

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

Table No. : MH 14

State : MAHARASHTRA

YAVATMAL

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 %				
						2.4	97.6			100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	229,568	30.4									
	Urban	24,164	3.2									
	Total	253,732	33.6			M	L			M		
A2 - Stone Wall not packed with mortar	Rural	13,649	1.8									
	Urban	2,769	0.4									
	Total	16,418	2.2			M	L			L		
Total - Category - A		270,150	35.8									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	206,788	27.4									
	Urban	91,501	12.1									
	Total	298,289	39.5			L	VL			L		
Total - Category - B		298,289	39.5									
C1 - Concrete Wall	Rural	16,513	2.2									
	Urban	14,187	1.9									
	Total	30,700	4.1			VL	VL			VL		
C2 - Wood wall	Rural	23,773	3.1									
	Urban	9,327	1.2									
	Total	33,100	4.3			VL	VL			M		
Total - Category - C		63,800	8.5									
X - Other Materials	Rural	110,474	14.6									
	Urban	12,050	1.6									
	Total	122,524	16.2			VL	VL			M		
Total - Category - X		122,524	16.2									
TOTAL HOUSES*		754,763										

ROOF												
R1 - Light Weight Sloping Roof	Rural	430,546	57.0									
	Urban	64,805	8.6									
	Total	495,351	65.6			L	VL			H		
R2 - Heavy Weight Sloping Roof	Rural	111,645	14.8									
	Urban	12,387	1.6									
	Total	124,032	16.4			L	VL			L		
R3 - Flat Roof	Rural	58,574	7.8									
	Urban	76,806	10.2									
	Total	135,380	18.0	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		754,763										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **516 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