

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

Table No. : MH 34

State : MAHARASHTRA

KOLHAPUR

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 %					
					3.3	96.7				64.5	35.5		
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	211,236	20.0										
	Urban	43,125	4.1										
	Total	254,361	24.1		H	M				M	L		
A2 - Stone Wall not packed with mortar	Rural	36,492	3.5										
	Urban	12,912	1.2										
	Total	49,404	4.7		H	M				L	VL		
Total - Category - A		303,765	28.7										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	397,643	37.6										
	Urban	213,845	20.2										
	Total	611,488	57.8		M	L				L	VL		
Total - Category - B		611,488	57.9										
C1 - Concrete Wall	Rural	32,988	3.1										
	Urban	54,601	5.2										
	Total	87,589	8.3		L	VL				VL	VL		
C2 - Wood wall	Rural	5,456	0.5										
	Urban	2,452	0.2										
	Total	7,908	0.7		L	VL				M	L		
Total - Category - C		95,497	9.0										
X - Other Materials	Rural	33,620	3.2										
	Urban	12,498	1.2										
	Total	46,118	4.4		VL	VL				M	L		
Total - Category - X		46,118	4.4										
TOTAL HOUSES*		1,056,868											

ROOF												
R1 - Light Weight Sloping Roof	Rural	107,704	10.2									
	Urban	67,369	6.4									
	Total	175,073	16.6		M	L				H	M	
R2 - Heavy Weight Sloping Roof	Rural	527,623	49.9									
	Urban	121,734	11.5									
	Total	649,357	61.4		M	L				L	VL	
R3 - Flat Roof	Rural	82,108	7.8									
	Urban	150,330	14.2									
	Total	232,438	22.0	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		1,056,868										

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