

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

Table No. : WB 04

State : WEST BENGAL

UTTAR DINAJPUR

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				17.7
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	152,544	20.0									
	Urban	3,304	0.4									
	Total	155,848	20.4		<i>H</i>				<i>H</i>			<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	2,239	0.3									
	Urban	454	0.1									
	Total	2,693	0.4		<i>H</i>				<i>M</i>			<i>VH</i>
Total - Category - A		158,541	20.8									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	148,223	19.4									
	Urban	50,643	6.6									
	Total	198,866	26.0		<i>M</i>				<i>M</i>			<i>H/M</i>
Total - Category - B		198,866	26.1									
C1 - Concrete Wall	Rural	8,626	1.1									
	Urban	2,340	0.3									
	Total	10,966	1.4		<i>L</i>				<i>VL</i>			<i>L/ VL</i>
C2 - Wood wall	Rural	630	0.1									
	Urban	555	0.1									
	Total	1,185	0.2		<i>L</i>				<i>H</i>			<i>H</i>
Total - Category - C		12,151	1.6									
X - Other Materials	Rural	360,492	47.3									
	Urban	32,209	4.2									
	Total	392,701	51.5		<i>VL</i>				<i>H</i>			<i>VH</i>
Total - Category - X		392,701	51.5									
TOTAL HOUSES*		762,259										

ROOF												
R1 - Light Weight Sloping Roof	Rural	578,711	75.9									
	Urban	52,214	6.8									
	Total	630,925	82.7		<i>M</i>				<i>VH</i>			<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	48,521	6.4									
	Urban	4,926	0.6									
	Total	53,447	7.0		<i>M</i>				<i>M</i>			<i>H</i>
R3 - Flat Roof	Rural	45,522	6.0									
	Urban	32,365	4.2									
	Total	77,887	10.2		Damage Risk as per that for the Wall supporting it							
TOTAL HOUSES*		762,259										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 718 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