



## 3.07 XPERT PLUG 505

(One-component, cement-based, fast-setting water-stop repair mortar)

### PRODUCT DESCRIPTION

XPERT PLUG 505 is a one-component, quick-setting, Portland-cement-based hydraulic repair mortar that instantly stops running water through holes or cracks in concrete or masonry. It expands as it sets to lock into place even under constant water pressure.

### USES

- Fast setting so it can stop running water and develops high strength quickly
- Fully hydraulic so it can set above or below water
- Shrinkage compensated so it expands to lock in place
- One component so it mixes easily with water only
- Ready to topcoat in 15 minutes with appropriate product to minimize downtime
- Durable non-metallic, non-gypsum formula to maintain volume stability over time
- XPERT PLUG formulation available for coldweather applications for use in all seasons and climates.
- Certified to the NSF/ANSI Standard 61 for potable water contact

### APPLICATIONS

- Non-moving (static) cracks and holes with running water or moisture seepage
- For immersion service
- For anchoring vertical bolts
- Basements
- Foundations
- Retaining walls
- Sewer

### LOCATIONS

- Vertical, overhead, or horizontal
- Interior or exterior
- Above or below grade

### SUBSTRATES

- Concrete and masonry

### SET TIMES

XPERT Plug 505 1.5-3 minutes @ 70°F / 21°C.

### PACKAGING

XPERT Plug 505 is available in 5, 10, 25 Kg Packing.

### ESTIMATING GUIDE

17 in<sup>3</sup> per lb. 607 cm<sup>3</sup> per Kg 50 pounds yields 0.5 Ft.<sup>3</sup> 22.7Kg yields 0.014 M<sup>3</sup>

### DIRECTIONS

**Surface Preparation:** Enlarge crack or hole to a depth and width of 3/4"/1.9 cm. Undercut is best. Do not "V" cut. Chip out joint cutting into both wall and floor in wall to floor joints. Brush out loose material. If leak is not active, dampen surface.

**Mixing:** Add clean, drinkable, room temperature water to a small amount of XPERT Plug 505. Mix to putty-like consistency. Warm mixing water will speed setting time, cold will slow it. Do not mix more than can be placed in 3 minutes.

**Above Normal Temperatures:** Over 70°F. /21°C. XPERT Plug 505 will set very quickly and structural strength is reduced. Never use water over 100°F. /38°C. Or heat material over 70°F. /21°C. Mix with ice water to slow set. Protect material from hot sun.

**Below Normal Temperatures:** Low temperatures, under 40°F. /4°C., delay set and make it difficult to stop flowing water. Warm XPERT Plug 505 and mixing water to 70°F. /21°C. To speed set time or use XPERT Plug 505-W.

### Application:

### HOW TO APPLY MIXING

1. Mix XPERT PLUG 505 powder with clean, potable water.
2. Use powder (neat) without adding any aggregates, chemical additives, or admixtures.
3. Add just enough water to mix rapidly by hand to a stiff, low-slump, putty consistency. Mix no longer than 30 seconds.
4. Mix only enough XPERT PLUG 505 that can be successfully placed within 3 minutes under



normal conditions (see Temperature). Do not retemper material after initially mixing.

5. Clean mixing vessel and tools immediately after each use

### STOPPING RUNNING WATER

1. To stop active water from running through concrete and masonry, cut out crack or hole to a minimum depth and width of  $\frac{3}{4}$ " (19 mm). Always square cut or undercut when possible; do not "V" cut.

2. Start at top and force XPERT PLUG 505 into crack. In areas of great pressure, do not place XPERT PLUG 505 into opening immediately. Hold XPERT PLUG 505 in hand or on trowel until a slight warming occurs. Then press XPERT PLUG 505 firmly into opening.

3. Do not remove trowel or hand pressure too soon so as to provide some confinement to XPERT PLUG 505 expansion during its set. Do not twist XPERT PLUG 505 during placement or disturb during set time (5 minutes)

4. After placement to stop the active water flow, carefully cut and "trowel shave" the patch level with the surrounding surface

**To Seal Wall to Floor Joint:** Force XPERT Plug 505 into crack and smooth forming cove at base of wall.

**Underwater Applications:** Contact XPERT Technical Service staff for detailed instructions.

**Curing:** XPERT Plug 505 continues to gain strength as long as it is damp. It should be kept wet for at least 30 minutes to reach maximum initial strength. XPERT Plug 505 locks itself in by expanding as it cures. It becomes stronger and more watertight when subjected to water pressure.

### LIMITATIONS

- XPERT Plug 505 hardens in 1.5-3 minutes. Prepare only enough for immediate use.
- Seal unused powder in airtight, moisture proof containers for later use.
- Does not use as topping or traffic bearing repair mortar.
- XPERT Plug 505 is not designed to be used as a structural or machine support

grout. Consult XPERT Technical Service staff for recommendations.

**STORAGE:** Store in tightly closed container in cool, dry area. Shelf life of properly stored material is one year from date of manufacture.

### CAUTION

May cause eye and respiratory tract irritation. Over exposure may cause skin irritation. Do not take internally. Keep out of reach of children. All label precautions and the MSDS must be fully understood before using this product.

### WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to XPERT Construction Chemicals ("XPRT") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose.

Satisfactory results depend upon many factors beyond XPERT's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product.

- XPERT shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.
- XPERT's sole responsibility shall be to replace that portion of the product, which proves to be defective.
- Any warranty claim must be made within six (6) months from the date of the claimed breach.
- This limited warranty applies only if the product was properly installed and used according to all instructions.
- This limited warranty applies only if the was properly stored prior to use.