

### PRODUCT DESCRIPTION

**BASIC USE** Thin calcium silicate units used in thin adhered veneer installations for both interior and exterior applications. Appropriate for use in residential, commercial and institutional building projects.

**COMPOSITION AND MATERIAL** Thin-Clad ARRIS.stack™ Units are manufactured calcium silicate units containing no Portland cement. They are pressure formed and autoclave cured, resulting in high-density, severe-weathering modular units, with one or more finished faces. They are then fabricated to the desired thickness to produce the thin units. The units may be site cut, trimmed and finished to custom lengths, shapes or sizes, as required on site.

**SHAPES AND SIZES** Thin-Clad ARRIS.stack™ Units are available in a variety of standard sizes:

Code	Height	Length	Bed
ARRIS•stack21	54mm (2-1/8")	102 to 546 mm (4" to 21-1/2")	38 mm (1-1/2")
ARRIS•stack35	92 mm (3-5/8")	102 to 546 mm (4" to 21-1/2")	32 mm (1-1/4")
ARRIS•stack56	148 mm (5-13/16")	102 to 305 mm (4" to 12")	46 mm (1-13/16")

Shipped material includes a percentage of shorter random length/fragmented units which can be used by the installer around openings such as windows and doors, to create the random ashlar bond pattern, or in internal corners where two walls meet. Some units may need to be field trimmed or guillotine split to ensure units fit snugly together.

Stretcher material is available in either 100 square foot skids or 5 square foot boxes, containing all available sizes to achieve bond. Corner pieces are available in boxes of 5 linear corner feet, containing all available sizes.

**TOLERANCES** Thin-Clad ARRIS.stack™ Units are fabricated to the following tolerances:

- ARRIS.stack21 and ARRIS.stack35 unit height: +/- .0625 mm (1/16")
- ARRIS.stack56 unit height: +/- 6 mm (1/4")
- Unit bed: +/- 6 mm (1/4")

Thin-Clad ARRIS.stack™ Units are shop inspected for defects that would affect the serviceability or strength of the unit, or become exposed once installed and objectionable when viewed from a distance of not less than 10 feet under diffused light. Split faces are inspected for cracks and blemishes only, as chippage considerations do not apply when the desired surface texture and unit shape are intended to be uneven.

**LIMITATIONS** Thin-Clad ARRIS.stack™ Units are not intended for use in flooring or paving applications. Adhered installation methods are not appropriate for applications where the adhering mortar will be in tension. For example, Thin-Clad ARRIS.stack™ Units should not be installed in soffit applications.

Thin-Clad ARRIS.stack™ Units are generally intended for above-grade installations. Manufactured masonry units, regardless of their composition, are inherently absorptive, and as such, are not intended for use below grade. Units installed below grade will tend to absorb moisture from the soil that is in direct contact with the masonry units effectively creating a condition known as "rising damp" in the masonry veneer.

In colder climates, Thin-Clad ARRIS.stack™ Units installed at- or below-grade may

become exposed to de-icing compounds. As with other types of manufactured masonry units, calcium silicate masonry units should not be installed where they will be directly exposed to de-icing compounds used to melt snow and ice from pavements. For information about installing masonry at grade refer to the Arriscraft "At-Grade Design Ideas" brochure.

**COLOURS AND FINSHES** Thin-Clad ARRIS.stack™ Units are available from our Fort Valley, Georgia and Cambridge, Ontario manufacturing facilities in the following standard colours: Ash, Beach, Cappuccino, Desert Sand, Ice, Matrix, Storm and Tabasco.

Different colours may be blended in a wall. For more information on common colour blends contact Arriscraft. Custom colours are also available on a minimum order basis.

As a manufactured product, Thin-Clad ARRIS.stack™ Units are monitored for colour consistency. Slight variations between batches may occur, and it is recommended that the installer mix units from different skids during installation.

The standard finish for Thin-Clad ARRIS.stack™ Units is a split finish. Splitting is a surface finish resulting from splitting a manufactured masonry unit during production, to achieve a rough, stone-like texture. Some units may have split fronts and backs. ARRIS.stack56 units are manufactured with split beds and may require shimming to align the units.

Consultants should review samples prior to selecting a particular colour and finish.

### TECHNICAL DATA

**APPLICABLE STANDARDS** - Required properties for calcium silicate masonry units are described in [ASTM C73, Standard Specification for Calcium Silicate Face Brick \(Sand-Lime Brick\)](#). This standard classifies calcium silicate products as either moderate-weathering or severe-weathering depending on the material's tested physical properties of compressive strength and 24-hour absorption.

Calcium Silicate Building Stone products meet the requirements of this standard.

### INSTALLATION

**DELIVERY** - Thin-Clad ARRIS.stack™ Units are delivered to the site in protective packaging.

**HANDLING** - Lift skids with proper and sufficiently long slings or forks with protection to prevent damage to units. Protect edges and corners.

**STORAGE** - Store Thin-Clad ARRIS.stack™ Units in a manner designed to prevent damage and staining of units. Stack units on timbers or platforms at least 76 mm (3") above grade. Place polyethylene or other plastic film between wood and other finished surfaces of units when stored for extended periods

of time. Stored units should be covered if exposed to extreme weather conditions.

Do not use de-icing compounds to remove ice from masonry surfaces.

**INSTALLATION** Thin-Clad ARRIS.stack™ Units must be installed using approved materials and techniques for each specific installation. Refer to the ARRISCRAFT•CADD Library for applicable details. Options are available for drainage plane, insulated drainage plane, ASHRAE 90.1 compliant, and barrier wall system installations. Construct Thin-Clad ARRIS.stack™ Units in accordance with all applicable codes and standards and any local requirements stipulated by the authorities having jurisdiction.

A suitably solid substrate should be provided to support the Thin-Clad ARRIS.stack™ Units. Suitable substrate options include steel stud, poured concrete, concrete masonry unit (CMU), and wood stud. Installation on other substrates may be possible. Contact Arriscraft Technical Services for information on installation over specific substrates. Design substrate for a maximum allowable deflection of L/600 (L/720 preferred).

Construct Thin-Clad ARRIS.stack™ veneers with an adequate number of elastic movement joints, properly located to accommodate differential movement. Refer to ARRISCRAFT•NOTE (Vol. IV, No. 1) Movement Joints for Thin Adhered Veneer for further information.

Thin-Clad ARRIS.stack™ Units are installed with dry joints between units, meaning there is no mortar used in the joints.

Thin-Clad ARRIS.stack™ Units are installed using a bond pattern, described as a percentage ratio, from the smallest to the largest sized units, as follows: 30:55:15 Bond.

Wall configuration is to be designed and constructed conforming to LATICRETE® MVIS installation instructions, including, but not limited to:

- LATICRETE® Hi-Bond Masonry Veneer Mortar
- LATICRETE® Air & Water Barrier
- LATICRETE® MVIS Silicone Sealant™

When properly installed utilizing the MVIS system, LATICRETE® provides a system warranty. Elimination or substitution of any materials may negate the system warranty.

LATICRETE® Hi-Bond Masonry Veneer Mortar is a polymer-fortified mortar that meets the requirements of ANSI 118.4. Mortar should be applied to achieve 100% coverage. Spot-daub and ribbon methods are not appropriate for installation of Thin-Clad ARRIS.stack™ Units. Mortar should be burned into the backs of the units and substrate to optimize bond.

Traditional masonry mortars are not appropriate for this application.

Inclusion of LATICRETE® Air & Water Barrier is recommended for exterior applications. For interior applications, LATICRETE® Air & Water Barrier is not necessarily required. LATICRETE® Air & Water Barrier is an ABAA-approved water barrier.

LATICRETE® MVIS Silicone Sealant™ is a silicone sealant that can be used for movement joint applications around windows and doors and sealing underneath flashing. A good quality backer rod should be used with any application of the sealant.

Other installation systems may be applicable. Contact Arriscraft Technical Services with any questions.

## AVAILABILITY AND COST

**AVAILABILITY** Thin-Clad ARRIS.stack™ Units are available worldwide.

Delivery times for orders will vary based on the complexity of what is required.

Arriscraft cannot be responsible for delays due to fire, acts of God, or any other cause beyond its control or which could not be reasonably foreseen.

Contact Arriscraft for a list of dealers in your area.

**COST** Quoted on a project basis for job-specific manufacturing to project requirements.

## WARRANTY

Arriscraft warrants its products against deterioration for the life of the building, provided the products have been erected and used according to accepted masonry standards, within the guidelines of local building codes and as recommended by the manufacture. Complete warranty information is outlined on the Arriscraft standard form of Product Warranty.

## MAINTENANCE

Clean Thin-Clad ARRIS.stack™ Units in accordance with the cleaning guidelines in Thin-Clad•CARE. Various proprietary masonry cleaning detergents and acid-based cleaning systems may alter the color of Thin-Clad ARRIS.stack™ Units. Always pre-test cleaning agents and methods on the job-site mock-up panel or a small, inconspicuous area of the wall. The Consultant and/or Owner should approve the test area prior to the start of full-scale cleaning operations. Refer to Thin-Clad•CARE and ARRISCRAFT•NOTE (Vol. 2, No. 2) Cleaning Masonry for further information.

Arriscraft does not recommend the application of water repellent or graffiti-proofing sealers to its masonry products.

## TECHNICAL SERVICES

Arriscraft offers consultation services to assist with the preparation of details, specifications and with pricing. Enquiries are addressed promptly and without obligation.

## RELATED REFERENCES

Arriscraft distributes an integrated technical information system including:

- ARRISCRAFT•CADD: sample details which are available in .dwg, .dxf, and .pdf formats.
- ARRISCRAFT•DATA: product data sheets.
- ARRISCRAFT•NOTE: technical discussions with respect to building construction issues
- ARRISCRAFT•SPEC: master guide specification sections.

All of these technical resources are available to be downloaded from the Arriscraft web site at [www.arriscraft.com](http://www.arriscraft.com).

Arriscraft also makes available samples for color and finish, coursing charts and copies of test reports upon request.

For additional information on LATICRETE® products visit [www.laticrete.com](http://www.laticrete.com).

