

# SHORT FORM APPLICATION GUIDE ISOLATEK QWIK-SET®

ISOLATEK QWIK-SET is a gypsum accelerator that is used in conjunction with CAFCO® 300, ISOLATEK® Type 300, CAFCO 300 AC, ISOLATEK Type 300 AC, CAFCO 300 HS, ISOLATEK Type 300 HS, CAFCO 300 ES Extended Set, ISOLATEK Type 300 ES Extended Set, CAFCO 300, ISOLATEK Type 300, ISOLATEK Type 300 AC, ISOLATEK Type 400 AC, ISOLATEK Type 300 and CAFCO 400 ES Extended Set to reduce the set time and increase yield. ISOLATEK QWIK-SET is applied by using a chemical metering pump which conveys the solution through a hose to the nozzle or in-line where it is mixed with the slurry.

The applicator shall completely and fully read and understand the Long Form Application & Installation Manuals for the specific CAFCO® Spray-Applied Fire Resistive Materials (SFRMs) being used in conjunction with ISOLATEK QWIK-SET prior to application.

### **EQUIPMENT REQUIREMENTS:**

ISOLATEK QWIK-SET requires an adjustable type chemical metering pump, a plastic 50 U.S. gallons (190 L) reservoir tank and an agitator mixer. ISOLATEK QWIK-SET is pumped through a pressure rated 1/4 in. (6 mm) I.D. hose to a standard injection cartridge where it is introduced at the nozzle or in-line.

Note: Since the ISOLATEK QWIK-SET solution is mildly acidic, all pumps and fittings must be resistant to this type of solution.

### **APPLICATION:**

For CAFCO 300 (ISOLATEK Type 300) family of products, each bag of ISOLATEK QWIK-SET requires 12.5 U.S. gallons (48 L) of potable water. For CAFCO 400 AC or CAFCO 400 ES Extended Set (ISOLATEK Type 400 AC or 400 ES), each bag of ISOLATEK QWIK-SET requires 30 gallons (114 L) of potable water.

When mixing multiple bags, add each bag slowly to ensure that the previous bag is fully dissolved before adding additional bags. Typical mix time to fully dissolve 1 bag of ISOLATEK QWIK-SET is 5 minutes. Continually mix the ISOLATEK QWIK-SET solution during use.

### **HOSE SET-UP:**

Following mixing, place a 1036cc cup on a 2000 gram capacity scale and slowly fill the cup with the ISOLATEK QWIK-SET solution. When ISOLATEK QWIK-SET is properly mixed, the 1036cc cup must weigh between 1220 to 1255 grams when using 12.5 U.S. gallons (48 L) of water per bag of QWIK-SET for the CAFCO 300 (ISOLATEK® Type 300) family of products and 1120 to 1150 grams when using 30 U.S. gallons (114 L) of water per bag of QWIK-SET for CAFCO 400 AC & 400 ES Extended Set (ISOLATEK® Type 400 AC or 400 ES).

Use 1/4 in. (6 mm) I.D. high pressure hose. Lengths dependent on material hose set-up.

#### **APPLICATION:**

To achieve a desired density and yield follow the steps below:

- 1. Weigh an empty 1036cc cup and "zero" the scale with the cup on it.
- 2. While the pump and atomizing air are running, place the nozzle head inside the cup and slowly pull back as the cup fills.
- 3. Level the product with the top of cup, being careful not to compress the product. Leveling must be repeated until the material stops swelling in cup. When leveling the product, angle the spatula so that it is cutting the excess product as opposed to troweling/compressing it.
- 4. Weigh the filled cup in grams.
- Match the cup weight with the appropriate Isolatek short form application guide density chart for the product you are using. Adjust the ISOLATEK QWIK-SET flow rate and repeat the steps above until the desired density and yield are achieved.

## INTRODUCTION OF ISOLATEK QWIK-SET:

ISOLATEK QWIK-SET is typically introduced in-line. When using a 1 in. (25 mm) whip hose, the ISOLATEK QWIK-SET must be introduced a <u>maximum</u> of 25 ft. (8 m) back from the nozzle <u>or maximum 50 ft. (15 m) back only when CAFCO 300 AC (ISOLATEK TYPE 300AC) is used from the nozzle; when using a 3/4 in. (19 mm) whip hose, the ISOLATEK QWIK-SET should be introduced a <u>maximum</u> of 17 ft. (5 m) back. As an alternative, ISOLATEK QWIK-SET can be introduced at the nozzle.</u>

### **USAGE:**

One bag of ISOLATEK QWIK-SET will set approximately 19 bags of CAFCO® 300 (ISOLATEK® Type 300), CAFCO 300 SB (ISOLATEK Type 300 SB), CAFCO 300 AC (ISOLATEK Type 300 AC), CAFCO 300 ES Extended Set (ISOLATEK Type 300 ES), and CAFCO 304 (ISOLATEK Type 304) materials when the product is applied at an average 15 pcf (240 kg/m³) density.

One bag of ISOLATEK QWIK-SET will set approximately 30 bags of CAFCO 300 HS (ISOLATEK Type 300 HS) and CAFCO 300 ES Extended Set (ISOLATEK Type 300 ES) materials when the product is applied at an average 17.5 pcf (280 kg/m³) density.

One bag of ISOLATEK QWIK-SET will set approximately 35 bags of CAFCO 400 AC (ISOLATEK Type 400 AC) and CAFCO 400 ES Extended Set materials (ISOLATEK Type 400 ES) when the product is applied at an average 22 pcf (352 kg/m³) density.

Note: Exceeding the above guidelines will result in average densities below UL Design or Assessment minimum guidelines.

### YIELD CHARTS:

In order to determine mixer and cup weights, refer to CAFCO 300 (ISOLATEK Type 300), CAFCO 300 AC (ISOLATEK Type 300 AC), CAFCO 300 HS (ISOLATEK Type 300 HS), CAFCO 300 ES (ISOLATEK Type 300 ES) Extended Set, CAFCO 300 SB (ISOLATEK Type 300 SB), CAFCO 304 (ISOLATEK Type 304), CAFCO 400 AC (ISOLATEK Type 400 AC), or CAFCO 400 ES (ISOLATEK Type 400 ES) Extended Set Short Form and/or Long Form Application Manuals.

### **PRECAUTIONS:**

- In-line injecting beyond the maximum distance shown above may retemper the material. This will result in poor physical performance properties and cracking.
- 2. Do not add ISOLATEK QWIK-SET solution to the product while the product is in the mixer or pump. This will result in a premature set and will cause blockages in the equipment and/or material lines.
- The water ratio and ISOLATEK QWIK-SET rate must be adjusted to achieve the desired density and yield. Do not apply product below the recommended cup weights.
- 4. ISOLATEK QWIK-SET may stain or discolor aluminum or metal doors and window frames, window glass or other surfaces. Provide masking, drop cloths or other suitable coverings to protect surfaces.
- ISOLATEK QWIK-SET may stain or discolor floor slabs and may inhibit or reduce the ability of tile or carpet to adhere to the slab. Protect floor slabs from leaks or spills especially in the vicinity of the ISOLATEK QWIK-SET equipment and hoses.
- 6. After use, tank, pump and hose must be thoroughly flushed clean with water.

### **HEALTH & SAFETY:**

Refer to Safety Data Sheet (SDS) for complete information.

For additional information, please contact the Technical Service Department.



