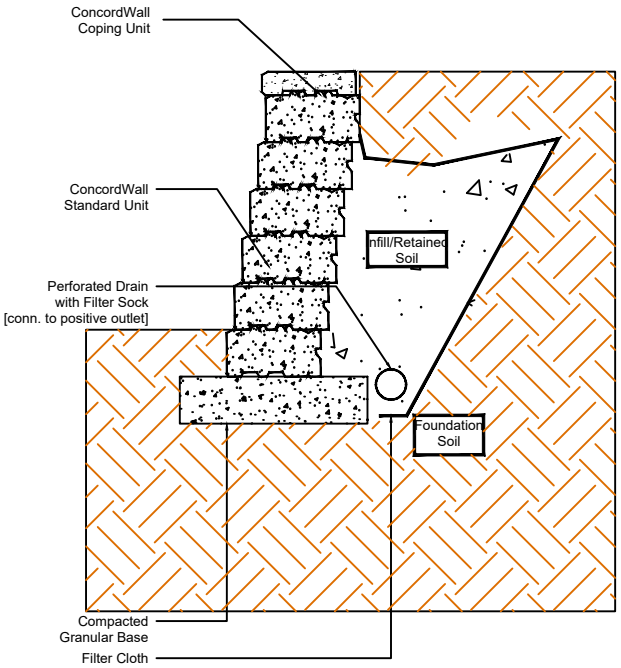
CONCORD WALL®

REF: Concord Wall_Grid Reinforced_Traffic Load_3.3ft_2.06m

RETAINING WALL GRAVITY SECTION

990mm (3.25ft) Site: Surcharge - Clays Infill: Granular



Design Specific Geometric Information

Retaining Wall System	ConcordWall	Geogrid Type and Manufacturer	N/A
Maximum Height mm (in)	990 (38)	Minimum Geogrid LTDS kN/m (lb/ft)	N/A
Maximum Slope Above Wall	Horizontal	Maximum Slope Below Wall	None
Max. Surcharge Above Wall kPa (lb/sq.ft)	Pedestrian Surcharge 2.4 kPa (50 lb/sq.ft)	Depth of Embedment mm (in)	153 (6)
Batter of Wall	9.5 °	Compacted Base Dimension mm (in)	610 x 153 (24 x 6)

Design Specific Soil Information

	Soil Region				
	Infill / Retained		Foundation	Base	Drainage
Description (by USCS)	GP		CL	GW	see infill
	Angular 3/4" clear stone (no fines)		Inorganic Clays Low Plasticity	Well graded, free draining Granular	
Effective Internal Friction Angle	36 °		28 °	39 °	NR
Moist Unit Weight kN/cu.m (lb/cu.ft)	18 (115)		20 (127)	22 (140)	NR
Effective Cohesion kPa (lb/sq.ft)	NR		13 (270)	NR	NR
Soil Notes	Placed in 150mm (6") lifts and compacted to 95% SPD.	Angular drain stone placed at 1H:1V from heel of wall as shown	Allowable bearing cap.must exceed 50kPa (1050 psf).	Crushed Gravel (free draining) compacted to 98% SPD.	Gravel infill must be gap graded, angular, free drain w/ no fines.

NR - Not Required

Notes:

1. This design meets or exceeds the minimum factors of safety required by Risi Stone Systems based on the design parameters listed above. The analysis was performed as outlined in the National Concrete Masonry Association Design Manual for Segmental Retaining Walls, Third Edition. This is a typical, non site-specific Design.

2. No analysis of global stability, total or differential settlement, or seismic effects has been performed.

3. This design is only provided to illustrate the general arrangement of the SRW structure for preliminary costing and feasibility purposes only. This drawing is not for construction. A qualified Engineer must be retained to provide the Final Design prior to construction.

4. Structures such as handrails, guardrails, fences, terraces, and site conditions such as water applications, drainage and soil conditions, additional live and dead loads, etc., have significant effects on the wall design and have not been taken into account in this typical section. When accounted for in the Final Design, other conditions and elements may result in additional design measures (geogrid, drainage, etc) and cost.

5. For geogrid reinforced structures, a minimum Long Term Allowable Design Strength of 14 kN/m was assumed.

Contact your manufacturer or Risi Stone Systems for a list of approved geogrid reinforcements.

RisiStone

Engineering design by RisiStone Inc.