



## 400 Specification Sheet

**TECHDESIGN FLOORS 400 TRANSITIONAL / PRESSURE SENSITIVE (TPS) ADHESIVE** TechDesign 400 TPS is an advanced, cross-linking pressure sensitive adhesive featuring high aggressive peel and shear strength. This solvent-free, non-flammable, easy troweling product provides excellent installations for tile-over-tile applications, sheet goods, luxury vinyl tile and plank, solid vinyl tile & plank, and vinyl composition tile over both porous and non-porous surfaces. TechDesign 400 has low odor, is freeze/thaw stable, bondable, and is very quick and easy to use. It demonstrates excellent water and alkali resistance and may be used with confidence over a variety of flooring materials. Acceptable subfloors include above, on, or below grade moisture free concrete, APA approved plywood underlayment; terrazzo and existing well adhered tile and sheet goods. Plasticizer migration resistance allows installation of a broad variety of vinyl floor products. Cleanup is simple. When wet, use warm water, when dry, use a solvent based adhesive remover approved by F2C Floors.

### INSTALLATION

Surfaces to be bonded must be free from moisture, wax, dirt, grease, oil, paint, rust, or other substances that might interfere with a good bond. Subfloor must be smooth and fully adhered. This adhesive is not recommended for use over concrete slabs where hydrostatic pressure, excessive moisture or alkali exists. Moisture level of concrete must be below 5 lbs. /1000 sq. ft. /24 hours (ASTM F-1869) or 85% relative humidity (ASTM F-2170). If both tests are performed, the RH test is the qualifying standard. The pH level of concrete must be between 5 and 10. Both the adhesive and surfaces to be bonded should be at 70F (+/- 5F) at least 24 hours before, during, and after installation.

The pH level of concrete must be between 5 and 9 (do not install if over 9) and moisture level of concrete must be at or below 8 lbs./1000 sq. ft./24 hours (ASTM F-1869) or 90% relative humidity (ASTM F-2170) for luxury vinyl tile and luxury vinyl plank

**NON-POROUS SURFACES:** Apply with the recommended trowel, allow to dry completely from yellow to tan, and lie in the tile or plank according to the flooring manufacturer's instructions within 3 hours. The highly aggressive pressure sensitive grip prevents slippage and minimizes seam gaps. Drying time is 45-90 minutes and will vary due to installation site temperature and humidity. Installation over areas of incomplete drying can result in job failure.

**POROUS SURFACES:** May be used either wet or as a pressure sensitive adhesive over porous surfaces. To use wet, apply adhesive with the recommended trowel and allow to flash off for 5-10 minutes before installing flooring. Lay tile or plank into wet adhesive according to flooring manufacturer's instructions. Adhesive must transfer to floor product to ensure proper bond. To use as a pressure sensitive adhesive, allow to dry to a tacky state, and then install flooring according to flooring manufacturer's instructions within 3 hours. After installation is complete, roll and cross roll with a 100 lb. sectional roller. Use hand roller in areas which cannot be reached with larger roller. Check 1-2 hours after installing flooring material and roll again if necessary.

### RECOMMENDED TROWELS

Type of Installation	Trowel Size* and Notch	Coverage
<b>Sheet Goods</b>		
Over porous substrates	1/16" x 1/32" x 1/32" U notch	Up to 300 sq. ft./gal
Over non-porous substrates	1/16" x 1/32" x 5/64" U notch	Up to 350 sq. ft./gal
<b>Luxury Vinyl Tile and Vinyl Plank</b>		
Over porous substrates	1/16" x 1/32" x 1/32" U notch	Up to 200 sq. ft./gal
Over non-porous substrates	1/16" x 1/32" x 5/64" U notch	Up to 300 sq. ft./gal

\*Trowel dimensions are width x depth x spacing. Coverage is approximate and may vary depending on porosity of substrate and the angle at which the trowel is held. *IT IS THE INSTALLER'S RESPONSIBILITY TO APPLY THE PROPER AMOUNT OF ADHESIVE FOR THE JOB CONDITION.*

## **PHYSICAL PROPERTIES**

VOC's: Negligible

Base: Amide-Ester-Acrylate Resin Blend

Appearance: Smooth, creamy, easy to trowel. Yellow when wet, tan when dry.

Open time: Three hours depending on temperature and humidity.

Shelf life: One year in unopened container at 70° F (21.10° C).

Flammability: Meets NFPA Class A and UBC Class 1 as determined by ASTM E-84 and also passes the pill test.

Anti-Microbial: Contains anti-microbial agents that will provide its dry film with protection from fungal growth. This protection is determined using the ASTM G21 test method.

Freeze/thaw Stable: Freeze/thaw stable to 10° F. While this adhesive is freeze/thaw stable, it is still necessary to protect from freezing. Multiple freeze/thaw cycles below 10° F may irreversibly damage the adhesive.

Other features: Waterproof when cured, VOC compliant, non-flammable.

Clean up: Warm water when wet, Taylor Touchdown #9 Adhesive Remover/Stripper when dry.

### **CAUTION**

DO NOT take internally. If swallowed, DO NOT induce vomiting. Call a physician immediately. KEEP OUT OF REACH OF CHILDREN.

### **WARRANTY INFORMATION**

This product is manufactured according to exacting quality control standards and is warranted to be free from manufacturing defects. Defective material called to our attention within one year of manufacture date will be replaced. No guarantee, expressed or implied, is made regarding the performance of this product since the manner and conditions of application are beyond our control.