

DELIVERY, STORAGE AND HANDLING

Upon delivery, isolate cast stone units from contact with the ground, vegetation and other material to prevent staining. Stack the cast stone units on timbers or platforms at least 75 mm (3") above ground.

Lift skids with proper slings or forks of sufficient length to prevent damage.

Place polyethylene or other plastic film between wood and other finished surfaces of unpackaged units when stored for an extended period of time.

Cover stored material with a tarp if it will be exposed to weather for an extended period of time.

Depending on weather conditions, it may be advisable to remove the plastic stretch wrap from the skids to allow air to flow around the product. If this is done, the unwrapped skid will be less stable and subsequent handling of the skid of units must be done with great care.

Do not use salt to thaw ice formed on the surfaces of units.

PROTECTION

Protect products at all times from damage.

During the installation, protect corners and edges of the cast stone. Protect the installation by means of wood or other sufficiently strong materials, secured in a manner that will not damage or stain the finished surfaces.

Carefully remove the protection only when the risk of damage is no longer present.

Some water repellent sealers may be applied to Arriscraft cast stone units, though in most cases are not necessary. Arriscraft recommends either silane or siloxane (or blends containing each) for weatherproofing cast stone units when a water repellent is desired. Water repellents should be applied after all pointing, touch and repair, cleaning and inspection operations are completed. Always check with the manufacturer of any adjacent masonry materials to cast stone elements for issues when applying a water repellent coating.

MORTAR MIXES AND MIXING

Arriscraft recommends a 1:1:6 Portland cement-lime mortar. The proportions by volume should be 1 part Portland cement, 1 part hydrated mason's lime (Type S - Special) and 6 parts washed masonry sand.

Calibrate shovels of sand to a one cubic foot gauging box with each change in shift or mixing operator.

INSTALLATION

Careful adherence to proper masonry techniques is key to ensuring the performance of the completed cast stone wall system.

Arriscraft products should be laid with consistent mortar joints for proper coursing.

Set stones in full bed of mortar with all vertical joints full. Avoid rocking the unit into place following initial contact with mortar, as this will detrimentally affect mortar-unit bond.

Cast stone units should always be pre-wetted before installation.

It is advisable to keep the cast stone units free from mortar smears as the work progresses. Some general precautions that can result in cleaner walls are:

- Protect the base of the wall from rain-splashed mud and mortar splatters. Use straw, sand, sawdust or other material spread out on the ground, extending approximately 1 meter (3 ft.) away from the wall;
- At the end of each workday turn any scaffold boards near the wall on their edge to prevent possible precipitation from splashing mortar and dirt directly onto the completed cast stone;
- Cover walls at the end of each workday with protective, waterproof coverings to prevent mortar joint wash out and entry of water into completed cast stone; and,
- Store cast stone products on skids, off the ground and under protective coverings. Prevent excessive mortar droppings by cutting off excess mortar with a trowel as the units are laid. Tool mortar joints when they are thumbprint hard. After tooling, any excess mortar and dust should be brushed from the cast stone surface using a soft bristle brush. Avoid rubbing or pressing the mortar into the units.

CLEANING

PREPARING FOR CLEANING OPERATIONS

Prior to commencing construction, it is imperative to test-clean either a mock-up panel or samples of the Arriscraft cast stone units in a manner similar to how the building will be cleaned.

Temperature, humidity and the method of cleaning will impact the cleaning operations and the ultimate look of the wall. Inspection of the test panel or samples should occur after a 3 to 7 day drying time. This test should be available for the architect to inspect and approve, then remain as the standard for the project.

Certain precautions must be taken during construction to minimize the potential for color changes resulting from the cleaning process and to ensure a more consistent in-the-wall appearance. Refer to the Installation section above. Removing mortar droppings and smears from the cast stone units as the work progresses will minimize cleaning requirements. Cleaning the constructed walls with water and non-acidic detergent will minimize any color changes that can occur during cleaning.

Many acid-based detergents and proprietary cleaners may alter the color of the cast stone units.

After approval of the test-cleaned material, it is imperative that the same cleaning procedure be used consistently throughout the cleaning of the building. Failure to follow these procedures can result in uneven or streaked color.

GENERAL CLEANING GUIDELINES

Regardless of the cleaning method considered, it is essential to pre-wet the surface of the cast stone units before applying any type of cleaning solution. Pre-wetting the cast stone units will minimize their absorption of the cleaning agent. It is equally important to keep the units wet during

cleaning operations and upon finishing to thoroughly rinse any cleaning solution from the wall surface. The key to successful cleaning is a continuous source of a sufficient volume of clean water throughout the cleaning operations.

When cleaning individual spots off cast stone unit faces, such as cement slurry, it is important to clean only the spotted areas. Pre-wet the area, apply the cleaning agent and then sand with 120 grit sandpaper.

Power washing and sandblasting are not recommended procedures for cleaning cast stone. Metal fiber brushes, rubbing stones and any tool or device that can scar the stone are not to be used for cleaning cast stone.

CLEANING WITH ACID-BASED OR PROPRIETARY CLEANERS

The color of the ARRIS.cast units may change with the application of either acid-based solutions or most proprietary masonry detergents. Refer to the test-cleaned material to determine the effect of the selected cleaning method on the color of the cast stone units.

If required, properly mask or otherwise protect metal, glass, wood and other surfaces from damage by exposure to the cleaning solution.

Schedule cleaning operations no sooner than 7 days, but not later than 28 days after the cast stone has been completed. Remove larger mortar droppings by hand with wooden paddles or a non-metallic scraper.

Thoroughly pre-soak the area of wall to be cleaned.

Dilute the cleaning agent with clean water in controlled proportions according to that approved on the site panel. Apply the solution to the presoaked area of wall with a soft bristled washing brush or low pressure (max. 40-50psi) acid-resistant sprayer.

Thoroughly rinse any cleaning solution and residue from the wall surface.