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

Table No. : BH 20   **State : BIHAR**   **BEGUSARAI**

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			23.4
WALL												
A1 - Mud &	Rural	131,960	18.6									
Unburnt Brick Wall	Urban	22,521	3.2									
	Total	**154,481**	**21.8**		H				H			VH
A2 - Stone Wall	Rural	4,703	0.7									
not packed with mortar	Urban	1,935	0.3									
	Total	**6,638**	**1.0**		H				M			VH
Total - Category - A		**161,119**	**22.7**									
B - Burnt Bricks Wall	Rural	279,764	39.5									
& Stone wall packed	Urban	88,425	12.5									
with mortar	*Total*	**368,189**	**52.0**		M				M			H/M
Total - Category - B		**368,189**	**51.9**									
C1 - Concrete Wall	Rural	5,411	0.8									
	Urban	2,165	0.3									
	Total	**7,576**	**1.1**		L				VL			L/VL
C2 - Wood wall	Rural	4,404	0.6									
	Urban	1,023	0.1									
	Total	**5,427**	**0.7**		L				H			H
Total - Category - C		**13,003**	**1.8**									
X - Other Materials	Rural	152,779	21.5									
	Urban	13,989	2.0									
	Total	**166,768**	**23.5**		VL				H			VH
Total - Category - X		**166,768**	**23.5**									
TOTAL HOUSES*		**709,079**										
ROOF												
R1 - Light Weight	Rural	198,656	28.0									
Sloping Roof	Urban	26,626	3.8									
	Total	**225,282**	**31.8**		M				VH			VH
R2 - Heavy Weight	Rural	199,290	28.1									
Sloping Roof	Urban	31,477	4.4									
	Total	**230,767**	**32.5**		M				M			H
R3 - Flat Roof	Rural	181,075	25.5									
	Urban	71,955	10.1									
	Total	**253,030**	**35.6**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**709,079**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.   613 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