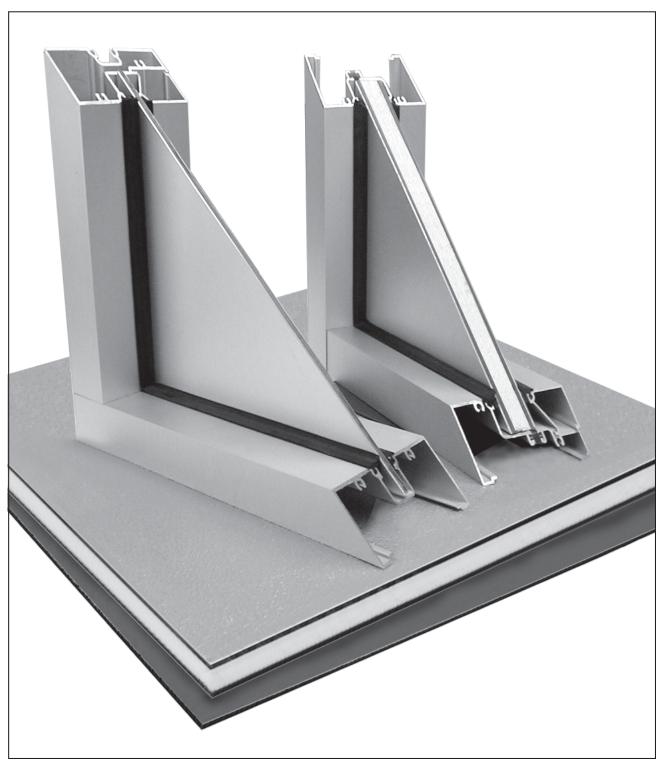




PRODUCT MANUAL

Rev. (11/06)



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Table Of Contents

PRODUCT DATA SHEET

Panel & System Description
Basic Uses & Applications
Composition & Materials
Panel Weight & Thickness
Material Tolerances
Sizes Available
General Limitations

INSTALLATION GUIDELINES

Pre-Installation Guidelines

Material Receiving & Inventory

Transporting & Handling

Storing The Material Units

General Work

Limitations Of The Panel System Fabrication Of The Panels The Protective Film

Work Sequence Maintenance Of The Panel Finish

GUIDE SPECIFICATION

STANDARD WARRANTY

CUSTOMER SERVICE & TECHNICAL ASSISTANCE

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226 phone: (317) 894-9400

(800) 446-8828 fax: (317) 894-6333

(800) 247-2635

www.citadelap.com info@citadelap.com

Call (800) 446-8828 or visit www.citadelap.com for downloads!...

SAMPLES & LITERATURE:

Product or color samples, as well as additional literature may be obtained by contacting our sample department.

BINDER ON CD:

Our complete binder is available on CD in an easy-to-use .pdf format. Also included are Guide Specifications in MicroSoft® Word® (.doc) and NotePad (.txt) formats as well as Typical Details in AutoCAD® drawing format (.dwg).

Product Data Sheet

PRODUCT NAME:

GlazeGuard® 250 Opaque Glazing Panels

MANUFACTURER:

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226

phone: (317) 894-9400 (800) 446-8828

fax: (317) 894-6333

(800) 247-2635 web: www.citadelap.com email: info@citadelap.com

PANEL & SYSTEM DESCRIPTION

OVERVIEW:

GlazeGuard® 250 is a composite panel made by laminating either textured or smooth aluminum skins (or porcelain enamel steel) to a tempered hardboard substrate.

Panels are furnished with a strippable film (or interleafed microfoam) on the painted surfaces to protect the finish during shipment and installation.

GlazeGuard® 250 is installed in aluminum glazing/storefront channels (typically on setting blocks) and sealed using gaskets. No mechanical fasteners or adhesives are used in the installation of the panel.

BASIC USES & APPLICATIONS:

As an alternative or complement to glass, GlazeGuard® panels provide an excellent choice for use as glazing infill, spandrel panels, modesty screens, and railing inserts.

These panels are typically used on various types of buildings including schools and universities, retail complexes, storefront conditions etc... However, with an impact resistant core, GlazeGuard® 250 panels are ideal for any other application where durability and safety are concerns.

GENERAL LIMITATIONS:

GlazeGuard® panels are designed to be installed in glazing channels or other similar type channels where all

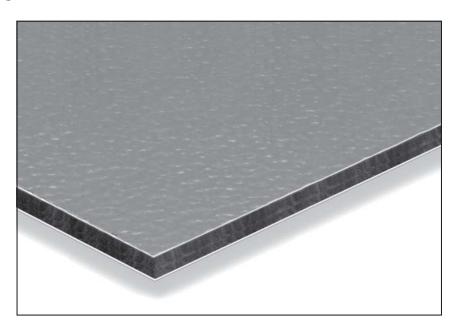


TABLE 1. COMPOSITION & MATERIALS1:

| Component | Standard (in) | Metric (mm) |
|--|---------------------------------------|--------------------------------------|
| Prefinished Textured Aluminum Skins (or) Prefinished Smooth Aluminum Skins (or) Porcelain Enamel Steel Skins Tempered Hardboard Core | .010" .024" (min) 28ga 3/16" | .254mm .609mm .390mm 4.76mm |

¹ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a line of glazing infill solutions, GlazeGuard® offers a number of benefits to the building owner, architect, and installer including:

Versatile

With a complete line of options, GlazeGuard® panels offer solutions for water and fire resistant compositions in addition to the standard panel.

Durable

Whether installed in new or retrofit applications, the tempered hard-board core provides superior impact and dent resistance.

Low Maintenance

Little or no maintenance is required and most grease, dirt, oil and other foreign material can be easily cleaned from the surface using mild detergents.

Variety Of Finish Options

GlazeGuard® panels are available in a wide range of colors and finishes. From solid tones in textured aluminum and porcelain enamel steel to metallic and anodized finishes in smooth skins, these panels provide the designer with a broad palette to work from.

• Economical Alternative

With several different compositions and finish options, GlazeGuard® can provide an economical alternative to other glazing solutions while still providing aesthetic interest and value.

four edges are sealed. The panels are not eligible for use as a wall cladding or system. No moldings are available with GlazeGuard® panels.

SYSTEM FINISHES:

GlazeGuard® 250 panels are available with either smooth or textured prefinished aluminum or porcelain enamel steel skins.

Standard colors in textured skins are offered with a coil coated polyester. Premium colors are also available with an acrylic urethane coating.

Smooth standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are also standard.

Whether smooth or textured, both finishes can be ordered in custom colors to match customers' standard.

Porcelain enamel steel is available in both standard and premium colors.

TABLE 2. PANEL WEIGHT & THICKNESS:

| Component | Standard (in) | Metric (mm) |
|-------------------|---------------|-------------|
| Panel Weight¹ | 1.40 lbs/ft² | 6.83 kg/m² |
| Nominal Thickness | 1/4" | 6mm |

TABLE 3. PANEL PERFORMANCE:

| Property | Test | Value | Unit |
|---|--|--|---|
| R-Value Flame Spread Stiffness (EI) ¹ Allowable Bending Moment ¹ Tensile Yield ¹ Ultimate Tensile ¹ | ASTM E84 ASTM E72 ASTM E72 ASTM E72 ASTM E72 | 0.5 Class A 2.36 ^{E+4} 2.96 ^{E+1} 6.24 ^{E+3} 8.16 ^{E+3} | °F ft²/BTU Ib-in²/ft width Ib-ft/ft width Ib/ft width |

¹ Weight and testing based upon panels using an .010" textured face skin and an .010" textured back skin.

MATERIAL TOLERANCES:

Thickness: ±1/32" (±0.79mm)

Length Dim: +0, -1/8" (+0, -3.18mm)

Width Dim: +0, -1/8" (+0, -3.18mm)

Squareness: 1/64" (0.4mm) per lineal foot

GlazeGuard® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Textured: Coil Coated

Polyester

Custom Textured: Spray Applied

Acrylic Urethane

Standard Smooth: Coil Coated

Kynar 500[®] (or) Porcelain Enamel Steel

Custom Smooth: Spray Applied

Kynar 500®

STANDARD WARRANTY:

Panel Warranty: 5 Years Polyester/Acrylic 5 Years

Finish: No change greater

than 6 for chalk, 8 E units for fade

Kynar 500[®] Finish: 20 Years

No change greater than 8 for chalk,

5 E units for fade Anodized Finish: 20 Years (prorated)

Porcelain Steel: 20 Years

No chalk

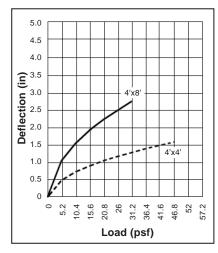
No change greater than 5 E units for fade

SIZES AVAILABLE:

| 48" x 96" | (1219mm x 2438mm) |
|------------|-------------------|
| 48" x 120" | (1219mm x 3048mm) |
| 48" x 144" | (1219mm x 3658mm) |
| 60" x 96" | (1524mm x 2438mm) |
| 60" x 120" | (1524mm x 3048mm) |
| 60" x 144" | (1524mm x 3658mm) |

Cut-to-size panels are also available in virtually any size up to 60" x 144".

LOAD DEFLECTION1:



¹ Panel tested while supported on four sides.

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Product Data Sheet

PRODUCT NAME:

GlazeGuard® 250 WR Water Resistant Opaque Glazing Panels

MANUFACTURER:

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226

phone: (317) 894-9400 (800) 446-8828

fax: (317) 894-6333

(800) 247-2635 web: www.citadelap.com email: info@citadelap.com

PANEL & SYSTEM DESCRIPTION

OVERVIEW:

GlazeGuard® 250 WR is a composite panel made by laminating either textured or smooth aluminum skins to a high density polypropylene core.

Panels are furnished with a strippable film (or interleafed microfoam) on the painted surfaces to protect the finish during shipment and installation.

GlazeGuard® 250 WR is installed in aluminum glazing/storefront channels (typically on setting blocks) and sealed using gaskets. No mechanical fasteners or adhesives are used in the installation of the panel.

BASIC USES & APPLICATIONS:

As an alternative or complement to glass, GlazeGuard® panels provide an excellent choice for use as glazing infill, spandrel panels, modesty screens, and railing inserts.

These panels are typically used on various types of buildings including schools and universities, retail complexes, storefront conditions etc... However, with a water resistant composition and a variety of finish options, GlazeGuard® 250 WR panels are ideal for other applications such as areas where moisture intrusion is a key concern.

GENERAL LIMITATIONS:

GlazeGuard® panels are designed to be installed in glazing channels

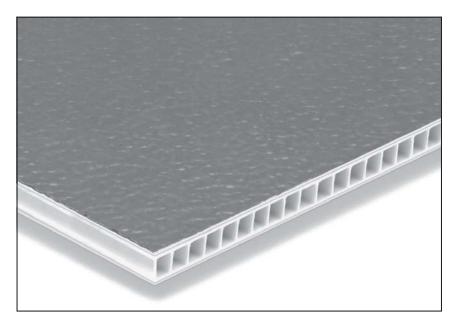


TABLE 1. COMPOSITION & MATERIALS1:

| Component | Standard (in) | Metric (mm) |
|--|------------------------------|----------------------------|
| Prefinished Textured Aluminum Skins (or) Prefinished Smooth Aluminum Skins High Density Polypropylene Core | .010" .024" (min) 1/4" | .254mm .609mm 6.00mm |

¹ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a line of glazing infill solutions, GlazeGuard® offers a number of benefits to the building owner, architect, and installer including:

Versatile

With a complete line of options, GlazeGuard® panels offer solutions for water and fire resistant compositions in addition to the standard panel.

Water Resistant

An innovative polypropylene core makes GlazeGuard® 250 WR panels virtually unaffected by any incidental moisture intrusion which may occur in a typical glazing system.

Low Maintenance

Little or no maintenance is required and most grease, dirt, oil, and other foreign material can be easily cleaned from the surface.

Variety Of Finish Options

GlazeGuard® panels are available in a wide range of colors and finishes. From solid tones in textured aluminum to metallic and anodized finishes in smooth skins, these panels provide the designer with a broad palette to work from.

• Economical Alternative

With several different compositions and finish options, GlazeGuard® can provide an economical alternative to other glazing solutions while still providing aesthetic interest and value.

or other similar type channels where all four edges are sealed. These panels are not eligible for use as a wall cladding and should not be used in low grade areas with heavy traffic. No moldings are available with GlazeGuard® panels.

SYSTEM FINISHES:

GlazeGuard® 250 WR panels are available with either smooth or textured prefinished aluminum.

Standard colors in textured skins are offered with a coil coated polyester. Premium colors are also available with an acrylic urethane coating.

Smooth standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are also standard.

Whether smooth or textured, both finishes can be ordered in custom colors to match customers' standard.

TABLE 2. PANEL WEIGHT & THICKNESS:

| Component | Standard | Metric |
|-------------------|--------------|------------|
| Panel Weight¹ | 0.72 lbs/ft² | 3.51 kg/m² |
| Nominal Thickness | 1/4" | 6mm |

TABLE 3. PANEL PERFORMANCE:

| Property | Test | Value | Unit |
|---|--|---|---|
| R-Value Flame Spread Stiffness (EI) ¹ Allowable Bending Moment ¹ Tensile Yield ¹ Ultimate Tensile ¹ | ASTM E84 ASTM E72 ASTM E72 ASTM E72 ASTM E72 | 1.32 Class A 3.68 ^{E+4} 3.72 ^{E+1} 6.24 ^{E+3} 8.16 ^{E+3} | °F ft²/BTU Ib-in²/ft width Ib-ft/ft width Ib/ft width Ib/ft width |

¹ Weight and testing based upon panels using an .010" textured face skin and an .010" textured back skin.

MATERIAL TOLERANCES:

Thickness: ±1/32" (±0.79mm) Length Dim: +0, -1/8" (+0, -3.18mm) Width Dim: +0, -1/8" (+0, -3.18mm) Squareness: 1/64" (0.4mm) per lineal foot

GlazeGuard® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Textured: Coil Coated

Polyester

Custom Textured: Spray Applied

Acrylic Urethane

Standard Smooth: Coil Coated

Kynar 500®

Custom Smooth: Spray Applied

Kynar 500®

STANDARD WARRANTY:

Panel Warranty: 5 Years
Polyester/Acrylic 5 Years

Finish: No change greater

than 6 for chalk, 8 E units for fade

Kynar 500® Finish: 20 Years

No change greater than 8 for chalk.

5 E units for fade

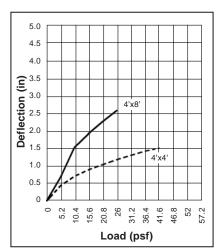
Anodized Finish: 20 Years (prorated)

SIZES AVAILABLE:

| 48" x 96" | (1219mm x 2438mm) |
|------------|-------------------|
| 48" x 120" | (1219mm x 3048mm) |
| 48" x 144" | (1219mm x 3658mm) |
| 60" x 96" | (1524mm x 2438mm) |
| 60" x 120" | (1524mm x 3048mm) |
| 60" x 144" | (1524mm x 3658mm) |

Cut-to-size panels are also available in virtually any size up to 60" x 144".

LOAD DEFLECTION1:



¹ Panel tested while supported on four sides.

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Product Data Sheet

PRODUCT NAME:

GlazeGuard® 1000 Opaque Glazing Panels

MANUFACTURER:

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226 phone: (317) 894-9400

(800) 446-8828 fax: (317) 894-6333

(800) 247-2635 web: www.citadelap.com email: info@citadelap.com

PANEL & SYSTEM DESCRIPTION

OVERVIEW:

GlazeGuard® 1000 is a composite panel made by laminating either textured or smooth aluminum skins (or porcelain enamel steel) to tempered hardboard substrates. These stabilizers surround a core of expanded polystyrene or polyisocyanurate foam.

Panels are furnished with a strippable film (or interleafed microfoam) on the painted surfaces to protect the finish during shipment and installation.

GlazeGuard® 1000 is installed in aluminum glazing/storefront channels (typically on setting blocks) and sealed using gaskets. No mechanical fasteners or adhesives are used in the installation of the panel.

BASIC USES & APPLICATIONS:

As an alternative or complement to glass, GlazeGuard® panels provide an excellent choice for use as glazing infill, spandrel panels, modesty screens, and railing inserts.

These panels are typically used on various types of buildings including schools and universities, retail complexes, storefront conditions etc... However, with an impact resistant composition and a foam core GlazeGuard® 1000 panels are ideal for any other application where increased thermal properties, durability and safety are concerns.

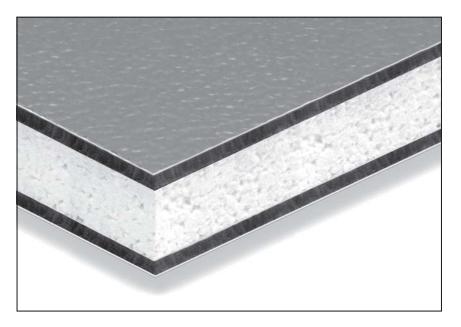


TABLE 1. COMPOSITION & MATERIALS1:

| Component | Standard (in) | Metric (mm) |
|--|--|--|
| Prefinished Textured Aluminum Skins (or) Prefinished Smooth Aluminum Skins (or) Porcelain Enamel Steel Skins Tempered Hardboard Stabilizers Expanded Polystyrene Foam (EPS) Core (or) Polyisocyanurate Foam (ISO) Core | .010" .024" (min) 28ga 1/8" 21/32" 21/32" | .254mm .609mm .390mm 3.18mm 16.6mm |

¹ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a line of glazing infill solutions, GlazeGuard® offers a number of benefits to the building owner, architect, and installer including:

Versatile

With a complete line of options, GlazeGuard® panels offer solutions for water and fire resistant compositions in addition to the standard panel.

Durable

Whether installed in new or retrofit applications, the tempered hard-board stabilizers provide superior impact and dent resistance.

Low Maintenance

Little or no maintenance is required and most grease, dirt, oil, and other foreign material can be easily cleaned from the surface.

• Increased Thermal Value

When compared to glass, GlazeGuard® offers an attractive alternative with increased R-values gained from panels 1" to 3-1/2" thick.

Variety Of Finish Options

GlazeGuard® panels are available in a wide range of colors and finishes. From solid tones in textured aluminum and porcelain enamel steel to metallic and anodized finishes in smooth skins, these panels provide the designer with a broad palette to work from.

GENERAL LIMITATIONS:

GlazeGuard® panels are designed to be installed in glazing channels or other similar type channels where all four edges are sealed. The panels are not eligible for use as a wall cladding or system. No moldings are available with GlazeGuard® panels.

SYSTEM FINISHES:

GlazeGuard® 1000 panels are available with either smooth or textured prefinished aluminum or porcelain enamel steel skins.

Standard colors in textured skins are offered with a coil coated polyester. Premium colors are also available with an acrylic urethane coating.

Smooth standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are also standard.

Whether smooth or textured, both finishes can be ordered in custom colors to match customers' standard.

Porcelain enamel steel is available in both standard and premium colors.

TABLE 2. PANEL WEIGHT & THICKNESS:

| Component | Standard | Metric |
|---------------------------|--------------|------------|
| Panel Weight ¹ | 2.08 lbs/ft² | 10.2 kg/m² |
| Nominal Thickness | 1" | 25mm |

TABLE 3. PANEL PERFORMANCE:

| Property | Test | Value (EPS) | Value (ISO) | Unit |
|-------------------------------|----------|---------------------|-------------|-----------------|
| R-Value | | 4.6 | 6.0 | °F ft²/BTU |
| Flame Spread | ASTM E84 | Class B | Class A | |
| Stiffness (EI) ¹ | ASTM E72 | 8.69 ^{E+5} | | lb-in²/ft width |
| Allowable Bending | ASTM E72 | 1.87 ^{E+2} | | lb-ft/ft width |
| Moment ¹ | 40714570 | 0.045.2 | | He /ft t ettle |
| Tensile Yield ¹ | ASTM E72 | 6.24 ^{E+3} | | lb/ft width |
| Ultimate Tensile ¹ | ASTM E72 | 8.16 ^{E+3} | | lb/ft width |

¹ Weight and testing based upon panels using an .010" textured face skin and an .010" textured back skin.

MATERIAL TOLERANCES:

Thickness: ±1/32" (±0.79mm) Length Dim: +0, -1/8" (+0, -3.18mm) Width Dim: +0, -1/8" (+0, -3.18mm) Squareness: 1/64" (0.4mm) per

lineal foot

GlazeGuard® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Textured: Coil Coated

Polyester

Custom Textured: Spray Applied

Acrylic Urethane

Standard Smooth: Coil Coated

Kynar 500® (or) Porcelain

Enamel Steel

Custom Smooth: Spray Applied

Kynar 500®

STANDARD WARRANTY:

Panel Warranty: 5 Years Polyester/Acrylic 5 Years

Finish: No change greater

than 6 for chalk, 8 E units for fade

Kynar 500® Finish: 20 Years

No change greater than 8 for chalk,

5 E units for fade

Anodized Finish: 20 Years (prorated)

Porcelain Steel: 20 Years

No chalk

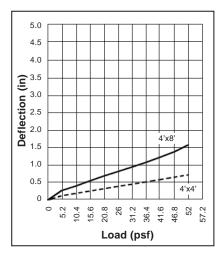
No change greater than 5 E units for fade

SIZES AVAILABLE:

| 48" x 96" | (1219mm x 2438mm) |
|------------|-------------------|
| 48" x 120" | (1219mm x 3048mm) |
| 48" x 144" | (1219mm x 3658mm) |
| 60" x 96" | (1524mm x 2438mm) |
| 60" x 120" | (1524mm x 3048mm) |
| 60" x 144" | (1524mm x 3658mm) |

Cut-to-size panels are also available in virtually any size up to 60" x 144".

LOAD DEFLECTION1:



¹ Panel tested while supported on four sides.

Product Data Sheet

PRODUCT NAME:

GlazeGuard®1000 WR Water Resistant Opaque Glazing Panels

MANUFACTURER:

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226

phone: (317) 894-9400 (800) 446-8828

fax: (317) 894-6333

(800) 247-2635 web: www.citadelap.com email: info@citadelap.com

PANEL & SYSTEM DESCRIPTION

OVERVIEW:

GlazeGuard® 1000 WR is a composite panel made by laminating either textured or smooth aluminum skins to high density polypropylene stabilizers. These plastic stabilizers surround a core of expanded polystyrene or polyisocyanurate foam.

Panels are furnished with a strippable film (or interleafed microfoam) on the painted surfaces to protect the finish during shipment and installation.

GlazeGuard® 1000 WR is installed in aluminum glazing/storefront channels (typically on setting blocks) and sealed using gaskets. No mechanical fasteners or adhesives are used in the installation of the panel.

BASIC USES & APPLICATIONS:

As an alternative or complement to glass, GlazeGuard® panels provide an excellent choice for use as glazing infill, spandrel panels, modesty screens, and railing inserts.

These panels are typically used on various types of buildings including schools and universities, retail complexes, storefront conditions etc... However, with a water resistant composition and a foam core, GlazeGuard® 1000 WR panels are ideal for other applications where increased thermal properties are desired and incidental moisture intrusion may be possible.



TABLE 1. COMPOSITION & MATERIALS1:

| Component | Standard (in) | Metric (mm) |
|--|---|--------------------------------------|
| Prefinished Textured Aluminum Skins (or) Prefinished Smooth Aluminum Skins High Density Polypropylene Stabilizers Expanded Polystyrene Foam (EPS) Core (or) Polyisocyanurate Foam (ISO) Core | .010" .024" (min) 5/32" 5/8" 5/8" | .254mm .609mm 4.00mm 15.9mm |

 $^{^{1}}$ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a line of glazing infill solutions, GlazeGuard® offers a number of benefits to the building owner, architect, and installer including:

Versatile

GlazeGuard® panels offer solutions for water and fire resistant compositions in addition to the standard panel.

Water Resistant

Innovative polypropylene stabilizers make GlazeGuard® WR panels virtually unaffected by incidental moisture intrusion which may occur.

Low Maintenance

Little or no maintenance is required and most grease, dirt, oil, and other foreign material can be easily cleaned from the surface.

Variety Of Finish Options

GlazeGuard® panels are available in a wide range of colors and finishes. From solid tones in textured aluminum to metallic and anodized finishes in smooth skins, these panels provide the designer with a broad palette to work from.

• Economical Alternative

With several different compositions and finish options, GlazeGuard® can provide an economical alternative to other glazing solutions while still providing aesthetic interest and value.

GlazeGuard®

GENERAL LIMITATIONS:

GlazeGuard® panels are designed to be installed in glazing channels or other similar type channels where all four edges are sealed. The panels are not eligible for use as a wall cladding or system. No moldings are available with GlazeGuard® panels.

SYSTEM FINISHES:

GlazeGuard® 1000 WR panels are available with either smooth or textured prefinished aluminum skins.

Standard colors in textured skins are offered with a coil coated polyester. Premium colors are also available with an acrylic urethane coating.

Smooth standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are also standard.

Whether smooth or textured, both finishes can be ordered in custom colors to match customers' standard.

TABLE 2. PANEL WEIGHT & THICKNESS:

| Component | Standard | Metric |
|---------------------------|--------------|------------|
| Panel Weight ¹ | 1.05 lbs/ft² | 5.12 kg/m² |
| Nominal Thickness | 1" | 25mm |

¹ Panel weight based upon an .010" textured face skin and an .010" textured back skin.

TABLE 3. PANEL PERFORMANCE:

| Property | Test | Value (EPS) | Value (ISO) | Unit |
|--------------|----------|-------------|-------------|------------|
| R-Value | | 4.08 | 5.85 | °F ft²/BTU |
| Flame Spread | ASTM E84 | Class A | Class A | |

MATERIAL TOLERANCES:

 $\begin{array}{lll} \mbox{Thickness:} & \pm 1/32" \ (\pm 0.79 mm) \\ \mbox{Length Dim:} & +0, -1/8" \ (+0, -3.18 mm) \\ \mbox{Width Dim:} & +0, -1/8" \ (+0, -3.18 mm) \\ \mbox{Squareness:} & 1/64" \ (0.4 mm) \ \mbox{per} \\ \mbox{lineal foot} \\ \end{array}$

GlazeGuard® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Textured: Coil Coated

Polyester

Custom Textured: Spray Applied

Acrylic Urethane

Standard Smooth: Coil Coated

Kynar 500®

Custom Smooth: Spray Applied

Kynar 500®

SIZES AVAILABLE:

48" x 96" (1219mm x 2438mm) 48" x 120" (1219mm x 3048mm) 48" x 144" (1219mm x 3658mm) 60" x 96" (1524mm x 2438mm) 60" x 120" (1524mm x 3048mm) 60" x 144" (1524mm x 3658mm)

Cut-to-size panels are also available in virtually any size up to 60" x 144".

STANDARD WARRANTY:

Panel Warranty: 5 Years Polyester/Acrylic 5 Years

Finish: No change greater

than 6 for chalk, 8 E units for fade

Kynar 500[®] Finish: 20 Years

No change greater than 8 for chalk, 5 E units for fade

Anodized Finish: 20 Years (prorated)

Product Data Sheet

PRODUCT NAME:

GlazeGuard® 1000 FR Fire Resistant Opaque Glazing Panels

MANUFACTURER:

Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226 phone: (317) 894-9400

onone: (317) 894-9400 (800) 446-8828

fax: (317) 894-6333

(800) 247-2635 web: www.citadelap.com email: info@citadelap.com

PANEL & SYSTEM DESCRIPTION

OVERVIEW:

GlazeGuard®1000 FR is a composite panel made by laminating either textured or smooth aluminum skins (or porcelain enamel steel) to a tempered hardboard stabilizer. This stabilizer, along with a Type-X gypsum board, surround a core of polyisocyanurate foam.

Panels are furnished with a strippable film (or interleafed microfoam) on the painted surfaces to protect the finish during shipment and installation.

GlazeGuard®1000 FR is installed in aluminum glazing/storefront channels (typically on setting blocks) and sealed using gaskets. No mechanical fasteners or adhesives are used in the installation of the panel.

BASIC USES & APPLICATIONS:

As an alternative or complement to glass, GlazeGuard® panels provide an excellent choice for use as glazing infill, spandrel panels, modesty screens/door light panels, and railing inserts. These panels are typically used on various types of buildings including schools and universities, retail complexes. storefront conditions etc... However, with a fire resistant composition, an impact resistant stabilizer, and a foam core, GlazeGuard®1000 FR panels are ideal for any other application where increased thermal properties, durability, and safety are concerns.

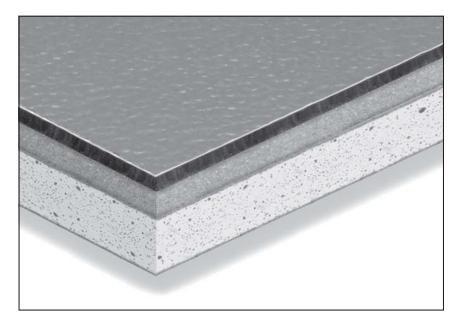


TABLE 1. COMPOSITION & MATERIALS1:

| Component | Standard (in) | Metric (mm) |
|--|---|--|
| Prefinished Textured Aluminum Skins² (or) Prefinished Smooth Aluminum Skins (or) Porcelain Enamel Steel Skins² Tempered Hardboard Stabilizer Polyisocyanurate Foam (ISO) Core Type-X Exterior Grade Gypsum Board | .010" .024" (min) 28ga 1/8" 3/16" 5/8" | .254mm .609mm .390mm 3.18mm 4.76mm 15.9mm |

¹ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a line of glazing infill solutions, GlazeGuard® offers a number of benefits to the building owner, architect, and installer including:

Fire Resistant

A Type-X gypsum board provides additional fire resistance for areas with more stringent requirements (i.e. educational facilities, etc.).

Low Maintenance

Little or no maintenance is required and most grease, dirt, oil, and other foreign material can be easily cleaned from the surface.

Durable

Whether installed in new or retrofit applications, the tempered hard-board stabilizer provides superior impact and dent resistance.

Versatile

With a complete line of options, GlazeGuard® panels offer solutions for water and fire resistant compositions in addition to the standard panel.

• Variety Of Finish Options GlazeGuard® panels are available in a wide range of colors and finishes. From solid tones in textured aluminum and porcelain enamel steel to metallic and anodized finishes in smooth skins, these panels provide the designer

with a broad palette to work from.

² Textured and porcelain skins available on face only. Backer must be .024" smooth aluminum.

GlazeGuard®

GENERAL LIMITATIONS:

GlazeGuard® panels are designed to be installed in glazing channels or other similar channels where all four edges are sealed. The panels are not eligible for use as a wall cladding or system. No moldings are available for use with GlazeGuard® panels.

SYSTEM FINISHES:

GlazeGuard® 1000 FR panels are available with either smooth or textured prefinished aluminum or porcelain enamel steel skins.

Standard colors in textured skins are offered with a coil coated polyester. Premium colors are also available with an acrylic urethane coating.

Smooth standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are also standard.

Whether smooth or textured, both finishes can be ordered in custom colors to match customers' standard.

Porcelain enamel steel is available in both standard and premium colors.

TABLE 2. PANEL WEIGHT & THICKNESS:

| Component | Standard | Metric |
|---------------------------|--------------|------------|
| Panel Weight ¹ | 3.78 lbs/ft² | 18.5 kg/m² |
| Nominal Thickness | 1" | 25mm |

¹ Panel weight based upon an .010" textured face skin and an .024" smooth back skin.

TABLE 3. PANEL PERFORMANCE:

| Property | Test | Value | Unit |
|--------------|----------|---------|------------|
| R-Value | | 2.19 | °F ft²/BTU |
| Flame Spread | ASTM E84 | Class A | |

MATERIAL TOLERANCES:

Thickness: ±1/32" (±0.79mm) +0, -3/16" (+0, -4.76mm) Length Dim: Width Dim: +0, -3/16" (+0, -4.76mm) 1/64" (0.4mm) per Squareness:

lineal foot

GlazeGuard® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Textured: Coil Coated

Polyester

Custom Textured: Spray Applied

Acrylic Urethane

Standard Smooth: Coil Coated

Kynar 500® (or) Porcelain

Spray Applied

Custom Smooth: Kynar 500®

Enamel Steel

| Olass A | |
|-----------------|----|
| | |
| SIZES AVAII ABI | F: |

48" x 96" (1219mm x 2438mm) 48" x 120" (1219mm x 3048mm) (1219mm x 3658mm) 48" x 144"

Cut-to-size panels are also available in virtually any size up to 48" x 144".

STANDARD WARRANTY:

Panel Warranty: 5 Years Polyester/Acrylic: 5 Years

> No change greater than 6 for chalk, 8 E units for fade

Kynar 500® Finish: 20 Years

No change greater than 8 for chalk, 5 E units for fade 20 Years (prorated)

Porcelain Steel: 20 Years

Anodized Finish:

No chalk

No change greater than 5 E units for fade

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Installation Guidelines



WARNING: FAILURE TO FOLLOW THESE GUIDELINES WILL VOID THE STANDARD WARRANTY.



BE SURE TO READ, UNDERSTAND AND FOLLOW ALL GUIDELINES. Manufacturer guidelines may vary depending upon specific application and project conditions. The manufacturer should be contacted with questions regarding conditions which vary from the guidelines set forth. Standard carpentry knowledge is required and good construction practice for health, safety and welfare must be followed when installing GlazeGuard®.

PRE-INSTALLATION: MATERIAL RECEIVING & INVENTORY

VISUAL INSPECTION:

Upon material arrival, all panel units should be visually inspected to verify that the product is in good condition and free from shipping damage, weather damage or defects.

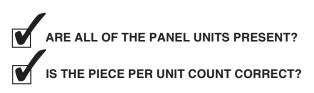


NOTE:

- Shipping damage and/or packaging issues should be first noted on the bill of lading and then reported to the distributor.
- Should damage occur, the customer is responsible for filing a freight claim with the shipping company WITHIN 24 HOURS from material receipt. Failure to do so may possibly result in forfeit of corrective action.
- Any defective material should be reported directly to the distributor from which the product was purchased.

MATERIAL INVENTORY:

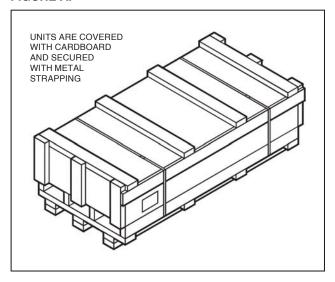
After verifying the condition of the product, inventory units against the packing slip to make sure that all material is received.



NOTE:

Notify the distributor from which the product was purchased of any missing or incomplete shipments IMMEDIATELY. Failure to do so may result in forfeit of corrective action.

FIGURE A.



PRE-INSTALLATION: TRANSPORTING & HANDLING

TRANSPORTING THE MATERIAL:

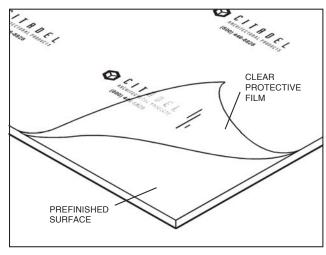
GlazeGuard® is packaged from the manufacturer in quantities of 40 pieces (or less) per unit (only 20 pieces per unit for GlazeGuard® 1000), under cover and secured with metal strapping (FIG. A). If possible, panels should remain in this original packing for transport.

If a forklift or pallet jack is unavailable, panel unit may be broken and carried to storage by hand according to the following guidelines.

HANDLING THE MATERIAL:

A strippable protective film (or interleafed foam) is standard on all panels. This film should remain on the product until instructed to take it off (during installation procedure). This strippable film **(FIG. B)** is designed to prevent minor abrasions to the surface. However, panels should still be handled with care to avoid any major dings, dents or scratches.

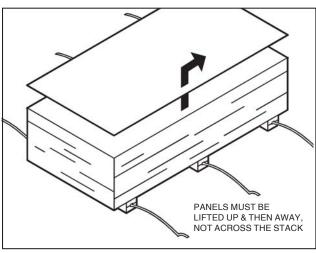
FIGURE B.



NOTE:

- When handling panels, clean work gloves should be worn at all times to protect from sharp edges and to prevent any smudging of the painted finish.
- When removing material from shipping units, DO NOT drag/slide panels across stack underneath. Panels must be lifted up, then away to avoid any permanent damage to the painted surface (FIG. C).

FIGURE C.



PRE-INSTALLATION: STORING THE MATERIAL UNITS

MATERIAL STORAGE:

If the units have been broken, material should be restacked, on a skid. Painted surfaces (strippable film side) should be placed face to face and any interleafed foam must be repositioned.

NOTE:

Failure to properly protect material from moisture intrusion may cause damage to the panel surface and/or core. Such damage is NOT covered under the standard warranty.

If the material has become damp or wet during transportation, the surface should be wiped dry before stacking to prevent any type of corrosion. Once the stacking is completed (or if the original packaging is still intact), the units must be covered with a waterproof covering.

All units must be kept in a dry, well-ventilated area away from exposure to the elements and/or any other construction installations which may cause damage to the product.

GENERAL WORK: LIMITATIONS OF THE PANEL SYSTEM

USES & APPLICATIONS:

GlazeGuard® is intended for use as a replacement or complement to glass in new or retrofit construction. The panels are designed to be installed in glazing channels or other similar type channels where all four edges are sealed.

NOTE:

These panels are not eligible for use as a wall cladding system. No trim moldings, fasteners or accessories are available with GlazeGuard®.

GENERAL WORK: FABRICATION OF THE PANELS

SAFETY PRECAUTIONS:

When performing fabricating procedures, it is necessary to observe all general guidelines for safety. Cutting, drilling, or otherwise machining the panels and trim moldings may produce flying chips, shavings, or dust.

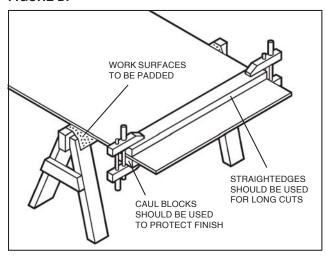
NOTE:

In addition to work gloves and proper clothing, safety goggles, ear protection, and possibly dust masks may be needed when fabricating system components.

CUTTING & DRILLING OF PANELS:

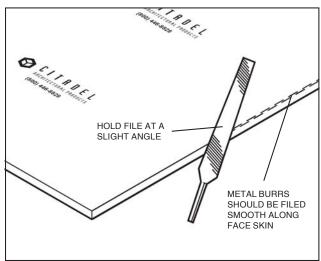
Cut-to-size panels are available from the manufacturer. When field cutting is required, it may be performed using standard carpentry tools equipped with carbide-tipped blades. Work surfaces should be padded (FIG. D) and free from any debris which may damage the finish. For cleaner cuts, backer blocks and straightedges may be

FIGURE D.



clamped to the panel surface. Caul blocks should be used when necessary to protect the painted finish. After cutting, aluminum edges may need filing to remove sharp projections and/or metal burrs (FIG. E) that might prevent the panel from sliding into the channel properly. Doing so will also reduce the risk of personal injury.

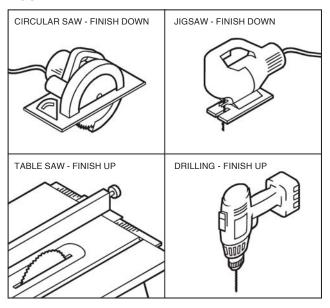
FIGURE E.



When using a table saw to cut panels, the finished side (protective film) should be placed facing upward. For hand held circular saws and jigsaws, the finish side should be facing down (FIG. F). If working with custom color panels and a protective film is not present, the interleafed foam should be placed in a position to protect the painted finish.

For drilling operations, the finished side should be placed facing upward and a backer block should be used when necessary to minimize any tearout.

FIGURE F.



GENERAL WORK: INSTALLING THE PANELS

WORK SEQUENCE:

GlazeGuard® panels should be cut-to-size for proper installation. A standard 1/4" space should be allowed around the perimeter of the glazing channel.

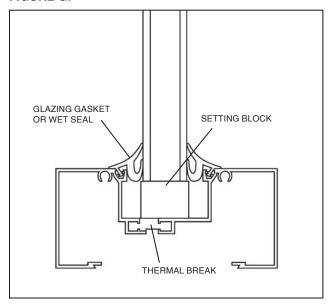
Before placing the panel into the channel, peel the protective film away from the edges (approx. 4"-6").

To prevent moisture intrusion, panels should be set on 2" (approx.) long setting blocks (**FIG. G**). These blocks should be set at quarter points at the bottom of the panel (appropriate block width determined by panel thickness). Installing GlazeGuard® panels framing systems with weep holes are preferred, as they aid in dispersing any incidental moisture.

Verify glazing channel has depth capacity to accommodate the 1/4" spacing needed around the perimeter of the panel while allowing for a standard 1/2" edge grip.

To complete installation, seal perimeter joint with an acceptable wet seal compound or water tight gasket and completely remove the protective film.

FIGURE G.



GENERAL WORK: THE PROTECTIVE FILM

GlazeGuard® panels have a protective film (or interleafed foam) on all painted finishes. During installation, the protective film is to be removed completely. For ease of removal, pull the film back against itself in the same plane as the panel.

NOTE:

Failure to remove the protective film promptly after installation (or exposure to long periods of sunlight) may cause difficulties in removal and possibly leave an adhesive residue.

MAINTENANCE OF THE PANEL FINISH

REPAIR/TOUCH UP:

Any minor scratches or dings which may occur during installation can be repaired using touch-up paint available from the manufacturer. Repainting of large areas with the touch-up paint is not recommended. Finish characteristics of the repainted surface may vary from the prepainted aluminum.

MAINTENANCE:

Panels should be incorporated into an overall building washing/maintenance schedule and cleaned in accordance with AAMA 610.1, Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels.

In general, panels may be cleaned using warm water and a mild detergrent (if necessary). For more aggressive materials, a gentle brushing/scrubbing action may be required. Abrasive detergents and/or harsh solvents should not be used.

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Guide Specification

(Specifier Note: This is a guide specification for opaque glazing panels as manufactured by Citadel Architectural Products, Inc. and marketed under the trade names GlazeGuard® 250, GlazeGuard® 250 WR, GlazeGuard® 1000, GlazeGuard® 1000 WR and GlazeGuard® 1000 FR. Revise section number and title below to suit project requirements, specification practices and section content. Options are indicated by brackets { }: delete non-selected text in final copy of specification.)

SECTION 07415: EXTERIOR WALL PANELS & SYSTEMS

PART 1: GENERAL

1.01 WORK INCLUDED

Section Includes: Laminated panels for use as glazing infill or railing type channel inserts.

(Specifier Note: Revise article below to suit project requirements. Add section numbers and title's per specifier's practice.)

1.02 RELATED SECTIONS

B. Section 06100: Back Up WallsC. Section 07299: InsulationD. Section 07600: Metal FlashingE. Section 07920: Sealants

A. Section 05100: Structural Framing

F. Section 09200: Finishes

(Specifier Note: Revise article below to suit project requirements. Restrict to statements describing design or performance requirements of the complete wall system.)

1.03 SYSTEM DESCRIPTION

- A. Panel's exposed finishes shall perform according to AAMA 2603-98 or AAMA 2605-98; exposed anodized aluminum according to AAMA 611-98; exposed porcelain enamel steel according to PEI S-100.
- B. Panel composite assembly shall conform to ASTM E84, Flame Spread, Class A; Class B for GlazeGuard®1000 with EPS core.
- C. Design wall system to withstand a positive and negative windload pressure acting inward and outward normal to the plane of the wall to meet the requirements of the latest adopted Local Building Code.

- D. Make adequate provisions in the wall system for thermal expansion and contraction of the component parts and fastening of the system to prevent harmful damage caused by buckling, opening of joints, expasion and contraction due to accumulation of dead loads and various live loads.
- E. Design wall system to be sealed at all joints, intersections and cutouts to prevent moisture intrusion of any type.

1.04 QUALITY ASSURANCE

- A. Panel Manufacturer: Manufacturer shall have a minimum of ten (10) years experience in the manufacture of composite architectural wall systems and must have ISO 9001:2000 Certification.
- B. Panel Installer: Installer shall be experienced in performing work of this section and be specialized in the installation of similar work required on this project.
- C. Field Measurements: When possible, measurements should be taken prior to the completion of shop manufacturing and assembly.
- D. Pre-Installation Meetings: Conduct pre-installation meetings to verify project requirements, substrate condition, installation instructions, and warranty requirements. Comply with Division 1 Project Management and Coordination, Project Meetings Section.

(Specifier Note: Articles below list industry standards referenced in this section.)

1.05 REFERENCES

A. American Society for Testing and Materials (ASTM):

ASTM E84: Surface Burning Characteristics

- B. Architectural Aluminum Manufacturer's Association (AAMA):
 - 1. AAMA 2603-98: Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - 2. AAMA 2605-98: Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
 - 3. AAMA 611-98: Voluntary Specification for Anodized Architectural Aluminum
- C. Porcelain Enamel Institute (PEI):
 PEI S-100: Specification for
 Porcelain Enamel on Steel

(Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor either before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.)

1.06 SUBMITTALS

A. Samples:

Panel: Two (2) 3"x 5" samples of each type of assembly. Color Standards: Two (2) 3"x 5" samples of each color of finish selected.

B. Shop Drawings: Indicate thickness and dimension of parts, fastening and anchoring methods, detail and location of joints, including joints necessary to accomodate thermal movement.

GlazeGuard®

- C. Material Certification: Two (2) copies certifying that material meets the requirements specified.
- D. Manufacturer's Literature: Two (2) copies of manufacturer's literature for panel material.
- E. Test Reports: Two (2) copies of third party test reports on testing required in Section 1.03.

(Specifier Note: Article below should include special and unique requirements. Coordinate article below with Division 1 Product Requirements Section.)

1.07 DELIVERY, STORAGE AND HANDLING

- **A.** General: Comply with Division 1 Product Requirements Section.
- B. Delivery: Package all panels for protection against transportation damage in accordance with manufacturer's requirements.
- C. Storage: Store all materials in accordance with manufacturer's installation instructions. Stack materials on pallets or platforms, covered with suitable ventilated covering. Do not store panels where accumulation of water may occur or in contact with other materials that might cause staining, denting or other damage.
- D. Handling: All materials should be handled in a manner to prevent damage to the product in accordance with manufacturer's installation instructions.

(Specifier Note: Coordinate article below with Condition of the Contract and with Division 1 Closeout Submittals [Warranty] Section.)

1.08 WARRANTY

A. Manufacturer's Warranty: Furnish panel manufacturer's standard limited warranty document executed by an authorized company official. Manufacturer's warranty is in addition to and not a limitation of other rights Owner may have under the Contract Documents.

- B. Panel Lamination Warranty: Five (5) years commencing on Date of Substantial Completion.
- C. Finish Warranty:
 {Polyester: Five (5) years}
 {Acrylic Urethane: Five (5) years}
 {Kynar 500®: Twenty (20) years}
 {Kynar 500® Metallic: Twenty (20)
 years}
 {Anodized: Twenty (20) years}
 {Porcelain Enamel Steel: Twenty

PART 2: PRODUCTS

(20) years}

(Specifier Note: Select product paragraph below to suit project requirements. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" and "or approved equal" may cause ambiguity in the specifications. Such phrases require verification—procedural, legal, regulatory, and responsibility—for determining equivalence of products.)

2.01 EXTERIOR WALL PANELS & SYSTEMS

A. Manufacturer:

fax:

Citadel Architectural Products, Inc 3131-A North Franklin Road Indianapolis, Indiana 46226 phone: (317) 894-9400

> (800) 446-8828 (317) 894-6333

(800) 247-2635

www.citadelap.com info@citadelap.com

- B. {GlazeGuard® 250 Opaque Glazing Panels}
 - 1. Panel Composition:
 - a. Face Skin:
 {.010" prefinished textured aluminum to match Architect's color selection.}
 {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.}
 {28ga. porcelain enamel steel}
 - **b.** Core: 3/16" tempered hardboard

- c. Back Skin: {.010" prefinished textured aluminum to match Architect's color selection.} {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.} {28ga. porcelain enamel steel}
- 2. Panel Tolerances:

a. Thickness: ±1/32"

- b. Length and Width: +0, -1/8"
- c. Squareness: 1/64" per lineal foot
- Attachment System: To be used as glazing infill or inserted into an encapsulating watertight channel.

{GlazeGuard® 250 WR - Water Resistant Opaque Glazing Panels}

- 1. Panel Composition:
 - a. Face Skin: {.010" prefinished textured aluminum to match Architect's color selection.} {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.}
 - **b.** Core: 6mm high density polypropylene
 - c. Back Skin: {.010" prefinished textured aluminum to match Architect's color selection.} {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.}
- 2. Panel Tolerances:
 - a. Thickness: ±1/32"
 - b. Length and Width: +0, -1/8"
 - c. Squareness: 1/64" per lineal foot
- Attachment System: To be used as glazing infill or inserted into an encapsulating watertight channel.

{GlazeGuard® 1000 - Opaque Glazing Panels}

- 1. Panel Composition:
 - a. Face Skin:
 {.010" prefinished textured aluminum to match Architect's color selection.}

 {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.}
 {28ga. porcelain enamel steel}
 - b. Face Stabilizer:1/8" tempered hardboard
 - c. Core: {21/32" expanded polystyrene (EPS) foam} {21/32" polyisocyanurate (ISO) foam}
 - d. Back Stabilizer: 1/8" tempered hardboard
 - e. Back Skin:
 {.010" prefinished textured
 aluminum to match
 Architect's color selection.}
 {.024" (minimum) prefinished
 smooth aluminum to match
 Architect's color selection.}
 {28ga. porcelain enamel
 steel}
- 2. Panel Tolerances:

a. Thickness: ±1/32"

- b. Length and Width: +0, -1/8"
- **c.** Squareness: 1/64" per lineal foot
- Attachment System: To be used as glazing infill or inserted into an encapsulating watertight channel.

{GlazeGuard® 1000 WR - Water Resistant Opaque Glazing Panels}

- 1. Panel Composition:
 - a. Face Skin:
 {.010" prefinished textured
 aluminum to match
 Architect's color selection.}
 {.024" (minimum) prefinished
 smooth aluminum to match
 Architect's color selection.}
 - b. Face Stabilizer: 4mm high density polypropylene

c. Core: {5/8" expanded polystyrene (EPS) foam}

{5/8" polyisocyanurate (ISO) foam}

- d. Back Stabilizer: 4mm high density polypropylene
- e. Back Skin:
 {.010" prefinished textured
 aluminum to match
 Architect's color selection.}
 {.024" (minimum) prefinished
 smooth aluminum to match
 Architect's color selection.}
- 2. Panel Tolerances:

a. Thickness: ±1/32"

- b. Length and Width: +0, -1/8"
- **c.** Squareness: 1/64" per lineal foot
- Attachment System:
 To be used as glazing infill or inserted into an encapsulating watertight channel.

{GlazeGuard® 1000 FR - Fire Resistant Opaque Glazing Panels}

- 1. Panel Composition:
 - a. Face Skin:
 {.010" prefinished textured aluminum to match Architect's color selection.}

 {.024" (minimum) prefinished smooth aluminum to match Architect's color selection.}
 {28ga. porcelain enamel steel}
 - b. Face Stabilizer:1/8" tempered hardboard
 - **c.** Core: 3/16" polyisocyanurate foam
 - d. Back Stabilizer: 5/8" type-x exterior grade gypsum board
 - Back Skin:
 .024" (minimum) prefinished
 smooth aluminum to match
 Architect's color selection

2. Panel Tolerances:

a. Thickness: ±1/32"

- **b.** Length & Width: +0, -3/16"
- **c.** Squareness: 1/64" per lineal foot
- 3. Attachment System:
 To be used as glazing infill or inserted into an encapsulating watertight channel

(Specifier Note: Revise article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements, Product Substitutions Procedures Section.)

2.02 SUBSTITUTIONS

- A. Acceptable Alternatives: Panels of similar composition providing manufacturer has a minimum of ten (10) years experience.
- B. The materials and products specified in this section establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.
- C. No substitution will be considered unless written request for approval has been submitted by the bidder and has been received by the Architect ten (10) days prior to the date for receipt of bids.
- D. Each request shall include the name of the materials and a complete description of the proposed material, including test performance and any other information necessary for evaluation.

2.03 FINISH

- A. Exposed Finish:
 {Polyester}
 {Acrylic Urethane}
 {Kynar 500®}
 {Kynar 500® Metallic}
 {Anodized}
 {Porcelain Enamel Steel}
- B. Color: As selected by the Architect from panel manufacturer's Color Selection Guide.

2.04 ACCESSORIES

Weather Seals: Shall be Tremco® Spectrem® 2, applied per the sealant manufacturer's guidelines and in accordance with the panel manufacturer's installation instructions.

(Specifier Note: Revise article below to suit project requirements and specifier's practice.)

PART 3: EXECUTION

3.01 EXAMINATION

- A. Examine and verify substrate surfaces to receive composite metal panel system and associated work and condition which work will be installed.
- B. Maximum deviation from vertical and horizontal alignment of substrate shall be no more than 1/4" in 20'-0".
- C. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to installer. Starting work within a particular area will be construed as installer's acceptance of surface conditions.

3.02 PREPARATION

- A. Comply with manufacturer's product data including product technical bulletins, product catalog installation instructions, and product carton instructions.
- B. Surfaces to receive panels shall be even, smooth, sound, clean, and free from defects detrimental to panel installation.
- **C.** Field measure and verify dimensions as required.
- D. Protect adjacent areas or surfaces from damage as a result of the work of this section.

(Specifier Note: Coordinate article below with panel manufacturer's recommended installation details.)

3.03 INSTALLATION

- A. Sheathing and water resistant membrane (if specified) by others.
- **B.** Erect panels level and true to intended plane.
- C. Maximum deviation from vertical and horizontal alignment of erected panel system shall be no more than 1/4" in 20'-0".

- D. Maximum deviation in panel flatness shall be 0.6% of the assembled units.
- E. Conform to panel manufacturer's installation instructions for attachment systems.
- F. Weather seal all joints as required using methods and materials as recommended by the panel manufacturer's installation instructions.

(Specifier Note: Coordinate article below with Division 1 Execution Requirements, Cleaning Section.)

3.04 CLEANING

- A. Remove temporary coverings and protection to adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance.
- B. Remove and legally dispose of construction debris from project site.

END OF SECTION

| | | | \$ | | | |
|----|-----|------|-----|------|---------|-----|
| C | I | T | A | D | Ε | L |
| AR | CHI | TECT | URA | L PR | 0 D U I | CTS |

| PROJECT: . | |
|------------|--|
| LOCATION: | |
| DATE: | |

GLAZEGUARD® PRODUCT WARRANTY (POLYESTER FINISH OR EQUIVALENT)

This Warranty is given by Citadel Architectural Products, Inc. ("Citadel") to the initial owner and subsequent owners ("Owner") of the structure on which GlazeGuard® panels (individually, a "Panel" and collectively, the "Panels") are first installed.

Citadel warrants that: (a) at the time the Panels are delivered to the above-described Project Site (the "Delivery Date"), the Panels will meet Citadel's standard specifications then in effect; (b) the Panels will not delaminate for a period of five (5) years from the Delivery Date; (c) the exterior painted finish of the Panels will not have a Chalk Rating of less than 6 or a Fade Differential of greater than 8E units (Hunter Color Difference) for a period of five (5) years from the Delivery Date; and (d) the finish of the Panels will not check, peel, lose adhesion or fracture (other than minute fractures which may develop due to fabrication and which are acceptable by industry standards on the Delivery Date) for a period of five (5) years from the Delivery Date.

For purposes of this Warranty: (a) "Chalk Rating" means the rating calculated by using the Method of Evaluating Degree of Chalking of Exterior Paint (per ATSM D4214-98); and (b) "Fade Differential" means the difference between the color value as measured on exposed painted surfaces that have been cleaned of external deposits and chalk and the corresponding color value measured on the original unexposed painted surfaces; and (c) a Panel has a "Defect" and is "Defective" if it does not conform to this Warranty. Unequal fading or finish color changes resulting from unequal exposure of surfaces to the sun or other exterior elements or conditions are not Defects.

THIS WARRANTY DOES NOT COVER DEFECTS CAUSED BY:

Exposure to smoke, fire, radiation, salt spray, chemicals, harmful or foreign substances in the atmosphere, including but not limited to organic solvents, concentrated detergents, wetting agents or sulfur dioxide emission levels above those deemed safe by the U.S. Environmental Protection Agency.

Negligence; improper maintenance; abuse; impact or other physical force, whether prior or subsequent to installation; normal wear and tear and weathering; fire, lightning, tornadoes, or other acts of God.

Defective or damaged fasteners, extrusions, brackets or fabricated applications attached to or used in connection with installation of the Panels, or Defects in the Panels caused by such fasteners, extrusions, brackets or fabricated applications.

Failure to adequately seal edges and joints of the Panels or to apply an approved sealant in its proper amount in accordance with Citadel's GlazeGuard® Installation Guide.

Improper installation or sizing of the Panels, including moisture intrusion, water and air leakage as a result of improper installation or sizing.

Damage incurred after the Delivery Date during storage, handling, installation or maintenance of any of the Panels.

DISCLAIMER OF WARRANTIES:

THIS WARRANTY IS THE EXCLUSIVE WARRANTY GIVEN BY CITADEL FOR THE PANELS. CITADEL DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE. THIS WARRANTY SUPERSEDES ALL OTHER WARRANTIES, INCLUDING ANY WARRANTIES BASED ON ORAL REPRESENTATIONS.

OWNER'S REMEDIES

For this Warranty to be valid, Owner must complete and return Citadel's Product Warranty Request Form within thirty (30) days of completion of installation of the Panels at the above-described Project Site and shall document in writing its maintenance and cleaning of the Panels, and provide such documentation to Citadel upon request. To make a claim under this Warranty, Owner must send a written description of any claimed Defect (the "Claimed Defect") to Citadel in writing at its address shown below within thirty (30) days of discovery of the Claimed Defect. Upon the request of Citadel, Owner shall permit Citadel reasonable time to inspect Panels for which notice of a Claimed Defect has been given prior to any removal, repair or replacement of the Panels. Any failure of Owner to notify Citadel of a Claimed Defect or to afford Citadel a reasonable opportunity to inspect the Claimed Defect prior to taking any remedial measures (including removal, repair or replacement) shall render this Warranty void in its entirety and the Claimed Defect shall not be covered by this Warranty. If the Claimed Defect is a Defect covered by this Warranty, Citadel, at its option, will do one of the following within a reasonable period of time: (1) refinish or repair the Defective Panel; (2) furnish a conforming Panel to replace the Defective Panel; or (3) refund a prorated portion of the price paid to Citadel for the Defective Panel. In determining the amount of any refund to be paid by Citadel for a Defective Panel, the original price paid to Citadel for such Defective Panel shall be reduced by 20% for each full year which has passed since the Delivery Date for delamination Defects covered by this Warranty and 20% for each full year which has passed since the Delivery Date for all other Defects covered by this Warranty. Owner shall bear all costs of removal and disposal of Defective Panels and installation of all replacement Panels provided by Citadel.

THE REMEDIES SET FORTH HEREIN SHALL BE THE EXCLUSIVE AND SOLE REMEDIES OF OWNER FOR BREACH OF THIS WARRANTY AND FOR DEFECTS COVERED BY THIS WARRANTY.

EXCLUSION OF CONSEQUENTIAL AND OTHER DAMAGES:

IN NO EVENT SHALL CITADEL BE LIABLE FOR ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE OR INSTALL THE PANELS OR FROM DEFECTS IN THE PANELS.

Citadel Architectural Products, Inc., 3131-A North Franklin Road, Indianapolis, Indiana 46226

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GLAZEGUARD® PRODUCT WARRANTY

(KYNAR 500® & ANODIZED FINISHES)

This Warranty is given by Citadel Architectural Products, Inc. ("Citadel") to the initial owner and subsequent owners ("Owner") of the structure on which GlazeGuard® panels (individually, a "Panel" and collectively, the "Panels") are first installed.

Citadel warrants that: (a) at the time the Panels are delivered to the above-described Project Site (the "Delivery Date"), the Panels will meet Citadel's standard specifications then in effect; (b) the Panels will not delaminate for a period of five (5) years from the Delivery Date; (c) the exterior painted finish of the Panels will not have a Chalk Rating of less than 8 or a Fade Differential of greater than 5E units (Hunter Color Difference) for a period of twenty (20) years from the Delivery Date; and (d) the finish of the Panels (either painted or anodized) will not check, peel, lose adhesion or fracture (other than minute fractures which may develop due to fabrication and which are acceptable by industry standards on the Delivery Date) for a period of twenty (20) years from the Delivery

For purposes of this Warranty: (a) "Chalk Rating" means the rating calculated by using the Method of Evaluating Degree of Chalking of Exterior Paint (per ATSM D4214-98); and (b) "Fade Differential" means the difference between the color value as measured on exposed painted surfaces that have been cleaned of external deposits and chalk and the corresponding color value measured on the original unexposed painted surfaces; and (c) a Panel has a "Defect" and is "Defective" if it does not conform to this Warranty. Unequal fading or finish color changes resulting from unequal exposure of surfaces to the sun or other exterior elements or conditions and gradual color changes in anodized Panel finish from normal weathering are not Defects.

THIS WARRANTY DOES NOT COVER DEFECTS CAUSED BY:

Exposure to smoke, fire, radiation, salt spray, chemicals, harmful or foreign substances in the atmosphere, including but not limited to organic solvents, concentrated detergents, wetting agents or sulfur dioxide emission levels above those deemed safe by the U.S. Environmental Protection Agency.

Negligence; improper maintenance; abuse; impact or other physical force, whether prior or subsequent to installation; normal wear and tear and weathering; fire, lightning, tornadoes, or other acts of God.

Failure of Owner to clean anodized Panel finish at least once a year, or a failure of Owner to perform all maintenance and cleaning in accordance with AAMA 610.1, Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels.

Defective or damaged fasteners, extrusions, brackets or fabricated applications attached to or used in connection with installation of the Panels, or Defects in the Panels caused by such fasteners, extrusions, brackets or fabricated applications.

Failure to adequately seal edges and joints of the Panels or to apply an approved sealant in its proper amount in accordance with Citadel's GlazeGuard® Installation Guide.

Improper installation or sizing of the Panels, including moisture intrusion, water and air leakage as a result of improper installation or sizing.

Damage incurred after the Delivery Date during storage, handling, installation or maintenance of any of the Panels.

DISCLAIMER OF WARRANTIES:

THIS WARRANTY IS THE EXCLUSIVE WARRANTY GIVEN BY CITADEL FOR THE PANELS. CITADEL DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE. THIS WARRANTY SUPERSEDES ALL OTHER WARRANTIES, INCLUDING ANY WARRANTIES BASED ON ORAL REPRESENTATIONS.

OWNER'S REMEDIES

For this Warranty to be valid, Owner must complete and return Citadel's Product Warranty Request Form within thirty (30) days of completion of installation of the Panels at the above-described Project Site and shall document in writing its maintenance and cleaning of the Panels, and provide such documentation to Citadel upon request. To make a claim under this Warranty, Owner must send a written description of any claimed Defect (the "Claimed Defect") to Citadel in writing at its address shown below within thirty (30) days of discovery of the Claimed Defect. Upon the request of Citadel, Owner shall permit Citadel reasonable time to inspect Panels for which notice of a Claimed Defect has been given prior to any removal, repair or replacement of the Panels. Any failure of Owner to notify Citadel of a Claimed Defect or to afford Citadel a reasonable opportunity to inspect the Claimed Defect prior to taking any remedial measures (including removal, repair or replacement) shall render this Warranty void in its entirety and the Claimed Defect shall not be covered by this Warranty. If the Claimed Defect is a Defect covered by this Warranty, Citadel, at its option, will do one of the following within a reasonable period of time: (1) refinish or repair the Defective Panel; (2) furnish a conforming Panel to replace the Defective Panel; or (3) refund a prorated portion of the price paid to Citadel for the Defective Panel. In determining the amount of any refund to be paid by Citadel for a Defective Panel, the original price paid to Citadel for such Defective Panel shall be reduced by 20% for each full year which has passed since the Delivery Date for delamination Defects covered by this Warranty and 5% for each full year which has passed since the Delivery Date for all other Defects covered by this Warranty. Owner shall bear all costs of removal and disposal of Defective Panels and installation of all replacement Panels provided by Citadel.

THE REMEDIES SET FORTH HEREIN SHALL BE THE EXCLUSIVE AND SOLE REMEDIES OF OWNER FOR BREACH OF THIS WARRANTY AND FOR DEFECTS COVERED BY THIS WARRANTY.

EXCLUSION OF CONSEQUENTIAL AND OTHER DAMAGES:

IN NO EVENT SHALL CITADEL BE LIABLE FOR ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE OR INSTALL THE PANELS OR FROM DEFECTS IN THE PANELS.

Citadel Architectural Products, Inc., 3131-A North Franklin Road, Indianapolis, Indiana 46226

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GLAZEGUARD® PRODUCT WARRANTY (PORCELAIN ENAMEL FINISH)

This Warranty is given by Citadel Architectural Products, Inc. ("Citadel") to the initial owner and subsequent owners ("Owner") of the structure on which GlazeGuard® panels (individually, a "Panel" and collectively, the "Panels") are first installed.

Citadel warrants that: (a) at the time the Panels are delivered to the above-described Project Site (the "Delivery Date"), the Panels will meet Citadel's standard specifications then in effect; (b) the Panels will not delaminate for a period of five (5) years from the Delivery Date; (c) the exterior porcelain finish of the Panels will not exhibit excessive fading of color, crazing, cracking, or flaking (other than minute fractures which may develop due to fabrication and which are acceptable by industry standards on the Delivery Date) for a period of twenty (20) years from the Delivery Date.

For purposes of this Warranty: (a) "Chalk Rating" means the rating calculated by using the Method of Evaluating Degree of Chalking of Exterior Paint (per ATSM D4214-98); and (b) "Fade Differential" means the difference between the color value as measured on exposed painted surfaces that have been cleaned of external deposits and chalk and the corresponding color value measured on the original unexposed painted surfaces; and (c) a Panel has a "Defect" and is "Defective" if it does not conform to this Warranty. Unequal fading or finish color changes resulting from unequal exposure of surfaces to the sun or other exterior elements or conditions and gradual color changes in anodized Panel finish from normal weathering are not Defects.

THIS WARRANTY DOES NOT COVER DEFECTS CAUSED BY:

Exposure to smoke, fire, radiation, salt spray, chemicals, harmful or foreign substances in the atmosphere, including but not limited to organic solvents, concentrated detergents, wetting agents or sulfur dioxide emission levels above those deemed safe by the U.S. Environmental Protection Agency.

Negligence; improper maintenance; abuse; impact or other physical force, whether prior or subsequent to installation; normal wear and tear and weathering; fire, lightning, tornadoes, or other acts of God.

Defective or damaged fasteners, extrusions, brackets or fabricated applications attached to or used in connection with installation of the Panels, or Defects in the Panels caused by such fasteners, extrusions, brackets or fabricated applications.

Failure to adequately seal edges and joints of the Panels or to apply an approved sealant in its proper amount in accordance with Citadel's GlazeGuard® Installation Guide.

Improper installation or sizing of the Panels, including moisture intrusion, water and air leakage as a result of improper installation or sizing.

Damage incurred after the Delivery Date during storage, handling, installation or maintenance of any of the Panels.

DISCLAIMER OF WARRANTIES:

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OWNER'S REMEDIES:

For this Warranty to be valid, Owner must complete and return Citadel's Product Warranty Request Form within thirty (30) days of completion of installation of the Panels at the above-described Project Site and shall document in writing its maintenance and cleaning of the Panels, and provide such documentation to Citadel upon request. To make a claim under this Warranty, Owner must send a written description of any claimed Defect (the "Claimed Defect") to Citadel in writing at its address shown below within thirty (30) days of discovery of the Claimed Defect. Upon the request of Citadel, Owner shall permit Citadel reasonable time to inspect Panels for which notice of a Claimed Defect has been given prior to any removal, repair or replacement of the Panels. Any failure of Owner to notify Citadel of a Claimed Defect or to afford Citadel a reasonable opportunity to inspect the Claimed Defect prior to taking any remedial measures (including removal, repair or replacement) shall render this Warranty void in its entirety and the Claimed Defect shall not be covered by this Warranty. If the Claimed Defect is a Defect covered by this Warranty, Citadel, at its option, will do one of the following within a reasonable period of time: (1) refinish or repair the Defective Panel; (2) furnish a conforming Panel to replace the Defective Panel; or (3) refund a prorated portion of the price paid to Citadel for the Defective Panel. In determining the amount of any refund to be paid by Citadel for a Defective Panel, the original price paid to Citadel for such Defective Panel shall be reduced by 20% for each full year which has passed since the Delivery Date for delamination Defects covered by this Warranty and 5% for each full year which has passed since the Delivery Date for all other Defects covered by this Warranty. Owner shall bear all costs of removal and disposal of Defective Panels and installation of all replacement Panels provided by Citadel.

THE REMEDIES SET FORTH HEREIN SHALL BE THE EXCLUSIVE AND SOLE REMEDIES OF OWNER FOR BREACH OF THIS WARRANTY AND FOR DEFECTS COVERED BY THIS WARRANTY.

EXCLUSION OF CONSEQUENTIAL AND OTHER DAMAGES:

IN NO EVENT SHALL CITADEL BE LIABLE FOR ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE OR INSTALL THE PANELS OR FROM DEFECTS IN THE PANELS.

Citadel Architectural Products, Inc., 3131-A North Franklin Road, Indianapolis, Indiana 46226



Citadel Architectural Products, Inc. 3131-A North Franklin Road Indianapolis, Indiana 46226

phone: (317) 894-9400

(800) 446-8828 fax: (317) 894-6333

(317) 894-6333 (800) 247-2635

www.citadelap.com info@citadelap.com

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