



09300 - Thin Calcium Silicate Masonry Units

ARRIS•tile Renaissance® Units
09300 (09 30 00)
ARRIS•clip Renaissance® Units
04850 (04 73 17)



PRODUCT DESCRIPTION

BASIC USE Thin calcium silicate units used for vertical veneer wall applications in residential, commercial and institutional buildings.

Applications include: adhered tile installations, anchored or clipped veneer installations, and precast concrete panelized applications.

COMPOSITION AND MATERIALS Thin-Clad Renaissance® 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 Renaissance® Units are available in a variety of standard sizes in two unique systems:

ARRIS•tile Renaissance® Units

CODE	HEIGHT	LENGTH	BED*
RS358 TILE	3-5/8"	23-5/8"	3/4"
RS758 TILE	7-5/8"	23-5/8"	3/4"
RS115 TILE	11-5/8"	23-5/8"	3/4"

* Due to the allowable weight restrictions of 15 lbs/ft² for adhered units, the thickness of the ARRIS•tile units is limited to a maximum of 3/4" with rocked finish and 1-1/4" with smooth finish.

ARRIS•clip Renaissance® Units

CODE	HEIGHT	LENGTH	BED
RS358 CLIP	3-5/8"	23-5/8"	1-3/8"
RS758 CLIP	7-5/8"	23-5/8"	1-3/8"
RS115 CLIP	11-5/8"	23-5/8"	1-3/8"

* Clip units are fabricated with continuous kerfs cut into top and bottom beds.

Corner units with 3-5/8" returns can be provided for smooth and rocked finishes for each of the Thin-Clad Renaissance® Unit systems. Return corner units are 22-7/8" long. Additional custom shapes and sizes are available, up to a maximum length of 23-5/8" and face rise of 11-5/8". Profiles such as margins, chamfers, notches and bullnoses are available at a premium price. Contact your local Arriscraft representative or dealer for additional information.

TOLERANCES Thin-Clad Renaissance® Units are fabricated to the following tolerances:

- Unit Length: ± 1/16"
- Unit Height: ± 1/16"
- Deviation from square, with the measurement taken using the longest edge as the base will be ± 1/16"
- Bed Depth Thickness: ± 1/8"
- Custom Unit Dimensions: ± 1/8"

Thin-Clad Renaissance® Units are shop inspected to be sound and free of cracks, chips or other defects that would affect the serviceability or strength of the unit, or become exposed once installed and visible when viewed from a distance of not less than 10 feet under diffused light. Units with rocked 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.

COLORS AND FINISHES Thin-Clad Renaissance® Units are available from our Fort Valley, Georgia manufacturing facility in the standard colors and finishes listed in Table 1.

Standard Finishes and Colors - Table 1

COLORS	FINISH	
	SMOOTH	ROCKED
Limestone▲	•	•
Champagne▲	•	•
Suede▲	•	•
Oak Ridge■	•	•
Ginger■	•	•
Café♦	•	•
Garnet*	•	•
Magnolia*	•	•
Sunset*	•	•
Montecito*	•	•

▲ Monochromatic ♦ Monochromatic Range

■ Striated * Striated Range

Monochromatic colors consist of a single hue.

Striated colors are a multi-hue blend.

For those colors designated as **Range**, the distribution of colors or shades will vary from unit to unit.

Custom colors are also available on a minimum order basis.

Contact your local Arriscraft representative or dealer for additional information.

The standard finishes are described below:

- Smooth Finish: achieved by lightly honing the surface with a mechanical, fine abrasive head in a wide, circular motion.
- Rocked Finish: a surface finish resulting from mechanical splitting and hand-chiseling of the masonry unit to a set depth, to achieve a bold rustic appearance.

Thin-Clad Renaissance® Units are monitored for color consistency. Slight variations between batches may occur, and it is recommended that the installer mix units from different skids during installation. Consultants should review samples prior to selecting a particular color and finish.

LIMITATIONS Manufactured Thin-Clad products are generally intended for above-grade installations. Manufactured units are inherently absorptive, and as such, are not intended for use below grade. Units installed below grade will wick moisture from the soil that is in contact with the units, effectively creating a condition known as "rising damp" in the veneer.

In colder climates, Thin-Clad veneer walls at grade may also become exposed to de-icing compounds. As with other types of manufactured units, calcium silicate units should not be installed where they will be directly exposed to de-icing compounds used to melt snow and ice from pavements.

The function of caps and copings is to prevent moisture from entering the building envelope. As most manufactured units are produced in relatively short lengths, when they are used as a cap or coping material, this results in more joints between the units when compared to other longer products. The joints are the most likely entry point for moisture to infiltrate the building envelope.

As such, it is generally recommended that longer components such as quarried stone or metal parapet cap flashing be used to reduce the number of joints and thereby limit the potential infiltration points within the cap assembly.

ARRIS•tile RENAISSANCE® UNITS ARRIS•tile adhered veneer walls are intended to be a barrier wall system. This means that the tile and grout form a barrier to the passage of moisture. If moisture does manage to enter the wall system through the “barrier” or by some other means, the moisture may over time affect the integrity of the system.

The designer must consider climatic conditions and as a result, it is critical when using a barrier wall that the system be designed to preclude moisture from entering the wall system.

TECHNICAL DATA

APPLICABLE STANDARDS Required properties for calcium silicate units are described in ASTM C73-05, 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. Thin-Clad Renaissance® Units meet and exceed the requirements necessary to comply with the severe-weathering classification.

INSTALLATION

DELIVERY Thin-Clad Renaissance® 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 the units in a manner designed to prevent damage and staining. Stack units on timbers or platforms at least 3” above grade. Place polyethylene or other plastic film between wood and other finished surfaces of units when stored for long periods of time. Cover stored units if exposed to extreme weather conditions. Do not use de-icing compounds to remove ice from Thin-Clad Renaissance® Unit surfaces.

PREPARATORY WORK Extreme weather conditions may require preparatory work of all materials.

INSTALLATION Thin-Clad Renaissance® Units must be installed using approved materials and techniques for each specific installation.

ARRIS•tile RENAISSANCE® UNITS Construct ARRIS•tile Renaissance® Unit veneers in accordance with all applicable codes and standards and any local requirements stipulated by the authorities having jurisdiction. Installation should be over a suitable solid substrate. Designers should conform to the relevant design details contained in the latest edition of the Tile Council of North America’s (TCNA), Handbook for Ceramic Tile Installation for the proper installation. The TCNA design details outline the recommended setting materials and installation procedures specific to a particular set of design conditions. Beyond these recommendations, one of the thin-set mortar system manufacturers, such as Mapei (www.mapei.com), Laticrete International (www.laticrete.com), or Custom Building Products (www.custombuildingproducts.com) should be consulted. A grout should be used to fill the joints between units and applied using a grout bag.

The joints should then be tooled. For further information about the recommended type of grout that should be used consult with the same manufacturer that provided the thin-set mortar.

Construct tile veneers with an adequate number of elastic movement joints, properly located to accommodate differential movement. Refer to the latest edition of the Tile Council of North America’s (TCNA) Handbook for Ceramic Tile Installation for further information.

ARRIS•clip RENAISSANCE® UNITS A suitably solid substrate should be provided to support the anchors and ARRIS•clip Renaissance® Units. ARRIS•clip Renaissance® Units are provided with kerfs cut into the top and bottom of the units. Using the

Gridworx’s™ installation system to anchor the units to the substrate is one method of anchoring the units to the wall system. Refer to the installation recommendations provided by Gridworx (www.gridworxwalls.com).

With respect to filling the joints between individual ARRIS•clip Renaissance® Units a good quality backer-rod and sealant should be used to seal the outer face of the joint. Mortar may be used in the joints up to a height of 15 feet.

AVAILABILITY AND COST

AVAILABILITY Thin-Clad Renaissance® Units are available worldwide. Delivery times for orders will vary based on the complexity of the order. Arriscraft International 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 International for a list of dealers in your area.

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

WARRANTY

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

Other proprietary Thin-Clad installation systems are available. The designer must contact the manufacturer’s representatives of these other systems for application details and warranty information with regard to the system as a whole including the thin -clad units.

MAINTENANCE

Clean Thin-Clad Renaissance® Units in accordance with the cleaning guidelines in ARRISCRAFT•CARE. Various detergents and cleaning systems can change the color of Thin-Clad Renaissance® products. Acid-based cleaning agents will darken the color of the 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.

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

TECHNICAL SERVICES

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

RELATED REFERENCES

Arriscraft International distributes an integrated technical information system, comprised of the following components:

- ARRISCRAFT•DATA are product data sheets;
- ARRISCRAFT•NOTE are technical discussions with respect to building construction issues; and
- ARRISCRAFT•SPEC are master guide specification sections.

These technical resources are available for download at www.arriscraft.com.

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



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