

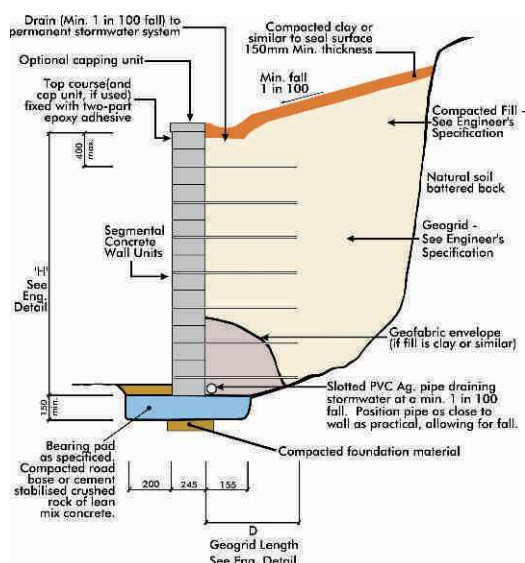
## GEO-GRID REINFORCED WALLS (See Fig 3)

Height of Wall 'H' (mm)	No. of Geogrid Layers	Soil Type 1													
		Backfill Slope - Level							Backfill Slope - 1 in 4						
		Geogrids lengths (mm) are shown below.													
Layer		1	2	3	4	5	6	7	1	2	3	4	5	6	7
1000	3	1000, 1000, 1000							1100, 1100, 1400						
1200	3	1000, 1000, 1400							1100, 1100, 1600						
1400	3	1000, 1000, 1400							1100, 1100, 1600						
1600	4	1100, 1100, 1300, 1700							1200, 1200, 1500, 1900						
1800	4	1300, 1300, 1400, 1900							1800, 1800, 1800, 2100						
2000	5	1400, 1400, 1400, 1700, 2200							1800, 1800, 1800, 2000, 2400						
2200	5	1500, 1500, 1500, 1700, 2000							1900, 1900, 1900, 1900, 2400						
2400	6	1700, 1700, 1700, 1700, 2000, 2500							2100, 2100, 2100, 2100, 2300, 2700						
2600	6	1800, 1800, 1800, 1800, 2000, 2500							2200, 2200, 2200, 2200, 2200, 2800						
2800	7	2000, 2000, 2000, 2000, 2000, 2300, 2800							2400, 2400, 2400, 2400, 2400, 2600, 3000						
3000	7	2100, 2100, 2100, 2100, 2100, 2200, 2800							2500, 2500, 2500, 2500, 2500, 2500, 3100						

Height of Wall 'H' (mm)	No. of Geogrid Layers	Soil Type 2													
		Backfill Slope - Level							Backfill Slope - 1 in 4						
		Geogrids lengths (mm) are shown below.													
Layer		1	2	3	4	5	6	7	1	2	3	4	5	6	7
1000	3	1000, 1000, 1000							1200, 1200, 1400						
1200	3	1000, 1000, 1400							1200, 1200, 1600						
1400	3	1000, 1000, 1400							1200, 1200, 1600						
1600	4	1100, 1100, 1300, 1700							1600, 1600, 1600, 1900						
1800	4	1300, 1300, 1400, 1900							1800, 1800, 1800, 2100						
2000	5	1400, 1400, 1400, 1700, 2200							1900, 1900, 1900, 1900, 2400						
2200	5	1500, 1500, 1500, 1700, 2000							2000, 2000, 2000, 2000, 2400						
2400	6	1700, 1700, 1700, 1700, 2000, 2500							2200, 2200, 2200, 2200, 2200, 2700						
2600	6	1800, 1800, 1800, 1800, 2000, 2500							2300, 2300, 2300, 2300, 2300, 2800						
2800	7	2000, 2000, 2000, 2000, 2000, 2300, 2800							2500, 2500, 2500, 2500, 2500, 2500, 3000						
3000	7	2100, 2100, 2100, 2100, 2100, 2200, 2800							2600, 2600, 2600, 2600, 2600, 2600, 3100						

Height of Wall 'H' (mm)	No. of Geogrid Layers	Soil Type 3													
		Backfill Slope - Level							Backfill Slope - 1 in 4						
		Geogrids lengths (mm) are shown below.													
Layer		1	2	3	4	5	6	7	1	2	3	4	5	6	7
1000	3	1000, 1000, 1000							1600, 1600, 1600						
1200	3	1000, 1000, 1400							1800, 1800, 1800						
1400	3	1100, 1100, 1400							2100, 2100, 2100						
1600	4	1500, 1500, 1500, 1700							2400, 2400, 2400, 2400						
1800	4	1700, 1700, 1700, 1900							3700, 3700, 3700, 3700						
2000	5	1700, 1700, 1700, 1700, 2200							3900, 3900, 3900, 3900, 3900						
2200	5	1800, 1800, 1800, 1800, 2200							4100, 4100, 4100, 4100, 4100						
2400	6	2000, 2000, 2000, 2000, 2000, 2500							4500, 4500, 4500, 4500, 4500, 4500						
2600	6	2100, 2100, 2100, 2100, 2100, 2500							4700, 4700, 4700, 4700, 4700, 4700						
2800	7	2300, 2300, 2300, 2300, 2300, 2300, 2800							5100, 5100, 5100, 5100, 5100, 5100, 5100						
3000	7	2400, 2400, 2400, 2400, 2400, 2400, 2800							5300, 5300, 5300, 5300, 5300, 5300, 5300						

Figure 3



Soil Type Descriptions		
Type 1 Soil	Type 2 Soil	Type 3 Soil
Friction Angle at least 35°	Friction Angle at least 30°	Friction Angle at least 25°
Includes FCR, rock, sandstone and gravels	Includes stiff sandy clays and gravelly clays	Includes soft and firm clay, fine sands and silty clays

### Construction Notes (Applies to NFC Backed Walls & Geo-grid Reinforced Walls):

1. Designed in accordance with AS4678 Structure Classification A and B & CMAA Manual MA 52 and MA 53 as appropriate.
2. Retaining walls up to and including 1.5m high are designed for an imposed load (live load) of 2.5 kPa.
3. Retaining walls over 1.5m high designed for an imposed load (live load) of 5.0 kPa.
4. Footings should be 5% cement-stabilised crushed rock to dimensions shown.
5. Before the bottom course is positioned, the footing should be moistened to ensure bond between the block and footing.
6. For reinforced soil systems (incorporating polyester geogrids), the minimum number of grids is three and the min. length of grids is 1m.
7. Geo-grid lengths from design tables above are measured from the back of the wall.
8. All geogrids are Fortrac 35-20 or equivalent. The spacing of geogrids is 400mm (every second block) except at the base of the wall, where it is 200mm (one course).
9. These tables are a guide, all retaining walls over one metre in height need to be designed and certified by a qualified engineer.

### Trendstone™ Terraced Walls

