

FIRE PITS


PLANTERS

Available in three wall block sizes and two cap sizes accompanied by $90^{\circ}$ corner units.

Combine multiple sizes of StackStone ${ }^{\oplus}$ to create intricate Ashlar, repeating or random patterns. Each size utilizes a unique, beveled shape that allows you to easily build curved and straight walls. Columns can be created by using the corner units.

StackStone uses a tongue and groove connection system. It is ideal for raised garden beds, tree rings, planters and short patio walls up to 2 ' tall.

Minimum radius using 4" x 8" units is approx. 1' 9". Minimum radius using 4 " x $12^{\prime \prime}$ units is approx. 2' $11^{\prime \prime}$. StackStone Ashlar shapes are palletized and sold separately.

## PRODUCT DATA*

|  | Coverage* | Units / Pallet | Coverage* / Pallet | Weight / Piece* | Weight / Pallet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \times 8$ Wall Unit | $4.5 \mathrm{pcs} / \mathrm{ft}^{2}$ (48.44 pcs / m${ }^{2}$ ) | 168 | $37.33 \mathrm{ft}^{\mathbf{2}}$ (3.47 m${ }^{2}$ ) | 18 lb ( 8.6 kg ) | 3,242 lb ( $1,470 \mathrm{~kg}$ ) |
| $4 \times 8$ Cap Unit | $1.6 \mathrm{pcs} / \mathrm{ln} \mathrm{ft} \mathrm{(4.92} \mathrm{pcs} \mathrm{/} \mathrm{In} \mathrm{m)}$ | 168 | 122 ln ft ( 34.14 ln m ) | $18 \mathrm{lb}(8.6 \mathrm{~kg})$ | 3,242 lb ( $1,470 \mathrm{~kg}$ ) |
| $4 \times 12$ Unit | $3 \mathrm{pc} / \mathrm{ft}^{2}\left(32.3 \mathrm{pc} / \mathrm{m}^{2}\right)$ | 126 | $42 \mathrm{ft}^{2}\left(3.9 \mathrm{~m}^{2}\right)$ | $26 \mathrm{lb} / \mathrm{pc}(11.8 \mathrm{~kg} / \mathrm{pc})$ | 3,276 lb (1,487 kg) |
| $4 \times 12$ Cap Unit | $1 \mathrm{pc} / \mathrm{ln} \mathrm{ft}(32.28 \mathrm{pc} / \mathrm{ln} \mathrm{m})$ | 126 | $126 \mathrm{ln} \mathrm{ft}(38.4 \mathrm{ln} \mathrm{m})$ | $26 \mathrm{lb} / \mathrm{pc}(11.8 \mathrm{~kg} / \mathrm{pc})$ | $3,276 \mathrm{lb}(1,487 \mathrm{~kg})$ |
| $8 \times 8$ Jumbo Unit | $2.25 \mathrm{pc} / \mathrm{ft}^{2}\left(24.22 \mathrm{pc} / \mathrm{m}^{2}\right)$ | 96 | $42.67 \mathrm{ft}^{2}\left(3.96 \mathrm{~m}^{2}\right)$ | $32 \mathrm{lb} / \mathrm{pc}(14.5 \mathrm{~kg} / \mathrm{pc})$ | $3,072 \mathrm{lb}(1,392 \mathrm{~kg})$ |


|  | Coverage* / Pallet | Units <br> /Pallet | Weight / Piece* | Weight / Pallet |
| :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ Corner Unit | $44 \mathrm{ft}^{2}\left(4.08 \mathrm{~m}^{2}\right)$ | 144 | $24 \mathrm{lb} / \mathrm{pc}(10.89 \mathrm{~kg} / \mathrm{pc})$ | $3,456 \mathrm{lb}(1,567.6 \mathrm{~kg})$ |

All Weight per Pallet noted above include a 50 lb pallet weight.
Maximum wall height: 2'. Minimum radius: 2' 4".

* For walls built by alternating 6 " and 8 " faces, there are $54.9 \mathrm{pcs} / \mathrm{m}^{2}\left(5.1 \mathrm{pc} / \mathrm{ft}^{2}\right)$ and $3.06 \mathrm{~m}^{2}\left(32.94 \mathrm{ft}^{2}\right)$ per pallet. For walls built by alternating 6 " and $8 "$ faces, there are $5.6 \mathrm{pc} / \operatorname{ln~m}(1.7 \mathrm{pc} / \operatorname{ln~ft})$ and $30.11 \ln \mathrm{~m}(98.8 \mathrm{lnft})$ per pallet.


## AVAILABLE COLORS

For more information regarding custom colors, please contact a Mutual Materials sales representative. Custom colors may be restricted by the size of the order or project.


## PROJECT ESTIMATION

| Max Height = 2' ${ }^{\prime \prime}$ |  | Wall Length |  |  |  | Max Height = 2' ${ }^{\prime \prime}$ |  | Wall Length |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 8" Faces |  | Alternating 8" \& 6" Faces |  |  |  | 12" Faces |  | Alternating 12" \& 10" Faces |  |
| Wall Height | Courses | 10 ft | 25 ft | 10 ft | 25 ft | Wall Height | Courses | 10 ft | 25 ft | 10 ft | 25 ft |
| 8" | 2 | 30 | 75 | 34 | 85 | 8" | 2 | 20 | 50 | 22 | 55 |
| 1'0" | 3 | 45 | 113 | 51 | 128 | 1'0" | 3 | 30 | 75 | 33 | 82 |
| 1'4" | 4 | 60 | 150 | 68 | 170 | 1'4" | 4 | 40 | 100 | 44 | 109 |
| 1'8" | 5 | 75 | 188 | 85 | 213 | 1'8" | 5 | 50 | 125 | 55 | 137 |
| Caps Needed | Top Course | 15 | 38 | 17 | 43 | Caps Needed | Top Course | 10 | 38 | 17 | 43 |

StackStone ${ }^{\oplus}$ 's three basic shapes may be combined to produce unlimited patterns. StackStone units can be used as a system or installed separately to give additional patterning options. Following, are some of those options.

## STANDARD INSTALLATION PATTERNS

$4 \times 8$ Units


4 x 8 Units - Curved Wall Using 6" \& 8" Faces
(can also be done with $8 \times 8$ and $4 \times 12$ units)


## SAMPLE ASHLAR INSTALLATION PATTERNS

Choose from one of the patterns shown here, or create a pattern of your own.
Unit quantities shown are estimates only and do not take into account cut units. You may wish to purchase a few extra pieces of each size to allow for cutting units.

## UNIT KEY:



PATTERN \#1A - Repeats every 3' 0" for free-standing wall These are sample patterns only. For detailed help with your project, consult a Mutual Materials Representative.

|  | WALL LENGTH (height is 2' 0') |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{3}^{\prime}$ | $\mathbf{6}$ | $\mathbf{9}$ | $\mathbf{1 5}$ | $\mathbf{2 1}$ | $\mathbf{3 3}$ |
| $4 \times 8$ Unit | 10 | 20 | 30 | 50 | 70 | 110 |
| $4 \times 12$ Unit | 10 | 20 | 30 | 50 | 70 | 110 |
| $4 \times 8$ Cap | 2 | 4 | 6 | 10 | 14 | 22 |
| $4 \times 12$ Cap | 2 | 4 | 6 | 10 | 14 | 22 |



[^0]PATTERN \#1B - Repeats every 3' 0 " for free-standing wall
$90^{\circ}$ corner units may be split along score to reveal three split faces.
These split corner units can be then used to start/stop a wall.

|  | WALL LENGTH (height is 2' 0") |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $3 '$ | $6 '$ | 9 | $15^{\prime}$ | 21 | $33^{\prime}$ |  |
| $4 \times 8$ Unit | 10 | 20 | 30 | 50 | 70 | 110 |  |
| $4 \times 12$ Unit | 10 | 20 | 30 | 50 | 70 | 110 |  |
| $4 \times 8$ Cap | 2 | 4 | 6 | 10 | 14 | 22 |  |
| $4 \times 12$ Cap | 2 | 4 | 6 | 10 | 14 | 22 |  |
| $90^{\circ}$ Corner Unit | 1 Per Course Per $90^{\circ}$ Corner |  |  |  |  |  |  |
| $90^{\circ}$ Corner Unit | 1 Per Course to Start/Stop Wall |  |  |  |  |  |  |

The end sizes (11/6) represent $90^{\circ}$ corner units.


## PATTERN \#2 - Repeats every 3' $\mathbf{0}^{\prime \prime}$ for retaining wall

These are sample patterns only. For detailed help with your project, consult a Mutual Materials Representative.

## UNIT KEY:



|  | WALL LENGTH (height is 2' 0') |  |  |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{3}$ | $\mathbf{6}$ | $\mathbf{9}$ | $\mathbf{1 2}$ | $\mathbf{1 8}$ | $\mathbf{2 4}$ | $\mathbf{3 0}$ | $\mathbf{3 6}$ |  |
| $4 \times 8$ Unit | 18 | 36 | 54 | 72 | 108 | 144 | 180 | 216 |  |
| $\mathbf{4} \times \mathbf{1 2}$ Unit | 3 | 6 | 9 | 12 | 48 | 24 | 30 | 36 |  |
| $8 \times 8$ Jumbo | 2 | 4 | 6 | 8 | 12 | 16 | 20 | 24 |  |
| $4 \times 12$ Cap | 4 | 8 | 12 | 14 | 20 | 27 | 33 | 40 |  |



PATTERN \#3 - Repeats every 3' 8" for retaining wall
These are sample patterns only. For detailed help with your project, consult a Mutual Materials Representative.

## UNIT KEY:

| 8 | $4 \times 8$ Unit - 8" Face |
| :---: | :---: |
| 6 | $4 \times 8$ Unit - 6" Face |
| 12 | $4 \times 12$ Unit - 12" Face |
| 10 | $4 \times 12$ Unit - 10" Face |
| 12-C | $4 \times 12$ Cap-12" Face |
| 10-C | $4 \times 12$ Cap-10" Face |
| 8 | $8 \times 8$ Jumbo Unit |
| Right-Hand $90^{\circ}$ Corner Unit |  |
|  | Left-Hand $90^{\circ}$ Corner Unit |


|  | WALL LENGTH (height is $1{ }^{\prime} 8{ }^{\prime \prime}$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3' 8" | 7'4' | 11' | 22' | 29' 4" | 36' 8" |
| $4 \times 8$ Unit | 11 | 22 | 33 | 64 | 88 | 110 |
| $4 \times 12$ Unit | 7 | 14 | 21 | 42 | 56 | 70 |
| $8 \times 8$ Jumbo | 2 | 4 | 6 | 12 | 16 | 20 |
| $4 \times 8$ Cap | 3 | 6 | 9 | 18 | 24 | 30 |
| $4 \times 12$ Cap | 3 | 6 | 9 | 18 | 24 | 30 |



## PATTERN \#4 - Repeats every 3' 6" for retaining wall

These are sample patterns only. For detailed help with your project, consult a Mutual Materials Representative.

|  | WALL LENGTH (height is $2^{\prime} 0^{\prime \prime}$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3' 8" | 7'4' | 11' | 22' | 29'4" | 36' 8" |
| $4 \times 8$ Unit | 8 | 17 | 25 | 50 | 67 | 84 |
| $4 \times 12$ Unit | 12 | 25 | 37 | 74 | 99 | 124 |
| $8 \times 8$ Jumbo | 2 | 4 | 6 | 12 | 16 | 20 |
| $4 \times 12$ Cap | 3 | 6 | 9 | 18 | 24 | 30 |



## INSTALLATION INSTRUCTIONS

Due to the complexity of StackStone ${ }^{\circledR} /$ StackStone Ashlar installation, Mutual Materials recommends you consult a Mutual Materials representative before beginning your StackStone/StackStone Ashlar project.

## Maximum height: $\mathbf{2 '}^{\prime}$

1. Excavation: First mark the area of the wall with chalk or spray paint and then string a line. Dig out a trench that is a minimum of 6 " ( 152 mm ) deep plus one inch for every foot of wall height. Allow 8" ( 200 mm ) of space behind the wall for $3 / 4$ " washed drain rock (this means your trench should be 20" wide). Roots and large rocks should be removed from the trench.
2. Base Preparation: The project requires a perforated drain, so cover the back and the bottom of the trench with a geotextile fabric to prevent soil from blocking the drainage system. Measure geotextile fabric with excess length of about 12" $(305 \mathrm{~mm})$ at the top of the bank, which will be folded over the completed drainage fill.
3. Foundation: Install a 4" (102 mm) diameter perforated drain in this foundation, and connect it to the existing drainage system. Next, prepare a 4" ( 102 mm ) deep foundation, with $5 / 8$ minus or $3 / 4$ minus crushed rock. Add 1 " -2 " of $5 / 8$ minus or $3 / 4$ minus crushed rock, rake smooth and compact with plate compactor. Base rock should have a certain amount of moisture content. Repeat steps until final 4" base elevation is achieved.
4. First Course: Lay the base course of retaining wall blocks. Using a string line at the back of the units for alignment, place units side by side on the gravel checking for level in both directions. Begin laying block at the lowest point of the wall and/or $90^{\circ}$
 corner. It is easier to start at a straight section of the wall. Complete the base course before proceeding to the second course. When curves are laid out, space the base course block slightly apart to allow for their set back.

NOTE: Before installing additional courses, it is recommended that the installer front fills and backfills the first course with base rock and compacts to ensure stability of the wall.
5. Second \& Additional Courses: Sweep top of underlying course and stack next course in running bond pattern so the middle of the unit is above the joint between adjacent blocks below. To cut blocks for the ends of the wall, or in tight curved sections, use a hammer and chisel to score the unit on all sides. Always wear eye protection when splitting stones. If many cuts are needed, a masonry saw may be the better option to use.
6. Backfilling: After each course is laid, backfill behind the wall with $3 / 4$ " washed drain rock. This improves drainage and prevents soil from leaching through the wall face.
7. Top Course: Use concrete adhesive to secure the cap course. Lay the cap down and press firmly.

Finish backfilling behind the wall

StackStone ${ }^{\circledR}$ is a registered trademark of Risi Stone Products.

## MUTUAL MATERIALS LOCATIONS

For product information and customer service, call 1-888-MUTUALø (688-8250).

| WASHINGTON |  | OREGON | IDAHO | MONTANA |
| :---: | :---: | :---: | :---: | :---: |
| Auburn | Port Orchard | Bend | Boise | Missoula |
| Bellevue | South Seattle | Clackamas | Hayden |  |
| Bellingham | Spokane | Durham |  |  |
| Marysville | Tacoma (Parkland) | Portland |  |  |
| Olympia (Tumwater) | Vancouver, WA | Salem | M | ATER |


[^0]:    * Place one additional cap block adjacent to the short side of the 90-corner blocks

