



4100 PRIMER Installation Guide

PRODUCT DESCRIPTION

4100 PRIMER is a 100% solids epoxy clear primer/sealer designed for use over concrete to eliminate moisture vapor emissions and increase adhesion of subsequently applied systems to bare concrete and oil stained concrete. It is recommended that a MVE test be done to determine the amount of MVE coming up from the concrete before installing the 4100. 4100 has been shown to work well blocking MVE levels up to 20 lbs.

COVERAGE RATES AND PACKAGING

4100 PRIMER 250-450 ft²/Kit 166-300 ft²/Gal Sold in 1.5-Gallon Unitized Kit and 5 Gal Pails
(Avg coverage rate over bare concrete 250 sq ft per gal)
4100 15 Gal kit covers 3750 sq ft per 15 Gal kit

SUBSTRATE REQUIREMENTS

Concrete

Concrete shall be structurally sound and stable. Concrete shall be free of dust, dirt, grease, contamination, surface laitance, and other potential bond-breaking substances that could impair adhesion. All cracks, gouges, and other surface defects need to be addressed prior to coating installation. Substrate and ambient temperatures must be above 50°F (10°C) during installation of coating. Relative humidity should not exceed 65% during installation of the coating. Environmental conditions must not be near the dew point during installation of the coating. **Concrete with MVE readings up to 10lbs** must have a porous surface profile equal to #150 grit sandpaper. **Concrete with MVE readings between 10 and 20 lbs** concrete must be mechanically profiled and prepared by shot-blasting, grinding or other means of scarification to produce a Concrete Surface Profile (CSP) between of #3 or greater (International Concrete Repair Institute (ICRI) Guideline No. 03732) which would be equal to a 60 grit sand paper.

Oily Areas

4100 has shown good results adhering and penetrating oil stained concrete. We recommend that a test area be done first to judge the adhesion performance of 4100 when being used over an oil stained concrete substrate.

Other Substrates

Consult with a Versatile Building Products representative for recommendations over other substrates.

STEP 1) INSTALLATION OF 4100 PRIMER

(Note: Cure time is effected by environmental conditions. Do not force dry. High humidity and/or low temperatures can cause haziness and blushing in the coating. Material has a pot-life of 90 minutes based on an insulated 200 gram mass at a starting temperature of 70°F. **Warning: Large masses of mixed and/or heated material will have a shorter pot-life.**)

Installation for Subsequent Epoxy Topcoats

Mixing

Mix 2 parts by volume 4100 PRIMER A-Component with 1 part by volume 4100 PRIMER B-Component for 2-3 minutes using a jiffy-type mixing blade at no less than 400rpm. Transfer mixed material to a second mixing vessel and mix an additional 30 seconds to ensure that material along the sides of the first mixing vessel have been properly incorporated into the mixture.

Application

Apply mixture to the substrate using a brush, roller, or squeegee at a uniform coverage rate of 150-300 ft² per mixed gallon. Use spiked shoes when walking into wet material.

Subsequent Coats

Additional coats and techniques may be needed to obtain the desired results for MVT. 4100 may allow MVT bubbling during the drying process due to high MVT in substrate. If mild out-gassing bubbles are found in the dry material, sand bubbles down and fill the bubbled areas with more 4100 that has been accelerated using the 41 accelerator. If unsure consult with a Versatile Building Products representative for recommendations to achieve specific results. Recoat window for 2nd coat is 5 – 10 hours, if more than 10 hours passes, sand the 4100 surface with 150 grit sand paper or use a floor buffer machine (black or green scotchbrite pad works best).

Thinning

4100 may be thinned so it can penetrate dense or tight troweled concrete surfaces. Add up to 40% xylene (use Acetone when applying in strict AQMD Districts like the SCAQMD). Apply the thinned material at the same coverage rate as un-thinned 4100.

Installation for Cementitious Toppings

Application

Apply 4100 as listed above and then broadcast #30 sieve silica sand over wet 4100 and allow to dry. Remove all loose sand. Verify that the dried material has a sandpaper finish and then proceed with application of topping. ****If concrete is extremely porous, sand may not stick to the initial application of 4100. If sand does not fully adhere to first coat then a second application of 4100 and silica sand broadcast will be required.***

Cure Times

Coating can typically accept light foot traffic in 12-18 hours when installed at a temperature of 70 F° and above or 24-36 hours when installed at temperatures below 60 degree F°. Full cure occurs in 5-7 days.

STEP 2) CLEANUP

Immediately cleanup splatter marks and tools with lacquer thinner. Clean hands and exposed skin with mild soap and water, and/or citrus based hand-cleaner.

ADDITIONAL CAUTIONS AND RECOMENDATIONS

- Do not force dry
- Coverage rates may vary
- Mask all areas that need protection
- Always wear protective clothing and equipment as required by OSHA and as necessary
- Read Material Safety Data Sheets before commencing work
- Store material at 50-70°F to prevent shortened pot-life due to excessive heat
- Coating may amber under exposure to ultraviolet light
- Designed for use over porous concrete