

# ACROVYN 4000 .040" AND .060" WALL COVERING

## INSTALLATION INSTRUCTIONS

Please read these instructions thoroughly before beginning the installation of Acrovyn .040 or .060 Wall Covering! This manual is intended to provide a specific guide to follow, including technical information and installation techniques required for an efficient, neat and long-lasting installation.

Acrovyn Wall Covering must be installed in accordance with these instructions! **Failure to follow these instructions may void any product warranties and result in an unsuccessful installation.** Removal of improperly installed material will damage the wall substrate and require refinishing. For specific questions regarding the installation, please call (800) 233-8493 or in Canada (888) 895-8955.

### ★ IMPORTANT NOTES – DO NOT OVERLOOK

- The building environment where Acrovyn 4000 Wall Covering is being installed must always be climate controlled.
- Ideal room temperature during installation is between 60°F - 80°F (16°C - 27°C).
- Room temperature after installation must always be maintained between 60°F - 80°F (16°C - 27°C).
- Allow materials to acclimate to facility room temperature (min. 24 hours) before beginning the installation.
- If the quantity of sheets to be installed in a specific area is 25 or more, break the stack down to a maximum of 25 sheets.
- Shipment may contain more than one lot number, as noted on back side of sheets. Sort and install accordingly, failure to do so may result in shade variations.
- Do not expose wall covering to ultra-violet light sources, as this could cause fading and/or color variations.
- Acrovyn Wall Covering will expand and contract with changes in temperature. Thermal movement of the Acrovyn will change in size by .00005" per inch/per degree (see Thermal Movement Chart below). If the temperature is expected to vary more than 20°F (11°C), please contact us before beginning the installation.

#### THERMAL MOVEMENT CHART

Sheet Width	Expected Growth for Various Temperature Changes			
	±5°F (3°C)	±10°F (6°C)	±15°F (8°C)	±20°F (11°C)
4'-0"	1/64" (.38mm)	1/32" (.79mm)	1/32" (.79mm)	3/64" (1.17mm)
8'-0"	1/32" (.79mm)	3/64" (1.19mm)	5/64" (1.98mm)	3/32" (2.36mm)
10'-0"	1/32" (.79mm)	1/16" (1.59mm)	3/32" (2.36mm)	1/8" (3.17mm)
12'-0"	1/32" (.79mm)	5/64" (1.98mm)	7/64" (2.78mm)	9/64" (3.57mm)

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### DO'S AND DONT'S

**DO** read all notes on the cover page about critical climate control recommendations before starting the installation.

**DO** read all instructions for wall primers & installation procedures prior to beginning the installation.

**DO** make certain porous substrates like drywall or concrete block are sealed with Water Base Mastic Primer before adhesive application.

**DO** wipe the back of the wall covering with a clean damp cloth to remove any dust or dirt just before installing.

**DO** apply the adhesive to the wall surface only.

**DO** allow the adhesive to cure properly. Under ideal conditions, curing time will be approximately 30 min. however it will vary depending on temperature and relative humidity. The adhesive cure time for applications over nonporous substrates is critical and will also vary. (Ref. Page 5, Step 5)

**DO** remove excess adhesive immediately. Dried adhesive is to be removed from tools using paint thinner or a similar solvent.

**DO** drill oversize holes when installing fixtures such as handrails, air ducts, etc. If another contractor is to install these items, be certain to notify them that oversized holes are necessary.

**DO** refer to the MSDS for disposal of extra adhesive and primer.

**DON'T** stand sheet on end.

**DON'T** install sheets exceeding 12'-0" long.

**DON'T** use Polyvinyl Acetate (PVA) base primers or joint compounds in conjunction with Water Base Mastic.

**DON'T** use any primers or adhesives other than those recommended for use with this product.

**DON'T** use adhesive, primer, or caulk that has frozen and thawed more than 3 times.

**DON'T** dilute Water Base Mastic with water or solvent.

**DON'T** begin the installation if the relative humidity is above 80%.

**DON'T** butt wall covering tight against door jambs, ceilings or baseboards. Allow a 1/16" gap (1.6mm) for expansion. Refer to thermal movement chart on Page 1.

**DON'T** expose wall covering to elevated temperatures or direct sunlight after the installation. This causes the surface temperature to rise, which will cause bubbles and delamination.

**DON'T** use Methyl Ethyl Ketone (MEK), cleaners containing MEK or similar solvents to clean Acrovyn Wall Covering.

**DON'T** use Scotch-Brite pads, steel wool or similar cleaning pads on Acrovyn wall covering.

**DON'T** rush the installation!

**If there are any doubts or concerns about the installation, perform a trial installation before beginning the project. Should you have any questions regarding the installation, please call (800) 233-8493 or in Canada (888) 895-8955.**

## TOOLS & EQUIPMENT

### SUPPLIED BY CONTRACTOR

Chalk Line (wainscot application)  
6'-0" Level (or larger)  
Straight Edge  
Drop Cloth  
Masking Tape  
Utility Knife  
Water Bucket  
Mild Detergent  
Electric Shears  
Rotozip Router  
Paint Tray & Roller (if using C/S Water Base Mastic Primer)

### SUPPLIED BY CONSTRUCTION SPECIALTIES

1/8" V-Notch Trowel  
C/S Water Base Mastic Adhesive  
C/S Water Base Mastic Primer (if required)

#### OPTIONAL KIT IF PURCHASED SEPARATELY:

1/8" V-Notch Trowel	Putty Knife	Utility knife
Crain #333 Extension Roller	Compass	Sponge Pad
Paint Tray & Roller	Scissors	

ALL CUTS CAN BE PERFORMED BY USING ELECTRIC SHEARS, A ROTOZIP ROUTER OR A UTILITY KNIFE. SEVERAL CUTS WILL BE REQUIRED TO CUT COMPLETELY THROUGH IF UTILIZING A UTILITY KNIFE.

## WALL PREPARATION

### GENERAL

Examine all new or existing walls that are to receive Acrovyn Wall Covering. They must be clean, smooth, dry and free of any oils or loose paint prior to applying Water Base Mastic Primer.

### SPECIFIC CONDITIONS

**New Drywall or Plaster** – New drywall should be taped and sanded smooth. When finished, all surfaces should be wiped clean to remove any dust. New plaster should be allowed to cure a minimum of 30 days.

**Concrete & Concrete Masonry Units** – .040 thick Acrovyn is not recommended for use over concrete and CMU walls because the unevenness of the wall will telegraph through the wall covering. Instead, .060 is suggested for these conditions. All concrete or CMU walls should still be made smooth with a coating of spackling compound or a thin set mortar. **Note: C/S strongly suggests that a test area be done to insure desired adhesion is achieved. All adhesive testing is the responsibility of the contractor on site.**

**Painted Surfaces** – Painted surfaces must be tested for adhesion. Apply a 12" x 12" piece of Acrovyn in an inconspicuous area. After allowing the sample to set for 24 hours, remove the test piece and examine the area. If the paint has softened where the adhesive was applied, the paint must be removed or sealed with Water Base Mastic Primer. If the walls are drywall, test over a joint compound location if possible.

**Existing Wall Coverings** – When installing over existing materials like wallpaper, the entire surface must be inspected for areas that are not securely bonded to the wall surface. Any loose areas must be removed and repaired as required. The existing wall covering should then be cleaned with a mild detergent and wiped dry. Be certain all cleaned areas are completely dry before proceeding. **Note: C/S strongly suggests that a test area be done to insure desired adhesion is achieved. All adhesive testing is the responsibility of the contractor on site.**

**Ceramic Tile** – Only .060 thick Acrovyn is suggested for use over existing ceramic tile. Inspect the bond and surface condition of the tile to be sure it is suitable for sheet installation. If the tile bond and surface is not adequate, scuffing the tile to remove the glossy surface glazing may improve the bond to an adequate level. If the bond is still not adequate, the ceramic tile should be removed and the wall surface repaired as required.

Apply joint compound to eliminate all evidence of the tile joints and then apply Water Base Mastic Primer. Once all surfaces have been made smooth, complete the installation according to the C/S installation instructions. **Note: C/S strongly suggests that a test area be done to insure desired adhesion is achieved. All adhesive testing is the responsibility of the contractor on site.**

**Note: For all other conditions C/S strongly suggest that a test area be done to insure desired adhesion is achieved. All adhesive testing is the responsibility of the contractor on site.**

### **STEP 1: GRAIN DIRECTION AND PREVENTATIVE MEASURES**

Acrovyn Wall Covering has a grain direction and each sheet must be installed with the same top and bottom orientation. To insure consistent orientation, always refer to the ink jet-printed arrow on the reverse side of the sheet. Always install the sheet with the arrow in a consistent direction.

To ensure easy clean-up and/or prevent damage to adjacent finishes, provide a drop cloth at the base of the walls, mask door and window frame edges, and remove all cover plates like switches, outlets and thermostat covers.

### **STEP 2: WALL PRIMING**

**NEVER USE POLYVINYL ACETATE (PVA) PRIMERS IN PLACE OF C/S WATER BASE MASTIC PRIMER!**

**ALLOW AT LEAST 24 HOURS BEFORE INSTALLING WALL COVERING OVER NEWLY PRIMED WALLS.**

**New Drywall or Plaster** – Walls must be sealed/primed using a Water Base Mastic Primer.

**Painted Drywall or Plaster** – Painted walls **MUST** be checked for adhesion as described above under the wall preparation section. If the paint will not provide an acceptable base for adhesion, all areas must be removed and primed with a Water Base Mastic Primer.

**Concrete, Concrete Block, Wood Paneling, Plywood or Similar** – These surfaces must be made smooth with a suitable filler and then primed with a Water Base Mastic Primer. C/S suggest that all surfaces be checked for adhesion.

**Flexible or Rigid Wall Covering over Drywall or Plaster** – Existing wall covering must be clean and their installation must be secure before installing Acrovyn Wall Covering. Priming is not necessary for these surfaces.

**Note: Adhesive testing is the responsibility of the contractor on site.**

### **STEP 3: STARTING PROCEDURES**

**Full Height Installation** – Establish a plumb line to be located at the edge of the first sheet. This will serve as a starting point for the wall covering to be installed on that wall and will ensure the following sheets to be installed plumb. Establish a plumb line at the beginning of each new installation of wall covering.

**Wainscot Installation** – Establish a level line at the specified height for the entire length of the run. Install the wall covering by aligning the top edge with this line. A level line should be established for each new installation.

### **STEP 4: SHEET PREPARATION**

Prepare the first sheet by making any necessary cutouts or scribe the edge to fit the inside corner if applicable. Remember to allow a 1/16” gap around door and window frames, ceilings and baseboards. Use a straight edge to ensure neat cutouts.

Place the sheet with the smooth side up and wipe the sheet with a clean damp cloth to remove any dust or dirt.

## STEP 5: ADHESIVE APPLICATION

Use the 1/8" V-Notch trowel to apply C/S Water Base Mastic Adhesive to an area of the wall surface that can be completed within the cure time of the adhesive. Make sure the entire area receives an even coat. **DO NOT ALLOW THE ADHESIVE TO OVER CURE!**

**When applying the adhesive to the wall, the trowel must be held as close to perpendicular or 90 degrees to the wall as possible. Angles less than perpendicular reduce the amount of adhesive for proper installation and may result in delamination.**

Be certain the trowel notches are cleaned regularly. **Allowing the notches to fill with dried adhesive will reduce the application, which will cause failures because of inadequate adhesive. The projected coverage using the 1/8" V-Notch trowel is 125 sq. ft. / gallon.** Occasionally check the adhesive coverage to ensure the correct amount is being applied.

Under ideal conditions, the proper cure time of the adhesive should be approximately 30 min. but could be up to 2hrs. However, this time will vary depending on temperature and relative humidity. The use of fans for air movement may help reduce the adhesive cure time. A dehumidifier may also be used in high humidity conditions to help reduce cure time. When applied, the adhesive is white and creamy. As it cures, the adhesive will become translucent and tacky. In a porous substrate application, it is best to install the wall covering when the adhesive has cured approximately 75% or when it becomes tacky and does not transfer onto your finger.

Nonporous surfaces like metal, high-pressure laminate or vinyl will not absorb moisture from the adhesive, thus retarding its cure time. It is important that the adhesive is firm, yet pliable, to the touch and that it does not transfer onto your finger. If the wall covering is installed before the adhesive has reached this stage, the moisture released by the curing adhesive will become trapped and at elevated temperatures the wall covering will bubble and/or delaminate.

Once the adhesive has cured properly, the wall covering can be installed.

**Note: Adhesive testing is the responsibility of the contractor on site.**

## STEP 6: HANDLING AND INSTALLATION

Careless handling of Acrovyn wall covering could result in damage and unrepairable "kink" marks. Damage is less likely to occur when using two people to move and position the sheets.

Align the edge of the wall covering with the plumb or level line established in Step 3 and rub the wall covering along the edge no closer than six inches from that edge (to allow for positioning of vertical trims). Continue this procedure over the full length of that edge of wall covering until it has been aligned. Lightly rub the rest of the wall covering until the rest of its area has made contact with the wall surface. Sheets can be repositioned as long as they are not pressed firmly into the mastic adhesive.

**IT IS IMPORTANT TO REMOVE ANY EXCESS ADHESIVE WITH SOAP AND WATER BEFORE IT CURES AND BECOMES MUCH MORE DIFFICULT TO REMOVE.**

## STEP 7: TRIM APPLICATION

When required, install the vertical trim after the first sheet is in place but before the smoothing operation. It is necessary to notch the back of the vertical trim where it intersects the wainscot trim. Attach the trim to the edge of the abutting sheet and align with the edge of the previously installed sheet, making sure that trim overlaps both installed sheets. **Do not install the trim tight against the sheet edge – allow tolerance to accommodate thermal movement.** Use roller to ensure the trim makes contact with the wall surface.

Wainscot trim is installed much the same way as vertical trim.

## STEP 8: SMOOTHING OPERATION

Once the Acrovyn sheet has been aligned with the plumb line or adjacent sheet, use a roller to insure maximum contact with the C/S Water Base Mastic Adhesive. With the roller, start in the middle of the sheet and work toward the top, bottom and edges using full width strokes in an arching motion. By smoothing the sheet, you will also be able to remove any trapped air pockets. Once completed, run the palm of your hand over the entire surface feeling for bubbles or loose areas. Repeat the smoothing process as necessary until the entire sheet makes full contact with the adhesive.

## STEP 9: ABUTTING SHEETS

**Vertical Trims** – When specified, install vertical trims as described in Step 7. The next sheet should be installed by inserting the adjacent edge into the vertical trim that's been installed previously. Insert the corner of the adjacent sheet into the vertical trim first and gradually work along the length of the trim until the wall covering is in position.

**Butt Joints** – Butt joints should only be used in temperature controlled environments of  $75^{\circ}\text{F} \pm 5^{\circ}\text{F}$  ( $24^{\circ}\text{C} \pm 3^{\circ}\text{C}$ ) during and after the installation. If the temperature is expected to exceed these temperatures, please refer to the thermal movement chart on the cover page to determine the appropriate joint spacing.

**Color Matched Caulk** – Construction Specialties has caulk that matches the specified sheet color and can be purchased separately for use at wall covering joints. When caulked joints are specified, a gap is required between sheets. Refer to the thermal movement chart on the cover page for the appropriate gap width, **BUT DO NOT MAKE THE GAP LESS THAN 1/16" (1.5mm) WIDE.**

Before applying caulk, mask each edge of the joint with masking tape to protect the wall covering from excess caulk. Once the joints have been masked, apply a bead of the color-matched caulk to the joint. Use a putty knife to immediately screed the excess caulk off. Additional instructions for caulk application can be found on the tube. Wait 4 hours before removing the tape.

In certain applications a second coat may be required. Please follow the same installation procedure when applying the second coat. Allow a minimum of four hours to cure before applying the second top coat.

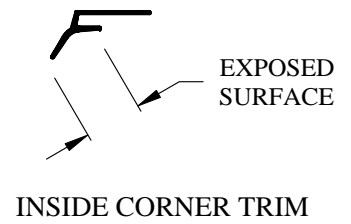
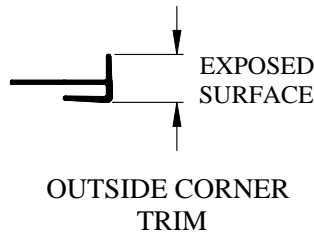
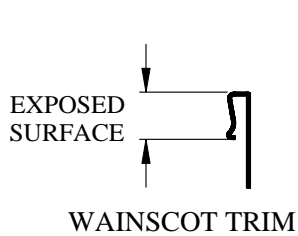
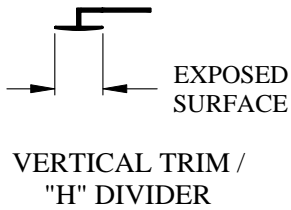
## STEP 10: CORNER CONDITIONS

At inside and outside corners, cut the Acrovyn wall covering to the correct width minus 1/16" (1.5mm) to facilitate the installation of the inside or outside corner trim. Dry fit the sheet with the trim attached to ensure proper alignment or fit. Once satisfied with the fit, apply the adhesive as noted in Step 5. Align the sheet edge with the adjacent piece and roll it toward the inside or outside corner. **Note:** It is necessary to notch the back of the corner trim where it intersects the wainscot trim.

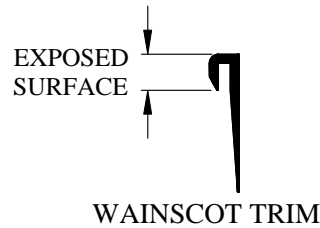
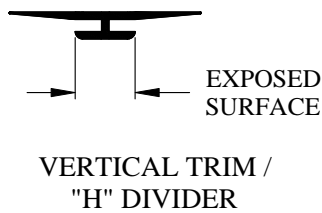
## STEP 11: CLEAN UP

Upon completion of the installation, remove all protective materials (masking tape, etc.) except for the drop cloths. Inspect all joints and cutouts to ensure that all excess adhesive has been removed. Use soap and water to clean any areas that may have adhesive residue. Once the inspection and clean-up have been completed, the drop cloths can be removed and the cover plates and other wall-mounted items can be installed.

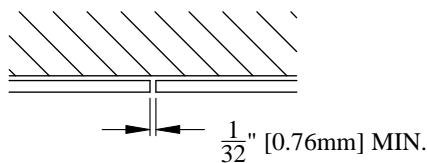
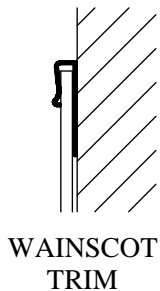
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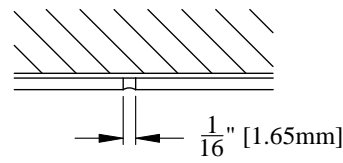
## METAL TRIMS



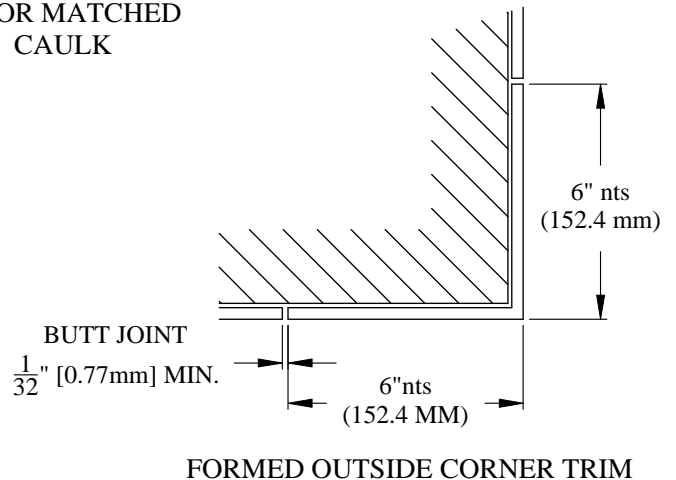
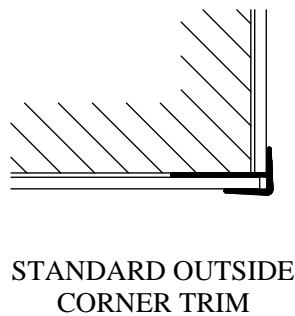
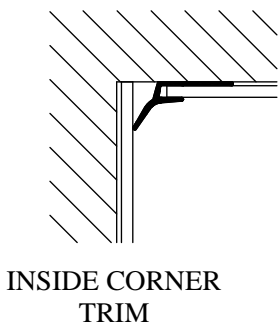
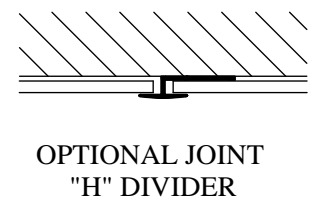
## INSTALLATION DETAILS



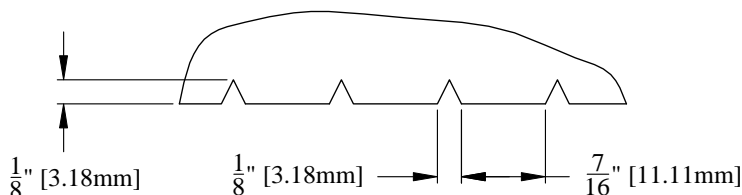
STANDARD VERTICAL JOINT  
REFER TO THERMAL MOVEMENT  
CHART FOR PROPER SPACING



OPTIONAL JOINT  
COLOR MATCHED  
CAULK



## TROWEL DETAILS



SPECIAL 1/8" "V" NOTCH TROWEL FOR USE WITH  
.040 & .060 ACROVYN WALL COVERING.

PROJECTED ADHESIVE COVERAGE USING THIS  
TROWEL IS 125 SQ. FT. /GAL. DO NOT SUBSTITUTE!



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