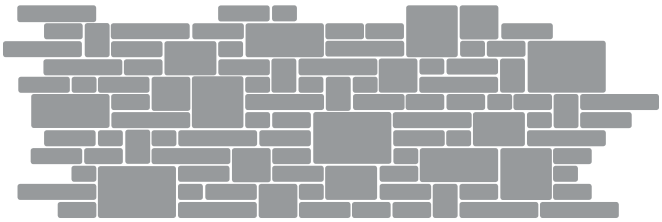
SARATOGA INSTALLATION

Saratoga Installation

One pallet of Saratoga contains 84 sq. ft. of stone, there are seven layers on each pallet. Each layer consists of three different heights and four different lengths in correct proportions for installation. The lengths have been calculated to reduce cutting to a minimum. The three heights can be coursed with a ½" bed joint to reach imperial coursing or with a 10 mm bed joint to achieve metric coursing. Avoid placing the larger stones in groups spreading each size equally through the wall breaking the horizontal mortar joints regularly. Vertical mortar joints should not exceed 16" (400 mm) with a minimum of 2" (50 mm) of overlap on the stone below.

When cutting is required a chisel, mechanical splitter or a masonry saw may be used remembering to turn the cut end into the wall leaving the factory finish exposed.



Masonry Cement

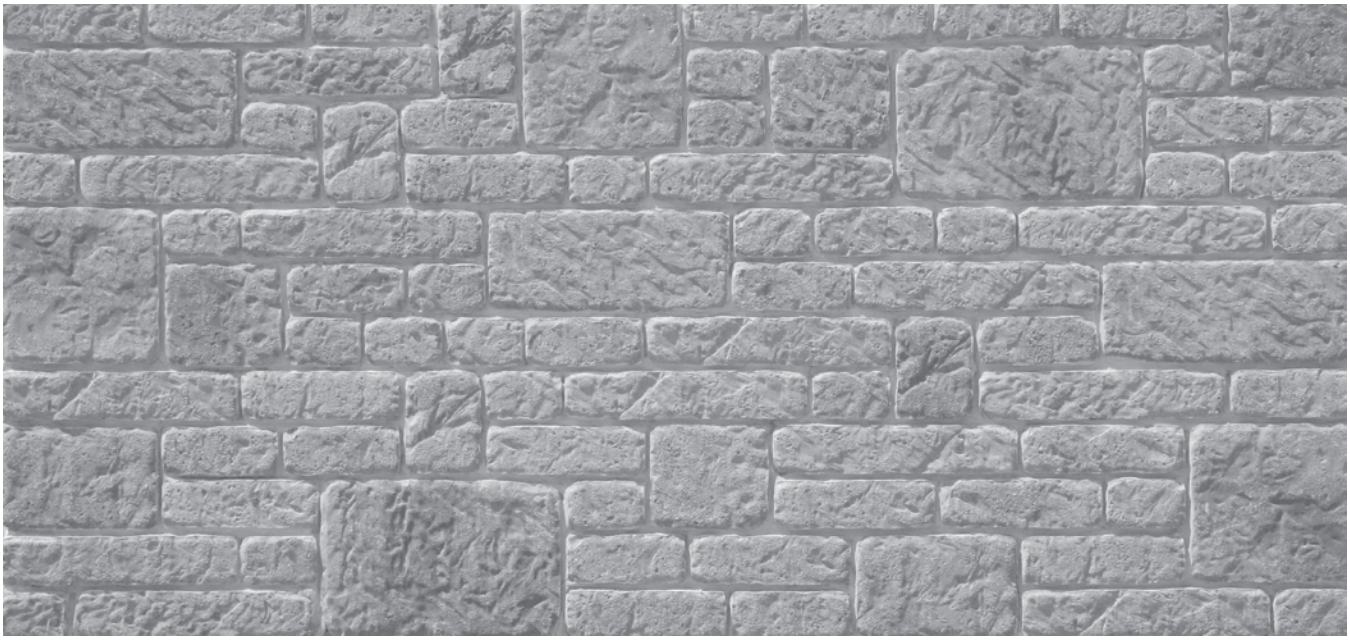
Shouldice Designer Stone recommends Type N masonry mixed 3 to 1 with sharp clean masonry sand. When the mortar joint is thumbprint hard it should be tooled using a method that compresses the mortar increasing its strength and ability to shed moisture.

Control Joints and Reinforcement

Concrete masonry walls have a tendency to shrink, whereas clay brick has a tendency to expand. Both require movement joints to accommodate this movement. The recommended placement of control joints are as follows: maximum panel length to height ratio of 1 to 1 ½, and a maximum spacing of 20 feet. Vertical control joints may be placed at points of stress such as changes in wall height, openings and ends of lintels. In areas where control joints are unacceptable horizontal metal reinforcement can be used at stress points where shrinkage cracks tend to appear. When the material comes in contact with steel lintels or masonry units with different expansion or contraction properties a slip plane such as building paper should be used to separate the two materials.

Cleaning

If cleaning is required use a mild masonry detergent applied with a soft nylon brush. Colour pigments are sensitive to strong acids and may be damaged. Testing a small area prior to use is recommended for colour fastness.



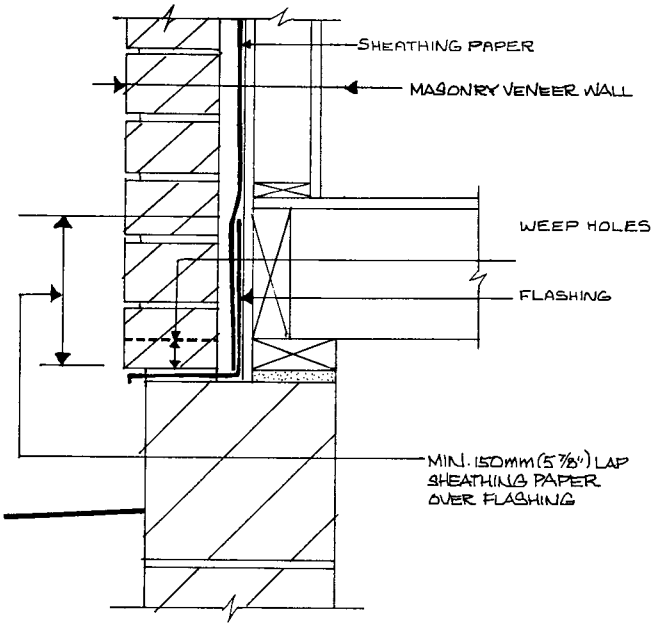
Flashing And Moisture Barriers

All masonry walls have moisture form in the cavity between the interior wall and masonry veneer from either absorption, condensation or voids in the mortar. The primary role of moisture barriers and flashing is to intercept the flow of water and direct moisture away from the wall interior. Flashings and moisture barriers must be placed at all vulnerable areas. Flashings should be installed at the following locations:

- At grade to prevent dampness or water flow from the ground
- At window sills and headers
- At shelf angles
- At chimney and roof junctures
- At wall roof junctures
- At parapet copings

Weep holes are installed at the elevation immediately above the flashing every 32 inches. Water accumulated by the flashing is relieved by the weep holes. All installations must conform to local and national building codes.

- If Shouldice units are installed in an area that may receive salt or de-icing chemicals or excessive moisture, they must be sealed.
- Failure to follow the above instructions may allow excessive and harmful moisture to accumulate in the wall system.



Wall Ties and Weepers

Approved wall ties should be used at a ratio of 1 per 2 Sq. Ft. Weepers should be placed approximately every 32 inches at the foundation level and wherever flashings and moisture barriers occur.

Cleaning Instructions

If cleaning is required, use a mild masonry detergent applied with a soft nylon brush. Contact the office for more detailed information. Pressure washers should not be used as a means for removing excess mortar or splatters.

COLD WEATHER CONSTRUCTION

When masonry construction is carried on during periods of freezing weather, proper facilities should be available for preparing the mortar and protecting the fresh masonry work against frost damage. The most important consideration is that sufficient heat be provided to ensure hydration of the cement. After combining all ingredients, mortar temperature should be within the range of 4°C (40° F) to 49° C (120° F). The use of an admixture to lower the freezing point of mortars during winter construction should be avoided.

In conditions from freezing to 4° C (40° F): Heat mixing water, cover walls and materials to prevent wetting and freezing. Covers should be plastic or canvas.

In conditions below freezing: In addition to the above, heat the sand. Frozen sand and frozen wet masonry units must be thawed. Maintain masonry above 0° C (32° F) for 16 to 24 hours after laying units.

Always wear eye protection when cutting and shaping Stone, and always wear protection from dust and noise as required.

Shouldice Designer Stone is manufactured to conform to and exceed CSA A165 Series-04 and the ASTM C90-03 for load bearing units and ASTM C55-03 for veneer units.

Shallow Lake, Ontario, Canada N0H 2K0
Phone: 800-265-3174 Fax: 800-211-6060
www.shouldice.ca • designer@shouldice.ca