

High-Performance Construction Adhesive Data Sheet

Product Description

XCEL HCA is a 1-component, moisture-curing, permanently elastic, high performance construction adhesive, based on MS Polymer. XCEL HCA is engineered for subfloor, decking, and hardscaping etc. While remaining permanently flexible with zero shrinkage, HCA is excellent for all interior and exterior general construction needs.

Fields of Application

Multipurpose construction adhesive providing excellent adhesion to various building materials, including but not limited to wood, stone and concrete.

- ✓ Bonds to most building materials
- ✓ Excellent for subfloor, decking, hardscaping & much more
- ✓ Excellent resistance to extreme temperatures
- ✓ Versatile – no risk of damage or leaching with any building materials.

Main Benefits

- ✓ Interior + Exterior Application
- ✓ Tenacious Bonding
- ✓ Ultra-Low VOC's
- ✓ Virtually Odorless
- ✓ Highly durable, & moisture stable
- ✓ Cures permanently flexible, with zero shrinkage
- ✓ Can bridge gaps up to 3/8" – Conforms to ASTM C-557



Directions for Use:

For best results the substrates must be clean, dry, and free of old residues, polish, liquid sealants, wax, dust, grease and other contaminants which may affect the adhesion. Painted surfaces must be well cured and free of loose paint. The product is suitable for a large range of substrates, however, a preliminary adhesion test is recommended on every surface. After substrate preparation, apply with a high performance caulking gun. Uncured product may be easily removed with soapy water. Cured sealant may be removed using mineral spirits or mechanically. HCA is usually set after 12 to 24 hours at +23°C for a thickness between 2 to 3 mm.

XCEL HCA is engineered with low to medium viscosity and is to be used as an all-weather adhesive for projects involving subfloor assembly and standard wood deck construction, or general construction. It may be used on all grade levels: concrete, cementitious underlayment, APA-grade underlayment plywood, and existing resilient flooring, metal and common flooring and decking materials.

Technical Information:

Raw material basis: MS Polymer

Weight per gallon: 14.4 lbs/gal

VOC: <25 g/l

Viscosity: 400,000 to 650,000 centipoises

Working time: 10 – 20 minutes (at 23°C; 50% R.H.)

Curing rate: Set in 12-24 hrs, full cure in up to 7 days

Repositioning Time: 30 minutes

Application Temperature: 23°F - 100°F (-5°C - 38°C)

Properties of cured product:

Shear strength (shear rate = 1"/min): >150 psi

Peel Strength to Wood/Concrete: >18 pli

Shrinkage: Zero

Low Temperature flexibility: Pass

Service Temperature: -20°F to 120°F (-29°C - 49°C)

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates.

Color and Packaging Information

This product is packaging in 900 ml / 28 oz cartridges and upon request 600 ml / 20 oz sausages

Colors: Beige/Natural Color



Surface Preparation

Testing for compatibility and adhesion on small area of the surface must be performed by the user. The user shall determine suitability of the product for its intended use. Testing must also be performed to determine the actual coverage rates necessary to achieve desired thickness.

All surfaces must be clean, dry, and free from damage, loose contaminants, dirt, dust, oil, grease, mist, frost, and mildew. Sweeping the surface to remove contaminants before applying the adhesive is recommended.

Application Equipment

HCA can be applied in beads using a dispensing gun and/or by troweling the adhesive with suitable trowel. Immediately place substrate onto "wet" adhesive. Do not apply more adhesive than can be covered within 10 - 20 minutes, depending upon temperature and humidity.

Product Limitations

HCA will not prevent moisture-related damage to wood/decking substrates. Do not allow heavy-foot traffic until product has set: usually 12 to 24 hrs. Follow industry standards and recommendations for subfloor moisture content, design, layout and application of flooring materials.

Clean Up

Remove wet adhesive residue with a clean, white cloth dampened with soapy water. Use mineral spirits for dried adhesive residue, carefully following warnings on the container. When using mineral spirits, test a small area before proceeding to make sure it does not damage the surface being cleaned.

Storage and Safety:

The shelf life is 18 months from manufacturing date, provided that it is stored in original packaging, sealed and in a dry place in temperatures from 41°F (+5°C) to 86°F (+30°C). Once the container is open and exposed to the atmosphere, a skin will start to form at the surface over time. If this occurs, remove the skin from the surface before using the material.

Avoid skin and eye contact. For further safety information see the corresponding Safety Data Sheet.