

BELEGAARD



allanblock.com

RETAINING
WALL IDEA
CATALOG

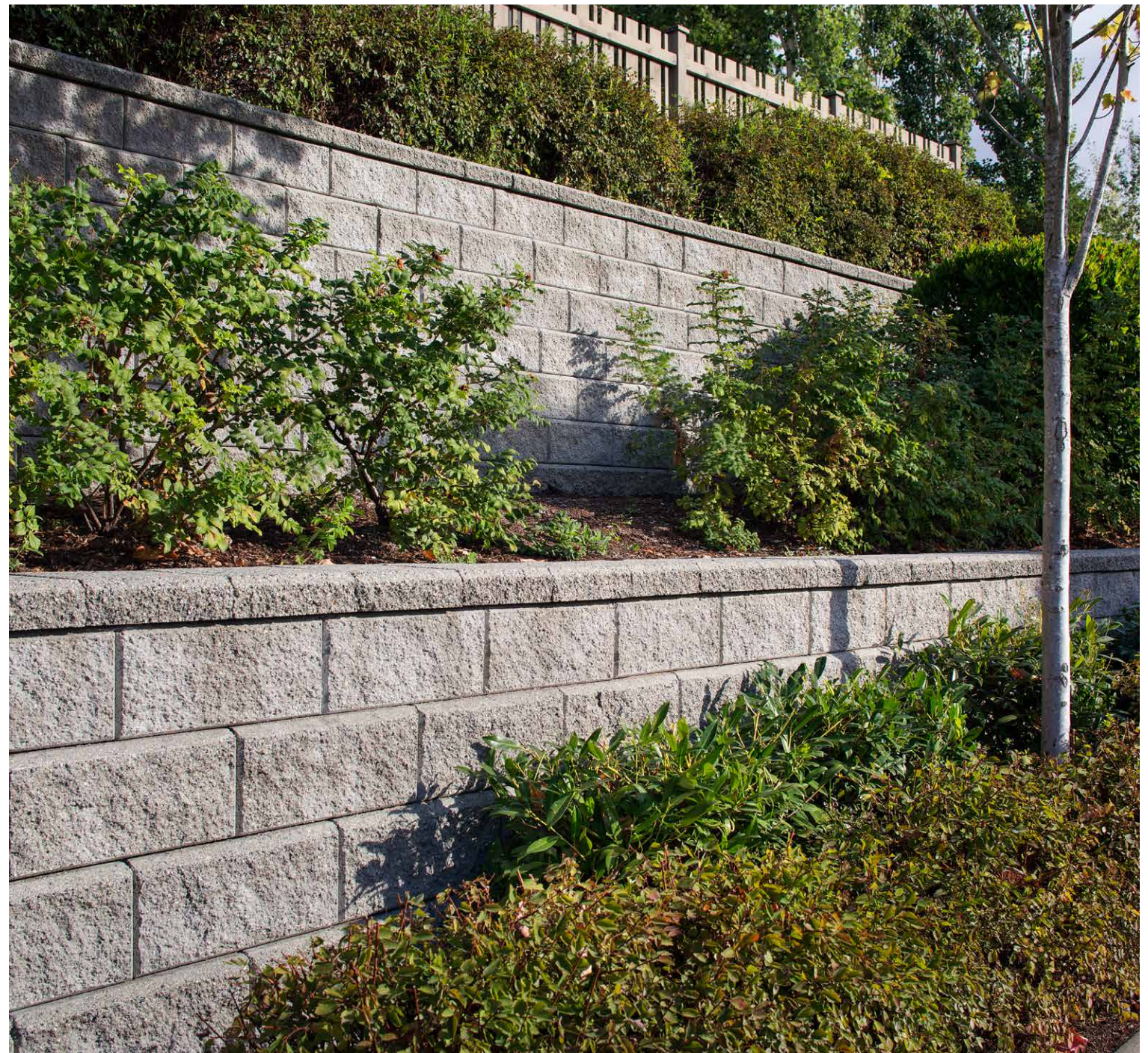
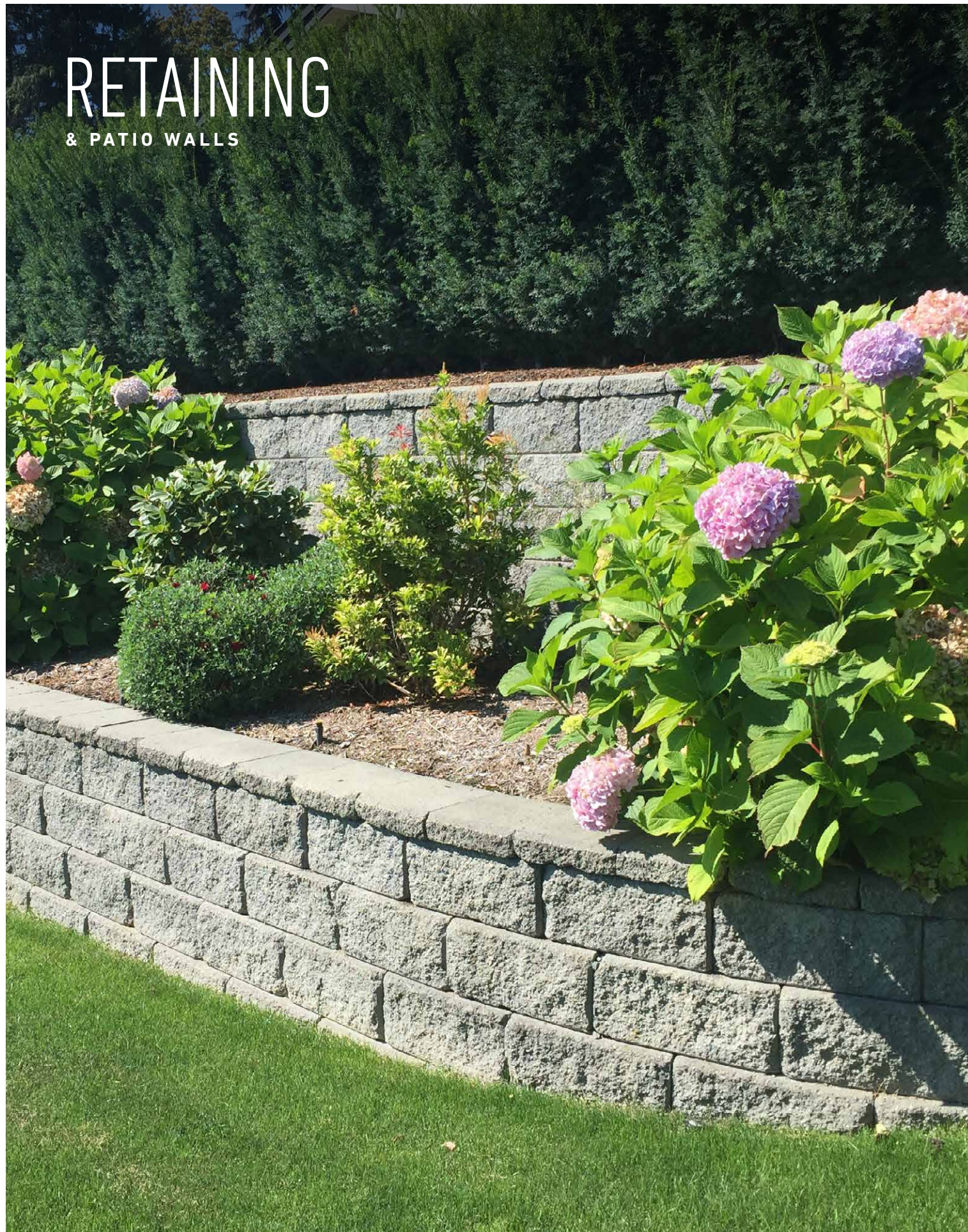


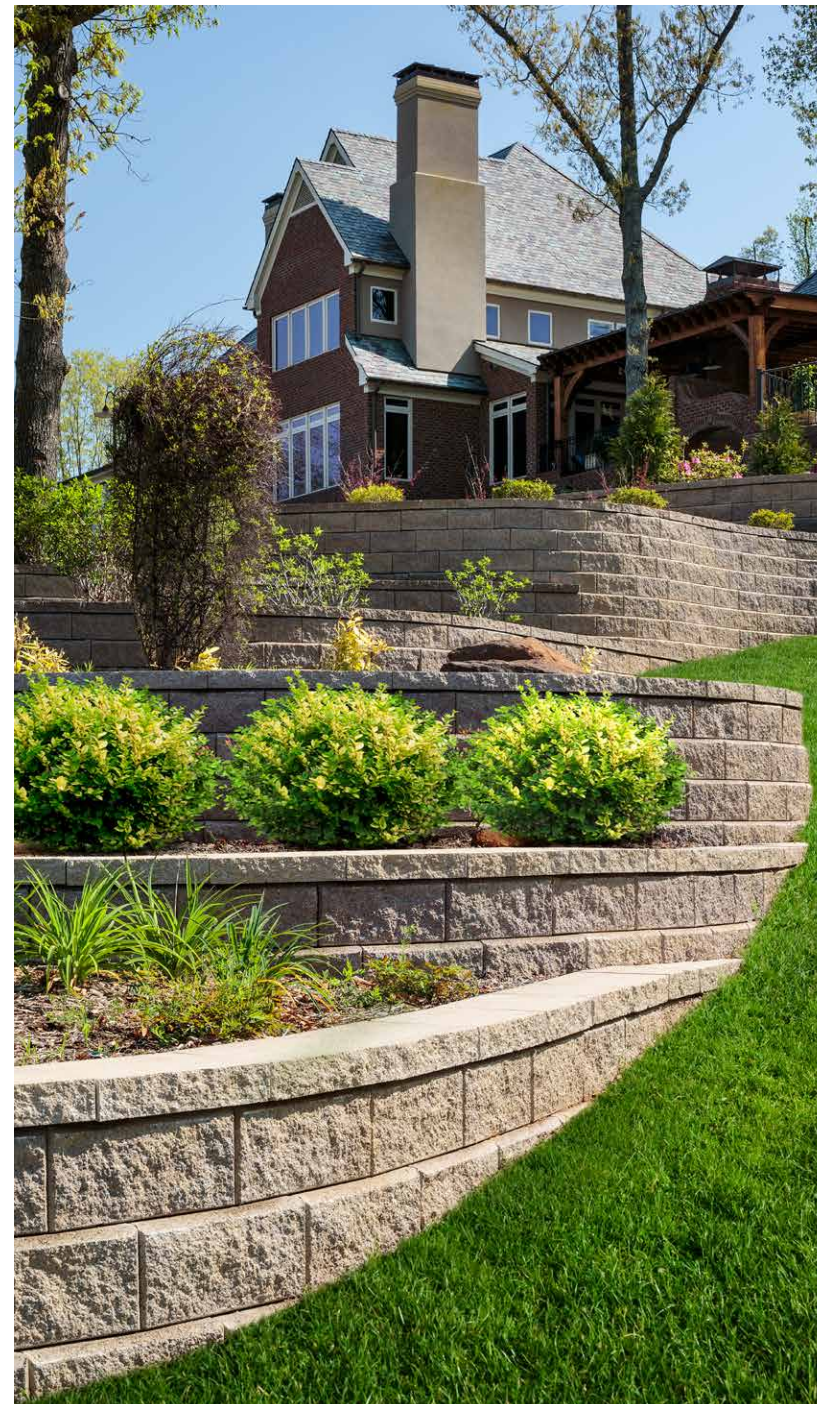
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RETAINING & PATIO WALLS



Allan Block has many products available to help you transform your outdoor living area to a backyard destination. We hope our ideas will inspire you to create your own masterpiece to enjoy for years with family and friends.



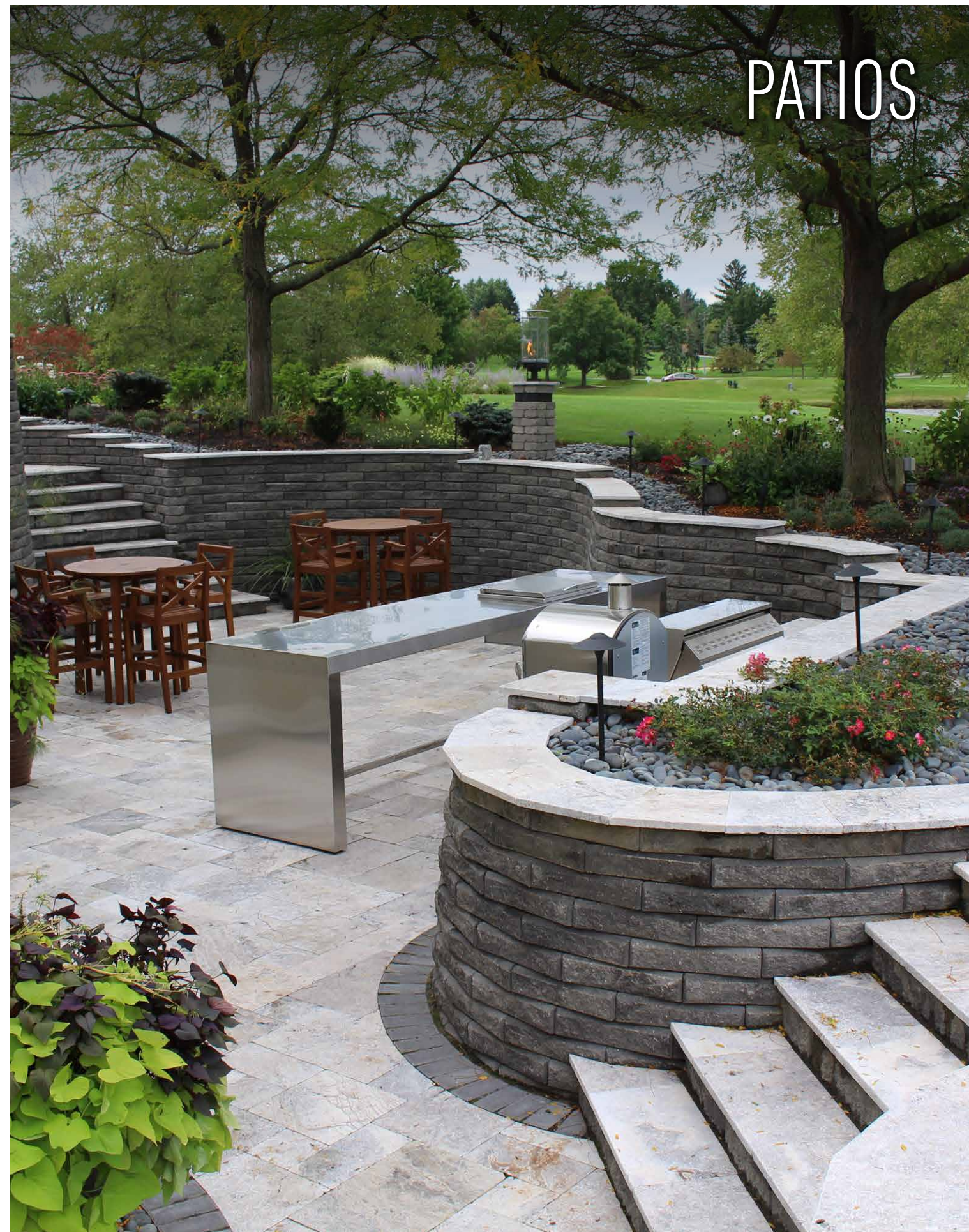
The Allan Block products are inspired by nature to help create beautiful outdoor spaces in the world we live in. We pride ourselves on the training we provide to our Allan Block network of professionals so you can be confident in your choice.



With our design flexibility, you can build strong, durable patios in any size and shape with very little maintenance.

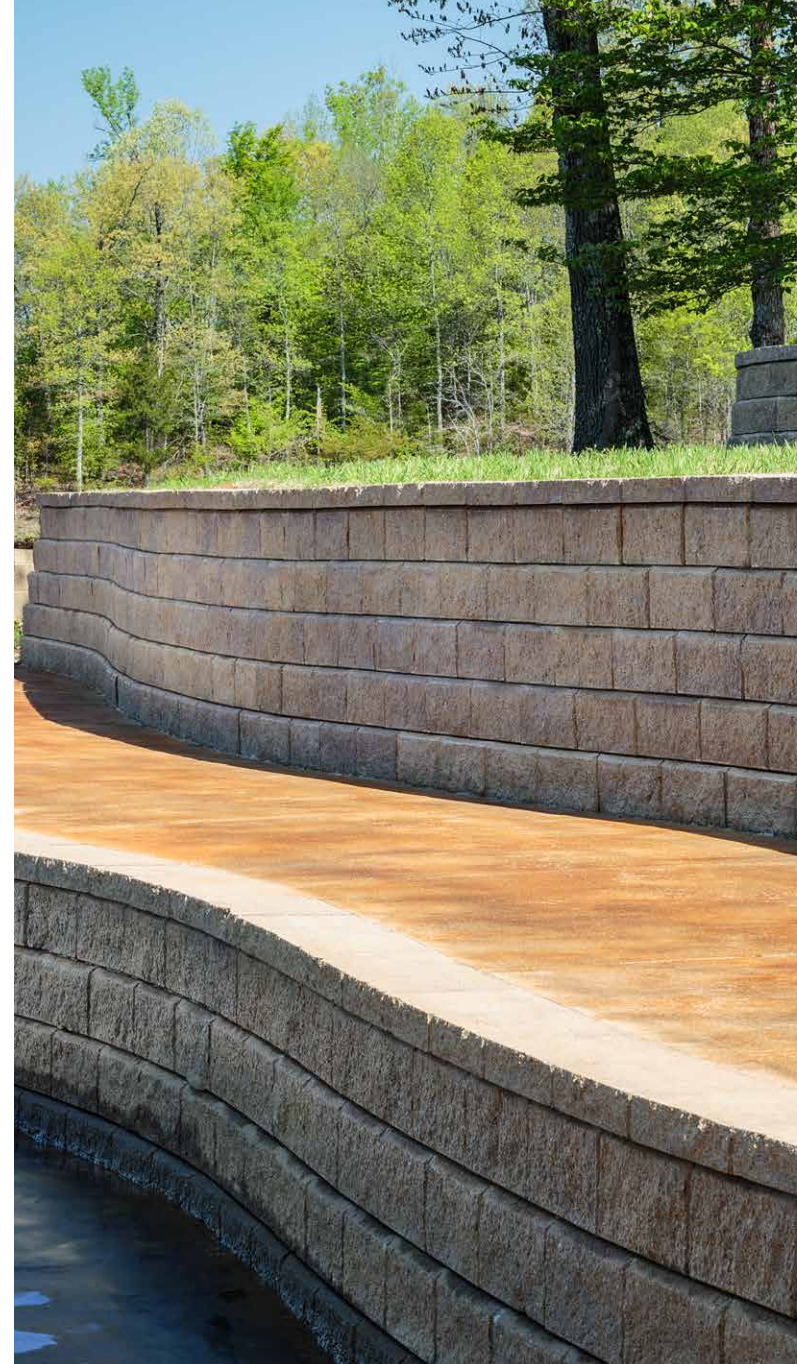


Create more usable space or multi-level patios for a quiet getaway or to entertain family and friends.

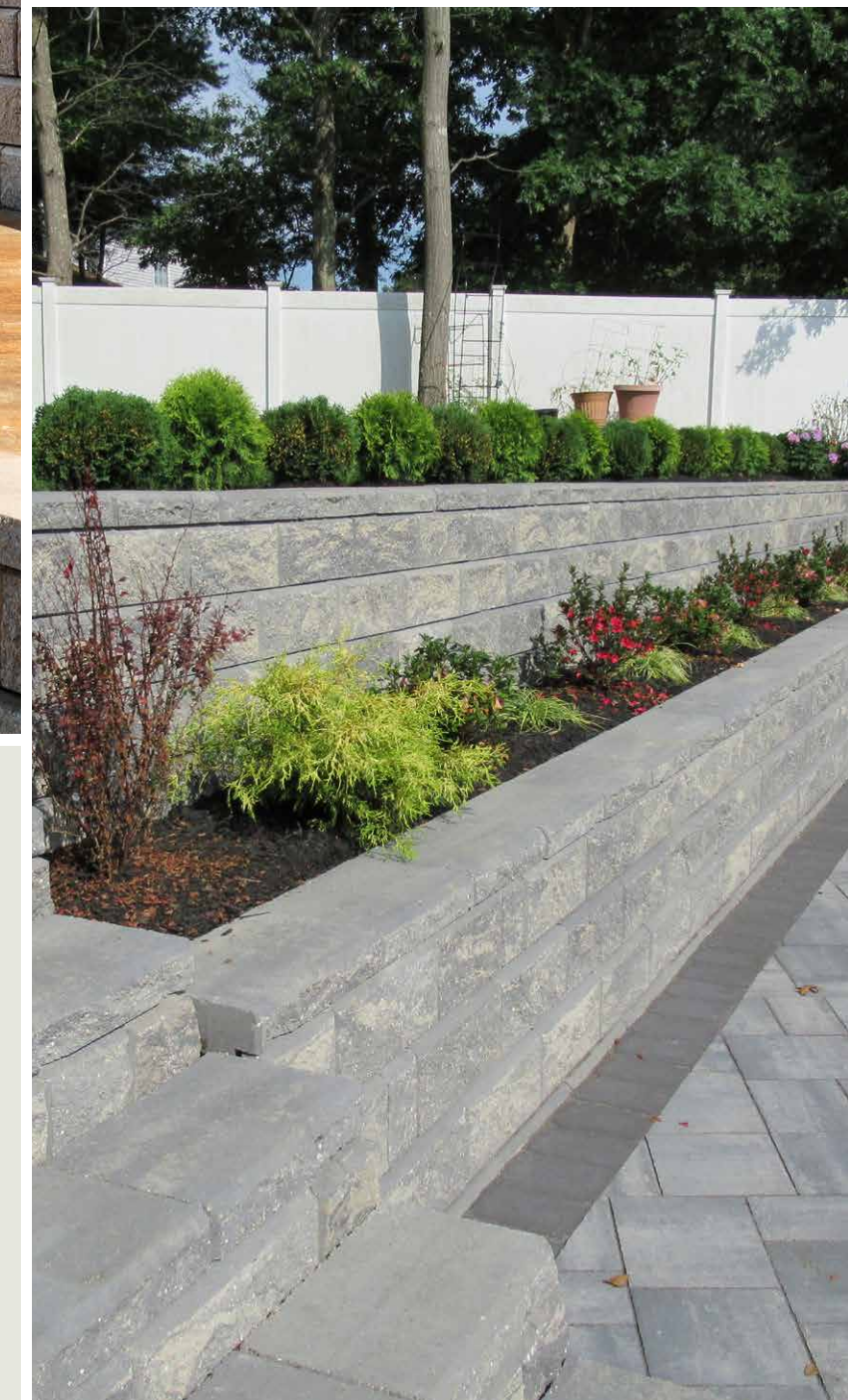


PATIOS

SLOPING YARDS



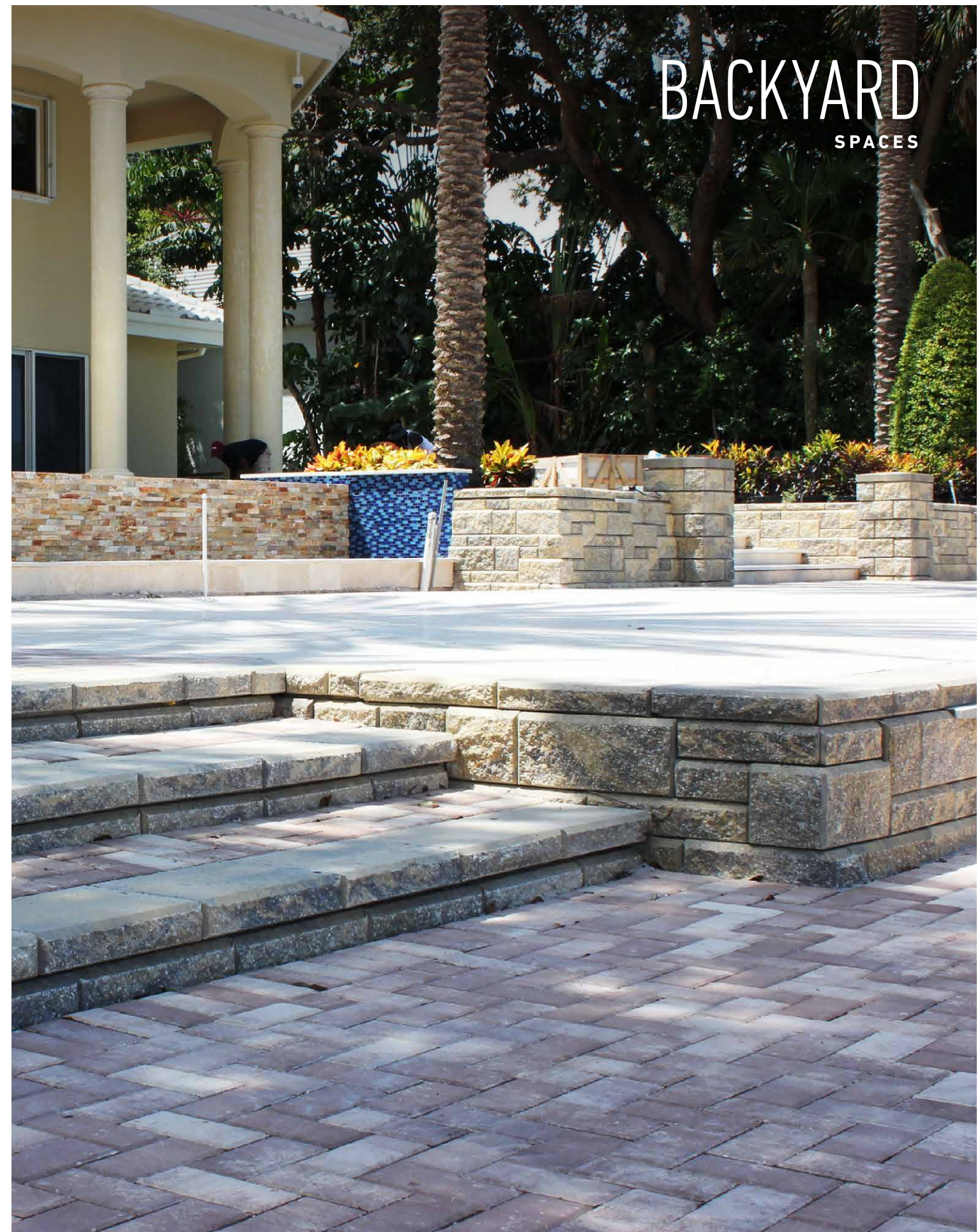
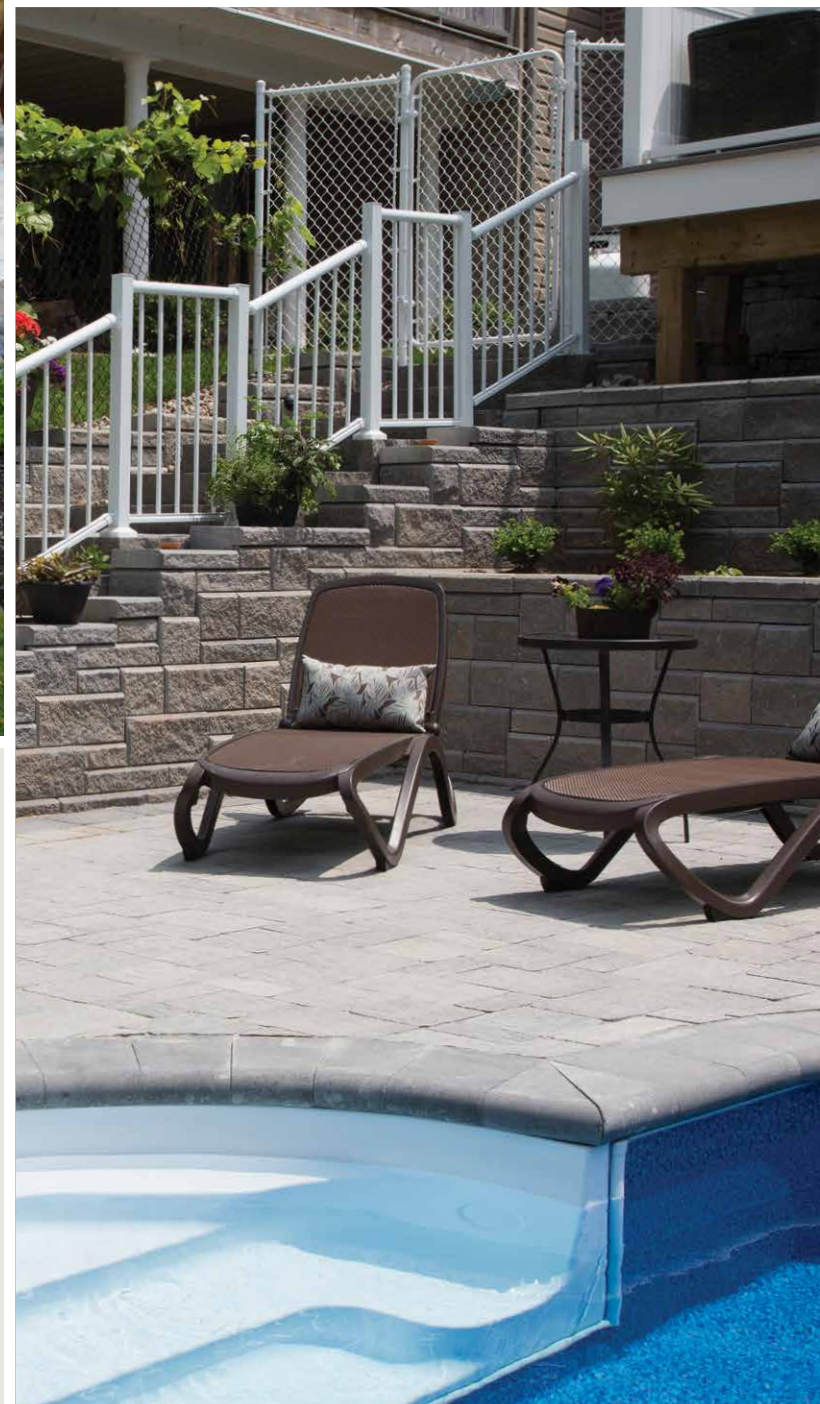
Claim more space by turning sloping yards into something extraordinary with vertical gardens and planted terraces.



Use grade changes to your advantage by adding multiple walls or stairways to elevate your architectural style with a warm inviting outdoor space.

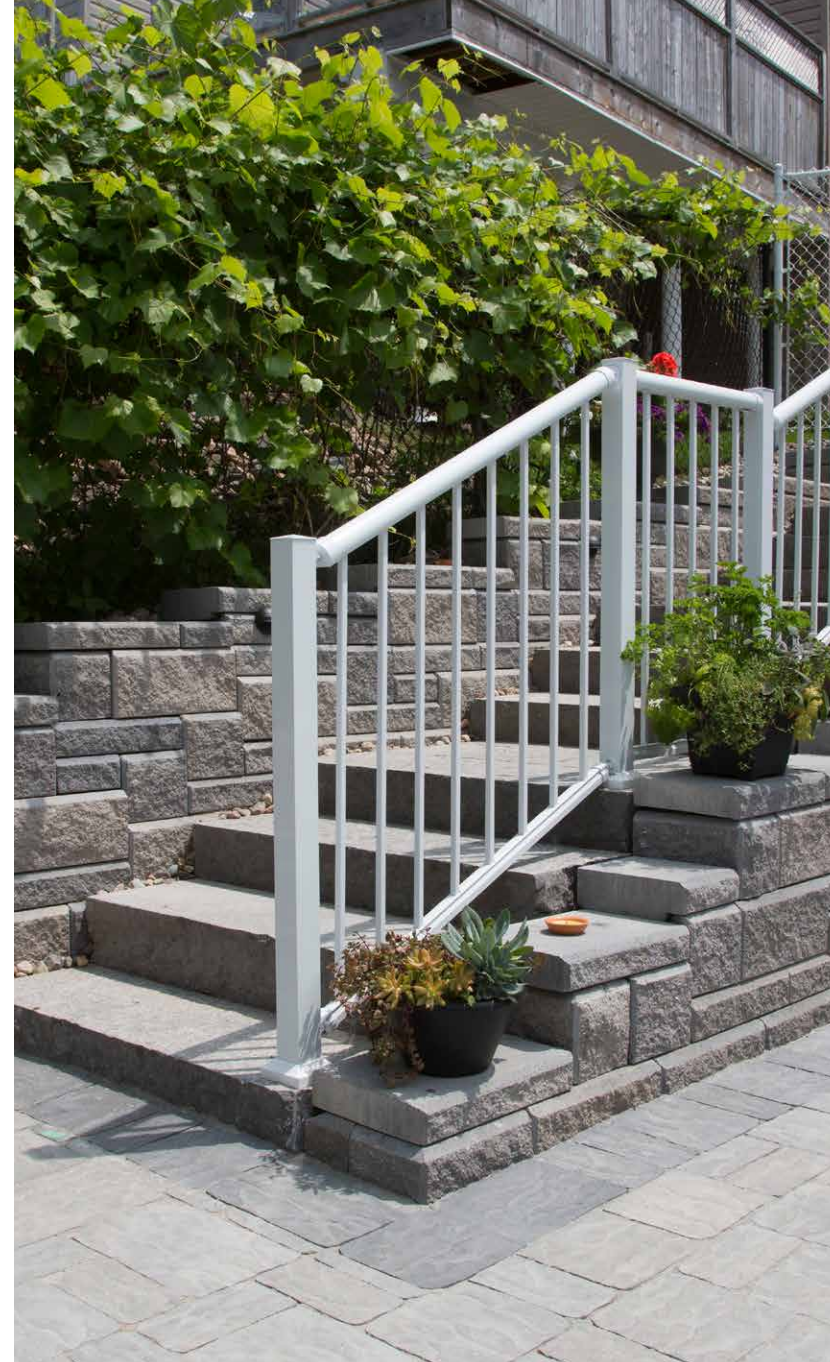
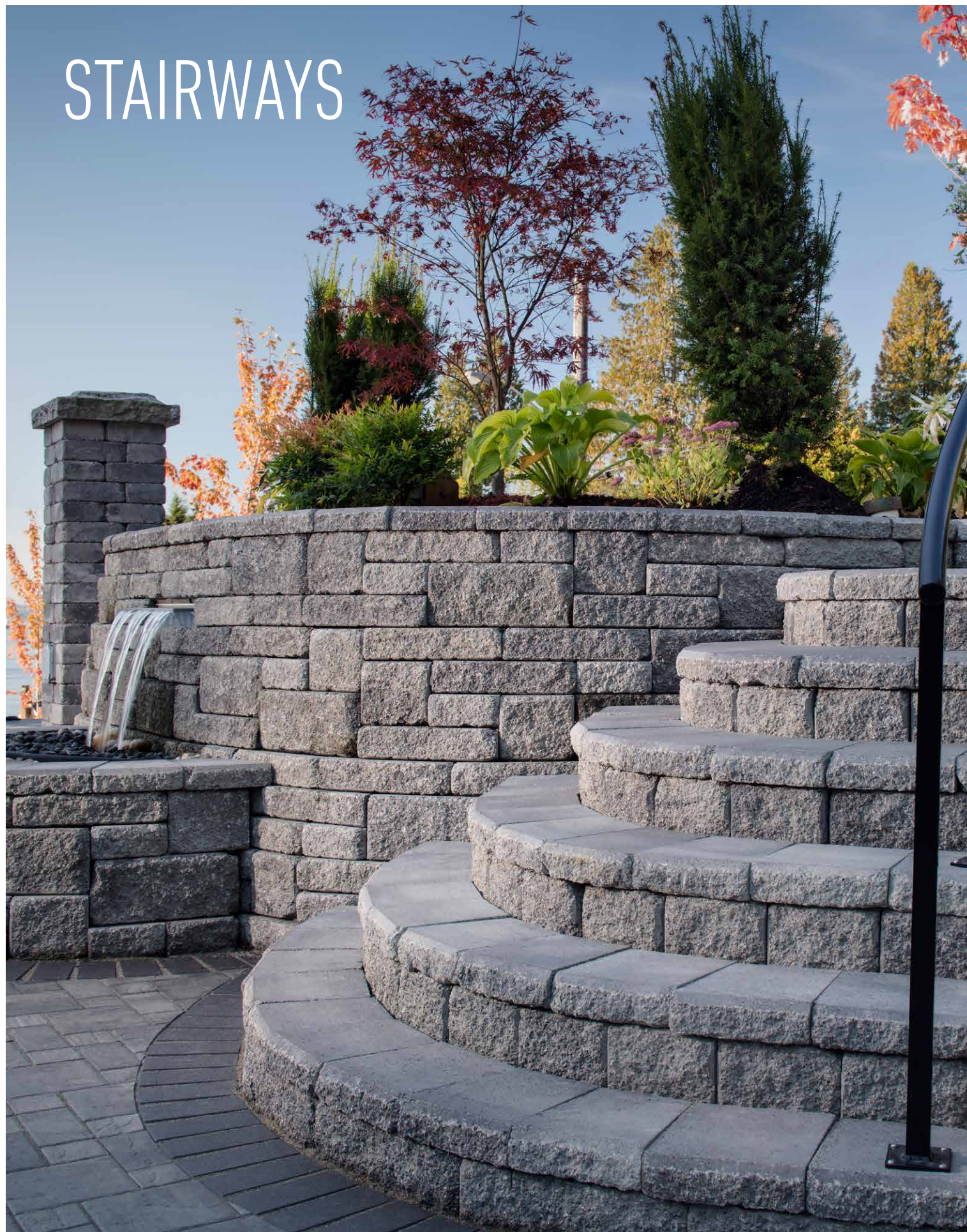


Upgrade your backyard space and extend your home outdoors, adding beauty and function.

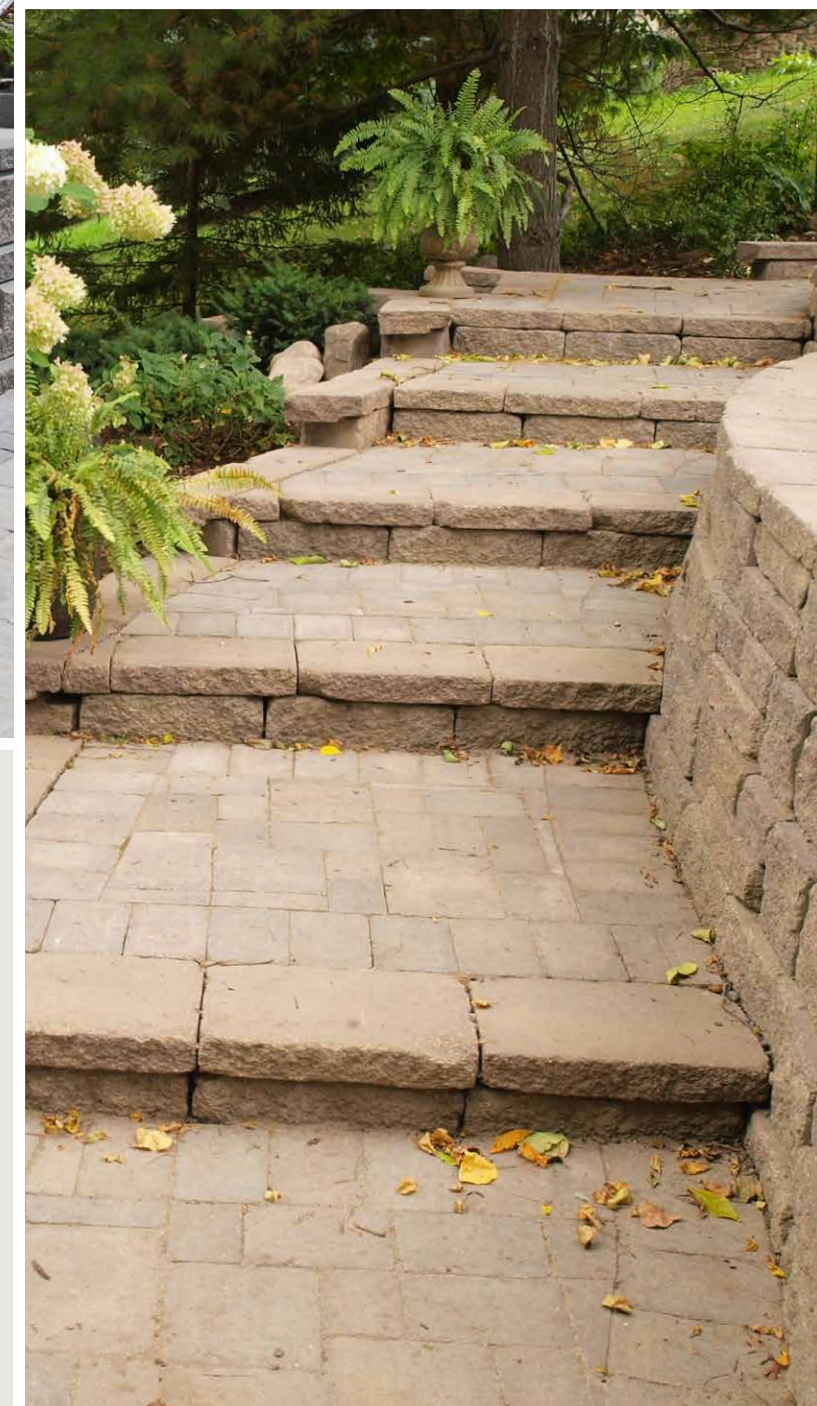


Design a comfortable outdoor living space with a purpose. Envision a relaxed kitchen or bar space, a private oasis or a backyard entertaining area.

STAIRWAYS



Enhance your outdoor spaces with stylish and functional stairways to easily connect upper and lower elevations in elegant transitions.









Stairways add a visual element that can flow through the landscape with curves or follow along the side of a slope. The design possibilities are endless.

BLOCK COLLECTIONS *AB® COLLECTION RETAINING WALLS*



Tan Brown Charcoal

AB STONE & AB CLASSIC **AB JUMBO JUNIOR** **AB LITE STONE** **AB JUNIOR LITE** **CAPSTONE** **CORNER RIGHT***

| | | | | | |
|--|---|---|---|---|---|
|  |  |  |  |  |  |
| 8 x 12 x 18 75 lbs 40 units per pallet Approx. 1 blk/ft ² | 8 x 9.5 x 9 39 lbs 80 units per pallet Approx. 2 blk/ft ² | 4 x 12 x 18 37 lbs 80 units per pallet Approx. 2 blk/ft ² | 4 x 9.5 x 9 19 lbs 160 units per pallet Approx. 4 blk/ft ² | 4 x 12 x 18 65 lbs 50 units per pallet | 8 x 8 x 16 65 lbs 54 units per pallet (27 left, 27 right) <i>*Direction as manufactured by Belgard</i> |









BROWN BEIGE CHARCOAL **GRAY CHARCOAL TAN** **TAN BROWN CHARCOAL**
AB Classic, Corner and Caps units also available in solid Tan and Gray.

BLOCK COLLECTIONS *AB EUROPA® COLLECTION RETAINING WALLS*



Tan Brown Charcoal

AB DOVER **AB PALERMO** **AB BARCELONA** **AB BORDEAUX** **CAPSTONE** **CORNER RIGHT***

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| 8 x 12 x 18 75 lbs 40 units per pallet Approx. 1 blk/ft ² | 8 x 9.5 x 9 39 lbs 80 units per pallet Approx. 2 blk/ft ² | 4 x 12 x 18 37 lbs 80 units per pallet Approx. 2 blk/ft ² | 4 x 9.5 x 9 19 lbs 160 units per pallet Approx. 4 blk/ft ² | 4 x 12 x 18 65 lbs 50 units per pallet | 8 x 8 x 16 65 lbs 54 units per pallet (27 left, 27 right) <i>*Direction as manufactured by Belgard</i> |



BROWN BEIGE CHARCOAL **GRAY CHARCOAL TAN** **TAN BROWN CHARCOAL**
Contact local representative for availability, exact specifications and colors for all Allan Block products.

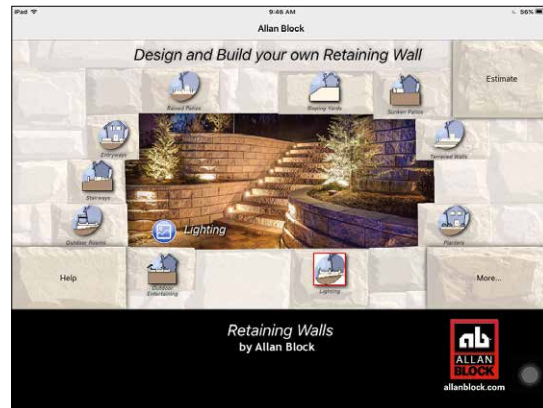
Reproducing the look and feel of natural stone, Belgard strives to create random fractures, chips, scratches, broken edges and corners, in the manufacturing of our AB Europa product line.

DESIGN & ESTIMATING

ESTIMATING MADE EASY WITH OUR GREAT TOOLS

RETAINING WALL APP

Design and estimate your retaining wall projects with material outputs given for all retaining wall collections. A detailed package is generated and emailed instantly.



Apps are available for tablet, mobile devices and Mac/PC computers.

ESTIMATING TOOL

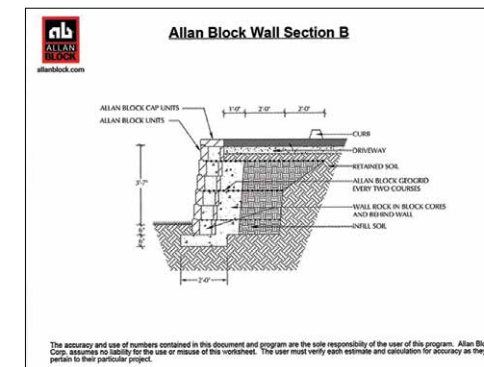
Estimating your project for retaining walls, patio walls and/or fences all in one tool. Choose the product, enter the project's details and instantly receive a detailed list that includes quantities for the block, rock, grid and more.



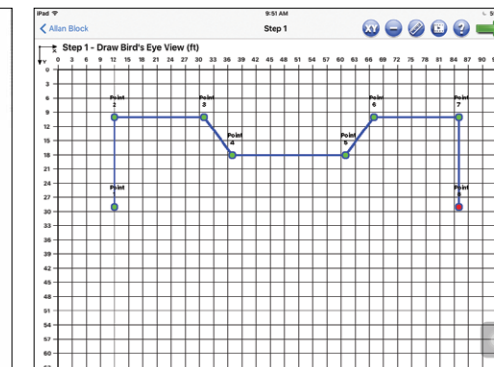
Use the Allan Block Apps or the AB Estimating Tool to create a detailed material estimate on your next project. By simply entering in the project details, you can generate specific drawings and product estimates from all the available Allan Block products.

Check out the options to assist with designs and material estimating, all available to you for FREE.

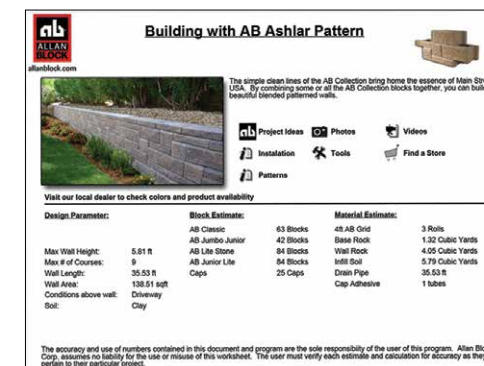
Drawings



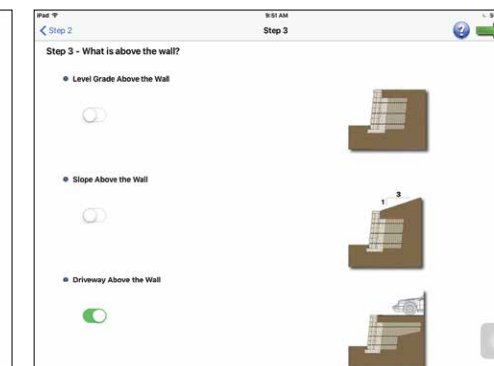
Design Options



Material Lists

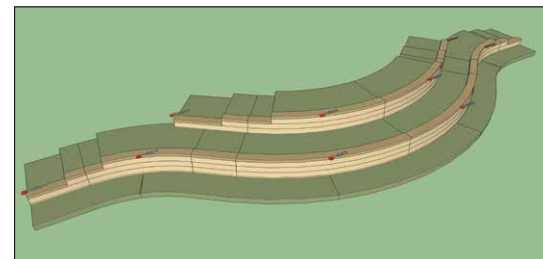


Block Quantities



VISUALIZE THE PROJECT *Generate a 3-D Model*

Using the estimating Apps, our AB Design Center will create and email a 3D file offering a visual of the project entered.



From App to 3D design in seconds.

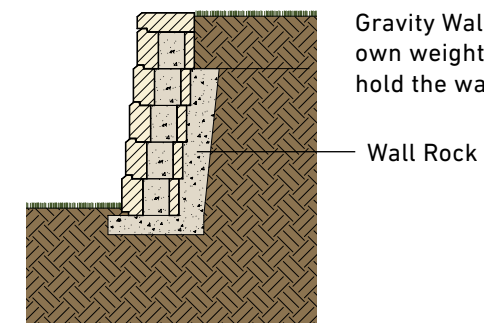


The Allan Block Apps can create a file with the details of your project that can be used in a 3D modeling program to create a visual image of your project. Then, use images from the library to create and design the look you want to achieve for your outdoor space.

Visit allanblock.com for complete installation details.

RETAINING WALL TYPES

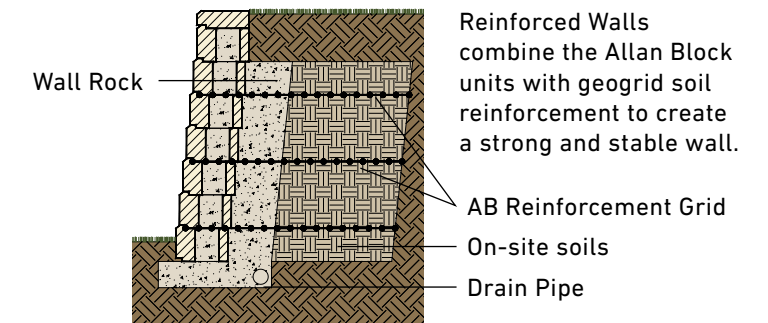
Gravity Walls



Gravity Walls rely on their own weight and setback to hold the wall in place.

For Gravity Wall Installation Walls under 4 ft (1.2 m)

Reinforced Walls



Reinforced Walls combine the Allan Block units with geogrid soil reinforcement to create a strong and stable wall.

For Reinforced Wall Installation Walls over 4 ft (1.2 m)



Check them out today!

HOW TO BUILD

AN ALLAN BLOCK RETAINING WALL

GRAVITY WALLS



1



2



3



4



5

1. Mark the location of the retaining wall and dig a trench a minimum of 24 in. wide (600 mm) and 6 in. deep (150 mm) plus an additional 1 inch (25 mm) for each 1 ft (300 mm) of wall height for gravity walls. If reinforcement will be needed, additional excavation will need to be completed to accommodate the length of the grid, see allanblock.com for complete details. Excavated materials that can not be used as backfill material will need to be discarded. Compact the trench thoroughly with a hand tamper or plate compactor. Install a drain pipe at the back of the trench for walls with poor drainage, over 4 ft. (1.2 m) tall or any reinforced walls. Make sure the drain pipe can be vented to daylight. Place a minimum of 6 in. (150 mm) of wall rock in the trench. Do not use sand. Compact thoroughly with a hand tamper or plate compactor. Level the entire trench.

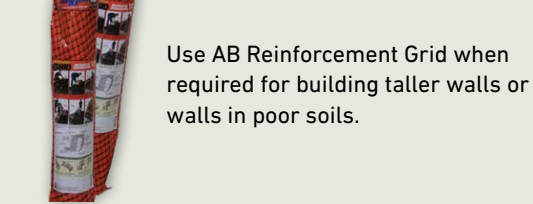
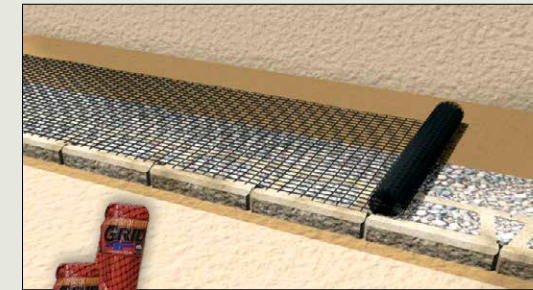
2. Install the blocks on the wall rock foundation with the raised front lip facing up and forward near the front of the trench. Verify the proper position of the AB blocks by sighting down the back of the raised front lip or using a string line. Level each block from side to side and front to back as installed, make adjustments as necessary. Careful attention to a straight and level base course will ensure a quality finished wall.

3. Once the entire base course is installed, fill in front of the blocks with onsite soils to keep the base course from shifting while filling and compacting the blocks. Fill the hollow cores and 12 in. (300 mm) behind the block with wall rock to the height of the block. Use infill or approved onsite soils to backfill behind the wall rock to the height of the block. Using a hand tamper or plate compactor, compact the wall rock and onsite soils behind the block in a path parallel to the wall. Check the base course of blocks for level and adjust as needed.

4. If reinforcement is needed, see next page and go to allanblock.com for complete details. Sweep off the top surface of the installed blocks. Stack the next course so that the block seams are offset from the course below. Check each block for level and alignment, making adjustments as needed. Fill the hollow cores and behind the block with wall rock, to the height of the block. Use infill or approved onsite soils to backfill behind the wall rock. Using a plate compactor, compact on the blocks to lock them together as well as the area behind the blocks as previously done. Repeat these steps to the top of wall.

5. Install AB Capstones for a clean, finished look. Secure in place with masonry adhesive. For a different finishing option, fill the hollow cores and behind the top course with rock, mulch or dirt if plantings are desired up the face of the wall.

REINFORCED WALLS



Use AB Reinforcement Grid when required for building taller walls or walls in poor soils.



More Information on Gravity Walls



More Information on Reinforced Walls



Installation Videos

1. If reinforced walls are needed, excavate behind the wall to accommodate the design length of the geogrid. Refer to your approved plans for exact length. Installing Reinforced Walls will be the same as Gravity Walls for trench and base course installation as shown on previous page. Once base course is installed and compacted, begin installing the first layer of AB Reinforcement Grid by rolling it out along the back of the wall on top of the blocks. Stake grid in place.
2. Continue installing your next courses of blocks as shown in Step 4 under Gravity Walls. Per your approved plans, install geogrid on every other course of the wall.
3. See allanblock.com for complete installation details when installing geogrid on curves and corners.

INSTALLATION & REINFORCEMENT

DOES YOUR WALL NEED REINFORCEMENT?

Conditions above and behind the wall will determine how high the wall can go before reinforcement is needed. Use the chart below to find the maximum height you can build a gravity wall before reinforcement is required. **Walls may require a building permit and engineering. Check with your local municipality before starting construction.**

Ask about Belgard's Free Standardized Engineering that is available for some walls up to 6 ft high. Contact your local dealer for more information.

Match your wall to the conditions below to find which width of AB Reinforcement Grid to use, and the number of layers you need. To determine the number of rolls needed, multiply the length of your wall by the number of layers needed, and then divide by 50 (the length of a roll of grid).

SOIL REINFORCEMENT CHART

| CONDITION ABOVE WALL | WALL HEIGHT | AB AND AB EUROPA COLLECTION 6° | | | | AB STONES 12° | | | |
|----------------------|-------------|--------------------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| | | CLAY SOIL | | SANDY SOIL | | CLAY SOIL | | SANDY SOIL | |
| | | No. of Layers | Width (W) | No. of Layers | Width (W) | No. of Layers | Width (W) | No. of Layers | Width (W) |
| Level | 3ft (0.9 m) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4ft (1.2 m) | 2 | 3 ft | 0 | 0 | 2 | 3 ft | 0 | 0 |
| | 5ft (1.5 m) | 3 | 3 ft | 3 | 3 ft | 3 | 3 ft | 0 | 0 |
| | 6ft (1.8 m) | 4 | 4 ft | 4 | 4 ft | 4 | 4 ft | 4 | 4 ft |
| Surcharge 125 psf | 3ft (0.9 m) | 2 | 3 ft | 0 | 0 | 2 | 3 ft | 0 | 0 |
| | 4ft (1.2 m) | 2 | 3 ft | 2 | 3 ft | 2 | 3 ft | 0 | 0 |
| | 5ft (1.5 m) | 3 | 3 ft | 3 | 3 ft | 3 | 3 ft | 3 | 3 ft |
| Slope 3:1 | 3ft (0.9 m) | 2 | 3 ft | 0 | 0 | 2 | 3 ft | 0 | 0 |
| | 4ft (1.2 m) | 2 | 3 ft | 2 | 3 ft | 2 | 3 ft | 0 | 0 |
| | 5ft (1.5 m) | 3 | 4 ft | 3 | 3 ft | 3 | 4 ft | 0 | 0 |
| | 6ft (1.8 m) | 4 | 4 ft | 4 | 4 ft | 4 | 4 ft | 4 | 4 ft |

Example:

Using the AB Collection 6° block, a 5 ft high wall built in sandy soil with a sloped surface above the wall requires three layers of geogrid, 3 ft wide.

Soil reinforcement increases the strength of the wall by creating a reinforced mass of soil behind the blocks. The weight of the reinforced soil mass combines with the blocks for a heavier, stronger wall. The above chart is for estimating AB Reinforcement Grid quantities only.

Visit allanblock.com for complete installation details.

WALL PATTERNS

By blending the different sized blocks together into your wall, you can capture the look of hand laid stone. Choose from one of our preset patterns to build your wall or create your own random look. Both of the collections can be used to create patterned walls.

STANDARD PATTERNS *Uses all blocks in the collection*



- AB Europa Collection**
- 6 AB Dover
 - 4 AB Palermo
 - 8 AB Barcelona
 - 8 AB Bordeaux
- AB Collection**
- 6 AB Classic
 - 4 AB Jumbo Junior
 - 8 AB Lite Stone
 - 8 AB Junior Lite*
- * Use an AB Lite Stone cut in half when AB Junior Lite is not available.

Uses for the 2 course Standard Pattern include: Any wall project. This is the recommended pattern.

Use the Top of Wall Pattern shown below to finish off the top of a wall where an additional pattern is needed.

LITE PATTERN *Uses the small blocks in the collection*



- Note: Maximum recommended gravity wall height for Lite Patterns is 3 ft.
- AB Europa Collection**
- 7 AB Palermo
 - 15 AB Barcelona
 - 12 AB Bordeaux
- AB Collection**
- 7 AB Jumbo Junior
 - 15 AB Lite Stone
 - 12 AB Junior Lite*
- * Use an AB Lite Stone cut in half when AB Junior Lite is not available.

Uses for the 2 course Lite Pattern include: Any wall project under 3 ft. high where a smaller scale look to the project is desired.

Note: A base course of full-size blocks (AB Classic or AB Dover) **needs to be included.** For each 10 ft of wall length, you will need 7 full-size blocks. For 10 ft. of wall length for AB Caps, you will need 10 AB Caps.

TOP OF WALL PATTERN *Use this pattern to finish off the top of a wall*



- AB Europa Collection**
- 2 AB Dover
 - 2 AB Palermo
 - 6 AB Barcelona
 - 4 AB Bordeaux
- AB Collection**
- 2 AB Classic
 - 2 AB Jumbo Junior
 - 6 AB Lite Stone
 - 4 AB Junior Lite*
- * Use an AB Lite Stone cut in half when AB Junior Lite is not available.

If building with the Lite Pattern, replace each AB Dover/AB Classic block with 2 AB Jumbo Junior/AB Palermo or 2 AB Lite Stone/AB Barcelona Blocks.

Additional pattern options are available at allanblock.com.

ADDITIONAL ASSISTANCE

Refer to Retaining Walls by Allan Block for complete details on wall design and installation for walls up to 6 ft high. For more technical information, such as building stairs, terraces, ending and topping off walls or to download the Retaining Walls Installation Guide, visit allanblock.com.



*Retaining Walls
Installation Guide*

WALL PATTERN

EXAMPLES

The following are examples showing patterns for standard heights that will work with site and soil conditions.

GRAVITY WALL 32 in. tall

Can only be built in sandy soil with a level slope. Use in projects where no reinforcement is needed and the project is straight walls.

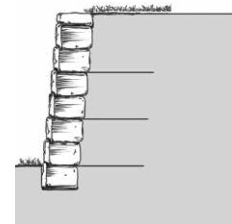
AB Europa Collection

- 15 AB Dover (including base)
- 6 AB Palermo
- 14 AB Barcelona
- 12 AB Bordeaux
- 10 Caps
- 46 ft³ Wall Rock
- 10 ft. Drain Pipe

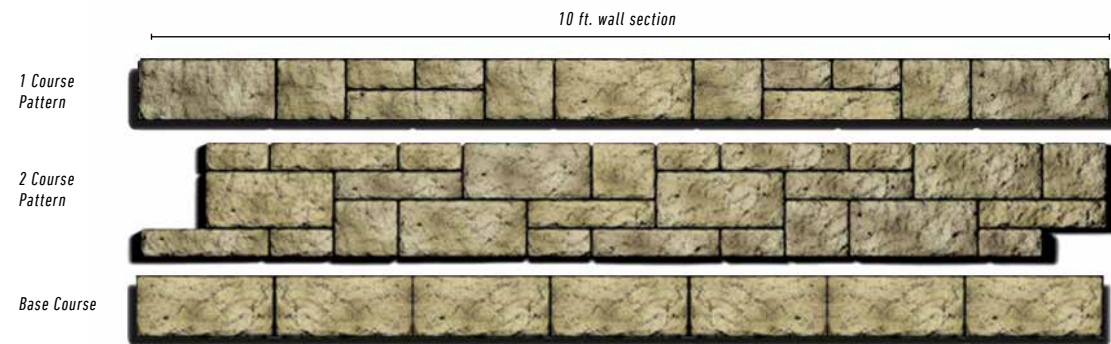
AB Collection

- 15 AB Classic (including base)
- 6 AB Jumbo Junior
- 14 AB Lite Stone
- 12 AB Junior Lite
- 10 Caps
- 49 ft³ Wall Rock
- 10 ft. Drain Pipe

Site Considerations



Level



Wall Rock is used for base material, block cores and behind the wall 12 in. and is based on a trench that is 9 in. D x 24 in. W x 10 ft. L. **Adding a cap to the top of the wall will add 4 in. to height.**

REINFORCED WALL 64 in. tall

Can be built in sandy or clay soils in all of the site conditions shown.

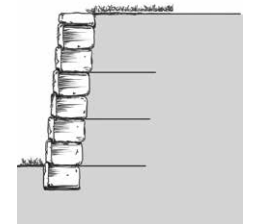
AB Europa Collection

- 28 AB Dover (including base)
- 16 AB Palermo
- 26 AB Barcelona
- 28 AB Bordeaux
- 10 Caps
- 81 ft³ Wall Rock
- 10 ft. Drain Pipe
- 40 ft AB Grid 4 ft wide

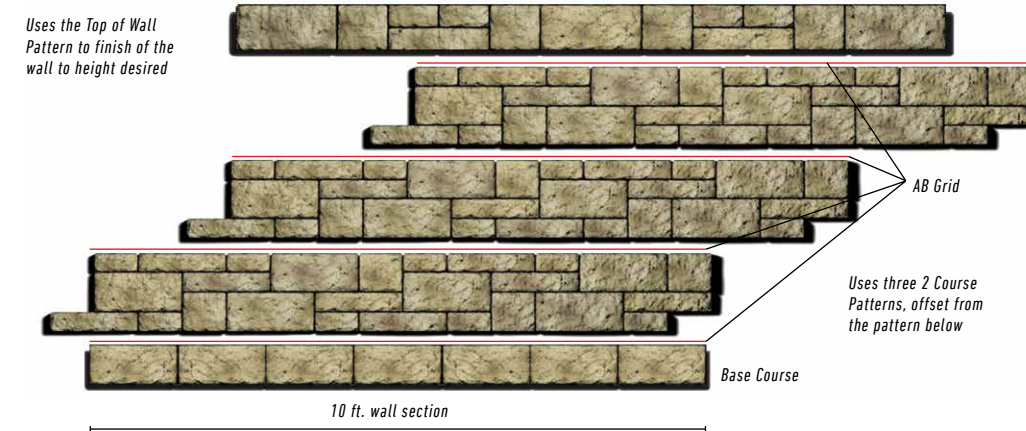
AB Collection

- 28 AB Classic (including base)
- 16 AB Jumbo Junior
- 26 AB Lite Stone
- 28 AB Junior Lite
- 10 Caps
- 85 ft³ Wall Rock
- 10 ft. Drain Pipe
- 40 ft AB Grid 4 ft wide

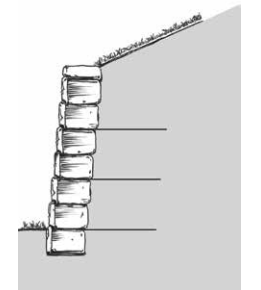
Site Considerations



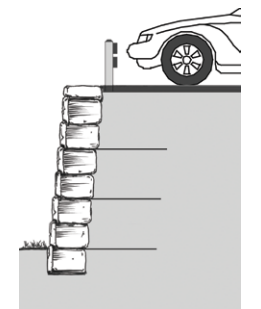
Level



Wall Rock is used for base material, block cores and behind the wall 12 in. and is based on a trench 11 in. D x 24 in. W x 10 ft. L. **Adding a cap to the top of the wall will add 4 in. to height.**



Slope 3:1



Surcharge 125 psf



For more information
visit AllanBlock.com

Manufactured by:

BELGARD® | PAVES THE WAY™



allanblock.com

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