

TECHNICAL DATA

Nominal Starting Thickness:	0.040" (1.016 mm)
Nominal Final Thickness:	1/8" (3.2 mm) 1/4" (6.35 mm) 3/8" (9.53 mm) 1/2" (12.7 mm)
Nominal Width:	48" (1.219 m)
Nominal Length:	12" (30.48 cm) 18" (45.72 cm)
ASTM E84 - Flammability:	Class A
ASTM E648 (NFPA 253) - Critical Radiant Flux:	Class I, > 0.45 W/cm ²
ASTM E662 (NFPA 258) - Smoke Density:	Passes, <450
ASTM F925 - Chemical Resistance:	Passes (chart available)
ASTM F970 - Static Load Limit:	Passes, 250 PSI
ASTM F970 - (Modified) Max Weight:	1000 PSI
Acclimation Time:	48 Hours
Storage & Acclimation Temperature:	65° - 85° F

SUSTAINABILITY

FloorScore® Certified, **NSF 332 Platinum**, **HPD** Available

Qualifies for **LEED v2009 IEQ Credit 4.1 credit**

Technical Support: solutions@rhctechnical.com

APPROVED ADHESIVES

Excelsior AW-510 Acrylic Wet-Set Adhesive – An acrylic adhesive used for the permanent installation of dimensionally stable vinyl, rubber and quartz flooring, wall base and stair tread products over porous and non-porous substrates in indoor applications.

Excelsior MS-700 Modified Silane Wet-Set – A premium, one component modified silane adhesive used for the permanent installation of vinyl & rubber flooring products over porous and non-porous substrate both indoors and outdoors.

Excelsior U-705 Urethane Wet-Set Adhesive – A premium water resistant, single component urethane adhesive used for the permanent installation of resilient flooring products, including recycled or crumb rubber flooring products over porous and non-porous substrates both indoors and outdoors.

Excelsior EW-710 Epoxy Wet-Set Adhesive – A non-flammable two-part urethane-modified epoxy adhesive used for the permanent, installation of vinyl, rubber and quartz flooring products over porous and non-porous substrates in both indoor and outdoor applications.

SUBSTRATE, INSTALLATION & MAINTENANCE INFORMATION

1. PRODUCT LIMITATIONS

- Prior to acceptance of this document refer to www.flexcofloors.com to confirm the most current revision.
- Do not install materials over LVT, cushioned vinyl, hardwood flooring, cork, rubber, or asphaltic materials.
- Do not install flooring materials in outdoor areas and in or around commercial kitchens.
- Do not install in areas that may be subjected to sharp, pointed objects, such as stiletto heels, cleats or spikes.
- Do not allow product to be directly exposed to extreme heat sources, such as radiators, ovens or other high-heat equipment.
- May be susceptible to staining from rubber tires, casters or rubber-backed walk-off mats, as well as harsh disinfectants, cleaning agents, dyes or other harsh chemicals – ensure all chemicals and materials that may come in contact with flooring surface will not stain, mar or otherwise damage the flooring material prior to use.

2. PRE-INSTALLATION CHECKLIST

- Consult all associated product literature concerning installation and warranty prior to installation.
- Allow all trades to complete work prior to installation.
- Deliver all materials to the installation location in its original packaging with labels intact.
- Inspect all materials to ensure there is no damage.
- Do not stack pallets to avoid damage.
- Protect installation area from extreme temperature changes, such as heat and freezing, as well as direct sunlight for at least 48 hours before, during and after installation.
- Ensure all vents, walls, moldings and/ or doorways are protected with tape or plastic prior to installation.
- Do not proceed with installation until all conditions have been met.

3. STORAGE, ACCLIMATION & SERVICE ENVIRONMENT

- Ensure material is adequately stored at temperatures between 65° F (19° C) and 85° F (30° C) prior to installation.
- This product is designed, manufactured and tested to perform at constant temperatures, not fluctuating more than 4° from normal selected service temperatures from the allowable 65° F (19° C) - 85° F (30° C) range.
- During acclimation, the material must be in the installation area with the HVAC system functional

and operating at desired service temperatures for a period of 48 hours prior to installation, during the installation and for the service life of the installation afterwards.

- It is recommended maintaining an ambient relative humidity between 40% and 60% for a period of 48 hours prior to installation, during the installation and for the service life of the installation afterwards.
- If the material will be installed outside of the above acclimation and service temperature ranges contact Technical Services for more detailed installation recommendations.
- Do not proceed with installation until all conditions have been met.

4. SUBSTRATE PREPARATION

In regards to substrate preparation when mechanical sanding, grinding, shot blasting and vacuuming always follow the Resilient Floor Covering Institute's (RFCI) "Recommended Work Practice for Removal of Existing Floor Covering and Adhesives", and all applicable local, state, federal and OSHA requirements in regards to Asbestos and Silica containment regulations.

All substrates must be prepared according to ASTM F710 or ASTM F1482, as well as applicable ACI and RFCI guidelines. Substrates must be clean, smooth, permanently dry, flat, and structurally sound. Substrates must be free of visible water or moisture, dust, sealers, paint, sweeping compounds, curing compounds, residual adhesives and adhesive removers, concrete hardeners or densifiers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and any other extraneous coating, film, material or foreign matter.

It is recommended that all substrates have a floor flatness of FF32 and/or a flatness tolerance of 1/8" in 6' or 3/16" in 10'.

Substrates that do not meet this requirement should have a compatible cementitious patch (such as the Excelsior CP-300) or self-leveling underlayment (such as the Excelsior SU-310) installed to flatten the installation area.

All substrates must have any and all existing adhesives, materials, contaminants or bond-breakers mechanically removed via scraping, sanding, grinding or buffing with a 25 grit DiamaBrush Prep Plus tool prior to adhesive installation. In extreme situations, shot-blasting may be required.

Mechanical preparation must expose at least 90% of the original substrate.

Following cleaning and removal, all substrates must be vacuumed with a HEPA approved vacuum and flat vacuum attachment to remove all surface dust. **Sweeping without vacuuming will not be acceptable.** Do not use solvent/citrus based adhesive removers prior to installation.

CONCRETE SUBSTRATES

All concrete must have a minimum compressive strength of 3500 PSI and be prepared in accordance with ASTM F710. When flooring is being installed directly over concrete, concrete surfaces that have an ICRI Concrete Surface Profile (CSP) over 4 should be smoothed with a self-leveling underlayment or a patch to prevent imperfections from telegraphing through flooring materials.

All substrates must be tested per ASTM F3191 to confirm porosity. Use a pipette or equivalent to conduct three tests by placing a .05 mL (1/4" wide) droplet of clean, potable water onto the surface. If the substrate absorbs water within 60 seconds, the substrate is considered porous. Conduct 3 tests for the first 2000 sq. ft. and one for each additional 3000 sq. ft., at least one per room. All other substrates that do not meet this requirement are considered non-porous. Ensure that all non-porous substrates are not contaminated with any aforementioned contaminants.

In addition to ASTM F2170 Relative Humidity Testing, existing concrete that has previously had floor covering installed on all grade levels must be tested in accordance with ASTM F1869, using Calcium Chloride test kits, to quantitatively determine the Moisture Vapor Emissions Rate (MVER) of the concrete.

If ASTM F2170 or ASTM F1869 test results exceed the prescribed limits, a moisture mitigation product, such as Excelsior MM-100 Moisture Mitigation, must be installed prior to proceeding with installation.

RESINOUS SUBSTRATES

When installing directly over a resinous products, such as the Excelsior MM-100 or an epoxy coating, ensure that coating is dry to the touch and has cured for the prescribed length of time. Substrate must be clean, dry, sound and free of contaminants. Resinous substrates are considered non-porous – make sure adhesive can be used over non-porous substrates and follow all installation instructions and flash times for non-porous substrates.

GYPSUM BASED SUBSTRATES

Gypsum-based substrates must have a minimum compressive strength of 3500 PSI. Gypsum substrates that do not meet this requirement may have one coat of the Excelsior MM-100 installed to improve the top layer bonding strength of the substrate.

Substrate must be structurally sound and firmly bonded to the subfloor below.

Any cracked or fractured areas must be removed and repaired with a compatible patch or repair product. Follow instructions for installation over a gypsum substrate. New or existing gypsum substrates may require the substrate has a primer or sealer applied just prior to finished floor being installed. Follow all manufacturers' recommendations regarding preparation for resilient flooring installation.

WOOD SUBSTRATES

Wood substrates must be prepared in accordance with ASTM F1482. Prior to installation, moisture retardant sheeting with a maximum rating of 1.0 perm must be installed beneath the wood subfloor, overlapped at least 8". Other wood subfloor materials, such as OSB, lauan, particleboard, chipboard or cementitious tile backer boards, are not acceptable subfloors. Avoid preservative treated and fire-retardant plywood, as some may be manufactured with resins or adhesives that may cause discoloration or staining of the flooring.

This also includes plywood sheathing designed for long lasting exposure to exterior climates. These also could contain resins/waxes that could stain or be considered bond breakers. Always refer to those manufactures recommendations. If the subfloor materials mentioned above are already installed or the wood substrate is old and not repairable, the use of multi-ply Underlayment Grade plywood at a minimum of 1/4" thick with a fully sanded face will be required. Wood subfloor deflection, movement, or instability will cause the flooring installations to release, buckle or become distorted. As such, do not use plastic or resin filler to patch cracks. Do not use cement or rosin coated nails and staples or solvent-based construction adhesives to adhere the plywood. Only install over a properly constructed sleeper system (wood subfloor system over concrete, consult the technical department for further details) and do not install directly over Sturd-I-Floor panels

METAL SUBSTRATES

Metal substrates must be thoroughly sanded/ground and cleaned of any residue, oil, rust and/or oxidation. Substrate must be smooth, flat and sound prior to installation. When installing in areas that may be subject to topical water or moisture and/or high humidity, an anti-corrosive coating must be applied to protect metal substrate. Contact a local paint or coating supplier for coating recommendations. Install flooring within 12 hours after sanding/grinding to prevent re-oxidation. Any deflection in the metal floor can cause a bond failure between the adhesive and the metal substrate. Be sure to follow installation procedures and trowel sizes for non-porous substrates.

Installing over Checker plate or Diamond plate is not recommended.

EXISTING FLOORING SUBSTRATES

Existing rubber flooring and LVT, as well as the adhesives used to install them, must be completely removed from the substrate prior to installation.

Existing VCT, VAT, quartz tile, solid vinyl tile, sheet goods, hardwood flooring, asphaltic materials and existing adhesives or adhesive residue must have a compatible cementitious patch or underlayment installed over them prior to installation. Existing hardwood flooring requires suitable underlayment grade plywood be installed over the substrate. Adhesive may be installed over existing stone flooring substrates, such as terrazzo, porcelain or ceramic tile.

Ensure existing flooring is a single layer of material and that all materials are clean, dry, sound, solid, well adhered and free of site-applied finishes, waxes and/or contaminants. Any and all loose tiles must be removed and repaired or replaced. All grout lines and irregularities must be filled and troweled flush with a suitable primer and patch such as the Excelsior NP-230 and CP-300 to prevent telegraphing of the existing floor. All existing flooring substrates that are outside of flatness tolerances that cannot be repaired with the Excelsior CP-300 patch should be leveled with the SU-310 self-leveling underlayment to achieve a smooth, flat substrate.

All existing flooring substrates must have any and all site-applied finishes and/or waxes completely removed prior to flooring installation in order to ensure a proper adhesive bond. For mechanical removal, use a low-speed buffer and 40-60 grit sandpaper. Properly prepared substrates should not have any remaining gloss or sheen. For chemical removal, ensure chemical treatments will not disrupt adhesion of the existing flooring to the substrate. Be sure to rinse the existing flooring adequately with clean, potable water to remove any and all chemicals from the surface of material.

Do not install flooring until any moisture on, between or below existing flooring has completely dried. Ensure all dust; dirt and debris are removed prior to flooring installation.

RADIANT HEATING SUBSTRATES

When installing flooring over a substrate that contains a radiant heating system, ensure the radiant heat is turned off 48 hours prior to installation and remains off during the entire installation. The radiant heat may be turned on 48 hours after installation and the normal operating temperature should be increased gradually over the course of 24 hours. Ensure the temperature of the radiant heating system does not exceed 85° F (29.5° C) and avoid making abrupt changes in radiant heating temperature.

5. CRACKS, JOINTS & VOIDS

All cracks, joints and voids, as well as the areas surrounding them, must be clean and free of dust, dirt, debris and contaminants. All minor cracks and voids 3/64" or less may be repaired with a suitable cementitious patch. Due to the dynamic nature of concrete slabs, manufacturer cannot warranty installations to cover expansion joints, cracks or other voids such as control cuts saw joints and moving cracks or voids. Do not install flooring directly over any expansion joints as all expansion joints should be honored and have a suitable expansion joint covering system installed to allow expansion joint to move as it was designed. In areas where random cracks are 3/64" or greater it is hard to tell if the slab will continue to move or has finished moving.

Consult a structural engineer if there are any questions or concerns with a crack or joint, especially those that may affect structural integrity such as expansion joints or excessive random cracking in areas that are not designed to move.

6. SUBLEVELER INSTALLATION

Ensure adhesive is approved for use with flooring material and that proper trowel type and size is used, manufacturer is not responsible for any and all adhesion issues related to improper adhesive selection or usage.

Prior to installation, dry-lay several subleveler to establish the best layout for the installation area and facility. Inspect all sections before installing.

Apply adhesive according to instructions for specific product in use. Be sure to follow instructions based on substrate porosity (porous or non-porous).

When installing into adhesive using a wet-set method, avoid walking or working on material until adhesive has cured for light foot traffic. Pay close attention to open times to avoid adhesion issues.

Be sure to install materials with the cut lines down against the substrate.

Periodically lift material to ensure proper adhesive transfer and ensure adhesive has not surpassed the open time – adhesive should cover 90% of the material.

Use a hand roller to ensure material is properly embedded into adhesive. Visually inspect installation to ensure that material has not shifted and that adhesive has not been squeezed out of joints or compressed onto surface.

7. FLOORING INSTALLATION

Flexco Subleveler is a non-porous material and is considered a non-porous substrate.

Always follow adhesive recommendation of flooring material for a non-porous substrate when installing materials to the subleveler.

Ensure that Subleveler is free of dust, dirt and debris prior to installation of flooring material. If necessary, clean the Subleveler using a clean cloth.

If patching is required the use of a primer is recommended, the subleveler is considered a non-porous material.

8. WARRANTY

Flexco provides a 1 year limited warranty for all Accessories. For additional information, see associated warranty documents.

FOR PROFESSIONAL USE ONLY

PLEASE CONSULT ALL ASSOCIATED INSTALLATION INSTRUCTIONS and TECHNICAL DATA, SAFETY DATA SHEETS, MAINTENANCE DOCUMENTS, AND WARRANTY INFORMATION PRIOR TO INSTALLATION.