

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

Table No. : MN 07

State : MANIPUR

IMPHAL EAST

Wall / Roof		Census Houses		Level of Risk under								Flood Pron e Area	
		No. of Houses	%	EQ Zone				Wind Velocity m/s					
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
				100					29.1		70.9		14.5
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	36,716	33.8										
	Urban	21,367	19.7										
	Total	58,083	53.5	VH				VH		M		VH	
A2 - Stone Wall not packed with mortar	Rural	376	0.3										
	Urban	819	0.8										
	Total	1,195	1.1	VH				H		L		VH	
Total - Category - A		59,278	54.6										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	5,780	5.3										
	Urban	12,907	11.9										
	Total	18,687	17.2	H				H		L		H/M	
Total - Category - B		18,687	17.2										
C1 - Concrete Wall	Rural	145	0.1										
	Urban	1,185	1.1										
	Total	1,330	1.2	M				L		VL		L/VL	
C2 - Wood wall	Rural	531	0.5										
	Urban	1,497	1.4										
	Total	2,028	1.9	M				VH		M		H	
Total - Category - C		3,358	3.1										
X - Other Materials	Rural	20,058	18.5										
	Urban	7,211	6.6										
	Total	27,269	25.1	M				VH		M		VH	
Total - Category - X		27,269	25.1										
TOTAL HOUSES*		108,592											

ROOF												
R1 - Light Weight Sloping Roof	Rural	60,447	55.7									
	Urban	36,391	33.5									
	Total	96,838	89.2	M				VH		H		VH
R2 - Heavy Weight Sloping Roof	Rural	1,377	1.3									
	Urban	2,341	2.2									
	Total	3,718	3.5	H				H		L		H
R3 - Flat Roof	Rural	1,782	1.6									
	Urban	6,254	5.8									
	Total	8,036	7.4	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		108,592										

Probable Maximum Precipitation at a Station of the district in 24 hrs is **440 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