

# **Adhesive System**

FOR INSTALLATION OF RIGID VINYL WALLCOVERING

The XT2000+ Adhesive System is a time tested method for installing rigid vinyl wallcovering. The combination of XT2000+ Adhesive, XT2000+ Primer and the XT2000+ Trowel allows for easier, cost effective and secure installations of rigid vinyl wallcovering.

# **Formulated Solutions LLC**

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## **XT2000+<sup>™</sup> Adhesive**

A high strength adhesive with aggressive initial tack and permanent flexible bond that adheres rigid vinyl wallcovering to a variety of substrates. XT2000+ Adhesive is the next generation version of XT2000 which has thousands of trouble free, time proven installations to its credit.

- + Freeze-thaw stable
- + One coat application reduces labor costs
- + Wallcovering can be repositioned during installation
- + Water-based with no offensive odor
- + Heat resistant to 150°F
- + Spreads easily
- + Non-flammable, minimal VOC content
- + Easy, water clean-up
- + Meets Class 1/A fire rating standards for .040 or thinner guage sheets

## XT2000+<sup>™</sup> Primer

XT2000+ Primer is a water-based primer designed for sealing and priming wallboard and concrete block prior to applying XT2000+ Adhesive to install rigid vinyl wallcovering.

- Inhibits Polyvinyl Acetate (found in most joint compounds, low cost paints and sealers) from adversely reacting with the XT2000+ Adhesive.
- + Allows vinyl wallcovering to be shifted or repositioned during the installation.
- + Wallcovering can be sized, trimmed, mounted and realigned without tearing the gypsum wallboard.
- + Brush or roller application



### XT2000+<sup>™</sup> Trowel

A uniquely designed 1/8" V-Notched Trowel for economically spreading XT2000+ Adhesive.

- + Greater spread rate: coverage approximately 125 150 sq. ft. / gal.
- + Adhesive cost reduced by up to 40% compared to traditional trowels
- + Bonding capabilities are not sacrificed

XT2000+ Adhesive Technical Information	
CHARACTERISTIC	DESCRIPTION
Base	Synthetic Latex
Solvents	Water
Solids	62-63%
Application Temperature Limits	65°F to 80°F
Lifetime Jobsite Temperature Limits	35°F to 150°F (after adhesive is cured)
Flammability	Non-Flammable
Consistency	Trowelable Mastic
Application	Notched-Trowel
Coverage	Approx. 120-150 Sq. Ft. per Gal. with recommended XT-2000+ Trowel
Specific Gravity	~1.00
Smoke and Flame Contribution	Meets/exceeds Class 1/A fire code requirements for .040 or thinner gauge sheets (ASTM E-84)

# for Rigid Vinyl Wall Covering

#### PREPARATION

Approved Substrates: Sealed drywall and concrete block. Non-porous surfaces such as stainless steel or existing rigid vinyl wallcovering are permissible provided special installation techniques are followed. (See special advisory sheet.)

**Surface Preparation**: Surfaces must be clean and free of dust, grease, sealants and foreign matter. Wipe wallcovering and the substrate with a damp cloth immediately before installation to remove any dust or foreign material. Allow to dry before installation.

Sealing / Priming: Porous substrates such as drywall, joint compound, and concrete block must be sealed using XT2000+ Primer. Apply XT2000+ Primer evenly with a brush or roller. Cover 100% of the surface. Newly sealed walls must dry 24 hours before installation. XT2000+ Primer will not soften, moisten, or reemulsify. Priming prevents wallboard from tearing during installation. This process is also needed because most joint compounds, low cost paints and sealers are made with PVAc (Polyvinyl Acetate) which may react with the adhesive causing bonding failure.

Acclimation: Allow wallcovering material, XT2000+ and the jobsite to regulate in a temperature range between 65°F & 80°F, with humidity no greater than 80%, for 24 hours prior to installation. These conditions must be maintained during the installation and for at least 48 hours following it. Significant temperature changes cause the wallcovering to expand/contract thereby causing adhesive failure. Do not install wallcovering with XT2000+ Adhesive over cold exterior walls. Failure to comply with these requirements may result in significant installation problems. **Flat Material**: Precut pieces from any roll material & flatten them with weights or reverse roll for at least 24 hours prior to installation to remove "roll set".

Wall Material Length: Limit the length of wallcovering material cut from rolls to a maximum of 12 feet, preferably not more than 8 feet. Longer lengths are subject to twisting.

#### INSTALLATION

**Application**: Do not thin out XT2000+ Adhesive with water or solvents. Spread the adhesive evenly with a notched trowel only. Cover 100% of the surface. Do not apply adhesive with a roller or brush. Insufficient adhesive coverage is the cause of most installation problems. Apply XT2000+ Adhesive to the wall surface only. Do not apply to the wallcovering. Keep trowel grooves clean while working. Wash trowel frequently.

#### Trowel/Spread Rates:

Wallcovering less than 0.030" thick: Smooth walls: use a 1/16"x 1/16"x 1/16" square-notched trowel. Approximate coverage: 125 sq. ft. /gal. Rough walls: use a 1/8" x 1/8" saw-tooth v-notched trowel\*. Approximate coverage: 100 sq. ft. /gal.

Wallcovering 0.030" thick or thicker: Smooth or Rough Walls: 1/8" x 1/8" sawtooth v-notched trowel\*. Approximate coverage: 100 sq. ft. /gal.

\*For greater coverage substitute the 1/8" x 1/8" trowel with Formulated Solutions' special XT2000+ Trowel. Approximate coverage: 125-150 sq. ft. /gal.

**Flash Off:** After spreading XT2000+ it must dry for 20-30 minutes and be firm to the touch before setting wall panels. The wallcovering should be set into the adhesive within 1 1/2 hours after spreading. This will ensure a solid bond. If the

adhesive dries too long, its bond strength will weaken.

Expansion Allowance: Rigid vinyl wallcovering materials expand with increases in temperature, approximately 1/64" per foot per 30°F increase for 0.040" thickness. For example: An expansion space of 1/16" must be provided at each end of an 8' long sheet of 0.040" thick wallcovering if the temperature is expected to vary in a 30°F range from the initial installation temperature. Do not force wallcovering up against door jambs, ceilings or baseboards. Leave a 1/16" expansion gap all around. Do not force butt joints together. Wallcovering tends to push away from points of compression and buckle away from the adhesive during the critical curing period. Remove baseboards during installation if possible. Expansion gaps may be filled with colored urethane or silicone caulk. NOTE: Larger clearance (preferably 1/8") should be left on all edges of the wallcovering when installing near heaters or underlying hot water pipes.

**Rolling**: Roll wallcovering with a laminate roller (similar to the Crain Cutter Co. #333) after installation. Roll from the center of the material towards the edges to remove any entrapped air and ensure complete adhesion. Apply extra pressure to finished edges.

**Corner Guards**: Do not use XT2000+ for installing corner guards less than 1/8" thick. Use double-adhesive backed tape or contact adhesive.

**Packaging**: XT2000+ Adhesive is available in 5 gallon (18.9 Liter) plastic pails; XT2000+ Primer in 1 gallon (3.8 Liter) plastic pails.

Clean Up: Remove wet adhesive with water. Do not allow to dry on tools or

DESCRIPTION
Butadiene Resin (SBR)
Water
20-23%
60°F to 90°F
35°F to 150°F (after adhesive is cured)
Non-flammable
White, milk-like
Brush, roller or spray
Approximately 350-400 sq.ft./gallon depending on surface porosity
~1.03

materials. Dry adhesive requires solvent such as mineral spirits for cleanup.

**Removal**: Damaged wallcovering may be replaced by mechanically removing cured adhesive. Re-apply adhesive and new wallcovering in normal manner.

**Storage**: XT2000+ Adhesive and Primer: Close container after each use. Store in original, tightly sealed container at room temperature. PROD-UCTS ARE FREEZE-THAW STABLE. Avoid excessive cycling or prolonged frozen states which can damage the products. Shelf life is one year from date of manufacture.

Odor: Minimal acrylic paint-like odor.

**Precautions:** Synthetic latex can be irritating. Avoid contact with skin. In case of contact, wash thoroughly with water. For eyes, get prompt medical attention. Provide adequate ventilation. KEEP OUT OF REACH OF CHILDREN.

**Technical Assistance**: Information is available by calling Formulated Solutions, Mon. thru Fri. (Hours 8:00 AM to 4:30 PM EST) Telephone: (718) 267-6380 FAX: (718) 204-6013.

NOTICE AND WARRANTY DISCLAIMER: The manufacturer has provided the enclosed Instructions/Recommendations [I/R] to assist the USER in the application of this product. These I/Rs are not warranted to be comprehensive, complete, thorough or conclusive as regards to any specific installation. It is the user's obligation to ensure that the product is suitable for it's intended use and that it is compatible with existing conditions or applications of other coincident or adjoining materials. The liability of the seller and the manufacturer, whether express or implied, whether in contract or in tort, arising out of warranties, representations, instructions or defects from any cause shall be limited exclusively to replacing the product, provided the same is proved defective, or refunding the purchase price upon return of the unused product. In no event will seller or manufacturer be liable for consequential damages, including but not limited to, loss of materials, costs of labor, loss of profits, costs of replacement goods, or other commercial loss. The user accepts the product as is, and without warranties expressed or implied.

#### XT2000+<sup>™</sup> SPECIAL INSTALLATION ADVISORIES

#### ADVISORY #1:

#### Using XT2000+ Adhesive over Non-Porous Substrates

Non-porous surfaces prevent or slow evaporation, lengthening the cure time and reducing the initial bond strength. On installations over nonporous substrates such as painted metal, stainless steel, high pressure laminate or other rigid plastic, glazed block, etc., make the following adjustments to standard installation instructions:

- Adhesive drying time will vary with jobsite temperature and humidity conditions. Drying will take at least one hour, usually no longer than three hours.
- 2. The adhesive must be firm and not transfer to fingers when touched and will change from white to clear indicating the optimum time for installation. The edges of the installed wallcovering will adhere before the center does.
- Keep wallcovering material flat and properly aligned as when using a contact adhesive. DO NOT allow wallcovering to touch the adhesive unless it is perfectly aligned. Readjusting the sheets may be difficult or impossible.

#### ADVISORY #2:

#### How to Prevent the Telegraphing of Trowel Grooves through Thin Gauge Wallcovering

Some installations using thin gauge (0.028" and less) wallcovering can have an unsatisfactory appearance because of adhesive trowel marks telegraphing through from the back of the wallcovering to its face. This is caused by using a V-notch trowel and allowing the adhesive to become excessively firm before applying the wallcovering. The grooves of the adhesive can become too stiff to flatten out even when a pressure roller is used. Follow these procedures to prevent telegraphing:

- 1. On smooth walls use a 1/16" square-notched trowel.
- On rough walls use a 1/8" Vnotched trowel having flat areas between the grooves. Formulated Solutions' specially designed 1/8" V-notched trowel minimizes telegraphing and improves coverage.
- Apply wallcovering when the high points of the adhesive have changed from white to clear but most of the groove is still white.
- Important: Adhesive grooves must be flattened immediately by rolling the wallcovering with a laminate roller.

#### ADVISORY #3:

#### Adhering Rigid Vinyl Wallcovering over Ceramic Tile or Glazed Block Using XT2000+ Adhesive

- 1. 0.060" or thicker wallcovering is effective in hiding uneven wall surfaces such as ceramic tile and glazed block. Thinner gauges may only be used if the wall surface is properly prepared to be smooth and flat.
- 2. Wall flatness is very important. Level the wall with a premium ceramic tile adhesive. Use a wide, flat-edged leveling trowel to fill grout line depressions. Leave tile faces uncovered. Allow to dry for a minimum of 24 hours.
- 3. Wet sand high points to smooth walls and keep dust to a minimum.
- Sponge down walls with water to remove dust and loose particles. Allow walls to dry, and then apply the XT-2000+ Adhesive in accordance with Special Advisory #1, installing over non-porous surfaces.



# **Formulated Solutions LLC**

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