

В-3.3. Таблицы по подбору армирования стен подвала в сейсмических зонах

Диаметр арматуры 10M = Ø11.3мм; 15M = Ø16мм; 20M = Ø19.5мм

Таблица В-3.3.1

150mm CONCRETE THICKNESS WALL
REQUIRED VERTICAL REINFORCEMENT FOR BASEMENT WALLS (RESTRAINED TOP & BOTTOM)
IN ALL SEISMIC ZONES

Wall Height (Unbalanced Backfill Depth), mm	Equivalent Fluid Pressure, kN /m ³				
	4.8	6.4	8	9.6	12.8
1800	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.
2100	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2400	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.
2700	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.	15M @ 200 o.c.
3000	15M @ 400 o.c.	20M @ 400 o.c.	20M @ 400 o.c.	15M @ 200 o.c.	20M @ 200 o.c.

Horizontal Rebar Requirements: 15M @ 400 o.c.

NOTE:

1. Calculations are based on maximum two floors above the basement
2. Concrete strength $f'c = 25\text{MPa}$
3. Reinforcing steel $f_y = 400\text{MPa}$
4. Reinforcing steel must be placed on the centre of wall
5. The basement floor must be cured on 70% and the first floor fixed in place before backfilling
6. The walls concrete must be cured as a minimum of 7 days before backfilling
7. Wall designed for additional earth pressure resultin from seismic activity.

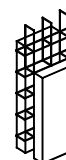


Таблица В-3.3.2

200mm CONCRETE THICKNESS WALL
REQUIRED VERTICAL REINFORCEMENT FOR BASEMENT WALLS (RESTRAINED TOP & BOTTOM)
IN ALL SEISMIC ZONES

Wall Height (Unbalanced Backfill Depth), mm	Equivalent Fluid Pressure, kN /m ³				
	4.8	6.4	8	9.6	12.8
1800	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.	10M @ 400 o.c.
2100	10M @ 400 o.c.	10M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2400	10M @ 400 o.c.	10M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2700	10M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.
3000	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.	20M @ 400 o.c.
3400	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.	20M @ 400 o.c.	20M @ 200 o.c.
3700	15M @ 400 o.c.	20M @ 400 o.c.	15M @ 200 o.c.	20M @ 200 o.c.	—

Horizontal Rebar Requirements: 15M @ 400 o.c.

NOTE:

1. Calculations are based on maximum two floors above the basement
2. Concrete strength $f'_c = 25\text{MPa}$
3. Reinforcing steel $f_y = 400\text{MPa}$
4. The basement floor must be cured on 70% and the first floor fixed in place before backfilling
5. The walls concrete must be cured as a minimum of 7 days before backfilling
6. Wall designed for additional earth pressure resultin from seismic activity.
7. Reinforcing steel must be placed on the tension side of the wall and the outer surface of the steel is covered by 40 mm thick concrete. If wall bears load from both sides, reinforcing steel must be in the center of wall

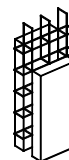


Таблица В-3.3.3

250mm CONCRETE THICKNESS WALL
REQUIRED VERTICAL REINFORCEMENT FOR BASEMENT WALLS (RESTRAINED TOP & BOTTOM)
IN ALL SEISMIC ZONES

Wall Height (Unbalanced Backfill Depth), mm	Equivalent Fluid Pressure, kN /m ³				
	4.8	6.4	8	9.6	12.8
1800	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2100	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2400	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
2700	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.
3000	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.
3400	15M @ 400 o.c.	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.	20M @ 400 o.c.
3700	15M @ 400 o.c.	15M @ 400 o.c.	20M @ 400 o.c.	20M @ 400 o.c.	20M @ 200 o.c.

Horizontal Rebar Requirements: 15M @ 400 o.c.

NOTE:

1. Calculations are based on maximum two floors above the basement
2. Concrete strength $f'_c = 15\text{MPa}$
3. Reinforcing steel $f_y = 400\text{MPa}$
4. The basement floor must be cured on 70% and the first floor fixed in place before backfilling
5. The walls concrete must be cured as a minimum of 7 days before backfilling
6. Reinforcing steel must be placed on the tension side of the wall and the outer surface of the steel is covered by 40 mm thick concrete. If wall bears load from both sides, reinforcing steel must be in the center of wall
7. Wall designed for additional earth pressure resultin from seismic activity.

