



INSTALLATION GUIDELINES

REZI-WELD® 360:

Pumping & Installation Guide

1. PURPOSE AND SCOPE

This guide provides recommended pumping, setup, and installation procedures for REZI-WELD 360, a two-part polyurea control joint filler, when installed using plural-component pumping equipment. The intent is to ensure consistent material ratio, proper flow, and high-quality joint fill performance in concrete floor applications

2. PRODUCT DESCRIPTION

REZI-WELD 360 is a self-leveling, 100% solids, aromatic, two-component polyurea joint filler. It is a heavy-duty, semi-rigid joint filler designed to fill and protect contraction and construction joints in industrial concrete floors. A two-part polyurea joint filler is based on a rapid step-growth polymerization reaction between isocyanate groups and amine groups, producing a crosslinked polyurea elastomer.

REZI-WELD 360 is intended for interior horizontal concrete applications and is used to fill control joints, construction joints, and random interior cracks subject to hard-wheeled traffic and heavy loads. Its primary function is to support wheeled material handling equipment and protect joint edges from spalling and deterioration.

Key performance characteristics include rapid cure and fast return to service. Due to the rapid cure dispensing through a plural-component pump or cartridge is required.

3. RECOMMENDED PUMPING EQUIPMENT

3.1 AST GMP -025 or GMP-050 Pump Types or Similar from other Pump Manufacturers such as Gorilla Concrete Tools Dual Component Pump or U.S.SAWS Polymer Pump

AST pumps designed for polyurea, epoxy, and urethane dispensing are recommended, including but not limited to:

- **AST GMP-025** – Portable, low-output system suitable for control joints and small to mid-size projects
- **AST GMP-050** – Higher-output system for larger floor areas or increased production rates

3.2 Pump Construction and Features

AST plural-component pumps typically include:

- Precision metering pumps for Component A and Component B
- Stainless steel components
- Independent material feed lines
- Desiccant dryers on each material side to protect moisture-sensitive components
- Static mixing manifold or disposable static mixers

4. MATERIAL HANDLING AND STORAGE

- Store Components A and B in original, unopened containers.
- Recommended material temperature at time of pumping: 70–90°F (21–32°C).
- Minimum installation temperature: 60°F (16°C).
- Protect moisture-sensitive components from exposure to humidity and free moisture.
- Ensure desiccant dryers are installed and functional on both material feed lines prior to pumping.

5. PUMP SETUP AND CALIBRATION

5.1 Ratio Verification

REZI-WELD 360 must be dispensed at a 1:1 ratio by volume (Component A : Component B).

Pump operation procedures vary by manufacturer. Always consult pump manufacturer for unit-specific setup, calibration, and operating instructions prior to use.

Before installation:

1. Verify equal pump displacement settings on the AST system.
2. Dispense each component separately into graduated containers.
3. Confirm volumes are within $\pm 5\%$ of each other.





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5.2 Pressure Settings

- Set pump pressures equal on both Component A and Component B.
- Typical operating pressures range from 1,000 to 2,500 psi, depending on hose length, ambient conditions, and output rate.
- Avoid excessive pressures that may cause off-ratio delivery or rapid over-fill dispensing.

5.3 Hose, Mixer, and Gun Configuration

- Use equal-length hoses for both components.
- Heated or insulated hoses may be used when ambient temperatures are near the minimum installation limit.
- Use a 1/2 in. (12 mm) diameter static mixer with 30 or 32 elements, compatible with polyurea materials.
- Ensure the mixing manifold and static mixer are appropriate for fast-reacting polyurea systems.

6. SUBSTRATE AND JOINT PREPARATION

Proper joint preparation is critical to performance and adhesion.

- Concrete should be cured a minimum of 28 days prior to installation.
- The American Concrete Institute (ACI) recommends 60–90 days of slab cure to allow for maximum shrinkage and joint opening, reducing the likelihood of filler separation.
- Ambient conditions should be stabilized at final operating temperatures prior to installation.
- Joints must be clean, dry, and free of moisture, dust, laitance, oils, curing compounds, and debris.
- Abrade joint sidewalls using clean-out saw equipment with a diamond blade and proper Hepa filter (consult saw-cutting manufacturer for proper dust collection system and safety instructions) to expose sound concrete, then vacuum thoroughly to remove all dust.

Joint Depth Requirements:

- Saw-cut control joints: install REZI-WELD® 360 at full joint depth.
- Joints exceeding 2 in. (50.8 mm) depth: install to a minimum depth of 2 in. (50.8 mm) per ACI guidelines.
- Construction (formed) joints that are not saw-cut: install to 2 in. (50.8 mm) depth.

If concrete staining from overfill is a concern, apply a suitable stain-preventing film prior to installation.

7. INSTALLATION PROCEDURE

1. Confirm pump calibration, pressure balance, static mixer size, and material temperatures.
2. Thoroughly pre-mix pails with a drill and paddle to re-disperse any settlement. If using a pre-filled REZI-WELD 360 cartridge, shake aggressively to mix prior to use.
3. Purge material through the static mixer until uniform color and consistency are achieved.
4. Begin dispensing at one end of the joint, maintaining a steady and continuous flow.
5. Fill joints from the bottom up to minimize air entrapment.
6. Overfill (crown) the joint slightly to allow for proper finishing.
7. Maintain consistent gun speed to avoid voids or cold joints.

8. CURING AND FINISHING

- Gel time: approximately 60–90 seconds at 77°F (25°C).
- Tack-free time: 2–3 minutes.
- Open to foot traffic: 15–20 minutes, depending on temperature.

Once cured, excess material may be shaved flush with the floor surface using a razor scraper or joint shaving equipment. Shaving can typically begin in as little as 15 minutes, depending on ambient and slab temperatures.





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Always determine the appropriate shave time based on jobsite conditions. Delayed shaving may increase difficulty and result in surface marks. If filler cures below the slab surface, abrade the cured filler and apply additional material.

9. CLEANUP AND MAINTENANCE

- Follow AST pump manufacturer recommendations for shutdown and cleaning.
- Use approved flushing materials compatible with polyurea systems.
- Do not allow mixed material to cure inside hoses or static mixers.
- Dispose of used static mixers after shutdown.

10. SAFETY AND HANDLING

- Review the REZI-WELD 360 Safety Data Sheet (SDS) prior to use.
- Wear appropriate PPE, including gloves, eye protection, and protective clothing.
- Ensure adequate ventilation during application.

11. LIMITATIONS AND PRECAUTIONS

- REZI-WELD 360 is intended for interior use only.
- Not designed for expansion, isolation, exterior, or moving joints.
- Not recommended for use under non-breathing, resilient, or polymer flooring systems.
- As an aromatic polyurea, the material may yellow or discolor when exposed to UV Sunlight, certain types of artificial lighting, or temporary heating systems.
- Blistering or pinholes may occur due to concrete outgassing and do not adversely affect long-term performance.

12. SAFETY AND HANDLING

- For industrial use only.
- Review the REZI-WELD 360 Safety Data Sheet (SDS) prior to use.
- Use only in well-ventilated areas.
- Wear appropriate PPE, including gloves, eye protection, and protective clothing.

13. DISCLAIMER

This guide is intended as a general reference for pumping and installation of REZI-WELD 360 using plural-component equipment. Field conditions, equipment configurations, and application requirements may vary. Always follow pump manufacturer instructions, applicable standards, and project specifications. W. R. MEADOWS assumes no liability for improper installation or misuse of the product.

