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

Table No. : KN 29   **State : KARNATAKA**   **BANGALORE RURAL**

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 %				
							100				100	
WALL												
A1 - Mud &	Rural	47,984	16.8									
Unburnt Brick Wall	Urban	7,405	2.6									
	Total	**55,389**	**19.4**				L				L	
A2 - Stone Wall	Rural	11,379	4.0									
not packed with mortar	Urban	4,233	1.5									
	Total	**15,612**	**5.5**				L				VL	
Total - Category - A		**71,001**	**24.8**									
B - Burnt Bricks Wall	Rural	128,454	44.9									
& Stone wall packed	Urban	61,393	21.5									
with mortar	*Total*	**189,847**	**66.4**				VL				VL	
Total - Category - B		**189,847**	**66.4**									
C1 - Concrete Wall	Rural	9,356	3.3									
	Urban	7,825	2.7									
	Total	**17,181**	**6.0**				VL				VL	
C2 - Wood wall	Rural	1,385	0.5									
	Urban	224	0.1									
	Total	**1,609**	**0.6**				VL				L	
Total - Category - C		**18,790**	**6.6**									
X - Other Materials	Rural	4,837	1.7									
	Urban	1,368	0.5									
	Total	**6,205**	**2.2**				VL				L	
Total - Category - X		**6,205**	**2.2**									
TOTAL HOUSES*		**285,843**										
ROOF												
R1 - Light Weight	Rural	82,530	28.9									
Sloping Roof	Urban	22,330	7.8									
	Total	**104,860**	**36.7**				VL				M	
R2 - Heavy Weight	Rural	80,579	28.2									
Sloping Roof	Urban	12,803	4.5									
	Total	**93,382**	**32.7**				VL				VL	
R3 - Flat Roof	Rural	40,286	14.1									
	Urban	47,315	16.6									
	Total	**87,601**	**30.7**	*Damage Risk as per that for the Wall supporting it*								
TOTAL HOUSES*		**285,843**										

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm.   385 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