

SECTION 08842

LAMINATED GLASS GLAZING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Flat laminated glass, CPS Category I.
- B. Flat laminated glass, CPS Categories I and II.
- C. _____.

1.2 RELATED SECTIONS

- A. Section 07900 - Joint Sealers.
- B. Section 08100 - Metal Doors and Frames.
- C. Section 08200 - Wood and Plastic Doors.
- D. Section 08520 - Aluminum Windows.
- E. Section 08600 - Skylights.
- F. Section 08800 - Glazing.
- G. Section 08910 - Metal-Framed Curtain Wall.
- H. Section 10185 - Shower and Dressing Compartments.
- I. Section 13125 - Greenhouses.
- J. _____.

1.3 REFERENCES

- A. ANSI Z97.1 - American National Standard for Glazing Materials Used in Buildings -- Safety Performance Specifications and Methods of Test.
- B. ASTM C 1036 - Specification for Flat Glass.
- C. ASTM E 1300 - Practice for Determining the Minimum Thickness and Type of Glass Required to Resist a Specified Load.
- D. ASTM F 1233 - Test Method for Security Glazing Material and Systems.

- E. Consumer Product Safety Commission, Federal Standard 16CFR1201.
- F. UL 752 - Standard for Bullet-Resisting Equipment.
- G. UL 972 - Standard for Burglary Resisting Glazing Material.
- H. _____.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Interlayer Manufacturer: Solutia, Inc., 10300 Olive Boulevard, P.O. Box 66760, St. Louis, MO 63166-6760; ASD. Tel: (314) 674-1000 or (800) 248-6844; Fax: (314) 674-3439; Internet: www.saflex.com
- B. Acceptable Laminated Glass Manufacturers:
_____.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- D. Substitutions: Not permitted.
- E. Provide all laminated glass from a single manufacturer.

2.2 MATERIALS

- A. Interlayer: Plasticized polyvinyl butyral (PVB).
 - 1. Thickness: 0.015 inches (0.38 mm).
 - 2. Thickness: 0.030 inches (0.76 mm).
 - 3. Thickness: 0.060 inches (1.52 mm).
 - 4. Thickness: 0.090 inches (2.28 mm).
 - 5. Color: Clear.
 - 6. Color: Bronze, Light.
 - 7. Color: Bronze, Medium.
 - 8. Color: Bronze, Dark.
 - 9. Color: Gray.
 - 10. Color: Blue Green.
 - 11. Color: Neutral Brown, Light.
 - 12. Color: Neutral Brown, Medium.
 - 13. Color: Neutral Brown, Dark.
 - 14. Color: Translucent White.
- B. Glass: Conforming to ASTM C 1036.
 - 1. Annealed.

2. Tempered.
3. Heat-strengthened.
4. Chemically-strengthened.
5. Spandrel.
6. Tinted.
7. Reflective.
8. One-way mirror.
9. Two-way mirror.
10. Clear bent.
11. Tinted bent.
12. Reflective bent.
13. Wired.

2.3 LAMINATED GLASS

- A. Provide laminated glass comprised of two or more pieces of glass and one or more interlayers, permanently bonded together under heat and pressure.
- B. Entrance Doors:
 1. Glass Type: _____.
 2. Glass Thickness: _____ inches (_____ mm).
 3. Pieces of Glass: _____.
 4. Interlayer Thickness: _____ inches (_____ mm).
 5. Interlayer Color: _____.
 6. Number of Interlayers: _____.
 7. Overall Thickness: _____ inches (_____ mm).
 8. STC Value: _____.
 9. Visible Light Transmittance: _____ percent.
 10. Solar Optical Transmittance: _____ percent.
 11. Properties Shading Coefficient: _____.
 12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.
- C. Sliding Doors:
 1. Glass Type: _____.
 2. Glass Thickness: _____ inches (_____ mm).
 3. Pieces of Glass: _____.
 4. Interlayer Thickness: _____ inches (_____ mm).
 5. Interlayer Color: _____.
 6. Number of Interlayers: _____.
 7. Overall Thickness: _____ inches (_____ mm).
 8. STC Value: _____.
 9. Visible Light Transmittance: _____ percent.
 10. Solar Optical Transmittance: _____ percent.
 11. Properties Shading Coefficient: _____.
 12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.
- D. Shower and Tub Enclosure Doors:
 1. Glass Type: _____.

2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

E. Storm Doors:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

F. Sidelights:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

G. Fixed Glass Panels:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.

7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

H. Vision and Spandrel Areas:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

I. Greenhouses:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

J. Skylights:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.

12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

K. Sloped Glazing:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

L. Burglar-Resistant Glazing:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

M. Bullet-Resistant Glazing:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

N. Blast-Resistant Glazing:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).

3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

O. _____:

1. Glass Type: _____.
2. Glass Thickness: _____ inches (_____ mm).
3. Pieces of Glass: _____.
4. Interlayer Thickness: _____ inches (_____ mm).
5. Interlayer Color: _____.
6. Number of Interlayers: _____.
7. Overall Thickness: _____ inches (_____ mm).
8. STC Value: _____.
9. Visible Light Transmittance: _____ percent.
10. Solar Optical Transmittance: _____ percent.
11. Properties Shading Coefficient: _____.
12. Design Instantaneous Heat Gain: _____ BTUH/sq. ft.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect and verify that frame openings are correct size and conform to recommendations of the glazing manufacturer.

3.2 PREPARATION

- A. Clean frame contact surfaces with compatible solvent and wipe dry. Do not allow solvent to pool in glazing channels.

3.3 INSTALLATION

- A. Install laminated glass in accordance with manufacturer's recommendations for edge engagement and expansion allowance.

- B. Employ only sealants and glazing accessories that have been approved by laminated glass manufacturer.

END OF SECTION