

Guidelines

Interbloc™ Gravity Walls

The inherent flexibility of the Interbloc™ system mean there are many ways to engineer a wall depending on the unique requirements of a given project. The following info sheet provides information and design guides for a basic Interbloc Gravity Wall. The information contained in this information sheet is designed first and foremost to be demonstrative of the capabilities of Interbloc™ walls. Each project will require specific design work by a suitable qualified professional.

Interbloc™ Gravity Wall

Interbloc™ Gravity Walls are suitable solutions for low height retaining wall structures with favourable loading conditions. The high mass of the Interbloc™ units provide sufficient overturning resistance in their own right without need for extra reinforcing. In these situations, Interbloc™ walls can be constructed without vertical reinforcement and on relatively minor foundations. Often the foundation sizes specified by the Engineer are for practical purposes.

These walls are usually only used in non-critical applications where some wall movement can be allowed, such as low level landscaping walls, slope rehabilitation, edges to rural access routes etc. It is most common for such walls to be constructed with an angled face where the walls are “leant” back into the reinforced material.

“In essence Interbloc™ have developed a very simple product – a mass concrete block. What sets this product apart is its innovative interlocking ability which provides a shear key in both horizontal directions...”

Blueprint Consulting Engineers 2012

The following table provides a guide on the footing requirements and corresponding load capacities of a low height Interbloc™ Gravity Wall.

Earth Pressures Ka
 No Seismic Loads
 Good Ground Conditions
 Backfill Density 18kN/m
 Backfill Friction Angle 30 degrees
 Backfill Slope 0 degrees
 Friction Angle 30 degrees
 Wall Friction Included 20 degrees

Surcharge	Wall Angle (Slope into Retaining)	Level Backfill				
			Block Inclined Height			Ka
			1200	1800	2400	
0 kPa	0 deg	Footing W	700	800	1050	0.3
		D	150	200	225	
		L	50	150	300	
	5 deg	Footing W	700	800	900	0.26
		D	150	175	200	
		L	50	100	200	
5 kPa	0 deg	Footing W	750	950	1250	0.3
		D	200	225	250	
		L	100	200	400	
	5deg	Footing W	700	800	1100	0.26
		D	175	200	200	
		L	50	150	250	
10kPa	0 deg	Footing W	850	1100	1425	0.3
		D	175	200	250	
		L	200	300	400	
	5 deg	Footing W	800	1050	1250	0.26
		D	150	200	225	
		L				

