

S-462 Seal Strong™

For use with the following commercial and residential applications:

- Suitable on porous, unheated concrete slabs to reduce moisture vapor emission rates from 100% RH or 25 lbs/1000 sq. ft./24 hrs. to suitable levels before applying underlayment.
- Typically, only one coat is required to penetrate and to fully seal the substrate.

Type	Solvent-free two-part epoxy
Color	Black (Part A resin), Yellow (Part B hardener)
Taggants	None
Applicator	Notched squeegee and short nap roller. For uneven surfaces use long nap roller and paint brush.
Coverage	At 10 mils: 250-270 sq. ft. per mixed unit. At 14 mils: 170-190 sq. ft. per mixed unit.
Units	2-component system Net 1.65 Gal. (6.25 L) Net 22 Lb. (10 kg)
Working Time	Approximately 20 minutes at 70° F (21° C)
Curing Time	Minimum 4 hours
Shelf Life	12 months if unopened
Freeze/Thaw Stable	Keep from freezing
VOC Content	19.9 g/L (Parts A+B combined); ASTM D2369
Bonds To	Porous concrete surfaces with moisture limits of 100% RH per ASTM F 2170 or 25 lbs/1000 sq. ft./24 hrs. per ASTM F 1869
Advantages	Suitable for use up to 100% RH (or 25 lbs CaCl) Only one coat required to fully seal concrete Can be installed on top of Armstrong Flooring S-466 Patch Strong™ Longer working time and faster drying time

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Important Notes:

External Water Sources: Armstrong Flooring S-462 Seal Strong™ is suitable for reducing concrete moisture vapor emissions rates of up to 100% RH down to a level acceptable for the installation of floor covering. Please note that a very high concrete RH level, tested per ASTM F2170, may indicate external water is present due to improper site grading/drainage or leaking/damaged pipes. Verify that any external sources of water are addressed prior to installation.

Moisture, Temperatures, and Dew Point: Concrete must be surface dry at time of installation. Conduct a mat test (ASTM D4263) on any concrete with an RH level above 98% for at least 4 hours to verify surface dry. Do not apply if concrete surface temperature is below 50°F (10°C). To avoid potential for condensation to form at time of installation, surface temperature must be at least 5°F (3°C) higher and rising compared to dew point for the given room temperature and humidity.

Tensile Strength of Concrete to Receive Armstrong Flooring S-462 Seal Strong™: A minimum concrete tensile strength of 150 psi (ASTM C1583) is required for areas where the floor covering will undergo normal foot traffic. A minimum of 200 psi is required for areas where the floor covering will undergo heavy commercial traffic.

Substrate Preparation:

All concrete substrates must be structurally sound and solid, surface dry and thoroughly clean and free of oil, wax, grease, asphalt, paint, latex compounds, curing and sealing compounds and any contaminant that could act as a bond breaker. Mechanical preparation of the surface is required to obtain a minimum ICRI concrete surface profile of 3 (CSP #3). Substrate preparation must be by mechanical means, such as shot blasting. Broom sweep and vacuum the prepared surface. Acid etching, solvents, sweeping compounds, adhesive removers and sanding are not acceptable means of cleaning the substrate.

If a concrete substrate is too uneven to provide a uniform film thickness of the Armstrong Flooring S-462 Seal Strong™ (typically CSP #6 or higher), the substrate can be pre-smoothed using Armstrong Flooring S-466 Patch Strong™ in certain situations. For substrate preparation and installation instructions regarding such an application, please contact the Armstrong Customer Service TechLine.

Joints and cracks:

Armstrong Flooring cannot be responsible for issues arising from expansion joints, isolation joints, saw cuts, and new or existing cracks that may develop or change in width after installing. Honor all moving joints and moving cracks in the concrete up through the S-462 Seal Strong™ and Armstrong underlayment and floor covering by installing a fully flexible sealing compound intended for this use. Dormant hairline cracks of up to 1/32" can be covered with S-462 Seal Strong®. Dormant joints and dormant cracks greater than 1/32" that will not be honored must be pre-filled with a highly fluid 100% rigid-drying crack filling material such as polyurethane intended for this purpose. Upon filling dormant cracks and dormant joints immediately broadcast the specified sand to refusal. After curing thoroughly, remove excess sand prior to proceeding with S-462 Seal Strong™ installation.

Mixing: Prior to mixing Part A and Part B, first thoroughly stir the contents of the Armstrong Seal Strong™ Part A container (resin). Next, pour the entire contents of the Armstrong Seal Strong™ Part B container (hardener) into the Part A container. Mix the blend for a minimum of 3 minutes using a low speed drill and epoxy paddle. Next, pour a portion of the blended epoxy back into the Part B container, and mix again for 30 seconds. Next, return all material back to the Part A container and mix again for 30 seconds.

CAUTION! After thoroughly mixing, immediately pour the entire contents of the container onto the prepared concrete surface. Mixed material left in mixing container will generate heat. If occurs, do not touch container. Close lid loosely and carry container by handle to a cool space or to outdoors until it sets and cools.

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Application:

The required thickness of application for S-462 Seal Strong™ is dependent on the thickness of flooring underlayment that will be installed on top of the S-462 Seal Strong™. Apply S-462 Seal Strong™ at 10 mils thick when the flooring underlayment will be ¼" thick or less. Apply S-462 Seal Strong at 14 mils thick for applications that will receive a flooring underlayment greater than ¼" thick.

Apply evenly across the area at application thickness described above. Spread with a saturated nap roller or notched squeegee. Avoid moving too fast in order to allow S-462 Seal Strong™ to saturate the concrete surface. Immediately begin to back roll to evenly distribute the epoxy film over the surface avoiding puddles. To minimize the potential for pinhole formation, work S-462 Seal Strong™ into the surface with the roller to ensure maximum penetration. A paintbrush may be used for edges and corners. Coat the area completely prior to proceeding. Typically only one coat is required to penetrate and to fully seal the concrete". If experiencing gas bubble formation in the surface of the epoxy on extremely porous concrete, contact Armstrong Technical Service for guidance on applying a second coat of S-462 Seal Strong.

A sand broadcast is required for certain applications. When required, sand broadcasting must take place while the S-462 Seal Strong™ is still wet (maximum 20 minutes). Note – Temperatures warmer than 70°F will cause the S-462 to cure more quickly and reduce the time available.

When planning to install flooring underlayment at greater than ¼" thick: Broadcast an excess of fine sand into the wet epoxy material while wearing a NIOSH-approved dust mask in conformance with OSHA requirements for handling of sand (crystalline silica). Sand must be clean and dry and less than 1/50" in grain size (98.5% passing sieve size #30 or #35). Consistently cover the entire area with sand at a rate of approximately 1 lb. of sand per 1 square foot of area. Do not stand or walk on the freshly applied epoxy while broadcasting sand. Areas covered with sand may be walked on, taking care not to expose or disturb the epoxy. After 4 hours, broom and vacuum to remove loose sand. No primer is required prior to installing the Armstrong Flooring underlayment.

When planning to install flooring underlayment up to ¼" thick: Allow a minimum epoxy drying time of 4 hours (max. 20 hours) at 70 °F before priming with Armstrong S-465 NP Prime Strong prior. No sand broadcast is required.

Disposal: Dispose of packaging and residue in accordance with federal, state and local waste disposal regulations.

Precautions:

Contaminants like aggregates causing alkali-silica reaction (ASR), material constituents or reaction products, bond breakers such as curing compounds, deleterious salts, silicate based surface hardeners, and more may prohibit S-462 Seal Strong™ from working properly. If it is unknown what types of treatments may have previously been applied to the concrete subfloor, the concrete should be tested to determine if any past treatments may jeopardize the use of S-462 Seal Strong™. The responsibility for conducting such tests lies with the building owner and/or its authorized jobsite crew.

FOR PROFESSIONAL USE ONLY.

- Do not use moisture mitigation system on gypsum-based substrates.
- Carefully read and follow all cautions and warnings on product label.

For complete safety information, please refer to the Safety Data Sheet, or visit our website at armstrongflooring.com or floorexpert.com.