



CSU-400 Cork Sound Underlayment

TECHNICAL DATA

PRODUCT DESCRIPTION

CSU-400 Cork Sound Underlayment is a rolled resilient acoustic underlayment made of agglomerated cork and recycled PU foam with PU (polyurethane) elastomer bonding agent for impact noise insulation for LVT, SPC or WPC floors.

Nominal Dimensions ¹	42" (1.07 m) x 100' (30.5 m) x 1.9 mm Roll
Coverage Rate	350 sq. ft. per Roll

MOISTURE REQUIREMENTS

Moisture Control Properties	Not a Moisture Inhibitor or Moisture Mitigation Product
Vapor Barrier	Not Present
ASTM F2170 – RH Limit	90%, <i>in situ</i>
ASTM F1869 – MVER Limit	6 lbs. / 1,000 sq. ft. / 24 hours

PRODUCT PERFORMANCE PROPERTIES

Density	20 – 26 lb. / ft ³
Tensile Strength	> 350 Kpa
Compression @ 0.7 MPa	20 – 45%
Recovery after MPa	> 70%

ACOUSTICAL PERFORMANCE PROPERTIES ²

6 INCH CONCRETE SLAB	
ASTM E2179 – Effectiveness of Floor on Impact Sound Transmission	ΔIIC 21
8 INCH CONCRETE SLAB	
ASTM E2179 – Effectiveness of Floor on Impact Sound Transmission	ΔIIC 23

APPLICATION & WORKING PROPERTIES

Application Method	Fully Adhered Underlayment to the Substrate
Seam Sealing Method	Tightly Butted and Taped with 3M 3903 6.5 Mil Vinyl Duct Tape, Tyvek House Wrap Tape or Equivalent Underlayment Seam Tape
Application Methods for Flooring	Suitable for Floating Floors Suitable for Full Glue Flooring (CSU-400 should be treated as Non-Porous / Non-Absorptive for adhesive selection and application)

PRODUCT INSTALLATION & WARRANTY INFORMATION

Intended for Use With	Luxury Vinyl Plank & Tile (LVP / LVT) Rigid Core Products (SPC / WPC)
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Not Recommended for Use With	Rubber Flooring Products Vinyl Sheet Flooring Products ESD Flooring Products
Lot Controlled	No
Suitable for In Floor Radiant Heat	Yes
Heat Weldable / Required	No
Indoor / Outdoor Suitability	Indoor Use Only
Service & Storage Temperature Range ³	60° - 85° F
Recommended Adhesives ⁴	Excelsior AW-510 Wet-Set Acrylic Adhesive Excelsior PS-525 Modified Pressure Sensitive Adhesive Excelsior U-705 Urethane Adhesive Excelsior EW-710 Urethane Enhanced Two-Part Epoxy Adhesive
Product Warranty ⁵	Lifetime System Limited Commercial Warranty

PRODUCT INSTALLATION PROCEDURES

- If product is being installed with plank flooring, the CSU-400 must be installed in a perpendicular direction to the intended direction of the flooring material or planks.
- Cut rolls to fit tightly at the seams while honoring the perimeter gap according to the Perimeter Isolation procedures
 - To preserve the sound reduction properties of the CSU-400, finished flooring cannot make direct contact with the perimeter wall or any vertical surface attached to it, such as electrical boxes, heating ducts, columns and pipes or rigid baseboards, moldings, trim, and accessories.
 - To isolate the perimeter, leave a 1/4" gap between the finished flooring and all vertical surfaces and a 1/8" gap between the finished flooring and rigid baseboards, moldings, trim, and accessories. Seal all gaps with a permanently flexible acoustical grade caulk, such as the Color Rite sealant/caulk. Ensure caulk is clear, colored, or paintable.
- Tightly butt seams and apply approved tape to treat the seam.
- Select appropriate adhesive for use on Non-Porous (Non-Absorptive) surface.

ADHESIVE BOND TEST

We suggest performing an ASTM F3311 Mat Bond Evaluation of Performance and Compatibility for Resilient Flooring System Components Prior to Installation to alleviate any concerns regarding the condition of the substrate and if it is ready to receive resilient flooring.

SITE REQUIREMENTS

- During acclimation, the site must be fully enclosed, weather tight, and 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 to maintain 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.

NON-APPROVED SUBSTRATES

- Concrete substrates that have been abated or prepared with chemical adhesive removers, solvents, or chemical cleaners.

APPROVED SUBSTRATES

- Concrete above, on, or below grade; properly prepared to receive moisture sensitive resilient flooring that has been in place a minimum of 45 days.
- Properly prepared APA rated plywood underlayments.
- Properly prepared Portland cement-based patches & underlayments.



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- Properly prepared & primed Gypsum cement-based underlayments meeting the requirements of ASTM F2419 – Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring.
- Properly prepared Ceramic, Stone, & Terrazzo Tiles.
- Properly prepared Steel & Aluminum.
- Radiant-heat systems that have been properly installed and operating at a surface temperature no higher than 85° F (29° C).
- Properly installed and prepared moisture mitigation systems.

SUBSTRATE REQUIREMENTS

- All substrates must be prepared according to the information contained within the product installation instructions.
- Concrete substrates, whether on-grade and/or below grade must have an intact and effective moisture vapor barrier which meets the current requirements of ASTM E1745.
- 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, 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.

DISPOSAL INFORMATION

- Dispose in accordance with local, state, and federal regulations.
- Empty packaging is recyclable.

SUPPORT & ADDITIONAL DOCUMENTATION

Product Support Phone & Email	(844) 393 – 4044 / solutions@rhctechical.com
Technical Documentation	www.excelsiorproducts.net
Associated or Related Documentation	Excelsior AW-510 Wet-Set Acrylic Adhesive Excelsior PS-525 Modified Pressure Sensitive Adhesive Excelsior U-705 Urethane Adhesive Excelsior EW-710 Urethane Enhanced Two-Part Epoxy Adhesive Referenced Standards within Technical Documents Technical Bulletin Excelsior Products Warranty

¹ Nominal Dimensions are the marketed dimensions of the product, tolerances are allowed in the manufacturing process and our tolerance range is what is allowed by the ASTM documentation overseeing the product construction.

² Acoustical testing information is provided for information and guidance when selecting flooring materials. Testing is conducted on flooring products with or without underlayments and over laboratory substrates. These results should not be construed as an indicator of installed flooring performance and results.

³ See installation documents for full installation details regarding approved substrates, job site conditions and acclimation procedures.

⁴ Recommended adhesives listed are recommended to be used to obtain the full listed system warranty that includes a bond performance warranty. Material installed with adhesives other than those listed here or an approved option in writing will only have a product manufacturing and wear warranty, no performance or bond warranty.

⁵ See product warranty for full details regarding limitations and warranty coverage.

The contents contained within this Technical Data Sheet (TDS) may be utilized or copied into another projected related document, but this original document will remain in effect at the time of product installation, this TDS shall not be supplemented or replaced by the resulting project documentation. **Any alterations to the wording or requirements contained in or derived from this document shall void all related warranties.**

See installation information and documents for full installation details regarding substrates, job site conditions, & acclimation procedures. The intent of this document is to provide technical and performance properties of the mentioned adhesive as well as define the intended method of installation for the products in which the adhesive is approved for use. Any installation guidelines are to be considered as a starting point at a minimum for a successful installation. We rely on the expertise and professionals that are installing the products to adjust based on site conditions. Anything that appears to be a link, is and leads to additional information if necessary or provides a means of contact in the event there are any additional questions. Prior to acceptance of this document refer to the product website to confirm that you have the most current revision.

These products are intended for installation by professionals, prior to use the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability.