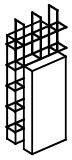
B-5.2. Minimum Vertical and Horizontal Reinforcement for *Above-Grade Walls* (restrained top & bottom) of low-rise residential buildings in low and moderate Seismic Zones

Table B-5.2.1(imperial)

Supporting Condition	Wall Height (ft)	Minimum of Vertical Reinforcement			Minimum of Horizontal Reinforcement		
		Minimum Wall Thickness (in)					
		4	6	8	4	6	8
Roof or Non –Load Bearing Wall	8	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	10	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	12	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
Concrete Floor & Second Storey Light Frame & Roof	8	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	10	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	12	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
Concrete Floor & Second Storey Concrete Wall & Roof	8	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	10	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″
	12	# 6 @ 16″	# 5 @ 16″	# 5 @ 16″	# 4 @ 16″	# 5 @ 16″	# 5 @ 16″

1. Applicable to low & moderate seismic zones, and maximum factored wind pressure = 66 psf
2. This table based on Reinforcing bars with a minimum yield strength of 40,000 psi, and Concrete F'c = 3,000 psi
3. Calculations are based on maximum two floors above the basement.
4. Vertical reinforcement should be placed on the tension side of the wall and shall be covered by 1 ½″ thick concrete (for wall thick 8 inch).
5. If wall is bearing pure axial load the reinforcement must be placed in the middle third of the wall (for wall thick 8 inch).
6. For wall 4 and 6 inches thick Vertical reinforcement should be placed within middle third of the concrete wall



Minimum Vertical and Horizontal Reinforcement for *Above-Grade* Walls (restrained top & bottom) of low-rise residential buildings in low and moderate Seismic Zones

Table B-5.2.2.(metric)

Supporting Condition	Wall Height (mm)	Minimum of Vertical Reinforcement			Minimum of Horizontal Reinforcement		
		Minimum Wall Thickness (mm)					
		100	150	200	100	150	200
Roof or Non –Load Bearing Wall	2400	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3000	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3700	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
Concrete Floor & Second Storey Light Frame & Roof	2400	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3000	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3700	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
Concrete Floor & Second Storey Concrete Wall & Roof	2400	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3000	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400
	3700	20M@400	15M@400	15M@400	10M@400	15M@400	15M@400

1. Applicable to low & moderate seismic zones, and maximum factored wind pressure = 3.15 kPa.
2. This table based on Reinforcing bars with a minimum yield strength of 400 MPa, and Concrete F'c = 20 Mpa.
3. Calculations are based on maximum two floors above the basement.
4. Vertical reinforcement should be placed on the tension of the wall and shall be covered by 40 mm hick concrete (for wall thick 200 mm).
5. If wall is bearing pure axial load the reinforcement must be placed in the middle third of the wall (for wall thick 200 mm).
6. For wall 100 and 150 mm thick Vertical reinforcement should be placed within middle third of the concrete wall.