



# Why Arriscraft Thin-Clad?



Take advantage of the most comprehensive set of thin-clad materials on the market today:

ARRIS-tile Renaissance<sup>®</sup>, Stack, Coastal, Midtown, Adair<sup>®</sup> Tile and Ashlar Thin-Adhered Veneers are adhered to a suitable solid substrate using polymer fortified mortars. Applications such as face-sealed, drainage plane, insulated drainage plane, and **Energy Code compliant (IECC, ASHRAE 90.1, SB-10) adhered veneers are possible**.

ARRIS-clip Renaissance<sup>®</sup> or Adair<sup>®</sup> clipped or anchored rainscreen veneers are kerfed, thin units that are simply 'clipped' to a substrate using a channel system. These can be used in sealed or open, back drained and ventilated rainscreen applications. **Energy Code (IECC, ASHRAE 90.1, SB-10) installations are also possible**.

Arriscraft Thin-Clad Units are versatile, surprisingly affordable and easy to install. All of our products will support "Green" product and design philosophies with attributes such as low embodied energy, reduced transportation, and a VOC-free finish for healthy interior spaces.





BBVA Compass – Kingwood, TX Branch | Ziegler Cooper Architects | ARRIS-clip Renaissance® Units

### NATURAL EDGE®

Our patented manufacturing process is unique in the world, so you won't find other stone products made like ours anywhere else. Remarkably, our simple process delivers superb durability and aesthetics – the same you would get from quarried stone.

#### PERFORMANCE

Naturally-made Arriscraft stone doesn't shrink, fade or discolor over time. Arriscraft's proprietary production method ensures remarkably natural color ranges and striations unmatched by other manufactured stone products. Our products have proven durability and come with the Arriscraft Lifetime Product Warranty.



#### SELECTION

Create unique and diversified exteriors utilizing Arriscraft thin adhered veneers. Maximum design versatility can be achieved by coordinating with our full-bed, ARRIS-clip and ARRIS-cast products.



#### INNOVATION

Product innovation at Arriscraft continues to meet market demands for modern stone designs and lightweight thin stone solutions. We also continuously improve our manufacturing process to lead the industry in green and sustainability initiatives.



#### SOLUTIONS

We lead the industry in premier product support, including an extensive technical library, complimentary Masonry Envelope Review services, personal technical support, and renowned custom color and blend development.



#### LIFETIME WARRANTY All Arriscraft stone products come with a lifetime warranty.



## Rainscreen Veneers

ARRIS-clip Renaissance<sup>®</sup> Units are a revolutionary idea for the installation of a thin stone cladding system. These Thin-Clad units are simply clipped to a substrate on the preengineered Gridworx<sup>™</sup> channel system, creating a **backdrained and ventilated rainscreen**; an easy and efficient means of installation. This cost-efficient curtain wall type system allows you to achieve stone façades without the costly "curtain wall" price.

Used in both the new build and renovation markets, the ARRIS-clip Renaissance<sup>®</sup>/Gridworx<sup>™</sup> system offers tremendous construction scheduling flexibility as the units do not have to be installed sequentially. An ARRIS-clip façade facilitates all-weather construction as it is a mortarless system.



Methuen High School | Methuen, MA | Finegold Alexander Architects | Montecito ARRIS-clip Montecito

## ARRIS-clip

Available standard features:

- Nominal 4", 8" and 12" face rises; nominal 24" lengths and 1-3/8" thickness
- 2" Thicknesses are also available
- Twelve standard colors
- Rocked, Smooth, and Satin textures
- Return corner units

Optional features:

- Custom colors (minimum order quantities may apply)
- Custom profiles (Refer to the Thin-Clad Profiles Guide)
- Colors and textures that match ARRIS-tile and full bed Renaissance<sup>®</sup> units allow for maximum design versatility



Height (H)	Length (L)	Bed (B)	Depth (D)
Stretchers:			
3-5/8"	23-5/8"	1-3/8"	-
7-5/8"	23-5/8"	1-3/8"	-
11-5/8"	23-5/8"	1-3/8"	-
Corners:			
3-5/8"	≤ 22-7/8"	1-3/8"	3-5/8"
7-5/8"	≤ 22-7/8"	1-3/8"	3-5/8"
11-5/8"	≤ 22-7/8"	1-3/8"	3-5/8"



Mirabella Senior Living Condos | Portland, OR | Ankrom Moisan Associated Architects | ARRIS-clip Renaissance® Units



## Rainscreen Veneers

## Adair® Clip

Adair<sup>®</sup> Clip is unlike any other stone cladding on the market. We've essentially designed very large sheets, or panels, of limestone that clip into a channel system for an outstanding aesthetic. Not only does Adair<sup>®</sup> Clip offer a completely unique look – with panels up to six feet long - it's also natural limestone which means its performance and durability is unmatched by concrete-based manufactured stone.

Adair<sup>®</sup> Clip is designed for installation using the Gridworx<sup>®</sup> channel system, which Arriscraft has successfully used for its thin ARRIS-clip calcium silicate stone product for many years.

Available standard features:

- Three heights 11-3/4", 15-3/4", 23-3/4"
- Lengths of 47-3/4" and 71-3/4"
- 1-1/4" thickness
- Available in Stretcher, Quirk Mitre, and Back-Checked units
- Blue-Grey or Sepia tones, in Fleuri or Veined pattern



Height (H)	Length (L)	Bed (B)
Stretchers:		
11-3/4"	47-3/4" or 71-3/4"	1-1/4"
15-3/4"	47-3/4" or 71-3/4"	1-1/4"
23-3/4"	47-3/4" or 71-3/4"	1-1/4"
Quirk Mitre:		
11-3/4"	47-3/4" or 71-3/4"	1-1/4"
15-3/4"	47-3/4" or 71-3/4"	1-1/4"
23-3/4"	47-3/4" or 71-3/4"	1-1/4"
Back-Checked:		
11-3/4"	47-3/4" or 71-3/4"	1-1/4"
15-3/4"	47-3/4" or 71-3/4"	1-1/4"
23-3/4"	47-3/4" or 71-3/4"	1-1/4"





Commerce Court Office Building | A Baldassarra Architect Inc. | Adair® Sepia Fleuri



# **ARRIS-clip Installation**

ARRIS-clip and Gridworx<sup>™</sup> channels maintain a drainage cavity behind the units, making them an ideal thin cladding system suitable for all climatic conditions. Replacement of damaged or graffiti-stained units is straightforward, further enhancing the cost efficiency and benefits of this system.

### Standard Clip



- 1. Poured concrete or concrete block
- 2. Waterproofing
- Gridworx<sup>™</sup> Channels
  ARRIS-clip or Adair<sup>®</sup>
- Clip Units 5. Continuous L-Brackets and vertical water blockers, or backer rod and sealant



- 1. Wood or Steel Studs 2. Exterior Grade
- Sheathing 3 Waterproof
- 3. Waterproofing
- 4. Gridworx<sup>™</sup> Channels
  5. ARRIS-clip or Adair<sup>®</sup> Clip Units
- 6. Continuous L-Brackets and vertical water blockers, or backer rod and sealant

## Z-Channel/Rigid Insulation



## 1. Poured concrete or concrete block

- 2. Waterproofing
- 3. Z-channels
- 4. Cavity Insulation
- 5. Gridworx<sup>™</sup> Channels 6. ARRIS-clip or Adair<sup>®</sup>
- Clip Units
- 7. Continuous L-Brackets and vertical water blockers, or backer rod and sealant



- 1. Wood or Steel Studs
- 2. Exterior Grade Sheathing
- 3. Waterproofing
- 4. Z-channels
- Cavity Insulation
  GridworxTM Channels
- 7. ARRIS-clip or Adair®
- Clip Units 8. Continuous L-Brackets
- and vertical water blockers, or backer rod and sealant



### Energy Code Compliant System



- 1. Poured concrete or concrete block
- 2. Waterproofing 3. Discrete girt with thermal break and vertical mullion assembly
- to limit thermal bridging.
- Cavity Insulation surrounding discrete girts
  Gridworx<sup>™</sup> Channels
  ARRIS-clip or Adair<sup>®</sup> Clip
- Units
- 7. Continuous L-Brackets and vertical water blockers, or backer rod and sealant



- 1. Wood or Steel Studs
- 2. Exterior Grade Sheathing
- 3. Waterproofing
- 4. Discrete girt with thermal break and vertical mullion assembly to limit thermal bridging.
- 5. Cavity Insulation surrounding discrete girts
- 6. Gridworx<sup>™</sup> Channels 7. ARRIS-clip or Adair<sup>®</sup> Clip Units
- 8. Continuous L-Brackets and vertical water blockers, or backer rod and sealant





Curtain wall construction has been a mainstay in the architectural community for many years with metal, glass, pre-cast and even quarried stone and terracotta materials being incorporated. ARRIS-clip Renaissance<sup>®</sup> and Adair<sup>®</sup> clip units provide a viable alternative with it's curtain wall type construction and can offer significant cost savings over these competing systems.

ARRIS-clip Renaissance<sup>®</sup> and Adair<sup>®</sup> clip units are suspended from the substrate on the continuous anodized aluminum Gridworx<sup>™</sup> channels. An airspace is maintained behind the supported stone units and drainage holes in the channels allow for drainage and drying of any moisture that does penetrate the assembly. This creates a back drained and ventilated rainscreen. The design and installation of "clipped" units in this rainscreen wall system

is easily understood by architects, installers, and general contractors alike as the system utilizes and builds on current construction principles and practices.

## Distinct looks can be achieved with the selection between two optional joint systems, SEALED or OPEN rainscreens.

With a SEALED BACK DRAINED AND VENTILATED RAINSCREEN application, a silicone sealant and backer rod fills and seals the joints around each unit. The sealed system offers the flexibility of non-systematic installation as each unit is independent of the next unit on the wall. Joint sealants are available in many colors and smooth and sanded finishes are possible.



Langley High School | Perkins Eastman Architects | ARRIS-clip Oakridge



Mountain Point Medical Center | ESA Architects | ARRIS-clip Sunset

Options are available in back drained and ventilated systems with either open or sealed joints with simple drainage plane, insulated drainage plane, or Energy Code compliant (IECC, ASHRAE 90.1, SB-10) system installations.



# ARRIS-clip Back Drained and Ventilated Open Rainscreens

Virtua Voorhees Hospital | Voorhees, NJ | HGA Architects and Engineers | ARRIS-clip Sunset

With all the versatility in design and construction of the sealed system, Arriscraft is pleased to be able to provide ARRIS-clip in a BACK DRAINED AND VENTILATED OPEN RAINSCREEN system as well. This open rainscreen option allows designers to use stone on their facades in a more modern way, taking stone from the traditional to the contemporary in look and feel.

The principle of rainscreen technology requires a three part assembly to prevent moisture penetration; the rainscreen veneer, airspace and waterproofing. With completely open joints, wind driven rain may be able to bypass the veneer and cavity making the waterproofing the only line of defense. The ARRIS-clip/Gridworx<sup>™</sup> OPEN RAINSCREEN system incorporates water deflection and drainage as additional measures against the infiltration of wind driven moisture while maintaining the open joint look.

This system uses the same channels as the sealed rainscreen but uses a modified and colored anodized L-bracket connection that is the full length of each unit giving the look of an open horizontal joint. Likewise, colored 'water blockers' are inserted in the vertical joints between units. These also serve to maintain the spacing between units, allow venting and quicker drying of the assembly, aid in pressure equilibrium, and deflect water. This same system also protects the air/moisture barrier from exposure, unlike truly open systems.

Other back drained and ventilated open rainscreen systems such as terra cotta have significant limitations to bond pattern and coursing options. The ARRIS-clip OPEN RAINSCREEN system on the other hand, allows for bond patterns and coursing options such as half-bond, third-bond, quarter-bond and stack bond, as well as soldier coursing.



Hartford Health Care Cancer Institute | New Britain, CT | Steffian Bradley Architects | ARRIS-clip Ginger & Montecito





University Of Southern Indiana Arena And Kinesiology Building | Evansville, IN | Cannon Design | ARRIS-clip Café



Photo: Laura Peters Cannon Design



# Thin Adhered Veneers

Utilizing thinner cladding materials effectively reduces transportation and the structural components in the building envelope. This means a lower carbon footprint and lower costs may be achieved.

Atelier at University Park | ARRIS-tile Oak Ridge

ARRIS-tile Renaissance<sup>®</sup>, Stack, Coastal, Midtown, Adair<sup>®</sup> tile and Ashlar thin adhered veneers have become favorites for classic interior designs and for exterior applications in new and renovation applications all over North America. These thin adhered veneers can be adhered to suitable solid substrates. Developed for vertical wall applications, they may be site cut, trimmed and finished to custom lengths, shapes or sizes.

## ARRIS-tile

Available standard features:

- Nominal 4", 8" and 12" face rises; nominal 24" lengths and 3/4" thickness
- 1-3/8" thicknesses are also available in smooth textured material
- Twelve standard colors
- Rocked, Smooth, and Satin textures
- Return corner units
- Optional features:
- Custom colors (minimum order quantities may apply)
- Custom profiles (Refer to the Thin-Clad Profiles Guide)
- Colors and textures that match ARRIS-clip and full bed Renaissance<sup>®</sup> units allow for maximum design versatility

## Stack

Available standard features:

- Three face rises are pre-blended on a skid
- Eight standard colors from our Fort Valley Plant, and six standard colors from our Cambridge plant
- Split face and sawn textures (sawn available from Fort Valley only)
- Return corner units

Optional features:

- Custom colors (minimum order quantities may apply)
- Custom profiles (Refer to the Thin-Clad Profiles Guide)





Height (H)	Length (L)	Bed (B)	Depth (D)
Stretchers:			
3-5/8"	23-5/8"	3⁄4"	-
7-5/8"	23-5/8"	3⁄4"	-
11-5/8"	23-5/8"	3⁄4"	-
Corners:			
3-5/8"	≤22-7/8"	3⁄4"	3-5/8"
7-5/8"	7-5/8" ≤ 22-7/8" <sup>3</sup> ⁄4"		3-5/8"
11-5/8" ≤ 22-7/8"		3⁄4"	3-5/8"
11-5/8" ≤ 22-7/8"		3⁄4"	3-5/8"

Height (H)	Length (L)	Bed (B)	Depth (D)
Stretchers:			
2-1/8"	4" to 23-5/8"	1-1/2"	-
3-5/8"	4" to 23-5/8"	1-1/4"	-
5-3/4"	4" to 23-5/8"	1-1/8"	-
Corners:			
2-1/8"	4" to 10"	1-1/2"	2" to 4"
3-5/8"	4" to 10"	1-1/4"	2" to 4"
5-3/4"	4" to 10"	1-1/8"	2" to 4"



# Thin Adhered Veneers



Arkansas Children's Northwest | Polk Stanley Wilcox Architects | Stack Beach

## Midtown

The unique Midtown series is reminiscent of a linear brick. It is available in three sizes that can be laid separately or combined. This versatile thin adhered stone can be laid with or without mortar joints.

Available standard features:

- Three separate face rises; one size per skid
- Five standard colors from our Fort Valley Plant, and six standard colors from our Cambridge plant
- Split face and sawn textures (sawn available from Fort Valley only)
- Return corner units

Optional features:

- Custom colors (minimum order quantities may apply)
- Custom profiles (Refer to the Thin-Clad Profiles Guide)
- Midtown can also be provided in full bed units to match

## Coastal

The linear Coastal Series is an evolution of our popular Stack product. The thin adhered Coastal Series is ideal for those that prefer a sleek look with a mortar joint.

Available standard features:

- Three face rises are pre-blended on a skid
- Five standard colors from our Fort Valley Plant
- Split face and sawn textures
- Return corner units

Optional features:

- Custom colors (minimum order quantities may apply)
- Custom profiles (Refer to the Thin-Clad Profiles Guide)
- Coastal can also be provided in full bed units to match





Height (H)	Length (L)	Bed (B)	Depth (D)
Stretchers:			
2-1/8"	4" to 23-5/8"	1-1/2"	-
3-5/8	4" to 23-5/8"	1-1/4"	-
5-3/4	4" to 23-5/8"	1-1/8"	-
Corners:			
2-1/8"	4" to 10"	1-1/2"	2" to 4"
3-5/8"	4" to 10"	1-1/4"	2" to 4"
5-3/4	4" to 10"	1-1/8"	2" to 4"

Height (H)	Length (L)	Bed (B)	Depth (D)
Stretchers:			
2-1/8"	4" to 23-5/8"	1-1/2"	-
3-5/8"	4" to 23-5/8"	1-1/4"	-
6-1/8"	4" to 23-5/8"	1-1/8"	-
Corners:			
2-1/8"	4" to 10"	1-1/2"	2" to 4"
3-5/8"	4" to 10"	1-1/4"	2" to 4"
6-1/8"	4" to 10"	1-1/8"	2" to 4"



# Thin Adhered Veneer Installation

### Face Sealed



- 1. Poured concrete or concrete block
- 2. Laticrete Air and Water Barrier
- Laticrete polymerfortified bonding mortars (call technical services for more information)
- 4. Arriscraft Thin Adhered Masonry
- 5. Pointing mortar



- 1. Steel or Wood Studs
- 2. Exterior Grade Sheathing
- Concrete backer board (½" thick) with taped and mudded joints
- 4. Laticrete Air and Water Barrier
- 5. Laticrete polymer-fortified bonding mortars (call technical services for more information)
- 6. Arriscraft Thin Adhered Masonry
- 7. Pointing mortar

### Drainage Plane



- 1. Poured concrete or concrete block
- 2. Laticrete Air and Water Barrier
- 3. Drainage Plane
- Concrete backer board (½" thick) with taped and mudded joints
- 5. Laticrete polymer-fortified bonding mortars (call technical services for more information)
- 6. Arriscraft Thin Adhered Masonry
- 7. Pointing mortar



- 1. Steel or Wood Studs
- 2. Exterior Grade Sheathing
- 3. Laticrete Air and Water Barrier
- 4. Drainage Plane
- 5. Concrete backer board  $(\frac{1}{2}'' \text{ thick})$  with taped and mudded joints
- 6. Laticrete polymerfortified bonding mortars (call technical services for more information)
- 7. Arriscraft Thin Adhered Masonry
- 8. Pointing mortar

## Insulated Drainage Plane/Energy Code Compliant



- 1. Poured concrete or concrete block
- 2. Laticrete Air and Water Barrier or ProGUARD<sup>\*</sup>DP Water Armor Air and Water Barrier
- ProGUARD<sup>®</sup>DP Insulated Concrete Board Panel with drainage planes (EPS, XPS, or mineral wool insulation)
- 4. Alkali Resistant Mesh Tape (with mudded joints)
- 5. ProGUARD<sup>®</sup>DP Insulated Concrete Board "Base Weep Panel" (EPS or XPS)
- 6. Laticrete polymer-fortified bonding mortars (call technical services for more
- information) 7. Arriscraft Thin Adhered Masonry
- 8. Pointing mortar

1. 2. 3. 4. 5. 6. 7.

- 1. Steel or Wood Studs
- 2. Exterior Grade Sheathing
- 3. Laticrete Air and Water Barrier or ProGUARD®*DP* Water Armor Air and Water Barrier
- ProGUARD<sup>®</sup>DP Insulated Concrete Board Panel with drainage planes (EPS, XPS, or mineral wool insulation)
- 5. Alkali Resistant Mesh Tape (with mudded joints)
- ProGUARD®DP Insulated Concrete Board "Base Weep Panel" (EPS or XPS)
- 7. Laticrete polymer-fortified bonding mortars (call technical services for more information)
- 8. Arriscraft Thin Adhered Masonry
- 9. Pointing mortar

### Interior



- 1. Poured concrete or concrete block
- Laticrete polymerfortified bonding mortars (call technical services for more information)
   Aminant fraction
- 3. Arriscraft Thin Adhered Masonry
- 4. Pointing mortar



- 1. Steel or Wood Studs
- Concrete backer board (1/2" thick) with taped and mudded joints
- Laticrete polymerfortified bonding mortars (call technical services for more information)
- 4. Arriscraft Thin Adhered Masonry
- 5. Pointing mortar





# Thin Adhered Veneer Exterior Applications



#### Thin Stone Benefits:

- The associated reduction in load affords significant savings in structural costs
- Contributes to sustainable architecture through:
  - low embodied energy
  - reduced transportation
  - reduced structure.
- Easy to use in new and renovation work



Midtown Peachtree - two sizes blended



Kelsey-Seybold Clinic | Kirksey Architecture | ARRIS-tile Custom Color



Stack Ash and Desert Sand Blend

A wide variety of wall construction methods are possible with ARRIS-tile, Stack, Coastal, Midtown, and Adair<sup>®</sup> tile and Ashlar. These include face-sealed, drainage plane, insulated drainage plane, and Energy Code compliant (IECC, ASHRAE 90.1, SB-10) applications.



# Thin Adhered Veneers Exterior Applications

W. G. (Bill) Hefner VA Medical Center | RPA Design | ARRIS-tile Gamet





Exterior thin adhered veneers are installed with a systems approach:

ProGUARD® *DP* Insulated Concrete Board is a combined system that eliminates the separate steps of the drainage plane, insulation, wire lath and mortar bed. The ProGUARD® *DP* panels consist of a fully laminated 1/4" thick concrete board to EPS, XPS or Mineral Wool insulation. Drainage grooves are cut into the front and back face of the EPS or XPS insulation to provide the assembly with a drainage plane. These fully engineered panels offer superior thermal protection that eliminates thermal bridges, to meet the continuous insulation (CI) requirements of the energy codes (IECC, ASHRAE 90.1, SB-10).

Arriscraft thin veneers are adhered with a system consisting of a polymer fortified mortar such as Laticrete's Hi-Bond Masonry Veneer Mortar and waterproofing such as Laticrete's Air and Water Barrier. To complete the system, the joints may be pointed using a pointing mortar and tooled to a weather resistant finish. All of this provides the opportunity for a system warranty.





# Thin Adhered Veneers Exterior Applications

The Oaklander Hotel | ARRIS-tile and ARRIS-clip Oakridge and Montecito



Promenade at Castle Rock | Galloway Architects | ARRIS-tile Montecito



Advanced Medical | Galloway Architects | ARRIS-tile and Stack Custom



ARRIS-tile Montecito and Stack Ash



# Quality Testing

Property/Test	Required Value	Tested Value	Rationale
Absorption/ ASTM C140	15 lb /ft3 (max)	11 lb/ft3	ASTM C73, Grade SW has a maximum absorption limit. We routinely test below this limit. Expressed as a percentage, this comes out to roughly 8.5% absorption by weight.
Compressive Strength/ ASTM C140	5500 psi (min, avg 3 units)	7000 psi	ASTM C73, Grade SW has a minimum compressive strength requirement. Our tested results are representative of a strong, durable material.
Density/ ASTM C140	N/A	130 lb/ft3	Not required by ASTM C73 but tested per ASTM C140. Consistent density value from routine testing shows a stable, consistent chemistry in material from run to run, giving confidence that material will perform over time.
Flame Spread/ ASTM E84	0 – 25 (Class A – Type 1)	0	For increased fire safety, building materials that will not propagate the spread of fire are desired. CSMU and Adair Limestone perform exceedingly well in this regard with the lowest possible result of zero.
Smoke Developed Index/ ASTM E84	0 – 450 (Class A – Type 1)	0	For increased life safety, building materials that will not produce noxious gasses in the event of a fire are desired. CSMU and Adair Limestone perform exceedingly well in this regard with the lowest possible result of zero.
Modulus of Rupture/ ASTM C99	N/A	914 psi	Not required by ASTM C73 but tested to determine flexural strength of CSMU. A high modulus of rupture means that the material can experience a significant amount of bending before failure. For comparison good quality natural stones will vary between 700 and 1000 psi.
NFPA 285/ NFPA 285	Pass	Pass	Commercial projects over 40 feet in height that contain combustible elements (such as insulation) require a PASS for NFPA 285 testing. Calcium Silicate materials over ProGUARD <sup>*</sup> <i>DP</i> panels have received this designation and can be used in these applications.
Miami-Dade County Approval/ TAS 202/ TAS 203	Pass	Pass up to 105 psf wind loads	The Florida Building Code has stringent requirements within Miami-Dade County for static air pressure, impact resistance, and wind pressure loading. Thin-Clad Calcium Silicate products installed over approved backings (concrete board) and impact-resistant sheathing meet these requirements for wind pressures up to 105 psf (equal to 202.5 mph wind velocities)

### **High Velocity Hurricane Building Code**

Our thin-clad stone exterior cladding system has met the 6th Edition (2017) Florida Building Code, after rigorous testing with the Miami-Dade Department of Regulatory and Economic Resources. This inherently strong wall system consists of: steel/wood stud (with plywood and concrete backer board) or concrete wall (poured or CMU), Laticrete Air and Water Barrier, Hi-Bond masonry veneer mortar and Arriscraft thin-clad calcium silicate stone. What the testing concluded, and our Miami-Dade approvals confirm, is that when our materials are installed with Laticrete's MVIS system it can be used in areas with up to 202.5 mph winds. This certification qualifies for the Miami-Dade area and down into the Florida Keys for Building Risk Categories I through to IV (essentially all buildings in all scenarios).



### **NFPA-285**

Fire can be beautiful when it's controlled in a fireplace or firepit, and regenerative when used correctly in a controlled burn in the natural environment, but it can be destructive and dangerous in the built environment putting not only buildings, but their occupants in danger.

For millennia it's been a well-known fact that masonry does not burn, and in the more recent century, testing supports that statement. Cities that have had the "great fire" like Chicago, Toronto, and New York when they rebuilt afterwards, they used masonry to prevent future "great" fires. Those cities, to this day, have a great tradition of using masonry.

With the change in the building codes however, and the introduction of the energy codes there has been a push to put more and more insulation outboard of the structural substrate, to ensure dew points fall in the correct place and we reduce thermal bridging in the wall assemblies, so we obtain better thermally performing wall assemblies. This has resulted in thicker walls when masonry was being used and we have seen an increase in thin stone systems to help reduce the wall system thickness but to maintain the aesthetics of the masonry.

As the energy codes have been adopted there has been an increase in use of foam plastic insulations in the wall cavity to achieve the thermal performance requirements of the energy codes. This has led to other concerns such as how those combustible elements such as foam plastics, waterproofing membranes, and certain claddings might contribute to the growth of a fire once it had started. As these wall systems have evolved the need for oversight for fire protection became necessary and the NFPA-285 Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Non-Load Bearing Wall Assemblies became a requirement. This standardized test for projects built of non-combustible construction is used to test if combustible materials in a wall assembly will propagate a fire if they started to burn.

We've always known our masonry materials (and most other masonry materials) wouldn't propagate a fire, however as masonry has become thinner and thin adhered masonry veneer systems have evolved and are being installed over continuous insulation systems like ProGUARD*DP*<sup>®</sup> as well as different waterproofing materials we needed to be sure how they would perform. With that in mind we undertook the NFPA-285 test with thin adhered masonry veneer installed over the ProGUARD*DP*<sup>®</sup> insulated Concrete Board Panels to be absolutely sure and we passed the NFPA-285 test with flying colors. For further information please request our NFPA-285 report from Arriscraft's Technical Services Department.









# Thin Adhered Veneer Interior Applications



Roy H. "Sonny" Watson Health Sciences Building, CGTC | Azar-Walsh | ARRIS-tile Sunset

#### Why use Thin Masonry Indoors?

- Thinner stone materials mean more interior space.
- VOC-free ensuring safe and healthy indoor air quality for the benefit of building occupants.
- No need to load the interior building structure with 4" masonry when the same look and feel can be created with thin.
- CSMU stone doesn't burn or create smoke in a fire, aiding in life saftey aspects in the event of a fire.

#### **Distinctive Style**

ARRIS-tile, Stack, Coastal and Midtown, Adair<sup>®</sup> tile and Ashlar establish dramatic interior spaces. Consider featuring stone on walls in lobbies, religious spaces, ballrooms and even hallways and elevator cores.



Liberty High School Commons | SVPA Architects | ARRIS-tile Magnolia

Bring the outside in with our thin adhered veneers! Consider continuing the motif of an Arriscraft exterior stone cladding on the interior walls.

T

Embassy Suites | Stack Desert Sand



# Thin-Clad Versatility



P&S Office Building | North Chelmsford, MA | Design/Build by P&S Construction | ARRIS-clip exterior, ARRIS-tile interior

Thin-Clad Renaissance<sup>®</sup> Units provide an ideal solution for various construction challenges.

Arriscraft Thin-Clad Units are the ideal solution for retrofitting existing walls. Building owners looking to attract new tenants, buyers and customers to their existing facilities can consider enhancing their building's curb appeal with the use of these materials.

Arriscraft Thin-Clad products do not require a ledge to support the stone veneer units. Overall, these systems are thinner and lighter than traditional brick or stone masonry veneer.

ARRIS-clip can also be installed during the winter months without the need for tarps, salamanders and in some cases scaffolding.

## A thin-clad wall system constructed with Arriscraft Thin-Clad products:

- addresses limited lot lines & site space restrictions
- is lighter for use on existing structural elements
- does not require a brick ledge for support
- facilitates all-weather construction, and
- provides an attractive, durable façade
- Requires less structure for elements like ribbon windows.
- Addresses Energy Codes and Coninuous Insulation (CI) requirements







Arriscraft



Bailey's Jewelers | Barnhill Contracting Company | ARRIS-tile Limestone

Discover the incomparable design flexibility of Arriscraft Thin-Clad products. Our technical services team will help ensure that your design vision is realized.





Available bullnoses, watertables, custom arches, chamfers and notches enable the designer to dress up a façade beyond what is typically available with many other thin products.

Special details such as stone soffits, barrel vaults, battered/sloping walls, gable ends and building cantilevers are readily achieved with the use of an ARRIS-clip wall system







## About Arriscraft

Arriscraft manufactures a vast range of premium stone for commercial and residential projects, including full-bed Building Stone, Renaissance<sup>®</sup> Masonry Units, Thin-clad adhered and clipped masonry, Adair<sup>®</sup> Limestone, and cast accessories. Cambridge, Ontario Plant 875 Speedsville Road Cambridge, Ontario, Canada N3H 4S8

Toll Free: 800-265-8123 Email: solutions@arriscraft.com

Fort Valley, Georgia Plant 6054 Zenith Mill Road, Arriscraft Lane Fort Valley, Georgia, USA 31030

Toll Free: 888-910-7775 Phone: 478-827-1896

B-GA-THIN 1119

#### **IMPORTANT NOTES**

Colors and textures have been reproduced as closely as the printing process allows. Final selection should be made from actual samples.

Arriscraft stone products must be installed using industry recommended materials and techniques and conform to all related building requirements. All masonry products are intended for above-grade installations. Proper care, installation and cleaning are required for warranty validation. Please refer to the Thin-Clad DATA Sheets and Thin-Clad CARE at: www.arriscraft.com



Arriscraft is the stone products group of General Shale, the North American subsidiary of Wienerberger AG and a leading manufacturer of brick, one of the world's oldest green building materials.

ON THE COVER

Mirabella Senior Living Condos | Portland, OR Ankrom Moisan Associated Architects ARRIS-clip Renaissance® Units



www.arriscraft.com