

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

Table No. : HR 04

State : HARYANA

KURUKSHETRA

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 %							46.0	
				32.9	67.1			100						
WALL														
A1 - Mud & Unburnt Brick Wall	Rural	7,023	2.6											
	Urban	1,460	0.5											
	Total	8,483	3.1		<i>H</i>	<i>M</i>			<i>VH</i>				<i>VH</i>	
A2 - Stone Wall not packed with mortar	Rural	2,260	0.8											
	Urban	1,419	0.5											
	Total	3,679	1.3		<i>H</i>	<i>M</i>			<i>H</i>				<i>VH</i>	
Total - Category - A		12,162	4.5											
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	177,249	65.6											
	Urban	71,802	26.6											
	Total	249,051	92.2		<i>M</i>	<i>L</i>			<i>H</i>				<i>H/M</i>	
Total - Category - B		249,051	92.1											
C1 - Concrete Wall	Rural	4,508	1.7											
	Urban	1,678	0.6											
	Total	6,186	2.3		<i>L</i>	<i>VL</i>			<i>L</i>				<i>L/ VL</i>	
C2 - Wood wall	Rural	191	0.1											
	Urban	160	0.1											
	Total	351	0.2		<i>L</i>	<i>VL</i>			<i>VH</i>				<i>H</i>	
Total - Category - C		6,537	2.4											
X - Other Materials	Rural	1,739	0.6											
	Urban	851	0.3											
	Total	2,590	0.9		<i>VL</i>	<i>VL</i>			<i>VH</i>				<i>VH</i>	
Total - Category - X		2,590	1.0											
TOTAL HOUSES*		270,340												
ROOF														
R1 - Light Weight Sloping Roof	Rural	62,055	23.0											
	Urban	8,797	3.3											
	Total	70,852	26.3		<i>M</i>	<i>L</i>			<i>VH</i>				<i>VH</i>	
R2 - Heavy Weight Sloping Roof	Rural	43,986	16.3											
	Urban	3,796	1.4											
	Total	47,782	17.7		<i>M</i>	<i>L</i>			<i>H</i>				<i>H</i>	
R3 - Flat Roof	Rural	86,929	32.2											
	Urban	64,777	24.0											
	Total	151,706	56.2		<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		270,340												

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