

ROSETTA®

THE LOOK AND FEEL OF NATURE

by **Brown's**
CONCRETE PRODUCTS LTD

BELVEDERE TECH GUIDE



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Thank you for your interest in installing Rosetta by Brown's exciting new Belvedere Collection. By combining the look and feel of natural weathered stone, with the dimensional consistency of concrete blocks, this premium line of hardscape products promises to give you **creative possibilities** never before available in an **engineered system**.

Because each Belvedere unit has a **beautiful stone texture** on both the front and back surfaces, the system provides an ideal solution for **garden walls, columns, free-standing walls, water-features, retaining walls** and more. The possibilities are truly endless.

Please take the time to familiarize yourself with this detailed technical guide. This valuable resource will give you the basic knowledge needed to create **stunning, quality landscape features** that will last for generations to come!

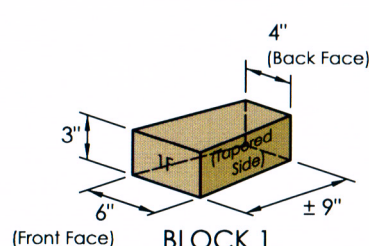
www.brownsconcrete.com

AVAILABLE COLORS



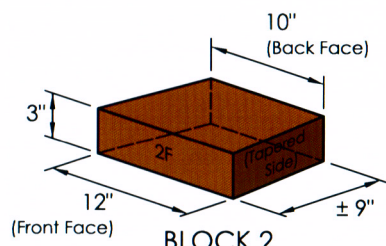
WALL BLOCKS

Belvedere Collection wall blocks are provided in six basic sizes. The blocks are finished on the front and back faces. Both sides of the wall blocks are tapered on each side approximately 1" from the front to the back of the block. There are multiple face/texture patterns for each basic block size, providing a more random look for your finished project. Average block weights of the different face/texture patterns are shown. Weights of individual blocks may vary.



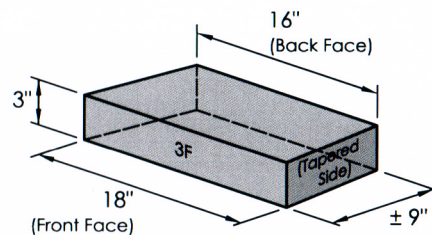
BLOCK 1

- Weight = ± 10 lbs
- 12 per Pallet



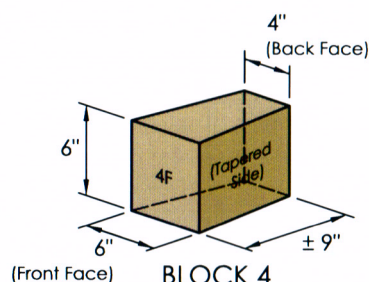
BLOCK 2

- Weight = ± 22 lbs
- 12 per Pallet



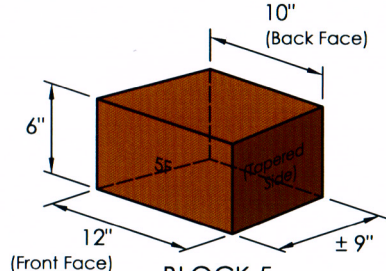
BLOCK 3

- Weight = ± 36 lbs
- 12 per Pallet



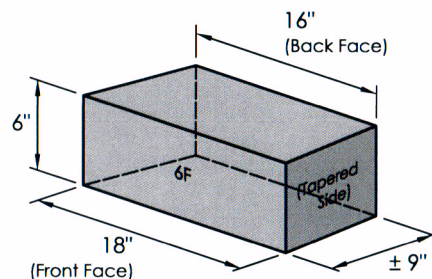
BLOCK 4

- Weight = ± 21 lbs
- 12 per Pallet



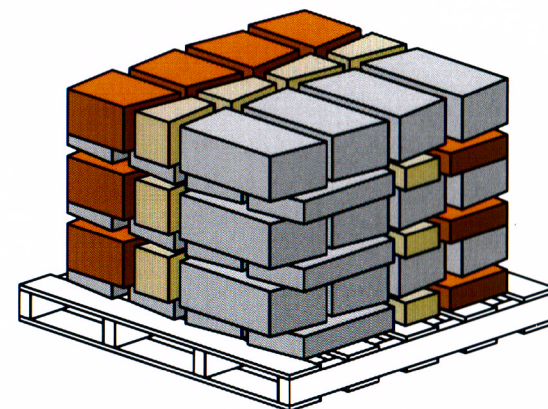
BLOCK 5

- Weight = ± 42 lbs
- 12 per Pallet



BLOCK 6

- Weight = ± 67 lbs
- 12 per Pallet

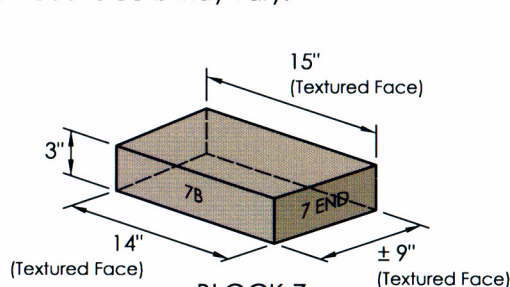


WALL PALLET

- Pallet weight = $\pm 2,475$ lbs (incl. pallet weight)
- Coverage = ± 27 sft / Pallet when used in a Retaining Wall and ± 25 sft / Pallet when used in a Freestanding wall

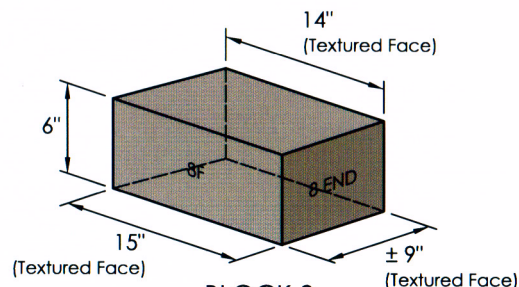
CORNER BLOCKS

The Belvedere Collection contains 2 corner blocks sizes. The blocks are finished on 3 sides. The 4th side is tapered to fit with retaining wall blocks. The corner blocks can be used to construct columns, provide a finished end on a freestanding wall, and to make 90° corners. There are multiple face/texture patterns for both column blocks sizes, providing a more random look for your finished project. Average block weights of the different face/texture patterns are shown. Weights of individual blocks may vary.



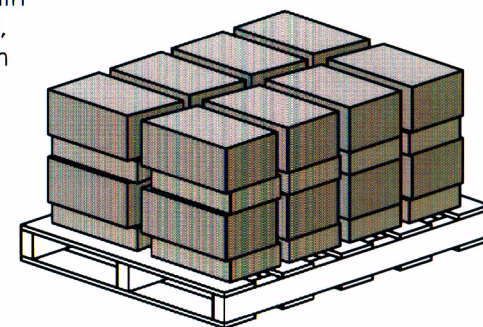
BLOCK 7

- Weight = ± 30 lbs
- 16 per Pallet



BLOCK 8

- Weight = ± 58 lbs
- 16 per Pallet

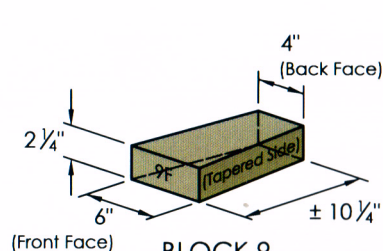


CORNER PALLET

- Pallet weight = $\pm 1,520$ lbs (incl. pallet weight)
- Coverage = ± 24 sft / Pallet

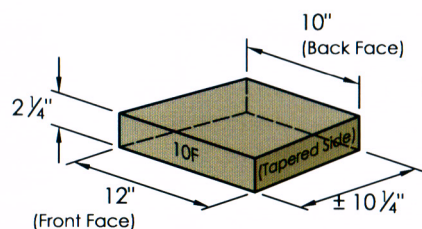
COPING BLOCKS (CAPS)

Belvedere Collection coping blocks are provided in five basic sizes. There are three standard coping blocks which are finished on the front, back, and top faces. The standard coping blocks are tapered approximately 1" on each side from the front to the back of the block. There are also two end units which are finished on front, back, top, and one of the sides. The other side is tapered approximately 1" from the front to the back of the block. The end units are useful for constructing corners and ends. There are multiple face/texture patterns for each basic block size, providing a more random look for your finished project. Average block weights of the different face/texture patterns are shown. Weights of individual blocks may vary.



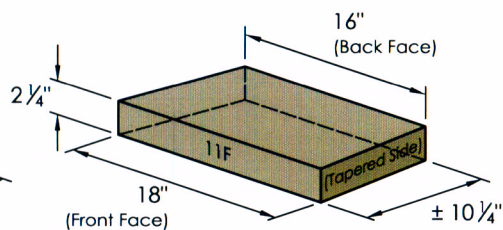
BLOCK 9

- Weight = ± 9 lbs
- 24 per Pallet



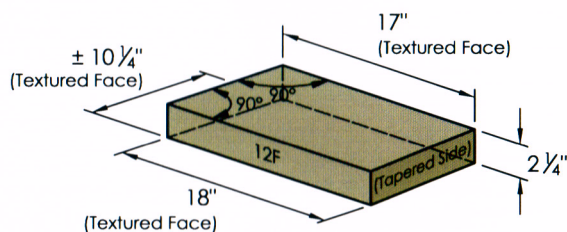
BLOCK 10

- Weight = ± 20 lbs
- 24 per Pallet



BLOCK 11

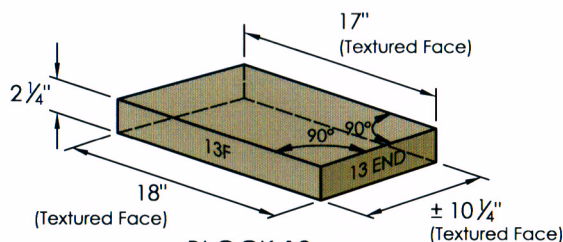
- Weight = ± 30 lbs
- 12 per Pallet



BLOCK 12

(Left End)

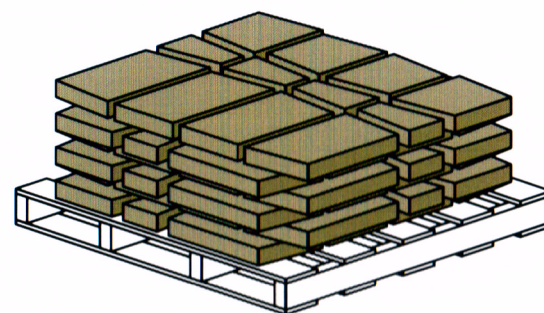
- Weight = ± 29 lbs
- 6 per Pallet



BLOCK 13

(Right End)

- Weight = ± 34 lbs
- 6 per Pallet

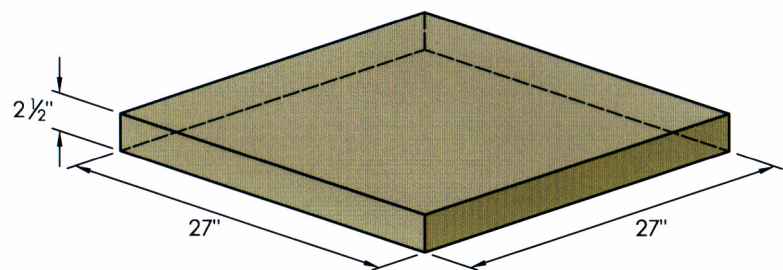


COPING PALLET

- Pallet weight = $\pm 1,550$ lbs (incl. pallet weight)
- Coverage = ± 66 linear feet / Pallet

COLUMN CAP BLOCKS

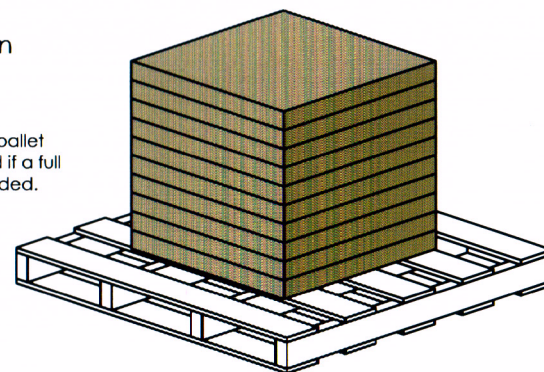
Belvedere Collection column cap blocks are provided to finish our standard built-up column. The 27" x 27" dimension provides an overhang of approximately 1 1/2" on all sides. The column cap can be cored for installation of lights or other features. Average block weights are shown. Weights of individual blocks may vary.



BLOCK 14
(Column Cap)

- Weight = ± 150 lbs
- 10 per Pallet

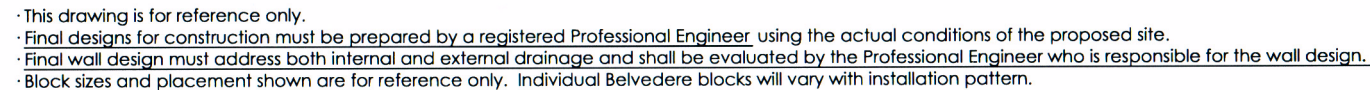
Note: A partial pallet may be shipped if a full pallet is not needed.



COLUMN CAP PALLET

- Pallet weight = $\pm 1,550$ lbs (incl. pallet weight)
- Coverage = 10 caps

This page shows typical construction details for Belvedere retaining walls. These drawings are representative of major components required in wall construction. Specific details including geotextile reinforcement layers, drainage details, soil requirements, etc. shall be per the engineered design for the wall.



BELVEDERE RETAINING WALL INSTALLATION NOTES

1. Review all plans and specifications for the project. Make sure you understand the detailed design for the project before starting construction.
2. Leveling pad excavation should be to the depth shown in the engineered plans for the wall, but at least 6" (150 mm) below the elevation of the bottom block in the wall.
3. Leveling pad excavation width should be a minimum of 27" (690 mm), which will provide 6" (150 mm) in front of and 12" (300 mm) behind the bottom block.
4. Existing foundation soil (soil below wall) should be compacted to a minimum of 95% of standard proctor before leveling pad material is introduced. Foundation soil should be firm, dry and free of debris, stones, roots, etc. Consult a soils engineer if soil stability is in doubt.
5. Place leveling pad material as specified in the wall design. Compact using a vibrator plate compactor. If crushed drain stone is used for the leveling pad, wrap bottom and sides of leveling pad with geotextile to maintain soil separation between leveling pad and foundation soil.
6. Install a 4" (100 mm) diameter perforated drain pipe at the lowest point within the drain stone or leveling pad (if drain stone is used) from which free drainage can be accomplished. Drainage can be to daylight at the ends of, or through the face of, the wall or to a nearby drainage ditch or catch basin. See page 22 for more details. Because water can flow both ways through the drain pipe, connection to an active storm sewer should only be made under the direction of a professional engineer.
7. Walls shall have the bottom course(s) buried to the depth shown on the engineered design. A minimum depth of 6" (150 mm) is required for all walls.
8. Place the bottom course of wall blocks. Take care to level the blocks both parallel and perpendicular to the wall.
9. Backfill the first 12" (300 mm) behind the blocks and triangle shaped areas between the blocks with ASTM No. 57 drainstone. Place a layer of non-woven geotextile fabric immediately behind the drainstone and then place the retained or reinforced soil.
10. Drainstone and backfill shall be placed in maximum 3" (75 mm) lifts and compacted to a minimum of 95% of standard proctor. For the drainstone, use a hand tamper only. For the reinforced or retained soil, use a vibratory tamper large enough to achieve the desired compaction but not so large as to move the wall blocks. Monitor the wall blocks for movement during compaction and rectify if required prior to proceeding.

11. Place successive units, drainstone, and compacted backfill to the desired grade/ wall height. Make sure the wall blocks are setback a minimum of 1/2" (13 mm) for every 6" (150 mm) of wall height.
12. The top of wall must be graded to direct surface water away from the wall.
13. Coping layer should be adhered with a concrete adhesive.

ADDITIONAL REQUIREMENTS FOR GEOGRID INSTALLATION (If Required)

14. Geogrid layers shall be installed to the lengths and elevations detailed in the wall design.
15. Geogrid shall be placed starting at the face of the retaining block and extending into the reinforced soil. Take care to install the geogrid with the strong direction (roll direction) into the reinforced soil zone and not parallel to the wall.
16. Use the next layer of blocks to secure the front end of the geogrid. Make sure the geogrid is as close as possible to the front face of the wall without being visible. Pull the geogrid taut to eliminate any folds and pretension the geogrid. Pin or secure the back edge of the geogrid before placing the reinforced fill.
17. Place and compact drainstone and reinforced fill starting at the back of the blocks and continuing back into the retained soil. Drainstone and reinforced fill shall be placed in maximum 3" (75 mm) lifts and compacted to a minimum of 95% of standard proctor. For the drainstone, use a hand tamper only. For the reinforced soil, use a vibratory tamper large enough to achieve the desired compaction but not so large as to move the wall blocks. Monitor the wall blocks for movement during compaction and rectify if required prior to proceeding.
18. Tracked construction equipment shall not be used directly on the geogrid. A minimum of 6" (150 mm) of fill is required between tracked equipment and geogrid to prevent damage to the grid. Rubber- tired equipment may pass over the geogrid when traveling at low speeds of 5 mph (8 km/h) or less.
19. Avoid any sudden stopping or turning of construction equipment in the reinforced fill zone to prevent moving or damaging the geogrid layers.
20. Follow geogrid manufacturer's requirements, including requirements for vertical separation and overlap of geogrid.