

ARDEX EXTERIOR TILE & STONE SYSTEMS



DRAINAGE AND PEDESTAL SYSTEMS
VENEER STONE INSTALLATION SYSTEMS
CONCRETE RESTORATION SYSTEMS



tile & stone
Installation Systems
www.ardexamericas.com • 1-888-512-7339



ARDEX EXTERIOR TILE & STONE SYSTEMS

Beautiful aesthetics combined with the long-term durability of tile and stone has led to enhanced popularity for outdoor installations. Especially in today's health-conscious environment, outdoor spaces are now even more desirable in residential and commercial venues. The caveat is that exterior installations are subject to harsh weather and difficult environments. Issues such as efflorescence, staining, discoloring and disbonding are commonplace in outdoor installations. These problems are primarily caused by sedentary and evaporating water along with moisture vapor combined with incorrect installation techniques and materials.

Reliable solutions for exterior installation challenges:

- Drainage and Pedestal Systems
- Veneer Stone Installation Systems
- Concrete Restoration Systems

As the industry innovation leader for exterior tile and stone installations, ARDEX offers four time-tested systems featuring Passive Capillary Drainage Technology. Watec®, TerraMaxx® TSL Pedestals, ProDrain® and the TerraMaxx® Systems are uniquely designed not as waterproofing systems, but proven systems to actually move water out and away from the installation.

ARDEX continues its leadership in exterior and interior Veneer Stone Installation Systems by providing a collection of high-performance products designed to make the installation of most all types of these very popular wall coverings much easier and faster than traditional installation methods. ARDEX Systems result in less time and overall costs combined with long-term durability backed by the ARDEX Veneer Stone 5-Year Warranty.

And, when there are adjacent concrete surfaces like sidewalks, pool surrounds, driveways and steps that need freshened up to complete and blend the overall aesthetic look of the new environment, ARDEX Concrete Restoration Systems are the perfect solution. Legacy ARDEX products and systems that allow landscapers, contractors and architects to refresh and restore concrete surfaces versus the high cost, time consuming and environmentally detrimental option of tearing out and replacing concrete.

Architects, landscape designers, contractors and installation professionals can now confidently specify tile and stone in outdoor spaces without fear of the inherent risks commonly associated with installations outdoors.

It's your choice; address weather, water and moisture with the time-proven ARDEX Exterior Tile & Stone Systems upfront or be prepared to manage maintenance and call backs later!



ARDEX DRAINAGE and PEDESTAL SYSTEMS

The ARDEX Difference

ARDEX Drainage and Pedestal Systems are four time-tested systems featuring Passive Capillary Drainage Technology. These unique systems are uniquely designed NOT as waterproofing systems, but proven systems that actually move water out and away from the installation.

- **ARDEX Wattec®** Drainage System

- Low construction height
- Ideal for almost any size of tile

- **ARDEX TerraMaxx® TSL** Pedestal System

- Pre-assembled pedestals in 5 sizes
- Easy leveling and pitch adjustment up to 9% without tools
- Integrated spacer and sound dampening pad

- **ARDEX TerraMaxx®** Cement Pedestal Drainage System

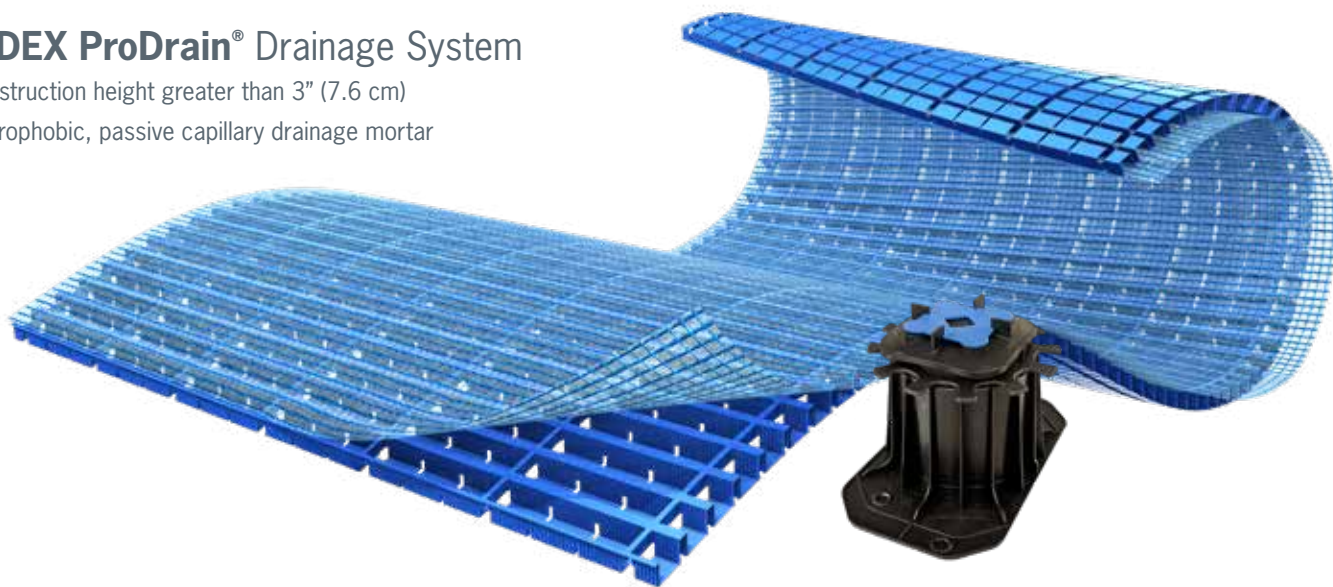
- Ideal for 3/4" (2 cm) Porcelain Tile and Pavers
- Low construction height

- **ARDEX ProDrain®** Drainage System

- Construction height greater than 3" (7.6 cm)
- Hydrophobic, passive capillary drainage mortar



Scan for complete Drainage
and Pedestal information.



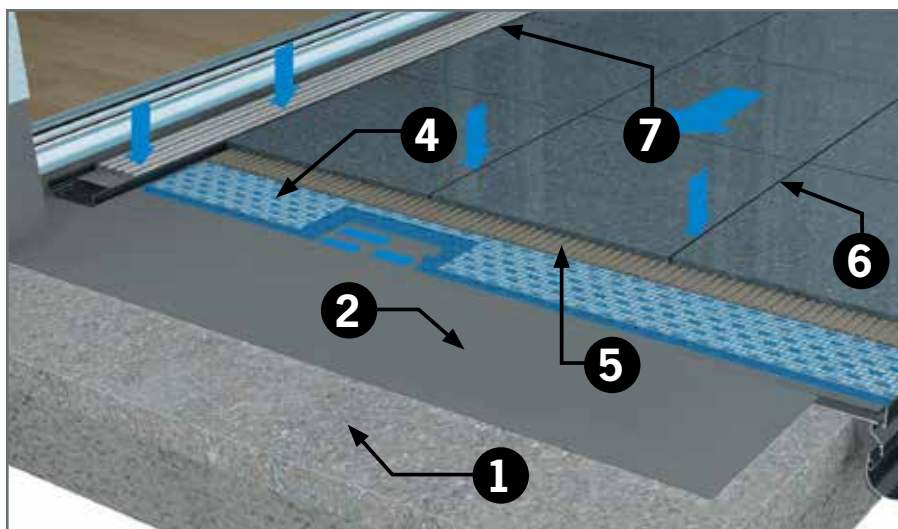


ARDEX Watec® Drainage System

Developed specifically for exterior installations of the most common types of tile and stone with limited construction height, the ARDEX Watec® Drainage System is anchored by the ARDEX UD 150™ Watec® Drainage Mat and ARDEX X 90™ OUTDOOR Microtec3 Mortar. ARDEX Watec® is a comprehensive passive capillary, three-dimensional drainage system designed to move water through and away from tile and stone installations on patios, balconies and decks providing maximum protection against efflorescence, staining and disbonding.

Installation Steps

1. Begin with a sound, solid substrate pre-sloped 1.5 to 2% grade
(ARDEX AM 100™ Smoothing and Ramping mortar can be used to create slope)
 2. Install ARDEX TLT™ Waterproofing Membrane and Vapor Retarder*
 3. Install ARDEX UD 146™ Perimeter Strip along walls and attached structures (not shown)
 4. ARDEX UD 150® Watec® Drainage Mat is installed loose laid over the ARDEX TLT™ Waterproofing Membrane
 5. ARDEX X 90 OUTDOOR™ Microtec3 Tile and Stone Mortar is flat-troweled and combed directly over the Watec® Drainage Mat. Back-butter (flat trowel) the tile or stone and then set into place
 6. ARDEX FL™ Rapid Set, Flexible Sanded Grout can be installed in as little as 2 hours
 7. Use ARDEX SX™ 100% Silicone Sealant around the perimeter and where soft/flexible joints are needed
- Always read Watec® Installation Guide for complete installation details.





ARDEX TerraMaxx® TSL Pedestal Systems

Pre-assembled, raised-flooring support system for 3/4" (2 cm)+ porcelain tile/pavers or 1 1/8" (3 cm) Natural Stone. ARDEX TerraMaxx® TSL Pedestals enable quick and simple installations on balconies, roof terraces and other walk-on surfaces. Rain water runs off through the open joints. Piping, power lines and floor gullies can be concealed in the cavity between the covering and the substrate and remain accessible since individual tiles can be lifted and exchanged as needed.



TSL-XS



TSL-S



TSL-M



TSL-L

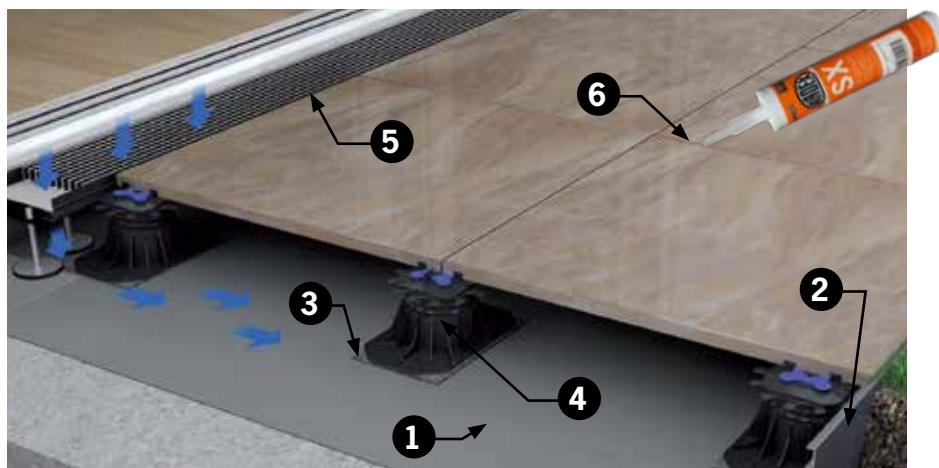


TSL-XL

- Pre-assembled pedestals in 5 sizes 1" to 4.7" (26 mm to 120 mm)
- Easy leveling and pitch adjustment up to 9% (no tools required)
- Integrated spacers 1/16" (2 mm) with available 3/16" (5 mm) spacer attachment
- Built-in sound dampener, reduces sound up to 30 dB

1. ARDEX TLT™ Waterproofing Membrane and Vapor Retarder*
2. ARDEX ProFin® KL Profile
3. ARDEX UD 189 TerraMaxx® TSL Pad

4. ARDEX TerraMaxx® TSL Pedestals
5. ARDEX ProDrain® Drains
6. Joints left open or ARDEX SX™ 100% Silicone Sealant can be used





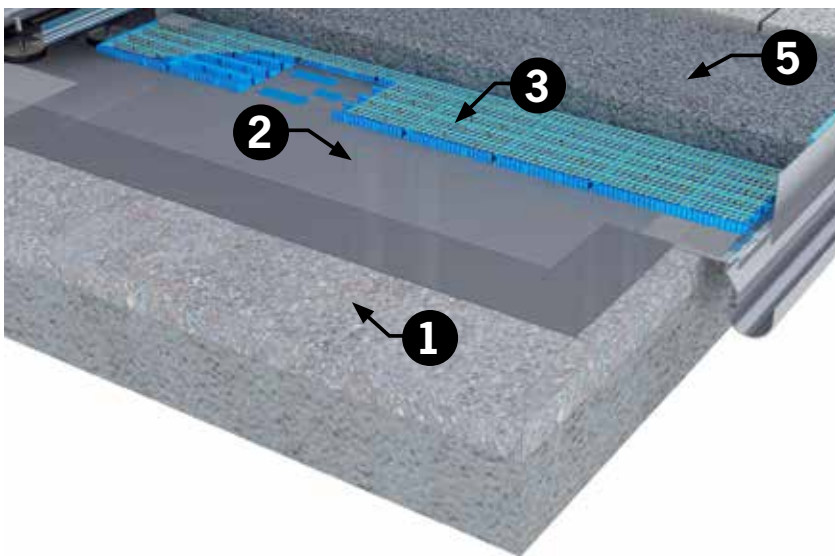
ARDEX ProDrain® Drainage System

An innovative and comprehensive passive capillary drainage system designed for 3/4" (2 cm)+ porcelain tile and stone. The system features the ARDEX ProDrain® Drainage Mat and ARDEX Drainage Mortar. When mixed with the recommended aggregates, ARDEX Drainage Mortar is hydrophobic and allows water to move easily and quickly through into the ARDEX ProDrain® Drainage Mat and away from the installation. The ARDEX ProDrain® Mat and ARDEX Drainage Mortar work together to prevent capillary movement of water and moisture back up through to the covering providing maximum protection against efflorescence, framing and staining. Ideal for installations with tile or pavers where 3" (7.6 cm)+ construction elevations are needed.

Installation Steps

1. Begin with a sound and solid substrate pre-sloped 1.5 to 2% grade
(ARDEX AM 100™ Smoothing and Ramping Mortar can be used to create slope)
2. Install ARDEX TLT™ Waterproofing Membrane and Vapor Retarder*
3. ARDEX UE 190-8 ProDrain® Drainage Mat is installed loose laid over the ARDEX TLT™ Waterproofing Membrane
4. Install ARDEX UD 146™ Perimeter Strip on top of the ProDrain Mat along walls and attached structures (not shown)
5. ARDEX Drainage Mortar is installed with recommended aggregate at a minimum of 2" (51 mm) directly on-top of the mat
(A hydrophobic, deep-bed mortar that allows water to pass through freely into the ProDrain® Drainage Mat)
6. Back-trowel ARDEX X 90 OUTDOOR™ to the back of the tile with the appropriate size notched trowel

• Always read the ProDrain® Installation Guide for complete installation details.



ARDEX Drainage Mortar



Traditional regular sand cement screed



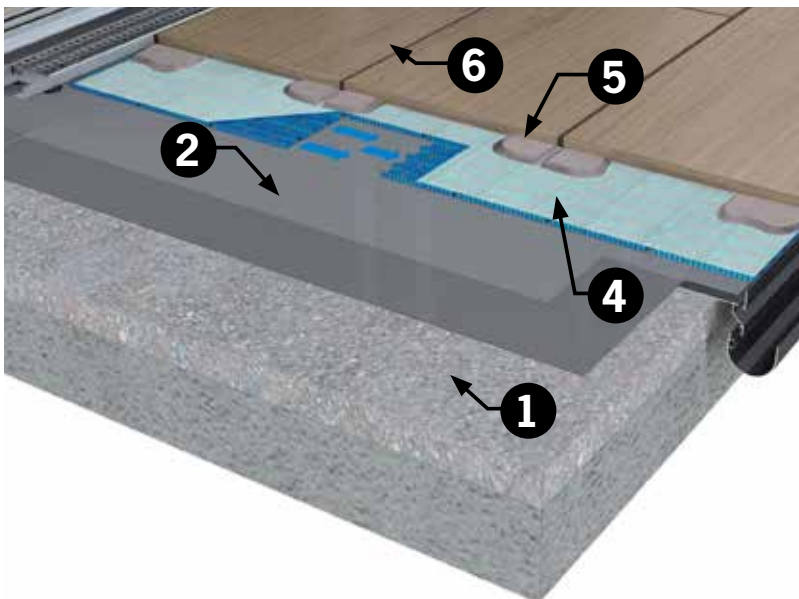
ARDEX TerraMaxx®

Cement Pedestal Drainage Systems

A time-tested, comprehensive passive capillary drainage system for the installation of 3/4" (2 cm)+ porcelain tile/paver or 1 1/8" (3 cm) Natural Stone. Ideal where minimal construction elevation is required. ARDEX X 32™ MICROTEC® Rapid Setting and Drying Thin-to-Thick Bed Mortar is used to build cement pedestals directly onto the ARDEX ProDrain® Drainage Mat.

Installation Steps

1. Begin with a sound and solid substrate pre-sloped 1.5 to 2% grade (ARDEX AM 100™ Smoothing and Ramping mortar can be used to create slope)
2. Install ARDEX TLT™ Waterproofing Membrane and Vapor Retarder*
3. Install ARDEX UD 146™ Perimeter Strip along the perimeter of the attached structure (not shown)
4. ARDEX UE 190-8 ProDrain® Drainage Mat is installed loose laid over the ARDEX TLT Waterproofing Membrane™
5. ARDEX X 32™ MICROTEC® Mortar is used to create cement pedestals (approx. 1/4" thick) placed directly onto the ARDEX ProDrain® Drainage Mat positioned to support the corners of the tile or stone.
6. Joints can be sealed with ARDEX SX™ 100% Silicone Sealant or left open
 - Always read the TerraMaxx® Installation Guide for complete installation details.





ARDEX Mortars... Complete Confidence versus the Destructive Forces of Nature



ARDEX X 90 OUTDOOR™

Microtec3 Rapid Set, Flexible Tile and Stone Mortar

- Highest levels of freeze thaw protection (150+ freeze/thaw cycles)
- Maximum efflorescence resistance
- Consistent performance in the harshest heat and humidity
- Sets at temps as low as 40°F (5°C)



ARDEX X 32™ MICROTEC®

Universal Rapid Setting and Drying Thin-to-Thick Bed Mortar

- Sets in just 3 hours - even at 1 1/4" (32 mm) thickness
- Perfect for ungauged stone
- ARDEX Self-Drying Technology - No shrinkage or staining



ARDEX Drainage Mortar

(Cement Binder)

- Allows water to pass through and away from installation
- Hydrophobic – repels water and absorption
- Will not contribute to efflorescence

ARDEX ProFin™ Profiles and ARDEX ProDrain® Drain Grates

Height-adjustable drains and profiles for a complete aesthetic finish

ARDEX ProFin™ Profiles and Face Plates

High-quality aluminum powder-coated profiles and accessories for a clean, finished look with functionality that moves water effectively away from the installation

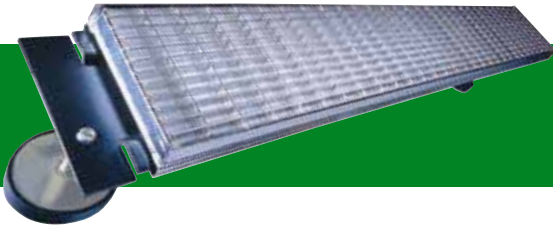


- High-quality aluminum powder-coated profiles and accessories

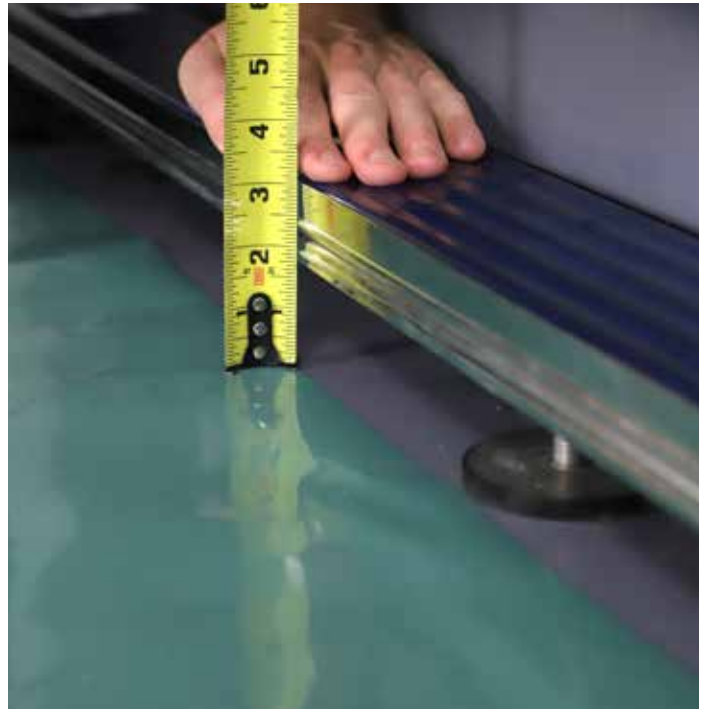


ARDEX ProDrain® Drain Grates

Height-adjustable drain grates strategically placed in front of doorways and floor level windows to prevent water seepage to vulnerable interior areas. The drain grates allow the flow of water or melting snow directly into the drainage mat.



- Adjustable sliding feet and legs
- Integral dirt trap prevents debris build up



*ARDEX TLT™ Waterproofing Membrane is NOT a replacement for waterproofing protection over occupied living spaces. Applications over occupied living spaces require an existing, intact primary roofing membrane prior to the installation of any ARDEX Exterior System. ARDEX TLT™ Waterproofing Membrane is used to provide protection against vapor transmission from the substrate. For additional details regarding exterior installations over living spaces please contact the ARDEX Technical Department at 1-888-512-7339.

**For the ARDEX Watec® Drainage System and ARDEX ProDrain® Drainage System the Tile or Stone being installed must be approved by manufacturer for use in exterior installations. For ARDEX TerraMaxx® TSL Pedestal System or the ARDEX TerraMaxx® Drainage System the Tile or Stone being installed must be approved by the manufacturer for use with pedestal support systems.



ARDEX VENEER STONE INSTALLATION SYSTEMS

The ARDEX Difference

Stone veneer (also known as manufactured stone, natural stone veneer) is among the fastest growing decorative building products on the market. The aesthetics of these products have improved significantly providing an attractive finished look that is hard to differentiate from authentic natural stone at a much lower cost.

Despite the many benefits, the increased popularity of veneer stone has led to an influx of less experienced installers and the continued use of low-quality materials that are highly inconsistent and not properly formulated for these specialty coverings. The results are delamination, water problems, failures and on-going call backs that lead to costly repairs.

ARDEX Veneer Stone Installation Systems are comprised of time-tested, high-performance mortars and wall smoothing compounds that deliver measurable, tangible differences in veneer stone installations including:

- **Creamy, smooth, very easy-to-mix and apply**
- **Mortar stays on the wall, less mortar waste and less mess**
- **Outstanding non-sag bond strength**
- **Long open and working times**
- **Long-term durability and reliability**
- **Significant time savings and minimized call backs**
- **Overall project cost reduction and enhanced profitability**

Backed by the comprehensive ARDEX Veneer Stone 5-Year Warranty for ultimate long-term peace of mind!

ARDEX also offers extensive training and support through an expert team of technical specialists and sales professionals throughout North America!



Scan for complete Veneer
Stone installation information.

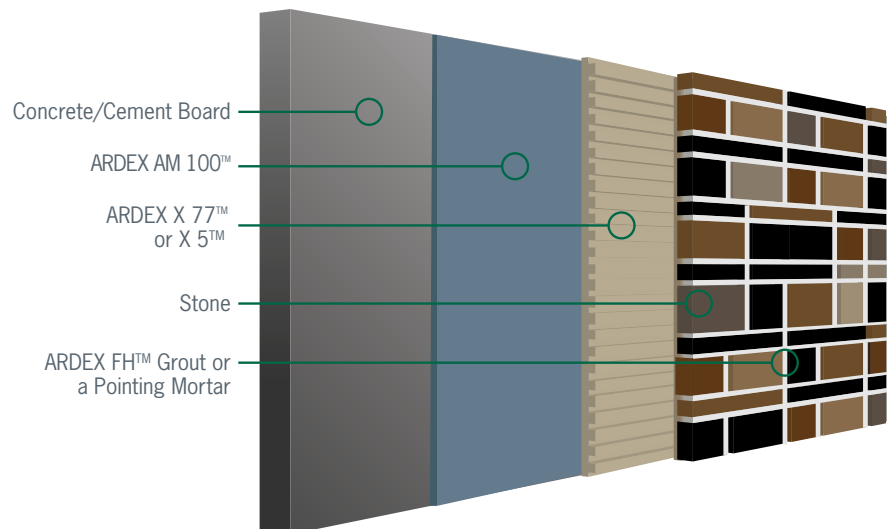




Installation Methods

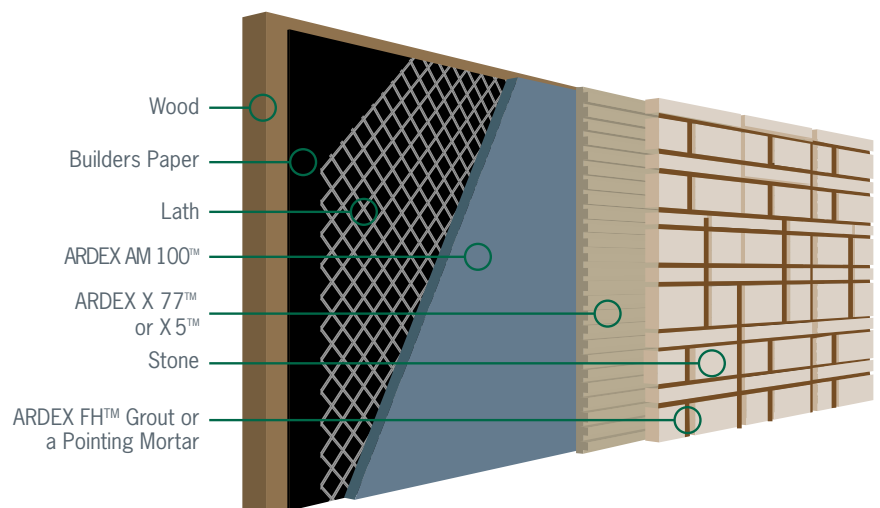
Interior Installation Over Concrete, Masonry or Cement Board Substrates

1. Concrete or masonry substrates that are rough or require repair can be easily smoothed with ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar to create an optimal smooth surface that can receive veneer stone in just two hours where most brown coats require a minimum of 24 hours.
2. ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar or ARDEX X 5™ Flexible and Versatile Tile and Stone Mortar
3. ARDEX FH™ Sanded Floor and Wall Grout or an appropriate pointing mortar.



Interior Installations Over Framed or Wood Substrates

1. Fasten builders paper (tar paper), Grade D paper or similar to the substrate (typically two layers) and then attach metal lath that complies with ASTM 1063.
2. Smooth over the lath with ARDEX AM 100™ Rapid Set Smoothing and Ramping Mortar to create a smooth surface. Veneer stone can be installed in just two hours where most brown coats require a minimum of 24 hours.
3. ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar or ARDEX X 5™ Flexible and Versatile Tile and Stone Mortar
4. Grout with ARDEX FH™ Sanded Floor and Wall Grout or an appropriate pointing mortar.

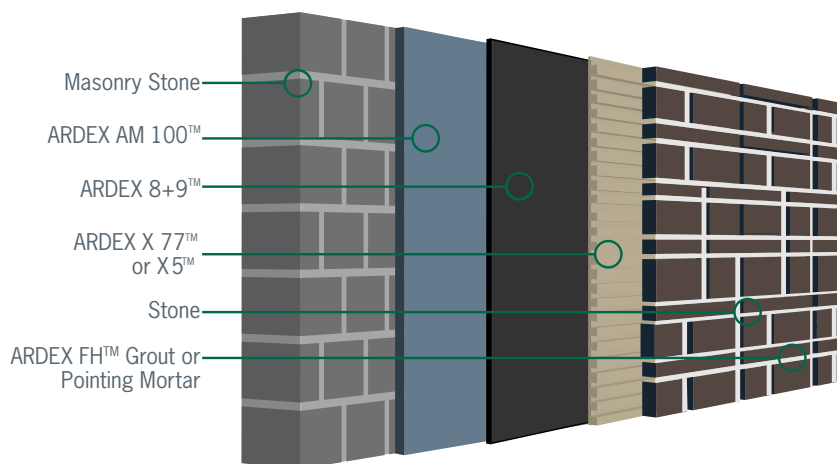


For interior installations using cement board over wood framed substrates refer to concrete diagram above.



Exterior Installation Over Concrete, Masonry or Cement Board Substrates

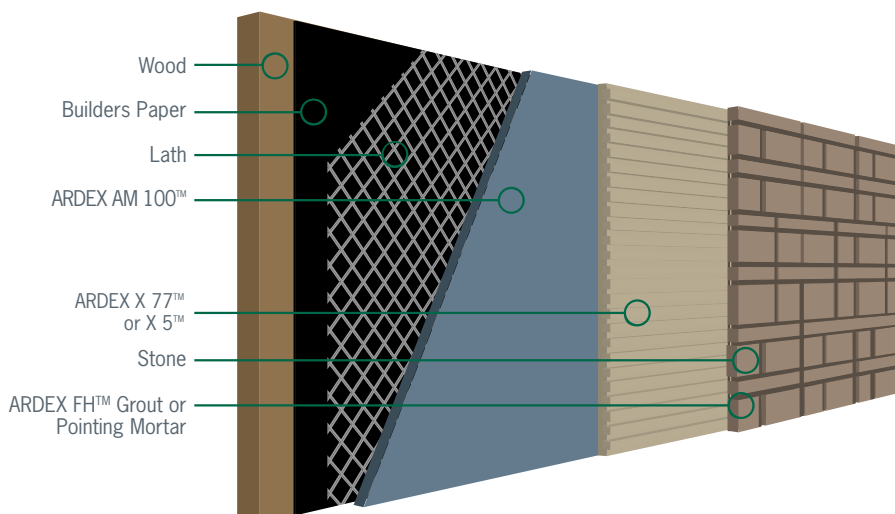
1. Concrete or masonry substrates that are rough or require repair can be easily smoothed with ARDEX AM 100™ Rapid Set Smoothing and Ramping Mortar to create an optimal smooth surface that can receive veneer stone in just two hours where most brown coats require a minimum of 24 hours.
2. ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound can be applied over the ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar or directly to the concrete, masonry or cement board substrate to provide topside protection from water intrusion. **Important:** If waterproofing is required, please contact the ARDEX Technical Department for installation recommendations.



3. ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar or ARDEX X 5™ Flexible and Versatile Tile and Stone Mortar
4. ARDEX FH™ Sanded Floor and Wall Grout or an appropriate pointing mortar.

Exterior Installations Over Framed Wood or Other Substrates

1. Fasten builders paper (tar paper), Grade D paper or similar to the substrate (typically two layers) and then attach metal lath that complies with ASTM 1063.
2. Smooth over the lath with ARDEX AM 100™ Rapid Set Smoothing and Ramping Mortar to create a smooth surface. Installation can proceed in just two hours where most brown coats require a minimum of 24 hours.
3. Use ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar or ARDEX X 5™ Flexible and Versatile Tile and Stone Mortar to install the veneer stone.



4. ARDEX FH™ Sanded Floor and Wall Grout or an appropriate pointing mortar.



ARDEX VENEER STONE INSTALLATION Products

ARDEX X 77™ MICROTEC®

Fiber Reinforced Tile and Stone Mortar

- Creamy, very easy to mix and apply consistency
- True 60 minute open time indoors and out
- Non-Sag – double ISO certification standards
- Long adjustment and working time
- 3 hour pot life – re-whip and keep on going
- Excellent flexibility and strength
- Water and frost resistant

ARDEX X 5™

Flexible and Versatile Tile and Stone Mortar

- Creamy smooth consistency
- Non-Sag – double ISO certification standards
- Long adjustment and working time
- 3 hour pot life – re-whip and keep on going
- Excellent flexibility and strength
- Water and frost resistant

ARDEX AM 100™

Rapid Set Pre-Tile Smoothing and Ramping Mortar

- Use as brown coat over lath and for smoothing
- Easy to work with consistency that stays on the wall
- Install stone in just 2 hours
- Installs up to 1 1/4" in one lift
- Only one coat required
- Water and frost resistant

ARDEX FH™

Sanded Floor and Wall Grout

- For joints 1/6" to 3/4" (1.5mm to 19mm)
- Creamy easy to mix, apply and form in the joint
- Strong and durable joints
- Working time and Pot Life - 2 hours
- When cured unaffected by weather and water

Other Outstanding Products For Exterior Installations

ARDEX X 32™ MICROTEC®

Fiber Reinforced, Rapid Thin to Thick Bed Mortar

- For installation of large, heavy and ungauged stone
- Outstanding bonding power; no shrinkage
- Install from thin bed up to 1 1/4"
- Open to traffic in just 90 minutes
- Unaffected by weather, water and moisture

ARDEX X 90 OUTDOOR™

MicroteC3 Rapid Set, Flexible Tile and Stone Mortar

- Highest levels of freeze thaw protection (150+ freeze/thaw cycles)
- Maximum efflorescence resistance
- Consistent performance in the harshest heat and humidity
- Sets at temps as low as 40°F (5°C)



ARDEX CONCRETE RESTORATION SYSTEMS

Repair...Don't Replace!

When concrete sidewalks, pool surrounds, steps and driveways start showing signs of wear and tear from usage and harsh weather, ARDEX provides a significant time, cost and sustainable solution. With ARDEX CD™, you can resurface worn and spalled concrete to provide a “new concrete” finish.

ARDEX CD™

Concrete Dressing

- Resurface worn and spalled concrete to provide a “new concrete” finish
- Suitable for foot and rubber tire traffic on commercial and residential applications
- Use for interior and exterior floors and walls

ARDEX CD™ can be:

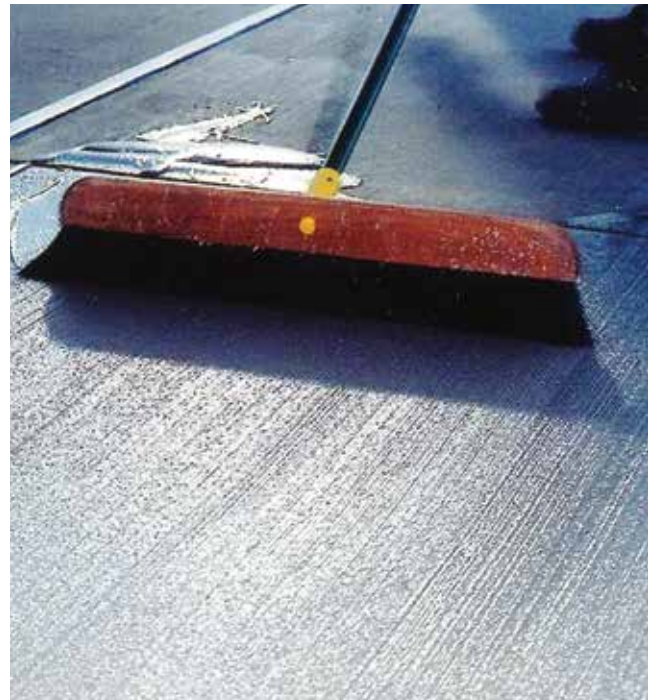
- Broom textured or left smooth
- Integrally tinted for coloring and stenciling
- A durable and cost-efficient replacement for paint when lining parking areas

Available in Regular and Fine

ARDEX CG™ Concrete Guard

High-performance, high solids, waterborne, acrylic concrete sealer

- Easy to apply and fast drying
- SCAQMD 1113 compliant
- Meets and exceeds ADA requirements
- Available in 1 gal. pails; Gray and Clear



Scan for complete information on
ARDEX CD™ Concrete Dressing.



TECHNICAL FOUNDATION

ARDEX Americas technical training programs and seminars have been recognized as the best in the industry. For over 40 years, our trainings provide classroom and hands-on learning where attendees work directly with ARDEX high-performance products. They learn the newest installation techniques allowing them to return to the job site with the latest knowledge and skills necessary to increase job efficiency and help ensure installation success.

TRAINING EXPERTISE

Count on our expert team to provide you with the ins and outs of installing our products to industry standards. Whether you are an installer, an architect or a distributor, you will always benefit from seminars tailored to your needs. In addition, we provide you with documentation and learning materials, as well as free catering and lodging during your stay.

PROUD TRAINING PARTNER OF:

FCICA, TCNA, ASCC, INSTALL, NAFCT, TTMAC, CTEF, NTCA, NICFI, and ICRI



REGISTER NOW!

Check with your local ARDEX Americas Sales Professional or visit www.ardexamericas.com to sign up for one of the ARDEX Technical Training programs. Training seminars are available throughout the US and Canada.





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Tile and Stone Installation
Systems information.

ARDEX EXTERIOR TILE & STONE SYSTEMS

DRAINAGE AND PEDESTAL SYSTEMS

VENEER STONE INSTALLATION SYSTEMS

CONCRETE RESTORATION SYSTEMS



Built by You, Backed by ARDEX!

ARDEX Exterior Tile & Stone Systems are comprehensive, single-source systems that provide maximum protection in the most demanding and complex environments. Whether its freeze thaw, hot temperatures, high humidity or driving rains, ARDEX delivers the right solution to protect your customized exterior installation.

In 2002, these systems were incorporated into the external floor coverings standards of the German Construction Industry Association (ZDB), now with 20+ years of successful installations throughout Europe. Complemented by ARDEX high-performance installation products, ARDEX is proud to deliver these unique, time-tested system solutions throughout North America. And, confidently backed by the **ARDEX 5-Year Exterior Tile & Stone Installation Systems Limited Warranty**.

For more information on ARDEX Exterior Tile & Stone Systems please contact your local ARDEX Sales Professional or visit www.ardexamericas.com.

Connect with ARDEX online! You'll stay up-to-date on our upcoming events, like trade shows, demo days, and even educational webinars!



tile & stone
Installation Systems

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