

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

Table No. : BH 07

State : BIHAR

ARARIA

Wall / Roof		Census Houses		Level of Risk under								Flood Prone Area in %
		No. of Houses	%	EQ Zone				Wind Velocity m/s				
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
				84.3	15.7				100			46.9
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	18,377	2.6									
	Urban	3,193	0.5									
	Total	21,570	3.1	VH	H				H			VH
A2 - Stone Wall not packed with mortar	Rural	1,440	0.2									
	Urban	247	-									
	Total	1,687	0.2	VH	H				M			VH
Total - Category - A		23,257	3.3									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	86,057	12.4									
	Urban	21,348	3.1									
	Total	107,405	15.5	H	M				M			H/M
Total - Category - B		107,405	15.4									
C1 - Concrete Wall	Rural	1,755	0.3									
	Urban	183	-									
	Total	1,938	0.3	M	L				VL			L/VL
C2 - Wood wall	Rural	2,402	0.3									
	Urban	740	0.1									
	Total	3,142	0.4	M	L				H			H
Total - Category - C		5,080	0.7									
X - Other Materials	Rural	543,844	78.2									
	Urban	16,107	2.3									
	Total	559,951	80.5	M	VL				H			VH
Total - Category - X		559,951	80.5									
TOTAL HOUSES*		695,693										

ROOF												
R1 - Light Weight Sloping Roof	Rural	596,282	85.7									
	Urban	18,295	2.6									
	Total	614,577	88.3	M	M				VH			VH
R2 - Heavy Weight Sloping Roof	Rural	16,029	2.3									
	Urban	8,604	1.2									
	Total	24,633	3.5	H	M				M			H
R3 - Flat Roof	Rural	41,564	6.0									
	Urban	14,919	2.1									
	Total	56,483	8.1	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		695,693										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. **729 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