



ARDEX ARDISEAL™ RAPID PLUS

Semi-Rigid Joint Sealant

Two-part polyurea semi-rigid joint sealant

Designed specifically for filling cracks, control joints (saw cuts) and expansion joints that will be directly exposed to traffic

Use on industrial floor applications with heavy traffic

For interior and exterior use where limited movement due to thermal cycling occurs

Ideal for freezer applications

No VOC's, low odor

Abrasion resistant

Fast setting – open to full traffic in 90 minutes

Self-leveling consistency

100% solids with no shrinkage

ARDEX Engineered Cements
400 Ardex Park Drive
Aliquippa, PA 15001 USA
Tel: 724-203-5000
Toll Free: 888-512-7339
Fax: 724-203-5001
www.ardex.com

ARDEX ARDISEAL™

RAPID PLUS

Semi-Rigid Joint Sealant

Description And Usage

ARDEX ARDISEAL™ RAPID PLUS is a two-part, self-leveling, semi-rigid polyurea joint filling compound. Designed specifically to accommodate heavy traffic, use ARDEX ARDISEAL RAPID PLUS indoors to fill cracks and joints in concrete floors that will receive both foot and heavy-duty rubber-wheeled traffic. Exterior, ARDEX ARDISEAL RAPID PLUS can be used in joints that exhibit some movement (10 to 15%) due to thermal cycling. ARDEX ARDISEAL RAPID PLUS is 100% solids for no shrinkage in the joints, and cures to a semi-rigid hardness. Its wide service temperature range of -40°F to 120°F (-40°C to 48°C) makes it ideal for freezer applications and warehouses alike.

Subfloor Preparation

ARDEX ARDISEAL RAPID PLUS is intended for use on clean exposed concrete from a minimum depth of ¼" up to 2". While the product will perform well at the thicker depths, the use of backer rod or sand to pre-fill cracks and joints that are greater than 1" is acceptable (see below). Also note that when using ARDEX ARDISEAL RAPID PLUS in moving joints, pre-fill the joint with backer rod or sand to ensure that the bottom surface is not bonded, therefore allowing free movement. All concrete must be structurally sound, solid, dry, and free of laitance, dirt, debris, coatings, sealers, and any contaminant that may act as a bond breaker. It is recommended that a dry cut saw with a diamond blade be used to open cracks to a minimum width of ¼". The blade depth should extend to the full depth that the joint filler is to be applied. Run the blade against each side of the joint. After cleaning, vacuum any remaining dust and debris from the joint. Simply brushing debris out of the joint is not an acceptable means of preparation. Do not use sweeping compounds, solvents or acid etching to prepare the surface. The area to be filled should have a surface temperature between 50°F to 85°F (10°C to 29°C).

To minimize waste on deep joints, backer rod can be inserted into the prepared joint to within 2" of the surface, keeping in mind that the joint depth must be at least ½ of the joint width. As an alternate, pre-fill the joint with at least a ¼" of play sand prior to filling the rest of the joint with ARDEX ARDISEAL RAPID PLUS.

Recommended Tools

ARDEX 22 oz. dual cartridge dispenser, ARDEX 26-element static mixing nozzle, razor scraper.

Application

Shake cartridge vigorously for 60 seconds, then stand cartridge upright for 5 minutes.

While preparing cartridge for dispensing, keep cartridge in upright position to prevent material from leaking out of cartridge. Do not tilt cartridge until material is to be applied to the repair area.

IMPORTANT: During cartridge set-up (purging air and equalizing) and initial dispensing of material, keep the cartridge and nozzle assembly pointed straight up. AFTER purging/equalizing and initial shot of material, always keep cartridge and nozzle pointed downward to prevent material in the nozzle from flowing back into the cartridge.

Remove plastic cap from the top of the cartridge. Place nozzle onto cartridge and secure by threading in a clockwise direction. Make sure that the nozzle and cartridge assembly is secure.

Insert cartridge and nozzle assembly into dispenser. Make sure it is properly positioned with the shoulder of the cartridge flush with front/top bracket of the dispenser. Point nozzle straight up and slowly apply pressure to dispenser, moving product up through the nozzle until it reaches the tip, then dispense 2 full strokes of material (1 to 2 quick bursts if using an air tool) into a rag or on another disposable surface. After purging and balancing always point cartridge downward when not dispensing to prevent mixed material in the nozzle from flowing back into the cartridge.

This product has a pot life of only 3 minutes. Apply continuously once opened to prevent the tip from becoming clogged. Place the mixing nozzle directly over the crack, joint or repair area. Dispense material using full smooth trigger pulls (no short, choppy strokes) and allow the material to gravity feed into the crack or joint. Over-fill the crack or joint so that the material is slightly higher than the face of the concrete slab being repaired.

Allow the ARDEX ARDISEAL RAPID PLUS to set for approximately 45 minutes (at 75° F/23.8°C) and then use a sharp razor scraper to shave excess material from the top of the slab.

For clean up, use xylene while material is still fresh, carefully following all instructions and warnings on the xylene container. Once the product cures, it can be removed with a razor scraper.

Notes

For interior or exterior use over dry substrates only. ARDEX ARDISEAL RAPID PLUS should be applied at temperatures between 50°F to 85°F (10°C to 29°C). Substrate temperatures must be a minimum of 5°F (2.8°C) above dew point. Warm or hot weather will shorten pot life and working time.

ARDEX ARDISEAL RAPID PLUS is intended for use only in dormant cracks and joints or those joints exhibiting minimal movement. If movement in excess of 10 to 15% occurs, the material may separate as the joint or crack opens wider. This is not a failure of the ARDEX ARDISEAL RAPID PLUS.

ARDEX ARDISEAL RAPID PLUS's color may vary from batch to batch, and the color stability may be affected by environmental conditions such as high humidity, lighting or chemical exposure. This product is not designed to be UV color stable.

All new concrete must be cured for at least 28 days prior to application.

This product must be mixed very well before using. Improper or inadequate mixing can cause isolated soft spots and subsequent failure.

Always install an adequate number of properly located test areas to evaluate the suitability of the product for the intended use.

Do not mix with additives. Do not thin.

Physical properties are typical values and not specifications.

Precautions

ARDEX ARDISEAL RAPID PLUS contains polymer resins. Wear appropriate protective gear to avoid skin and eye contact. Provide for adequate ventilation during and immediately after application. This material is for professional use only. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on the product label. For complete safety information, please refer to the Material Safety Data Sheet or visit our website at www.ardex.com.

Chemical Resistance Chart

CHEMICAL	Recommended For Continuous Service	Limited Recommendation (Occasional Spills)
Acetic Acid (10%)	•	
Acetone		•
Bleach		•
Bleach (10%)	•	
Citric Acid (5%)	•	
Crude Oil	•	
Motor Oil		•
Gasoline		•
Diesel Fuel	•	
Skydrol		•
Hydraulic Oil	•	
Ethylene Glycol		•
Fatty Acids	•	
Water (room temp.)	•	
NaCl (10%)	•	
Hydrochloric Acid (10%)	•	
Lactic Acid (5%)	•	
Methyl Ethyl Ketone		•
Nitric Acid (1%)	•	
Phosphoric Acid (10%)	•	
Sodium Hydroxide (20%)	•	
Sulfuric Acid (20%)	•	
Toluene		•
Urea (50%)	•	
Vinegar	•	
Xylene		•

Technical Data According To ARDEX Quality Standards

Test data based on neat resin at 70°F (21°C) and a mixing ratio of 1:1 by volume

Recommended

Thickness: 1/4" to 2" (6 mm to 50 mm)

Pot Life: Approx. 3 minutes

Percent Solids: 100% by weight

Tensile Strength (ASTM D412): Approx. 1200 psi (84 kg/cm²)

Elongation (ASTM D412): 82%

Bond Strength (ASTM C882): 400 psi (28 kg/cm²)

Shore A Hardness (ASTM D2240): 75 to 80

Cure Time: 90 minutes

VOC: <2 g/L calculated

Storage: Store in a cool dry area. Do not expose containers to sun. Keep from freezing. Keep away from heat.

Packaging: 22 oz. dual cartridge

Shelf Life: One year if unopened

Warranty: ARDEX Engineered Cements Standard Limited Warranty applies

© 2010 ARDEX, L.P. All rights reserved.
AT311 (ENG. 07/10)

Coverage (approx.): linear feet (linear meters) at specified width and depth

Width	Depth					
	1/2" (12 mm)	5/8" (15 mm)	3/4" (18 mm)	1" (25 mm)	1 1/2" (37 mm)	2" (50 mm)
1/8" (3 mm)	53.0 (16.1)	42.6 (12.9)	35.6 (2.7)	26.7 (8.1)	17.5 (5.3)	13.3 (4.0)
1/4" (6 mm)	26.7 (3.9)	22.0 (3.3)	17.5 (2.7)	13.3 (2.1)	8.8 (2.7)	6.7 (2.0)
1/2" (12 mm)	13.3 (3.9)	11.0 (3.3)	8.8 (2.7)	6.7 (2.0)	4.4 (1.3)	3.3 (1.0)
3/4" (18 mm)	8.8 (2.7)	6.7 (2.0)	5.9 (1.8)	4.4 (1.3)	3.0 (1.0)	2.2 (0.7)
1" (25 mm)	7.0 (2.1)	5.3 (1.6)	4.4 (1.3)	3.3 (1.0)	2.2 (1.7)	1.6 (0.5)

ARDEX Engineered Cements
400 Ardex Park Drive
Aliquippa, PA 15001 USA
Tel: 724-203-5000
Toll Free: 888-512-7339
Fax: 724-203-5001
www.ardex.com