

# OCTOLUX Spektre

## Technical Information

### Standard Sizes

Sizes available vary depending upon material used. Typical standard size is 48" x 96", maximum size is 60" x 120" and is available only in selected patterns and materials.

### Cutting and Forming

All sheets are shipped with a PVC peel-away coating to protect the surface. If proper care is exercised, this coating is adequate to protect the surface while working with the material. Stainless, copper, and brass sheets can be sheared and bent by traditional methods with minimal to no disruption of the finish. Aluminum sheets can be cut with saws equipped with sharp carbide tipped blades.

### Adhesives

Octolux Spektre can be applied with traditional contact adhesive or panel adhesive, or by mechanical fasteners. Care should be taken not to get adhesive on the finished surface. If necessary, adhesive cleanup may be done with mild solvents such as naphtha or mineral spirits.

### Cleaning and Care

Finished surfaces can be cleaned with mild soap and water and dried and buffed with a soft cloth. Harsh or abrasive cleaners or solvents, or abrasive pads should not be used.

### Storage and Handling

Material should always be transported and stored flat, on a fully supporting surface. Care should be exercised when handling material to not scratch through the protective coating.

### Process

Octolux Spektre is a unique patented procedure using a computer mapped mechanical engraving process.

## Certificate of Analysis SpectraCoat Clear Coating

Product Name: SpectraCoat

Physical Characteristics: Matte Clear Coating

Adhesion: 4B to Aluminum Range 0B to 5B (per ASTM 3359)

Intercoat Adhesion: N/A

Solvent Resistance: >20 cycles Mek

Printability: N/A

Dielectric Strength: N/A

Depth of Cure: .50 mils

Cure Energy: >0.350 j/cm<sup>2</sup>

Pencil Hardness: 2H Range H-2H (per ASTM F 1683-02)

Flexibility: 5B using 3/8" mandrel bend test

## Accelerated Aging Tests

Pacific Crest Industries, Inc. makers of SpectraMetal decorative metals with SpectraCoat clear coating, has participated in extensive outdoor weatherability testing in Arizona and South Florida. PCI has specifically formulated leading edge solutions to the address the requirements of the outdoor coatings marketplace.

### Critical formulation factors include:

*Raw material selection Photoinitiator selection*

*Pigment selection Substrate consideration*

*Matching coating performance criteria Selecting the correct UV stabilizer package*

*Matching the UV stabilizer package to film thickness Other TradeSecrets.....*

*Outlined below are the testing criteria utilized for outdoor testing:*

### Inspection and Reporting Standards: Clear Coat

Adhesion: ASTM DD3359 Blistering: ASTM D714 Surface Rust: ASTM D610

Chalking: ASTM D4214 Checking: ASTM D660 Blistering: ASTM D714

Color (Visual) ASTM D1729 Corrosion: ASTM D1654 Chalking: ASTM D4214

Cracking: ASTM D661 Dirt: ASTM D3274 Corrosion: ASTM D1654

Erosion: ASTM D662 Flaking: ASTM D772 Color (Visual) ASTM D1729

Instrumental Gloss: ASTM D523 Mildew Growth: ASTM D3274 Dirt: ASTM D3274

Cracking: ASTM D661

Different climates perform different TESTING functions:

### Arizona / 3 year accelerated / Radiation Log - Total: 13,774.00 MJ/m<sup>2</sup>

Realities: Higher radiant exposure / More hours of sunshine / Higher temperatures

#### Inspection and Reporting Standards: Clear Coat

Adhesion: ASTM DD3359 93 – 10 / Excellent 94 – 10 / Excellent

Blistering: ASTM D714 93 – 10 / Excellent 94 – 10 / Excellent

Chalking: ASTM D4214 93 – 10 / Excellent 94 – 10 / Excellent

Checking: ASTM D660 93 – 9 / Excellent 94 – 9 / Excellent

Color (Visual) ASTM D1729 93 – 9 / Excellent 94 – 9 / Excellent

Corrosion: ASTM D1654 93 – 10 / Excellent 94 – 10 / Excellent

Cracking: ASTM D661 93 – 10 / Excellent 94 – 10 / Excellent

Dirt: ASTM D3274 93 – 9 / Excellent 94 – 9 / Excellent

Erosion: ASTM D662 93 – 10 / Excellent 94 – 10 / Excellent

Flaking: ASTM D772 93 – 10 / Excellent 94 – 10 / Excellent

Instrumental Gloss: ASTM D523 93 – 10 / Excellent 94 – 10 / Excellent

Mildew Growth: ASTM D3274 93 – 10 / Excellent 94 – 10 / Excellent

Surface Rust: ASTM D610 93 – 10 / Excellent 94 – 10 / Excellent

*General Appearance: 93 – 9 / Excellent 94 – 9 / Excellent*

Gloss: 93 Original: 94 / After Test: 89 / Delta of 5

94 Original: 91 / After Test: 92 / Delta of -1

### South Florida / > 1 year / Direct Inland – 45 Deg/ Radiation Log – Total: 5,738.00 MJ/m<sup>2</sup>

Realities: Higher radiant exposure / Increased temperatures / Relatively high humidity

#### Inspection and Reporting Standards: Clear Coat

Blistering: ASTM D714 26 – 10 / Excellent 27 – 10 / Excellent

Chalking: ASTM D4214 26 – 10 / Excellent 27 – 10 / Excellent

Color (Visual) ASTM D1729 26 – 10 / Excellent 27 – 10 / Excellent

Corrosion: ASTM D1654 26 – 10 / Excellent 27 – 10 / Excellent  
Cracking: ASTM D661 26 – 10 / Excellent 27 – 10 / Excellent  
Dirt: ASTM D3274 26 – 10 / Excellent 27 – 10 / Excellent  
*General Appearance: 26 – 10 / Excellent 27 – 10 / Excellent*  
Gloss: 26 Original: 95 / After Test: 94 / Delta of 1  
27 Original: 88 / After Test: 94 / Delta of -6