

Metposite provides a low cost alternative to aluminum composite panels, allowing project cost saving or use of funds in other areas of the project. Using Kynar coated metal fully adhered to rigid stiffeners, Metposite the offers a high quality product at less than the cost of composite panels.

Metposite<sup>tm</sup> panels are custom manufactured to strict standards. We are committed to providing high quality products with service and follow through to match.

From our customers to our employees and suppliers, and everyone else we work with, we strive to create long-term mutually beneficial relationships.

All the material in this book is available online at <u>www.metposite.com</u>, including downloadable files of the guide specification, detail drawings and other useful information.

Revision #16 01/26/09



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PO Box 156 Hubbard, OR 97032

Table of Contents

Metposite<sub>m</sub> Information

Photos & Customers

Colors & Coatings

Materials & Technical

Details & Drawings

**Guide Specifications** 

Installation & Installers

Terms & Conditions

503.981.5900 Fax 503.981.5901 sales@metposite.com



WWW.METPOSITE.COM ETPOSIT

PO Box 156, Hubbard, Oregon 97032

# Quality and Appearance at an Affordable Price.

- Major cost savings compared to composite panel systems.
- Custom fabricated to fit your project requirements.
- Large flat panel coverage. Panel sizes up to 45" x 117". (141" special order)
- Wide selection of Kynar colors and finishes.
- Formed from 22 ga .Zincalume coated steel. (also available in aluminum)
- Stiffeners fully adhered with 3M tm high quality bonding agents.
- ASTM tested for air & water infiltration, and structural performance.
- Available in multiple systems designed to meet your budget and project needs.



# Testing and Certification



# Profile/Joint configurations



- ASTM E 283-04 Air Infiltration: 0.00 CFM. (No Leakage) at 300 Pa (6.24 psf)
- ASTM E 331-00 Water Penetration: 0.00 CFM. (No Leakage) at 729 Pa (15.0 psf)
- ASTM E-72 Structural Performance: Individual panel average ultimate load (held for one minute) 117lbs
- ASTM E-1761a. Fastener Pull Through: Using a #8 modified truss head / phillips wafer head screw average pull through or screw failure 881lbs.

Our testing and credentials allows you to appreciate the cost savings using the Metposite System in place of high price aluminum composite systems and still have the confidence that your wall panel system will perform up to industry standards.



# Metal / Panel face options

Metposite panels are available in 22 ga or aluminum in a large choice of Kynar painted color options. They are also available in true zinc, copper and anodized aluminum. (Please contact us to discuss your projects individual custom needs.)



Nike Early Childhood Development Ctr. 1234 SW Burlington Dr. Beaverton OR 97006 Completed 2008 Installer: Portland Sheet Metal Architect: TVA Architects







METPOSITE LLC 503.981.5900 Fax 503.981.5901 SALES® METPOSITE.COM



MCKINLEY ELEMENTARY SCHOOL 1500 NW 185th Ave, Beaverton OR 97006 Completed 2008 Installer: TT&L Sheet Metal Architect: Architects Barrentine.Bates.Lee







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SLOCUM BUILDING 55 COLBURG RD. EUGENE, OR 97401 Completed 2007 Installer: Streimer Sheet Metal Architect: TBG Architects





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#### **McKinley Elementary School**

1500 NW 185th Ave Beaverton, OR 97006 Completed 2008 Installer: TT&L Sheet Metal Architect: Architects Barrentine.Bates.Lee

#### **Springfield Justice Center**

230 4th Street Springfield, OR 97477 Completed 2008 Installer: Al's Sheet Metal Architect: Robertson/Sherwood Architects PC

#### Nike Early Childhood Development Ctr.

1234 SW Burlington Dr. Beaverton, OR 97006 Completed 2008 Installer: Portland Sheet Metal Architect: TVA Architects

#### **Eden Hill Condominiums**

1929 Queen Anne Ave.N Seattle, WA 98109 Completed 2008 Installer: Architectural Metal Works Architect: Weber & Thompson

#### **Clear Creek Telephone and Television**

18238 S Fischers Mill Rd Oregon City, OR 97045 Completed 2008 Installer: Portland Sheet Metal Architect: Co-Bella Design

#### **Mason Building**

212 SW 4th St Madras, OR 97741 Completed 2008 Installer: JICA Construction Architect: Henneberry Eddy Architects Inc

#### **OSU Gill Annex**

Gill Coliseum Corvallis, OR 97331 Completed 2007 Installer: Streimer Sheet Metal Architect: HNTB Architecture Inc.

#### Metposite tm Installations

#### Tualatin Library

18878 SW Martinazzi Tualatin OR, 97062 Completed 2008 Installer: Skyline Sheet Metal Architect: SRG Partnership

#### **Sue Buel Elementary School**

135 SE Booth Bend Rd McMinnville, OR 97128 Completed 2008 Installer: Pioneer Sheet Metal Architect: Mahlum

#### West Salem Building Blocks

1137 Edgewater St.NW Salem, OR 97304 Completed 2008 Installer: Santiam Heating & Sheet Metal Architect: Workshop Architecture

#### **Pierce College Fine Art Center**

1601 39th Ave SE Puyallup, WA 98379 Completed 2008 Installer: Advanced Metal Systems Architect: MSGS Architects

#### **Salmon Bay Marine**

2300 Commodore Way Seattle, WA 98199 Completed 2008 Installer: Architectural Metal Works Architect: Abbot Heys

#### **The Bonnett Building**

929 SW Simpson Ave. Bend, OR 97702 Completed 2008 Installer: Cascade Heating & Specialties, Inc Architect: Steele Associates Architecture, LLC

#### **Madras Aquatic Center**

35 SE C St # A Madras, OR 97741 Completed 2007 Installer: JICA Sheet Metal Architect: Opsis Architecture

#### 503.981.5900 FAX 503.981.5901

#### SALES@METPOSITE.COM

#### **Slocum Building**

55 Colburg Rd. Eugene, OR 97401 Completed 2007 Installer: Streimer Sheet Metal Architect: TBG Architects

#### **Red Robin**

9199 NE Cascade Parkway Portland, OR 97220 Completed 2007 Installer: Portland Sheet Metal

#### **Jefferson Place**

1747 SW Jefferson St. Portland, OR 97201 Completed 2007 Installer: Architectural Metal Works Architect: Vallaster and Corl Architects

#### **H-45 Building**

4424 SE Hawthorne Portland, OR 97215 Completed 2007 Installer: Architectural Metal Works Architect: Boora Architects, Inc.

#### **T-Mobil Store**

9199 NE Cascade Parkway Portland, OR 97220 Completed 2007 Installer: Portland Sheet Metal

#### **Newberg High School**

2400 Douglas Rd. Newberg, OR 97132 Completed 2005 Architect: Boora Architects, Inc.

#### **Fern Hill Elementary School**

4445 Heather St. Forest Grove, OR 97116 Completed 2005 Architect: Mahlum Architects

Additional references available on request.

#### **Cascade Station**

9199 NE Cascade Parkway Portland, OR 97220 Completed 2007 Installer: Portland Sheet Metal Architect: Perkowitz + Ruth Architects

#### **David Douglas High School**

1001 SE 135th Portland Portland, OR 97233 Completed 2007 Installer: West Coast Sheet Metal

#### Lower Columbia College Fine Arts Center

1600 Maple St. Longview, WA 98632 Completed 2007 Installer: S & R Sheet Metal Architect: Opsis Architecture

#### **Upper Falls Condominiums**

1800 E Trent Ave Spokane, WA 99202 Completed 2007 Installer: Architectural Metal Works Architect: Ankrom Moisan

#### **Aloha Park Middle School**

17770 SW Blanton St Aloha, OR 97007 Completed 2006 Installer: Amer-x Sheet Metal

#### **Highland Professional Center**

990 NW Circle Blvd. Corvallis, OR 97330 Completed 2006 Architect: DJ Architecture

#### **Tom McCall Elementary School**

1341 NW Pacific Av. Forest Grove, OR 97116 Completed 2005 Architect: Mahlum Architects



Kynar 500° or Hylar 5000° pre-finished galvanized steel and aluminum for roofing, curtainwall and storefront applications.



PAC-CLAD<sup>®</sup> Cool Colors
PAC-CLAD<sup>®</sup> Metallic Colors
PAC-CLAD<sup>®</sup> Metallic finishes are available from stock at a moderate extra cost. PAC-CLAD<sup>®</sup> Copper Penny is a Non-Weathering finish.
\*Chips represent colors on 24 ga. galvanized steel. Consult actual samples for these colors on aluminum sheet.

# PAC-CLAD Color Availability

Denotes available from sto	ock. 🛪 Indica	ates low gloss	s/low sheen form	ulation.	St	eel		Alun	ninum	
PAC-CLAD Cool Colors	Reflectivity	Emissivity	3 Yr Exposure	SRI*	24 ga.	22 ga.	.032	.040	.050	.063
Almond	0.56	0.89	0.57	66	•	•	•	•	•	
Bone White	0.73	0.89	0.71	89	•	•	•	•	•	•
Cardinal Red	0.37	0.89	0.38	41	•		•		•	
Charcoal	0.28	0.89	1000	29	•		•		•	
Colonial Red	0.32	0.89		34	•		•	•	•	
Dark Bronze	0.25	0.89		25	•	•	•	٠	•	•
Evergreen	0.26	0.88		26	•		•			
Granite	0.36	0.89	0.35	40	•*	•	•*	•	•*	
Hemlock Green	0.30	0.90		32	•	•	•		•	
Hunter Green	0.26	0.88		26	•	120 10 10	•			
Mansard Brown	0.25	0.88		25	•	•	•	•	•	
Medium Bronze	0.27	0.90		28	•	•	•	•	•	•
Military Blue	0.34	0.88		36	•		•			
Musket Gray	0.31	0.89	No. of Contraction	33	•	•	•		•	
Patina Green	0.34	0.89		37	•		•			
Sandstone	0.53	0.89	0.49	62	•	•	•	•	•	•
Sierra Tan	0.36	0.89	0.35	40	•	٠	•	•	•	
Slate Blue	0.26	0.87	1	26	•		•			
Slate Gray	0.36	0.89		40	•	٠	•	•	•	
Stone White	0.64	0.88	0.59	77	•	•	•	•	•	•
Teal	0.26	0.88		26	•		•			
Terra Cotta	0.36	0.89	0.37	40	•		•		•	1000
Matte Black**	0.25	0.85		23	•		•	•	•	•
PAC-CLAD Metallic		1.28								1000
Aged Copper	0.28	0.89		29	•		•		•	
Champagne	0.41	0.80	0.40	43	•		•		•	1111111111
Copper Penny	0.49	0.87	0.47	56	٠		•		•	
Silver	0.60	0.83	0.55	70	•		•	•	•	
Weathered Zinc	0.30	0.81		28	•		•		•	
Zinc	0.32	0.89	0.31	34	•		•		•	
PAC-CLAD Standar	d Colors	do not mee	t cool roof requi	rements)	1					
Arcadia Green					. •		•			
Award Blue					÷ •	12 N 12 M 1	•		•	1.1.1.1.1
Berkshire Blue					•*					
Burgundy					•	12000	•		•	1000
Forest Green					•	•	•	•	•	
Hartford Green					•		•	•	•	
Interstate Blue					٠		•		•	

PAC-CLAD® Metallic finishes are available from stock at a moderate extra cost. PAC-CLAD® Copper Penny is a Non-Weathering finish. \*Solar Reflectance Index calculated according to ASTM E-1980. \*\*Matte Black (SRI Color) in steel only.

#### Energystar<sup>®</sup> Performance Criteria

Emissivity uses ASTM C1371/E408. Reflectivity uses ASTM E903/C1549.

Installation

PAC-CLAD® can be cut, formed, nailed, screwed, or riveted using hand or power tools. Fabricate and install in accordance with drawings and normal sheet metal practices using hand or power tools. Keep cutting edges sharp, clean, and properly aligned. Exercise care during fabrication and installation to avoid damage.

#### Maintenance

Maintenance is not required. This finish is a member of the Teflon<sup>®</sup> family, and is self-cleaning. If cleaning is desired, it can be washed with a mild soap and water followed by a clean-water rinse.

#### Samples

These color reproductions are as accurate as modern printing technology will permit. Free material samples are available on request.

#### Textures

PAC-CLAD<sup>®</sup> is available with a smooth texture or a standard E-5 stucco embossed pattern, available at extra cost. \*Low Gloss/Low Sheen

This finish is a full Kynar 500<sup>®</sup>/Hylar 5000<sup>®</sup> finish, but is formulated in a **low gloss/low sheen** in order to minimize the appearance of oil-canning.

Technical Data for Kynar  $500^{\circ}$ /Hylar  $500^{\circ}$  Coating • Life Expectancy – 20 years exposure – Chalk: rating of 8 or better. Color:  $5\Delta E$  (Hunter Units) change.

 Accelerated Weathering—(ASTM G-23 Type EH)
5,000 hours - Chalk: rating of 8 or better. Color: ≤5ΔE (Hunter Units) color change.

•Humidity Resistance-(ASTM 2247) 2,000 hours - No change in pencil hardness.

•Salt Spray Resistance – (ASTM B 117) – 2,000 hours for Aluminum, creepage at scribe ≤1/32", no blisters. 2,000 hours for hot dipped Galvanized, creepage at scribe 1/8", few #8 blisters.

#### Chemical/Acid Pollution Resistance—(ASTM D) 1808) - Pass

 Solvent Resistance—(NCCA procedure 11-18, no comparable ASTM test) - Pass.

•Formability-(ASTM D 3281 and ASTM D 1737) -Can be formed without film fracture using normal metal shop practices to a 1 to 2-T bend radius

•Hardness-(ASTM D 3363) - ≥F pencil hardness.

•Gloss-30 ± 5 at 60° (low gloss/sheen available). •Abrasion Resistance-(ASTM D 968) - Coefficient of  $65 \pm 10.$ 

 Adhesion—(ASTM D 3359 and NCCA procedure No. 11-5) - Pass.

 Impact Resistance – (ASTM D 2794 and NCCA Technical Bulletin No. 11-6) - 70 inch/lbs., no tape pick-off.

#### **Recycled Content**

•PAC-CLAD Aluminum - 91% •PAC-CLAD Steel - 28 to 35%

#### Petersen Aluminum Corporation

Headquarters 1005 Tonne Road Elk Grove Village, IL 60007 800-PAC-CLAD FAX: 800-722-7150 or 847-956-7968

9060 Junction Drive Annapolis Junction, MD 20701 800-344-1400 FAX: 301-953-7627

www.pac-clad.com

10551 PAC Road Tyler, TX 75707 800-441-8661 FAX: 903-581-8592

4175 Royal Drive Suite 300 Kennesaw, GA 30144 800-272-4482 FAX: 770-420-2533

PAC-CLAD® is a registered trademark of Petersen Aluminum Corporation, Kynar 500® is a registered trademark of Eli Atochem North America, Inc. Hylar 5000® is a registered trademark of Ausimont USA. 7/2007

#### PAC-CLAD® 20 Year Limited Warranty

)wn	er:
Addr	ess:
Cont	ractor:
Custo	omer:
nvoi	ce Num. & Date:
Date	Warranty Begins:
oh N	Jame.

of

Date Warranty Ends:

#### PARTI

PETERSEN ALUMINUM CORPORATION (hereinafter referred to as "PAC") hereby issues the following limited warranty to the above referenced owner (hereinafter referred to as OWNER) exclusively. Subject to the terms and conditions listed below, PAC warrants that upon delivery its PAC-CLAD® Fluropon® coating (hereinafter referred to as the "COATING") applied to aluminum, G-90 hot-dipped galvanized steel or AZ 55 zincaluminum alloy steel sheet and coil that has been fabricated, roll-formed or otherwise manufactured, within one year from the date of shipment thereof by PAC, and sold for use as painted roofing panels, fascia, mansard, soffit or other building components, will for a period of twenty (20) years from the invoice date listed above (hereinafter referred to as the "WARRANTY PERIOD"), meet the following quality standards:

- WILL NOT chalk in excess of ASTM D-4214-89 method A (D659) number eight (8) rating.
- B. WILL NOT change color more than five (5.0) Hunter ∆E units as determined by ASTM method D-2244-02 after removal of external deposits and chalk. It is understood by all the parties herein named, that fading or color change may not be uniform in appearance between surfaces not equally exposed to the sun and other weathering elements.
- C. WILL NOT crack, check, peel or otherwise lose adhesion. The terms, crack, check and peel, used herein shall not include minute fracturing of the COATING incurred during proper fabrication. In addition loss of adhesion of the COATING as a result of substrate corrosion, however caused, and either from the front side or the backside of the substrate is specifically excluded from this warranty.

The following additional terms, conditions and other limitations are also included as part of this warranty:

#### PART H

- 1.) This warranty and all terms, conditions and exclusions contained herein apply to PAC's COATING only. In regards to either the aluminum, G-90 hot-dipped galvanized steel or AZ 55 zinc-aluminum alloy steel substrates to which the COATING has been applied, PAC makes no representations or other warranties whatsoever. All base metal substrates are sold AS IS. In addition, PAC makes no representations or other warrants the weather tightness of the roofing panels, fascia, mansard, soffit or other building components referred to in Part I. Further, PAC is expressly to be held harmless for failures, leaks or consequential damages caused by the roofing panels, fascia, mansard, soffit or other building components.
- 2.) This warranty applies to the COATING installed on structures within the continental United States that have been exposed to normal weather and atmospheric conditions only. Failure of the COATING caused by exposure to harmful fumes, cement dust, falling sand, animal waste or its decomposition by-products, dust particles and other foreign substances in the air, chemical fumes, chemical sprays and installations with a proximity of less than a one-half mile radius from a seacoast, saltwater or other brackish water environment are all excluded from this warranty. In addition, this warranty does not apply to failure of the COATING caused by or as a result of fire, other accident or casualty, vandalism, radiation, falling objects, explosions, riots or acts of God. Finally, this warranty does not apply to failure of the COATING caused by the following: damage incurred during shipment, improper storage, improper fabrication or improper installation, surface scratches or other abrasions however caused, damage caused by contact with areas subject to water run-off from lead, copper or other incompatible flashings or areas in metallic contact with lead, copper or other dissimilar metals, damage caused by failure to provide free drainage of water, including internal condensation from overlaps, and all other surfaces of the roofing panels, fascia, mansard, soffit or other building components, damage caused by failure to remove debris or other accumulations of foreign substances from the surface of the roofing panels, fascia, mansard, soffit or other building components, damage caused by contact with green or wet lumber, damage caused by contact with or close proximity to damp underlayment, insulation, soil, vegetation or other corrosive materials and/or damage caused by use of unsuitable fasteners or flashings. Selection of suitable long-lasting fasteners as well as appropriate flashings rests solely with the OWNER.
- 3.) This warranty does not apply to failure of the COATING in the following additional circumstances: forming where the bend is tighter than 2T, forming which involves severe reverse bending, or which subjects the COATING to alternate compression and tension, roofing applications where the slope of the roof, or sections of the roof, are flatter than ½": 12", applications where the COATING is sheltered from periodic washing by natural rainfall such as underside eaves and soffits, or discoloration or damage to the COATING caused by failure to remove factory applied protective strippable film (where applicable).

#### PART III

4.) All claims filed under the provisions of this warranty must be presented by the OWNER to PAC, in writing, during the WARRANTY PERIOD and not more than thirty (30) days after discovery of any apparent defects, delivered by Registered or Certified mail to the following address:

#### Petersen Aluminum Corp. 1005 Tonne Rd. Elk Grove Village, IL 60007 ATTN: Warranty Claims

In submitting a claim under the provisions of this warranty, it is the responsibility of the OWNER to provide adequate documentation of the COATING involved in the claim including date of installation, name of installer and contractor (if different), PAC order number, PAC invoice number and proof of payment to PAC for all such materials included as part of the claim. In no event will any claims be honored under the provisions of the warrenty invoices from PAC have not been previously satisfied in full within PAC's standard credit terms. OWNER futher agrees to allow PAC to inspect all such documentation.

- 2.) After receipt of claim from owner, PAC will be given a reasonable opportunity to examine or cause to be examined, the COATING claimed to be non-conforming. OWNER shall further use reasonable care to protect any disputed material until PAC has had time to conduct its own inspection and make disposition.
- 3.) If after inspection it is determined by PAC that the claim is valid under the terms of this warranty, then PAC agrees, at its option, to refinish, repair or replace the defective COATING on the following basis:
  - a. If the COATING is to be refinished then PAC shall bear the cost of materials and labor reasonably necessary to repaint those areas showing failure. Further, PAC shall use normal painting practices to apply a Kynar 500® or Hylar 5000® coating system or other suitable alternative. The choice of appropriate coating system to use rests exclusively with PAC.
  - b. In the case of repair or replacement of the defective COATING, PAC shall at its option, and F.O.B. PAC plant, furnish either replacement components or sufficient sheet to fabricate replacement components, for those areas of the building where the COATING is determined to be defective. However, in no event shall PAC be liable for the cost of labor expended by others on any nonconforming material or for any special, indirect or consequential damages to anyone by reason of the fact that such material may have been nonconforming.

This warranty shall apply to the part or parts of the COATING refinished, repaired or replaced by PAC, but only for the unexpired portion of the WARRANTY PERIOD applicable to the original COATING only. It will be at the discretion of PAC what appropriate measure shall be taken; that is whether the COATING should be refinished, repaired or replaced. However, in lieu of any of the foregoing alternatives PAC also reserves the right to refund to the OWNER a cash amount equal to PAC's original invoiced price of the nonconforming material as satisfaction in full for all claims under this warranty. At no time does this warranty confer upon the OWNER the right to refinish, repair or replace those areas of COATING under dispute without written notice and agreement by a duly authorized officer of PAC. Any unauthorized refinish, repair or replacement of the COATING shall result in this warranty becoming null and void.

#### <u>PART IV</u>

- Except as provided herein, PAC makes no warranty or guarantee, express or implied, including without limitation, WARRANTIES OF FITNESS AND MERCHANTABILITY. Further, OWNER acknowledges that PAC shall have no other liability to any other person, firm, or corporation with respect thereto, including, without limitations, any liability for indirect, consequential or resultant damages, whether based upon breach of warranty or negligence.
- 2.) PAC extends this warranty solely to the OWNER listed herein. This warranty is non-transferable and non-assignable.
- 3.) This warranty shall be subject to and shall be enforced and construed according to the laws of the State of Illinois. Any legal action to enforce or construe any portion of this warranty shall be brought in a Court of competent jurisdiction in Cook County, Illinois.
- 4.) If any provision of this warranty shall be held by any Court of competent jurisdiction to be invalid or unenforceable in whole or in part, the remaining provisions of this warranty shall be effective to the same extent as if such invalid or unenforceable provision had never been contained herein.
- 5.) PAC reserves the right to terminate this warranty at any time upon thirty (30) day written notice. However termination shall not affect the rights accruing to the OWNER prior to such termination.
- 6.) Both the supplier of the PAC COATING and the applicator thereof have made certain warranties to PAC which are similar to the warranties made by PAC to the OWNER under this limited warranty. In the event that the supplier and or applicator (or its successors or assigns) of the coating can no longer perform, or is not willing to perform, its obligations to PAC, then the limited warranty contained herein shall be of no further force or effect.
- 7.) The terms hereof shall constitute the entire agreement and understanding of the parties hereto respecting the subject matter hereof and no provision or statement contained at any time in any other writing, including without limitation, OWNERS, customers and/or contractors purchase orders or PAC's acceptance forms shall be effective to change the provisions hereof, unless contained in a subsequent agreement, in writing, signed by both the OWNER and PAC expressly stating that it is intended thereby to modify or supplement this instrument.

#### PETERSEN ALUMINUM CORPORATION

By:

President \* Not valid without Officer Signature

#### Date:

Fluropon® is a registered trademark of The Valspar Corporation Hylar 5000® is a registered trademark of Ausimont USA, Inc. Kynar 500® is a registered trademark of Atochem N.A. PAC-CLAD® is a registered trademark of Petersen Aluminum Corporation

# **AEP Span Standard Colors & Coating Systems DURATECH 5000 COLORS**



Cool Zinc Grev R 38.6 • E .85 • SRI 41



Cool Parchment R 52.6 • E .83 • SRI 60



Cool Sierra Tan R 49.1 • E .86 • SRI 56



Cool Forest Green R 29.5 • E .84 • SRI 29



Cool Leaf Green R 25.5 • E .84 • SRI 23

#### **DURATECH MX COLORS**



Cool ZACtique II R 31.3 • E .85 • SRI 32

- Solar Reflectivity (ASTM E-903, C-1549) R =
- E = Emissivity (ASTM C-1371)

SRI = Solar Reflective Index (ASTM E-1980, based on medium wind speed)



Cool Colonial Red R 30.1 • E .85 • SRI 30



Cool Regal White R 72.2 • E .86 • SRI 88



Cool Weathered Copper R 32 • E .86 • SRI 33



R 28.9 • E .85 • SRI 25



Cool Matte Black R 25.4 • E .83 • SRI 23



Cool Metallic Copper<sup>1</sup> R 43.1 • E .85 • SRI 47



Cool Metallic Silver

R 48.9 • E .88 • SRI 56

Color swatches are for reference only - limited by printing process and viewing conditions. Actual color samples are available upon request. Please contact your AEP Span representative.



Cool Marine Green R 40.5 • E .86 • SRI 44



Cool Red R 40.5 • E .86 • SRI 44



Cool Old Town Grav R 40.5 • E .85 • SRI 44



Cool Dark Bronze R 28.7 • E .83 • SRI 27

Cool Regal Blue

Cool Jade Green

R 26.5 • E .84 • SRI 25

R 26.8 • E .85 • SRI 26

# **Build Green with AEP**

AEP Span helps you design and build sustainable projects that look great and stand the test of time. All AEP Span profiles are made from recycled steel and are offered in a full spectrum of energy saving Cool Colors. These standard DuraTech 5000 Cool Colors come with a 30 year warranty. Contact your AEP Span representative for more information.



R 35.5 • E .86 • SRI 38



Cool Hemlock Green R 31.9 • E .85 • SRI 32



Cool Metallic Champagne' R 44.8 • E .85 • SRI 50











Cool Terra-Cotta

#### **SPECIFICATIONS**

#### Description

Dura Tech 5000 is a premium fluoropolymer (PVDF) coating system. Dura Tech mx is a premium fluoropolymer (PVDF) pearlescent coating system. When applied and cured on properly prepared substrates, Dura Tech coatings exhibit exceptional color stability, chalk resistance, durability, abrasion resistance, chemical resistance and flexibility.

#### **Composition & Application**

DuraTech 5000 and DuraTech mx coatings shall contain a minimum of 70% fluoropolymer resin. These coating systems, including primer, are to be applied by coil coaters experienced in handling 70% Kynar 500<sup>®</sup> or Hylar 5000<sup>®</sup> PVDF resin-based coatings.

#### Substrate

The Zincalume® and Galvalume® coatings are AZ50 and is comprised of a 45% zinc, and 55% aluminum alloy by weight.

#### Pretreatment

All substrates are pre-treated in accordance with manufacturer's instructions. The pretreatment is to provide a suitable surface for application of the recommended primer.

#### Colors

DuraTech 5000 and DuraTech mx are available in a wide selection of pre-formulated standard colors, which is shown on chart. Custom colors can also be formulated.

#### Gloss

DuraTech 5000 coatings are supplied with a gloss of 10-30% at 60° per ASTM D-523. DuraTech mx (metallics) have a gloss rating of 20-35% at 60° per ASTM D-523.

#### Film Thickness

DuraTech coatings are applied at a total dry film thickness of 1.0 -1.1 mils. The primer is applied at 0.2 mils and topcoat is applied at a nominal 0.8-0.9 mils.

Thick Film - A high-build DuraTech 5000 or DuraTech mx coating system is also available on special order. It is normally applied at a total dry film thickness of 1.8-2.0 mils. For this system, high build primer is applied at a nominal 0.9-1.0 mils and topcoat is applied at a nominal 0.9-1.0 mils. Clear Coat - A 0.5 mil clear coat also available on special order.

Zincalume® is a registered trademark of BlueScope Limited. Galvalume® is a registered trademark of BIEC International, Inc.

#### **Oil Canning**

All flat metal surfaces can display waviness commonly referred to as "oil canning". This is caused by steel mill tolerances, variations in the substrate and relative reflectivity of the material. "Oil canning" is an inherent characteristic of steel products, not a defect, and therefore is not a cause for panel rejection.

TESTS	ASTM TEST *	PERFORMANCE		
Physical Properties and Durability				
Specular Gloss	D-523	10-35°		
Pencil Hardness	D-3363	HB-H		
Flexibility, T-Bend Mandrel	D-4145	1-T aluminum 2-T coated steel**		
Adhesion	D-3359	No adhesion loss		
Reverse Impact	D-2794	No cracking or loss of adhesion		
Abrasion, Falling Sand	D-968	65-85 l/mil		
Mortar Resistance	C-267	No effect		
Detergent Resistance 3% Detergent, 100°F, (72 hrs.)	D-2248	No effect		
Atmospheric and Pollu	tant Resistance			
Acid Pollutants	D-1308	No effect		

	10% Muriatic Acid (15 min) 20% Muriatic Acid (15 min) AAMA 605.2	No effect No effect <5 units color change
Acid Rain Test	Kesternich	15 cycles minimum
Alkali Resistance	Kesternich	No effect
Salt Spray Resistance 5% @ 95°F	B-117	Passes 3,000 hrs. aluminum, Passes 1,000 hrs. coated steel**
Cyclic Salt Fog	B-5894	2000 hours - passes adhesion per ASTM D-3359, ASTM D-714 rating of panels was an #8 size blisters, few in density. Creep from scribe <3.00 mm.
Humidity Resistance 100% @ 95°F	D-2247	Passes 3,000 hrs. aluminum, Passes 1,000 hrs. coated steel**

#### Weathering

South Florida exposure	D-2244	<5 NBS units change
UVB (313 bulbs)	D-822	Passes, 3,000 hrs.
Chalk Resistance	D-659	Rating of 8 min.

\*All tests performed to the latest ASTM revision. The test results set forth are representative of the results obtained by BASF. Warranties of the product are exclusively as set forth in the applicable contract documents. \*\* Performances on G-90, Zincalume, Galvalume and other approved zinc/aluminum coated steel.

Kynar 500<sup>®</sup> is a registered trademark of Arkema Inc., Hylar 5000<sup>®</sup> is a registered trademark of Ausimont USA, Inc.

#### **Colors by Request**

AEP Span continues to carry on the tradition of matching custom colors. Show us the color you want and AEP Span will supply it.

#### **Technical Support**

Call AEP Span to consult with a Technical Representative to specify appropriate materials and finishes for actual project conditions. Actual panel samples and colors are available upon request.

#### **30 Year Warranty**

Warranties for chalk, fade and film integrity are available in durations of 30 years for DuraTech 5000 colors and 20 years for DuraTech mx (metallics). Terms can be affected by factors such as environment. Inquire for details.



#### Sales Support:

Fontana, ĈA 800-272-2466, 909-823-0401, *fax* 909-823-2625 Tacoma, WA 800-733-4955, 253-383-4955, *fax* 253-272-0791 Dallas, TX 800-527-2503, 214-827-1740, *fax* 214-828-1394 Kernersville, NC 800-527-2503, 214-827-1740, *fax* 214-828-1394 **Technical Support:** 

In CA, NV, AZ, NM, CO, UT, and HI call (800) 400-3867 AK, WA, OR, ID, MT, WY, CO (800) 447-2477 East of the Rockies call (800) 527-2503

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2110 Enterprise Boulevard West Sacramento, CA 95691

#### DuraTech™5000 Warranty

We (IMSA Building Products Inc.) warrant our DURATECH™ 5000 coated steel Products as follows:

#### Performance.

- (1) The paint on the Products will not, for a period of twenty (20) years after installation (but not longer than 21 years from application of the coating):
  - a) Peel, check or crack (except for slight crazing and cracks during roll forming or brake bending, or metal fracture, or spangle cracking);
  - b) Fade or change color, in excess of five (5) DE (Hunter) units as measured using the procedure of ASTM D-2244-85, comparing an unexposed retain panel to the exposed panel after removal of dirt and chalk; or
  - c) Chalk in excess of a numerical rating of eight (8), as measured using the procedures of ASTM D-4214-89 (Method D-659).
- (2) The metal substrate will not, for a period of twenty (20) years after shipment;
  - a) Leak as a result of corrosion when exposed to normal atmospheric conditions. This warranty excludes any areas of the product that are within 3/4" of any edge that has been cut subsequent to the application of the paint to the substrate.

**Proper Use.** This warranty is conditioned upon the proper installation and maintenance of our products. We will not warrant products which have been modified without our express written approval, or which have been improperly used or applied.

**Environment**. This warranty is limited to exposure to normal atmospheric conditions (which term excludes corrosive or aggressive atmospheres such as those contaminated with chemical fumes, chemical deposits or salt spray).

**Installation.** The Products must be installed to prevent standing water and condensation. The pitch must not be less than 1/4:12. This warranty does not apply to areas which are sheltered from rainfall or which do not provide drainage. The Products must be in contact with only zinc- and zinc-aluminum coated fasteners and flashings. The Products must not be in contact with, or subject to runoff from, lead, copper, green or wet lumber, or wet insulation.

**Maintenance.** The Products must be regularly washed, either by fresh rainwater or by cleaning with 1) One cup of Tide or other common detergent containing less than 0.5% phosphate dissolved in 5 gallons of water, or 2) Use one cup of household ammonia in five gallons of water at room temperature. Never mix ammonia with any kind of bleach. The Products must not be cleaned with abrasive or chemical cleansers. The Products must be systematically rinsed with fresh water in areas of high salt concentration (such as adjacent to the seashore or in industrial atmospheres) to prevent accumulation of concentrated salt deposits. Cleaning must include the underside of any panel overhang where the underside is exposed to the weather.

Damage. This warranty does not apply to damage or failure caused by:

- (1) moisture or other contamination because of improper packaging, storage or handling prior to installation;
- (2) improper handling, shipping or installation;
- (3) scratching or abrading during or after installation;
- (4) standing or ponding water; or
- (5) Acts of God, falling objects, explosion, fire, or other such occurrences beyond our control.

Non-transferable. This warranty applies only to the Buyer and Owner stated in the Registration, and is not transferable.

**Notification.** You must notify us within thirty (30) days after discovery of any alleged defect in material or workmanship, and allow us a reasonable opportunity to inspect the product.

**Remedy.** If we determine that the Products are defective, we will repair or replace them. If repair or replacement is not practical, we may, at our option, refund the purchase price. THIS IS YOUR ONLY REMEDY FOR DEFECTIVE PRODUCTS.

LIMITATION OF LIABILITY; EXCLUSION OF CONSEQUENTIAL DAMAGES. Our total liability for all claims of any kind shall not exceed the purchase price paid. We shall not be liable to any person or entity for any incidental or consequential damages, including lost profits or lost use of the material. We shall not be liable to any person or entity for claims for property damage or personal injury.

# THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE ABOVE DESCRIPTION.

Registration. This warranty is not valid until it is registered with us, by returning the completed registration form (below).



# METPOSITE: RAISING THE BAR ON ALTERNATIVE VALUE ENGINEERED WALL PANEL SYSTEMS.

Metposite is pleased to announce that our panel system has been tested according to ASTM standards for air and water infiltration as well as structural and fastener adhesion. As the follow results below indicate, the system preformed outstandingly well in all four tests.



# **TESTING AND CERTIFICATION**

- ASTM E 283-04 Air Infiltration 0.00 CFM. (No Leakage) at 300 Pa (6.24 psf)
- ASTM E 331-00 Water Penetration: 0.00 CFM. (No Leakage) at 729 Pa (15.0 psf)
- ASTM E-72 Structural Performance: Individual panel average ultimate load (held for one minute) 117lbs
- ASTM E-1761a. Fastener Pull Through: Using a #8 modified truss head / phillips wafer head screw) average pull through or screw failure 881lbs.

This allow you to appreciate the cost saving from using the Metposite System in place of high price aluminum composite systems and still have the confidence that your wall panel system will perform up to industry standards.

> Testing Conducted By Intertek Testing Services NA Ltd. Complete report available on request

> > 503.981.5900 FAX 503.981.5901 SALES@METPOSITE.COM





#### Metposite panel transverse load chart

Fasteners per Sq.Ft.	Transverse load
1.066*	117** psf
1.00	109.76 psf
0.95	104.27 psf
0.90	98.78 psf
0.85	93.29 psf
0.80	87.80 psf
0.75	82.32 psf
0.70	76.83 psf
0.65	71.34 psf
0.60	65.85 psf
0.55	60.37 psf
0.50	54.88 psf
0.45	49.39 psf
0.40	43.90 psf
0.35	38.41 psf
0.3	32.93 psf

\* Based on 22.5 sq.ft test panel with corner fasteners and side fastened at 12" on center

\*\* ASTM E-72 Structural Performance: Individual panel average ultimate load (held for one minute) 117lbs \*\*\*Testing Conducted By Intertek Testing Services NA Ltd. Complete report available on request

#### **Fastener Requirement**

Fastener to be evenly spaced on fastening lip as required to achieve desired transverse load. See examples below.

Formula: (desired transverse load) x .0092 = (required screws per square foot)

#### **Examples**

Fastened 48" on center	48" x 48"	48" x 96"	48" x 120"
Number of screws	8	10	12
Fastener per square	0.5	0.3125	0.3
Transverse load (psf)	54.88	34.30	32.93
Fastened 32" on center	48" x 48"	48" x 96"	48" x 120"
Number of screws	12	14	16
Fastener per square	0.75	0.4375	0.4
Transverse load (psf)	82.32	48.02	43.90
Fastened 24" on center	48" x 48"	48" x 96"	48" x 120"
Number of screws	12	16	18
Fastener per square	0.75	0.5	0.45
Transverse load (psf)	82.32	54.88	49.39
Fastened 16" on center	48" x 48"	48" x 96"	48" x 120"
Number of screws	16	26	28
Fastener per square	1	0.8125	0.7
Transverse load (psf)	109.76	89.18	76.83
Fastened 12" on center	48" x 48"	48" x 96"	48" x 120"
Number of screws	20	28	36
Fastener per square	1.25	0.875	0.9
Transverse load (psf)	117+	96.04	98.78

#### 503.981.5900 FAX 503.981.5901



# Manufacturer's Warranty

Warranty No

#### 1. Performance:

Metposite LLC warrants it STD, Met-DRI\_RS, Metflush and Metflush II panels to be free of manufactures faults and defects for a period of \_\_\_\_ years. (Including manufacture's 20-year paint warranty on painted products. See additional warranty)

#### 2. Proper Use:

This warranty is conditioned upon the proper care and handling of the Metposite panels during delivery and installation. Metposite LLC will not warrant the product if it has been modified without Metposite LLC expressed written permission or if it has been improperly handled or installed inconsistent with Metposite LLC installation and care instructions. Materials must be stored in a dry place or completely covered if stored outdoors prior to installation.

#### 3. Environment:

This warranty is limited to exposure to normal atmospheric conditions, which term may be limited when exposed to salt, sea air, corrosive or aggressive atmospheres such as those contaminated with chemical fumes or chemical deposits.

#### 4. Maintenance:

There is no special need or requirement for any regulated maintenance of the Metposite panel system. Periodic rain or hosing down will remove normal dust accumulation.

#### 5. Damage:

- This warranty does not apply to any damage caused by:
  - a. Moisture or other contamination due to improper packaging, handling or installation of the manufactured panels.
  - b. Standing or ponding water.
  - c. Acts of God, falling objects, explosion or fire, malicious intent or other circumstances beyond our control.

#### 6. Transferable:

This Manufactures warranty is fully transferable from the original owner/party to a new owner party via additional continued registration. However, the continued warranty will have no effect or change of conditions or benefits of the expressed original warranty. Metposite LLC must be notified in writing with in 30 days of transfer. Without written notification or transfer approval, this warranty is void.

#### 7. Notification:

For this warranty to become effective, the original owner/party must register this warranty with Metposite LLC within 30 days of the completion of the installation of the wall panel system. Additionally, any claims related to this warranty must be claimed in writing within 30 days of the discovery of such alleged defect and allow Metposite LLC reasonable opportunity to inspect the product. If in part the defect is in the installation, this warranty is void.

#### 8. Remedy:

If Metposite LLC determines that its product is defective, Metposite LLC will repair or replace said product at its option. If repair or replacement is not practical, Metposite LLC may at our option, refund the original purchase price less any pro-rated deduction of the service provided by the product. (Product replacement only, removal and/or instillation will not be covered.) THIS IS THE ONLY REMEDY FOR PRODUCT CLAIMS.

#### 9. Limitation of Liability & Exclusion of Consequential Damages:

Our total liability for all claims of any kind shall not exceed the original purchase price paid. Metposite LLC shall not be liable for any incidental or consequential damages, including but not limited to, lost profits, loss of use of the material, property damage or claims of personal injury.

#### 10.Registration:

This warranty is not valid until it is registered with Metposite LLC, by returning the completed form below. There are no other warranties, expressed or implied including any warranty of merchantability or of fitness for a particular purpose, which extends beyond the above description

Authorized Metaosite LLC signature	Data	Building Name:			
Autionzed Melposite LLC signature	Date	Address:			
	Date	City:	State: Zip:		
	Date	Owner:			
Warrenty Coverage Area SQ.Ft.		Serial Number: 0000	Warrant Rev.1/07		



#### **Panel Material Information**

#### Metal

Standard base material is 22 gauge Galvalume® or Zincalume steel. These finishes involve coating the base metal in a hot dip process utilizing an alloy of 55% aluminum, 43.5% zinc, and 1.5% silicon as a protective coating. Panels are also available .032, .040 and .050 aluminum with a Kynar 500® or anodized finish.

Metposite panels are formed from Zincalume® or Galvalume® steel. Both have a metallic coating applied by a continuous coating process whereby properly cleaned low-carbon, cold-rolled sheet steel is dipped into a molten aluminum-zinc bath. The alloy bath temperature is around 600C, and the coating is solidified very rapidly to obtain a fine-grain microstructure with enhanced corrosion resistance, compared to the pure zinc coating (galvanized coating) or pure aluminum.

The result is a highly corrosion-resistant sheet steel that delivers the best protective features characteristic of aluminum and zinc: the barrier protection and long life of aluminum plus the sacrificial or galvanic protection of zinc at cut or sheared edges

Zinc has a self-healing mechanism in it. The zinc coating sacrifices itself slowly by galvanic action to protect the base steel. This sacrificial action continues as long as any zinc remains in the immediate area. In simple terms the edges will not rust. The silicon is introduced primarily to assist in the formation of a thin layer of intermetallic compound between the coating and base metal, providing coatings with good adhesion.

In addition to all the protective quality, it has excellent forming capabilities. **Therefore, no damage or compromise of the metal's strength or corrosion protection occurs during the forming of the panels**.

#### Coating

The Kynar 500® (70% PVDF Fluorocarboncoating) paint finish provides a superior low gloss finish with a 20 year warranty.

Kynar 500® is a Fluoropolymer Coating system. The secret of fluoropolymer's remarkable properties lies in its molecular structure; the carbon/fluorine bond (one of the strongest known to man) is the key to the coating's unsurpassed thermal, chemical and ultra violet resistance. The final coating is a factory-applied, oven baked finish based on Kynar 500® resin (Polyvinylidene fluoride). This finish is a dispersion coating based on Kynar 500® resin as formulated by Kynar 500® licensees. This finish is in strict accordance with the formulator's specification and applied by an applicator approved by the formulator. This finish based on Kynar 500® shall meet the performance criteria of AAMA 2605.2 specification, and certified by the formulator as containing KYNAR 500 resin.

Kynar 500 resin-based coatings out perform polyester powder, urethane, silicone polyester and acrylic coatings in every category: better color retention; better gloss retention; better resistance to chalking. Kynar 500® resin-based finishes meet or exceed the physical test performance criteria of the Architectural Spray Coaters Association (ASCA 96) and the American Architectural Manufacturers Association (AAMA 2605.2) for high-performance organic coatings on architectural extrusions and panels.

#### **Bonding**

The stiffener is fully adhered to metal using 3M high quality bonding specifically designed to be product compatible with our specific materials.

503.981.5900 FAX 503.981.5901



#### Joint Sealant (STD)

Use Dow Corning ® 795 or Tremco Spectrum 1 ® for panel-to-panel joints. For joints with other substrates please refer to Dow Corning's or Tremco specifications. (Available at www.dowcorning.com or www.tremcosealents.com)

All ASTM testing for water and air infiltration on Metposite panels were conducted using Dow Corning sealants. For this reason we specifically recommend the Dow Corning products. However, we recognize that there are other products on the market that may perform as well as the Dow Corning products and may provide some additional color option. Therefore, with approval from your architect and assurances from your caulking contractor on compatibility and performance and that they will warrant the material and workmanship, we do not oppose the use of alternative products

#### Backer Rod (STD)

Use ITP soft type manufactured by Industrial Thermo Polymers LTD. or Sof ® Rod manufactured by Applied Extrusion Technologies Inc. (See product specification sheet in this section.)

All ASTM testing for water and air infiltration on Metposite panels were conducted using ITP soft type and Sof ® Rod backer rod. For this reason we specifically recommend these products. However, we recognize that there are other products on the market that may perform as well. Therefore, with approval from your architect and assurances from your caulking contractor on compatibility and performance and that they will warrant the material and workmanship, we do not oppose the use of alternative products

#### **Butyl Sealant Metflush / Metflush II**

Use PTI ® 707 Architectural Butyl Sealant injected into the female rib of the panel system (as per manufactures recommendations)

#### **Underlayment**

Metposite panels can be installed over most commercial vapor barriers. (Per project requirements)

503.981.5900 FAX 503.981.5901

# **Product Information**

# Silicone Sealants

# *Dow Corning*<sup>®</sup> 795 Silicone Building Sealant

#### FEATURES

- Suitable for most new construction and remedial sealing applications
- Versatile high performance structural glazing and weathersealing from a single product
- Available in 11 standard colors; custom colors also available

#### **BENEFITS**

- Excellent weatherability virtually unaffected by sunlight, rain, snow, ozone and temperature extremes of -40°F (-40°C) to 300°F (149°C)
- Excellent unprimed adhesion to a wide variety of construction materials and building components, including anodized, alodined, most coated and many Kynar<sup>®1</sup>-painted aluminums<sup>2</sup>
- Ease of application ready to use as supplied
- Ease of use all-temperature gunnability, easy tooling and low-odor cure byproduct
- Meets global standards (Americas, Asia and Europe)

#### **COMPOSITION**

• One-part, neutral-cure, RTV silicone sealant

#### Neutral, one-part silicone sealant

#### APPLICATIONS

- Structural and nonstructural glazing
- Structural attachment of many panel systems
- Panel stiffener applications
- Weathersealing of most common construction materials including glass, aluminum, steel, painted metal, EIFS, granite and other stone, concrete, brick and plastics

#### **TYPICAL PROPERTIES**

Specification Writers: Please contact your local Dow Corning Sales Application Engineer or Dow Corning Customer Service before writing specifications on this product.

Method	Test	Unit	Result
As Supplied	1050	Cint	ittsuit
AS Supplied	Teal Error Time 500/ DU	1	2
ASIMC 0/9	lack-free lime, 50% KH	nours	3
	Curing Time at 25°C (77°F) and 50% RH	days	7-14
	Full Adhesion	days	14-21
ASTM C 639	Flow, Sag or Slump	inches (mm)	0.1(2.54)
	Working Time	minutes	20-30
	VOC Content <sup>1</sup>	g/L	28
		8/12	20
As Cured – Aft	er 21 days at 25°C (77°F) and 50% RH		
ASTM D 2240	Durometer Hardness, Shore A	points	35
ASTM C 794	Peel Strength	lb/in (kg/cm)	32 (5.7)
ASTM C 1135	Tensile Adhesion Strength		( )
	at 25% extension	nsi (MPa)	45 (0.310)
	at 50% extension	psi (MPa)	60(0.110)
ACTN C 710		psi (ivii a)	00 (0.414)
ASIM C /19	Joint Movement Capability	percent	$\pm 50$
ASTM C 1248	Staining (granite, marble, lime-		
	stone, brick and concrete)		None

# As Cured – After 21 days at 25°C (77°F) and 50% RH followed by 10,000 hours in a QUV weatherometer, ASTM G 53

ASTM C 1135	Tensile Adhesion Strength		
	at 25% extension	psi (MPa)	35 (0.241)
	at 50% extension	psi (MPa)	50 (0.345)

<sup>1</sup>Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please send your request to product.inquiry@dowcorning.com.

#### DESCRIPTION

*Dow Corning*<sup>®</sup> 795 Silicone Building Sealant is a one-part, neutral-cure, architectural-grade sealant that easily extrudes in any weather and cures quickly at room temperature.

This cold-applied, non-sagging silicone material cures to a medium-modulus silicone rubber upon exposure to atmospheric moisture. The cured sealant is durable and flexible enough to accommodate  $\pm 50$  percent movement of original joint dimension when installed

in a properly designed weatherseal joint. In a properly designed structurally glazed joint, the sealant is strong enough to support glass and other panel materials under high windload.

#### APPROVALS/ SPECIFICATIONS

*Dow Corning* 795 Silicone Building Sealant meets the requirements of:

- Federal Specification TT-S-001543A (COM-NBS) Class A for silicone building sealants
- Federal Specification TT-S-00230C

<sup>1</sup>*Kynar* is a trademark of Atofina Chemicals Inc. <sup>2</sup>Contact your local Dow Corning Sales Application Engineer for specifics. (COM-NBS) Class A for onecomponent building sealants

- ASTM Specification C 920 Type S, Grade NS, Class 50, Use NT, G, A and O
- ASTM Specification C 1184 for structural silicone sealants
- Canadian Specification CAN2-19.13-M82

#### COLORS

*Dow Corning* 795 Silicone Building Sealant is available in 11 colors: black, white, gray, limestone, bronze, sandstone, adobe tan, dusty rose, rustic brick, blue spruce and charcoal. Custom colors may be ordered to match virtually any substrate.

#### HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-theart application methods and joint design. Please contact your local Dow Corning Sales Application Engineer for specific advice.

#### Preparation

Clean all joints, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

#### **Application Method**

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended. Apply Dow Corning 795 Silicone Building Sealant in a continuous operation using positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against the backing material and



joint surfaces. Remove masking tape as soon as the bead is tooled.

#### HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING. READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMA-TION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT WWW.DOWCORNING.COM. OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

#### USABLE LIFE AND STORAGE

When stored at or below 27°C (80°F), *Dow Corning* 795 Silicone Building Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use By Date."

#### PACKAGING

*Dow Corning* 795 Silicone Building Sealant is supplied in 10.3-fl oz (305-mL) disposable plastic cartridges that fit ordinary caulking guns, 20-fl oz (590-mL) sausages and 2- and 4.5-gal (7.5- and 17-L) bulk containers.

#### LIMITATIONS

*Dow Corning* 795 Silicone Building Sealant should not be used:

- In structural applications without prior review and approval by your local Dow Corning Sales Application Engineer
- In below-grade applications
- When surface temperatures exceed 50°C (122°F) during installation
- On surfaces that are continuously immersed in water
- On building materials that bleed oils, plasticizers or solvents that may affect adhesion
- On frost-laden or wet surfaces
- In totally confined joints (the sealant requires atmospheric moisture for cure)
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants)
- To surfaces in direct contact with food or other food-grade applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

#### HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com, or consult your local Dow Corning Sales Application Engineer.

#### LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

#### DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

#### DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

A 20-year Weatherseal Limited Warranty is available. Some testing may be required. Consult your Dow Corning Sales Application Engineer for details.

# ITP SOFT TYPE BACKER ROD

### JOINT FORMING, PLIABLE, SOFT NON-GASSING, POLYETHYLENE FOAM BACKER ROD

#### MANUFACTURER — Industrial Thermo Polymers Ltd.

CANADA

153 Van Kirk Drive Brampton, Ontario L7A 1A4 Tel: (905) 846-3666 Fax: (905) 846-0363 www.tundrafoam.com

#### **PRODUCT DESCRIPTION**

**Basic Use:** ITP Soft Type Backer Rod is a soft, pliable, non-gassing backup material inserted into an expansion or contraction joint to:

- · Control sealant depth;
- · Create a backstop to allow proper sealant tooling;
- Ensure sealant adhesion to joint surfaces only;
- And yield a proper break between backup material and sealant.

It can also be used as a temporary joint seal.

**Specific Uses:** Particularly suited for specialty applications where standard Backer Rods are not appropriate. Ideal in irregular joint applications particularly where self-leveling, flowable sealants are employed. Also recommended with sealants where bubbling concerns are critical. May also be used in place of most standard backer rod applications. (See Illustration below)

**Compatibility:** ITP Soft Type Backer Rod is virtually an inert composition and therefore compatible with all known cold applied sealants including butyl, polysulfide, acrylic, polyurethane and silicone.

**Composition and Material:** ITP Soft Type Backer Rod Insulation is an extruded round, dust free, polyethylene-based foam material with a skin-like outer texture. It is highly flexible, pliable and compressible for easy installation. It is available in a medium-grey for easy identification and several other colors on a custom basis. U.S.A. 2316 Delaware Avenue Suite #216 Buffalo, New York 14216 Tel: 1 (800) 387-3847 www.tundrafoam.com

#### TABLE I

#### **STOCK SIZES AVAILABLE**

Rod Diameter	Feet / Carton	Metric Size	Meters / Carton
**3/8″	2100	9mm	640
*5/8"	1550	15mm	472
7/8″	850	22mm	259
1-1/8"	500	28mm	152
1-1/2"	420	38mm	128
2″	240	50mm	73
2-1/2"	156	63mm	48
3″	102	76mm	31
4″	48	101mm	15

ITP Soft Type Backer Rod Sizes 1-1/2" (38mm) to 4" (101mm) are furnished in easy to handle 6 ft. (1.83m) lengths. Rectangular cartons are ideal for warehousing and handling. All have convenient hand holes for carrying ease. UPS and most other package express services will accept all cartons for re-shipment. Truckload quantities furnished on pallets and may be warehoused two pallets high to maximize space.

\*\*Baby Backer Rod Carton - Minimum 2 carton purchase. \*Available 2 spools per carton.

#### SPECIALTY APPLICATIONS FOR ITP SOFT TYPE BACKER ROD INSULATION



# ITP Soft Type Backer Rod is **TECHNICAL DATA FORM 104**

#### **TECHNICAL DATA**

chemically inert and will resist oil, gasoline and most other solvents. This material will not stain nor adhere to sealant materials and is non-exuding. (Refer to Table II for typical physical properties)

#### INSTALLATION

Joint or opening must be clean, dry and free of obstructions. Using Table III select proper rod diameter and cut to length or use directly from spool. With a blunt instrument or roller, uniformly install rod at the level recommended by the sealant manufacturer, specifier or architect involved. Generally, the depth of the joint after the backer rod is installed is one half the width. Very large or very small joints vary in terms of this depth to width ratio. Avoid puncturing, stretching or over compression.

#### OUTGASSING

One of the unique characteristics of ITP Soft Type Backer Rod is that outgassing is minimized. However, care should be taken not to puncture this type of rod, particularly in the presence of water - which collects in this backer rod when punctured.

#### PURCHASING AND PRICING

ITP Soft Type Backer Rod is widely available throughout the United States and Canada. Please contact Industrial Thermo Polymers Ltd. for the name and address of your local distributor. This source will provide you with samples and pricing information as required.

#### **TECHNICAL ASSISTANCE**

Industrial Thermo Polymers Ltd. has aualified representatives available to assist users of the various Backer Rod materials referenced herein. Please contact your local ITP distributor should assistance be required.

#### **PURCHASING ADVANTAGE**

ITP offers the widest product range of any North American manufacturer (see Table IV). For prompt delivery, top service and convenient one-stop shopping for all your Backer Rod needs contact ITP or your local ITP distributor today.

#### TABLE II

#### \* PHYSICAL PROPERTY ANALYSIS VALUE

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Density (nominal)	2 lbs/cu ft.	ASTM-D-1622
Tensile Strength	50 PSI minimum	ASTM-D-1623
Compression Deflection @ 50%	5 psi maximum	ASTM-D-1621
Water Absorption	0.05 gm/cc	<sup>2</sup> ASTM-C-1016
Compression Recovery @ 50%	95% minimum	ITP
Out-Gassing	None	<sup>3</sup> ITP
Temperature Range	-90°F to 210°F	—
Classification	Type 3	ASTM-D-249-92

<sup>2</sup>"Determination of water absorption by sealant (joint filler) materials." Prior to ASTM-C-509 standard applicable to gasket and sealing material no longer appropriate in evaluating "sealant (joint filler) materials." <sup>3</sup>Pending ASTM specification for sealant (joint filler) materials.

		_	
TAB	LE III		
SOFT TYPE I SIZE-TO-JC	BACKER ROD DINT WIDTH		BAC
Joint Width	Rod Diameter		AL
3/16" - 1/4" 3/8" - 1/2" 5/8" - 3/4" 3/4" - 7/8" 1" - 1-1/4" 1-1/4" - 1-1/2"	3/8" 5/8" 7/8" 1-1/8" 1-1/2" 2"	•	Standa Polyeth Sizes 1 Tundra Backer
1-1/2" - 2" 2" - 2-1/4" 3" - 3-3/4"	2-1/2" 3" 4"	•	Hot Ro Closed Sizes 3

As with all Soft Type Backer Rods, diameter should be approximately 25% larger than joint width.

#### **OTHER ITP** KUP MATERIALS SO AVAILABLE

TEST METHOD

- rd Closed-Cell ylene Foam Backer Rod. /4" to 6"
- Foam Open-Cell Rod. Sizes 3/8" to 2"
- d XL (Hot Pour) -Cell Backer Rod. /8" to 2"
- Tundra Foam Filler Packaged Closed Cell Backer Rod.

#### TABLE IV

#### **CARTON SIZES AND WEIGHTS** ......

Rod Diameter	Weight / Carton	Carton Measurement
3/8″	6 lbs.	18" x 18" x 15"
9mm	2.7 kgs.	458mm x 458mm x 381mm
5/8″ to 1-1/8″	11 lbs.	18″ x 18″ x 30″
15mm to 28mm	5.0 kgs.	458mm x 458mm x 762mm
1-1/2″ to 4″	14 lbs.	17" x 10" x 74"
38mm to 101mm	6.4 kgs.	432mm x 254mm x 1880mm

#### ALSO AVAILABLE FROM INDUSTRIAL THERMO POLYMERS

PIPE INSULATION SEALANT JOINT BACKER ROD NOODLES (WATER TOYS) CUSTOM PROFILES

#### ® REGISTERED TRADEMARKS OF INDUSTRIAL THERMO POLYMERS LTD.

#### **GUARANTEE / WARRANTY**

Industrial Thermo Polymers Limited believes the information and recommendations herein to be accurate and reliable and the products are reasonably fit for the applications mentioned. However, as uses, conditions and application methods are not within the sellers control, ITP does not guarantee nor warrant these products nor results from the use of these products or information given. It is therefore the responsibility of the buyer to determine the suitability of these products in applications intended and determine the appropriateness of the products. Sizes and lengths per spool are those at times of packaging and may vary with climatic conditions after manufacture.

Field applied butyl sealant in Met-Flush female rib (per mfg. requirements)

#### PRODUCT INFORMATION BULLETIN

# **PTI® 707 ARCHITECTURAL BUTYL SEALANT**

**BASIC USES:** This butyl sealant is recommended for use in metal-to-metal panel seals, perimeter seal around doors, windows, and masonry intersections; bedding for mullions, framed openings, and coping areas, curtain wall sealants, end dams and splice joints.

It is recommended for glazing of glass, heel and toe beading, and complete channel bedding.

PTI 707 has excellent adhesion to wood, metal, glass, concrete, and masonry surfaces. However, tests should be run on special finishes to determine suitability. Not recommended for extended water immersion or interior application.

# TECHNICAL DATA

BaseA specially processed combination of butyl rubber with highly age-resistant polymers.
Cure systemSolvent release
Cure time14 days at 75°F (20°C)
Tack-free time
% Solids
Elongation
Shore A Hardness
Durability (loss of bond test) 1.5 sq. in. maximum over 6 sq. in. total when tested against TT-S-001657
Application temperature
Service temperature
UV resistance
Max. joint movement accommodation
Shelf Life
Typical Life ExpectancyLong Life
Paint
LimitationsJoint size: Minimum 1/4" x 1/4" Maximum 1/2" x 1/2"

**COMPOSITION AND MATERIALS:** PTI 707 butyl sealant is uniquely formulated. It is a non-skinning elastomeric sealant with a balance of adhesion-cohesion characteristics that enables it to perform in areas where dynamic conditions exist. PTI 707 does not harden or lose flexibility, adhesion, or elongation after prolonged exposure to high or low temperatures and ultra-violet light. Total joint movements of 12-1/2% will not affect the water-tightness of PTI 707. Adhesion to special finishes should be tested for suitability.

**GRADE:** Gun-grade consistency.

**PACKAGING:** PTI 707 is stocked in standard 10.5 fl. oz. (310 ml.), 4" needle nose cartridges, 30 per case, and 5-gallon pails. Also available on special request in 55-gallon drums.

**COLORS:** White, gray, black, bronze, and natural.

**MAINTENANCE:** Not required. PTI 707 may be reapplied upon itself at any time providing the existing surface is clean.

**APPLICABLE STANDARDS:** Meet Federal Specification TT-S-001657, Canadian Specification 19 GPN, AAMA 808.3, and ASTM C-1085.



#### **Detail Index**

Page 1 P1 Panel Profile / Joint Combinations

Page 2 P2 Panel Stiffeners / Backer Options

Note: In the interest of paper conservation, we have limited the typical details in this binder to only include the STD joint configuration and the ISO backing system. Although the different systems are unique, the basic interface from Metposite panels to edge, base, parapet, windows and the corner configuration are similar for all our systems.

A complete library of details that includes all profile/joint combinations and stiffener/backer options is available for download or printing at www.metposite.com or by request at 503.981.5900.

Page 3 D1 Typical Horizontal Joint

Page 4 D2 Typical Vertical Joint

Page 5 D3 Typical Base Joint

Page 6 D4 Typical Parapet Coping Cap

Page 7 D5 Typical Edge Joint

Page 8 D6 Typical Window Head

Page 9 D9 Typical Outside Corner

Page 10 D10 Typical Inside Corner

Page 11 D11 Fascia to Soffit

Page 12 D12 Square Column













February 2009

**D4** 

TYPICAL PARAPET COPING CAP

Metposite STD



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Note: PDF and Word formatted downloads of this file are available at www.metposite.com

#### SECTION 07 42 13 – Preformed (Manufactured) Flat Wall Panel Systems

#### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

The work includes, but is not necessarily limited to, furnishing and installation of all preformed metal walls, and accessories as indicated on the drawings and specified herein.

#### **1.02 RELATED SECTIONS**

- A. Structural Steel Supports: Section 05100
- B. Structural Metal Roof and Floor Decking: Section 05300
- C. Miscellaneous Fabricated Steel: Section 05500
- D. Structural Lumber Supports: Section 06100
- E. Structural Glue Laminated Lumber Supports: Section 06181
- F. Thermal Insulation: Section 07200
- G. Fireproofing: Section 07250
- H. Sheet Metal Flashings and Trim Section 07600
- I. Joint Sealants not specified herein: Section 07900
- J. Finish Painting not specified herein: Section 09900

#### **1.03 PERFORMANCE REQUIREMENTS**

Panels that do not meet the following ASTM standards are not acceptable. Performance testing must be proprietary to manufacture's specific panel system.

- A. Testing and Certification
  - 1. Air Infiltration: Panel system to meet the following standard when tested in accordance with ASTM E 283-04
    - a. With recommended joint sealant: 0.00 CFM (No Leakage) at 6.24 psf.
  - 2. Water Penetration: Panel system to meet the following standard when tested in accordance with ASTM E 331-00

a. With recommended joint sealant: 0.00 CFM. (No Leakage) at15.0 psf.

- 3. Structural Performance: Individual panel meet the following standard when tested in accordance with ASTM E 72
  - a. Using recommended fastener configuration for maximum wind load (see manufacture's recommended fastener chart): average ultimate load (held for 1 minute) must exceed 115 lbs.
  - b. Manufacture must provide a transverse load table utilizing data attained from ASTM E 72 structural testing.
- 4. Fastener Pull Through: Panel steel and fasteners to meet the following standard when tested in accordance with ASTM E 1761a
  - a. Using the recommended fastener (#8 modified truss head / phillips wafer head screw) average pull through or screw failure must exceed 875lbs.
- 5. Metposite tm Core E-84 panels meet ASTM E-84 Flame spread 0 or less, Smoke development <5
- 6. Metposite tm Iso panels ASTM E84 Flame spread 25 or less, Smoke development <250
- 6. Zincalume<sup>®</sup> substrates ASTM A 792 and A250
- 7. Aluminum substrates meet ASTM B-209
- 8. Exterior finish includes a 0.2 mil thick corrosion-resistant primer and a 0.8 mil thick finish coat of polyvinylidine fluoride (PVF<sub>2</sub>), full 70% Kynar 500<sup>®</sup>/Hylar 5000<sup>®</sup> for a total 1.0 mil dry film thickness with a specular gloss of 10-15% when tested in accordance with ASTM D-523-89 at 60°.
- 9. Protective coating conforms to ASTM A792, AZ50 (Zincalume<sup>®</sup>).

#### 1.04 SUBMITTALS

A. Product Data

1. Submit manufacturer's technical product data, installation instructions and recommendations for each type of wall panel required. Include data substantiating that materials comply with requirements.

- B. Samples
  - 1. Prior to ordering products, submit manufacturer's standard color samples for architect's/engineer's selection.
  - 2. Prior to starting work, submit (quantity) 12 inch by 12 inch long panel samples showing shape and are representative color chip for architect's/engineer's acceptance.

#### C. Shop Drawings

1. Show panel layout, trim installation, and panel attachment.

#### **1.05 QUALITY ASSURANCE**

- A. Installer's Qualifications
  - 1. Installation of panels and accessories by installers with a minimum of 5 years experience.
  - 2. Applicator must be approved by panel manufacturer in writing.
- B. Manufacture's Qualifications
  - 1. Manufacturer shall have a minimum of 5 years experience supplying flat metal wall panels to the region where the work is to be done.
  - 2. Panel manufacturers without full supporting literature, flashings & details guides, guide specifications and technical support shall not be considered equal to the specified product.
- C. Regulatory Agency Requirements
  - 1. Comply with UBC and local building code requirements if more restrictive than those specified herein.

#### 1.06. PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Keep panels dry.
- B. Protect against damage and discoloration.
- C. Handle panels with non-marring slings.
- D. Do not bend panels.
- E, Store panels above ground, with one end elevated for drainage.
- F. Protect panels against standing water and condensation between adjacent surfaces.
- G. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.
- H. Remove all strippable film coating immediately after installation and do not allow it to remain on the panels in extreme cold, heat or in direct sunlight. (see manufacture's installation instructions)

#### **1.07 WARRANTY**

- A. Manufacture's Warranty
  - 1. Metposite LLC warrants its Metposite tm STD, STD-DRI-RS tm, Metflush tm and Metflush II tm (ISO, Pro-Form tm, PRO tm or Core E84 backed) panels to be free of manufactures faults and defects for a period of ( ) years, including materials manufacturer's 20-year paint warranty on painted products. (See sample warranty in manufacture's literature)
- B. Contractor's Warranty
  - 1. Warrant panels, flashings, sealants, fasteners and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for ( ) years following project substantial completion date.

#### **1.08 PROJECT CONDITIONS**

- A. Examine the condition and substrates in which metal panel work is to be installed. Substrate shall be installed level, flat and true to avoid panel stress.
- B. Field measurements shall be taken prior to fabrication of panels.
- C. Proceed with panel installation only after satisfactory conditions are met.

#### **PART 2 – PRODUCTS**

#### 2.01 ACCEPTABLE MANUFACTURER

- A. Metposite LLC PO Box 156, Hubbard, OR 97032 phone 503.981.5900 fax 503.981.5901 e-mail info@metposite.com
  - 1. Panel: Metposite tm STD and STD-DRI-RS flat-faced panel with fully bonded, weather resistant (ISO and Pro-Form tm) or repellent (PRO tm & Core E84) integral stiffener. Wet joint panel system.
  - 2. Panel: Met-Flush tm and Metflush II tm flat-faced panel with fully bonded, water resistant, weather resistant (ISO and Pro-Form tm) or repellent (PRO tm & Core E84) integral stiffener. With female/male leg receiver to form positive adjoining panel system.
  - 3. Typical vented Metposite tm STD, STD-DRI-RS tm, Met-Flush tm or Metflush II tm panels to be perforated with .125" holes spaced inline or staggered .25" on center apart. The pattern and percentage of surface area per design requirements. (Typical: Full face or 3" wide strips full length of panel.)

#### 2.02 MATERIALS

- A. Panels
  - 1. Base Metal:
    - a. Material
      - 1. Steel conforming to ASTM A792 Zincalume<sup>®</sup>, minimum yield 40,000 psi., thickness [*choose one*] 22 gauge (standard), 24, 20, gauge (non-standard).
      - 2. Panels are also available [*choose one*] .032, .040 (limited colors may apply), .050 aluminum with a Kynar  $500^{\text{®}}$  or anodized finish.
      - b. Protective Coating:
        - 1. Conform to ASTM A792, AZ50 (Zincalume<sup>®</sup>).
      - c. Fully bonded stiffener material
        - 1. ISO
        - 2. Pro-form
        - 2. PRO tm
        - 3. Metposite Core E-84
  - 2. Configuration.
    - General: Provide factory formed metal wall panels with integral stiffener designed to be mechanically attached to supports using concealed fasteners. Include accessories required for a concealed fastener water tight or rain screen application.
    - a. Flat faced wall panels: Formed with vertical & horizontal panel edges and flat pan between panel edges with flush joints between panels.
    - b. Water resistant closed cell foam stiffener (ISO or Pro-form) fully bonded to concealed side of panel
    - c. Water repellent stiffener (PRO or Core E-84) fully bonded to concealed side of panel
    - d. Bottom and top edges concealed fastener through panel flange.
    - e. Side edges butt panel to panel in concealed, continuous vertical drainage channel with joint sealer.
    - f. Panel coverage: refer to drawings for panel sizes
    - g. Panel depth [choose one] ISO 1" / Pro-form 1 3/8" / PRO 1" or 1/2", Core E-84 1" or 1/2"
  - 3. Exterior Finish: [choose one]
    - a. Zincalume<sup>®</sup> Plus or G-90 Galvanized
    - b. Exterior finish includes a 0.2 mil thick corrosion-resistant primer and a 0.8 mil thick finish coat of polyvinylidine fluoride (PVF<sub>2</sub>), full 70% Kynar 500<sup>®</sup>/Hylar 5000<sup>®</sup> for a total 1.0 mil dry film thickness with a specular gloss of 10-15% when tested in accordance with ASTM D-523-89 at 60°. supplied over Zincalume base metal alternate finishes.
    - c. DuraTech<sup>TM</sup> mx metallic finish, consisting of a baked-on acrylic primer (0.2 mil.) and a baked-on polyvinylidine fluoride finish coat (0.8 mil.) totaling a nominal 1.0 mil. dry film thickness
  - 4. Interior Finish:
    - a. Primer coat material: Corrosion-resistant primer; primer coat dry film thickness: 0.15 mils; finish coat material: polyester paint, finish coat dry film thickness: 0.35 mils.
    - b. Total interior dry film thickness: 0.50 mils.
    - c. Color: Off-White.
  - 5. Color: [choose one]
    - a. Manufacturer's standard selection of not less than 20 colors.
    - b. Custom color as selected by architect to be \_\_\_\_\_
  - B. Fabrication
    - 1. Panels shall be <u>factory formed</u>. Field formed or general shop formed panels are not acceptable. Provide profiles and sizes indicated in drawings.
    - 2. Form panel lines, breaks, and angles sharp and true, with surfaces free from warp and buckle.
    - 3. Fabricate panels to include integral fully bonded stiffeners required to maintain flat face surface fabrication tolerances and deflection limits.
    - 4. Provide panels with [choose one] smooth face, embossed.
  - C. Flashing
    - 1. Material and Finish: Match panels in base metal, color and gauge. Do not use lead or copper.
- D. Sealants
  - 1. Joint sealants and fillers per section 07900

#### **PART 3 – EXECUTION**

#### **3.01 EXAMINATION**

A. Existing Conditions

- 1. Inspect installed work of other trades and verify that such work is complete to a point where this work may continue.
- 2. Verify that installation may be made in accordance with approved shop drawings and manufacturer's instructions.

#### **3.02 PREPARATION**

- A. Field Measurements
  - 1. Verify prior to fabrication.
  - 2. If field measurements differ from drawing dimensions, notify architect/engineer prior to fabrication.
- B. Protection
  - 1. Treat, or isolate with protective material, and contacting surfaces of dissimilar materials to prevent electrolytic corrosion.
  - 2. Protect work of other trades against damage and discoloration.
- C. Surface Preparation
  - 1. Clean and dry surfaces prior to applying sealant.
  - 2. Install flashings and other sheet metal to comply with requirements of section 07600.

#### 3.03 INSTALLATION

#### A. Panels

- 1. Follow panel manufacturer's directions.
- 2. Do not stretch or compress panel side-laps.
- 3. Secure panels without warp or deflection.

B. Fasteners

1. Per manufacturer recommendation. (See transverse load requirements in performance requirements of this section.)

- C. Allowable Erection Tolerances
  - 1. Maximum alignment variation: 1/4 inch in 40 feet.
- D. Panel Joints
  - 1. Install joint fillers and sealants where indicated and where required for a water tight metal wall panel assembly..

E. Flashing

- 1. Follow manufacturer's directions and architect approved shop drawings.
- 2. Install flashings to allow for thermal movement.
- 3. Remove strippable protective film, if used, immediately preceding flashing installation.

#### D. Cutting and Fitting

- 1. Neat, square and true. Torch cutting is prohibited where cut is exposed to final view.
- 2. Openings 6 inches and larger in any direction: Fabricate and reinforce to maintain original load capacity.

#### 3.04 CLEAN UP AND CLOSE OUT

A. Panel Damage and Finish Scratches

- 1. Do not apply touch-up paint to damaged paint areas that involve minor scratches.
- 2. Panels or flashings that have severe paint and/or substrate damage shall be replaced as directed by the architect's or owner's representative.
- B. Cleaning and Repairing
  - 1. At completion of each day's work and at work completion, wipe clean removing dirt and dust. Do not allow fasteners, cuttings, filings or scraps to accumulate.
  - 2. Remove debris from project site upon work completion.

[End of Section]



#### Installation Instructions

#### **Receiving a shipment of Metposite panels**

1. Take utmost care in reviewing packaging and shipment for damage in shipment.

*Please Read*: Claims for freight shortages: All claims for shortages must be noted on the freight bill of lading at the time of delivery. Any claims for shortages not noted on the bill of lading will be denied. Contact Metposite within 24 hours of receiving goods for any freight claims or shortages. No claims for shortage or damage will be accepted beyond 24 hours.

- 2. Open shipment and verify proper color of panels.
- 3. Measure panels for proper size.

Using you bill of lading or original order, verify panel sizes

4. Once you have verified your shipment meets your requirements and is free of factory defect, shipment damage and is of proper size, you can now move to the installation.

#### Storage of Metposite panels prior to installation

5. <u>Important - Please Read</u>: Panels must be kept dry and out of direct sunlight until ready to install. Prolonged exposure to UV rays may compromise backing material. Failure to adhere to the above criteria could void product warranty Prolonged exposure to the elements can also cause damage to the panel's adhered backing system and vinyl protective covering. We recommend keeping the panels covered with an opaque heavy-duty waterproof tarp.

#### Preparing to install Metposite panels

 Metposite is shipped with a vinyl protective covering; <u>do not remove covering until</u> <u>product has been installed on building.</u> The only required removal of vinyl is to expose attachment leg of panel system prior to screw installation.



PEEL COVERING OFF OF LEGS LEAVE ON FACE

7. Verify substrate conditions, <u>it is important you install Metposite on a true flat</u> <u>surface</u>, verify substrate meets allowed tolerance for true surface application. In an application with the panels mounted directly over solid substrate, make sure there are no bumps or waves to wall condition. In an application with the panels mounted on zee, cee or hat channels, make sure the zee, cee or hat channels are correctly aligned for proper panel compression, screw attachment and joint sealing conditions.

503.981.5900 FAX 503.981.5901

#### **Installing Metposite panels**

*Important*: All installers must be pre-approved by Metposite before installing this product. If you are not an approved Metposite installer, please contact us for information on getting approved. (Contact information located at bottom of this page)

- 8. Place a panel in its proper location, level the panel and make sure it has proper reveal on each side.
- 9. Install screws into wall or standoffs. (Size and type of screw will vary depending on your project condition requirements. Please refer to blueprint or specification to verify correct fasteners)
- 10. After securing the panel, stand back from surface, verify panel is plumb, level, and that edge reveal is correct.
- 11. Once above inspections have been made you may remove the vinyl protective covering.

#### Sealing joints

- 12. Metposite recommends you have a professional do your panel sealing for you, this is a critical aspect of the complete Metposite system.
  - A. There are many factors that need considering for this portion of the installation; weather conditions, material type and wall types (example: cmu, brick, wood etc).
  - B. If you are going to install your joint sealing yourself, refer to the manufacture's joint sealing installation instructions (Enclosed in this packet).
  - C. <u>Note! Metposite does not warrant joint sealing of your project.</u> We recommend a professional do your joint sealing so that contractor can carry the warranty for you.
- 13. For flashing requirements of your project, please refer to the standard details (available on line at <u>www.metposite.com</u> or by request at 503.981.5900)

Flashing details are only guidelines; your project conditions may require a professional for detail conditions. We recommend you consult a professional sheet metal contractor, architect or engineer before designing flashing to complement your quality Metposite system.

#### Thank you for choosing Metposite as your quality alternative flat wall panel system.

If you have questions or need future assistance, please contact us at: 503.981.5900 fax 503.981.5901 e-mail info@metposite.com



#### 503.981.5900 Fax 503.981.5901 sales@metposite.com

PO Box 156, Hubbard, Oregon 97032



**Please indicate whether the dimensions below represent the size of the opening in which the panel(s) are to be installed or size of the actual panel face.** Typical joint spacing is 1/2". Please contact your Metposite project engineer for more information on tolerances and recommended clearances. Take extreme care to your measurements correct. Metposite is not responsible for unusable panels due to incorrect measurements.

Panel ID	A Face	A-2 Face Corner panel only	B Face	B-2 Face Corner panel only	C Thick	Quanity	Notes: indicate if panel is an inside/outside corner and any other information unique to panel.
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#### Policies, Terms and Conditions

#### Quotes:

Qualified contractors may obtain written quotes by phoning Metposite at 503-981.5900. Material must ship by expiration date on quote for pricing to apply.

Quote will be unit priced based on quantities and panel sizes provided by customer.

Invoices will be based on actual quantities shipped. Quotes for custom colors subject to minimum quantities.

#### Orders:

All orders must be in writing. Fax orders to 503-981.5901 Final quantities and panel layouts are the responsibility of the buyer. Freight charges will be added to all shipped orders. Buyers are welcome to will call product at Metposite location. Buyer signs off and accepts responsibility for ordering correct quantities, color and sizes

Buyer signs off and accepts responsibility for ordering correct quantities, color and sizes to meet project specifications.

#### **Credit Terms:**

Materials deposits are required on all orders before production, unless other prior arraignments have been approved. (In some case may also include joint check, prepayment, C.O.D, or net terms)

All invoices are net 30.

Buyers are required to submit a credit application by fax to 503-981.5901 All orders in excess of \$2500 will require buyer to provide legal job pre-lien information and a joint check agreement signed by the General contractor.

Past due invoices will be assessed a finance charge at the rate of 1.5% per month.

#### Claims for freight shortages:

All claims for shortages must be noted on the freight bill of lading at the time of delivery. Any claims for shortages not noted on the bill of lading will be denied. Contact Metposite within 24 hours of receiving goods for any freight claims or shortages. No claims for shortage or damage will be accepted beyond 24 hours.

#### Claims for product defect:

Applicable warranties for paint finish and corrosion resistance are passed through from the mill supplying the material. Such warranty documents will be furnished after the final invoices for a project are paid in full. Metposite warrants all materials to be free of factory defects for a period of one year. No other warranties express or implied.

#### **Return Policy:**

Because Metposite panels are custom formed for specific projects THERE SHALL BE NO RETURNS OF FINISHED PRODUCT ACCEPTED.

503.981.5900 FAX 503.981.5901