**BASIC USE** Thin quarried stone units used in adhered tile installations for both interior and exterior applications. Appropriate for use in residential, commercial and institutional building projects.

**COMPOSITION AND MATERIAL** Thin Adair® Limestone is a dense, dolomitic limestone, quarried from the Amabel formation in the Bruce Peninsula near Wiarton, Ontario, Canada. It is a natural stone that has been selected, trimmed or cut to specified or indicated shapes or sizes.

**SHAPES AND SIZES** Thin Adair® Limestone is available in the following standard size:

<table>
<thead>
<tr>
<th>HEIGHT</th>
<th>LENGTH</th>
<th>BED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- ¼”</td>
<td>Random lengths up to 23-5/8”</td>
<td>Random (5/8” to 1-1/4”)</td>
</tr>
<tr>
<td>2-¼”</td>
<td>Random lengths up to 23-5/8”</td>
<td>Random (5/8” to 1-1/4”)</td>
</tr>
<tr>
<td>3-½”</td>
<td>Random lengths up to 12”</td>
<td>Random (5/8” to 1-1/4”)</td>
</tr>
</tbody>
</table>

Shipped material includes a percentage of shorter random length units which can be used by the installer in creating coursed patterns and around openings and at internal corners.

Stretcher material is available in either 100 square foot skids or 5 square foot boxes, packaged all three sizes per skid or box. Boxes of stretcher units weigh approximately 64 lbs. Corner pieces are not provided; corners can be created by butting a split end face against the finished face to create a bonded corner.

**TOLERANCES** Thin Adair® Limestone is fabricated to the following tolerances:
- Unit height: +/-1/8”

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. 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 Adair® Limestone is an all-weathering, highly resistant material exhibiting "long life under hard use" characteristics.

Adhered installation methods are not appropriate for applications where the adhering mortar will be in tension. For example, Thin Adair® Limestone should not be installed in soffit applications.

**COLOURS AND FINISHES** Thin Adair® Limestone units have a split finish, which is a surface finish resulting from mechanical splitting of the dolomitic limestone to achieve a rough, stone-like texture. Some units may have split fronts and backs.

Thin Adair® Limestone is a random blend of colours and patterns; Sepia and Blue-Grey, blended with random combination of Veined, Fleuri, and Cross Veined patterns.

As a naturally occurring material, Thin Adair® Limestone is subject to variations in color and pattern. Arriscraft strongly recommends that Consultants review submitted samples prior to selecting an acceptable range of color and pattern.

**APPLICABLE STANDARDS** Thin Adair® Limestone has been extensively tested and found to have the typical physical properties outlined in Table 004435.4.A

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Imperial Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>ASTM C170</td>
<td>22,900 psi</td>
</tr>
<tr>
<td>Absorption</td>
<td>ASTM C97</td>
<td>0.75 percent</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM C97</td>
<td>167 lbf/ft³</td>
</tr>
<tr>
<td>Modulus of Rupture</td>
<td>ASTM C99</td>
<td>2,250 psi</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C880</td>
<td>1,600 psi</td>
</tr>
<tr>
<td>Coefficient of Thermal Expansion</td>
<td>ASTM C531</td>
<td>6.0 x 10-6 F°-1</td>
</tr>
</tbody>
</table>

* Independent test reports available upon request.

It exceeds the requirements of ASTM C568-03, Standard Specification for Limestone Dimension Stone; Class III – High Density.

**DELIVERY** Thin Adair® Limestone is 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 Adair® Limestone 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 masonry surfaces.

**PREPARATORY WORK** Dirt and dust should be removed from backs of Thin Adair® Limestone units prior to installation as it may inhibit the bond between the unit and the mortar. The surface of the substrate should also be kept clean of dirt and dust. Methods of removal include using a fiber brush or damp sponge. Units should be surface dry at the time of placement.

Prior to installation of units, a ledger board should be installed to support the weight of the units until the mortar cures.
**INSTALLATION** Thin Adair® Limestone must be installed using approved materials and techniques for each specific installation. Refer to the ARRISCRAFT®CAD® Library for applicable details. Options are available for drainage plane, insulated drainage plane, ASHRAE 90.1 compliant, and barrier wall system installations. Construct Thin Adair® Limestone 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 Adair® Limestone. 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 Adair® Limestone veneer 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 Adair® Limestone is installed with dry joints between units, meaning there is no mortar used in the joints.

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 A118.4. Mortar should be applied to achieve 100% coverage. Spot-daub and ribbon methods are not appropriate for installation of Thin Adair® Limestone. Mortar should be burned into the backs of the units and substrate to optimize bond.

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 air 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** Thin Adair® Limestone is available worldwide. Delivery times for orders will vary based on the complexity of the order. 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.

Following initial order and receiving full sets of architectural and structural drawings and specifications, shop drawings will require approximately 5-6 weeks to prepare. Additional time should be allotted for review and comment.

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

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.

Clean Thin Adair® Limestone 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 masonry products. 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 – Cleaning Guidelines 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.

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

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

- 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.
- ARRISCRAFT®SPEC are master guide specification sections.

These technical resources are available for download at 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.