

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

**Table No. : KN 06**

**State : KARNATAKA**

**KOPPAL**

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 & Unburnt Brick Wall	Rural	45,945	15.1									
	Urban	6,154	2.0									
	Total	52,099	17.1				L				L	
A2 - Stone Wall not packed with mortar	Rural	56,557	18.6									
	Urban	7,306	2.4									
	Total	63,863	21.0				L				VL	
Total - Category - A		115,962	38.2									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	107,528	35.4									
	Urban	35,167	11.6									
	Total	142,695	47.0				VL				VL	
Total - Category - B		142,695	47.0									
C1 - Concrete Wall	Rural	6,410	2.1									
	Urban	2,084	0.7									
	Total	8,494	2.8				VL				VL	
C2 - Wood wall	Rural	3,444	1.1									
	Urban	664	0.2									
	Total	4,108	1.3				VL				L	
Total - Category - C		12,602	4.2									
X - Other Materials	Rural	25,610	8.4									
	Urban	6,678	2.2									
	Total	32,288	10.6				VL				L	
Total - Category - X		32,288	10.6									
TOTAL HOUSES*		303,547										

ROOF												
R1 - Light Weight Sloping Roof	Rural	176,968	58.3									
	Urban	23,530	7.8									
	Total	200,498	66.1				VL				M	
R2 - Heavy Weight Sloping Roof	Rural	41,725	13.7									
	Urban	7,588	2.5									
	Total	49,313	16.2				VL				VL	
R3 - Flat Roof	Rural	26,801	8.8									
	Urban	26,935	8.9									
	Total	53,736	17.7	Damage Risk as per that for the Wall supporting it								
TOTAL HOUSES*		303,547										

**Probable Maximum Precipitation at a Station of the district in 24 hrs is 320 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