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

Table No. : WB 01   **State : WEST BENGAL**   **DARJILING**

Wall / Roof		Census Houses		Level of Risk under — EQ Zone V	IV	III	II	Wind Velocity m/s 55 & 50	47	44 & 39	33	Flood Prone Area in %
		No. of Houses	%	Area in %				Area in %				Area in %
					100				100			2.1
WALL												
A1 - Mud &	Rural	20,397	4.2									
Unburnt Brick Wall	Urban	4,364	0.9									
	Total	24,761	5.1		H				H			VH
A2 - Stone Wall	Rural	5,436	1.1									
not packed with mortar	Urban	2,544	0.5									
	Total	7,980	1.6		H				M			VH
Total - Category - A		32,741	6.7									
B - Burnt Bricks Wall	Rural	75,486	15.5									
& Stone wall packed	Urban	104,123	21.4									
with mortar	Total	179,609	36.9		M				M			H/M
Total - Category - B		179,609	37.0									
C1 - Concrete Wall	Rural	13,835	2.8									
	Urban	35,118	7.2									
	Total	48,953	10.0		L				VL			L/VL
C2 - Wood wall	Rural	65,282	13.4									
	Urban	21,208	4.4									
	Total	86,490	17.8		L				H			H
Total - Category - C		135,443	27.9									
X - Other Materials	Rural	108,446	22.3									
	Urban	29,694	6.1									
	Total	138,140	28.4		VL				H			VH
Total - Category - X		138,140	28.4									
TOTAL HOUSES*		485,933										
ROOF												
R1 - Light Weight	Rural	263,499	54.2									
Sloping Roof	Urban	110,072	22.7									
	Total	373,571	76.9		M				VH			VH
R2 - Heavy Weight	Rural	5,952	1.2									
Sloping Roof	Urban	6,494	1.3									
	Total	12,446	2.5		M				M			H
R3 - Flat Roof	Rural	19,431	4.0									
	Urban	80,485	16.6									
	Total	99,916	20.6		*Damage Risk as per that for the Wall supporting it*							
TOTAL HOUSES*		485,933										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.   720 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