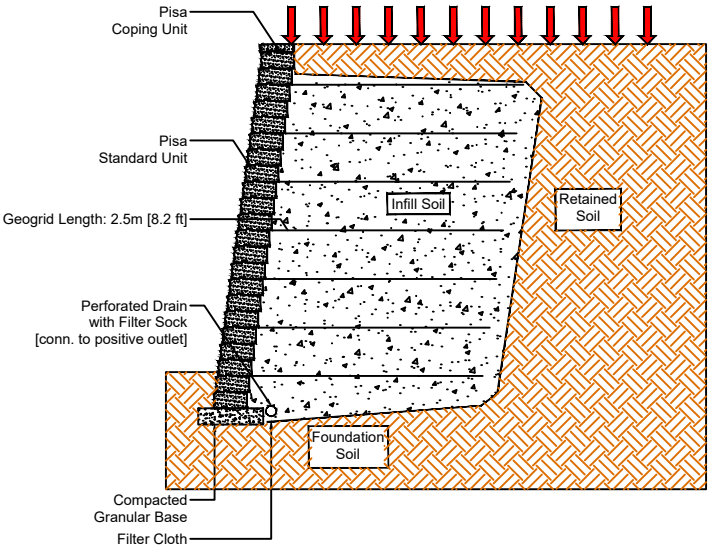
PISA®

REF: Pisa_Grid Reinforced_Traffic Load_11.3ft_3.43m

RETAINING WALL GEOGRID SECTION

3430mm (11.25ft) Site: Surcharge - Clays Infill: Granular



Design Specific Geometric Information

Retaining Wall System	Pisa w/ Geogrid	Geogrid Type and Manufacturer	See Notes
Maximum Height mm (in)	3430 (134)	Minimum Geogrid LTDS kN/m (lb/ft)	See Notes
Maximum Slope Above Wall	Horizontal	Maximum Slope Below Wall	None
Max. Surcharge Above Wall kPa (lb/sq.ft)	Traffic Surcharge 12 kPa (250 lb/sq.ft)	Depth of Embedment mm (in)	341 (13)
Batter of Wall	7.12 °	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)	GW Well graded, free draining Granular	CL Inorganic Clays Low Plasticity	CL Inorganic Clays Low Plasticity	GW Well graded, free draining Granular	see infill
Effective Internal Friction Angle	35 °	28 °	28 °	39 °	NR
Moist Unit Weight kN/cu.m (lb/cu.ft)	22 (140)	20 (127)	20 (127)	22 (140)	NR
Effective Cohesion kPa (lb/sq.ft)	NR	NR	NR	NR	NR
Soil Notes	Placed in 150mm (6") lifts and compacted to 95 % SPD.	Undisturbed dense soil or well compacted Eng. fill.	Allowable bearing cap.must exceed 150kPa (3125 psf).	Crushed Gravel (free draining) compacted to 98 % SPD.	Gravel infill must be well graded, angular, free drain w/max. 8% 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.