

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

**Table No. : KL 07**

**State : KERALA**

**THRISSUR**

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			16.1
<b>WALL</b>													
<b>A1 - Mud &amp; Unburnt Brick Wall</b>	Rural	49,385	5.2										
	Urban	60,720	6.4										
	<b>Total</b>	<b>110,105</b>	<b>11.6</b>				<i>M</i>				<i>M</i>		<i>VH</i>
<b>A2 - Stone Wall not packed with mortar</b>	Rural	38,531	4.1										
	Urban	55,977	5.9										
	<b>Total</b>	<b>94,508</b>	<b>10.0</b>				<i>M</i>				<i>L</i>		<i>VH</i>
<b>Total - Category - A</b>		<b>204,613</b>	<b>21.7</b>										
<b>B - Burnt Bricks Wall &amp; Stone wall packed with mortar</b>	Rural	192,348	20.4										
	Urban	479,149	50.9										
	<b>Total</b>	<b>671,497</b>	<b>71.3</b>				<i>L</i>				<i>L</i>		<i>H/M</i>
<b>Total - Category - B</b>		<b>671,497</b>	<b>71.3</b>										
<b>C1 - Concrete Wall</b>	Rural	10,028	1.1										
	Urban	17,271	1.8										
	<b>Total</b>	<b>27,299</b>	<b>2.9</b>				<i>VL</i>				<i>VL</i>		<i>L/ VL</i>
<b>C2 - Wood wall</b>	Rural	1,420	0.2										
	Urban	2,288	0.2										
	<b>Total</b>	<b>3,708</b>	<b>0.4</b>				<i>VL</i>				<i>M</i>		<i>H</i>
<b>Total - Category - C</b>		<b>31,007</b>	<b>3.3</b>										
<b>X - Other Materials</b>	Rural	13,093	1.4										
	Urban	21,859	2.3										
	<b>Total</b>	<b>34,952</b>	<b>3.7</b>				<i>VL</i>				<i>M</i>		<i>VH</i>
<b>Total - Category - X</b>		<b>34,952</b>	<b>3.7</b>										
<b>TOTAL HOUSES*</b>		<b>942,069</b>											

ROOF													
<b>R1 - Light Weight Sloping Roof</b>	Rural	22,376	2.4										
	Urban	40,539	4.3										
	<b>Total</b>	<b>62,915</b>	<b>6.7</b>				<i>L</i>				<i>H</i>		<i>VH</i>
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	118,941	12.6										
	Urban	191,059	20.3										
	<b>Total</b>	<b>310,000</b>	<b>32.9</b>				<i>L</i>				<i>L</i>		<i>H</i>
<b>R3 - Flat Roof</b>	Rural	163,488	17.4										
	Urban	405,666	43.1										
	<b>Total</b>	<b>569,154</b>	<b>60.5</b>				<i>Damage Risk as per that for the Wall supporting it</i>						
<b>TOTAL HOUSES*</b>		<b>942,069</b>											

Probable Maximum Precipitation at a Station of the district in one day for arial extent of 1000 sqm. 448 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