
	Urban	426	0.1											
	Total	535	0.1		L			VH	H					H
Total - Category - C		11,228	2.6											
X - Other Materials	Rural	1,060	0.2											
	Urban	4,108	1.0											
	Total	5,168	1.2		VL			VH	H					VH
Total - Category - X		5,168	1.2											
TOTAL HOUSES*		432,086												
ROOF														
R1 - Light Weight Sloping Roof	Rural	9,188	2.1											
	Urban	35,180	8.1											
	Total	44,368	10.2		M			VH	VH					VH
R2 - Heavy Weight Sloping Roof	Rural	59,648	13.8											
	Urban	117,676	27.2											
	Total	177,324	41.0		M			H	M					H
R3 - Flat Roof	Rural	13,057	3.0											
	Urban	197,337	45.7											
	Total	210,394	48.7	Damage Risk as per that for the Wall supporting it										
TOTAL HOUSES*		432,086												

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **621 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