B-7.1. FOOTINGS
FOR LOW RISE RESIDENTIAL BUILDINGS

All walls shall be supported by continuous concrete footings. Footing depth shall extend below the frost line as specified in the local building code. Minimum sizes for concrete footings shall be as outlined in Table B-7.1.2. Carry bottom of footing to undisturbed native soil or compacted fill approved by a soil consultant. The elevation of the bottom of the footing may be changed if necessary by structural engineer.
Minimum bearing capacity of the soil is to be 96 kPa.
Footings may be installed by common method, as well as by means of **Armopanel™** footing forms.

Table B-7.1.1.

Load-Bearing Soil Classification*

Minimum Load – Bearing Value psf (kPa)	Soil Description
2,000 (96)	Clay, sandy clay, silty clay, and clayey silt
3,000 (144)	Sand, silty sand, clayey sand, silty gravel, and clayey gravel
4,000 (192)	Sandy gravel and medium – stiff clay
>4,000 (192)	Stiff clay, gravel, sand, sedimentary rock, and crystalline bedrock

Confirm soil bearing capacity with local geotechnical consultant and local building code.

* Taken from Table C3.1 [1]

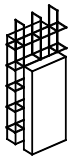


Table B-7.1.2.

Minimum Width of Concrete Footings for Armopanel™ Walls* (inches)

Maximum Number of Storeys		Minimum Load-Bearing capacity of Soil (psf)				
		2,000	2,500	3,000	3,500	4,000
5.5" Wall Thickness	One Storey	11	9	8	7	6
	Two Storey	20	16	13	11	9
	Three Storey	30	26	19	16	13
7.5" Wall Thickness	One Storey	14	11	9	8	8
	Two Storey	23	19	16	14	12
	Three Storey	33	26	22	19	16
9.5" Wall Thickness	One Storey	19	14	12	12	10
	Two Storey	25	22	19	17	15
	Three Storey	36	29	25	22	19

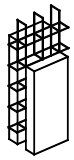
NOTES:

1. Footing thickness is 12 inches.
2. Minimum width of the footing shall have at least 2" projection to accommodate a polystyrene sheet on each side of the footing.
3. Table content is based on 32 ft building Span.
4. For the calculation of the footing width, the basement is considered as an additional storey.
5. Reinforcement (if required) shall be as per specific project.

Table B-7.1.3.

Minimum Width of Concrete Footings for Armopanel™ Walls* (mm)

Maximum Number of Storeys		Minimum Load-Bearing Value of Soil (kPa)				
		100	125	150	175	200
150 mm Wall Thickness	One Storey	280	230	200	180	150
	Two Storey	500	400	330	280	230
	Three Storey	760	660	480	400	330
200 mm Wall Thickness	One Storey	360	280	230	200	200
	Two Storey	580	480	400	360	300
	Three Storey	840	660	560	480	400
250 mm Wall Thickness	One Storey	480	350	300	300	250
	Two Storey	630	560	480	430	380
	Three Storey	900	730	630	560	480

NOTES:

1.Footing thickness is 300mm
2. Minimum width of the footing shall have at least 2” projection to accommodate a polystyrene sheet on each side of the footing.
3.Table content is based on 10.00 meters building width (Span).
4. For the calculation of the footing width, the basement is considered as an additional storey.
5. Reinforcement (if required) shall be as per specific project.