



SECTION 088700

SOLAR CONTROL FILM Edge Pristine Ceramic 40

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Solar control film applied to existing glass.

1.2 RELATED SECTIONS

- A. Section 081100 – Steel Doors and Frames
- B. Section 085100 – Steel Windows
- C. Section 085200 – Aluminum Windows
- D. Section 085900 – Window Restoration and Replacement
- E. Section 088100 – Glass Glazing
- F. Section 088500 – Glazing Accessories
- G. Section 088700 – Glazing Surface Films
- H. Section 089000 – Glazed Curtain Walls

1.3 REFERENCES

- A. American Society for Testing Materials (ASTM)
- B. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
- C. Association of Industrial Metallizers, Coaters and Laminators (AIMCAL)
- D. American National Standards Institute (ANSI)
- E. International Standards Organization (ISO)
- F. International Window Film Association (IWFA)

1.4 SUBMITTALS

- A. Submit under provisions of Section 013000.
- B. Manufacturer's data sheets on each product to be used, including:
 - 1. Physical properties and independent testing agency reports showing compliance with specified tests.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods.
- C. Verification Samples: For each product specified please include two samples, minimum size 20 inches square.

1.5 QUALITY ASSURANCE

- A. Product Qualifications: Product must be of regular production and manufactured within the past one (1) year.
- B. Installer Qualifications: Documented experience in the application of window films with at least 5 applications of similar size and complexity. Installer shall be approved by the manufacturer.
- C. Mock-Up: Provide a mock-up for evaluation of installation and application workmanship.

1. Apply film to one window designated by Architect.
2. Do not proceed with remaining work until workmanship and product are approved by Architect.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products indoors in manufacturer's unopened packaging until ready for installation.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (cleanliness, temperature, and humidity) within limits recommended by manufacturer.

1.8 WARRANTY

- A. See Section 017800 - Closeout Submittals required for additional warranty requirements.
- B. Provide film manufacturer's limited warranty against failure of film, including manufacturer's defect resulting in adhesive failure, peeling, bubbling, rippling, cracking, crazing, corrosion, delamination, demetallization, peeling, excessive or unusual discoloration. Duration of warranty shall be as follows:
 1. 15-Year Limited Warranty (commercial), and Limited Lifetime Warranty (residential) for the following products:
 - a. Pristine Ceramic 40

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Edge Film Technologies; 13011 Misty Willow Dr., Houston, TX 77070. Tel: (405) 664-0574. Email: dkratz@programedge.com
- B. Web: www.ProgramEdge.com.
- C. Substitutions: Substitutions must be reviewed and approved by Architect and will be considered only for identical specification(s) at lower price.
- D. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SOLAR CONTROL FILM

- A. Film may be manufactured from polyethylene terephthalate (polyester) and combined with sputtered metal coatings to achieve the desired performance and aesthetic characteristics. The finished film shall be self adhesive and include a coating to reduce the effects of scratching and abrasions that occur in normal daily activity and also include absorbers and inhibitors for the purpose of reducing ultra violet rays.
- B. Edge Pristine Ceramic 40 solar control film shall have the following properties when applied to 1/4 inch (6 mm) clear float glass.
 1. Film Performance Results, Nominal
 - a. Solar Absorptance -- 53 percent
 - b. Visible Light Transmittance -- 45 percent
 - c. Visible Light Reflectance (Exterior) --14 percent
 - d. Visible Light Reflectance (Interior) -- 12 percent
 - e. U-value – 1.04
 - f. Shading Coefficient – 0.57
 - g. Solar Heat Gain Coefficient -- 0.49

- a. Infrared Rejection -- 73 percent
 - b. Total Solar Energy Rejected -- 51 percent
 - c. Ultraviolet Light Blocked -- 99 percent
2. Physical and Thermal Properties, Nominal
 - a. Combustion Rate Negligible
 - b. Melting Point -- 260-265 degrees C

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until glass, frames, and or surrounding area(s) have been properly prepared.
- B. If 3.1.A preparation is the responsibility of another, notify Architect of any unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation using the methods recommended by the manufacturer.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions. Completed work must meet IWFA visual acceptance standard as adopted May 15, 1999
(<http://www.iwfa.com/professional/ProfessionalResources/VisualQualityStandard.aspx>)
- B. Install without bubbles, ripples, drips, dirt, cuts, tears or gaps between film and frame.
- C. After installation, clean the surface of the film and window frames for appearance.

END OF SECTION