



Fast Setting Waterproof Repair & Sealing Mortar

- ☑ **Capillary/Crystalline**
- ☑ **Potable water approved - NSF 61**
- ☑ **Applied to positive or negative side**

Product Description

AQUAFIN® MORTAR-IC is a cementitious, ready-mixed waterproof repairing and sealing mortar. It consists of rapid setting Portland cement, specially treated quartz sand and a compound of active chemicals which resist water pressure.

Typical Applications

- Applied in conjunction with AQUAFIN-IC for:
- Installation of seal strips (reglets and covers) at joints to assure water tightness
 - Patching of tie holes and faulty construction joints
 - Filling of routed out cracks
 - Waterproof sacking of concrete "bugholes"
 - Repairing of spalled and honeycombed areas.

Advantages

- Applied to the positive or negative water pressure side of a structure
- Resists strong hydrostatic pressure
- Post sealing effect of shrinkage cracks up to 1/64" (0.4mm) together with AQUAFIN-IC
- Easy to use - needs only to be mixed with water prior to application
- Safe for use in contact with potable water
- Not a vapor barrier, lets concrete "breathe"
- Can be skim coated or feather edged
- Applied to moist concrete
- No odor - no fumes ■ Inorganic - no polymers.

Properties

MORTAR-IC contains active waterproofing chemicals which react with moisture and free lime in the mortar and concrete, creating insoluble crystalline complexes. These crystalline complexes, similar to a gel which grows in the presence of water, block the capillaries of the MORTAR-IC and minor shrinkage cracks, thus preventing water ingress.

Chemical activation begins when the MORTAR-IC powder is mixed with water and may take several days to completely block the capillaries depending on ambient temperature and environmental conditions.

The waterproofing chemicals remain active for the life of the structure, permanently sealing it from water penetration.

Preparation of Substrate

- All surfaces to be patched, repaired or sealed with MORTAR-IC must be sound.
- Remove all dirt, cement laitance, form release agents, curing compounds, paints, etc. by means of wet or dry sandblasting, a

high pressure water jet or other suitable mechanical means.

- Surfaces must be well moistened to a dull dampness at the time of application.
- Active water leakages must be stopped using AQUAFIN FIX 10-S.
- Cracks should be routed out to a U-shaped configuration, approx. 3/4" (20 mm) wide and a minimum of 1" (25 mm) deep.
- Tie holes should be roughened prior to filling.
- Spalled and honeycombed areas must be thoroughly cleaned and chiseled back to sound concrete prior to repair.

Mixing

MORTAR-IC should be mechanically mixed with clean water to a trowelable mortar consistency.

Approximate mixing ratio is :

- ◆ 50 lb powder to 0.9 - 1.0 gal water ◆
(22.7 kg to 3.4 - 3.8 L)

For glove pointing add small amount of water. Mix only as much material as can be used within 30 minutes.

Application

⇒ **Do not apply MORTAR-IC at temperatures below 40° F (5° C) or to a frozen substrate.** This product is not recommended for use in expansion or contraction joints.

Cracks / Seal strips (Reglets & Coves):

After proper surface preparation and routing to appropriate configuration, prime areas to be patched or repaired with a slurry coat of AQUAFIN-IC and while "green" (tacky), fill cavity flush to surface with MORTAR-IC in mortar consistency.

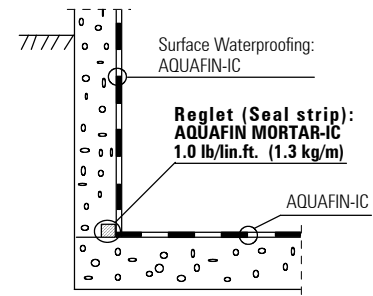
Physical Data

Aggregate State:	Powder
Color:	Cement gray
Bulk Density:	93 lbs/ft ³ (1.5 kg/dm ³)
Pot Life:	30 - 40 minutes
Compressive Strength: ASTM C-109	2,400 psi (17 MPa) @ 1day 4,000 psi (27 MPa) @ 28d
Flexural Strength: ASTM C-348	660 psi (4.6 MPa) @ 1 day 820 psi (5.7 MPa) @ 28d
Shrinkage:	0.04% (0.4 mm/m) @ 28d
Contact with potable water:	Certified to ANSI / NSF Standard 61

Consumption & Yield of 50 lb (22.7 kg) bag

	Size inch (mm)	Consumption lb/ft (kg/m)	~Yield/bag ft (m)
Cracks, U-shaped	1 x 1 (25x25)	1.0 (1.3)	50 (15.3)
Reglets	1 x 1 (25x25)	1.0 (1.3)	50 (15.3)
Coves, triangular shaped	1.5x1.5 (38x38)	1.0 (1.3)	50 (15.3)
Tie holes	1x1x1 (25x25x25)	----	~ 500 nos.
Honeycombs + patching	approx. 0.4 ft ³ (0.011 m ³) / bag		
All above values are approximate depending on surface conditions.			

TYPICAL APPLICATION



Spalled and Honey Combed Areas:

Prepare surface and chisel back to sound concrete. Prime areas to be repaired with a slurry coat of AQUAFIN-IC and while "green" (tacky), apply MORTAR-IC in layers of 1/2" (12.7 mm) until desired profile is obtained.

NOTE: AQUAFIN-IC should be applied as a surface treatment as soon as the MORTAR-IC has set (approx. 1 - 2 hours). If this is not practical, leave surface rough for subsequent surface treatment to bond.

Curing:

Provide protection against extreme weather conditions during the setting period.

Storage:

MORTAR-IC must be stored in a dry enclosed area off the ground.

Shelf life in unopened, undamaged bags is 12 months.

Packaging:

50 lbs. (22.7 kg) lined bags or plastic pails.

Safety

Refer to MSDS. This product contains Portland cement and silica and is highly alkaline. Do not inhale dust. The use of rubber gloves and goggles during mixing and application is recommended. Avoid contact with skin and eyes. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of water and seek medical advice.

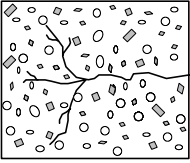
KEEP OUT OF REACH OF CHILDREN.



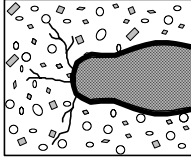
Certified to
ANSI/NSF 61

MORTAR-IC

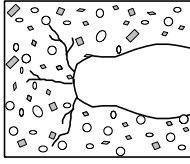
Typical detail crack repair



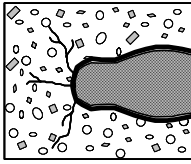
①
Locate
Crack



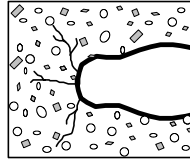
④
Fill cavity with
MORTAR-IC



②
Rout/cut out
in U-shaped
form



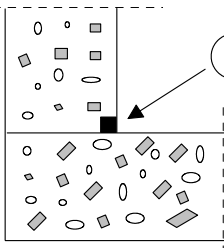
⑤
Top coat
surface with
AQUAFIN-IC



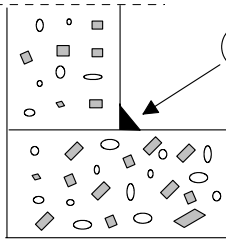
③
Prime cavity with
AQUAFIN-IC

Contact our office or visit our web site to obtain additional waterproofing sketches.

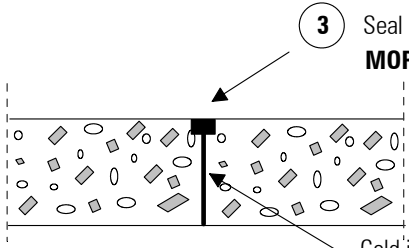
Typical detail sealing of construction joints



①
Reglet
(seal strip)
MORTAR-IC



②
Cove (seal strip)
MORTAR-IC



③
Seal strip
MORTAR-IC

Cold joint sealed with **AQUAFIN-IC**

LIMITED WARRANTY: AQUAFIN, INC. warrants its products to be manufactured free of defects and to be consistent with its standard high quality. We will replace or, at our election, refund the purchase price of, any product which is proven to be defective, provided that the product was properly applied. Our product recommendations are based on Industry Standards and testing procedures. We assume no warranties either written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN, INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

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