3M Scotch-Weld[™] Control Joint Sealant DP5106, Self-Leveling, Gray

Technical Data

June, 2015

Product Description

3MTM Scotch-WeldTM Control Joint Sealant DP-5106 is a self-leveling, gray, rapid setting, two-component polyurethane. It is packaged as 1:1 ratio liquids in duo-pak cartridges. With the squeeze of the trigger, the components are automatically mixed and easily dispensed as bubble-free, self-leveling liquids.

Suggested Applications: Building & Construction Maintenance & Repair Pool Maintenance & Repair

Suggested Applications: • For stress-relieving large segments of concrete floors

Typical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Test	Conditions	Test Method	Properties
Viscosity of Mixture	77°F (25°C)	HBDVI + CP	34,325 cps
Work Life	10 g, 1/4" thick @ 77°F (25°C)	PEC	4 minutes
Tack-free Time	10 g, 1/4" thick @ 77°F (25°C)	PEC	30 minutes
Full Cure Time	10 g, 1/4" thick @ 77°F (25°C)	PEC	24 hours
Hardness After Full Cure	24 hours @ 77°F (25°C)	ASTM D2240-91	85 Shore A
Lap Shear Strength	7 days @ 77°F (25°C)	ASTM D1002-72	1,100 psi
Temperature Range	Continuous	PEC	-60°F (-51°C) to 250°F (121°C)

Installation Building & Construction Maintenance & Repair Pool Maintenance & Repair

3MTM SCOTCH-WELDTM CONTROL JOINT SEALANT

Section 1: Preparation

General Preparation of the Control Joint Channel:

- 1. For existing control joints, removing all loose aggregate, dust, old caulks, grease or other compounds from the control joint saw cut.
- 2. For new control joints, prepare control joint cavities by making saw cuts 1/4-inch wide by 1/2-inch deep using an abrasive-resistant saw cut blade. Usually the placement of channels for these joints is described by the contractor. Typically control joint channels span 12 to 20 feet square areas.
- 3. Use a bristle brush to remove the major debris. Then use moisture-free and oil-free compressed air to blow out the fine dust.
- 4. If desired, mask off the areas surrounding the control joint for creating a well-defined and aesthetic appearance to the channel.

Section 2. Procedures

General Preparation of the Dual Cartridge/Dispenser/Mixer Tip Assembly:

- 1. Select the cartridge size required for the job.
- 2. Refer to the table below to determine how many feet of channel are filled for each cartridge size, channel width and channel depth.

Crack Width	Crack Depth	Linear ft. per 1.7 fl. oz.	Linear ft. per 12 fl. oz.	Linear ft. per gallon
1/4 in.	1/4 in.	3.9	28	297
1/2 in.	1/4 in.	2	14	148
3/4 in.	1/4 in.	1.3	9	95
1 in.	1/4 in.	1	7	74
1/4 in.	1/2 in.	2	14	148
1/2 in.	1/2 in.	1	7	74
3/4 in.	1/2 in.	0.6	4	42
1 in.	1/2 in.	0.4	3	32

- 3. Select the desired manual or pneumatic dispenser
- 4. Select the mix tip.
- 5. Prepare the required number of cartridges.
- 6. Cut the blind-end off of the cartridge orifice, or remove the cap.
- 7. Place the cartridge in the dispenser.
- 8. Dispense just enough material so that both components dispense equally.
- 9. Assemble the mix tip onto the cartridge.



Installation (continued)

General Procedure for Filling the Control Joints

- 1. Embed the mixer tip at the deepest portion of the channel and dispense into the prepared channel.
- 2. Fill so the sealant comes level with the concrete surface elevation.
- 3. 3MTM Scotch-WeldTM Control Joint Sealant DP5106 will self-level and leave a slight meniscus.
- 4. If desired, one can create a joint flush and level to the concrete floor by overlaying plastic release film and applying pressure to level the liquid.
- 5. A plastic spreader can also be used to spread the liquid level to the concrete floor prior to the set of 3MTM Scotch-WeldTM control joint sealant DP5106.
- 6. 3MTM Scotch-WeldTM control joint sealant DP5106 will set within approximately 5 to 15 minutes.
- 7. At 75°F (24°C), a 1/4"-thick section sets and becomes tack-free within 30 minutes and will cure within 24 hours. **Note:** Thicker masses or substrates at higher temperature take less time to cure. Thinner masses or substrates at lower temperature take more time to cure.

Section 3: Clean-up and Finishing

- 1. Remove the masking tape surrounding the control joint channels.
- 2. If desired, grind the cured product with 36 to 50 grit sanding disks or sandpaper to take off any rough edges and achieve the desire shape. Sand with finer grit sandpaper to the desired finish.



Storage	This product has a shelf life of 12 months from date of manufacture when properly stored in unopened packages at temperatures of 65°F to 85°F (18°C to 30°C).	
Maintenance	No maintenance is required. However, if joints become damaged, simply reapply $3M^{TM}$ Scotch-Weld TM Control Joint Sealant DP5106.	
Precautionary Information	Refer to Product Label and Material Safety Data Sheet (MSDS) for health and safety information before using this product. For environmental information, refer to MSDS. Always wear gloves, eye protection, appropriate respiratory protection, and work in a well-ventilated area. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.	
Product Use	Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use	

product, user is solely responsible for

method of application.

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a particular application. Given the variety of factors that can affect the use and performance of a 3M

evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's

If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

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Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 800-362-3550 • 877-369-2923 (Fax) www.3M.com/Structuraladhesives

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DP-5106-Gray