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

Table No. : MH 01 **State : MAHARASHTRA** **NANDURBAR**

Wall / Roof		Census Houses — No. of Houses	%	EQ Zone V	IV	III	II	Wind Velocity 55 & 50	47	44 & 39	33	Flood Prone Area in %
						Area in %				Area in %		
						100				100		
WALL												
A1 - Mud &	Rural	78,229	21.0									
Unburnt Brick Wall	Urban	10,906	2.9									
	Total	**89,135**	**23.9**			M				M		
A2 - Stone Wall	Rural	3,888	1.0									
not packed with mortar	Urban	1,138	0.3									
	Total	**5,026**	**1.3**			M				L		
Total - Category - A		**94,161**	**25.3**									
B - Burnt Bricks Wall	Rural	73,012	19.6									
& Stone wall packed	Urban	39,051	10.5									
with mortar	*Total*	**112,063**	**30.1**			L				L		
Total - Category - B		**112,063**	**30.1**									
C1 - Concrete Wall	Rural	4,764	1.3									
	Urban	3,997	1.1									
	Total	**8,761**	**2.4**			VL				VL		
C2 - Wood wall	Rural	2,317	0.6									
	Urban	992	0.3									
	Total	**3,309**	**0.9**			VL				M		
Total - Category - C		**12,070**	**3.2**									
X - Other Materials	Rural	147,721	39.7									
	Urban	6,536	1.8									
	Total	**154,257**	**41.5**			VL				M		
Total - Category - X		**154,257**	**41.4**									
TOTAL HOUSES*		**372,551**										
ROOF												
R1 - Light Weight Sloping Roof	Rural	104,027	27.9									
	Urban	26,568	7.1									
	Total	**130,595**	**35.0**			L				H		
R2 - Heavy Weight Sloping Roof	Rural	185,869	49.9									
	Urban	9,694	2.6									
	Total	**195,563**	**52.5**			L				L		
R3 - Flat Roof	Rural	20,035	5.4									
	Urban	26,358	7.1									
	Total	**46,393**	**12.5**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**372,551**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 528 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