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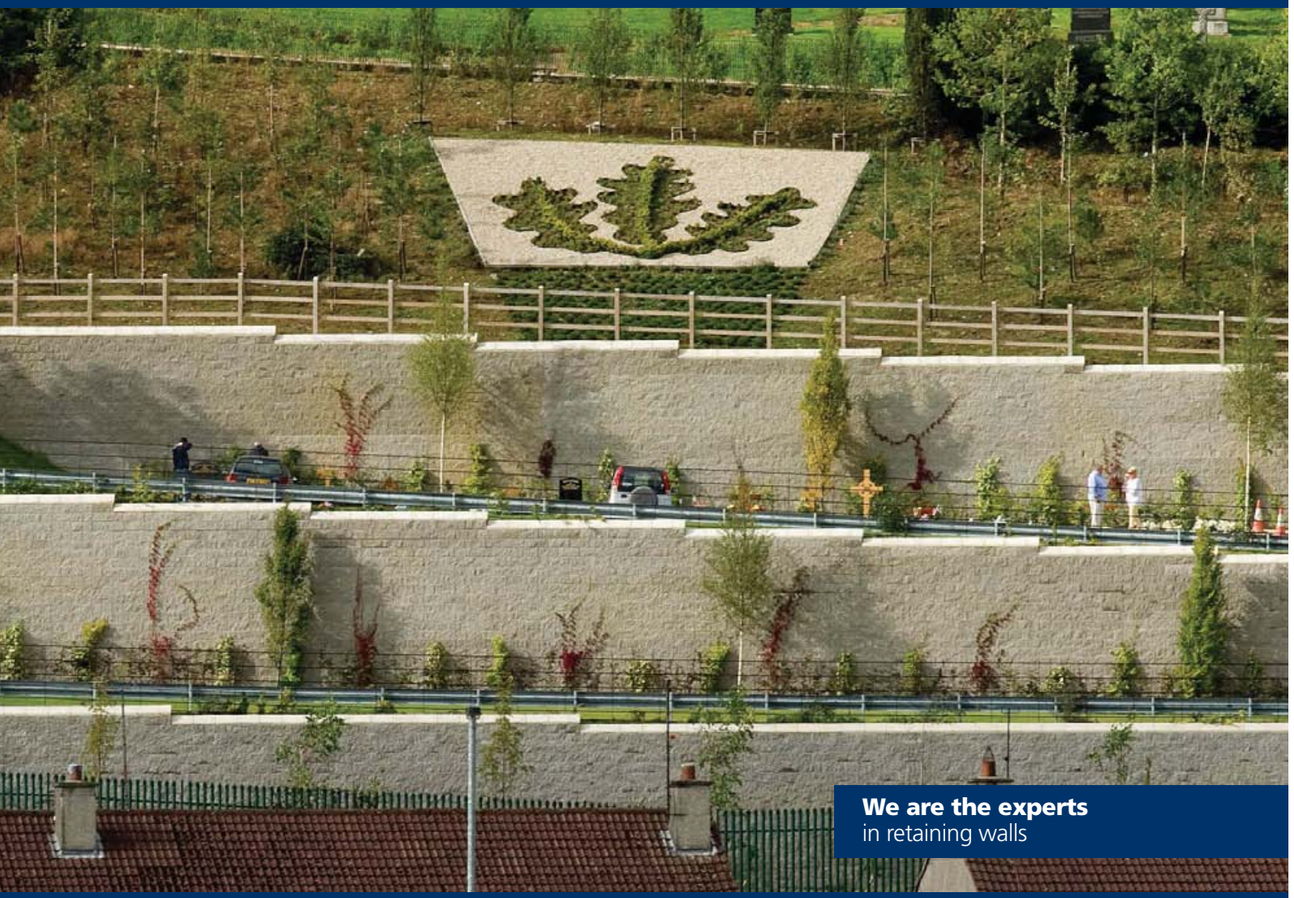
Acheson & Glover

ANCHOR®
BUILD SOMETHING BEAUTIFUL

SEGMENTAL RETAINING WALLS

SPECIFICATIONS

Vertica Straight Cut, Cathedral



We are the experts
in retaining walls

Inspiring Spaces

About Acheson & Glover

Established in 1960, A&G (Acheson & Glover) has spent over 50 years designing and manufacturing a wide range of products and solutions in concrete for both the residential and the commercial sectors and are recognised as one of the most trusted concrete producers in the UK and Ireland.

Through advances in manufacturing technology and a stringent quality control that stretches all the way from the quarry to the final product, we have a team of people who have the skills and imagination to not only rethink and re-engineer in concrete, but also to redefine it.

www.acheson-glover.com/cemarking

Contents

ANCHOR® BUILD SOMETHING BEAUTIFUL

Anchor wall blocks are manufactured by Northern Ireland based manufacturer Acheson & Glover under licence from Anchor Wall Systems Inc. based in Minnesota, USA.

Landmark, Cathedral

RETAINING WALLS

More and more architects, engineers, contractors and house-building companies are choosing Anchor Retaining Walls as the ideal solution for everything from residential landscaping and tall commercial retaining walls to civil engineering walls in the highways and rail sectors. Why? Because every Anchor system is backed up with the support of a highly qualified team of manufacturing, design and engineering specialists. From design assistance to installation information, our partnership will ensure your retaining wall project is a success.

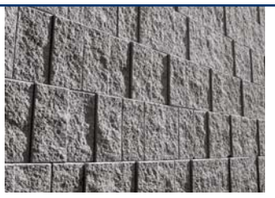
Advantages of Anchor Retaining Walls

- Engineering strength and durability
- Design advice by Chartered Civil Engineers
- Better utilisation of land
- Aesthetically pleasing
- Economic and versatile
- Fast construction in all weather conditions
- No mortar
- Available in a range of colours
- Minimal maintenance
- Reliability of geogrid reinforced earth backfill
- Backfill option reduces the amount of excavation required

PRODUCT SELECTOR

Designed for fast track installation, all our retaining solutions are pre-finished, mortarless, easy to fit and extremely cost effective. There is an Anchor block to suit all retaining applications from 0.5m in height upwards.

The Anchor retaining wall system is suitable for use in both commercial and residential locations and is available in a range of designs and colours.

PRODUCT:	ASPEN STONE® (Ireland only)	BAYFIELD®	REGAL STONE®	DIAMOND®	VERTICA®	LANDMARK®
						
WALL HEIGHT:	Gravity (max 0.6m) Engineered N/A	Gravity (max 0.9m) Engineered# (above 0.9m)	Gravity (max 0.9m) Engineered N/A	Gravity (max 1.2m) Engineered# (above 1.2m)	Gravity (max 1.2m) Engineered# (above 1.2m)	Gravity (max 1.2m) Engineered# (above 1.2m)
DESCRIPTION:	Rough hewn, weathered. textured finish.	Stone cut appearance. Rough hewn, weathered, textured finish.	Textured finish with straight lines / edges. Natural, weathered appearance with a completely vertical face.	A natural textured appearance.	Warm earth tone colours. Two natural textured finishes available (Straight Cut and Stone Cut).	A natural textured appearance with straight lines / edges.
COLOURS:	 Basalt  Canelletto  Cashel	 Basalt  Canelletto  Cashel	 Basalt  Canelletto  Cashel	 Basalt  Canelletto  Cashel	 Basalt*  Canelletto*  Cashel*	 Basalt*  Canelletto*  Cashel*
FIND ON:	Page 8	Page 12	Page 16	Page 20	Page 24	Page 28

is Other colours are available - please ask for more information.

* Made to order (minimum quantities required)

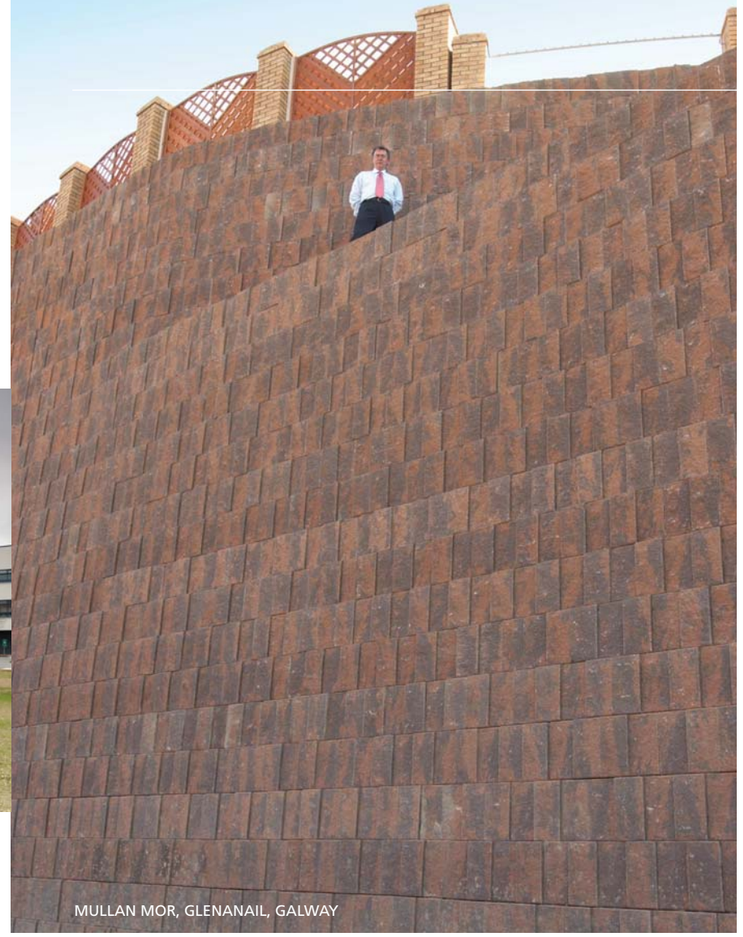
Please note minimum order quantities are required for certain colours.
We advise you speak to a member of the sales team in advance of order placement.

We are the experts
in retaining walls

Nationwide
PROJECTS

DERRY CITY CEMETERY

CREAGH DEMENSE COLLEGE, GOREY, WEXFORD



MULLAN MOR, GLENANAIL, GALWAY

MAGEE COLLEGE, DERRY

TESCO EXTRA, CHESTERFIELD

HERBERT STRUTT SCHOOL, DERBYSHIRE

ASHFIELD GIRLS SCHOOL, BELFAST

RESIDENTIAL, BELFAST

Retaining Walls

SELBY COLLEGE

Proven Performance Nationwide

Providers of revolutionary retaining wall technology

Anchor Wall Systems allows A&G to provide its customers with cost-effective, high-quality patented retaining wall solutions for a wide variety of commercial, municipal and residential landscaping projects nationwide.

A&G shares a strong commitment to quality, product development, technological innovation, the environment and the local community. They have extensive expertise in a wide range of projects - of every type, size and complexity.

The ideal solution

Attractive and innovative solutions can be achieved on the most challenging projects. Together, the partnership of Anchor Wall Systems and A&G provide the ideal solution for Construction Professionals.

Setting the standard

A&G invested in a purpose built factory to manufacture Anchor Retaining Walls. This state of the art factory has been accredited as an important part of the overall approval process.

The main components of Anchor Vertica® and Anchor Landmark®, have been subject to independent assessment throughout the world and have received international approval from the most respected bodies in the industry.

Testing was carried out both in-house and at accredited independent testing laboratories in the U.S.A. There was also testing at accredited independent testing laboratories in the UK and the geogrid has been tested all around the world.

With the benefit of BBA Roads & Bridges certification, Anchor Landmark® structures have been built on several high profile infrastructure schemes such as the M1 in Belfast and the M80 in Glasgow.

We are the experts
in retaining walls

ATTRACTIVE ROUGH HEWN, WEATHERED TEXTURED FINISH

ASPEN STONE® (IRELAND ONLY)

Aspen Stone, Canelletto

Who knew building a wall could be so easy? The beauty of Aspen Stone® retaining walls isn't only in the highly textured, richly coloured finish, it's also in the simplicity of its construction.

With no need for mortar or adhesives, each stone simply slots into the other so it's quick and easy to construct and can be used to build walls up to 0.6m (2ft) high.

CARBON: 49.6Kg CO_2 per m^2
NBS PLUS: D41 310

ASPEN STONE® (IRELAND ONLY)

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

Features a patented rear lip that acts as a guide to ensure accurate alignment and precise set back every time without the need for mortar - that means fast installation in all weather conditions and reduced labour costs.

Can be built up to 600mm high with no concrete or mortar.

Natural appearance of cut stone.

Lightweight and easy-to-handle.

Mortarless and pinless (fast-track construction).

Attractive, durable and versatile.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc. Their production is regularly tested to record important physical characteristics such as compressive strength and water absorption. Anchor Aspen blocks are dense, strong and have very low water absorption, thus ensuring their long-term durability in all weathers for many years.

INSTALLATION:

For heights up to 0.6m - no reinforcement required.
For heights above 0.6m - N/A.

UNITS PER m^2 / Lm:

Aspen Stone Block	33 blocks / m^2
Capping Block	3.77 caps / Lm

Note: Adhesive is required for fixing caps and partial units.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

Aspen Stone, Basalt

Aspen Stone, Cashel

BLOCKS:

Aspen Stone Block

Capping Block

COLOURS: Other colours are available - please ask for more information.

Basalt

Cashel

Canelletto

Please note minimum order quantities may be required for certain colours. We advise you speak to a member of the sales team in advance of order placement.

See full technical information on page 44.

A&G have introduced a new ShortCut™ Cap to their product lines. Please note: all photography shown still includes the previous capping block.

ATTRACTIVE ROUGH HEWN, WEATHERED TEXTURED FINISH

BAYFIELD®

Bayfield, Cashel

Bayfield® can be used to create attractive retaining walling up to 0.9m high (blocks alone) or can be combined with geogrid reinforcement to build taller engineered walls.

With its rough hewn weathered texture it's an extremely versatile walling option which can be constructed without the need for mortar or cement.

CARBON: 49.2Kg CO_2 per m^2
NBS PLUS: D41 310

BAYFIELD®

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

Features a patented rear lip that acts as a guide to ensure accurate alignment and precise set back every time without the need for mortar.

Can easily be built up to 900mm high with no concrete, mortar or geogrid.

Can be built up to 3m high with geogrid.

The stone face is rough hewn to give the wall a weathered textured appearance akin to natural dry stone walling.

Mortarless and pinless (fast-track construction).

The capping block is shaped asymmetrically (tapered), making capping straight or curved walls much easier.

Installation of the capping block will be easier and quicker as the shape of the capping piece minimises the need for cuts.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc. Their production is regularly tested to record important physical characteristics and to comply with product specific performance criteria.

The durability and performance of Anchor blocks is assured by meeting or exceeding targets for crushing strength and water absorption.

INSTALLATION:

For heights up to 0.9m - no reinforcement required.
For heights above 0.9m - reinforcement required.

UNITS PER m^2 / Lm:

Bayfield Block	15.36 blocks / m^2
Corner / Step Block	N/A
ShortCut Cap	5.4 caps / Lm

Note:

Adhesive is required for fixing caps and partial units.

walls greater than 1.0m in height should be designed by a suitably qualified engineer.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

Bayfield, Basalt

Bayfield, Cashel

BLOCKS:

Bayfield Block

Corner / Step Block

ShortCut™ Cap

COLOURS: Other colours are available - please ask for more information.

Basalt

Canelletto

Cashel

Please note minimum order quantities may be required for certain colours. We advise you speak to a member of the sales team in advance of order placement.

See full technical information on page 44.

NATURAL WEATHERED FINISH WITH A COMPLETELY VERTICAL FACE

REGAL STONE®

Regal Stone, Basalt

Modern and contemporary in appearance, Regal Stone® is the ideal choice when building domestic gravity walls, which do not require any engineering input.

Completely vertical and with a unique and patented locating system that ensures perfect alignment, Regal Stone® walls are built with no mortar or concrete. Suitable for both straight and curved retaining walls around the modern home, it's also perfect for terraced landscaping.

A&G have introduced a new ShortCut™ Cap to their product lines. Please note: some of the photography shown still includes the previous capping block.

CARBON: 61Kg CO_2 per m^2
NBS PLUS: D41 310

REGAL STONE®

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

Can be built vertically.

Suitable for both straight and curved retaining walls.

Each block features a locator that acts as a guide to ensure accurate vertical alignment and a perfect running bond.

Can be installed by a competent DIYer or a tradesman but does not require the skills of an experienced brick layer.

Can easily be built up to 900mm high with no concrete or mortar.

All blocks under 20kg and easy-to-handle.

Mortarless and pinless (fast-track construction).

Natural appearance of cut stone.

Attractive, durable and versatile.

The capping block is shaped asymmetrically (tapered), making capping straight or curved walls much easier.

Installation of the capping block will be easier and quicker as the shape of the capping piece minimises the need for cuts.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc. Their production is regularly tested to record important physical characteristics and to comply with product specific performance criteria.

The durability and performance of Anchor blocks is assured by meeting or exceeding targets for crushing strength and water absorption.

GRAVITY / ENGINEERED:

Gravity (max 0.9m)
Engineered N/A

UNITS PER m^2 / Lm:

Regal Stone Block	30 blocks / m^2
Corner Block	N/A
ShortCut Cap	5.4 caps / Lm

Note: Adhesive is required for fixing caps and partial units.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

BLOCKS:

Regal Stone Block

Corner Block

ShortCut™ Cap

COLOURS: Other colours are available - please ask for more information.

Basalt

Canelletto

Cashel

Please note minimum order quantities may be required for certain colours. We advise you speak to a member of the sales team in advance of order placement.

See full technical information on page 46.

A NATURAL TEXTURED APPEARANCE

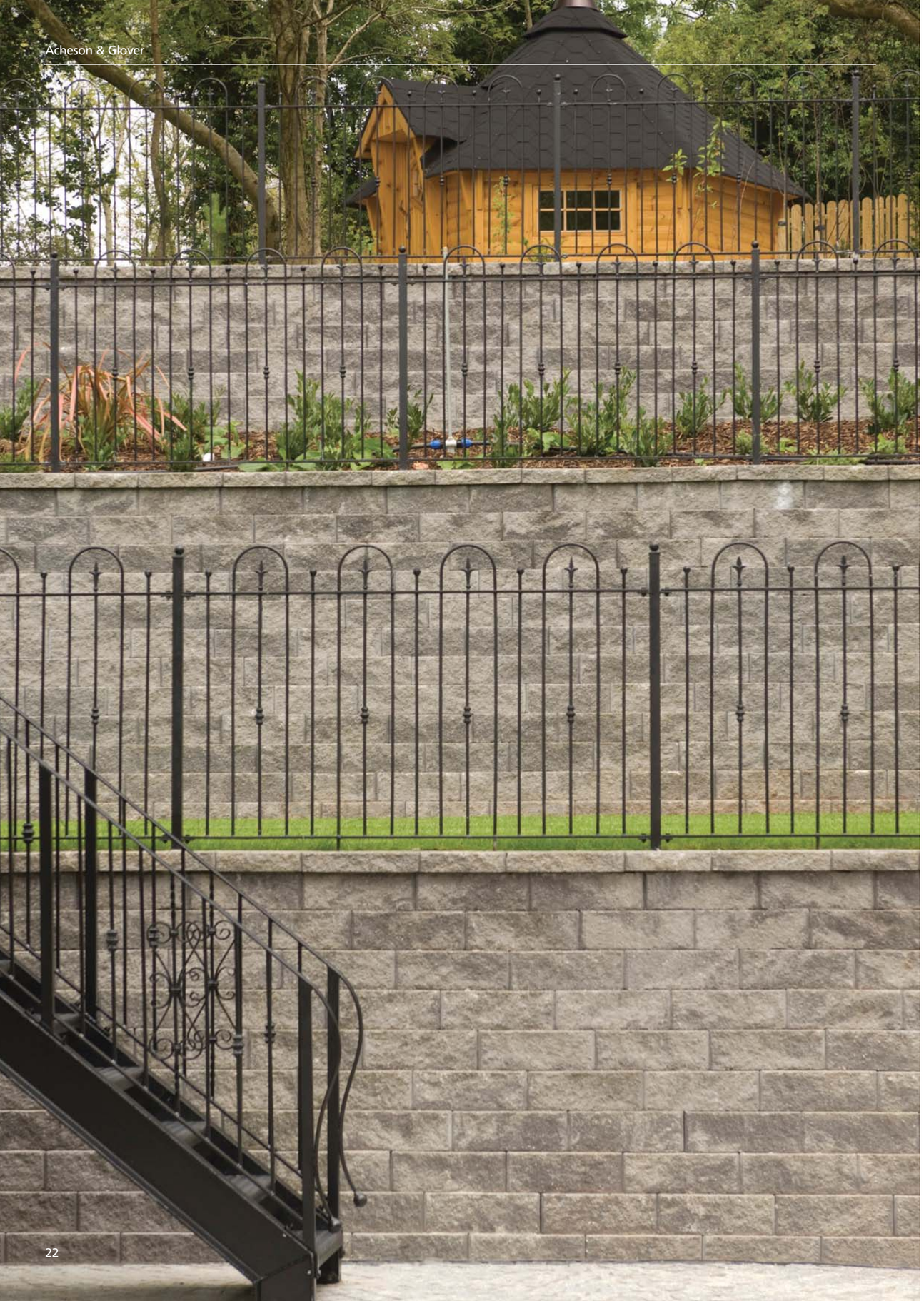
DIAMOND®

Diamond, Canelletto

Attractive, durable, versatile and easy to install; that's Diamond®. Whether reinforced or unreinforced, no other system offers these advantages. On your next project let Diamond® provide the most cost effective retaining wall solution you can buy.

Each block features a patented rear lip that acts as a guide to ensure accurate alignment and precise set back every time without the need for mortar. That means fast installation and reduced labour costs.

A&G have introduced a new ShortCut™ Cap to their product lines. Please note: all photography shown still includes the previous capping block.



CARBON: 60.7Kg CO_2 per m^2
NBS PLUS: D41 310

DIAMOND®

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

Features a patented rear lip that acts as a guide to ensure accurate alignment and precise set back every time without the need for mortar.

Mortarless and pinless (fast-track construction).

Can be built up to 1.2m high with no geogrid.

Can be built up to 3m high with geogrid.

Most competitive Anchor block per SQM.

Attractive, durable and versatile.

The capping block is shaped asymmetrically (tapered), making capping straight or curved walls much easier.

Installation of the capping block will be easier and quicker as the shape of the capping piece minimises the need for cuts.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc. Their production is regularly tested to record important physical characteristics and to comply with product specific performance criteria. The durability and performance of Anchor blocks is assured by meeting or exceeding targets for crushing strength and water absorption.

GRAVITY / ENGINEERED:

Gravity (max 1.2m)
Engineered (above 1.2m)

UNITS PER m^2 / Lm:

Diamond Block	15.4 blocks / m^2
Corner Block	N/A
ShortCut Cap	5.4 caps / Lm

Note: Adhesive is required for fixing caps and partial units.
Walls greater than 1.0m in height should be designed by a suitably qualified engineer.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

Diamond, Canelletto

Diamond, Basalt

BLOCKS:

Diamond Block

Corner Block

ShortCut™ Cap

COLOURS: Other colours are available - please ask for more information.

Basalt

Canelletto

Cashel

Please note minimum order quantities may be required for certain colours. We advise you speak to a member of the sales team in advance of order placement.

See full technical information on page 44.

A&G have introduced a new ShortCut™ Cap to their product lines. Please note: some of the photography shown still includes the previous capping block.

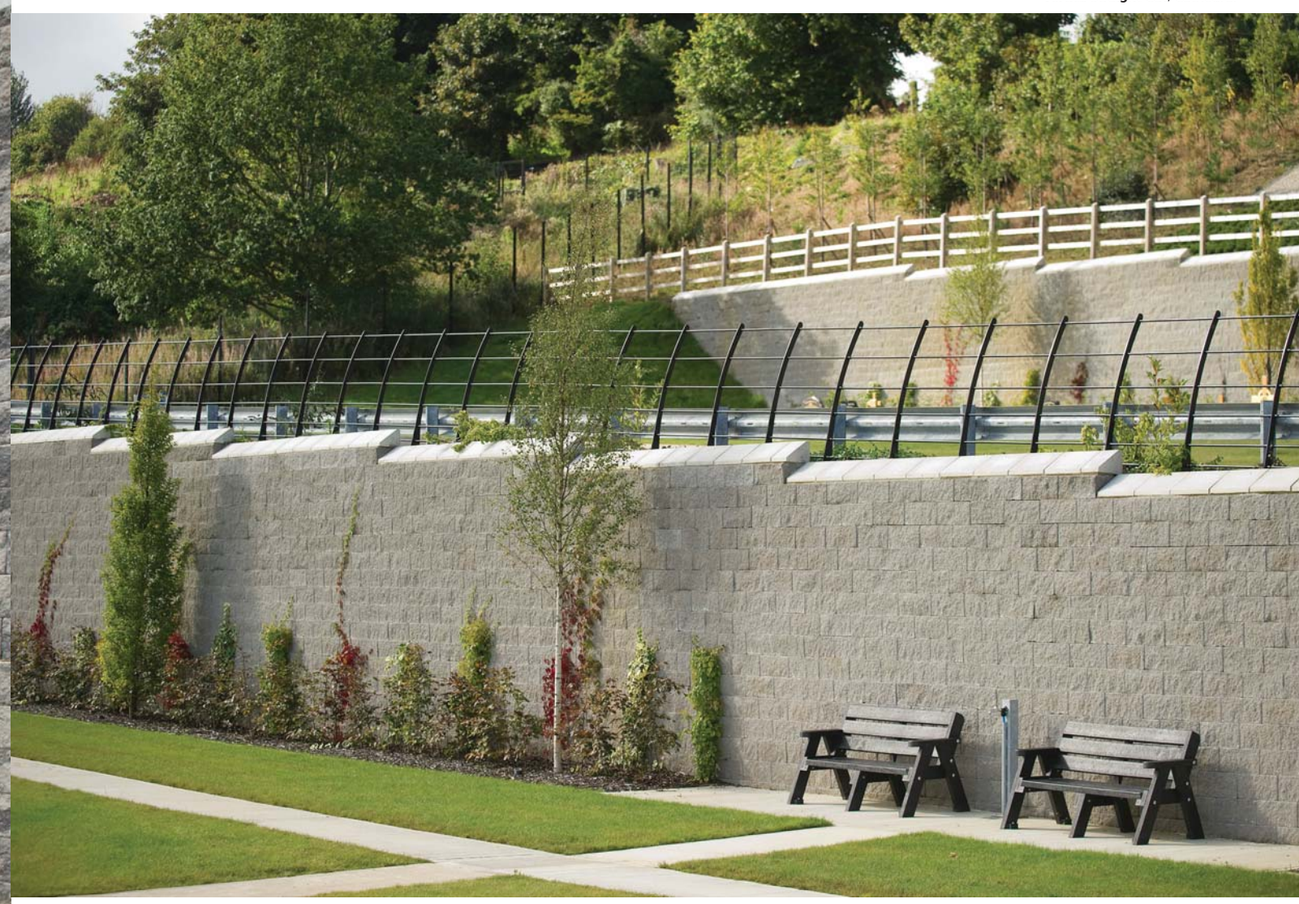
WARM EARTH TONE COLOURS IN TWO NATURAL TEXTURED FINISHES

VERTICA®

BBA BRITISH BOARD OF AGRÉMENT CERTIFICATE No 03/4032

Anchor Vertica
(Stone Cut 7° only)

Vertica Straight Cut, Cathedral



Designed for steep, sloping hillsides and other structural problems, Vertica® walls can be built to virtually any height in incredibly tight spaces - thanks to impressive, built-in alignment locators, and a near vertical rise for less excavation and land loss.

Typically used with geosynthetic reinforcement, Vertica® blocks meet or exceed industry standards for strength and durability.

There are two finishes available with Vertica - Straight Cut and Stone Cut.

CARBON: 60.7Kg CO_2 per m^2
NBS PLUS: D41 310
BBA CERTIFICATE NO: 03/4032

VERTICA®

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

BBA certified 60 year design life.

BBA certified up to 8m high.

Features a patented locating lug that acts as a guide to ensure accurate alignment and precise set back every time without the need for mortar - that means fast installation in all weather conditions and reduced labour costs.

Variety of warm earth tone colours available and a natural textured finish.

Mortarless and pinless (fast-track construction).

Suitable for all retaining walls; from low height landscape to tall commercial walls.

Attractive, durable and versatile.

The capping block is shaped asymmetrically (tapered), making capping straight or curved walls much easier.

Installation of the capping block will be easier and quicker as the shape of the capping piece minimises the need for cuts.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc. Their production is regularly tested to record important physical characteristics and to comply with product specific performance criteria. The durability and performance of Anchor blocks is assured by meeting or exceeding targets for crushing strength and water absorption, demonstrating their suitability for a project design life of at least 60 years.

GRAVITY / ENGINEERED:

Gravity (max 1.2m)
Engineered (above 1.2m)

UNITS PER m^2 / Lm:

Vertica Block	10.9 blocks / m^2
Corner Block	N/A
ShortCut Cap	5.4 caps / Lm

Note: Adhesive is required for fixing caps and partial units.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

FINISHES:

STRAIGHT CUT (7°)

STONE CUT (4°)

BLOCKS:

Vertica Block

Corner Block

ShortCut™ Cap

COLOURS: Other colours are available - please ask for more information.

Basalt*

Canelletto*

Cashel*

* Made to order

Please note minimum order quantities are required for all colours. We advise you speak to a member of the sales team in advance of order placement.

See full technical information on page 46.

A NATURAL TEXTURED APPEARANCE WITH STRAIGHT LINES

LANDMARK®

BBA BRITISH BOARD OF AGRÉMENT
CERTIFICATE No 04/R138

Roads & Bridges
Anchor Landmark®

Landmark, Canelletto

For high performance under extreme loading conditions, Landmark® is a positive mechanical connection retaining wall system that takes performance to new heights.

Designed with a unique locking connection between block facing and geogrid, the system offers unparalleled connection strength for challenging projects. The Landmark® System is a smart, aesthetically pleasing retaining wall solution.

A&G have introduced a new ShortCut™ Cap to their product lines. Please note: all photography shown still includes the previous capping block.

CARBON: 70-82.2Kg CO_2 per m^2
NBS PLUS: D41 310
BBA CERTIFICATE NO: 04/R138

LANDMARK®

FEATURES & BENEFITS:

Built with no mortar or concrete, the unique dry build locking system allows fast track construction in all weathers - that means quicker installation rates than traditional brick and blockwork.

Portrait orientated riven stone face of slightly varying depths.

The unique mechanical connection between the Anchor Landmark blocks, PVC locking bar and the geogrid reinforcement permits extremely high loading conditions; Anchor Landmark is therefore suitable for all retaining wall applications from landscape to heavy engineering.

Generally, the Anchor Landmark system is used for tall engineered walls and is BBA certified up to 10m (although structures exceeding this height have been designed and constructed).

Can be built to any retained height.

Suitable for any application.

BBA (Road & Bridges) certificate, design life of 120 years.

Attractive, durable and versatile.

The capping block is shaped asymmetrically (tapered), making capping straight or curved walls much easier.

Installation of the capping block will be easier and quicker as the shape of the capping piece minimises the need for c uts.

MANUFACTURE:

Anchor blocks are manufactured from locally sourced high grade aggregates. Using the latest computerized mixing systems ensures colour and strength consistency.

STANDARDS & PERFORMANCE:

Anchor blocks are manufactured under license from Anchor Wall Systems Inc and strictly in accordance with the requirements of the BBA certification. When used and installed in accordance with the BBA certification, an Anchor Landmark reinforced soil structure can achieve a design life of 120 years.

GRAVITY / ENGINEERED:

Gravity (max 1.2m)
Engineered (above 1.2)

UNITS PER m^2 / Lm:

Landmark Full Height Block	13.2 blocks / m^2
Tapered Full Block	13.2 blocks / m^2
Half Height Block	26.3 blocks / m^2
Foundation Block	0.019 Lm / blocks
ShortCut Cap	5.4 caps / Lm

Note: Adhesive is required for fixing caps and partial units. Walls greater than 1.0m in height should be designed by a suitably qualified engineer.

All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

As these products contain cement they may suffer from the temporary phenomenon of efflorescence. This is in no way detrimental to their performance characteristics and is common in all good quality products with a high cement content. Time should be given for all products to weather in, at this stage they will look their best.

BLOCKS:

Landmark
Full Height Block

Landmark
Tapered Full Block

Landmark
Half Height Block

Landmark
Foundation Block

ShortCut™ Cap

Lock Bar
Approx. Length: 1000mm

COLOURS: Other colours are available - please ask for more information.

Basalt*

Canelletto*

Cashel*

Please note minimum order quantities are required for all colours. We advise you speak to a member of the sales team in advance of order placement.

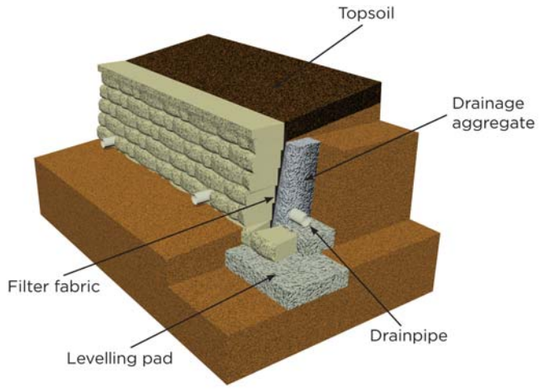
* Made to order

See full technical information on page 46.

THERE ARE TWO TYPES OF RETAINING WALLS - GRAVITY AND ENGINEERED.

GRAVITY WALLS

A gravity wall is a retaining wall that does not use soil reinforcement. It has height limitations specific to each product. A gravity wall relies on the weight and setback of the block to resist the soil forces being exerted on the wall.

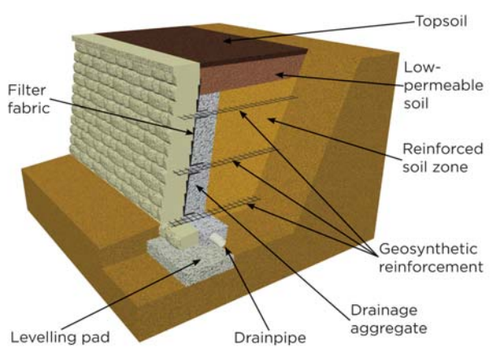


ENGINEERED WALLS

These are segmental retaining walls taller than gravity walls that can be designed several ways. Geosynthetic reinforcement is often used, however, in conjunction with Acheson & Glover two other options are available.

GEOSYNTHETIC-REINFORCED RETAINING WALL

A geosynthetic-reinforced wall needs to be designed by a qualified engineer. With reinforced retaining walls there are (theoretically) no height limitations, and they are used in taller applications. It requires more work area behind the structure. The block of soil is stabilized by introducing reinforcement layers into the soil mass behind the facing units. The larger the stabilized soil mass, the more soil can be retained or held back. The geosynthetic reinforcement in the soil extends past the theoretical failure plane and serves to create a large rectangular mass of block and reinforced soil, restraining the retained soil.

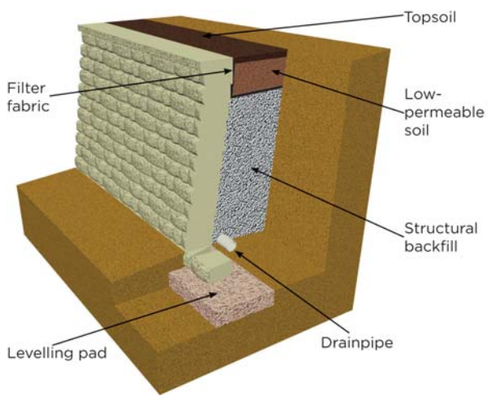


ANCHORPLEX™

The Anchorplex™ retaining wall system offers a unique solution to problematic wall construction sites. It is a retaining wall built with Anchor products and self compacting structural backfill specified by a qualified professional, backed up with all of the calculations required to meet the needs of the most challenging sites.

In combination with an Anchor block, the structural backfill attaches itself to the wall facing effectively increasing the depth and increasing the mass of the facing. The structural backfill acts as the required drainage zone.

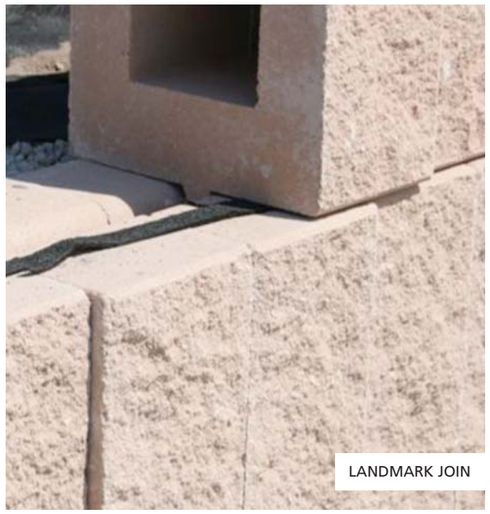
Using this system of structural backfill eliminates the need to construct a stabilised earth zone behind the wall facing. This method of construction also requires substantially less excavation than is necessary with grid-reinforced wall systems. Because of these efficiencies and the ease of design, Anchorplex™ walls have become extremely popular with contractors and designers worldwide.




ANCHORPLEX


ANCHORPLEX

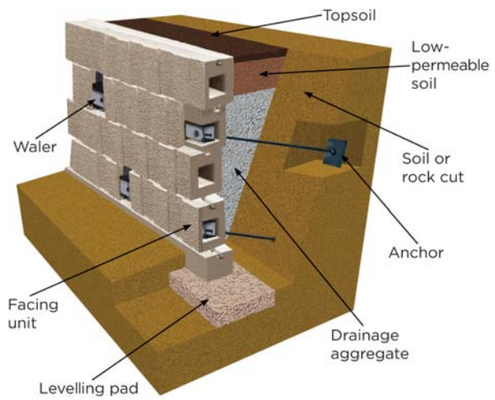

GEOGRID REINFORCED WALL


LANDMARK JOIN

DIRECT ANCHORAGE SYSTEM

Direct Anchorage is a system whereby an anchor is first secured into the ground and then connected to galvanised beams installed within the horizontal core of the Landmark retaining wall blocks. Landmark blocks have been specifically designed to accommodate this type of construction.

Each galvanised steel beam spans two adjacent anchors, transferring the load from the segmental retaining wall units to the anchors.



Further information on these systems is available from Acheson & Glover.

A GRAVITY WALL IS A RETAINING WALL THAT DOES NOT USE SOIL REINFORCEMENT.

GRAVITY WALL
INSTALLATION GUIDE

SAFE OPERATING PROCEDURES SHOULD BE PLANNED AND ESTABLISHED FROM THE BEGINNING OF THE PROJECT. PREPARATION IS KEY.

BASIC INSTALLATION

SETTING OUT THE WALL AND EXCAVATION
SEE DIAGRAMS 1, 2 & 3

- Stake out a string line in the required position for the front face of the wall.
- Cut a face slope into the soil 600mm back from this line, down to the finished ground level required along the front of the wall. This will leave enough room for the drainage fill that must be installed behind the back of the wall.
- Once the face slope has been cut, reposition the stakes and string lines in the correct position for the front of the wall.
- Dig out a level trench 300mm deep. The edge of the trench will be 150mm in front and 450mm behind the stake and string lines (making the trench width 600mm in total).
- Remove the stakes and string lines. Use a hand tamper or vibrating plate compactor to firmly compact the soil in the base of the trench before proceeding to the next step.

LEVELLING PAD (FOOTING)
SEE DIAGRAM 4

- An aggregate levelling pad is made of a good compactable base material - MOT Type 1, 20-40mm Aggregate with fines, Crusher Run or similar.
- The pad must be a minimum of 150mm deep (after compaction) and must fill the full width of the excavation trench.
- Using either a hand tamper or vibrating plate compactor, fully compact the aggregate, making sure it is level front-to-back and side-to-side.
- If the ground levels along the wall length slope by more than 150mm, the levelling pad must be stepped up to match the slope of the ground.

BASE COURSE
SEE DIAGRAM 5

- The most important step in the construction process.
- Select and mix blocks from a minimum of three packs to help achieve a balanced colour blend.
- Begin laying blocks at the lowest elevation of the wall.
- The base course blocks must be fully bedded and lie completely flat on the levelling pad.
- Screed out a thin layer of course grit sand on top of the levelling pad.
- Lay the first block, levelling it front to back **and** side to side, using the screeded sand to fully bed the block.
- Use a string line along the back of the blocks (not the front) to align the units, or evenly align the back of the units to form smooth and consistent curves.
- Place the blocks side by side, just touching each other at the front. Make sure the blocks are fully bedded on the sand screed. Level the blocks in both directions with a spirit level.
- Carefully replace the soil to the front and back of the blocks and lightly compact the soil using a hand compactor, ensuring that the blocks alignment and levels do not change.
- Completely fill all the block cores and all the voids between blocks with drainage aggregate.

DRAINAGE DESIGN
SEE DIAGRAM 6

- Good drainage is critical to ensuring the long term performance of any segmental retaining wall.
- 'Pea Gravel', '15-20mm Clean' or 'No Fines Aggregate' should always be used for the drainage fill.
- Water collected from the drainage fill behind the wall must be directed away from the wall either into an existing drainage network where permissable or, a safe area away from and lower than the wall.
- For walls longer than 15 metres, install drainage weep holes no more than 15 metres apart. Remove 50mm off the front of two adjacent blocks to provide sufficient space for the drain pipe to exit through the face to form the weep hole.
- The perforated drainage pipe should be positioned as low as possible behind the wall and should be placed in the middle point of the 300mm drainage zone.

NEXT COURSE CONSTRUCTION
SEE DIAGRAM 7

- Clean any debris off the top of the blocks. Blocks must be clean and free from debris to ensure perfect alignment.
- Always select and mix blocks from a minimum of three packs to help achieve a balanced colour blend.
- Place the second course of blocks on top of the base course by placing each block centrally over the joint of the blocks below (running bond).
- Pull each unit forward until the locator is securely in contact with the units below.

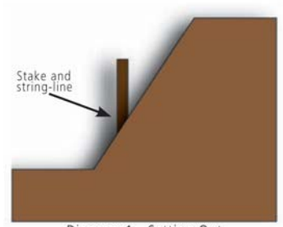


Diagram 1 - Setting Out

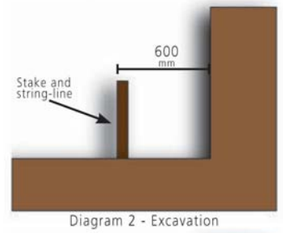


Diagram 2 - Excavation

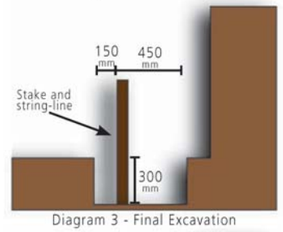


Diagram 3 - Final Excavation

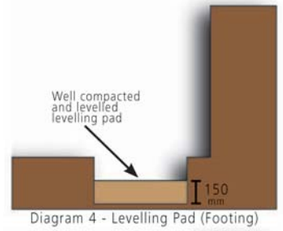


Diagram 4 - Levelling Pad (Footing)

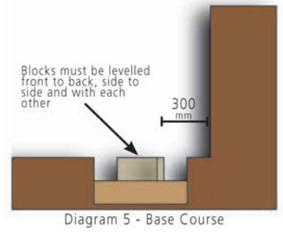


Diagram 5 - Base Course

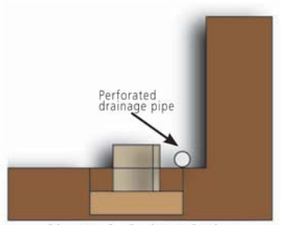


Diagram 6 - Drainage Design

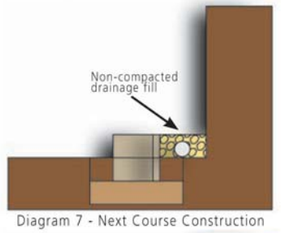


Diagram 7 - Next Course Construction

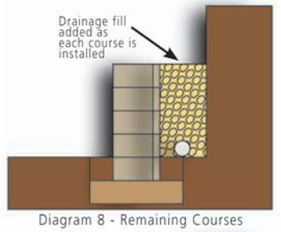


Diagram 8 - Remaining Courses

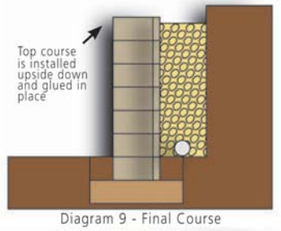


Diagram 9 - Final Course

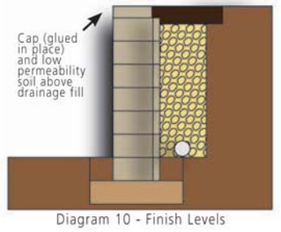


Diagram 10 - Finish Levels

Full installation guidelines are available upon request from Acheson & Glover.

- Once all the blocks in the second course are in position, backfill between the soil slope and the blocks with drainage aggregate.
- The drainage aggregate must extend at least 300mm back from the rear of the wall to the soil slope to ensure proper drainage takes place.
- Completely fill all the block cores and all the voids between blocks with drainage aggregate.

REMAINING COURSES
SEE DIAGRAM 8

- Continue to install each course of blocks and drainage fill in the same way.
- Note that drainage fill must be placed for each course before the next one is started. Do not install more than one course of blocks without the drainage fill. Unless this practice is followed, the drainage fill will not completely fill all the voids in the blocks and wall movement or settlement may then occur at a later date.

PRODUCT	MAX. WALL HEIGHT	NO. OF COURSE
Aspen Stone®	**0.6m**	**6 course**
Bayfield®	**0.9m**	**6 course**
Diamond®	**1.2m**	**8 course**
Regal Stone®	**0.9m**	**6 course**
Vertica®	**1.0m**	**6 course**
Landmark®	**1.14m**	**3 course**

FINAL COURSE
SEE DIAGRAM 9

- When using Regal Stone, the blocks in the last course should be installed upside down.
- Once the wall has been checked and no further changes or adjustments are required, the top course (and the subsequent cap course) must be bonded in place using the recommended adhesive.

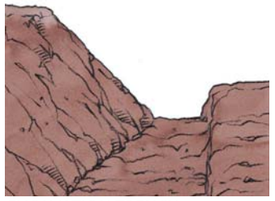
FINISH LEVELS AND SURFACE DRAINAGE
SEE DIAGRAM 10

- To ensure proper water drainage away from the wall, use 100mm of soil with low permeability. This will minimize water seeping into the soil and drainage aggregate behind the wall.

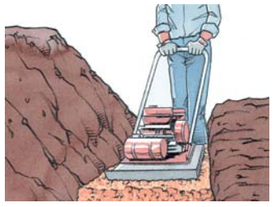
SEGMENTAL RETAINING WALLS
TALLER THAN GRAVITY WALLS.

ENGINEERED WALL
INSTALLATION GUIDE

BASIC INSTALLATION

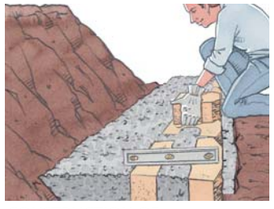


EXCAVATION TRENCH
Diagram 1



LEVELLING PAD (Footing)
COMPACTION
Diagram 2

BASE COURSE
Diagram 3



CONSTRUCTION OF
THE NEXT COURSE
Diagram 4

SETING OUT THE WALL & EXCAVATION - SEE DIAGRAM 1

- Mark out the wall placement. Verify the locations with the client and engineer if required or appropriate.
- Mark out the location of the excavation trench so that, when dug, the wall blocks will run centrally down the middle of the trench with equal spacing between the front and back of the blocks to the front and back of the trench.
- For engineered walls make the excavation 600mm from front to back, and 350mm deep, unless design assistance has specified this differently.
- Firmly compact the soil in the base of the trench, using a vibrating plate compactor before installing the levelling pad.

LEVELLING PAD (FOOTING)
SEE DIAGRAM 2

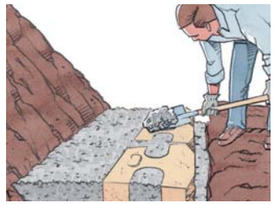
- An aggregate levelling pad is made of a good compactible base material - e.g. MOT Type 1, 20-40mm Aggregate with fines, Crusher Run or similar.
- The pad must be 150mm deep (after compaction) and must extend the full width of the excavation trench.
- Fully compact the aggregate, using a vibrating plate compactor, making sure it is level front-to-back and side-to-side.
- If the ground levels along the wall length slope by more than 200mm, the levelling pad must be stepped up to match the slope of the ground.

BASE COURSE
SEE DIAGRAM 3

- The most important step in the construction process.
- Always randomly select and mix blocks from a minimum of three packs to help achieve a balanced colour blend.
- Begin laying blocks at the lowest elevation of the wall.
- The base course blocks must be fully bedded and lie completely flat on the levelling pad.
- Lay the first block, levelling it front to back and side to side.
- Place the blocks side by side, flush against each other, making sure the blocks are in full contact with the levelling pad. Ensure blocks are level in both directions with a spirit level.
- Use a string line along the back of the blocks to align the wall units, or evenly align the back of the units (not the front) to form smooth and consistent curves.
- If the wall site is on an incline, do not slope the blocks; step them up so they remain consistently level.

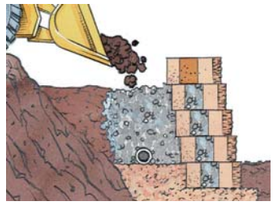
CONSTRUCTION OF THE NEXT COURSE - SEE DIAGRAMS 4 AND 5

- Always randomly choose and mix blocks from a minimum of three packs to help achieve a balanced colour blend.
- Clean any debris off the top of the blocks.
- Place the second course of blocks on top of the base course. Maintain running bond by placing the units in a staggered relationship to the course beneath.
- Push the block forward towards the front of the wall to ensure the locator cam or rear lip is tightly located against the block below.
- Backfill with drainage aggregate directly behind the block, adding 200mm at a time.
- The drainage aggregate should be 15-20mm clean or 'no fines' aggregate and should extend at least 300mm back from the rear of the wall.
- Fill all voids between each wall unit with drainage aggregate. Block cores must also be fully filled.

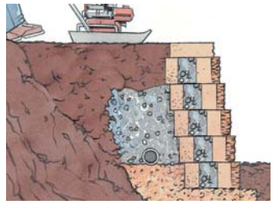


CORE FILL
Diagram 5

DRAINAGE PIPE
Diagram 6



DRAINAGE AGGREGATE
Diagram 7



COMPACTION
Diagram 8

DRAINAGE DESIGN
SEE DIAGRAMS 6 AND 7

- Each project is unique. The ground levels on the site will determine at what level to install the perforated drainage pipe, but generally the drainage pipe is positioned as low as possible behind the wall so water drains down, out and away from the wall into a storm drain, or to an area lower than the wall.
- The perforated drainage pipe should be placed in the middle point of the 300mm drainage zone.
- You may need to place and backfill several courses to achieve the proper drainage level. For best results, consider covering the perforated drainage pipe with a geotextile sock to act as a filter.

COMPACTION
SEE DIAGRAM 8

- Shovel suitable compactible backfill material behind the drainage aggregate and compact the fill (not he drainage aggregate) with a hand-operated compactor.
- Make sure the aggregate is level with or slightly below the top of the base course.
- Place soil in front of the base course and fully compact. The base course must be buried.
- Continue to fill and compact the backfill as each course is constructed.
- Self propelled compaction equipment should not be used within 1.2 metres of the wall units.

Full installation guidelines are available for each block system from Acheson & Glover.

REINFORCEMENT
FOR WALLS ABOVE 1000MM HIGH

- Geosynthetic reinforcement is generally required for walls taller than 1000mm.
- For walls taller than 1000mm a suitably qualified engineer must be consulted for design assistance. Contact Acheson & Glover for names and contact details of engineers in your area.

FINISH LEVELS AND SURFACE DRAINAGE

- Protect the wall with a finished ground level at the top and bottom.
- To ensure proper water drainage away from the wall, use a minimum of 200mm of soil with low permeability. This will minimize water seeping into the soil and drainage aggregate behind the wall.

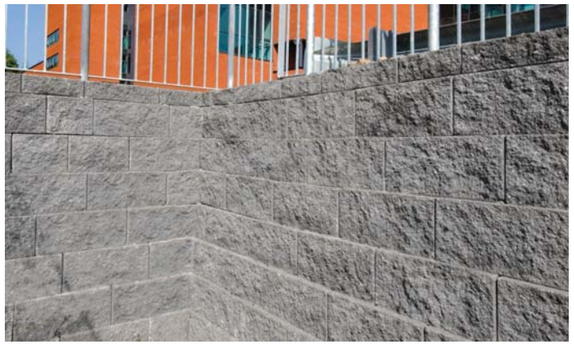
SITE CLEANING AND RESTORATION

- Brush off the wall and clean up any debris from the construction process.
- Following these best practices for construction will ensure the successful construction of an Anchor Vertica® Wall.

SAFE OPERATING PROCEDURES SHOULD BE PLANNED AND ESTABLISHED FROM THE BEGINNING OF THE PROJECT. PREPARATION IS KEY.

EXPLORE YOUR CREATIVITY THROUGH
FUNCTIONAL DESIGN FLEXIBILITY.

CORNER DETAILS



Vertica Straight Cut, Basalt

Diamond, Canelletto

INSIDE CORNERS

BASE COURSE

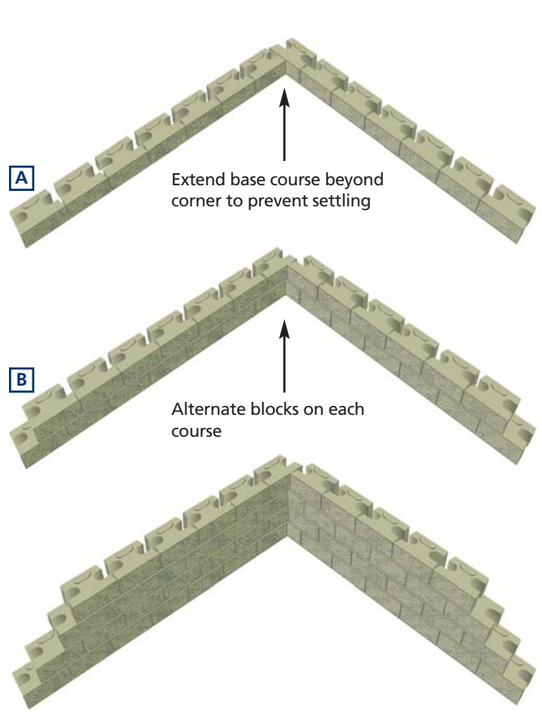
A To create an inside 90° corner, begin by placing a block at the corner. Then lay a second block perpendicular to the first and continue laying out the rest of the base course working from the corner out.

NEXT COURSE

B On the second course, place all blocks in a running bond along one side of the corner. Once the second course of one wall is established, begin the second course of the adjacent wall. Several blocks away from the corner, position full blocks in a running bond. Continue the running bond back towards the corner, until the gap becomes less than a full unit. A split unit* will then be required to maintain running bond away from the corner. Measure the length of the unit required and split to fit.

Block placement in the corner must alternate in direction with each succeeding course. The locating cam of the block being overlaid within the corner should be removed manually using a hammer and chisel, and these units should be bonded in place using a concrete adhesive.

*Cutting or splitting blocks - Use a hydraulic or mechanical splitter, or split manually by using a hammer and chisel to score the block on all sides. A circular masonry saw may also be used.



INSIDE CORNERS - REINFORCEMENT

FIRST COURSE WITH REINFORCEMENT

A To install reinforcement on an inside 90° corner, begin by checking the wall plan to determine reinforcement lengths and elevations. Cut reinforcement to the lengths shown in the wall plan, paying attention to the reinforcement strength direction.

Next, determine the proper placement of the reinforcement by dividing the proposed height of the wall by four. This represents the distance that reinforcement must extend beyond the front of the adjoining wall. Measure this distance from the front of the adjoining wall and begin the grid placement here.

Example: If overall wall height is 1.2 metres, the reinforcement extension would be 300mm.

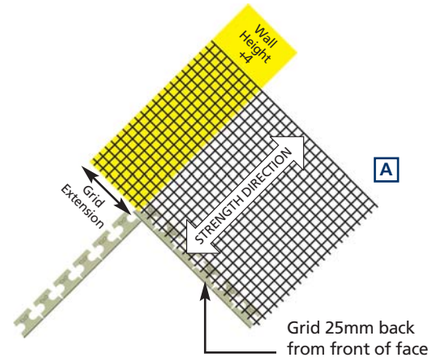
Make sure the grid is placed 25mm back from the face of the block below and runs along the back of the adjoining wall.

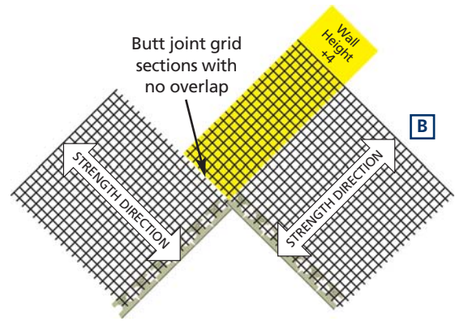
B Place the next section of reinforcement on the adjoining wall. The reinforcement must not overlap and should lie flush with previously placed sections. Once reinforcement is in place, the next course of blocks can be installed.

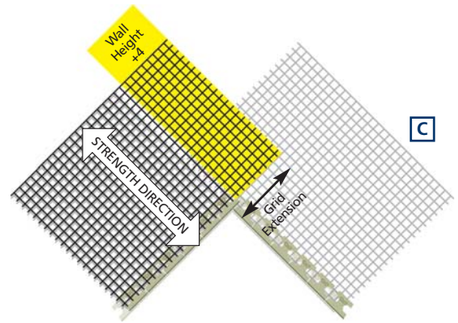
SECOND COURSE WITH GEOGRID

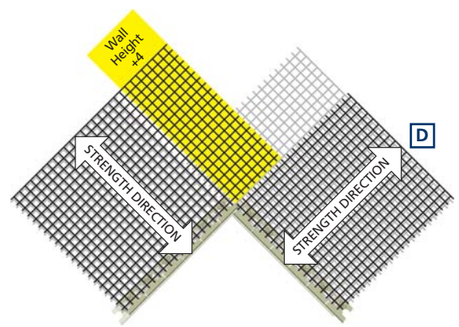
C The first section of grid on this course is placed using the same formula that determines placement in front of the adjoining wall. Alternate the reinforcement extension to the previous reinforced course on each course where reinforcement is required.

D Place the next section of reinforcement on the adjoining wall. The reinforcement must not overlap and should lie flush with previously placed sections. Once reinforcement is in place, the next course of block can be installed.



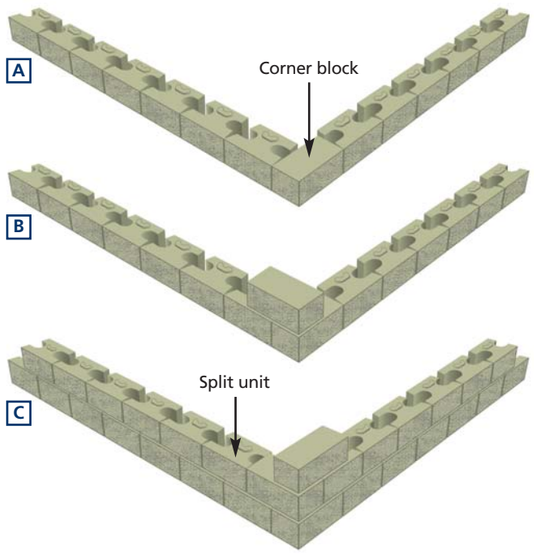






Diamond, Brindle

Diamond, Basalt



OUTSIDE CORNERS

BASE COURSE

A To build an outside 90° corner, begin by placing a corner base course working from the corner block outwards.

SECOND COURSE

B Lay a corner block perpendicular to the one below and fix the block in place with concrete adhesive. Two or three blocks away from the corner lay full blocks, maintaining running bond with the course below. Lay blocks back towards the corner block, leaving space for the final split units required to complete the course.

C Use split units immediately adjacent to the corner block to complete the course. Continue to alternate the corner unit orientation with each course and always use a concrete adhesive on all corner blocks and split units. Use split units* as necessary to maintain running bond.

*Cutting or splitting blocks - Use a hydraulic or mechanical splitter, or split manually by using a hammer and chisel to score the block on all sides. A circular masonry saw may also be used.

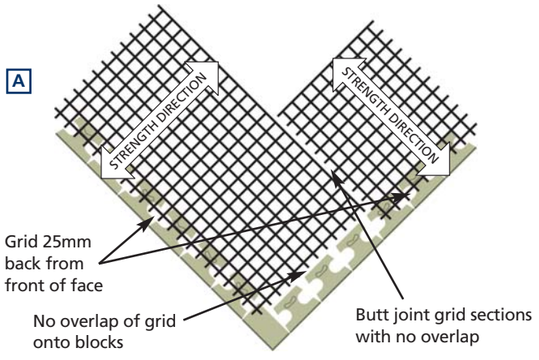
OUTSIDE CORNERS - REINFORCEMENT

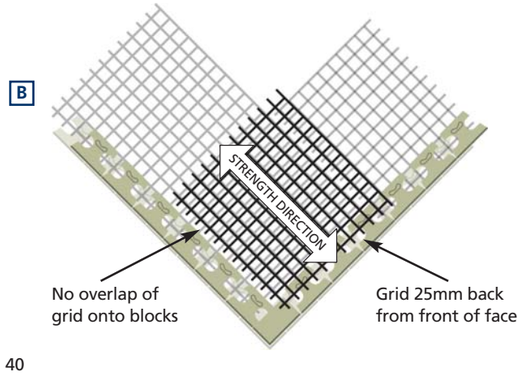
FIRST COURSE WITH REINFORCEMENT

A Begin by checking the wall plans from the engineer to determine reinforcement lengths and elevations. At each reinforced course, lay a section of reinforcement near the corner wall, ensuring that it is placed 25mm back from the wall face in one direction, whilst running along the back, but not overlapping the adjacent wall. Ensuring no grid overlap occurs, continue the grid reinforcement along both legs of the wall, to the reinforcement lengths specified. At this stage, there will still be several blocks which are not in contact with any reinforcement. Grid must not be directly overlaid, so this reinforcement must be incorporated at the next block level up. Lay the next course of blocks and before backfilling, mark the portion of the wall without reinforcement. This is important, because once the backfill is in place this cannot be seen.

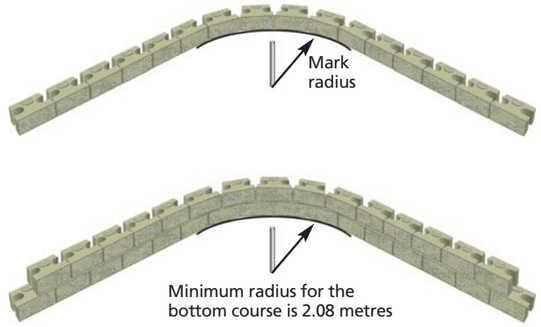
B Back fill and compact behind the course of blocks. Cut an additional length of grid to correspond to the marked section of blocks. This grid should be cut to the length shown in the drawings and laid so that it is placed 25mm back from the wall face, whilst running along the back, but not overlapping the adjacent wall.

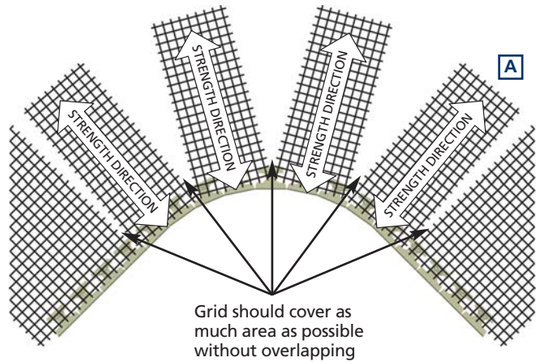
Repeat this procedure at each reinforced layer within the wall, alternating the alignment of the additional layer of reinforcement at each elevation.

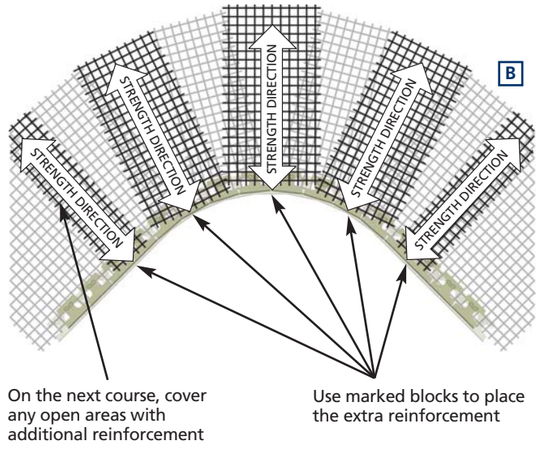




CURVE DETAILS







INSIDE CURVES

MINIMUM RADIUS

When building an inside curve, the minimum radius allowed (when measured to the front face of the block) for an Anchor Vertica® wall is 2.08 metres. Check the wall plan to ensure the radius of the base courses of any inside curves are greater than 2.08 metres.

BASE COURSE

Begin by driving a stake into the ground at the desired centre of the curve. Attach a string and rotate it in a circle around the stake to mark the radius in the levelling pad (footing or base). Align each block face with the radius curve and ensure level placement from side to side and front to back.

ADDITIONAL COURSES

On each course, the back of the locating cam of each block must be in contact with the units below to ensure structural stability. The setback of the block will cause the radius of each course to gradually increase and eventually affect the running bond of the wall. To maintain proper running bond, use split units* as needed. Once a split unit is cut to size, bond in place with a concrete adhesive.

*Cutting or splitting blocks - Use a hydraulic or mechanical splitter, or split manually by using a hammer and chisel to score the block on all sides. A circular masonry saw may also be used.

INSIDE CURVES - REINFORCEMENT

Retaining walls are designed assuming 100% coverage of the reinforcement.

When building a curve the reinforcement will have gaps. To ensure 100% coverage, additional lengths of reinforcement are used to fill those gaps on the next course of blocks. Never overlap the grid on one course to avoid slippage.

FIRST COURSE WITH REINFORCEMENT

A Cut reinforcement to the lengths specified in the wall plan. Lay segments of reinforcement within 25mm of the face of the wall, making sure that the strength direction of each section is perpendicular to the wall face. Place the next course of blocks, marking the backs of blocks to identify the middle of un-reinforced areas. Backfill and compact.

NEXT COURSE

B On the next course, centre subsequent sections of the reinforcement on the marked blocks to ensure full reinforcement coverage. This step is important because when this course is backfilled, it is impossible to locate the unreinforced areas. Repeat this procedure throughout the construction of the radius curve when reinforcement is required.

OUTSIDE CURVES

MINIMUM RADIUS

The radius of the top course of an Anchor wall will always be less than the radius of the base course because of the batter of the wall.

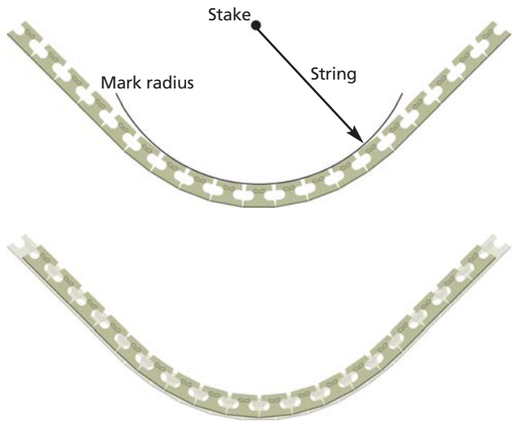
For Anchor walls built with outside curves the minimum radius of the top course of blocks must not be less than a radius of 1.82 metres.

The table below shows the minimum allowed radius of the base course for various wall heights. For each wall height, provided that the actual base course radius is greater than the minimum shown, the radius of the top course will always be greater than the allowed minimum of 1.82 metres.

WALL HEIGHT (METRES)	MINIMUM ALLOWED RADIUS OF BASE COURSE (METRES) TO BACK OF BLOCK
2.40	2.12
2.20	2.10
2.00	2.07
1.80	2.05
1.60	2.02
1.40	2.00
1.20	1.97
1.00	1.95
0.80	1.92
0.60	1.90
0.40	1.87
0.20	1.85

Example: A 1.60 metre wall is being built with an outside curve. The radius of the base course is 2.15 metres. The minimum allowed radius of a base course for a 1.60m high wall is 2.02 metres, so the curve can 'just' be built successfully.

Diamond, Basalt



BASE COURSE

Drive a stake into the ground at the desired centre of the curve. Attach a string and rotate it in a circle around the stake to mark the radius in the levelling pad (footing or base). Align the back of the block (not the front) with the radius curve and ensure level placement from side to side and front to back.

ADDITIONAL COURSES

On each course, the back of the locating cam of each block must be in contact with the units below to ensure structural stability. The setback of the block will cause the radius of each course to gradually decrease and eventually affect the running bond of the wall. To maintain proper running bond, use split units* as needed. Once a split unit is cut to size, bond in place with a concrete adhesive.

*Cutting or splitting blocks - Use a hydraulic or mechanical splitter, or split manually by using a hammer and chisel to score the block on all sides. A circular masonry saw may also be used.

OUTSIDE CURVES - REINFORCEMENT

A Retaining walls are designed assuming 100% coverage of the reinforcement. When building a curve the reinforcement will have gaps. To ensure 100% coverage, additional lengths of reinforcement are used to fill those gaps on the next course of blocks. Do not overlap the grid on one course to avoid slippage.

FIRST COURSE WITH REINFORCEMENT

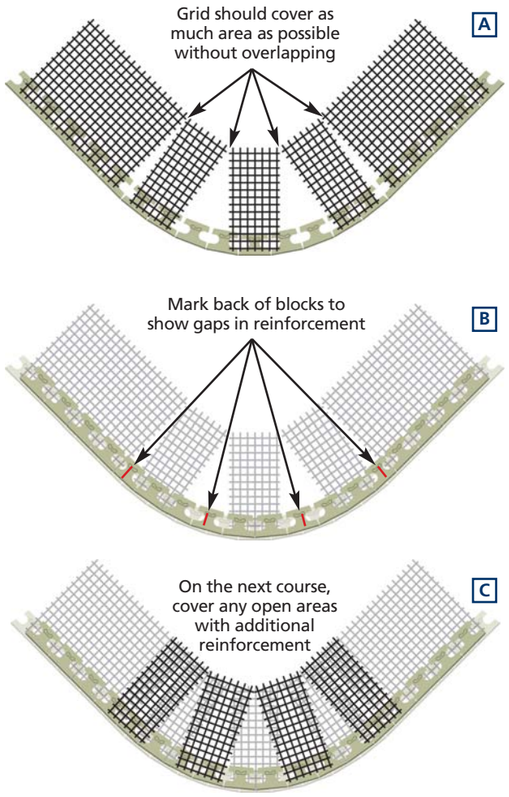
B Cut reinforcement to the lengths specified in the wall plan. Lay sections of the reinforcement within 25mm of the face of the wall with the strength direction perpendicular to the wall face. Avoid overlapping the reinforcement by separating each section.

NEXT COURSE

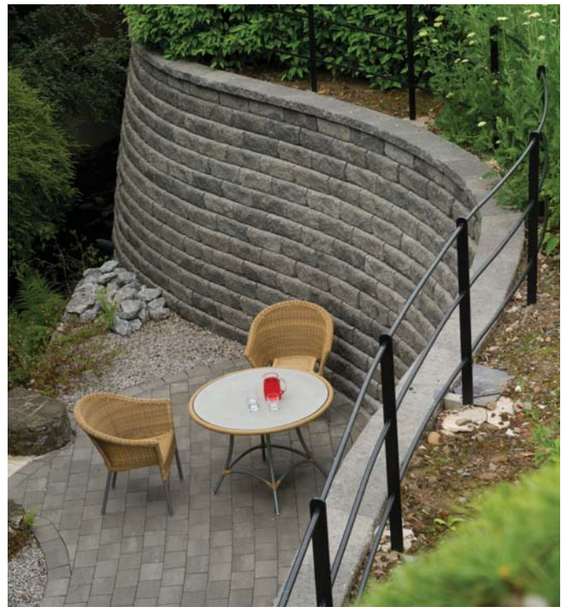
Place the next course of blocks, marking the backs of blocks to identify unreinforced areas. This step is important because when this course is backfilled, it is impossible to locate the un-reinforced areas.

C Use the marked blocks as a guide, placing subsequent sections of reinforcement to overlap the gaps left on the previous course. This will ensure total reinforcement coverage.

Repeat this procedure throughout the construction of the radius curve whenever reinforcement is required.



Vertica Straight Cut, Canelletto



Bayfield, Basalt

Bayfield, Canelletto

RETAINING WALL SYSTEM

Please note minimum order quantities are required for certain colours.
We advise you speak to a member of the sales team in advance of order placement.

TECHNICAL INFORMATION

REAR LIP LOCATOR PRODUCTS:

ASPEN STONE® (Ireland only)

BLOCKS:	SIZE: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	BOTTOM COURSE RADIUS (m):	TOP COURSE RADIUS (MAX. 6 COURSE HIGH) (m):	COMPRESSIVE STRENGTH [1] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² / LM PER PACK:	UNITS PER M² / Lm:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
ASPEN STONE BLOCK	L 295 x D 180 x H 100	9.3 kg	10.6°	0.7m	0.5m	18 N/mm²	Stone Cut	Stretcher	96	2.88m²	33 Blocks / m²	0.89 t	BASALT / CANELLETTO / CASHEL
CAPPING BLOCK	L 300 x D 200 x H 60	6.9 kg	N/A	N/A	N/A	N/A	Straight Cut	Stretcher	160	42 Lm	3.77 Caps / Lm	1.10 t	BASALT / CANELLETTO / CASHEL

(1) Compressive strength is determined by a section cut from a block.

BAYFIELD®

BLOCKS:	SIZE: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	MIN. INSIDE RADIUS (TO BACK OF BLOCK ON BOTTOM COURSE) (m):	MIN. OUTSIDE RADIUS (TO BACK OF BLOCK ON TOP COURSE) (m):	COMPRESSIVE STRENGTH [1] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² PER PACK:	UNITS PER M² / Lm:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
BAYFIELD BLOCK	L 435 x D 250 x H 150	23.5 kg	10.6°	2.4m	1.2m	24 N/mm²	Stone Cut	Stretcher	54	3.5m²	15.36 Blocks / m²	1.27 t	BASALT / CANELLETTO / CASHEL
CORNER BLOCK	L 435 x D 218 x H 150	29.5 kg	10.6°	10.6m	N/A	24 N/mm²	Stone Cut	Stretcher	48	N/A	N/A	1.42 t	BASALT / CANELLETTO / CASHEL
SHORTCUT™ CAP	L 200 x D 330 x H 75 (L 175 Short Side)	10.3 kg	N/A	N/A	N/A	N/A	Straight Split	Stretcher	120	N/A	5.4 Caps / Lm	1.24 t	BASALT / CANELLETTO / CASHEL

(1) Compressive strength is determined by a section cut from a block.

DIAMOND®

BLOCKS:	SIZE: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	MIN. INSIDE RADIUS (TO BACK OF BLOCK ON BOTTOM COURSE) (m):	MIN. OUTSIDE RADIUS (TO BACK OF BLOCK ON TOP COURSE) (m):	COMPRESSIVE STRENGTH [1] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² PER PACK:	UNITS PER M² / Lm:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
DIAMOND BLOCK	L 435 x D 300 x H 150	25 kg	10.6°	2.7 m	0.9m	24 N/mm²	Straight Cut	Stretcher	54	3.5m²	15.4 Blocks / m²	1.35 t	BASALT / CANELLETTO / CASHEL
CORNER BLOCK	L 435 x D 218 x H 150	29.5 kg	N/A	N/A	N/A	24 N/mm²	Straight Cut	Stretcher	48	N/A	N/A	1.42 t	BASALT / CANELLETTO / CASHEL
SHORTCUT™ CAP	L 200 x D 330 x H 75 (L 175 Short Side)	10.3 kg	N/A	N/A	N/A	N/A	Straight Split	Stretcher	120	N/A	5.4 Caps / Lm	1.24 t	BASALT / CANELLETTO / CASHEL

(1) Compressive strength is determined by a section cut from a block.

RETAINING WALL SYSTEM

Please note minimum order quantities are required for certain colours.
We advise you speak to a member of the sales team in advance of order placement.

TECHNICAL INFORMATION

LUG LOCATOR PRODUCTS:

REGAL STONE®

BLOCKS:	SIZE [1]: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	MIN. INSIDE RADIUS (TO BACK OF BLOCK ON BOTTOM COURSE) (m):	MIN. OUTSIDE RADIUS (TO BACK OF BLOCK ON TOP COURSE) (m):	COMPRESSIVE STRENGTH [1] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² PER PACK:	UNITS PER M²:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
REGAL STONE BLOCK	L 220 x D 300 x H 150	15 kg	0° (vertical)	0.5m	1.0m	24 N/mm²	Straight Cut	Stretcher	60	1.98m²	30 Blocks / m²	0.90 t	BASALT / CANELLETTO / CASHEL
CORNER BLOCK	L 187 x D 300 x H 150	17 kg	0° (vertical)	N/A	N/A	24 N/mm²	Straight Cut	Stretcher	80	N/A	N/A	1.36 t	BASALT / CANELLETTO / CASHEL
SHORTCUT™ CAP	L 200 x D 330 x H 75 (L 175 Short Side)	10.3 kg	N/A	N/A	N/A	N/A	Straight Split	Stretcher	120	N/A	5.4 Caps / Lm	1.24 t	BASALT / CANELLETTO / CASHEL

(1) Compressive strength is determined by a section cut from a block.

VERTICA®

BLOCKS:	SIZE [1]: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	MIN. INSIDE RADIUS (TO BACK OF BLOCK ON BOTTOM COURSE) (m):	MIN. OUTSIDE RADIUS (TO BACK OF BLOCK ON TOP COURSE) (m):	COMPRESSIVE STRENGTH [1] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² PER PACK:	UNITS PER M² / Lm:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
VERTICA BLOCK	L 457 x D 280 x H 200	37.7 kg	4° / 7.4°	2.4m	1.8m	BBA 30 N/mm² Non BBA 24N/mm²	Straight/Stone Cut	Stretcher	45	4.10m²	10.9 Blocks / m²	1.70 t	BASALT / CANELLETTO / CASHEL
CORNER BLOCK	L 457 x D 228 x H 200	43 kg	4° / 7.4°	N/A	N/A	BBA 24 N/mm² Non BBA 24N/mm²	Straight/Stone Cut	Stretcher	40	N/A	N/A	1.72 t	BASALT / CANELLETTO / CASHEL
SHORTCUT™ CAP	L 200 x D 330 x H 75 (L 175 Short Side)	10.3 kg	N/A	N/A	N/A	N/A	Straight Split	Stretcher	120	N/A	5.4 Caps / Lm	1.24 t	BASALT / CANELLETTO / CASHEL

(1) Compressive strength is determined by a section cut from a block.
(2) Refers to the average coverage length per block for straight walls.

VERTICA® CAP BLOCK
NOW AVAILABLE MADE TO ORDER
Vertica Technical Data available to download online

Vertica Walling is BBA certified for use in conjunction with Paragrid geogrids (Stone Cut 7° only). **Agrément Certificate No. 03/4032**.

FLANGE LOCATOR PRODUCT:

LANDMARK®

BLOCKS:	SIZE [1]: (mm)	APPROX. MASS PER BLOCK: (Kg)	SET BACK / FACE ANGLE: (degree)	MIN. INSIDE RADIUS (TO BACK OF BLOCK ON BOTTOM COURSE) (m):	MIN. OUTSIDE RADIUS (TO BACK OF BLOCK ON TOP COURSE) (m):	COMPRESSIVE STRENGTH [2] (N/mm²):	FACE FINISH:	FACE GEOMETRY:	UNITS PER PACK:	M² PER PACK:	UNITS PER M² / Lm:	WEIGHT PER PACK:	COLOUR AVAILABILITY: (other colours available - please ask for more information)
LANDMARK FULL HEIGHT	L 200 x D 300/320[3] x H 380	39 kg	25mm (3.8°)	2.1m	2.45m	30 N/mm²	Straight Cut	Soldier	45	3.41m²	13.2 Blocks / m²	1.76 t	BASALT / CANELLETTO / CASHEL
TAPERED FULL HEIGHT	L 200 x D 300/320[3] x H 380	39 kg	25mm (3.8°)	2.1m	2.45m	30 N/mm²	Straight Cut	Soldier	45	3.41m²	13.2 Blocks / m²	1.76 t	BASALT / CANELLETTO / CASHEL
HALF HEIGHT	L 190 x D 300/310[3] x H 200	23 kg	12mm (3.8°)	2.1m	2.45m	30 N/mm²	Straight Cut	Soldier	36	1.37m²	26.3 Blocks / m²	0.83 t	BASALT / CANELLETTO / CASHEL
FOUNDATION	L 190 x D 300 x H 200	22 kg	N/A	N/A	N/A	30 N/mm²	Straight Cut	Soldier	48	N/A	0.019 Lm / Block	1.06 t	BASALT / CANELLETTO / CASHEL
SHORTCUT™ CAP	L 200 x D 330 x H 75 (L 175 Short Side)	10.3 kg	N/A	N/A	N/A	N/A	Straight Split	Stretcher	120	N/A	5.4 Caps / Lm	1.24 t	BASALT / CANELLETTO / CASHEL

(1) To give the staggered appearance Anchor Landmark has two different sized blocks.
(2) Compressive strength is determined by a section cut from a block.
(3) Depth at top and bottom of block varies due to inclined split face.

Landmark Wall System is BBA Roads & Bridges certified for use in conjunction with Enkagrid PRO geogrids. Agrément Certificate No. 04/R138.

THE ENVIRONMENT

A&G recognise that the activities of the organisation could potentially have a significant impact on the environment. In order to minimise this impact, we take a proactive rather than reactive stance on environmental issues. In recognition of these efforts, we have won a number of environmental awards.

MEMBER OF THE GREEN ORGANISATION

'Green' Facts for A&G

Concrete segmental retaining wall units are rated 'A+' under the Green Guide. Acheson & Glover have an internal environmental management system.

ISO 14001 CERTIFICATION

BS EN ISO 14001 is a comprehensive tool that provides all industry with a way of controlling environmental impacts. A&G were awarded certification for a multi-site management system (across 8 NI manufacturing sites and 3 quarries) that documents environmental impacts including: Energy Waste, Production Waste and Carbon Emissions.

OHSAS 18001 CERTIFICATION

OHSAS 18001:2007 is an international occupational health and safety management system that provides a framework to control health and safety risks and improve the health and safety of employees.

A&G was awarded certification because of the high standards of safety awareness across all of its operations.

Design professionals can trust that A&G will always apply best practice in terms of health and safety.

THE GREEN ORGANISATION

A&G have been awarded Bronze membership status within The Green Organisation, one of the country's leading environment groups. Membership is restricted to companies, councils and communities that can demonstrate the effective measures that have been introduced for environmental benefit and A&G was awarded the distinction of Bronze membership status as a result of its actively adopting measures that will continue to improve their environmental performance for generations to come.

FOR MORE DETAILED INFORMATION PLEASE DOWNLOAD A COPY OF OUR ENVIRONMENTAL BOOKLET AT:
www.acheson-glover.com/downloads

ENVIRONMENTAL AWARDS

International Green Apple Award - Pomeroy Quarry for the White Clawed Crayfish Habitat (now an arc site).

Environmental Award Scheme - Recycling.

Gold Standard, HSENI - Fivemiletown Quarry and Production facilities in recognition of its commitment to Health and Safety.

Hard Rock Quarry of the Year Award - Belcoo Quarry at the prestigious Plant & Civil Engineer magazine's 'Plant, Construction & Quarry awards.

Environmental Award - Belcoo Plant at Northern Ireland's prestigious Belfast Telegraph business awards.

Green Hero Award - Granulated Lime Plant in Belcoo and Manufacturing Facility in Dungannon at National Green Apple Environmental Awards.

Green Champion of Ireland - Granulated Lime Plant in Belcoo at National Green Apple Environmental Awards.

Gold Award - Dungannon Plant for Sustainable Urban Drainage System.

National Green Champion for Northern Ireland Business - White-clawed Crayfish project in Pomeroy at the National Green Apple Environmental Awards.

QPA Water Management Award - Dungannon Plant in the Quarry Products for Northern Ireland scheme.

QPA Dust Reduction Award - Magherafelt Plant in the Quarry Products for Northern Ireland Environmental Awards Scheme.

Biodiversity Project of the Year - A joint initiative with Ballinderry River Enhancement Association to protect a globally threatened species - the White-clawed Crayfish, which live in the Ballinderry River and Lough Neagh Wetlands at the Sustainable Ireland Energy, Environmental & Waste Management Awards.

MAINTENANCE, GUIDANCE

Diamond, Basalt

As the retaining walls are all mortarless systems, caps should be applied using a concrete adhesive, eliminating the need for mortar and the associated risk of mortar stains.

General Wear
Clean using a stiff brush, mild detergent and water from a low pressure hose.

Remedial Work
Any type of remedial work should be tested on a small area which is not easily seen so that it can be assessed before carrying out work on a large area.

Remedial cleaning procedures may affect the final appearance of the masonry. For your safety, make sure you use gloves, goggles, safety helmet etc.

Power Washing
Using a power hose is not recommended as it may damage the surface of the product.

Graffiti
It's best to take preventative measures if graffiti is likely to occur. Anti-graffiti systems are available. These consist of a protective sacrificial coating on the masonry which acts as a barrier against the adhesion of the graffiti.

Efflorescence
Efflorescence (also known as 'white bloom') is the milky white staining that sometimes appears early on in all quality products with a high cement content.

A temporary condition which is purely cosmetic and requires no treatment, it is hard to predict how long it may last due to varying factors such as climate conditions, location and aspect (in some cases it can take around a year to disappear).

We hope this does not detract from your enjoyment of our products and would like to stress that Acheson & Glover cannot be held responsible for this natural phenomenon.

The best course of action is to let nature take its course.

NOTES:

COLOURS & FINISHES
The colours shown in this literature are as accurate as the printing process will allow. Whilst every effort is made to match colours and represent textures, we recommend that colours and textures are chosen from actual samples of the products.

MANUFACTURE
All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process. It is for this reason that we recommend that products are selected from at least three bales, within each delivery. This will eliminate 'banding'.

CAPPING BLOCKS
A&G have introduced a new ShortCut™ Cap to their product lines. Please note: all photography shown still includes the previous capping block.

Adhesive is required for fixing caps and partial units.
For advice on Capping Blocks please contact A&G.
NB: Recommended adhesive for fixing caps and partial units - Montagefix (available from A&G).

GENERAL
All information contained in this brochure is correct at the time of going to print. We recommend that you contact our sales staff for further information at the design stage of your project for the most up-to-date information.

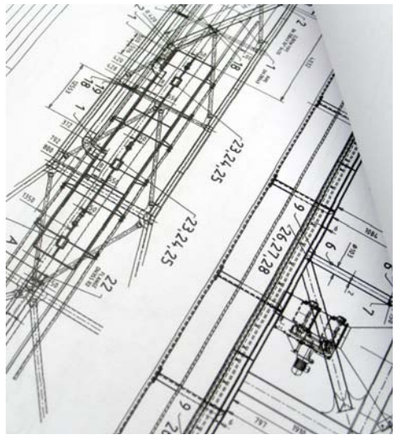
A&G reserves the right to discontinue products if necessary.

HEALTH & SAFETY
Care must be taken when handling / working with individual products to avoid risk of injury from manual handling, sharp edges, abrasive texture and dust fragments. Inhalation of any dust produced from aggregates must be avoided. Protective clothing must be worn and is activity dependant.

Further information may be obtained by contacting A&G or the HSE/HSA.

A UNIQUE AND UNBEATABLE PRODUCT RANGE, QUALITY AND SERVICE.

DESIGN SERVICE



Anchor retaining wall systems are manufactured in Ireland by Acheson & Glover and under license from Anchor Wall Systems Inc. This combined expertise in block design, block manufacture and engineering design offers a unique and unbeatable product range, quality and service available throughout the UK and Ireland.

Whether it be a fully indemnified design* or rapid technical advice Acheson & Glover can offer complete engineering support through their in-house team of Chartered Civil Engineers.

*A fee may apply for fully indemnified designs.

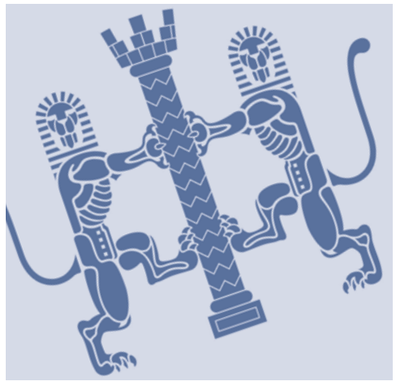
HOW TO SPECIFY

Full technical specifications for all retaining walls products are available to download from our website.

www.acheson-glover.com

Acheson & Glover is a member of the RIBA and RIAI CPD Providers Network and in-house presentations can be undertaken, by prior arrangement.

Acheson & Glover is a member of the NBS Plus Service. See each product page for NBS specifications.



PRODUCT PORTFOLIO

BUILDING ON TRADITION

The Acheson & Glover Product Portfolio contains ranges of high quality products produced using natural materials and advanced manufacturing processes.

Contact us for more information and for product availability.

BRICKS

The Acheson & Glover range of facing bricks have styles and finishes to suit every building type and helps you to create outstanding schemes.

A comprehensive selection of special shapes are available for detailing purposes, together with guidance and assistance during the design stage and an on-site advisory service.

MASONRY BLOCKS

Alphacrete® Architectural Masonry Blocks, offer architects and contractors a faster and easier way to achieve the exact design and finish they want, without problems or compromise.

Meeting every specification and conforming to BS EN771-3: 2011, Alphacrete® is available in a number of ranges, finishes and colour tones for the most demanding of uses.

PAVING & FLAGS

Acheson & Glover's paving and flags are versatile to suit the most demanding concepts, introducing a completely new dimension to design and construction.

Ideal for use in the design and construction of prestigious, private and commercial developments, allowing architects and contractors to create projects with true visual impact.

RETAINING WALLS

Anchor Retaining Wall Systems® are the ideal solution for all projects from residential landscaping and tall commercial retaining walls to civil engineered walls in the highways and rail sector.

Every Anchor system is backed up with the support of a highly qualified team of manufacturing, design and engineering specialists.

ROAD & CIVILS PRODUCTS

Acheson & Glover manufacture a range of civil engineering products, which include: manhole units, soakaways, ductile iron castings, slotted drainage channels and road gullies.

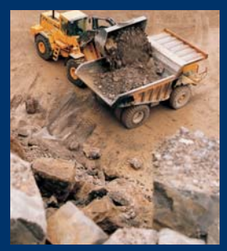
These products are manufactured to the highest standards and are used in a number of prestigious drainage schemes throughout Ireland.

PRECAST

Acheson & Glover Precast has many years experience in providing a high quality range of prestressed hollowcore floors, precast stairs, landings, balconies, terrace units, ground beams and other complementary products.

Acheson & Glover are experts in the design and use of precast concrete to suit a variety of industrial and commercial construction projects.

BLOCKS & CONCRETE



Acheson & Glover manufacture concrete blocks and concrete. These high quality products are available in a range of strengths and mixes for the full range of construction projects.

Using its own raw materials the company provides products to a consistently high quality. All products are regularly tested in the company's own laboratories as well as using independent testing stations.

Acheson & Glover

ANCHOR®
BUILD SOMETHING BEAUTIFUL

nbsPlus

network riacpd

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