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

JHARKHAND

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 %				
STATE - JHARKHAND					3.9	51.9	44.2	1.0	26.5	72.5		
WALL												
A1 - Mud & *Unburnt Brick Wall*	Rural	3,684,954	50.3									
	Urban	348,929	4.8									
	Total	**4,033,883**	**55.1**		H	M	L	VH	H	M		
A2 - Stone Wall *not packed with mortar*	Rural	54,122	0.7									
	Urban	19,847	0.3									
	Total	**73,969**	**1.0**		H	M	L	H	M	L		
Total - Category - A		**4,107,852**	**56.1**									
B - Burnt Bricks Wall *& Stone wall packed* *with mortar*	Rural	1,556,835	21.3									
	Urban	1,396,987	19.1									
	Total	**2,953,822**	**40.4**		M	L	VL	H	M	L		
Total - Category - B		**2,953,822**	**40.3**									
C1 - Concrete Wall	Rural	25,547	0.3									
	Urban	39,721	0.5									
	Total	**65,268**	**0.8**		L	VL	VL	L	VL	VL		
C2 - Wood wall	Rural	14,066	0.2									
	Urban	5,998	0.1									
	Total	**20,064**	**0.3**		L	VL	VL	VH	H	M		
Total - Category - C		**85,332**	**1.2**									
X - Other Materials	Rural	140,780	1.9									
	Urban	35,962	0.5									
	Total	**176,742**	**2.4**		VL	VL	VL	VH	H	M		
Total - Category - X		**176,742**	**2.4**									
TOTAL HOUSES*		**7,323,748**										
ROOF												
R1 - Light Weight Sloping Roof	Rural	1,021,895	14.0									
	Urban	416,511	5.7									
	Total	**1,438,406**	**19.7**		M	L	VL	VH	VH	H		
R2 - Heavy Weight Sloping Roof	Rural	3,385,189	46.2									
	Urban	401,295	5.5									
	Total	**3,786,484**	**51.7**		M	L	VL	H	M	L		
R3 - Flat Roof	Rural	1,069,220	14.6									
	Urban	1,029,638	14.1									
	Total	**2,098,858**	**28.7**		*Damage Risk as per that for the Wall supporting it*							
TOTAL HOUSES*		**7,323,748**										

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