

### PRODUCT DESCRIPTION

**BASIC USE** A calcium silicate brick unit used in full-bed masonry veneer construction for both interior and exterior applications.

For residential, commercial and institutional applications.

**COMPOSITION AND MATERIAL** Manufactured calcium silicate bricks contain no Portland cement. They are pressure-formed and autoclave cured, resulting in high-density, severe weathering bricks, with one or more finished faces. Refer to ARRISCRAFT•NOTE –Calcium Silicate Masonry Units for further information.

They may be site cut, trimmed and finished to custom lengths, shapes or sizes, as necessitated by site conditions.

**SHAPES AND SIZES** Arriscraft Brick products are available in a variety of standard sizes.

	CODE	HEIGHT	LENGTH	BED
<b>CAMBRIDGE PRODUCED</b>				
Contemporary Brick	CON31	3-1/8"	Random	3-1/2"
Tumbled Vintage Series	TVB31	3-1/8"	10-1/8"	3-1/2"
Architectural Linear Series	ALSB23	2-3/8"	Up to 23-5/8"	3-3/4"

**TOLERANCES** Arriscraft Brick products are fabricated with a pressed face height tolerance of  $\pm 1/16"$ . Dimensions produced by splitting units may have dimensional variations exceeding this value due to the nature of the splitting process.

Units shall exhibit a texture approximately equal to the approved sample when viewed under diffused daylight illumination at a 20 foot distance. Minor chipping resulting from shipment and delivery shall not be grounds for rejection. Minor chips shall not be obvious under diffused daylight illumination from a 20 foot distance.

**FINISHES** Standard finishes are as follows:

- Contemporary Brick: Split Finish; a surface finish resulting from mechanical splitting of pressed units, resulting in an uneven, naturally split appearance
- Tumbled Vintage Series: Split face, tumbled finish, one or more split heads and smooth beds.
- Architectural Linear Series: Smooth exposed face and ends with battered edges.

**LIMITATIONS** Manufactured masonry products 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 wick moisture from the soil that is in contact with the masonry units and create a condition known as "rising damp" in the masonry veneer.

In colder climates, masonry walls at 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.

The function of caps and copings is to prevent moisture from entering the building envelope through the top of the wall. As most manufactured masonry units are produced in relatively short lengths, if they are used as a cap or coping material, more mortar joints are required.

These horizontal mortar joints are the most likely entry points for moisture to infiltrate the building envelope. As such, it is generally recommended within the industry that longer components, such as quarried stone or metal parapet cap flashing, be used

to reduce the number of joints, thereby limiting the areas that may allow moisture infiltration of the building envelope.

**COLORS** Colors for each of the Brick products are as follows:

- Contemporary Brick: Blizzard, Ivory White, Mystic Grey, Phoenix, Tofino
- Tumbled Vintage Series: Chestnut Brown, Mystic Grey, Platinum Grey, Silver Mist, Weathered Oak
- Architectural Linear Series: Charcoal, Midnight Grey, Obsidian, Opal

As a manufactured material, Arriscraft Brick products are monitored for color consistency.

Slight variations between batches may occur, and it is recommended the installer mix units from different skids during installation.

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

**APPLICABLE STANDARDS** Required properties for calcium silicate masonry units are described in ASTM C73, Standard Specification for Calcium Silicate Face Brick (Sand-Lime Brick) for the United States.

### TECHNICAL DATA

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.

Arriscraft Brick products meet and exceed the requirements necessary to comply with the severe-weathering classification.

### INSTALLATION

**DELIVERY** Arriscraft Brick products 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 Arriscraft Brick products in a manner designed to prevent damage and staining of units. 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 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.

**PREPARATORY WORK** Arriscraft Brick products do not normally require pre-wetting prior to placement in the wall. It may, however, be advantageous under hot, dry or windy weather conditions to use pre-dampen the units. Damp units should be surface dry at the time of placement.

For additional information when constructing in hot or cold weather refer to the ARRISCRAFT•TECH bulletins titled Hot Weather Masonry Construction and Cold Weather Masonry Construction.

**INSTALLATION** Arriscraft Brick products must be installed using approved materials and techniques for each specific installation.

Construct masonry veneer with an adequate number of elastic movement joints, properly located to accommodate differential movement. Refer to ARRISCRAFT•NOTE – Building Movement Joints for further information.

Construct masonry veneer in accordance with [TMS 402-11/ACI 530-11/ASCE 5-11, Building Code Requirements for Masonry Structures in the United States](#), and any local requirements stipulated by the authorities having jurisdiction.

Mortar joints between bricks in any direction should be 3/8" thick.

Mortar for unit masonry veneer should be a Type N Portland cement-lime mix, proportioned to a 1:1:6 ratio. This ratio refers to:

- 1 part Portland cement (ASTM C150, Type I)
- 1 part hydrated lime (ASTM C207, Type S); and
- 6 parts masonry sand (ASTM C144).

When properly combined with the appropriate quantity of water, it will produce a general-purpose mortar, exhibiting good workability and board life in its plastic state, and good durability and flexibility in its hardened state; and conforming to ASTM C270; Standard Specification for Mortar for Unit Masonry.

For further information, refer to ARRISCRAFT•NOTE –Mortar for Masonry Veneer.

For applications where flexural strength is of particular importance to the design consult with our Technical Services Department for further recommendations.

Arriscraft recommends constructing masonry veneer with proper drainage mechanisms, including clear draining air spaces, through wall flashing membranes and weep hole vents. The air spaces must be at least 1" wide, and kept clear of debris, protrusions, mortar fins and droppings. Weep hole vents should be installed at the same level as through wall flashing membranes and spaced not more than 24" on centre horizontally.

Refer to ARRISCRAFT•NOTE – Moisture Management for further information.

Arriscraft Brick products must be connected to a structural substrate with an approved masonry connection system, designed by the consultant for each specific installation. Refer to ARRISCRAFT•NOTE – Connectors – Part I, Masonry Ties.

## AVAILABILITY AND COST

**AVAILABILITY** Arriscraft Brick products are available throughout the continental United States, as full-bed masonry units. 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 manufacturer. Complete warranty information is outlined on the Arriscraft standard form of Product Warranty.

## MAINTENANCE

Arriscraft Brick products should have excess mortar removed from their faces by brushing as they are placed within the wall at the point of tooling.

Clean Arriscraft Brick in accordance with the cleaning guidelines in ARRISCRAFT•CARE. Various masonry detergents and cleaning systems can change the color of masonry products. Acid-based cleaning agents will darken the color of the masonry 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 ARRISCRAFT•CARE – Cleaning Guidelines and ARRISCRAFT•NOTE – 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.

Arriscraft distributes an integrated technical information system including:

- ARRISCRAFT•CADD are sample details which are available in .dwg, .dxf, and .pdf formats.
- 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.

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

## RELATED REFERENCES

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

