

April 9, 2018

VIA EMAIL: becki@primastone.ca

Ms. Becki Allen **Prima Stone**4328 97 St

Edmonton, AB t6e 5r9 Canada

## ARDEX Products: General Recommendation - Prima Stone

Dear Ms. Allen:

Thank you for your interest in using ARDEX products to install Prime Stone. We are writing as a follow up to a jobsite report submitted by our Sales Professional, Adrian Caicedo. Enclosed, please find your jobsite recommendation for this project. We look forward to working with you on a successful installation.

If you have any questions on this information, or we can be of further assistance, please contact Adrian at 780-221-5285, or contact the ARDEX Technical Service Department at 888-512-7339.

Sincerely,

ARDEX ENGINEERED CEMENTS

Lindsey Gebhart

**Technical Communications Representative** 

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cc: S. Pevarnik; H. Gardner; M. Pennine; P. Renne; D. Costanza; K. King; A.

Caicedo; B. Tasch; D. Brletic; S. Wildman – ARDEX

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# **JOBSITE CONDITIONS**

**Substrate(s):** Horizontal and vertical, common building substrates in interior

and exterior settings

#### **Conditions:**

Composite panels and translucent panels manufactured by Prima Stone will be installed.

# RECOMMENDATION

### **Technical Data Sheets and Updates**

Prior to proceeding with the installation of any ARDEX product, please read the respective technical data sheets and technical updates found at the web links below. The information herein is intended to accompany, not stand separately from, published technical documentation for each recommended product.

#### Product Link(s)

ARDEX P 51™ Primer

ARDEX TL 1000™ Self-Leveling Underlayment

ARDEX Liquid BackerBoard® Self-Leveling Underlayment for Interior Wood and Concrete Subfloors

ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar

ARDEX P 82™ Ultra Prime

ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar

ARDEX E 90™ Mortar Admix

ARDEX WA™ High Performance, 100% Solids Epoxy Grout and Adhesive

ARDEX SX™ 100% Silicone Sealant for Tile and Stone Applications

#### Other Links

**ANSI A 108** 

**TCNA EJ 171** 

### **Application**

## Considerations

- Please note that the substrate must be sound, solid and well-bonded, and must be properly prepared and constructed in accordance with TCNA guidelines and local building codes.
- For tiles with at least 15" in length, the maximum allowable variation is 1/8" (3 mm) in 10' (3,05 m) from the required plane, with no more than 1/16" (1,59 mm) in any 24" (7,32 m) span when measured from the high points in the surface.
- 3. All panels installed above 10' (3.05 m) in height requires mechanical fastening that meets the requirements of local building codes as well as the installation requirements of Prima Stone.
- 4. Regarding exterior applications, please note the following:
  - a. All exterior joints are required to measure a minimum of 3/16" (4,8 mm), and must remain free of mortar. The joints must be incorporated into the installation as soft joints and filled with an appropriate elastomeric joint sealant, such as ARDEX SX™.
  - b. The above ARDEX products are intended for use at material and surface temperatures between 50° and 85°F (10° to 29°C). Do not install below 50°F (10°C) surface and air temperatures. For warm weather installation instructions, please contact the ARDEX Technical Service Department.
  - c. Please note that working times will likely be reduced as the installation is taking place in an exterior setting that may be subjected to wind, direct sunlight and similar ambient conditions. Precaution should be instituted to protect the installation.



- This will confirm that for interior installations ARDEX Liquid BackerBoard and ARDEX TL 1000 are suitable for self-leveling, while ARDEX AM 100 is suitable for smoothing cement based substrates in both interior and exterior applications.
- 6. Please also note that a project-specific letter will be required for each installation.
- 7. ARDEX recommends using the <u>ARDEX DUSTFREE</u>™ or a standard "gutter hook" vacuum attachment in combination with a wet/dry (Shop-Vac<sup>®</sup> style) vacuum and HEPA dust extraction vacuum system. Additionally, each bag should be handled with care and emptied slowly to avoid creating a plume of dust. Contact the ARDEX Technical Service Department for more details on ARDEX products and air quality management.

## Substrate Preparation (Proper Prep™)

1. Regarding substrate requirements, please contact and follow the tile manufacturer's quidelines.

#### 2. Concrete:

- a. Mechanically remove all loose or weak concrete, dirt, debris and any contaminants that could act as a bond breaker.
- When installing ARDEX LBB over a porous concrete substrate, the concrete must be absorbent. Any additional preparation required to achieve this must likewise be mechanical.
- c. When installing ARDEX LBB over a non-porous surface, surfaces that are sound, solid and uncontaminated may be bonded to without mechanical profiling. Where necessary, however, substrate preparation must be by mechanical means.
- 3. Masonry or approved tiling underlayment:
  - a. It is the responsibility of the installation contractor to verify that the substrate is sound, solid, well-bonded and free of undue flex and vibration.
  - b. Mechanically remove all loose or weak material, dirt, debris and any contaminants that could act as a bond breaker. Concrete surfaces that are sound, solid and uncontaminated may be bonded to without mechanical profiling. Where necessary, however, substrate preparation must be by mechanical means. Surfaces that are sound, solid and uncontaminated may be bonded to without mechanical profiling.
- 3. Do not use chemicals to prepare the substrate, including acid etching, sweeping compounds, solvents or adhesive removers.
- 4. Thoroughly sweep and vacuum to remove all loose material. The resulting surface must be deemed clean, sound and solid prior to proceeding with the installation.



#### **Smoothing Installation: ARDEX AM 100**

- Install ARDEX AM 100 in accordance with the technical data sheet.
  - a. After mixing the ARDEX AM 100, apply the mix to the substrate with the flat side of a trowel to obtain a solid mechanical bond. Immediately follow this by screeding the mortar to the desired thickness.
  - b. Once placed to the desired thickness, allow the material to take a set (approx. 1 hour), and then finish the surface using a steel trowel. Attempting to finish the surface with a steel trowel before it has taken a firm set will result in blistering.
  - c. ARDEX AM 100 can be installed at thicknesses from 1/4" up to a 1 1/4".
- 2. The ARDEX AM 100 must harden and appear dry (approx. 2 hours, 70°F) prior to proceeding with the waterproofing / crack isolation installation.

#### **Self-Leveling Installation:**

#### **Option 1: ARDEX Liquid BackerBoard**

- 1. Prime as follows in accordance with the technical data sheet:
  - a. Absorbent concrete: Prime with ARDEX P 51.
  - b. Approved non-absorbent surfaces: Prime with ARDEX P 82.
- 2. Allow the primers to dry thoroughly (min. 3 hours, max. 24 hours) before installing ARDEX LBB in accordance with the technical brochure linked above.
- 3. This will confirm that ARDEX LBB can be installed up to 1 1/4" neat.
- 4. Prior to proceeding, allow the ARDEX LBB to cure in accordance with the following schedule (70°F):
  - a. If crack isolation and/or waterproofing is needed, allow the ARDEX LBB to cure for 6 hours.
  - b. If the tile will be installed directly over the ARDEX LBB installation, allow the ARDEX LBB to cure as follows:
    - i. Up to 1/2" thick: 6 hours.
    - ii. Thicker than 1/2", as well as for any installation of moisture sensitive stone, test for dryness as follows: 48 hours after installing ARDEX Liquid Backer Board, place a piece of heavy plastic or a smooth rubber mat down over a 2'x 2' area. Wait 24 hours, then lift and inspect for surface darkening. Surface darkening means further drying is needed. Repeat this test at regular time intervals until no darkening is observed.



#### Option 2: ARDEX TL 1000

- 1. Prime as follows in accordance with the technical data sheet:
  - a. Absorbent concrete: Prime with ARDEX P 51.
  - b. Approved non-absorbent surfaces: Prime with ARDEX P 82.
- 2. Allow the primers to dry thoroughly (min. 3 hours, max. 24 hours) before installing ARDEX TL 1000 in accordance with the technical brochure linked above.
- 3. This will confirm that ARDEX TL 1000 can be installed from a minimum thickness of 1/4" up to a maximum thickness of 1 1/4".
- 4. The cure time required prior to installing finish flooring will vary with the thickness of the ARDEX TL 1000 installation (70°F / 21°C):
  - a. For installation thicknesses of 3/8" or less: 24 hours
  - b. For installation thicknesses greater than 3/8": Allow the installation to dry for 24 hours prior to mat testing in accordance with ASTM D4263 until dryness is confirmed (estimated 2 3 days).

#### Prima Stone Installation: ARDEX X 77 / E 90 / P 82 / WA

#### **Option 1: ARDEX X 77 / E 90**

- 1. Install the Prima Stone tiles with ARDEX X 77 mixed with ARDEX E 90 in accordance with the technical data sheet and ANSI A 108.19.
- Information on obtaining ANSI A 108.19 can be found at the ANSI A 108 link in the Other Links section above.
- All installations must include soft joints in accordance with ANSI A 108.01-3.7 and TCNA EJ 171. Information on obtaining TCNA EJ 171 can be found at the corresponding link in the Other Links section above.

## **Option 2: ARDEX P 82 / X 77**

Note: This installation option is for interior applications only.

- 1. Prime the backs of the Prima Stone tiles with ARDEX P 82 in accordance with the technical data sheet.
- 2. Allow the ARDEX P 82 to dry a minimum of 3 hours (max. 24 hours) prior to installing the Prima Stone tiles using ARDEX X 77 mixed in accordance with the technical data sheet and ANSI A 108.19.
- 3. Information on obtaining ANSI A 108.19 can be found at the ANSI A 108 link in the Other Links section above.



4. All installations must include soft joints in accordance with ANSI A 108.01-3.7 and TCNA EJ 171. Information on obtaining TCNA EJ 171 can be found at the corresponding link in the Other Links section above.

#### **Option 3: ARDEX WA**

- 1. Install the Prima Stone tiles with ARDEX WA in accordance with the technical data sheet and ANSI A 108.19.
- 2. Information on obtaining ANSI A 108.19 can be found at the ANSI A 108 link in the Other Links section above.
- All installations must include soft joints in accordance with ANSI A 108.01-3.7 and TCNA EJ 171. Information on obtaining TCNA EJ 171 can be found at the corresponding link in the Other Links section above.

#### Grouting

Allow the tiles to set in accordance with the technical data sheet of the selected mortar or adhesive (70°F) prior to grouting with in accordance with ANSI A 108.10 or ANSI A 108.6. Information on obtaining ANSI A 108.10 or ANSI A 108.6 can be found at the ANSI A 108 link in the Other Links section above.

#### **Test Areas**

As always, please be advised that prior to installing any ARDEX product, we recommend installing an adequate number of properly located test areas, to include the selected floor finishes, to determine the suitability and aesthetic value of the products for their intended use.

#### Warranty

**ARDEX SYSTEMONE™**: When installed in accordance with our written recommendations, the above application qualifies for an <u>Ardex SystemOne™ Limited Tiling Installation Warranty</u>. Click the link for more information online.

## **END OF REPORT**