

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

Table No. : MH 21

State : MAHARASHTRA

THANE

Wall / Roof		Census Houses		Level of Risk under									
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %	
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
						100					100		
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	100,055	3.3										
	Urban	65,106	2.1										
	Total	165,161	5.4					<i>M</i>			<i>M</i>		
A2 - Stone Wall not packed with mortar	Rural	9,801	0.3										
	Urban	41,082	1.3										
	Total	50,883	1.6					<i>M</i>			<i>L</i>		
Total - Category - A		216,044	7.1										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	313,842	10.3										
	Urban	1,733,416	56.8										
	Total	2,047,258	67.1					<i>L</i>			<i>L</i>		
Total - Category - B		2,047,258	67.1										
C1 - Concrete Wall	Rural	42,835	1.4										
	Urban	479,790	15.7										
	Total	522,625	17.1					<i>VL</i>			<i>VL</i>		
C2 - Wood wall	Rural	5,665	0.2										
	Urban	9,899	0.3										
	Total	15,564	0.5					<i>VL</i>			<i>M</i>		
Total - Category - C		538,189	17.6										
X - Other Materials	Rural	148,755	4.9										
	Urban	100,294	3.3										
	Total	249,049	8.2					<i>VL</i>			<i>M</i>		
Total - Category - X		249,049	8.2										
TOTAL HOUSES*		3,050,540											

ROOF													
R1 - Light Weight Sloping Roof	Rural	208,961	6.8										
	Urban	741,367	24.3										
	Total	950,328	31.1					<i>L</i>			<i>H</i>		
R2 - Heavy Weight Sloping Roof	Rural	341,191	11.2										
	Urban	268,548	8.8										
	Total	609,739	20.0					<i>L</i>			<i>L</i>		
R3 - Flat Roof	Rural	70,801	2.3										
	Urban	1,419,672	46.5										
	Total	1,490,473	48.8					<i>Damage Risk as per that for the Wall supporting it</i>					
TOTAL HOUSES*		3,050,540											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 1066 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, 2001

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