DrexelMetals
Roofing Systems + Custom Fabrication

25-Year DREXLUME Warranty

Galvalume® Acrylic/Chromate Treated

starts from the date of installation

Parties: Drexel Metals Inc extends the following limited warranty to:

Invoice #:

Drexel Contractor:

Address:

Project Owner:

Project Name:

Address:

that Drexel Metals Inc.'s hot dipped aluminum-zinc alloy coated known as DREXLUME™ sheet steel sold for use as steel roofing, siding panels, gutters and downspouts, if erected within the United States, WILL NOT as a result of corrosion from exposure to normal atmospheric conditions, rupture, fail structurally, or perforate within a period of 25 years and 6 months after shipment from Drexel Metals Inc.. This warranty applies to all categories of product with coating classes AZ50 ASTM A792-96 or heavier.

This warranty DOES NOT APPLY to sheets exposed at any time to corrosive or aggressive atmospheric conditions, including but not limited to:

- Areas subject to fallout or exposure to corrosive chemicals, fumes, ash, cement dust, or animal waste.
- Areas subject to water run-off from lead or copper flashings or areas in metallic contact with lead or copper.
- Areas sheltered from periodic washing by natural rainfall such as the underside of eaves and soffits.
- Conditions and circumstances where corrosive fumes or condensates are generated or released inside the building.

This warranty DOES NOT APPLY in the event of:

1. Bending or forming where the bend is tighter than 2T for sheet thickness up to 0.30" (0.75mm) and tighter than 4T for sheet thickness 0.031" (0.76mm) and thicker.
2. This slope of the roof or sections of the roof being flatter than 1/4:12.
3. Mechanical, chemical, or other damage sustained during shipments, storage, forming, fabrication, or during or after erection.
4. Forming which involves severe bending or which subjects the coating to alternate compression and tension.
5. Failure to provide free drainage of water, including internal condensation, from overlaps and all other surfaces of the sheets or panels.
6. Failure to provide bi-annual maintenance report (attached to warranty)
7. Failure to remove debris from overlaps and all other surfaces of the sheets or panels.
8. Damage to the metallic coating caused by contact with green or wet lumber.
9. Deterioration of sheets or panels caused by contact with green or wet lumber.
10. Wet storage stain caused by water damage or from condensation.
11. Presence of damp insulation or other corrosive materials in contact with or close proximity to sheets or panels.
12. Deterioration of sheets or panels caused directly or indirectly by contact with fasteners. The selection of suitable long-lasting fasteners to be used with GALVALUME® roofing, siding, gutter and downspouts rests solely with the Buyer.

This warranty shall be subject to the stipulations, limitations and conditions hereinafter set forth:

1. Drexel Metals Inc.'s liability for breach of this warranty shall be limited exclusively to the cost of either repairing non-conforming sheets, panels, gutters and downspouts, at Drexel Metals Inc.'s sole option of furnishing FOB Buyer's plant sufficient sheet product to enable Buyer to fabricate replacements for the nonconforming panels, gutters and downspouts.
2. Drexel Metals Inc. shall not in any event be liable for the cost of labor expended by others on any nonconforming sheets or for any special, indirect or consequential damages to anyone by reason of the fact that such sheets shall have been nonconforming.
3. Claims must be promptly reported in writing to Drexel Metals Inc. and Drexel Metals Inc. shall be given a reasonable opportunity to inspect the sheets, panels, gutter and downspouts claimed to be nonconforming adequate identification of the material involved in the claim, including the date of installation, order number, coil number, invoice number and date of shipment must be established by the Buyer.
4. Buyer shall exercise diligence in the inspection of material as received from Drexel Metals Inc. so as to mitigate repair or replacement.
5. Drexel Metals Inc. reserves the right to terminate this warranty at any time (except as to orders already accepted) upon the giving of written notice thereof.

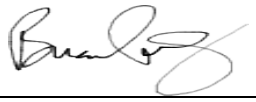
Maintenance:

This is a site specific warranty. For material installed less than 2,800 feet from a coastal environment including salt water and/or brackish water, a bi-annual maintenance routine must be performed by the building owner or management team including a fresh water rinse of all the components of the roof system, soffits and eaves. This maintenance program will be shall be in accordance with AAMA guidelines and our maintainance report shall be sent to bmclaughlin@drexmet.com upon completion each time. It is the building owner or management team's responsibility to maintain records and complete Drexel Metals dated maintance report to providing evidence that maintenance has been completed and such records must be sent via email to bmclaughlin@drexmet.com or mailed to Drexel Metals warranty department ar 1234 Gardiner Lane – Louisville, KY 40213. The use of Drexmet™ Clear Edge Protection will also be required during installation of your Drexmet™ SSMRS.

This is our complete warranty. The laws of the Commonwealth of Kentucky, USA, hereunder shall govern the rights and obligations of the parties. Any controversy or claim arising out of or relating to this contract shall be determined by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The place of arbitration shall be Louisville, KY USA. The language of the arbitration shall be English. Drexel Metals Inc. makes no guarantees, either expressed or implied beyond the fact hereof; including, with limitation, warranties of fitness and merchantability and shall have no other liability with respect thereto.

All other exclusions listed in our warranty must be recognized. Areas of the roof or soffit unexposed to natural fresh water rainfall must be washed and cleaned with fresh water and a mild detergent twice a year.

Drexel Metals Inc.



Brian Partyka
Partner

Date: _____

Site Specific Warranty Bi-Annual Maintenance Report

Date of Bi-Annual Maintenance:

Project Owner:

Project Address:

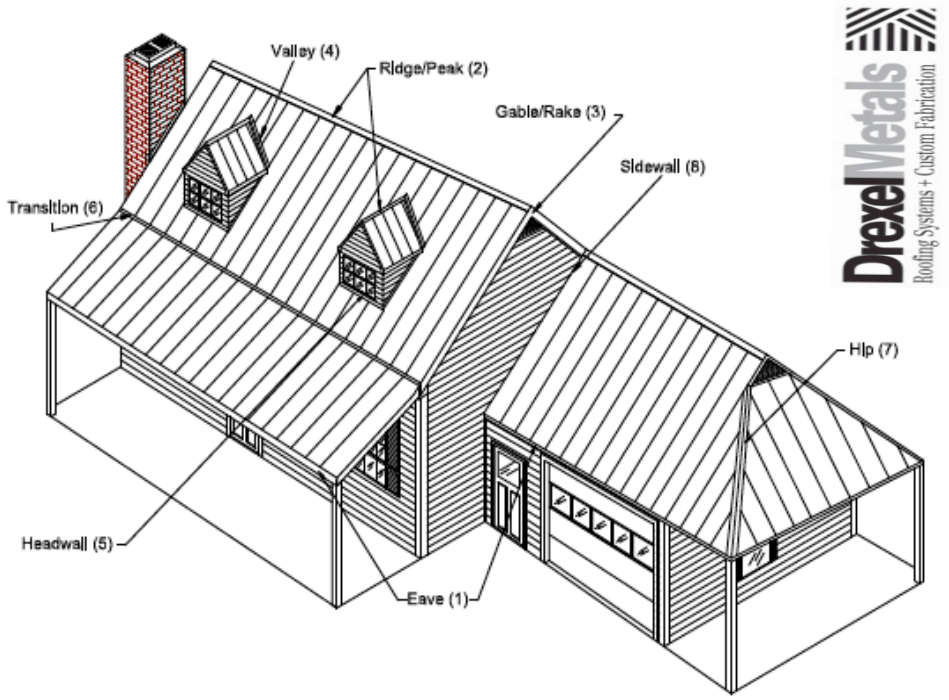
City, State and Zip:

Congratulations on the purchase of your new metal roof!!!! Metal roofs, like your car needs to be maintained, cleaned and kept free of mineral deposits caused by aggressive environments such as salt water. In order for you and your family to get years and years of strength and durability from your Drexlume® metal roof system you need to wash your roof just like you would a car, especially the areas that natural rainfall does not reach (such as areas of the roof or soffits unexposed to natural fresh water rainfall) and these areas must be washed and cleaned with fresh water and a mild detergent twice a year and a re-application of Drexel Metals Edge coating should be applied in the areas the unexposed areas.

Cleaning

Washing should be done at least every six months and must be documented in coastal areas where marine salt spray is prevalent or where high levels of industrial fallout occur. The maintenance program for your DREXLUME® roof shall be performed using the same guidelines as AAMA 610.1 – cleaning and maintenance (attached). Using either solution, work from the top to the bottom of panels with a well-soaked soft cloth, sponge, brush with very soft bristles, or low-pressure spray washer to clean the surface. Washing from the top down avoids streaking. Application should be gentle to prevent shiny spots. Scouring powders or industrial solvents are not recommended and solvent-containing cleaners such as Fantastic® are very effective and can be used.

- Use one cup of Tide® (or other common detergent containing less than 0.5% phosphate) dissolved in five gallons of warm water. NOTE: Detergents containing greater than 0.5% phosphate are not recommended for use in general cleaning of building panels.
    - OR use one cup of household ammonia dissolved in five gallons of water at room temperature. Never mix ammonia with any kind of bleach.
    - Never blend cleaners and bleach yourself. If bleach and detergent are required, use detergents containing bleach.
- Re-Apply Drexel Metals spray Edge-Coating to all eaves and areas unexposed to natural ran fall. Call Drexel Metals – 888.321.9630 to reorder
- Email upon completion to bmclaughlin@drexmet.com or mail to Drexel Metals Warranty department at 1234 Gardiner Lane – Louisville, KY 40213.
- All areas below must be cleaned and the eaves and gable/rakes a fresh coating of Drexmet® edge sealer should be applied.



All above areas must be cleaned annually and this report must be sent to Drexel Metals Inc. every time your roof has been cleaned.

Failure to report this maintenance report to Drexel Metals will void your warranty so its very important, like your car to maintain your Drexlume roof. Maintenance must be performed twice a year and this report must be completed and sent to Drexel Metals.

Maintenance was performed on this date:

Maintenance was performed by:

Roof Areas Cleaned:

Metal Roof Panels: ☐ Eaves: ☐ Soffits: ☐

Ridge / Hip: ☐ Gables/Rakes: ☐ Headwall: ☐

Edge Coating Applied: ☐

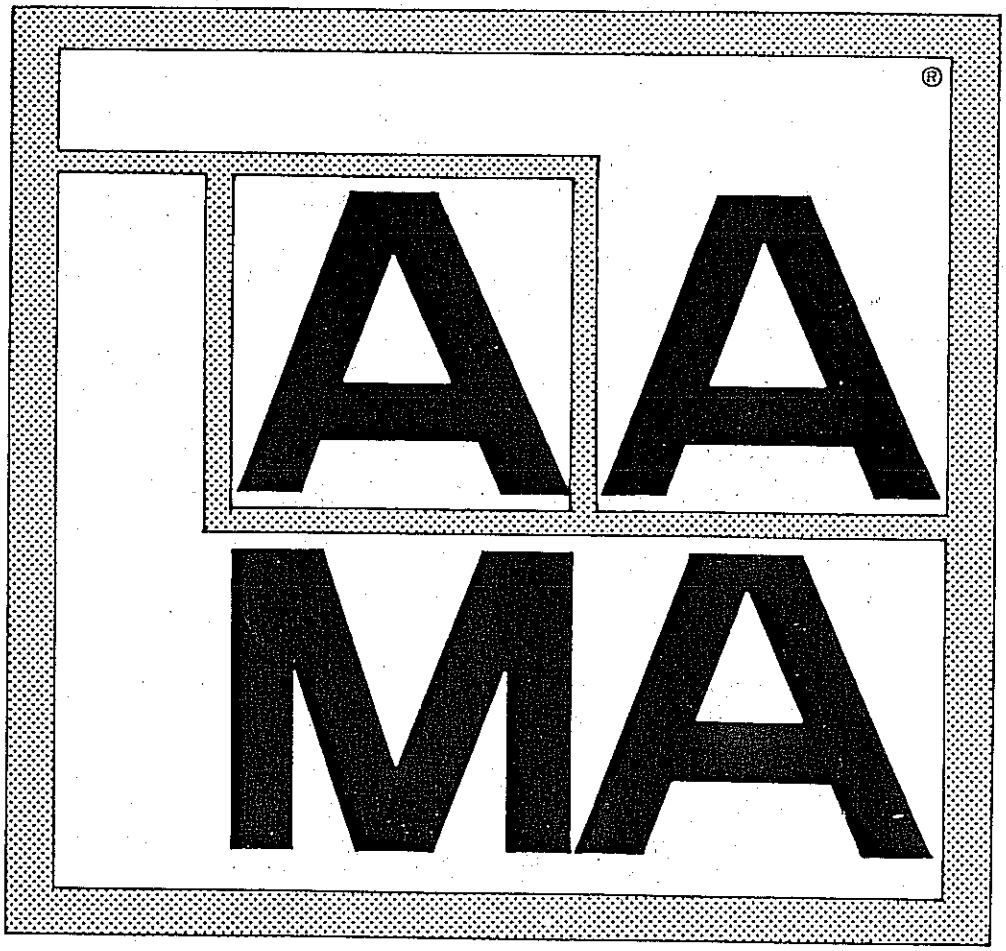
Drexel Metals Invoice for Edge Coating:

Signed: _____

Architectural Aluminum
Manufacturers Association
35 E. Wacker Dr., Chicago, IL 60601 • 312/782-8256

Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusion and Curtain Wall Panels.

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610.1-1979

TABLE OF CONTENTS

		Page
1.	Scope	1
2.	Purpose	1
3.	General	1
4.	Cleaning Procedures and Care After Installation	2
5.	Cleaning of Medium to Heavy Soil	3
6.	Summary of General Cleaning Tips	4
7.	General Inspection and Precautions	5

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35 east wacker drive, chicago, illinois 60601

VOLUNTARY GUIDE SPECIFICATION FOR CLEANING AND MAINTENANCE OF PAINTED ALUMINUM EXTRUSIONS AND CURTAIN WALL PANELS

AAMA 610.1-1979

1. SCOPE

This recommendation covers procedures for cleaning and maintenance of painted aluminum extrusions and curtain wall panels. The procedures are intended for application with painted, architectural aluminum extrusions such as window frames, door frames, railings and trim as well as curtain wall panels, column covers, spandrels, mullions, louvers, vertical trim, etc.

2. PURPOSE

These recommendations are intended to assist architects, contractors, owners, building managers, et al., who are concerned with the care and maintenance of painted, architectural aluminum. The information contains suggested methods as an aid in establishing safe, sound cleaning and maintenance procedures.

3. GENERAL

3.1 Organic coatings on aluminum do not normally show an appreciable amount of dirt collection. In many atmospheres dirt or soil would not indicate a detrimental risk to the coating, but cleaning and surface care may be desirable for the sake of appearance. Cleaning may become desirable in areas where heavy industrial deposits have dulled the surface, where materials from construction processes have soiled the surface or where cleaner run-down from other surfaces should be removed. Local atmospheric conditions as well as building location within a geographical area quite naturally have an effect on cleanliness. Very often, rainfall may be sufficient to keep exterior surfaces appearing clean and bright. These factors coupled with owner attitude regarding surface appearance probably would determine cleaning schedules. Areas that are in direct sight at lower levels would more likely be cleaned. Less obvious areas would be less frequently cleaned or in some instances, hardly at all. Cleaning of painted aluminum may be scheduled with other cleaning. For example, glass and painted aluminum components can be cleaned at the same time.

3.2 Cleaning will be more often required in areas of low rainfall (i.e. Los Angeles) or in heavily industrialized areas. Foggy coastal regions with frequent cycles of condensation and drying may tend to give a buildup of atmospheric salts and dirt. In any climate, sheltered areas such as overhangs, may become soiled because of lack of rain washing. Thorough rinsing is especially important after cleaning of these sheltered areas.

3.3 If automatic wall cleaning equipment is to be used on a building, a test should be made early in equipment design to insure that the cleaning solutions, brushes, as well as the frequency of cleaning should be taken into consideration to insure that there is no detrimental effect on the coating.

4. CLEANING PROCEDURES AND CARE AFTER INSTALLATION

Construction soils, including concrete or mortar, etc., should be removed as soon as possible. The exact procedure for cleaning will vary depending on the nature and degree of soil. Try to restrict cleaning to mild weather. Cleaning should be done on the shaded side of the building or ideally on a mild, cloudy day. Method of cleaning, type of cleaner, etc., of one component of the building must be used with consideration for other components such as glass, sealants, painted surfaces, etc.

4.1 Removal of Light Surface Soil

Removal of light surface soil may be accomplished in several ways. Some testing is recommended to determine the degree of cleaning actually necessary to accomplish the task. Ideally, an initial step of forceful water rinse from the top down is recommended prior to any cleaner application. Significant benefit is gained with some type of surface agitation. Low water volume with moderate pressure is much better than considerable volume with little pressure. Physical rubbing of the surface with soft, wet brushes, sponges or cloth is also helpful.

4.1.1 The simplest procedure would be to apply the water rinse with moderate pressure to dislodge the soil. If this does not remove the soil, then a concurrent water spray with brushing or sponging should be tested. If soil is still adhering after drying, then a mild detergent will be necessary.

4.1.2 When a mild detergent or mild soap is necessary for removal of soil, it should be used with brushing or sponging. The washing should be done with uniform pressure, cleaning first with a horizontal motion and then with a vertical motion. Apply cleaners only to an area that can be conveniently cleaned without changing position. The surface must be thoroughly rinsed with clean water. It may be necessary to sponge the surface while rinsing, particularly if cleaner is permitted to dry on the surface. The rinsed surface is permitted to air dry or is wiped dry with a chamois, squeegee or lint free cloth.

4.1.3 Run down of cleaner (from any operation) to the lower portions of the building should be minimized and these areas should be rinsed as soon as and as long as necessary to lessen streaking, etc. from unavoidable run down, lower areas should be kept wet or flooded with water. Do not allow cleaning

chemicals to collect on surfaces or to "puddle" on horizontal surfaces, crevices, etc. These should be flushed with water and dried. Always clean coated surfaces down from top to bottom and follow with a thorough rinsing with clean water. (With one story or low elevation buildings, it is recommended to clean from bottom up and rinse from top down).

4.1.4 Mild Detergents - Mild soaps or detergents ruled safe for bare hands should be safe for coated aluminum. Stronger detergents such as some dishwater detergents should be carefully spot tested. Some of the latter would necessitate rubber gloves, long handled brushes, etc. With any, the finish should be thoroughly rinsed with clean water and dried. Some mild cleaning solutions, which would comprise of selected wetting agents in water solution, are available for automatic building washing machines. These machines would have built in brush agitation, squeegee, filtration and recirculation; in some, a fresh water connection may be provided.

5. CLEANING OF MEDIUM TO HEAVY SOIL

5.1 Some type of mild solvent such as mineral spirits may be used to remove grease, sealant or caulking compounds. Stronger solvent or solvent containing cleaners may have a deleterious or softening effect on paints. To prevent harm to the finish, these types of solvent or emulsion cleaners should be spot tested and preferably the coating manufacturer should be consulted. Care should be taken to assure that no marring of the surface is taking place in this manner since this could give an undesirable appearance at certain viewing angles. Cleaners of this type are usually applied with a clean cloth and removed with a cloth. Remaining residue should be washed with mild soap and rinsed with water. Use solvent cleaners sparingly.

5.1.1 It may be possible for solvents to extract materials from sealants which could stain the painted surface or could prove harmful to sealants; therefore, these possible effects must be considered. Test a small area first.

5.2 If cleaning of a heavy surface soil has been postponed or in the cases of an especially tenacious soil, stubborn stains, etc., a more aggressive cleaner and technique may be required. Cleaner and technique should be matched to the soil and the painted finish. Some local manual cleaning may be needed at this point. Always follow the recommendations of the cleaner manufacturer as to proper cleaner and concentration. Test clean small area first. Cleaners should not be used indiscriminately. Do not use excessive, abrasive rubbing as such may alter surface texture or may impart a "shine" to the surface.

5.2.1 Concrete spillage that has dried on the painted surface may

become quite stubborn to remove. Special cleaners and/or vigorous rubbing with non-abrasive brushes or plastic scrapers may be necessary.
Diluted solutions of Muriatic Acid (under 10%) may be effective in removing dried concrete stains, however, a test area should be tried first. and proper handling precautions must be exercised for safety reasons. Also, effective proprietary cleaners for concrete and mortar staining are available. See supplier section for reference companies under 8.1.

5.3 Never Mix Cleaners - The mixing of cleaners may not only be ineffective, but also very dangerous. For example, mixing of chlorine containing materials such as bleaches, with other cleaning compounds containing amonia, can result in poison gas emission.

5.4 Always rinse after removal of heavy surface soil.

6. SUMMARY OF GENERAL CLEANING TIPS

6.1 Overcleaning or excessive rubbing can do more harm than good.

6.2 Strong solvents or strong cleaner concentrations can cause damage to painted surfaces.

6.3 Avoid abrasive cleaners. Do not use household cleaners that contain abrasives on painted surfaces.

6.4 Abrasive materials such as steel wool, abrasive brushes, etc., can wear and harm finishes.

6.5 Avoid drips and splashes. Remove run downs as quickly as possible.

6.6 Avoid temperature extremes. Heat accelerates chemical reactions and may evaporate water from solution. Extremely low temperature may give poor cleaning effects. Cleaning under adverse conditions may result in streaking or staining. Ideally, cleaning should be done in shade at moderate temperature.

6.7 Do not substitute a heavy duty cleaner for a frequently used mild cleaner.

6.8 Do not scour painted surfaces.

6.9 Never use paint removers, agressive alkaline, acid or abrasive cleaners. Do not use trisodium phosphate or highly alkaline or highly acid cleaners. Always do a test surface.

6.10 Follow manufacturers recommendations for mixing and diluting cleaners.

6.11 Never mix cleaners. (See 5.3 for precautions).

6.12 To prevent marring, make sure cleaning aponges, cloth etc., are grit free.

6.13 "An ounce of prevention is worth a pound of cure."

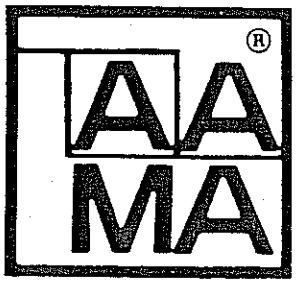
7. GENERAL INSPECTION AND PRECAUTIONS

7.1 Inspection

It is suggested that the building owner provide a qualified inspector who will see that the desired effect is being obtained with the use of sound procedures. Inspection should commence early in the cleaning procedure.

7.2 Building Surroundings

Consideration must be given to possible effects of run down on shrubbery, personnel, equipment, etc., located below. These factors may require considerations toward methods of timing.



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