

TECHNICAL DATA SHEET

DESCRIPTION

ProFill AW is a two-component polyurea joint filler designed for heavy duty traffic and freezer applications. ProFill AW is solvent free, flexible and with its low viscosity and self-leveling design, allows for 10%-15% movement of installed joint width. It may be used in temperatures between -40°F to 120°F (-40°C to 49°C). ProFill AW is moisture sensitive and cannot be used in damp conditions.

USE

ProFill AW is used to fill tooled interior/exterior control joints or new construction saw joints on horizontal concrete surfaces. May be used for exterior applications when minimal joint movement from thermal cycling will occur and protects joint edges from spalling due to wheeled traffic.

FEATURES

- Self-leveling, low viscosity system
- Wide application and service temperature range, including freezer applications
- Installation between -40°F to 120°F (-40°C to 49°C)
- ProFill AW can be shaved or sanded within a minimum of 60 minutes at 75°F (24°C)
- Profill AW can be opened to foot and light vehicular traffic in 90 minutes at 75 °F (24 °C)
- 1:1 mix ratio
- Highly sensitive to moisture
- Allows 10%-15% joint movement
- Does not weld slab joints together
- Meets U.S.D.A. requirements for incidental food contact

PROPERTIES

Color & Ratio: Part A (Resin) Amber: Part B (Hardener) Gray
 Mixed Ratio: 1:1 by volume
 Mixed Color - Concrete Gray
 See Appendix A for list of properties

VOC

ProFill AW has a VOC content of <10 g/L. Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

Packaging

PRODUCT CODE	PACKAGE	SIZE	
		oz/Gal	Liter
101205	Cartridge	8.6 fl oz	254 ml
101206	Cartridge	21.2 fl oz	627 ml
101207	Pail	10 gal	30 L

STORAGE

Shelf-life of 18 months when stored in unopened containers in dry conditions. Store between 60°F (16°C) and 90°F (32°C).

Surface Preparation:

Do not use in expansion joints. Profill AW is intended for use in exterior and interior control joints

Concrete should be at least 28 days old and bonding surface must be dry.

Heavy Duty Traffic Areas: The joint width should be a maximum of 3/4 in. (19 mm); The depth should be a minimum of 3 times the width, or 2.2 in. (57 mm)

Light Foot Traffic Areas: The joint width should be a maximum of 3/4 in. (19 mm); The depth should be a minimum of 1/2 in. (13 mm)

Joints to be filled must be clean, free of curing compounds and structurally sound. Remove all oil, grease, dirt, laitance, curing compounds and any other foreign material that may cause a problem with bond. Re-sawing, abrasive blast cleaning and mechanical removal methods, such as a wire brush, are recommended. Use clean, oil free, compressed air to blow out any remaining dust or debris prior to installation. In older concrete, the old joints must be routed out to remove old material and widen, if necessary.

Mixing

Condition material to 65°- 85°F (18°- 29°C) before using. Shake the cartridge vigorously for 60 seconds, then stand cartridge upright for at least 1 minute allowing any bubbles to rise to the top.

Insert cartridge into the dispenser. Make sure it is properly positioned with the shoulder of the cartridge flush with the front/top bracket of the dispenser. Point upward at a 45° angle. Remove the plastic cap and plug from the top of the cartridge.

TECHNICAL DATA SHEET

Before attaching nozzle, balance the cartridge by slowly dispensing a small amount of material into a disposable container until both components flow evenly from the cartridge. Install mixing nozzle onto cartridge.

Continue to point the nozzle upward away from yourself and others while slowly applying pressure to dispenser moving any bubbles and product up through the nozzle until it reaches the tip. Dispense the first full stroke of material into disposable container. The cartridge is now purged and ready for use.

10 Gallon Kit Preparation - Blend Part B separately with a mixing paddle affixed to a power drill set on slow RPM for 2 - 3 minutes. Do not whip in air while blending.

Mix only as much material as can be used within the pot life.

Placement:

Substrate and environment must be completely dry without any presence of moisture prior to usage.

To fill cracks, use a saw or grinder with a dry diamond or concrete abrasive blade and cut along the crack opening it up to 1/8 in. to 1/4 in. wide. The edges must be a 90° angle to the surface to avoid a feathered edge.

Blow out and remove all dust, dirt, debris, oil and any other contaminant from the control joint or crack. Backing material should preferably be compressible, with installed compression being approximately 50% of its original width. Fine clean sand may be used to close off small shrinkage cracks in the bottom of joints prior to placement of ProFill AW. Place mixing nozzle directly over the joint or repair area. Dispense material using full smooth trigger pulls (no short, choppy strokes) and allow material to gravity feed into the crack/joint.

For joints to be shaved, overfill the crack/joint so that material is slightly higher than the face of the concrete slab under repair. Allow product to cure for a minimum of 60 minutes at 75°F (24°C) then use a sharp floor scraper to shave excess material from top surface. Full cure times are temperature dependent.

Cure Time

Temperature °F (°C)	Working Time	Trim/Shave Time	Cure Time
0°F (-18°C)	5 min	6 hr	48 hr
75°F (24°C)	3.5 min	1 hr	24 hr
120°F (49°C)	1.5 min	20 min	12 hr

CLEAN UP

Clean tools and equipment before the polyurea sets with a solvent such as xylene or Citrus Clean J48. Cured product can only be removed mechanically.

LIMITATIONS

FOR PROFESSIONAL USE ONLY

ProFill AW is highly sensitive to moisture. Substrate and environment must be completely dry with no moisture present prior to application. Not intended for use in expansion/contraction joints or cracks that exhibit significant movement. Color varies during cure and may change in exterior applications. Product should not be stored once opened as exposure to moisture greatly reduces shelf life. Cartridge balancing and crack repair instructions must be strictly followed. Not intended for exterior or interior joints that are subject to high movement. Before applying a topcoat, it is recommended that the user check with coating manufacturer for compatibility with polyurea based products as Dayton Superior is not responsible for coating incompatibility.

PRECAUTIONS

READ SDS PRIOR TO USING PRODUCT

- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

TECHNICAL DATA SHEET

MANUFACTURER

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WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

TECHNICAL DATA SHEET

Appendix A

TABLE 1: ProFill AW Performance to ASTM C881-15^{1,2,3}

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature
				75 °F (24 °C)
Gel Time – 60 Gram Mass ⁴	----	C881	Min	3
Pot Life ^{5,7}	----	----	Min	2.5
Tack-Free-Time ⁵ (30 mil Thin Film)	----	D2377	Min	28
Adhesion to Concrete	----	D4541	PSI (MPa)	275 (1.9)
Mixed Viscosity ⁶	----	M2393	cP	1,500
Bond Strength	2 day	C882	PSI (MPa)	400 (2.8)
Shore A Hardness	----	D2240	----	75 - 80
Tensile Strength	7 day	D412	PSI (MPa)	1,200 (8.3)
Tensile Elongation	7 day	D412	%	82

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.
2. Full cure is listed above to obtain the given properties for each product characteristic.
3. Results may vary due to environmental factors such as temperature, moisture and type of substrate.
4. Gel time may be lower than the minimum required for ASTM C881.
5. Property not referenced in ASTM C881.
6. Mixed viscosity measured at 30 seconds.
7. Pot life is measured as the workable and applicable time of 1.0 gallon (3.8 L) when mixed.