





Application of temporary and permanent graphics to interior and exterior wall surfaces is a rapidly growing and dynamic market which expands the use for pressure sensitive films. Be it individual directional signage, promotional graphics or entire wall murals, graphic applications are increasing in both commercial and residential markets.



General Formulations produces Concept® 285 RoughMark™ to meet the needs for graphics designed for application to rough surfaces such as concrete, bricks and stucco for either interior or exterior requirements. RoughMark™ is for optimized printability across a diverse range of print platforms. While offering an excellent ink receptive surface, the opacity of this vinyl hides surface abnormalities and color variations so commonly encountered with wall products. RoughMark™ is a 3.5 mil opaque polymeric vinyl and conforms to moderately textured surfaces by increasing contact area and adhesive bond. Concept® 285 HTR adhesive also offers clean removability from rough substrates.

While RoughMark™ can be used on smooth wall surfaces, this product was developed and formulated for application to rough textured surfaces such as stucco, plaster, finished concrete, brick and mortar, or similar types of surfaces. For smooth painted drywall surfaces you may consider one of the many Concept® Wall

Media products such as (234 GraphiTex, 250 WallFrog, 229 WallMark Canvas, 226 WallMark or 252 WallTux). Please see www.generalformuations.com.

INTERIOR SURFACES

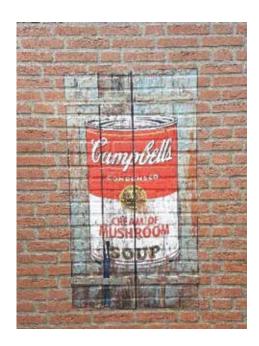
Commonly rough finishes are painted. In all cases of painted rough surface, the paint must have excellent bond to the substrate, be chalk free and clean. Thoroughly clean the surface of dirt and debris and loose paint using a stiff floor broom, wire brush or even power washing, especially if cracked or peeling paint is evident. Once heavy debris is removed the surface must be clean and dry. A preferred wall cleaner is trisodium phosphate (TSP). This is a common cleaning agent recommended before repainting and available at most home centers and paint retailers. Clean thoroughly paying special attention to the areas at the ceiling and adjacent walls. These are areas of dirt and grime accumulation over time and will reduce graphic adhesion if not cleaned properly. Rinse all TSP residue and allow to dry completely before graphic application, minimum 24 hours, 48 hours in humid ambient conditions.

When the wall surface is a new construction or a fresh repaint, drying/ cure of the paint is critical for successful RoughMark™ graphic application. With new drywall, prime and two coats of a semi-gloss or satin finish paint is recommended. Follow the paint manufactures recommendations on cure of the paint as to when it can be washed as a guideline for RoughMark™ graphic application. If no recommendation is

given, a minimum of two weeks' cure is recommended before graphic application. If you painted with a dark color using a medium or deep tint base these colors contain a high amount of surfactants that can slow paint cure, especially in humid ambient conditions. Follow on can directions for washing or a minimum of four weeks cure before wall graphic application. This same procedure should be followed when a fresh repaint is encountered.

EXTERIOR SURFACES

Cement block, poured cement, stucco and brick and mortar are common rough exterior surfaces encountered when applying RoughMark™ graphics. In most cases cement, poured cement and stucco are painted. It is critical the paint has exceptional bond to these surfaces before application of a RoughMark™ graphic. Follow the same general directions as interior application but pay special attention to painted mortar joints. If paint is peeling or cracked along mortar joints, that is an indication paint bond is poor. If the peeling paint contains cement on the backside of the paint chip that indicates cement bond breakdown has occurred and the wall must be repainted before RoughMark™ graphic application. The preferred paint for exterior applications of RoughMark™ graphics is an exterior semi-gloss. It is impossible to test every commercially available paint with RoughMark™ wall graphic media. Follow the paint manufactures dry/ cure recommendations before applying RoughMark™ graphics. If the type of paint is unknown or condition of the wall is suspect because of poor paint bond, test bond of the RoughMark™ media in an inconspicuous place. Adequate bond will develop in 72 hours with no edge lift or delamination. Upon removal no paint will adhere to the RoughMark™ test strip.



PRINTING ROUGHMARK™

General Formulations' RoughMarkTM wall graphic media is certified for use with eco-solvent, UV curable and latex digital printers as well as the equivalent product for Screen and Offset Printing. General Formulations has profiles for select printers when printing Concept® 285 RoughMarkTM. If your printer is not on the profile listing, contact General Formulations Technical Service department for assistance. It is critical that the ink be cured properly before installation. Uncured ink can induce premature edge lift and delamination of the graphic.

Screen and offset printing inks, especially UV curable, must be correctly cured for optimal RoughMarkTM graphic performance. Know the ink manufacturers cure recommendations and test your process to assure cure compliance. If using conventional offset inks, the wall graphics media most likely will have to be topcoated to provide complete ink drying/ curing. Always test ink compatibility with RoughMarkTM graphic media before production.

ROUGHMARK™ GRAPHIC APPLICATION

Once the substrate has been properly prepared, application of the RoughMark™ graphic can proceed. Never start the top edge of a RoughMark™ graphic on or near a mortar joint. The top edge must be a minimum of 2 inches from a mortar joint. Preplan the layout of the graphic to assure no edge finishes on a mortar joint. Depending on graphic size you can start in middle with small decals and uniformly work the air between the graphic and wall surface to the edge. Use your hand or light squeegee pressure to tack the whole graphic to the wall surface. If the decal is large, level the top edge and remove the top six inches of liner. Squeegee the top strip to the wall smoothly, without wrinkles. Pull down about 12 inches of liner and squeegee from the top strip down to the liner across the width of the decal moving the air to the edges. Keep working in steps about 12 inches wide across the graphic until the total graphic is applied to the wall. Now heat and pressure can be used bond to the graphic. A YELLOTOOLS foam roller, WallRoller Handy or WallRoller mono, is ideal for setting the bond of a RoughMark™ graphic on a textured surface. Use a heat gun at a temperature between 180° F and 220° F to soften the vinyl. While the vinyl is warm and soft, use the YELLOTOOLS foam roller to conform the graphic to the substrate. Start at the top with heat and pressure and work across in 4 to 6 inch strips. When starting the next strip overlap the first strip slightly to assure all air is removed between the graphic and substrate. Once the last strip is complete be sure all edges are conformed to the substrate. If needed, reheat and roll all edges to assure adequate bond.

Successful application of RoughMarkTM graphics is dependent on a variety of factors mentioned. General Formulations RoughMarkTM wall graphic media is designed for optimal printing on most digital printers and ink chemistries with an adhesive formulated for bond to a wide variety of rough or textured wall substrates. Proper wall preparation is needed to assure successful application. Correct ink drying or curing with an approved profile is critical to long term useful life of a RoughMarkTM graphic. Finally, application of the decal requires all the air to be removed between the graphic and wall without stretching the graphic. Following these preparation and application steps will result in a successful RoughMarkTM graphic application. If there are any questions concerning your specific textured wall graphic application, General Formulations Customer Service Department can assist you at 800-253-3664.