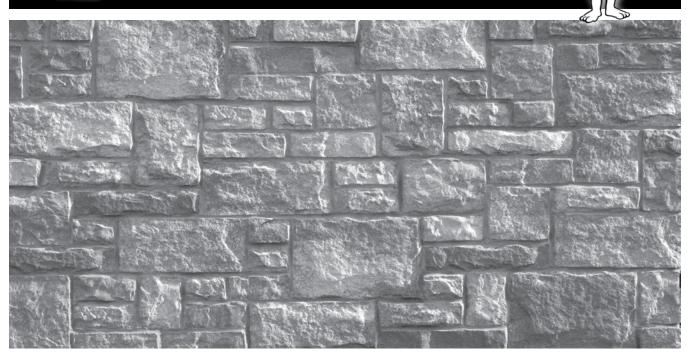


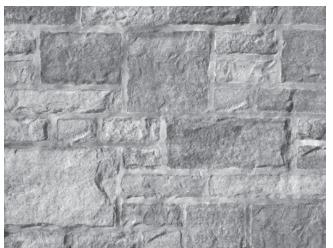
# ESTATE STONE INSTALLATION



#### **Estate Stone Installation**

One pallet of Estate Stone contains 84 SF of stone, there are seven layers on each pallet. Each layer consists of three different heights and multiple 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. 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 the use of Type N masonry mixed at a ratio of 3 to 1 with clean sharp masonry sand. Type S masonry should not be used in conjunction with standard veneer applications.

Use consistent batching procedures when mixing mortar and take adequate mixing time. Tool the joint after the mortar has begun to stiffen slightly. Should a joint be tooled too soon (in a wet condition) a light joint results. Conversely, if a joint is allowed to become too stiff, a dark, burned joint will result.

Shouldice Designer Stone is manufactured using an integral water repellent agent which inhibits water absorption and efflorescence. The low absorption rate may affect set-up time of the mortar joints in cool weather. This slow set-up time will be an advantage in warm dry weather but it is important to keep all material covered and dry in wet or cold conditions to ensure tooling of the joint can be done at the proper time.

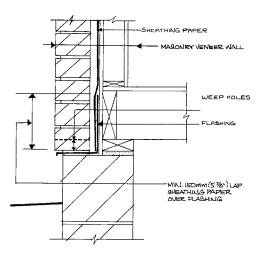
### **Flashing And Moisture Barriers**

All masonry walls have moisture form in the cavity between the interior wall and masonry veneer either from 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**

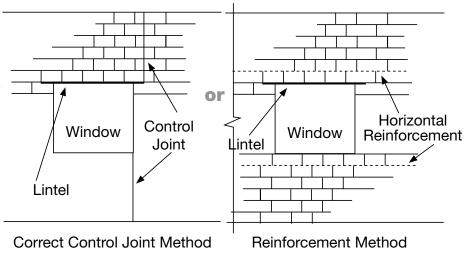
Approved wall ties should be used at a ratio of 1 per 2 Sq. Ft. Weepers should be placed approximately every 32 inches at the foundation level and wherever flashings and moisture barriers occur.

### **Cleaning Instructions**

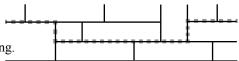
If cleaning is required, use a mild masonry detergent applied with a soft nylon brush. Contact the office for more detailed information. Pressure washers should not be used as a means for removing excess mortar or splatters.

#### **Aesthetic Crack Control**

Concrete masonry walls have a tendency to shrink, whereas clay brick walls tend to expand. Both require movement joints to accommodate this motion. The National Building Code requires that one or both of the techniques shown be implemented to reduce aesthetic cracking at openings in Concrete Masonry Veneers. The recommended placement of control joints are as follows: maximum panel length to height ratio of 1 to 1-1/2, and a maximum spacing of 20 feet. Vertical joints may be placed at points of stress, such as changes in wall height, openings, and ends of lintels. The Horizontal Reinforcement method requires the veneer shall have joint reinforcement of at least one W1.7 (MW11) wire, spaced at a maximum of 16" on centre vertically to increase the flexural strength of the veneer in the horizontal span at windows and doors. Ties are placed within 12" of the opening.



Where the bond does not have a continuous horizontal joint, a single wire can be bent to follow the coursing.



For more information see NCMA Tek Notes 10-4 & 10-1A

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.

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