



# LIGHTWEIGHT ONE COAT FIBERGLASS REINFORCED STUCCO

PRODUCT NO. 1201-56

**DIVISION 9**

Portland Cement  
Plastering  
09 24 00

## PRODUCT DESCRIPTION

QUIKRETE® One Coat Fiberglass Reinforced Stucco is a fiber-reinforced, Portland cement based plaster designed for use in one-coat stucco applications. When applied in accordance with IAPMO ER-455, this product provides a one-hour fire rating. *35% lighter than other stuccos - easy to haul, unload, mix, lift, pump and spread.*

## PRODUCT USE

QUIKRETE® Lightweight One Coat Fiberglass Reinforced Stucco (FRS) is a Portland cement-based plaster designed with recycled, coated Expanded Polystyrene (EPS) beads, uniformly graded sand, alkali-resistant glass fibers, and other approved materials. The proprietary formula delivers exceptional flexibility, durability and strength while making the material 35% lighter than other traditional field mixed or pre-blended stuccos. Designed to maximize productivity on any stucco job, QUIKRETE® Lightweight One Coat FRS may also contribute towards LEED credits. QUIKRETE® Lightweight One Coat FRS is one-hour fire rated and meets applicable ASTM standards, as well as those referenced on IAPMO ER-544 (including 2015, 2012, 2009, and 2006 International Building Code (IBC) and International Residential Code (IRC), 2013 California Building Code (CBC) and California Residential Code (CRC), 1997 Uniform Building Code (UBC), 2013 Abu Dhabi International Building Code (ADIBC)<sup>1</sup> and January 2013 ICC-ES AC11).

## Value Proposition

It is easier and faster to complete a stucco wall system with QUIKRETE® Lightweight One Coat FRS. One 50 lb (22.6 kg) bag yields the equivalent coverage area of a traditional 80 lb (36.2 kg) bag of pre-blended stucco. Working with lighter bags to install a stucco system helps manage fatigue and increase speed. In addition to being lighter, superior workability and ease of application allow QUIKRETE® Lightweight One Coat FRS to improve jobsite productivity and minimize costly call backs.

- Excellent insulation "R" value
- Improved hydration, water repellency and freeze-thaw durability
- Typical 2,000 PSI compressive strength at 28 days

QUIKRETE® Lightweight One Coat FRS is a high quality, reliable and environmentally friendly option for expediting any residential, commercial or industrial stucco project. Available in 50 lb bags (22.6 kg) and 1,875 lb (850.4 kg) bulk bags, QUIKRETE® Lightweight One

Coat Fiberglass Reinforced Stucco (FRS) can be trowel or spray applied. It can be applied as thick as 3/8 in (9.5 mm) to 7/8 in (22 mm) in a single pass when used in one-coat systems as detailed in IAPMO ER-455, or it may be used as scratch, brown, and finish coats in traditional two or three coat systems adhering to ASTM C 926.

QUIKRETE Quality Assurance program requires QUIKRETE® Lightweight One Coat FRS to be computer batched, blended and documented for consistent quality and performance unrivaled by traditional packaged or field-mixed stucco.

## INSTALLATION

Only contractors with experience applying one-coat systems, or those certified by the manufacturer, should install QUIKRETE® One Coat FRS.

## PREPARATORY WORK

The application of QUIKRETE® One Coat FRS is intended for use as a one-coat stucco over #20 gauge [0.035 in (0.89 mm)] 1" galvanized steel woven wire fabric lath, metal lath, and two layers of Grade D Kraft building paper or a combination of insulation board and 60 minute water resistant building paper (when applied over wood-based sheathing). For one-coat application utilize in accordance with IAPMO ER-455. Installation of wire mesh or lath and building paper shall be in accordance with ASTM C926 or local governing building codes. Control joints should be installed to limit sections to no more than 144 ft<sup>2</sup> (13 m<sup>2</sup>), or at a height/width ratio of 2.5 : 1.

## ONE-HOUR FIRE RESISTIVE WALL ASSEMBLIES

There are 4 wall configurations approved as 1-hour fire resistive wall assemblies. Do not proceed with construction without consulting IAPMO ER-455.

1. The first assembly uses 5/8" (15.9 mm) Type X gypsum wallboard on the interior face and 5/8" (15.9 mm) Type X gypsum wallboard on the exterior face. The framing can be constructed of 2" x 4" wood

studs spaced 24" (610 mm) oc maximum or minimum #16 gauge galvanized steel studs spaced 24" (610 mm) oc maximum. A weather resistive barrier, lath and One Coat FRS are then applied to the exterior face.

2. The second assembly uses 5/8" (15.9 mm) Type X gypsum wallboard with Kraft-paper-faced, 3 1/2" (89 mm) thick, R-11 fiberglass batt-insulation installed in the cavity of the wall. One layer minimum of 7/16" (11.1 mm) plywood or OSB sheathing shall then be applied to the exterior face. The framing can be constructed of 2" x 4" wood studs spaced 24" (610 mm) oc maximum or minimum #16 gauge galvanized steel studs spaced 24" (610 mm) oc maximum. A weather resistive barrier, lath and One Coat FRS are then applied to the exterior face.

3. The third assembly uses 5/8" (15.9 mm) Type X gypsum wallboard with Kraft paper-faced, 3 1/2" (89 mm) thick, R-11 fiberglass batt insulation installed in the cavity of the wall. One layer minimum of 7/16" (11.1 mm) plywood or OSB sheathing shall then be applied to the exterior face. Install a weather resistive barrier, then Type I EPS insulation board with a density of 1 pcf (16.02 kg/m<sup>3</sup>) over the sheathing. The framing can be constructed of 2" x 4" wood studs spaced 16" (406 mm) oc maximum or minimum #16 gauge galvanized steel studs spaced 16" (406 mm) oc maximum. The lath and One Coat FRS are then applied to the exterior face.

4. The fourth assembly uses 5/8" (15.9 mm) Type X gypsum wall board on the interior face with optional 3-1/2 inch thick, R-11 glass fiber or mineral wool batts or blankets placed between the studs. The outside face has foam insulation board that is applied over the WRB to open studs and fastened into place.

#### ACCESSORIES

- Insulation boards should be fastened to the studs with approved fastening fixtures, as governed by local or national building codes. The maximum spacing of the nails, screws or mechanical fasteners should not exceed 12" (305 mm) unless otherwise controlled by the codes. All fasteners must penetrate studs a minimum of 3/4" (19.1 mm) or as otherwise specified by local building codes.
- A variety of different accessories may be needed to provide completely homogeneous exterior cladding with no possibility of water leakage, either at corners, around openings or at the bottom and top of the cladding system. Consult IAPMO ER-455 for details.
- All trim, screeds and corner reinforcement must be galvanized steel or approved plastic.
- Joint sealant - Seal joints with an approved exterior sealant material where foam edges meet metal or plastic trim, such as with weep bases or dip screeds, and where J metal trim is applied. Sealant must comply with ASTM C834.

#### MIXING

Machine mix in a paddle-type mortar mixer:

1. Add approximately 5 quarts (4.7 L) of clean water into the mixer for each 50 lb (22.6 kg) bag.
2. Slowly pour the contents of the bag(s) into the mixer. Mix for 3 - 5 minutes until a firm, workable consistency is achieved. Avoid over-

mixing, as this may affect the integrity of the fibers. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved.

3. Do not exceed a total volume of 7 quarts (6.6 L) of water for each 50 lb (22.6 kg) bag.

4. Prepare only enough mix as can be applied in 1 hour.

#### APPLICATION

1. QUIKRETE® One Coat FRS may be trowel or spray applied. The proper selection of spray equipment is important. Apply stucco onto the lath working from bottom to top to achieve a minimum thickness of 3/8" (9.5 mm). Force the stucco through the lath so that it fills the gap between the lath and wall completely

2. Using a darby or straight edge, screed the stucco flat

3. After the stucco has lost its sheen, use a float to smooth the surface

4. For construction details, consult IAPMO ER-455.

#### CURING

QUIKRETE® One Coat FRS must be water cured with a fine mist once it has achieved final set. Spray the wall periodically for 48 hours. During hot and dry conditions, additional precautions may be necessary, including more frequent spraying or the erection of barriers to deflect sunlight and wind. Do not apply when weather is forecast to be above 100 degrees F (38 degrees C) or below 40 degrees F (4 degrees C) within 24 hours without adopting the required hot or cold weather precautions. QUIKRETE® One Coat FRS and QUIKRETE® One Coat FRS Concentrated do not require the addition of any other material, such as coloring compounds, calcium chloride, soaps, air entraining admixtures, polymers, etc. Such additions will void any warranty and result in a violation of code conditions.

#### PRECAUTIONS

In cool weather, use warm water to speed the setting time. Do not apply when temperatures are expected to fall below 40 degrees F (4 degrees C) within 24 hours. Protect from rain, snow and freezing for 48 hours after application.

During hot weather, work during cool times of the day, and use cold water to slow down the setting time. Keep cementitious substrates, such as concrete masonry block and concrete, damp prior to application. Do not apply when temperatures are above 100 degrees F (38 degrees C).

#### WARRANTY

[www.quikrete.com/product-warranty](http://www.quikrete.com/product-warranty)

#### PROP-65



WARNING: Cancer and Reproductive Harm –  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).