

## IMPORTANT INFORMATION

- Designed for Installation at Full Saw-Cut Depth in Control Joints or 2" Minimum in Joints Exceeding 2" in Depth
- Dual-Component Pump or Dual-Cartridge Units Required to Dispense
- Pre-Mix Part "A" Polyol Prior to Pouring Into Pump Tank
- **DO NOT USE COMPRESSIBLE BACKER ROD IN SAW CUT JOINTS!**

### What is RS 88?

**Spal-Pro RS 88** is a rapid-setting, two-component polyurea polymer liquid of 100% solids content developed to fill and protect joints in industrial concrete floors that are subject to hard wheels and heavy loads. Its primary function is to support such traffic and support joint edges. **Spal-Pro RS 88** is designed for use in areas where final temperatures are from 32°F (0°C) to +120°F (49°C)

### Material Storage

Store **RS 88** in a cool area. Do not allow to freeze. **RS 88** has a minimum shelf life of 12 months (bulk or dual-cartridge units). If material sits for over one month, rotate material monthly to minimize settlement.

### Checking Job Conditions

Floors should have a minimum cure of 30 days prior to joint filling. Since all concrete shrinks for months, and shrinkage results in the widening of joints, filling should always be delayed for as long as the schedule allows. If filling in refrigerated areas (coolers), the room should be stabilized at its final operating temperature for 7 days or longer. Joints should be dry, and work area should be well ventilated.

### Tools and Equipment

**RS 88** can be dispensed only through power dispensing pumps or dual-cartridge kits. Other equipment needed includes, but is not limited to, proper safety gear (See MSDS), drill and mixing paddle (Jiffy or equal-no flat mortar paddles), solvent (MEK or denatured alcohol) for cleanup, razor scraper, etc.

### Installation in Food Related Facilities

USDA limits the use of any chemicals in areas where existing food or food packaging can be contaminated. Contact Metzger/McGuire for further details if food products are present.

### Stain Prevention

Proper **RS 88** installation requires that the joint be overfilled (crowned). While **RS 88** will not typically leave a stain/film in normal conditions, the potential may exist for a slight shadow or film along the sides of joints on some slabs. We recommend a test placement prior to start of project to check conditions. If surface staining/film appears to be a concern, coat surface with Metzger/McGuire's "**SPF**" (Stain Preventing Film) prior to the commencement of joint cleaning and filling procedures.

### Joint Cleaning

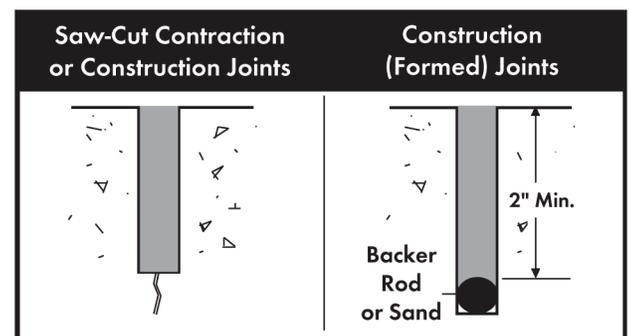
**RS 88** must bond to clean, exposed concrete for the full intended filler depth. Joints must be free of saw laitance, dirt, debris, coatings, sealers, etc. The only effective means of proper joint cleaning is the use of a dry cut saw (preferably vacuum-equipped) with a diamond blade. The blade depth should extend to the intended filler depth. Run blade against each side wall on separate passes. After cleaning joints with saw, vacuum any remaining dust/debris from joint.

### Joint Preparation

Due to **RS 88's** rapid gel time, it is not necessary to "choke-off" the bottom of control/contraction joints to prevent filler waste. Note: **DO NOT USE COMPRESSIBLE BACKER ROD IN SAWCUT JOINTS.** **RS 88** is designed to be placed to the full depth of the joint in saw-cut contraction/control or construction joints or at 2" minimum if joint depth exceeds 2".

For through-slab construction (cold) joints, the installer may use silica sand or backer rod IF it is held down at least 2" from the top. Contact Metzger/McGuire for information on special conditions (armored joints, etc.).

## JOINT DESIGN DETAIL



### Temperature Factors

Like most polyureas, **RS 88** is affected by temperature. In warm or hot weather, **RS 88** will cure faster. In cooler weather, **RS 88** will cure slightly slower. For best results in cooler temperatures, keep material temperature at a minimum of 75°F + by outfitting dispensing pump/material hoppers with heating unit. Contact pump manufacturer or Metzger/McGuire for more information.

**Dispensing Spal-Pro RS 88**

**Spal-Pro RS 88** must be dispensed with dual-feed power dispensing equipment, or with pre-filled, dual-dispense cartridge kits. Manual dispensing is impractical due to short working life (1-2 minute gel time). Power dispensing systems should be set to a 1:1 ratio by volume. If installing in cooler temperatures, material should be maintained at a minimum temperature of 75° F (24°C) for best results. We recommend the use of a 1/2" diameter (ID) static mixer with 30 or 32 elements for material dispensing and proper mix. We strongly recommend performing periodic ratio checks on power dispense units to ensure proper cure.

**Pre-Mixing Spal-Pro RS 88**

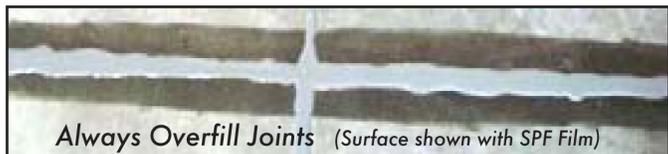
Read SDS prior to opening containers and follow all safety measures, including working in an obstacle-free, well ventilated area. Always pre-mix Part A component (polyol) with a Jiffy Mixer or helix paint mixer prior to pouring into pump tank to re-disburse any settlement. Mixing of Part B (iso) is not required. Do not thin or dilute **RS 88** with solvent or other substances. Dual-cartridge units should be shaken vigorously to re-disburse pigment. Follow cartridge use instructions enclosed with cartridge units.

**Installation**

Pump tanks, lines, and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations.

**RS 88** cures chemically through a reaction of parts A and B. During this chemical reaction the released fumes can be potentially harmful. Be cautious during the cure period. Do not inhale or get polyurea on skin or in eyes. See SDS for additional information.

Joints can be filled in one or two passes, depending upon joint depth and dispensing tip used. Preferred method is to fill from bottom to top using a dispensing tip that fits into the joint. Take care not to entrap air bubbles. Slightly overfill the joint, leaving a crowned profile, and allow to cure into a solid prior to razoring off overfill crown.



Always Overfill Joints (Surface shown with SPF Film)

The crown may be easily razored off as early as 15-20 minutes after placement, depending upon temperature. We recommend testing various shave times to find the optimal shave which results in a filler profile that is flush with the floor's surface and free of any film from material overfill. If shave time is substantially delayed or if temperatures are low, **RS 88** shaving process may be more labored. Generally optimal shaving operation will be deferred no longer than 6 hours after placement (depending upon slab temperature and conditions).

**Finish Profile**

To be effective as an edge-protector, **RS 88's** final profile should be flush with the floor surface. This is achieved by razoring off the overfill crown after the **RS 88** has fully cured into a solid. Use Crain Model #375 razor scraper or equal. If **RS 88** is gummy or liquid when shaving, allow additional cure time.

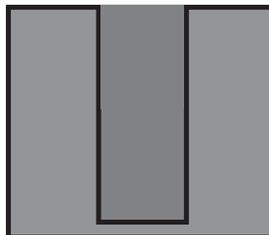
Should filler cure below the floor surface (due to settlement into the void at base of joint, etc.), remove top 1/2" of filler and re-apply additional **RS 88**.

**After the Installation**

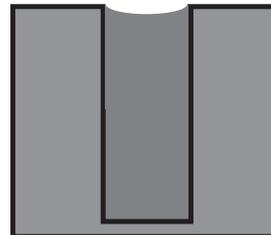
Clean all tools with solvent and remove spills on floor with solvent or by scraping. The floor, depending on temperature, can usually be opened to light traffic within 30 minutes and heavy traffic in 60-90 minutes. If the floor is to be acid-etched or coated, allow approximately 1 day. **RS 88** is generally unaffected by light muriatic acid and most coatings systems,

**Finish Profile (continued)**

## ACCEPTABLE



## NOT ACCEPTABLE

**After the Installation (continued)**

but a test coat is always recommended. Once cured, mechanical scrubbing or most cleaners do not affect **RS 88**. Stains left on the top edges from overfilling are difficult or impossible, to remove. Wire brushing with solvent (MEK or denatured alcohol) is somewhat successful.

**Use in Ground/Polished Concrete Floors**

When sequencing product installation as part of a concrete grinding/polishing process, installation can be done prior to grinding/honing if the first tool used is to be 40 grit or higher. Installation can also be deferred until prior to the last metal or transitional tooling step. The earliest the installed filler should be subjected to honing is 45 minutes if using a wet process, 60 minutes if using a dry process (at 70°F). See Technical Bulletin T21 for additional information on sequencing.

Note: Some higher grit polishing operations can generate sufficient heat to melt or smear joint fillers, depending upon equipment and job conditions. If melting or smearing is detected, stop operations and test potential methods of reducing slab surface heat, including misting joints with water, altering the speed of polishing operations, re-shaving the joint filler or changing tooling. Please contact our technical service department for more information or assistance.

**Filler Separation**

Since slabs continue to shrink long after the filler installation, **RS 88** may separate adhesively or cohesively. This is not a failure of the **RS 88**. Refer to Metzger/McGuire's Technical Bulletin T11 on "Filler Separation" for complete explanation.

**Color Changes**

**Spal-Pro RS 88** contains colorfast properties designed to minimize color shifting after cure. However, certain lighting systems or exposure to the sun can emit UV rays that may cause **RS 88** to exhibit color shifting. This color shift, if it occurs, will not affect **RS 88's** performance. If any degree of color shifting will prove aesthetically objectionable on a project, we recommend performing a sample installation or placing a cured strip of material in the building prior to commencement of installation to survey the degree to which color shift may or may not occur, and to confirm whether it is an aesthetics problem for the facility owner or other project authorities.

**WARRANTY:** Metzger/McGuire Co. solely and expressly warrants that its product shall be free from defects in material and workmanship for 365 days from the date of purchase. Unless authorized in writing by an officer of Metzger/McGuire, no other representations or statements made by Metzger/McGuire or its representatives, in writing or orally, shall alter this warranty. Metzger/McGuire makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its products and excludes the same. If any Metzger/McGuire product fails to conform with this warrant, Metzger/McGuire will replace the product at no cost to the purchaser. Purchaser's sole remedy in any case shall be limited to the purchase price or replacement cost of product and specifically excludes labor and the cost of labor, lost wages and opportunity costs, and all other possible incidental, consequential or special damages resulting from any claim of breach of warranty, breach of contract, negligence or any legal theory. Any warranty claim must be made within one (1) year from the date of material purchase. Metzger/McGuire does not authorize anyone on its behalf to make any written or oral statements which in any way alter the installation procedures or written installation instructions published in its product literature or on its packaging labels. Any installation of Metzger/McGuire products which fails to conform with such installation information or instructions shall void this warranty. Purchaser shall be solely responsible for determining the suitability of Metzger/McGuire products for the purchaser's intended purpose.