



SECTION 08873

SAFETY AND SECURITY FILM

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Safety and Security film field applied to existing glass.
- B. Safety and Security film factory applied to glazed surfaces.

1.2 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)
- G. General Services Administration (GSA)
- H. Consumer Products Safety Commission (CPSC)
- I. Code of Federal Regulations (CFR)

1.3 PERFORMANCE REQUIREMENTS

- A. Safety Glazing Impact Performance:
 - 1. Meets ANSI Z97.1 Class A,-Unlimited and 16 CFR 1201 Category II 400 ft-lbs impact resistance
 - 2. Meets ANSI Z97.1 Class B and 16 CFR 1201 Category I 150 ft-lbs impact resistance
 - 3. Meets accelerated weathering requirements in accordance with ANSI Z97.1
- B. Flammability: Meets surface burning characteristics in accordance with ASTM E-84 Class A
 - 1. Flame Spread Index = 15
 - 2. Smoke Development Index = 20
- C. Blast Mitigation Performance: Independent test results when tested in accordance with GSA TS01-2003, ISO 16933, ASTM F1642 and UFC 4-010-01
 - 1. GSA TS-01-2003, GSA Performance Condition with a minimum blast pressure of 4 psi-28 psi-msec when applied with GE SCS2000 Silpruf on 1/4 inch (6 mm) single pane annealed glass: 3B.
 - 2. GSA TS-01-2003, GSA Performance Condition with a minimum blast pressure of 4 psi-28 psi-msec on 1/4 inch (6 mm) double pane annealed glass: 3B.
 - 3. GSA TS-01-2003, GSA Performance Condition with a minimum blast pressure of 4

psi-28 psi-msec on 1/4 inch (6 mm) single pane annealed glass: 3B.

- D. Volatile Organic Compound Content:
 - 1. Compliant with the performance standard established for low-emitting materials under the CDPH, the Collaborative for High Performance Schools (CHPS) and the LEED v4 programs.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: 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. Shop Drawings: Detailing installation of film, anchoring accessories, and sealant.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

3. Physical and Thermal Properties, Nominal
 - a. Film Thickness: 7 mil (175 micron)
 - b. Peel Strength: >2,500 g/in (985 gm./cm).
 - c. Tensile Strength: 30,000 lbs