

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

### CHANDIGARH

Wall / Roof		Census Houses		Level of Risk under								
		No. of Houses	%	EQ Zone			Wind Velocity m/s			Flood Prone Area in %		
				V	IV	III	II	55 & 50	47	44 & 39	33	
<b>STATE - CHANDIGARH</b>												
<b>WALL</b>												
<b>A1 - Mud &amp; Unburnt Brick Wall</b>	Rural	24	-									
	Urban	7,468	2.7									
	<b>Total</b>	<b>7,492</b>	<b>2.7</b>				<i>H</i>			<i>VH</i>		
<b>A2 - Stone Wall not packed with mortar</b>	Rural	25	-									
	Urban	1,353	0.5									
	<b>Total</b>	<b>1,378</b>	<b>0.5</b>				<i>H</i>			<i>H</i>		
<b>Total - Category - A</b>		<b>8,870</b>	<b>3.2</b>									
<b>B - Burnt Bricks Wall &amp; Stone wall packed with mortar</b>	Rural	7,154	2.6									
	Urban	240,811	86.9									
	<b>Total</b>	<b>247,965</b>	<b>89.5</b>				<i>M</i>			<i>H</i>		
<b>Total - Category - B</b>		<b>247,965</b>	<b>89.5</b>									
<b>C1 - Concrete Wall</b>	Rural	869	0.3									
	Urban	13,440	4.9									
	<b>Total</b>	<b>14,309</b>	<b>5.2</b>				<i>L</i>			<i>L</i>		
<b>C2 - Wood wall</b>	Rural	20	-									
	Urban	494	0.2									
	<b>Total</b>	<b>514</b>	<b>0.2</b>				<i>L</i>			<i>VH</i>		
<b>Total - Category - C</b>		<b>14,823</b>	<b>5.4</b>									
<b>X - Other Materials</b>	Rural	208	0.1									
	Urban	5,192	1.9									
	<b>Total</b>	<b>5,400</b>	<b>2.0</b>				<i>VL</i>			<i>VH</i>		
<b>Total - Category - X</b>		<b>5,400</b>	<b>1.9</b>									
<b>TOTAL HOUSES*</b>		<b>277,058</b>										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	1,101	0.4									
	Urban	36,458	13.2									
	<b>Total</b>	<b>37,559</b>	<b>13.6</b>				<i>M</i>			<i>VH</i>		
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	203	0.1									
	Urban	3,829	1.4									
	<b>Total</b>	<b>4,032</b>	<b>1.5</b>				<i>M</i>			<i>H</i>		
<b>R3 - Flat Roof</b>	Rural	6,996	2.5									
	Urban	228,471	82.5									
	<b>Total</b>	<b>235,467</b>	<b>85.0</b>				<i>Damage Risk as per that for the Wall supporting it</i>					
<b>TOTAL HOUSES*</b>		<b>277,058</b>										

**Probable Maximum Precipitation at a Station of the district in 24 hrs is 600 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