



TECHNICAL DATA SHEET

SPEED PLUG®

Quick Setting Hydraulic Cement

03930

CONCRETE REHABILITATION
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TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 1/02)

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1. **DESCRIPTION:** SPEED PLUG is a quick setting hydraulic cement compound used to instantly stop running water or seepage leaks in masonry or concrete.

FEATURES AND BENEFITS

- *Non-shrinking, non-metallic and non-corrosive*
- *Initial set in 1-3 minutes*
- *Stops running water or seepage leaks*
- *High strength*
- *Controlled expansion*
- *Can be applied underwater*

APPLICATIONS

Used above or below grade, interior or exterior to stop seepage and flowing water on:

- *Concrete and masonry walls and floors*
- *Dams, swimming pools, cisterns, reservoirs and water tanks*

2. **COMPOSITION AND MATERIALS:** SPEED PLUG is a gray hydraulic cement compound specially modified to control the expansion, initial set, and final set times.

3. **SURFACE PREPARATION:** Cut or chisel out the concrete or masonry surrounding the hole or crack to a minimum depth and width of 3/4 inch (2 cm). Undercut the crack or hole in the shape of an inverted "V", to make the bottom of the cut area wider than the top, and to provide mechanical bond during initial set and final cure. Flush, blow, or vacuum loose particles, dust, and other foreign materials from the prepared areas. Wet the areas to be patched with potable water before installing SPEED PLUG.

4. **MIXING INSTRUCTIONS:** Pour potable water into a clean mixing container and gradually add SPEED PLUG. Use approximately 1 quart of water to 8-9 pounds of material (3.8 - 4.3 kg/l). Mix rapidly with a trowel to the consistency of stiff putty with no slump. Mix no more than 30 seconds. SPEED PLUG will flash set in 1-3 minutes. Properly mixed, SPEED PLUG can be hand formed into a ball.

5. **APPLICATION TECHNIQUES:** Dampen areas for repair with potable water immediately before application of SPEED PLUG.

5.1 **General Patching:** Force SPEED PLUG into the crack or hole by hand or with a trowel. Rapidly fill to the full depth of the opening.

5.2 **Patching Active Leaks:** Start at the top of the crack or hole, and force the SPEED PLUG to the full depth of the prepared area. Apply direct pressure to the new patch until the SPEED PLUG has taken a firm set. Mix fresh material, and continue patching toward the area of the greatest pressure. When extreme water pressure is encountered, hold the mixed SPEED PLUG in the hand until it becomes warm. Then rapidly force the patch into the hole, and apply continuous pressure until the SPEED PLUG has set, and the water has stopped running. Do not use a twisting motion.

5.3 **Floor-Wall Patching:** Follow above methods for the specific conditions encountered. Use a rounded tool to force the SPEED PLUG into the joint, and construct a 45 degree transitional cove between the floor and wall at the same time.

Material Properties @ 75°F

Test Method	Criterion	PSI
ASTM C109		
Compressive Strength	1 hour	1,835
	1 day	3,125
	7 days	7,808
	28 days	9,543

ASTM C78		
Flexural Strength	1 day	410
	3 days	855
	28 days	1245

ASTM C190		
Tensile Strength	1 day	510
	3 days	745
	28 days	855

ASTM C157	Criterion	Chg. Length
Expansion/Shrinkage - 28 Day Test		
Moist Room	100% RH	0.081%
	Dry Room	50% RH

Values presented are typical and not necessarily referenced to create specifications.

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5.4 **Expansion/Contraction Cracks:** Use SPEED PLUG to stop running water leaks, but do not fill cracks completely to the surface. Allow approximately 1/2 inch (1.3 cm) depth, and fill with a flexible joint sealant.

6. **COVERAGE:** 1 pound (0.45 kg) of SPEED PLUG yields approximately 17 cubic inches (171 cu.cm) and will repair approximately 30 inches of 3/4 x 3/4 inch crack. (Approx. 1 kg for 155 cm of 2 cm x 2 cm crack.)

7. **CLEAN-UP INSTRUCTIONS:** Clean tools and mixing equipment with water immediately after use.

8. **CAUTIONS:** Do not retemper SPEED PLUG. Do not apply SPEED PLUG to frozen or frost filled surfaces. Do not twist SPEED PLUG into the hole while plugging running water leaks. In warm weather, mix SPEED PLUG with ice water. In cold weather, mix SPEED PLUG with warm water and use a torch to preheat the area to be patched. Do not prewet in cold weather. Do not apply in dynamic (moving) cracks or to fill expansion joints.

9. **ENVIRONMENTAL AND SAFETY PRECAUTIONS:** Product contains portland cement which is alkaline on contact with water. Do not breathe dust. May cause delayed lung injury (Silicosis). IARC reports Crystalline silica may cause cancer in humans. Irritating to eyes and skin. Avoid splashing into eyes or contact with skin. In case of eye contact, flood eyes repeatedly with potable water and call a physician. **DO NOT RUB EYES.** Wash skin thoroughly after handling and before smoking or eating. Use adequate ventilation. **KEEP AWAY FROM CHILDREN AND ANIMALS.**

10. **PACKAGING:** 10 lb. tubs; 20 and 50 lb. pails. (Metric equiv. - 4.5, 9.1, and 22.7 kg).

Storage: On pallets, protected from moisture.

Shelf Life: 1 year in proper storage.

Freight Class: Class 55.

11. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

TAMMS INDUSTRIES, INC
3835 State Route 72, Kirkland, IL 60146
800-862-2667 FAX: 815-522-2323
www.tamms.com

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