PRODUCT DESCRIPTION

BASIC USE A quarried stone used for both horizontal and vertical building and landscaping elements, such as wall cladding and veneer, caps, copings, column covers, pavers, stair treads, and retaining walls.

When polished, it is also appropriate for use as a flooring, interior wall cladding, washroom partitions and screens, table and counter tops, etc. For residential, commercial, institutional, and landscape applications.

For thin-clad adhered Adair® Limestone applications, refer to ARRISCRAFT•DATA—04 73 15 / 04 43 13.16 Thin-Clad Adhered Masonry Veneer Assembly.

COMPOSITION AND MATERIAL 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, with or without one or more mechanically dressed faces.

SHAPES AND SIZES In addition to the wide range of standard sizes and shapes described below, Adair® Limestone can easily be fabricated into custom shapes and sizes. Many custom designs and profiles can be fabricated up to the limit of a quarry block size. Quarry blocks are approximately 30" wide and 80" long; however, blocks larger than this can be quarried on an as-needed basis.

Some Adair® Limestone standard products, however, may only be available in specific colors or finishes. Contact your local Arriscraft representative or dealer for specific details.

Product Code	Height	Length	Bed
Adair® Masonry Units*		Color: Sepia or Blue-Grey, veined or fleuri Texture: Fine or Medium-dressed	
ADA358	3 5/8"	23 5/8"	3 9/16"
ADA758	7 5/8"	23 5/8"	3 9/16"
ADA115**	11 5/8"	23 5/8"	3 9/16"
Adair® Pedestal Units		Color: Sepia or Blue-Grey in a Quarry Range, veined Texture: Medium-dressed	
ADA758PD	7 5/8"	23 5/8"	3 9/16"
ADA115PD	11 5/8"	23 5/8"	3 9/16"
Residential Adair® Armour Course		Color: Sepia or Blue-Grey in a Quarry Range Texture: Split-face	
START	3 5/8"	Random up to 23 5/8"	3 5/8"
Adair® Parliament		Color: Sepia fleuri Texture: Split-face	
APM358	3 5/8"	Random up to 35 5/8"	3 5/8" (+/- 1/4")
APM758	7 5/8"	Random up to 35 5/8"	3 5/8" (+/- 1/4")
APM1158	11 5/8"	Random up to 35 5/8"	3 5/8" (+/- 1/4")
Adair® Studio		Color: Sepia fleuri in a Quarry Range Texture: Glacial finish	
ST22	2 5/16"	Random up to 35 5/8"	3 5/8"
ST50	5"	Random up to 35 5/8"	3 5/8"
ST75	7 5/8"	Random up to 35 5/8"	3 5/8"
Adair® Georgian Blend		Color: Blend of Sepia and Blue-Grey quarry run; 40-60% of each color	
AGB22	2 5/16"	Random up to 23 5/8"	3 5/8" (+/-1/4")
AGB50	5"	Random up to 23 5/8"	3 5/8" (+/-1/4")
AGB75	7 5/8"	Random up to 23 5/8"	3 5/8" (+/-1/4")
AGB103	10 3/8"	Random up to 23 5/8"	3 5/8" (+/- 1/4")

*To inquire about Metric sizes contact your local representative.
**ADA115 Sepia Fleuri, Medium Dressed Finish is a stock item.

Standard sizes, colors and finishes listed. Alternate sizes and finishes may be available on a special order basis.

Approximately 15% of Adair® Studio units and Adair® Masonry Units (Medium or Fine Dressed Finish) randomly distributed within the skids are expected to have an end suitable for exposure at openings or corners.

Adair® Pedestal Units are a specialty product designed for use as a masonry starter in direct contact with finished grade. With their greater density and lower absorption, they are ideally suited to resist the effects of soluble salts associated with "at grade" installations. Adair® Pedestal Units are available in sizes to match the Arriscraft Renaissance® Masonry Units.

Residential Adair® Limestone Armour Course are similar to Adair® Pedestal Units and are designed for use as a masonry starter in direct contact with finished grade for residential Building Stone projects.

TOLERANCES Adair® Limestone is fabricated to a critical dimension tolerance of plus or minus 1/8" for the following:
- Unit Length;
- Unit Height;
- Deviation from square, with the measurement taken using the longest edge as the base; and
- Custom Unit Dimensions.

Larger tolerances will apply to dimensions created by split surfaces. Contact your Arriscraft representative for further information.

Adair® Limestone products are shop inspected to be sound, durable and free of spalls, cracks, open seams, pits, or other defects that are likely to impair its structural integrity in its intended use. Dry seams and vugs may be present in the finished faces of Adair® Masonry Units, and are considered acceptable.

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. Chippage considerations do not apply when the desired surface texture and unit shape are intended to be uneven.

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

Adair® Limestone's use however under special conditions, such as where resistance to chemicals, acids, fossil fuels, blood and other bodily fluids, etc. become a consideration, should be verified with Arriscraft .

Polished finishes are not recommended for use in exterior applications, as environmental effects cause the polish to weather too quickly for practical maintenance considerations.

Chippage considerations do not apply when the desired surface texture and unit shape are intended to be uneven.

COLORS AND PATTERNS Adair® Limestone is available in two distinct colors:

- Blue-Grey
- Sepia

Both colors are available in two distinct patterns, resulting from limestone's natural tendency to form with a vein running along the horizontal axis. When cut into slabs, the direction of the cut will determine the surface pattern created by the veining.

These are typically referred to as fleuried and veined, as described below:

- Fleuried: a mottled effect obtained when the limestone quarry block is cut parallel to the natural bed of the stone.
- Veined: a linear veined effect obtained when the limestone quarry block is cut perpendicular to the natural bed of the stone.

Physical properties do not vary with cut direction.

As a naturally occurring material, 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.

FINISHES Standard surface finishes available include split, rocked, medium-dressed, fine-dressed, and glacial. Custom finishes include bush-hammered and polished. Not all finishes are practical in all instances. Contact your local Arriscraft representative or dealer to discuss applicability.

Each standard and custom finish is described below:

- Split Finish: a surface finish resulting from the mechanical splitting of the dolomitic limestone unit to achieve a rough, stone-like texture.
- Rocked Finish: a surface finish resulting from mechanical splitting and hand-chiseling of the dolomitic limestone to a set depth, to achieve a bold rustic appearance.
- Medium-Dressed Finish: a surface dressed with a mechanical honing head in a rubbing motion to remove the saw marks, producing an even, but not quite smooth, surface. Slightly visible honing marks are considered acceptable.
- Fine-Dressed Finish: a surface dressed with a mechanical honing head in a rubbing motion to remove the saw marks, producing a smooth and even surface, with little or no gloss. No honing marks are visible.
- Glacial Finish: a surface sawn finish highlighting and enhancing the natural characteristics of the limestone.
- Bush Hammered Finish: a surface dressed with a bush hammer (a hammer having a face that is sharply ridged or toothed with points in a square-set pattern) to have random spaced pits. Used both decoratively and to provide a roughened traction surface for treads, floors, and pavements.
- Polished Finish: a surface dressed first with a mechanical honing head to a fine-dressed surface, and then rubbed in a circular motion with a polishing stone to produce a high quality reflective surface.

TECHNICAL DATA

APPLICABLE STANDARDS Adair® Limestone exceeds the requirements of ASTM C568, Standard Specification for Limestone Dimension Stone; Class III—High Density. Units have been extensively tested and found to have the typical physical properties outlined below:

Property	Test Method	Imperial Result
Compressive Strength	ASTM C170	22,900 psi
Abrasion Resistance	ASTM C241	18.0
Absorption	ASTM C97	0.75 percent
Density	ASTM C97	167 lb/ft3
Modulus of Rupture	ASTM C99	2,250 psi
Flexural Strength	ASTM C880	1,600 psi
Coefficient of Thermal Expansion	ASTM C531	6.0X10-6F°-1

* Independent test reports available upon request

INSTALLATION

DELIVERY 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 Adair® Limestone 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.

Cover stored units with protective enclosure if exposed to weather.

PREPARATORY WORK Ensure the substrate is structurally stable and sound.
Vertical substrates should be plumb, horizontal surfaces level and reasonably smooth without large protrusions that could restrict the application of the stone.

When constructing masonry in hot or cold weather refer to the ARRISCRAFT•TECH bulletins titled Hot Weather Masonry Construction and Cold Weather Masonry Construction.

INSTALLATION Adair® Limestone must be properly 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, Building Code Requirements for Masonry Structures in the United States of America, and any local requirements stipulated by the authorities having jurisdiction.

For mortared applications, mortar joints between units in any direction should be 3/8" thick. The mortar 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.

Arriscraft recommends construction 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 center horizontally. Refer to ARRISCRAFT•NOTE – Moisture Management for further information.

Adair® Limestone units 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

AVAILABITY Adair® Limestone is available worldwide.

Delivery times for orders will vary based on the complexity of what is required. Most standard products are inventoried. For custom items and larger projects, contact your local Arriscraft representative or dealer for estimated delivery times.

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

The finish and use of Adair® Limestone will dictate the required cleaning schedule to maintain color and/or texture. Flooring material in high traffic areas may require daily cleaning while stone cladding on a building exterior may not require attention for many years.

Adair® Limestone should be maintained in accordance with the requirements of the Maintenance Commentary found in the Marble Institute of America's Dimension Stone Design Manual. Arriscraft also offers cleaning guidelines in ARRISCRAFT•NOTE (Vol. II, No. 3), titled Cleaning Adair Limestone, which describes the important criteria to be considered when specifying and conducting cleaning, agents and operations.

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.

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