STORAGE & HANDLING MAINTENANCE LONG TERM CARE

ALFREX FR MCM | ALFREX PLATE



INTRODUCTION

Thank you very much for your selection of Alfrex products as your wall cladding choice. This document serves as a quick reference manual for often asked questions after project completion.

The INFORMATION contained herein refers to all PRODUCT, PRODUCT DATA, ADVICE, RECOMMENDATIONS, and SUGGESTIONS and is provided for reference purposes only, without guarantee, and may be subject to change or withdrawal without prior notice. General and project specific recommendations should be addressed on a case-by-case basis by an experienced sub-contractor. Any INFORMATION given by Alfrex Inc. (Alfrex) or its employees to any person or entity is acted upon entirely at the person's or entity's own risk, and accordingly, Alfrex shall not be liable for any such INFORMATION. Alfrex is not liable for any third-party design, engineering, or installation services or products, including, without limitation, any building wall system into which Alfrex PRODUCTS are incorporated.

ALFREX MAKES NO EXPRESS WARRANTIES AND DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, WITH RESPECT TO ANY OF THE PRODUCTS, PRODUCT DATA, ADVICE, RECOMMENDATIONS, AND SUGGESTIONS CONTAINED IN THIS DOCUMENT.

In no event shall Alfrex have any liability in any way, to any person or entity, for any special, incidental, punitive, consequential, or damages of any other kind resulting from said INFORMATION regardless of whether such liability is based upon breach of contract, breach of any express or implied warranty, negligence, or tort.

ALL SALES OF ALFREX PRODUCTS ARE SUBJECT TO ITS GENERAL TERMS AND CONDITIONS WHICH MAY BE FOUND AT www.alfrexusa.com IN THE DOWNLOADS SECTION.

CONTENTS

04	STORAGE AND HANDLING RECOMMENDATIONS
06	ALFREX PROTECTIVE MASKING FILM
08	CLEANING AND MAINTENANCE RECOMMENDATIONS
12	TOUCH UP PAINT RECOMMENDATIONS
14	ALFREX FR MCM POST PAINTING RECOMMENDATIONS
18	ALFREX PLATE POST PAINTING RECOMMENDATIONS

STORAGE AND HANDLING RECOMMENDATIONS













STORAGE AND HANDLING RECOMMENDATIONS

Alfrex FR MCM - Alfrex Plate - Alfrex 0.040"Matching Flat Sheet

- Alfrex FR MCM, Alfrex Plate, and Alfrex 0.040" Matching Flat Sheet are cut to length and packaged in cushioned, reinforced pallets (skids) to prevent excessive sagging of the skid when lifting and moving via fork trucks.
- Pallets of Alfrex product should always be stored horizontally on flat surfaces that prevent sagging or shifting. Do not stack skids of MCM or Plate product higher than six skids high. Care should be taken not to stack multiple skids of heavier material on top of pallets containing only 0.040" flat sheet.
- Storage should be in a cool, dry area with stable temperatures to prevent formation of condensation. Sheets should not be stored where they can be exposed to moisture which may cause permanent surface damage. Situations where sheets may be subjected to standing water conditions should be avoided.
- · Care should be taken when handling individual sheets during sheet fabrication. When lifted from each end, individual sheets will sag in the center as they are moved. Sagging should be minimized by having additional support in the center. Care must be taken to lift sheets high enough so that the sagging center sheet edge does not damage the surface of the sheet directly underneath as it is moved.
- Sheets of Alfrex product may be temporarily staged in "A-frame" racks commonly used with MCM and Plate sheets. It is not recommended that Alfrex product be transferred to other pallets not supplied by Alfrex as they may sag excessively - inducing permanent set in the solid aluminum plate sheets which will manifest in sheet bowing when placed on CNC tables.

ALFREX PROTECTIVE MASKING FILM













ALFREX PROTECTIVE **MASKING FILM**

General Information - Function - Performance - Limitations

Alfrex FR MCM and Plate are manufactured with a factory applied protective masking film to help protect finished surfaces from minor scratches and marring that may occur during fabrication, handling, transport, and installation. Extra care should be taken to:

- Keep working surfaces clear of any particulate that could penetrate the integrity of the protective
- Avoid the use of any type of marker, tape, or other material that could penetrate and stain the product surface finishes.

With specific regards to product installation on building exteriors:

- · Even though protective masking film is UV stabilized for short term exterior exposure, Alfrex recommends that protective masking film should be removed either immediately, or as soon as possible after installation.
- Any and all substances that come in contact with protective masking film, including but not limited to mortar, sealants, caulking, cleaning chemicals, etc. should be removed immediately to avoid bleed through and permanent staining of the painted surface finish.
- Alfrex and all other domestic MCM manufacturers do not publish specific time-based recommendations for removal of protective masking film since combinations of specific paint finishes, location, climate conditions, exterior exposure time, and other factors make each building project unique.
- Therefore, if protective masking film cannot be removed within one month after exterior installation, periodic checks may be made on-site by the installer, or other involved party, regarding comportment of protective masking film. Alfrex does not offer nor make these inspections.

CLEANING AND MAINTENANCE RECOMMENDATIONS













CLEANING AND MAINTENANCE RECOMMENDATIONS

Alfrex FR MCM - Alfrex Plate

Alfrex, LLC (Alfrex) Alfrex FR aluminum composite and Alfrex Plate panels are manufactured utilizing aluminum coils painted on continuous process coil coating lines. The high-quality architectural coatings used contain combinations of UV resistant resins, organic pigments, inorganic pigments, and protective clear coats engineered for long term exterior exposure in the elements and minimal maintenance.

Alfrex recommends that panels be cleaned on a regular basis in order to maintain their aesthetic appearance and to prevent the accumulation of dirt and particulate present in the local environment. The frequency and degree of cleaning is dependent upon several factor including the building location, proximity to bodies of fresh water or the ocean, local climate, pollution levels, proximity to heavy industry, and overall air quality. A general practice is to clean panels at the same time a building's windows are cleaned.

General Recommendations

- Always avoid the use of abrasive materials that pose a potential to scratch or degrade the
 painted surface of panels including, but not limited to, steel wool, wire brushes, metal
 scrapers, abrasive sponges, powder abrasives, and chemical abrasives.
- Commence cleaning at the bottom of building walls and progress upwards, working in the opposite direction of window cleaning, which traditionally progresses from top to bottom.
- To avoid streaking, cleaning should be done either on a cloudy day, or when areas of the building to be cleaned are shaded from direct sunlight.
- Regardless of the cleaning method used, the methods and materials should be first tested on either a product sample, or on a small, inconspicuous section of the building.
- It is recommended that more frequent cleaning intervals utilizing freshwater and mild
 detergents be employed as opposed to less frequent intervals which may require the use of
 harsher chemicals, solvents, and mild abrasive methods.
- NEVER use Acetone or Paint Removers on any painted product surface.
- Utilize personal protection equipment and proper safety precautions when handling solvents and other chemical agents to prevent chemical irritation or burns to the eyes, skin, or lungs.

- Follow closely cleaning product or chemical manufacturer recommendations regarding the mixing of certain chemicals in order toavoid the production of toxic gases or explosive chemical reactions.
- Only apply cleaning solutions, chemicals, or solvent solutions in conditions where panels can
 be rinsed with freshwater before the cleaning solution can dry. NEVER allow cleaning solutions
 to dry on the panels.

Freshwater Rinse

- Frequent freshwater rinsing of panel surfaces is ideal for the removal of water-soluble dirt, residues, and other organic material deposits. Mechanical pressure washers should not be used as this may damage panels, coated surfaces, or components critical for the function of the panel assembly.
- Annual freshwater rinses may be mandatory as stipulated in finish warranties under certain environmental conditions, such as proximity to salt-water and ocean mist.
 Please consult warranties for specific details.
- If surface contaminants or stains persist after freshwater rinsing, then the utilization of mild detergents is recommended.

Mild Detergent Cleaning

- For more persistent areas requiring deeper cleaning, Alfrex recommends that a 5% mild detergent solution diluted with freshwater be used and applied directly to the area using non-abrasive cloth, sponges, or soft bristle brushes.
- Mild detergents may be classified as those used in residential applications, commonly under popular brand names, which do not pose risks of irritation when coming in direct contact with exposed skin.

Intense Cleaning

• More intense cleaning methods may be required when mild detergent solutions are not successful in the removal of stubborn stains, or areas where non water-soluble contaminants such as paint, oils, tar, dirt, graffiti, silicone, or other sealing compounds are present.

- Alfrex recommends that a solution of Mirachem® 500 diluted to a IO% to 30% concentration be used before other common solvents or chemicals. Follow the manufacturer guidelines as well as the same processes detailed above in the general recommendations, always followed by a freshwater rinse.
- Solvents that may be used include alcohol solvents (ethanol, isopropyl alcohol, methanol), petroleum solvents (Turpentine, mineral spirits), aromatic solvents (xylene, toluene), ketones (MEK, MIBK), and esters (ethyl acetate, lacquer thinner). NEVER use acetones or paint removers.

TOUCH UP PAINT RECOMMENDATIONS













TOUCH UP PAINT RECOMMENDATIONS

Alfrex Products

For minor applications of touch up paint to coil coated Alfrex metal wall cladding products, it is recommended that one use a high-quality, air-dry PVDF / kynar resin product. Crosslink Paints in Dallas, Texas is a quality manufacturer of touch up paint well known in the metal wall panel and roofing industry. Their touch up paint products, color matching capabilities, and contact information may be found below. Crosslink Paints should be contacted directly for purchase of their products.

TOUCH UP PAINT PRODUCTS		
Touch Up Pens		
Liquid Bottle & Brush		
Aerosol Spray Can		
Paint Cans		

COLOR MATCH CAPABILITIES		
RAL Standard Colors		
PPG Duranar (kynar, PvDF)		
PPG Coraflon (FEVE)		
Sherwin Williams Fluropon®		
Akzo Nobel		
Custom Matches		

Company Contact Information

Crosslink Paints II078 Morrison Ln Dallas, TX 75229 Phone: 972-364-7839

Email: Sales@crosslinkpaints.com Website: https://www.crosslinkpaints.com

ALFREX FR MCM POST PAINTING RECOMMENDATIONS













ALFREX FR MCM POST PAINTING RECOMMENDATIONS

Alfrex FR Metal Composite Material

Alfrex FR MCM is a coil coated metal wall cladding panel top side coated with a 70% PVDF / kynar resin finish. For situations requiring smaller quantities of a custom color, post-painting may be the only economically viable option. Post-painting should only be done by experience applicators with experience in proper preparation of architectural wall panels and application of coating systems for exterior applications

General Recommendations

- It is important to confirm with Alfrex in advance if panels are to be post-painted and properly identify the type of coatings present. The backside of Alfrex FR is typically coated with an epoxy finish suitable for post-painting. However, some finished goods may have a kynar resin finish present on each side out of design, or they may have been manufactured using remnant coils of various colors - a common practice.
- Before painting, it is highly recommended that spot testing be done on small sample panel, or in a small inconspicuous area to confirm if the preparation procedures and paint application achieve the desired color and adhesion levels required for long term exterior exposure.
- Surfaces must be properly prepared before post-painting and should be degreased, clean, dry, and free of dust, dirt, oils, or any other surface contaminants.
- · Surfaces must be lightly abraded utilizing fine grade sandpaper or similar products. Special care must be taken to abrade the surface uniformly across the entire panel substrate without significantly decreasing its dry film thickness. Sanding should never expose aluminum.
- · After abrasion, the panel surface should be thoroughly wiped clean to remove dust and other surface contaminants. Utilize soft cloth and epoxy resin compatible, solvent based cleaners.
- Though the abraded epoxy primer can serve as a post-paint primer, it is recommended that the panel surface be primer coated again. For sanded kynar resin finishes, compatible primers must be used to ensure proper prime coat finish adhesion. This is especially important for exteriorapplications where longer term UV performance, film integrity, and coating warranties extended by the post-painter are required.
- Both air-dry and baked on finishes should be spray applied by a professional finish applicator.

- It is recommended that the finish applicator be informed in advance of material, process, and compatibility concerns.
- Alfrex FR MCM may be coated with air-dry finishes. Heat may be used to assist in the curing process but should not exceed temperatures of I40 °F (60 °C).

Exclusions

Alfrex FR MCM is a coil coated metal wall cladding panel top side coated with a 70% PVDF / kynar resin finish. For situations requiring smaller quantities of a custom color, post-painting may be the only economically viable option. Post-painting should only be done by experience applicators with experience in proper preparation of architectural wall panels and application of coating systems for exterior applications

- I. For any post-painted Alfrex MCM product, all finish warranties for the top side coating are null and void. All other warranties, representations or guarantees, express or implied, written or oral, by operation of law or otherwise, including without limitation, the implied warranties of merchantability and fitness for a particular purpose are excluded.
- 2. Alfrex does not offer finish warranties for post-painted finishes. All warranties must be provided by the finish applicator directly to the warantee.
- 3. All sales of Alfrex products are subject to its General Terms and Conditions which may be found at www.alfrexusa.com in the downloads section.

EPOXY COATING PROPERTIES		
PROPERTY	RESULT	
Color	Light Gray	
Particle Size	Max 25µm	
Gloss at 60 °	30 ± 5	
Viscosity (sec)	100 ± 20 (F.C#4/25°C)	
Density	1.3 ± 0.05	
NVM (%)	62 ± 3	
MEK Rubbing	Min 50	
Flexibility	2T	
Pencil Hardness	2H	
Acid Resistance	No Blisters	
Alkali Resistance	No Blisters	
Boiling Water Resistance	No Blisters	
C C T 000h	Plain Surface : No Blisters	
S.S.T 200hrs	Cross Hatch Surface : Max 2mm	

ALFREX PLATE POST PAINTING RECOMMENDATIONS













ALFREX PLATE POST PAINTING RECOMMENDATIONS

Alfrex Plate Material

Alfrex Plate is a coil coated metal wall cladding panel top side coated with a 70% PVDF / Kynar resin finish. Alfrex Plate is bottom side coated with an epoxy finish which can be post-painted utilizing both air dry and baked-on finishes.

General Recommendations

- The backside epoxy coating must be properly prepared before post-painting to ensure proper finish adhesion and long-term performance.
- The epoxy coating must be lightly abraded utilizing fine grade sandpaper or similar products. Special care must be taken to abrade the surface uniformly across the entire panel substrate without significantly decreasing its dry film thickness.
- After abrasion, the panel surface should be thoroughly wiped clean to remove dust and other surface contaminants. Utilize soft cloth and epoxy resin compatible, solvent based cleaners.
- Though the abraded epoxy primer can serve as a post-paint primer, it is recommended that the panel surface be primer coated again. This is especially important for exterior applications where longer term UV performance, film integrity, and coating warranties extended by the post-painter are required.
- Both air-dry and baked-on finishes should be spray applied by a professional applicator.
- Alfrex Plate may be coated with air-dry and baked-on finishes. Under no circumstances should Alfrex FR MCM be post-painted with baked-on finishes and submitted to the curing process associated with those coatings.
- Alfrex Plate may be coated with air-dry and baked-on finishes. Under no circumstances should Alfrex FR MCM be post-painted with baked-on finishes and submitted to the curing process associated with those coatings.

Exclusions

- I. For any post-painted Alfrex Plate or Alfrex MCM product, all finish warranties for the top side coating are null and void. All other warranties, representations or guarantees, express or implied, written or oral, by operation of law or otherwise, including without limitation, the implied warranties ofmerchantability and fitness for a particular purpose are excluded.
- 2. All sales of Alfrex products are subject to its General Terms and Conditions which may be found at www.alfrexusa.com in the downloads section.

EPOXY COATING PROPERTIES		
PROPERTY	RESULT	
Color	Light Grey	
Particle Size	Max. 25μm	
Gloss at 60°	30 ± 5	
Viscosity (sec)	100 ± 20 (F.C#4/25°C)	
Density	1.3 ± 0.05	
NVM (%)	62 ± 3	
MEK Rubbing	Min. 50	
Flexibility	2Т	
Pencil Hardness	2H	
Acid Resistance	No Blisters	
Alkali Resistance	No Blisters	
Boiling Water Resistance	No Blisters	
S.S.T 200 Hrs	Plain Surface: No Blisters	
3.3.1 ZUU NIS	Cross Hatch Surface: Max. 2mm	















Alfrex, Inc.
943 Gainesville Hwy Bldg. 100, Suite 4000
Buford, GA, 30518
470.589.7449
alfrex@alfrexusa.com
www.alfrexusa.com