

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

Table No. : MH 32

State : MAHARASHTRA

RATNAGIRI

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 %				
					56.0	44.0				100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	158,677	28.9									
	Urban	6,009	1.1									
	Total	164,686	30.0		H	M				M		
A2 - Stone Wall not packed with mortar	Rural	29,737	5.4									
	Urban	5,359	1.0									
	Total	35,096	6.4		H	M				L		
Total - Category - A		199,782	36.4									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	215,901	39.4									
	Urban	54,882	10.0									
	Total	270,783	49.4		M	L				L		
Total - Category - B		270,783	49.4									
C1 - Concrete Wall	Rural	12,334	2.2									
	Urban	10,422	1.9									
	Total	22,756	4.1		L	VL				VL		
C2 - Wood wall	Rural	5,077	0.9									
	Urban	761	0.1									
	Total	5,838	1.0		L	VL				M		
Total - Category - C		28,594	5.2									
X - Other Materials	Rural	45,351	8.3									
	Urban	4,119	0.8									
	Total	49,470	9.1		VL	VL				M		
Total - Category - X		49,470	9.0									
TOTAL HOUSES*		548,629										

ROOF												
R1 - Light Weight Sloping Roof	Rural	72,600	13.2									
	Urban	15,220	2.8									
	Total	87,820	16.0		M	L				H		
R2 - Heavy Weight Sloping Roof	Rural	367,941	67.1									
	Urban	28,917	5.3									
	Total	396,858	72.4		M	L				L		
R3 - Flat Roof	Rural	26,536	4.8									
	Urban	37,415	6.8									
	Total	63,951	11.6	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		548,629										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 640 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