



- (a) Section of the Band with 2 longitudinal steel bars  
 (b) Section of the Band with 4 longitudinal steel bars  
 (c) Structural Plan at L - type wall junction  
 (d) Structural Plan at T - type wall junction  
 (e) 3 Dimensional view of the L - type wall junction  
 (f) 3 Dimensional view of the T - type wall junction
1. Longitudinal reinforcements  
 2. Lateral Ties  
 3. Vertical reinforcement at corners  
 b, b1, b2 Wall thickness

**Figure-2: Reinforcement and Bending Details of Seismic Bands**

**Table-1: Recommended size and longitudinal steel in Seismic Bands (Zone IV)**

Internal length of wall	Residential buildings			Important Public Buildings (Schools, Hospitals, Meeting Halls, Anganwadis, etc.)		
	Size of the band	No. of Bars	Dia (mm)	Size of the band	No. of Bars	Dia (mm)
5 m or, less	10 cm x wall width	2	8	10 cm x wall width	2	10
6 m	10 cm x wall width	2	10	10 cm x wall width	2	12
7 m	15 cm x wall width	4	8	15 cm x wall width	4	10
8 m	15 cm x wall width	4	10	15 cm x wall width	4	12

### 3. VERTICAL REINFORCEMENT IN THE BRICK WALLS:

For earthquake safety in seismic zone IV reinforcing bars have to be embedded in brick masonry at the corners of all the rooms and the side of the door openings. Window openings larger than 60 cm in width will also need such reinforcing bars (**Figure – 4**). The diameter of the bar depends upon the number of storeys in the building. The recommendations are given in **Table-2**.

Providing the vertical bars in the brickwork and concrete blocks requires special techniques which could be easily learnt by the supervising engineers and masons will need to be trained.