U-PLUG



U-PLUG is a fast-setting (3-5 minutes), hydraulic cement designed to instantly stop running water from seeping through holes and cracks in masonry and concrete.

U-PLUG exhibits excellent adhesion & exceptional structural strength while providing a long lasting, permanent repair.

- Stops running water instantly
- Initial set in 3-5 minutes
- Effective against
 hydrostatic pressure
- Polymer modified
- Excellent adhesion and exceptional structural strength
- Chloride free, metallic free
 and sulfate resistant
- Repairs leaking cracks and holes in foundations, basement walls & floors, wells, tunnels, tanks, catch basins, sewers, etc.

Hydraulic Plug	May be applied by trowel or gloved hand
Packaging	50 lb pail (36/pallet) 10 lb pail (4/case)
Coverage	One lb yields 17 cubic inches (3/4"x3/4"x30")
Application Temperature	Ambient & surface temperature must be 40°F or above and will not fall below that for 48 hours
Mixing	Enough water to form putty like consistency
Working Time	3-5 minutes at 70°F
Set Time	5-10 minutes at 70°F
Color	Gray





Phone: 800-442-5535 Fax: 978-453-2416 www.umaco.com **U-PLUG** is a fast-setting, polymer modified hydraulic cement designed to instantly stop running water from seeping through holes and cracks in masonry and concrete. The polymer modification in U-Plug ensures superior adhesion and results in exceptional structural strength.

USES and ADVANTAGES

- Stops running water instantly
- Use to repair leaking cracks and holes in basement walls and floors, swimming pools and retaining walls
- Fast repair of culverts, catch basins, sewers and septic tanks
- Stops leaks in wells, mines, tunnels, tanks, concrete pipes and elevator shafts
- Initial set in 3-5 minutes
- Interior or exterior use
- Above or below grade
- Effective against hydrostatic pressure
- Polymer-modified
- Excellent adhesion and exceptional structural strength
- Chloride free, metallic free and sulfate resistant
- Safe for use in contact with drinking water when fully cured
- Long lasting for permanent repairs

SURFACE PREPARATION Holes or Wall Cracks

Chip the crack or hole into the shape of an inverted "V" 3/4" wide by 3/4" deep. Sweep or vacuum all loose debris and dust. If surface is dry, dampen with clean water or prime with Umaco Bond All Exterior in order to ensure proper bonding.

At the junction of the Floor and Wall Chip the junction of the wall and floor at a 45 degree angle, making sure to chip out the wall and floor at the same time.

This groove should be 3/4" wide by 3/4" deep. Sweep or vacuum all loose debris and dust. If surface is dry, dampen with clean water or prime with Umaco Bond All Exterior in order to ensure proper bonding.

Always perform a spot test (of sufficient size) prior to application in order to ensure compatibility between U-Plug and the substrate as well as to confirm that the performance is acceptable.

MIXING

Using a clean container, mix U-Plug with enough clean water to form a putty like consistency. Do not mix more material than can be applied within three minutes. Do not retemper. Retempering U-Plug will cause the set and the structural integrity to fail.

As with any Portland cementbased material, mixing liquid should be kept to a minimum to avoid decreasing strength and adhesive properties.

APPLICATION

Inactive Areas

If holes or cracks are not actively leaking, place mixed U-Plug in the hole or crack with a steel margin trowel making sure all voids are filled. Level and finish as needed.

At the junction of the floor and wall, place the mixed U-Plug then press into the chipped out groove making sure all voids are filled. When applying U-Plug with a margin trowel, be sure that the top edge of the trowel meets the wall and the bottom edge meets the floor at a 45 degree angle.

Actively Leaking Areas

Wearing gloves, mold the mixed U-Plug into a wedged shaped form. When the U-Plug gets firm and warm, place it immediately into the hole. Maintain pressure on the U-Plug until the U-Plug is firmly set. If the water leaking through is severe, hold the U-Plug in your gloved hand until it is hard. Immediately place the hardened U-Plug in the hole and beat it in with a hammer. Maintain direct pressure on the U-Plug until it is fully set.

Cracks

Cracks should be filled in starting at the top and working down to the bottom. Try and isolate exactly where the water is leaking through and leave this area until last to be repaired. Fill the U-Plug in all other areas coming as close to the leaking area as possible and allow to cure for one hour. Then apply U-Plug to the remaining void in the same manner as described under "Actively Leaking Areas". If the water pressure is severe, weep holes may be drilled below the leak to relieve the pressure. Repair the main leak and then go back and repair the drilled weep holes.

SETTING TIME

Setting time of U-Plug will vary depending on the temperature and the humidity. Following are approximate setting times:

- 60°F to 80°F, sets in 3-5 minutes
- Greater than 80°F, setting time accelerates
- Greater than 90°F, use ice water in the mix or cool down the surface with cold water
- Less than 60°F, setting slows down
- Less than 40°F, use warm water in the mix or heat the U-Plug and the surface being repaired

COVERAGE

One pound of U-Plug yields 17 cubic inches and will seal a crack 3/4" deep by 3/4" wide by 30 inches long.

PRECAUTIONS

- Do not apply when the temperature is above 90°F
- Mix only a small amount of U-Plug at a time
- Do not apply over frost or frozen surfaces
- Do not retemper U-Plug after it begins to set
- Wear protective gloves when handling this material

TEST DATA

Greater than 158 inch lbs.

Water Penetration

3 Day Soak1/8	8
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Compressive Strength

24 Hour	2150 psi
7 Days	3950 psi
15 Days (Water Soak)	4120 psi

Flexural Strength

24 Hour	
7 Days	770 psi
15 Days (Water Soak).	

Tensile Strength

24 Hours	135 psi
7 Days	535 psi
15 Days (Water Soak)	575 psi

WARNING!

Do not take internally. If ingested, do not induce vomiting. Get immediate medical attention. Contains Portland cement and Silica sand. May be irritating to the eyes and nose. Prolonged inhalation may cause lung injury. Avoid eye contact or prolonged contact with skin. The use of impervious rubber gloves is recommended when using this product. If large mass is kept in contact with skin while hardening, enough heat may be generated to cause burns. Wash hands thoroughly with water immediately after handling. In case of eye contact, flush with plenty of water for at least fifteen minutes. If irritation persists, consult a physician immediately. Dust mask and eye protection are recommended when using this product.

Read Safety Data Sheet (SDS) before using this product which may be obtained from your retailer or by calling 978-453-8881.

24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300 KEEP OUT OF THE REACH OF CHILDREN!

WARNING! If you scrape, sand or

remove old paint, you may release lead dust or fumes. LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto <u>www.epa.gov/lead</u>. Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

For technical assistance call 978-453-8881

www.umaco.com

LIMITED WARRANTY

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.



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Umaco, Inc. 60 Rear Newhall Street Lowell, MA 01852



Toll Free: 800-442-5535 Phone: 978-453-8881 Fax: 978-453-2416