

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

Table No. : KL 12

State : KERALA

PATHANAMTHITTA

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 %					
WALL													26.9
A1 - Mud & Unburnt Brick Wall	Rural	43,831	10.5										
	Urban	3,397	0.8										
	Total	47,228	11.3					<i>M</i>	<i>L</i>			<i>M</i>	<i>VH</i>
A2 - Stone Wall not packed with mortar	Rural	37,729	9.1										
	Urban	3,562	0.9										
	Total	41,291	10.0					<i>M</i>	<i>L</i>			<i>L</i>	<i>VH</i>
Total - Category - A		88,519	21.3										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	250,097	60.1										
	Urban	36,409	8.7										
	Total	286,506	68.8					<i>L</i>	<i>VL</i>			<i>L</i>	<i>H/M</i>
Total - Category - B		286,506	68.8										
C1 - Concrete Wall	Rural	16,229	3.9										
	Urban	3,509	0.8										
	Total	19,738	4.7					<i>VL</i>	<i>VL</i>			<i>VL</i>	<i>L/VL</i>
C2 - Wood wall	Rural	4,660	1.1										
	Urban	375	0.1										
	Total	5,035	1.2					<i>VL</i>	<i>VL</i>			<i>M</i>	<i>H</i>
Total - Category - C		24,773	6.0										
X - Other Materials	Rural	15,140	3.6										
	Urban	1,249	0.3										
	Total	16,389	3.9					<i>VL</i>	<i>VL</i>			<i>M</i>	<i>VH</i>
Total - Category - X		16,389	3.9										
TOTAL HOUSES*		416,187											

ROOF													
R1 - Light Weight Sloping Roof	Rural	56,781	13.6										
	Urban	6,182	1.5										
	Total	62,963	15.1					<i>L</i>	<i>VL</i>			<i>H</i>	<i>VH</i>
R2 - Heavy Weight Sloping Roof	Rural	160,969	38.7										
	Urban	15,543	3.7										
	Total	176,512	42.4					<i>L</i>	<i>VL</i>			<i>L</i>	<i>H</i>
R3 - Flat Roof	Rural	149,936	36.0										
	Urban	26,776	6.4										
	Total	176,712	42.4	<i>Damage Risk as per that for the Wall supporting it</i>									
TOTAL HOUSES*		416,187											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 450 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