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

Table No. : MH 25 **State : MAHARASHTRA** **PUNE**

Wall / Roof		Census Houses — No. of Houses	%	EQ Zone V	IV	III	II	Wind Velocity m/s 55 & 50	47	44 & 39	33	Flood Prone Area in %
					Area in % 9.5	90.5			Area in %	100		
WALL												
A1 - Mud &	Rural	116,596	4.5									
Unburnt Brick Wall	Urban	74,778	2.9									
	Total	191,374	7.4		H	M				M		
A2 - Stone Wall	Rural	47,609	1.8									
not packed with mortar	Urban	22,928	0.9									
	Total	70,537	2.7		H	M				L		
Total - Category - A		261,911	10.0									
B - Burnt Bricks Wall	Rural	550,701	21.0									
& Stone wall packed	Urban	1,027,655	39.2									
with mortar	Total	1,578,356	60.2		M	L				L		
Total - Category - B		1,578,356	60.3									
C1 - Concrete Wall	Rural	155,013	5.9									
	Urban	402,668	15.4									
	Total	557,681	21.3		L	VL				VL		
C2 - Wood wall	Rural	4,881	0.2									
	Urban	3,903	0.1									
	Total	8,784	0.3		L	VL				M		
Total - Category - C		566,465	21.6									
X - Other Materials	Rural	83,409	3.2									
	Urban	128,787	4.9									
	Total	212,196	8.1		VL	VL				M		
Total - Category - X		212,196	8.1									
TOTAL HOUSES*		2,618,928										
ROOF												
R1 - Light Weight	Rural	536,141	20.5									
Sloping Roof	Urban	529,372	20.2									
	Total	1,065,513	40.7		M	L				H		
R2 - Heavy Weight	Rural	236,194	9.0									
Sloping Roof	Urban	90,483	3.5									
	Total	326,677	12.5		M	L				L		
R3 - Flat Roof	Rural	185,874	7.1									
	Urban	1,040,864	39.7									
	Total	1,226,738	46.8	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		2,618,928										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 968 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 chocked 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