

Newsletter for the Landscape Professional

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Expanded Backyard Makes For A Beautiful View

Nestled in the hills of Shell Beach, California the Allee home was in need of a backyard expansion. With a beautiful view of the Pacific Ocean in the front and a hillside directly out their backdoor, the Allee family needed to add balance and outdoor living areas to their yard. To get the job done, the Allees sought the help and expertise of Jeromy Frakes, owner of Frakes-scapes and a certified Allan Block[®] wall installer to make the transformation.



Frakes suggested using the AB Europa[®] Collection by Allan Block to create some retaining walls in the backyard. The retaining walls would cut into the hillside to allow for a larger patio and more useable space. The flexible Allan Block segmental retaining wall products were the ideal choice for incorporating inside and outside curves, corners, and stairways into the project. The AB Europa Collection blocks also had an old world – rustic feel that the Allees really liked.

Working with the local Allan Block producer, Air Vol Block in San Luis Obispo, the homeowners were able to choose the perfect color for their retaining walls and interlocking paving stones for the patio to match. Frakes was able to expand the patio, create more outdoor living space and even incorporate an upper patio area where the Allee family can now enjoy their Pacific Ocean that had been previously enjoyed only from the front yard.



The Allee family is very pleased with their new expanded outdoor living space and are enjoying the time they can spend relaxing, socializing and taking in the beautiful view with friends in their new backyard.



Strong Walls - When Your Wall

Under certain conditions, the blocks alone are not enough to provide the structural support a retaining wall project may need. Soil reinforcement increases the strength of a 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. Using reinforcement grid is a simple solution for creating a reinforced soil mass. It creates a structure that is more resistant to soil pressure and surcharges.



What is Reinforcement Geogrid?

Reinforcement grid or geogrid is a flexible synthetic mesh that is manufactured specifically for stabilizing slopes and retaining soil. While there are many types and strengths of reinforcement grid on the market today, the Allan Block Reinforcement Grid is the best choice for building stronger landscape walls. Made of high strength polyester mesh that is coated with a black protective film, AB Reinforcement GridTM is specifically designed and packaged to be used on landscape walls up to 6 ft (1.8 m) in height.

Use the Soil Reinforcement Chart to see if reinforcement is needed on your project. Match your wall to the conditions in the chart to find which width and the number of layers of AB Reinforcement Grid you will need.

When is Reinforcement Grid Needed?

The first step in building a strong wall is to determine if additional reinforcement is needed. There are lots of factors to take into account when determining how much reinforcement your wall will require. Some of these factors include:

- Type of Soil
- Slopes
- Surcharges
- Setback

If your project site does not fit within the conditions shown in the Soil Reinforcement Chart below, or your project has any special characteristics or requirements, be sure to consult a qualified local engineer.



Lock your wall in place with AB Reinforcement Grid from Allan Block.

S	Soil Reinf	forceme	nt Cha	rt for R	esidenti	ial Wall	Applic	ations	
		AB Stones of the AB Collection only				AB and AB Europa Collection (excl. AB Stones)			
CONDITION	WALL	CLAY SOIL		SANDY SOIL		CLAY SOIL		SANDY SOIL	
ABOVE WALL	HEIGHT	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
1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	4 ft (1.2 m)	2	3 ft	0	0	2	3 ft	0	0
Ē-	5 ft (1.5 m)	3	3 ft	0	0	3	3 ft	3	3 ft 🔫
-8	6 ft (1.8 m)	4	4 ft	4	4 ft	4	4 ft	4	4 ft
Surcharge*	2ft (0.6 m)	0	0	0	0	0	0	0	0
100 pst	3 ft (0.9 m)	2	3 ft	0	0	2	3 ft	0	0
-0	4 ft (1.2 m)	2	3 ft	0	0	2	3 ft	2	3 ft
E .	5 ft (1.5 m)	3	3 ft	3	3 ft	3	3 ft	3	3 ft
8	6 ft (1.8 m)	4	4 ft	4	4 ft	4	4 ft	4	4 ft
Slope 3:1	3ft (0.9 m)	2	3 ft	0	0	2	3 ft	0	0
F	4ft (1.2 m)	2	3 ft	0	0	2	3 ft	2	3 ft
E-	5 ft (1.5 m)	3	4 ft	0	0	3	4 ft	3	3 ft
E	6ft (1.8 m)	4	4 ft	4	4 ft	4	4 ft	4	4 ft

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 geogrid quantities only. *For walls with driveways above, on the last layer of geogrid, it will need to be extended back 7 ft. (2.1 m). The geogrid must be installed perpendicular to the wall (rolled out from the front of the block to the back of the excavated area).

Strong Walls Built Right!

Example:

Using the *AB Collection*, a 5 ft high wall (1.5 m) built in sandy soil with a level surface above the wall requires three layers of geogrid, 3 ft wide (0.9 m).



Needs Reinforcement

How is AB Reinforcement Grid Installed?

Building with AB Reinforcement Grid is a snap! Follow these simple guidelines and you are ready to roll:





Start the first layer on top of the base course.

Using the AB Reinforcement Grid, roll out the grid along the wall, with the edge against the front lip of the blocks.

Stack the next course of blocks on top of the AB Reinforcement Grid.

Pull the grid taught an stake into place to remove any slack.



Fill the hollow cores and directly behind the blocks with wall rock.



Then compact the entire area, starting the first pass directly on top of the blocks.

Do NOT compact directly on reinforcement grid or drive heavy machinery WITHIN 3 ft (0.9 m) of your wall. Heavy machinery may cause your wall to rotate forward

out of alignment. For more detailed instruction on AB Reinforcement Grid installation and other reinforcement questions, visit our website at allanblock.com.



AB Reinforcement Grid is biaxial (strong in both directions) and can be simply rolled out along the

wall. Other geogrids are uniaxial (stong in only one direction) and must be installed running from the front of the block to the back of the excavated area.

AB Reinforcement Grid is available in 2 sizes: 3 ft and 4 ft rolls that are 50 ft long (0.9 m and 1.2 m by 15 m).

Curves

When placing grid along curved walls, the grid should follow the back of the lip. Simply slit the grid with a utility knife and either feather out or overlap to follow the curve.

Outside Curves



Corners

Inside Curves

When placing grid at corners, simply lay the geogrid into the corner and cut it to fit with a utility knife.

Outside Corners



Inside Corners

See pages 29 and 30 of the AB Landscape Walls Guide for more information on using geogrid with curves and corners.



Building a Straight Wall Up a Slope

There are many cases where a wall is needed to retain an area that is parallel with an existing feature, like a driveway, a roadway or sidewalk. Often times these walls are also sloped themselves. So how do you build a wall that is both functional and has a uniform look?

Take for example the picture shown on the right. This wall is an AB Ashlar BlendTM patterned wall from the AB Collection, with an approximate setback of 6 degrees. The entire finished wall needed to be the same distance from the curb so the contractor could place the continuous 4 ft. (1.2 m) sidewalk parallel to both the curb and the wall.

If the wall was built without accounting for the block's setback, the wall would move away from the curb approximately 0.8 in. (20 mm) per step-up as it continued up the slope. Depending on the slope of the hill, the wall could be a considerable distance away from the curb and sidewalk by the time it reached the top of the slope. See Figure 1 for an illustration of the effects of block setback.





FIGURE 1: Effect of Block Setback

Theoretical Base Course Line If the bottom course were to extend up the slope.



As you can see some additional adjustments will be needed to create the desired effect. When building an application of this type, you will want to build the wall in sections. These sections are called the Working Distance.

The adjustments needed to keep the wall straight will be determined by the grade of the slope and the length of the Working Distance. By using angled wall sections, you can step the wall up the slope and keep it parallel with the existing feature. See Figure 2 for an illustration.



FIGURE 2: Using Angled Segments to Build a Straight Wall

With a little extra planning and some special installation techniques, you can achieve the desired look and construction your project needs. For more detailed information on step-ups and building a wall up a slope, check out the AB Landscape Walls Guide and AB Tech Sheet #1208. Talk to your local AB Representative or visit allanblock.com to download these instructions for **FREE**.



Are You Ready For Spring?

Useful Tools to Help your Business Grow

Once the snow melts and the rains and cold weather wash away, be ready for the spring building season and get a jump start on the competition. Allan Block has developed a wide variety of useful tools to help you build your business. Be sure to visit allanblock.com and talk with your local Allan Block Representative to get up-to-date materials and resources to give your business a boost.

- Certification Courses for Contractors
- Estimating Tools
- Technical and Installation Support
- Promotional Materials Door Hangers and Postcards
- Videos & Photo Galleries
- And much, much more!





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