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

Table No. : BH 19　　　　**State : BIHAR**　　　　**SAMASTIPUR**

Wall / Roof		Census Houses — No. of Houses	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 %
				Area in %				*Area in %*				
					100				100			25.0
WALL												
A1 - Mud &	Rural	156,156	15.2									
Unburnt Brick Wall	Urban	4,177	0.4									
	Total	**160,333**	**15.6**		H				H			VH
A2 - Stone Wall	Rural	5,455	0.5									
not packed with mortar	Urban	223	-									
	Total	**5,678**	**0.5**		H				M			VH
Total - Category - A		**166,011**	**16.1**									
B - Burnt Bricks Wall	Rural	485,749	47.2									
& Stone wall packed	Urban	29,743	2.9									
with mortar	*Total*	**515,492**	**50.1**		M				M			H/M
Total - Category - B		**515,492**	**50.1**									
C1 - Concrete Wall	Rural	6,110	0.6									
	Urban	691	0.1									
	Total	**6,801**	**0.7**		L				VL			L/VL
C2 - Wood wall	Rural	8,258	0.8									
	Urban	632	0.1									
	Total	**8,890**	**0.9**		L				H			H
Total - Category - C		**15,691**	**1.5**									
X - Other Materials	Rural	327,493	31.8									
	Urban	4,210	0.4									
	Total	**331,703**	**32.2**	VL					H			VH
Total - Category - X		**331,703**	**32.2**									
TOTAL HOUSES*		**1,028,897**										
ROOF												
R1 - Light Weight	Rural	426,729	41.5									
Sloping Roof	Urban	9,452	0.9									
	Total	**436,181**	**42.4**		M				VH			VH
R2 - Heavy Weight	Rural	332,265	32.3									
Sloping Roof	Urban	5,888	0.6									
	Total	**338,153**	**32.9**		M				M			H
R3 - Flat Roof	Rural	230,227	22.4									
	Urban	24,336	2.4									
	Total	**254,563**	**24.8**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**1,028,897**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.　629 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