



AMERICAN BUILDING COMPONENTS

## Millennium® 3000 Paint System

PREMIUM PANEL COLORS NOW WITH COOL ROOF PIGMENTS

American Building Components is attempting to simplify the paint warranty so you can compare, evaluate and purchase a metal roof that provides the highest level of satisfaction and value. ABC has been providing metal roofing since 1908 and is committed to offering quality metal roofing, quality paint systems and quality service.

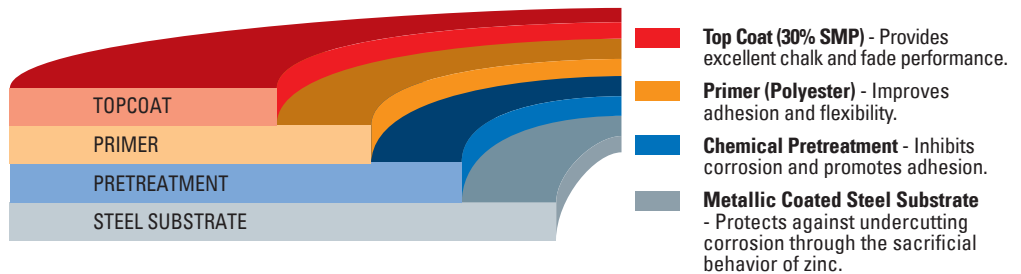
Low quality paint systems will not provide the high quality results that metal roofing owners desire. How do you tell the difference between a low quality paint system and a high quality paint system? One way is to look at the paint warranty. Your warranty should explain how the paint system performs over the life of the warranty and how this performance was measured. All paint systems will chalk and fade over time. The warranty will explain how much chalk and fade is acceptable according to standard tests set forth by the American Society of Testing Materials (ASTM).

**Please inquire for additional color availability, pricing and lead-times.**

**For the most current information available, visit our website at [www.abcmetalroofing.com](http://www.abcmetalroofing.com)**

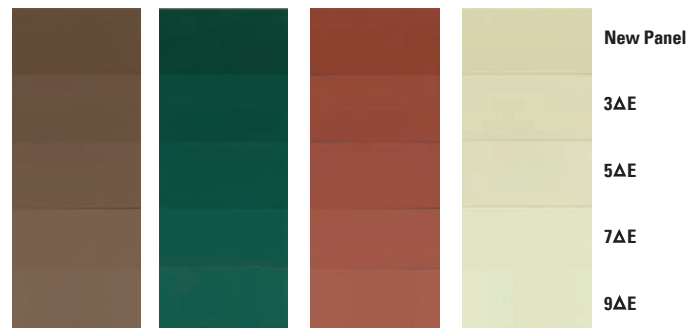
## Prepainted Metal Roof Panels

### Coating System Components

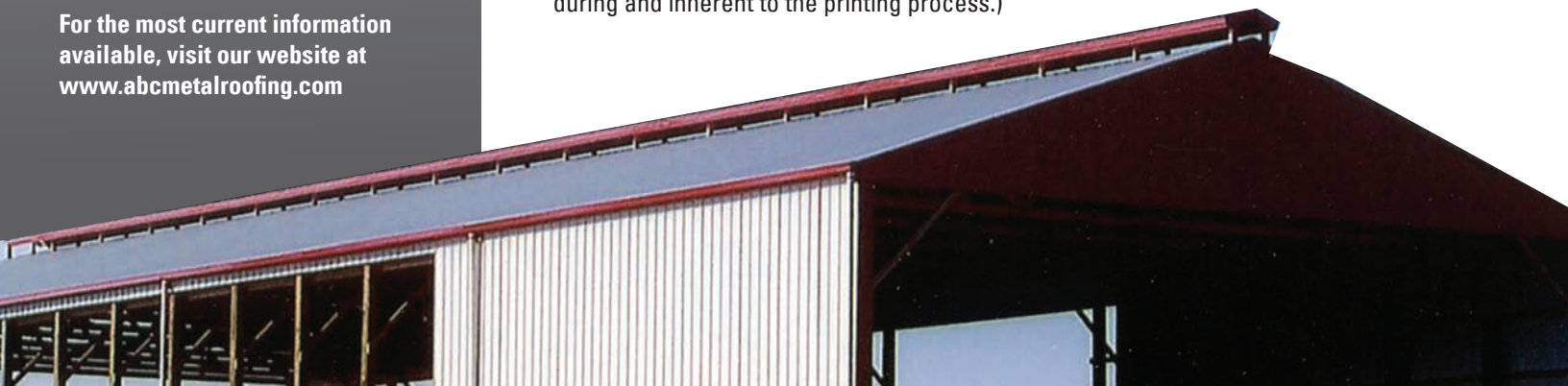


Coated steel, a pretreatment of chrome oxide is applied which also inhibits corrosion and promotes adhesion. Next, a primer, consisting of an epoxy modified polyester for improving adhesion and flexibility, is laid down. Lastly, the topcoat is used consisting of a 30% siliconized modified polyester (SMP) which minimizes chalk and fade.

### How Much Fading is Acceptable?



Every metal roof will fade overtime. The better the paint system, the less fade. Our industry standard of measuring fade is in Hunter (  $\Delta E$  ) units which evaluate or compare the difference in color in accordance with ASTM Standard D2244. Above are four colors that represent the use of our premium Millennium® 3000 Paint System with the original color on top. Each of the subsequent four segments represents what the panel could look like over the course of 25-30 years of atmospheric and solar exposure. For more information regarding paint performance, please read the Performance Summary section of the warranty. (The above illustration is reproduced as accurately as possible, but paint colors may differ due to variables introduced during and inherent to the printing process.)



[www.abcmetalroofing.com](http://www.abcmetalroofing.com)



# Millennium® 3000 Paint System

The ABC Millennium® 3000 Paint System represents the most sophisticated silicone polyester coating in the industry. It offers optimum exterior protection plus superior resistance to chemical corrosion and ultraviolet radiation.

## What Is Paint?

Paint consists of three parts: pigment, resin and solvent. After high performance finishes are factory applied, the coated product is baked, and the solvents are released and incinerated leaving the pigments and resins on the substrate.



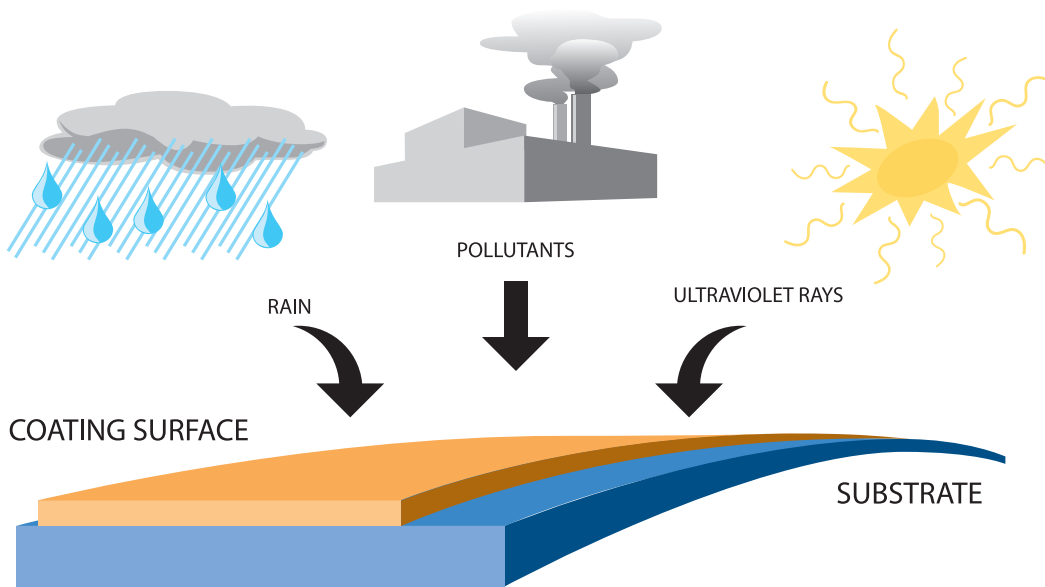
## Pigment: The Color

The right pigment is critical in formulating a finish that will resist fading. Ceramic and select inorganic pigments are recognized as offering the most durability, having proven this performance in hundreds of years of use in porcelain and ceramic products. Fading is caused when substances in the environment attack the pigment portion of the paint and cause the color to change. Millennium® 3000 paint only uses ceramic or inorganic pigments.

## Resin: The Binder

The stronger the resin, the more resistant it is to the sun and the environment. Chalking is caused by degradation of the resin system at the surface of the finish, due predominantly to ultraviolet (UV) rays. As the resin system breaks down, resin particles take on a white (chalking) appearance, as embedded pigment particles lose their adhesion to the film. Millennium® 3000 paint incorporates a 30% SMP Resin, one of the strongest in the marketplace.

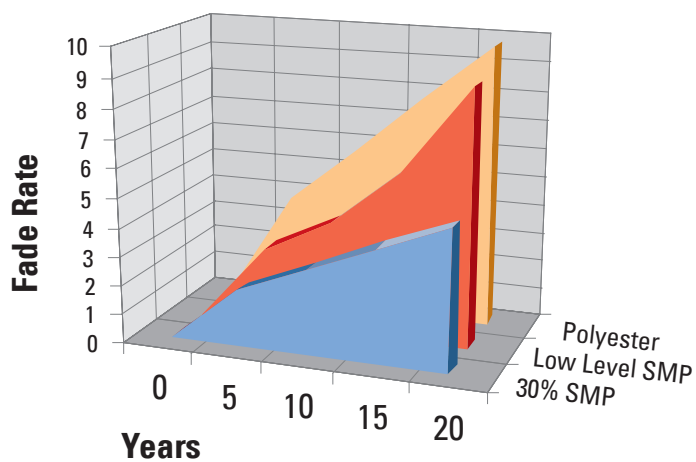




## Why Do Paints Fail?

Paints fail primarily due to rain, pollutants and ultraviolet rays breaking down resin and fading pigments resulting in the loss of color and/or chalking.

### Fade: Lower is Better

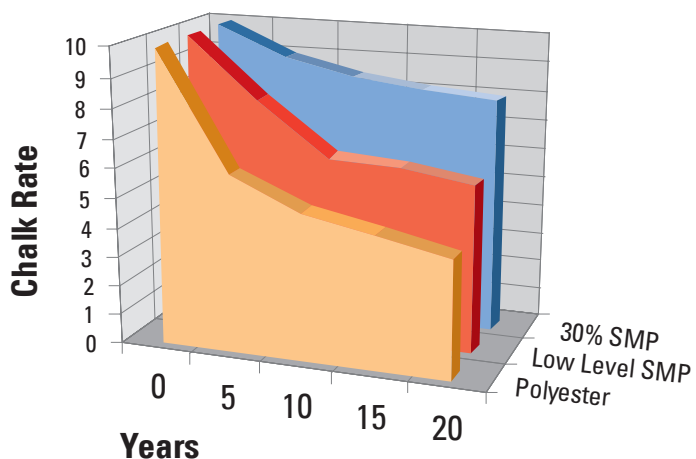


### Failure in the Pigment System Causes Fading



	Years				
	0	5	10	15	20
30% SMP	0	2	3	4	5
Low Level SMP	0	2.75	4	6	9.1
Polyester	0	4	6	8	10

### Chalk: Higher is Better



### Failure in the Resin System Causes Chalking



	Years				
	0	5	10	15	20
30% SMP	10	9	8.5	8.5	8.2
Low Level SMP	10	8	6.2	6.1	5.7
Polyester	10	6	5	4.5	4



# Millennium® 3000 Paint System

## 40-YEAR COLOR LIMITED WARRANTY

ABC, A DIVISION OF NCI GROUP, INC. WARRANTS THE PANELS, EFFECTIVE FROM THE DATE OF SHIPMENT, WILL PERFORM IN ACCORDANCE TO THE FOLLOWING MILLENNIUM® 3000 PAINT SYSTEM:

### PERFORMANCE SUMMARY

- A. FILM INTEGRITY: The paint film WILL NOT crack, check, or peel for a period of forty (40) years for Wall and Roof panels, except; Polar White, in which case the period is twenty-five (25) years, Crimson Red, in which case the period is thirty (30) years. Cracking is defined as breaks in the flat coating as opposed to breaks in the film caused by metal forming, which is not warranted hereunder.
- B. CHALK AND FADE: The paint film WILL NOT;
- (1) For a period of thirty (30) years, chalk in excess of a numerical rating of 8 for vertical panel applications or 6 for non-vertical panel applications, when measured in accordance with the standard procedures as defined by the "Standard Methods of Evaluating Degree of Chalking of Exterior Paints", ASTM D4214, except; Crimson Red, in which case the period is twenty-five (25) years and a numerical rating of 7 for vertical panel applications or 5 for non-vertical panel applications, or
- (2) For a period of thirty (30) years, fade or change in color in excess of 5 color difference units for vertical panel applications or 7 color difference units for non-vertical panel applications, measured in accordance with ASTM D2244 on the exposed painted surfaces which have been cleaned of external deposits and chalk and the corresponding values measured on the original (unexposed) painted surfaces, except; Crimson Red, in which case the period is twenty-five (25) years and a fade or change in color in excess of 7 color difference units for vertical panel applications or 10 color difference units for non-vertical panel applications. It is understood that fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements.

### CHALK RATING

Chalk Rating Table does not apply to Polar White or Crimson Red.

YEARS	SIDEWALL INCLINED	ROOF INCLINED	ASTM STANDARD
1-30	8	6	D4214

### FADE (IN HUNTER ΔE UNITS)

Fade Table does not apply to Crimson Red.

YEARS	SIDEWALL INCLINED	ROOF INCLINED	ASTM STANDARD
1-30	5	7	D2244

### TERMS AND CONDITIONS

1. This warranty covers the material exposed to normal atmospheric conditions (which term excludes exposure to saltwater/marine atmospheres or corrosive or aggressive atmospheres such but not limited to those contaminated with chemical fumes) in the continental United States or Canada only, unless ABC agrees otherwise in writing. This warranty shall not apply where material failure is the result of fire, other accident or casualty, vandalism, salt spray, atomic radiation, harmful fumes or foreign substances in the atmosphere, acts of God, or other such occurrences beyond ABC's control. It is understood that fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements.
2. This warranty will not extend to or cover damages to the material due to improper packaging, shipping or processing as specified in the National Coil Coaters Association Technical Bulletin No. IV- (7), improper handling (whether pre-erection or during erection), improper storage, improper erection, or improper installation (which includes failure to permit drainage of standing water.)
3. Microscopic crazing of the film on formed radii is considered normal and is not to be construed as film cracking.
4. This warranty does not apply in the event of deterioration to the panels caused directly or indirectly by panel contact with inferior fasteners. Selection of suitable long-lasting fasteners to be used with ABC's extended life panels rests solely with the Purchaser.
5. This warranty will not extend to or cover:
- a) Damage to the coating occasioned by moisture or other contamination detrimental to the coating because of improper storage of the prepainted Metal prior to installation.
- b) Water damage to any materials after they leave the possession of the ABC.
- c) Damage to the prepainted metal caused by shipping, handling, and/or installation, storing, erecting and/or handling of the panels on the job site and/or any act or acts of negligence of the customer or any third party after the panels leave the possession of the ABC.
- d) Damage to the prepainted Metal as a result of standing water in non-vertical application.
- e) Damage to the prepainted metal caused by cascading water.
- f) Damage to the prepainted Metal caused by contact with, or water run-off from, lead, copper, graphite or other dissimilar material. This includes, but is not limited to, A/C condensation and treated wood.
- g) Damage to the prepainted Metal caused by contact with corrosive substances, or allowing panel cut edges to be in continual contact with water, damp insulation, soil or vegetation i.e. setting wall panels directly on the concrete sheeting notch or base trim.
- h) This warranty does not apply to products, materials, accessories, parts, or attachments which are not produced by ABC. In addition, all items not specifically listed as included are hereby excluded from this warranty.
6. Customer shall exercise diligence in inspection of materials as received from ABC prior to use so as to mitigate expense involved to ABC under this warranty.
7. This warranty does not apply to the interior or reverse side finish nor does it extend to pre-painted materials used in interior (not atmospherically exposed) applications.
8. This warranty applies only to the paint film on the material and does not cover in any way any other aspect of the material.
9. If the panel finish fails to perform as indicated under the terms of Performance outlined above, ABC shall have no liability with respect thereto except, at its sole option to repaint, replace, or restore the failed material, which shall be the purchaser's sole and exclusive remedy. When ABC chooses to replace the defective prepainted Metal, its sole obligation is for the replacement of the material only. ABC shall not be liable for any expenses connected with labor for the replacement of the defective material or any consequential damages. Repainting shall not necessarily be with Millennium® 3000 Paint System. In no event, however, shall ABC's responsibility extend to any consequential damages, or for any special, indirect, or consequential loss of profits or any other incidental, general, special, or compensatory damages to anyone because such panels may have been nonconforming. In all cases ABC reserves the right to approve and negotiate the contract for such repainting, replacing or restoring. The warranty on any repainted, replaced or restored prepainted material supplied hereunder shall be for the unexpired portion of the warranty period applicable to the original panel.
10. Claims must be reported in writing to ABC within thirty (30) days after discovery of nonconformance. Adequate identification of the material involved in the claim, including date of installation, ABC's order number, ABC invoice number, and date of shipment must be established by Buyer. A copy of this document must be presented to ABC at time of claim. All notices given under or pursuant to this Agreement shall be in writing and sent by registered mail, postage prepaid, return receipt requested to: **NCI, Group, Inc. P.O. Box 692055, Houston, TX 77269-2055; Attn: Claims Department**
11. No terms or conditions other than those stated herein and no agreement or understanding, oral or written in any way purporting to modify this warranty shall be binding on ABC unless made in writing and signed by the President of ABC.
12. This warranty shall extend to the original Building Owner and is non-assignable and/or non-transferable. Should the Owner become insolvent, bankrupt, make an assignment for the benefit of its erectors, or for any reason discontinue its normal or regular business practices, this warranty shall forthwith become null and void and of no legal effect.
13. Any party seeking to enforce claims under this Warranty hereby acknowledges and agrees that (i) all matters relating to the validity, performance, interpretation, and/or enforcement of this Warranty shall be governed by and construed in accordance with the laws of the State of Texas, (ii) any and all claims, actions, proceedings or causes of action relating to the validity, performance, interpretation, and/or enforcement hereof must be submitted to a court of competent jurisdiction in Houston, Harris County, Texas, (iii) this Warranty is capable of being performed in Harris County, Texas, (iv) it irrevocably submits itself to the jurisdiction of the state and federal courts in Harris County, Texas, (v) service of process may be made upon it in any legal proceeding in connection with this Warranty or any other agreement as provided by Texas law, (vi) it irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of venue of any litigation arising out of or in connection with this Warranty or any other agreement or transaction brought in any such court, (vii) it irrevocably waives any claims that litigation brought in any such court has been brought in an inconvenient forum, and (viii) it irrevocably consents to the service of process out of any of the aforementioned courts by the mailing of copies thereof by Certified Mail, Return Receipt Requested, postage prepaid, and its address set forth herein. The scope of each of the foregoing waivers is intended to be all encompassing. Each party acknowledges that this waiver is a material inducement to the agreement of each party hereto to enter into a business relationship, and that each has already relied on this waiver in entering into this Warranty. Each party warrants and represents that it has reviewed these waivers with its legal counsel, and that it knowingly and voluntarily agrees to each such waiver following consultation therewith.
14. **FORCE MAJEURE. UNDER NO CIRCUMSTANCES SHALL ABC BE LIABLE IN ANY WAY TO THE BUILDING OWNER OR ANY OTHER PARTY FOR DELAYS, FAILURE IN PERFORMANCE, OR LOSS OR DAMAGE DUE TO FORCE MAJEURE CONDITIONS INCLUDING, WITHOUT LIMITATION: FIRE; LIGHTNING; STRIKE; EMBARGO; EXPLOSION; POWER SURGE OR FAILURE; ACTS OF GOD; WAR; LABOR OR EMPLOYMENT DISPUTES; CIVIL DISTURBANCES; ACTS OF CIVIL OR MILITARY AUTHORITY; INABILITY TO SECURE MATERIALS, FUEL, PRODUCTS OR TRANSPORTATION FACILITIES; ACTS OR OMISSIONS OF SUPPLIERS, OR ANY OTHER CAUSES BEYOND ITS REASONABLE CONTROL, WHETHER OR NOT SIMILAR TO THE FOREGOING.**
15. Notwithstanding the foregoing, the warranty coverage provided above by ABC shall be expressly limited to and shall include only such warranty coverage on coatings applied to ABC's panel materials by the original supplier(s) thereof. Any and all such warranty coverage available from ABC shall apply only to the same extent that such warranty coverage is available from the original supplier thereof. To the extent that warranty coverage from such supplier(s) is unavailable for any reason whatsoever, ABC shall not have any further liability to purchaser or any other party therefore.

**DISCLAIMER-EXCEPT AS EXPRESSLY STATED HEREIN, THE ABOVE WARRANTY PROVISIONS DO NOT COVER COATINGS, PRODUCTS, ACCESSORIES, PARTS OR ATTACHMENTS THAT ARE NOT MANUFACTURED BY ABC. EXCEPT AS OTHERWISE EXPRESSLY STATED, THERE IS NO WARRANTY, REPRESENTATION OR CONDITION OF ANY KIND AND ANY WARRANTY, EXPRESS OR IMPLIED, IS HEREBY EXCLUDED AND DISCLAIMED INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. NOTWITHSTANDING ANYTHING ELSE CONTAINED HEREIN TO THE CONTRARY, IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT ABC'S LIABILITY AND PURCHASER'S SOLE REMEDY, WHETHER IN CONTRACT, UNDER ANY WARRANTY, IN TORT (INCLUDING NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE COST OF THE AMOUNT OF THE MATERIALS, EXPRESSLY EXCLUDING LABOR COSTS AND EXPENSES, COSTS OF RENTING REPLACEMENTS AND ANY OTHER ADDITIONAL EXPENSES, EVEN IF ABC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. ABC WILL NOT BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES AS A RESULT OF PURCHASER'S (OR ANY OTHER PARTY'S) NEGLIGENCE, WHETHER DEEMED ACTIVE OR PASSIVE AND WHETHER OR NOT ANY SUCH NEGLIGENCE IS THE SOLE OR PARTIAL CAUSE OF ANY SUCH DAMAGE, LOSS OR EXPENSE. IN ADDITION, UNDER NO CIRCUMSTANCES SHALL ABC BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES WHATSOEVER AS A RESULT OF ANY OTHER PARTY'S MATERIALS OR PRODUCTS WHICH CAUSE OR ALLEGEDLY CAUSE, IN WHOLE OR PART, DAMAGE, LOSS OR DETERIORATION TO ABC'S WALL AND/OR ROOF PANELS.**

Millennium is a registered trademark of American Building Components.



Adel, GA 800-877-8709  
Lubbock, TX 800-481-3035  
Memphis, TN 800-877-8709

Nicholasville, KY 800-877-8709  
Omaha, NE 800-228-2260  
Oskaloosa, IA 800-345-0044

Phoenix, AZ 800-481-3035  
Rome, NY 800-544-2651  
Salt Lake City, UT 800-481-3035

## Call ABC for help locating a distributor near you!

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project job site in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

Imperial Rib®, Regal Rib®, Rugged Rib®, Monarch Rib®, Ameri-Drain®, 7/8" Wide Rib®, Perma Clad®, Perma Clad® II and SL-16® are registered trademarks of American Building Components. Galvalume® is a registered trademark of BIEC International, Inc.