SECTION 08 87 00

ARCHITECTURAL WINDOW FILM

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Global Hi-Tech Films, Inc.; architectural window films.  
This section is based on the products of Global Hi-Tech Films, Inc., which is located at:  
18302 Highwoods Preserve Pkwy.  
, Suite 115  
Tampa, FL 3647  
Toll Free Tel: 866-664-5622  
Tel: 954-499-7990  
Fax: 954-499-7992  
Email: [request info (info@globalwindowfilms.com)](https://arcat.com/rfi?action=email&company=Global%252BHi-Tech%252BFilms%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(08870glo)%253A%2520&coid=52812&spec=08870glo&rep=&fax=954-499-7992)  
Web: <https://globalwindowfilms.com/global-architectural-films/> | <https://globalwindowfilms.com/global-guard-safety-films/>   
 [ [Click Here](https://arcat.com/company/global-hi-tech-films-inc-52812) ] for additional information.  
Global Hi-Tech Films, a subsidiary of Garware Hi-Tech Films Ltd. (GHFL), is a global leader in the manufacturing of high-performance specialty films, serving the automotive, architectural, and industrial sectors. Established in 1957, the company has continuously advanced through cutting-edge technology and innovation, setting industry benchmarks with its solar control, paint protection, and window films. With over 60 years of expertise, Global Hi-Tech Films remains a fully vertically integrated organization, leading the sun control film market and ranking among the top 3 window film brands in the USA. https://globalwindowfilms.com/architectural-window-films

1. GENERAL
   1. SECTION INCLUDES
      1. Architectural Window Film of the following manufacturer's Series:
         1. Spectrally Selective.
         2. (Sputtered) Neutral And Solar Bronze.
         3. Exterior Sputtered Neutral.
         4. Dual Reflecltive.
         5. Reflective.
         6. Exterior.
         7. High Performance.
         8. Safety And Security (Interior).
         9. Privacy And Specialty.
         10. Designer (Specialty).
   2. RELATED SECTIONS
      1. Section 08 50 00 - Windows.
      2. Section 08 60 00 - Roof Windows and Skylights.
      3. Section 08 44 23 - Structural Sealant Glazed Curtain Wall.
      4. Section 08 81 00 - Glass Glazing.
   3. SUBMITTALS
      1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
      2. Product Data: Manufacturer's current technical literature on each product to be used, including:
         1. Manufacturer's Data Sheets.
         2. Preparation instructions and recommendations.
         3. Storage and handling requirements and recommendations.
         4. Installation methods.
      3. Verification Samples: Two representative units of each type, thickness, pattern, and color.
   4. QUALITY ASSURANCE
      1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum of five years documented experience.
      2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
      3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.
      4. Field Sample: Apply a field sample of material, minimum 3 x 3 feet (0.9 x 0.9 m), to glass in location directed by Architect.
         1. The intent of the field sample up is to demonstrate quality of workmanship and visual appearance of film.
         2. If the field sample is not acceptable, reapply until satisfactory results are achieved.
         3. Retain field sample during construction as a standard for comparison with completed Work and may remain as part of the finished Work.
   5. PRE-INSTALLATION CONFERENCE
      1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
   6. DELIVERY, STORAGE, AND HANDLING
      1. Follow Manufacturer's instructions for storage and handling.
      2. Store products in manufacturer's unopened packaging until ready for installation.
      3. Store and dispose of hazardous materials, and materials contaminated by hazardous materials, in accordance with requirements of local authorities having jurisdiction.
   7. PROJECT CONDITIONS
      1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
   8. WARRANTY
      1. Manufacturer's standard 10 year commercial warranty against manufacturing defects.
2. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Global Hi-Tech Films, Inc., which is located at:  
         18302 Highwoods Preserve Pkwy.  
         , Suite 115  
         Tampa, FL 3647  
         Toll Free Tel: 866-664-5622  
         Tel: 954-499-7990  
         Fax: 954-499-7992  
         Email: [request info (info@globalwindowfilms.com)](https://arcat.com/rfi?action=email&company=Global%252BHi-Tech%252BFilms%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(08870glo)%253A%2520&coid=52812&spec=08870glo&rep=&fax=954-499-7992);Web: <https://globalwindowfilms.com/global-architectural-films/> | <https://globalwindowfilms.com/global-guard-safety-films/>
      2. Manufacturer Toll Free USA Tel: 1-866-664-5622; Toll Free Canada Tel: 1-888-846-9578; Tel: 1-954-499-7990; ASD; Email: info@globalwindowfilms.com; Web: www.GlobalWindowFilms.com.
      3. Substitutions: Not permitted.
      4. Requests for substitutions will be considered in accordance with the provisions of Section 01 25 00.
   2. FILM SERIES: SPECTRALLY SELECTIVE.
      1. Film Type: SSF 70 EXTERIOR, Single Pane.
         1. Thickness: 3.0 mils.
         2. Visible Light Transmittance: 70 percent.
         3. Visible Light Reflectance Exterior: 11 percent.
         4. Visible Light Reflectance Interior: 11 percent.
         5. Solar Energy Transmittance: 42 percent.
         6. Solar Energy Reflectance: 22 percent.
         7. Solar Energy Absorption: 36 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 48 percent.
         10. Shading Coefficient: 0.6.
         11. Solar Heat Gain Coefficient: 0.52.
         12. Luminous Efficacy: 1.17.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.02.
         15. Glare Reduction: 23 percent.
         16. NIR Blocking At 1025 Nm: 95 +- 3.0.
         17. Visible Light Transmittance Tolerance: 70 +- 3.0.
      2. Film Type: SSF 70 EXTERIOR, Dual Pane.
         1. Thickness: 3.0 mils.
         2. Visible Light Transmittance: 64 percent.
         3. Visible Light Reflectance Exterior: 15 percent.
         4. Visible Light Reflectance Interior: 18 percent.
         5. Solar Transmittance: 37 percent.
         6. Solar Reflectance: 23 percent.
         7. Solar Absorptance: 40 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 55 percent.
         10. Shading Coefficient: 0.52.
         11. Solar Heat Gain Coefficient: 0.45.
         12. Luminous Efficacy: 1.23.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 21 percent.
      3. Film Type: SSF 55 EXTERIOR, Single Pane.
         1. Thickness: 3.0 mils.
         2. Visible Light Transmittance: 54 percent.
         3. Visible Light Reflectance Exterior: 10 percent.
         4. Visible Light Reflectance Interior: 12 percent.
         5. Solar Energy Transmittance: 30 percent.
         6. Solar Energy Reflectance: 21 percent.
         7. Solar Energy Absorption: 49 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 57 percent.
         10. Shading Coefficient: 0.49.
         11. Solar Heat Gain Coefficient: 0.43.
         12. Luminous Efficacy: 1.08.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.02.
         15. Glare Reduction: 41 percent.
         16. NIR Blocking At 1025 Nm: 95 +- 3.0.
         17. Visible Light Transmittance Tolerance: 55 +- 3.0.
      4. Film Type SSF 55 EXTERIOR, Dual Pane.
         1. Thickness: 3.0 mils.
         2. Visible Light Transmittance: 49 percent.
         3. Visible Light Reflectance Exterior: 12 percent.
         4. Visible Light Reflectance Interior: 18 percent.
         5. Solar Transmittance: 27 percent.
         6. Solar Reflectance: 22 percent.
         7. Solar Absorptance: 51 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 64 percent.
         10. Shading Coefficient: 0.42.
         11. Solar Heat Gain Coefficient: 0.36.
         12. Luminous Efficacy: 1.17.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 40 percent.
      5. Film Type: SSF 70 INTERIOR, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 69 percent.
         3. Visible Light Reflectance Exterior: 8 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 35 percent.
         6. Solar Energy Reflectance: 29 percent.
         7. Solar Energy Absorption: 36 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 55 percent.
         10. Shading Coefficient: 0.52.
         11. Solar Heat Gain Coefficient: 0.45.
         12. Luminous Efficacy: 1.32.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 24 percent.
         16. NIR Blocking At 1025 Nm: 95 +- 3.0.
         17. Visible Light Transmittance Tolerance: 70 +- 3.0.
      6. Film Type: SSF 70 INTERIOR, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 61 percent.
         3. Visible Light Reflectance Exterior: 14 percent.
         4. Visible Light Reflectance Interior: 13 percent.
         5. Solar Transmittance: 31 percent.
         6. Solar Reflectance: 22 percent.
         7. Solar Absorptance: 47 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 49 percent.
         10. Shading Coefficient: 0.59.
         11. Solar Heat Gain Coefficient: 0.51.
         12. Luminous Efficacy: 1.03.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 25 percent.
      7. Film Type: SSF 55 INTERIOR, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 53 percent.
         3. Visible Light Reflectance Exterior: 8 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 27 percent.
         6. Solar Energy Reflectance: 28 percent.
         7. Solar Energy Absorption: 45 percent.
         8. Ultraviolet Light Transmission: less than 1.
         9. Total Solar Energy Rejected: 61.
         10. Shading Coefficient: 0.45.
         11. Solar Heat Gain Coefficient: 0.39.
         12. Luminous Efficacy: 1.18.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 42 percent.
         16. NIR Blocking At 1025 Nm: 95 +- 3.0.
         17. Visible Light Transmittance Tolerance: 55 +- 3.0.
      8. Film Type SSF 55 INTERIOR, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 47 percent.
         3. Visible Light Reflectance Exterior: 14 percent.
         4. Visible Light Reflectance Interior: 16 percent.
         5. Solar Transmittance: 24 percent.
         6. Solar Reflectance: 21 percent.
         7. Solar Absorptance: 55 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 51 percent.
         10. Shading Coefficient: 0.56.
         11. Solar Heat Gain Coefficient: 0.49.
         12. Luminous Efficacy: 0.84.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 42 percent.
      9. Film Type: ICE COOL GREY 86, Single Pane.
         1. Thickness: 1.5 mils.
         2. Visible Light Transmittance: 86 percent.
         3. Visible Light Reflectance Exterior: 9 percent.
         4. Visible Light Reflectance Interior: 8 percent.
         5. Solar Energy Transmittance: 65 percent.
         6. Solar Energy Reflectance: 8 percent.
         7. Solar Energy Absorption: 27 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 27 percent.
         10. Shading Coefficient: 0.83.
         11. Solar Heat Gain Coefficient: 0.73.
         12. Luminous Efficacy: 1.04.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 6 percent.
         16. NIR Blocking At 1025 Nm: 35 +- 3.0.
         17. Visible Light Transmittance Tolerance: 86 +- 3.0.
      10. Film Type: ICE COOL GREY 86, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 77 percent.
          3. Visible Light Reflectance Exterior: 15 percent.
          4. Visible Light Reflectance Interior: 11 percent.
          5. Solar Transmittance: 59 percent.
          6. Solar Reflectance: 13 percent.
          7. Solar Absorptance: 28 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 28 percent.
          10. Shading Coefficient: 0.83.
          11. Solar Heat Gain Coefficient: 0.72.
          12. Luminous Efficacy: 0.93.
          13. U Value (Day Winter): 0.49.
          14. Glare Reduction: 05 percent.
      11. Film Type: ICE COOL BLAST 80, Single Pane.
          1. Thickness: 2 mils.
          2. Visible Light Transmittance: 78 percent.
          3. Visible Light Reflectance Exterior: 9 percent.
          4. Visible Light Reflectance Interior: 8 percent.
          5. Solar Energy Transmittance: 45 percent.
          6. Solar Energy Reflectance: 8 percent.
          7. Solar Energy Absorption: 47 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 42 percent.
          10. Shading Coefficient: 0.67.
          11. Solar Heat Gain Coefficient: 0.58.
          12. Luminous Efficacy: 1.16.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.04.
          15. Glare Reduction: 14 percent.
          16. NIR Blocking At 1025 Nm: 73 +- 3.0.
          17. Visible Light Transmittance Tolerance: 80 +- 3.0.
      12. Film Type: ICE COOL BLAST 80, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 70 percent.
          3. Visible Light Reflectance Exterior: 15 percent.
          4. Visible Light Reflectance Interior: 12 percent.
          5. Solar Transmittance: 40 percent.
          6. Solar Reflectance: 13 percent.
          7. Solar Absorptance: 47 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 35 percent.
          10. Shading Coefficient: 0.75.
          11. Solar Heat Gain Coefficient: 0.65.
          12. Luminous Efficacy: 0.93.
          13. U Value (Day Winter): 0.49.
          14. Glare Reduction: 14 percent.
   3. FILM SERIES: SPUTTERED NEUTRAL AND SOLAR BRONZE.
      1. Film Type: NICROME 20, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 21 percent.
         3. Visible Light Reflectance Exterior: 32 percent.
         4. Visible Light Reflectance Interior: 37 percent.
         5. Solar Energy Transmittance: 18 percent.
         6. Solar Energy Reflectance: 32 percent.
         7. Solar Energy Absorption: 50 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 68 percent.
         10. Shading Coefficient: 0.37.
         11. Solar Heat Gain Coefficient: 0.32.
         12. Luminous Efficacy: 0.57.
         13. Emissivity: 0.77.
         14. Winter Median U Value: 0.98.
         15. Glare Reduction: 77 percent.
         16. NIR Blocking At 1025 Nm: 80 +- 3.0.
         17. Visible Light Transmittance Tolerance: 21 +- 3.0.
      2. Film Type: NICROME 20, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 19 percent.
         3. Visible Light Reflectance Exterior: 35 percent.
         4. Visible Light Reflectance Interior: 34 percent.
         5. Solar Transmittance: 16 percent.
         6. Solar Reflectance: 30 percent.
         7. Solar Absorptance: 54 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 55 percent.
         10. Shading Coefficient: 0.52.
         11. Solar Heat Gain Coefficient: 0.45.
         12. Luminous Efficacy: 0.37.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 77 percent.
      3. Film Type: NICROME 35, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 34 percent.
         3. Visible Light Reflectance Exterior: 20 percent.
         4. Visible Light Reflectance Interior: 24 percent.
         5. Solar Energy Transmittance: 29 percent.
         6. Solar Energy Reflectance: 19 percent.
         7. Solar Energy Absorption: 52 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 56 percent.
         10. Shading Coefficient: 0.50.
         11. Solar Heat Gain Coefficient: 0.44.
         12. Luminous Efficacy: 0.68.
         13. Emissivity 0.81.
         14. Winter Median U Value 1.01.
         15. Glare Reduction: 63 percent.
         16. NIR Blocking At 1025 Nm: 65 +- 3.0.
         17. Visible Light Transmittance Tolerance: 35 +- 3.0.
      4. Film Type: NICROME 35, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 31 percent.
         3. Visible Light Reflectance Exterior: 25 percent.
         4. Visible Light Reflectance Interior: 25 percent.
         5. Solar Transmittance: 25 percent.
         6. Solar Reflectance: 21 percent.
         7. Solar Absorptance: 54 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 46 percent.
         10. Shading Coefficient: 0.63.
         11. Solar Heat Gain Coefficient: 0.54.
         12. Luminous Efficacy: 0.49.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 62 percent.
      5. Film Type: SOLAR BRONZE 20.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 21 percent.
         3. Visible Light Transmittance Tolerance: 22 +- 3.0.
         4. Visible Light Reflectance Exterior: 35 percent.
         5. Visible Light Reflectance Interior: 40 percent.
         6. Solar Energy Transmittance: 14 percent.
         7. Solar Energy Reflectance: 43 percent.
         8. Solar Energy Absorption: 43 percent.
         9. Ultraviolet Light Transmission: less than 1 percent.
         10. Total Solar Energy Rejected: 74 percent.
         11. Shading Coefficient: 0.3.
         12. Solar Heat Gain Coefficient: 0.26.
         13. Luminous Efficacy: 0.7.
         14. Glare Reduction: 77 percent.
         15. NIR Blocking At 1025 Nm: 85 +- 3.0.
   4. FILM SERIES: EXTERIOR SPUTTERED NEUTRAL.
      1. Film Type: NICROME 20 EXTERIOR, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 22 percent.
         3. Visible Light Reflectance Exterior: 36 percent.
         4. Visible Light Reflectance Interior: 30 percent.
         5. Solar Energy Transmittance: 19 percent.
         6. Solar Energy Reflectance: 35 percent.
         7. Solar Energy Absorption: 46 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 68 percent.
         10. Shading Coefficient: 0.37.
         11. Solar Heat Gain Coefficient: 0.32.
         12. Luminous Efficacy: 0.59.
         13. Emissivity 0.79.
         14. Winter Median U Value 1.03.
         15. Glare Reduction: 76 percent.
         16. NIR Blocking At 1025 Nm: 80 +- 3.0.
         17. Visible Light Transmittance Tolerance: 21 +- 3.0.
      2. Film Type: NICROME 20 EXTERIOR, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 19 percent.
         3. Visible Light Reflectance Exterior: 35 percent.
         4. Visible Light Reflectance Interior: 34 percent.
         5. Solar Transmittance: 16 percent.
         6. Solar Reflectance: 30 percent.
         7. Solar Absorptance: 54 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 55 percent.
         10. Shading Coefficient: 0.52.
         11. Solar Heat Gain Coefficient: 0.45.
         12. Luminous Efficacy: 0.37.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 77 percent.
      3. Film Type: NICROME 35 EXTERIOR, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 34 percent.
         3. Visible Light Reflectance Exterior: 24 percent.
         4. Visible Light Reflectance Interior: 20 percent.
         5. Solar Energy Transmittance: 29 percent.
         6. Solar Energy Reflectance: 24 percent.
         7. Solar Energy Absorption: 47 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 58 percent.
         10. Shading Coefficient: 0.48.
         11. Solar Heat Gain Coefficient: 0.42.
         12. Luminous Efficacy: 0.71.
         13. Emissivity: 0.81.
         14. Winter Median U Value: 1.03.
         15. Glare Reduction: 63 percent.
         16. NIR Blocking At 1025 Nm: 65 +- 3.0.
         17. Visible Light Transmittance Tolerance: 35 percent +- 3.0.
      4. Film Type: NICROME 35 EXTERIOR, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 31 percent.
         3. Visible Light Reflectance Exterior: 25 percent.
         4. Visible Light Reflectance Interior: 25 percent.
         5. Solar Transmittance: 25 percent.
         6. Solar Reflectance: 21 percent.
         7. Solar Absorptance: 54 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 46 percent.
         10. Shading Coefficient: 0.63.
         11. Solar Heat Gain Coefficient: 0.54.
         12. Luminous Efficacy: 0.49.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 62 percent.
   5. FILM SERIES: DUAL REFLECTIVE.
      1. Film Type: DUAL REFLECTIVE CHARCOAL 05.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 7 percent.
         3. Visible Light Reflectance Exterior: 65 percent.
         4. Visible Light Reflectance Interior: 14 percent.
         5. Solar Energy Transmittance: 7 percent.
         6. Solar Energy Reflectance: 54 percent.
         7. Solar Energy Absorption: 39 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 82 percent.
         10. Shading Coefficient: 0.2.
         11. Solar Heat Gain Coefficient: 0.18.
         12. Luminous Efficacy: 0.35.
         13. Emissivity: 0.7.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 93 percent.
         16. NIR Blocking At 1025 Nm: 88 +- 3.0.
         17. Visible Light Transmittance Tolerance: 7 +- 2.0.
      2. Film Type: DUAL REFLECTIVE CHARCOAL 05, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 06 percent.
         3. Visible Light Reflectance Exterior: 64 percent.
         4. Visible Light Reflectance Interior: 18 percent.
         5. Solar Transmittance: 6 percent.
         6. Solar Reflectance: 49 percent.
         7. Solar Absorptance: 45 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 72 percent.
         10. Shading Coefficient: 0.33.
         11. Solar Heat Gain Coefficient: 0.28.
         12. Luminous Efficacy: 0.18.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 93 percent.
      3. Film Type: DUAL REFLECTIVE CHARCOAL 15, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 15 percent.
         3. Visible Light Reflectance Exterior: 47 percent.
         4. Visible Light Reflectance Interior: 21 percent.
         5. Solar Energy Transmittance: 13 percent.
         6. Solar Energy Reflectance: 44 percent.
         7. Solar Energy Absorption: 43 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 75 percent.
         10. Shading Coefficient: 0.29.
         11. Solar Heat Gain Coefficient: 0.25.
         12. Luminous Efficacy: 0.52.
         13. Emissivity: 0.77.
         14. Winter Median U Value: 1.08.
         15. Glare Reduction: 84 percent.
         16. NIR Blocking At 1025 Nm: 82 +- 3.0.
         17. Visible Light Transmittance Tolerance: 15 + - 2.0.
      4. Film Type: DUAL REFLECTIVE CHARCOAL 15, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 14 percent.
         3. Visible Light Reflectance Exterior: 47 percent.
         4. Visible Light Reflectance Interior: 21 percent.
         5. Solar Transmittance: 12 percent.
         6. Solar Reflectance: 40 percent.
         7. Solar Absorptance: 48 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 63 percent.
         10. Shading Coefficient: 0.42.
         11. Solar Heat Gain Coefficient: 0.37.
         12. Luminous Efficacy: 0.33.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 83 percent.
      5. Film Type: DUAL REFLECTIVE CHARCOAL 25, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 23 percent.
         3. Visible Light Reflectance Exterior: 40 percent.
         4. Visible Light Reflectance Interior: 17 percent.
         5. Solar Energy Transmittance: 19 percent.
         6. Solar Energy Reflectance: 36 percent.
         7. Solar Energy Absorption: 45 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 69 percent.
         10. Shading Coefficient: 0.36.
         11. Solar Heat Gain Coefficient: 0.31.
         12. Luminous Efficacy: 0.64.
         13. Emissivity: 0.68.
         14. Winter Median U Value: 1.03.
         15. Glare Reduction: 74 percent.
         16. NIR Blocking At 1025 Nm: 74 +- 3.0.
         17. Visible Light Transmittance Tolerance: 24 +- 3.0.
      6. Film Type: DUAL REFLECTIVE CHARCOAL 25, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 21 percent.
         3. Visible Light Reflectance Exterior: 41 percent.
         4. Visible Light Reflectance Interior: 40 percent.
         5. Solar Transmittance: 17 percent.
         6. Solar Reflectance: 34 percent.
         7. Solar Absorptance: 49 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 57 percent.
         10. Shading Coefficient: 0.5.
         11. Solar Heat Gain Coefficient: 0.43.
         12. Luminous Efficacy: 0.42.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 74 percent.
      7. Film Type: DUAL REFLECTIVE CHARCOAL 35, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 35 percent.
         3. Visible Light Reflectance Exterior: 25 percent.
         4. Visible Light Reflectance Interior: 14 percent.
         5. Solar Energy Transmittance: 29 percent.
         6. Solar Energy Reflectance: 24 percent.
         7. Solar Energy Absorption: 47 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 58 percent.
         10. Shading Coefficient: 0.48.
         11. Solar Heat Gain Coefficient: 0.42.
         12. Luminous Efficacy: 0.73.
         13. Emissivity: 0.72.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 62 percent.
         16. NIR Blocking At 1025 Nm: 62 +- 3.0.
         17. Visible Light Transmittance Tolerance: 35 +- 3.0.
      8. Film Type: DUAL REFLECTIVE CHARCOAL 35, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 32 percent.
         3. Visible Light Reflectance Exterior: 29 percent.
         4. Visible Light Reflectance Interior: 26 percent.
         5. Solar Transmittance: 26 percent.
         6. Solar Reflectance: 25 percent.
         7. Solar Absorptance: 49 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 48 percent.
         10. Shading Coefficient: 0.6.
         11. Solar Heat Gain Coefficient: 0.52.
         12. Luminous Efficacy: 0.53.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 60 percent.
      9. Film Type: DUAL REFLECTIVE CHARCOAL 45, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 45 percent.
         3. Visible Light Reflectance Exterior: 15 percent.
         4. Visible Light Reflectance Interior: 13 percent.
         5. Solar Energy Transmittance: 36 percent.
         6. Solar Energy Reflectance: 14 percent.
         7. Solar Energy Absorption: 50 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 50 percent.
         10. Shading Coefficient: 0.57.
         11. Solar Heat Gain Coefficient: 0.5.
         12. Luminous Efficacy: 0.79.
         13. Emissivity: 0.75.
         14. Winter Median U Value: 1.07.
         15. Glare Reduction: 51 percent.
         16. NIR Blocking At 1025 Nm: 60 +- 3.0.
         17. Visible Light Transmittance Tolerance: 45 +- 3.0.
      10. Film Type: DUAL REFLECTIVE CHARCOAL 45, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 41 percent.
          3. Visible Light Reflectance Exterior: 18 percent.
          4. Visible Light Reflectance Interior: 14 percent.
          5. Solar Transmittance: 32 percent.
          6. Solar Reflectance: 18 percent.
          7. Solar Absorptance: 50 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 41 percent.
          10. Shading Coefficient: 0.68.
          11. Solar Heat Gain Coefficient: 0.59.
          12. Luminous Efficacy: 0.60.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 49 percent.
   6. FILM SERIES: REFLECTIVE.
      1. Film Type: REFLECTIVE SILVER 20, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 18 percent.
         3. Visible Light Reflectance Exterior: 58 percent.
         4. Visible Light Reflectance Interior: 59 percent.
         5. Solar Energy Transmittance: 13 percent.
         6. Solar Energy Reflectance: 53 percent.
         7. Solar Energy Absorption: 34 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 78 percent.
         10. Shading Coefficient: 0.25.
         11. Solar Heat Gain Coefficient: 0.22.
         12. Luminous Efficacy: 0.72.
         13. Emissivity: 0.64.
         14. Winter Median U Value: 1.01.
         15. Glare Reduction: 80 percent.
         16. NIR Blocking At 1025 Nm: 80 +- 3.0.
         17. Visible Light Transmittance Tolerance: 20 +- 2.0.
      2. Film Type: REFLECTIVE SILVER 20, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 17 percent.
         3. Visible Light Reflectance Exterior: 58 percent.
         4. Visible Light Reflectance Interior: 59 percent.
         5. Solar Transmittance: 12 percent.
         6. Solar Reflectance: 47 percent.
         7. Solar Absorptance: 41 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 68 percent.
         10. Shading Coefficient: 0.37.
         11. Solar Heat Gain Coefficient: 0.32.
         12. Luminous Efficacy: 0.46.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 79 percent.
      3. Film Type: REFLECTIVE SILVER 35, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 36 percent.
         3. Visible Light Reflectance Exterior: 38 percent.
         4. Visible Light Reflectance Interior: 40 percent.
         5. Solar Energy Transmittance: 28 percent.
         6. Solar Energy Reflectance: 37 percent.
         7. Solar Energy Absorption: 35 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 63 percent.
         10. Shading Coefficient: 0.43.
         11. Solar Heat Gain Coefficient: 0.37.
         12. Luminous Efficacy: 0.84.
         13. Emissivity: 0.72.
         14. Winter Median U Value: 1.05.
         15. Glare Reduction: 60 percent.
         16. NIR Blocking At 1025 Nm: 68 +- 3.0.
         17. Visible Light Transmittance Tolerance: 37 +- 2.0.
      4. Film Type: REFLECTIVE SILVER 35, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 33 percent.
         3. Visible Light Reflectance Exterior: 34 percent.
         4. Visible Light Reflectance Interior: 38 percent.
         5. Solar Transmittance: 26 percent.
         6. Solar Reflectance: 34 percent.
         7. Solar Absorptance: 40 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 54 percent.
         10. Shading Coefficient: 0.53.
         11. Solar Heat Gain Coefficient: 0.46.
         12. Luminous Efficacy: 0.62.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 59 percent.
      5. Film Type: REFLECTIVE SILVER 50, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 49 percent.
         3. Visible Light Reflectance Exterior: 26 percent.
         4. Visible Light Reflectance Interior: 27 percent.
         5. Solar Energy Transmittance: 38 percent.
         6. Solar Energy Reflectance: 26 percent.
         7. Solar Energy Absorption: 36 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 52 percent.
         10. Shading Coefficient: 0.56.
         11. Solar Heat Gain Coefficient: 0.48.
         12. Luminous Efficacy: 0.88.
         13. Emissivity: 0.78.
         14. Winter Median U Value: 1.07.
         15. Glare Reduction: 46 percent.
         16. NIR Blocking At 1025 Nm: 55 +- 3.0.
         17. Visible Light Transmittance Tolerance: 50 +- 2.0.
      6. Film Type: REFLECTIVE SILVER 50, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 45 percent.
         3. Visible Light Reflectance Exterior: 29 percent.
         4. Visible Light Reflectance Interior: 22 percent.
         5. Solar Transmittance: 35 percent.
         6. Solar Reflectance: 25 percent.
         7. Solar Absorptance: 40 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 45 percent.
         10. Shading Coefficient: 0.63.
         11. Solar Heat Gain Coefficient: 0.55.
         12. Luminous Efficacy: 0.71.
         13. U Value (Day Winter): 0.47.
         14. Glare Reduction: 44 percent.
      7. Film Type: RA CHARCOAL 35, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 31 percent.
         3. Visible Light Reflectance Exterior: 33 percent.
         4. Visible Light Reflectance Interior: 23 percent.
         5. Solar Energy Transmittance: 26 percent.
         6. Solar Energy Reflectance: 30 percent.
         7. Solar Energy Absorption: 44 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 62 percent.
         10. Shading Coefficient: 0.44.
         11. Solar Heat Gain Coefficient: 0.38.
         12. Luminous Efficacy: 0.7.
         13. Emissivity: 0.73.
         14. Winter Median U Value: 1.09.
         15. Glare Reduction: 66 percent.
         16. NIR Blocking At 1025 Nm: 68 +- 3.0.
         17. Visible Light Transmittance Tolerance: 32 +- 3.0.
      8. Film Type: RA CHARCOAL 35, Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 29 percent.
         3. Visible Light Reflectance Exterior: 36 percent.
         4. Visible Light Reflectance Interior: 23 percent.
         5. Solar Transmittance: 23 percent.
         6. Solar Reflectance: 29 percent.
         7. Solar Absorptance: 48 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 52 percent.
         10. Shading Coefficient: 0.55.
         11. Solar Heat Gain Coefficient: 0.48.
         12. Luminous Efficacy: 0.53.
         13. U Value (Day Winter): 0.47.
         14. Glare Reduction: 64 percent.
      9. Film Type: RA BRONZE 25, Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 27 percent.
         3. Visible Light Reflectance Exterior: 34 percent.
         4. Visible Light Reflectance Interior: 26 percent.
         5. Solar Energy Transmittance: 25 percent.
         6. Solar Energy Reflectance: 33 percent.
         7. Solar Energy Absorption: 42 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 64 percent.
         10. Shading Coefficient: 0.42.
         11. Solar Heat Gain Coefficient: 0.36.
         12. Luminous Efficacy: 0.64.
         13. Emissivity: 0.73.
         14. Winter Median U Value: 1.09.
         15. Glare Reduction: 70 percent.
         16. NIR Blocking At 1025 Nm: 68 +- 3.0.
         17. Visible Light Transmittance Tolerance: 26 +- 3.0.
      10. Film Type: RA BRONZE 25, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 27 percent.
          3. Visible Light Reflectance Exterior: 18 percent.
          4. Visible Light Reflectance Interior: 20 percent.
          5. Solar Transmittance: 27 percent.
          6. Solar Reflectance: 19 percent.
          7. Solar Absorptance: 54 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 44 percent.
          10. Shading Coefficient: 0.65.
          11. Solar Heat Gain Coefficient: 0.56.
          12. Luminous Efficacy: 0.42.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 67 percent.
      11. Film Type: RA GREY 20, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 17 percent.
          3. Visible Light Reflectance Exterior: 36 percent.
          4. Visible Light Reflectance Interior: 13 percent.
          5. Solar Energy Transmittance: 19 percent.
          6. Solar Energy Reflectance: 27 percent.
          7. Solar Energy Absorption: 54 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 66 percent.
          10. Shading Coefficient: 0.39.
          11. Solar Heat Gain Coefficient: 0.34.
          12. Luminous Efficacy: 0.44.
          13. Emissivity: 0.7.
          14. Winter Median U Value: 0.99.
          15. Glare Reduction: 81 percent.
          16. NIR Blocking At 1025 Nm: 68 +- 3.0.
          17. Visible Light Transmittance Tolerance: 17 +- 2.0.
      12. Film Type: RA GREY 20, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 16 percent.
          3. Visible Light Reflectance Exterior: 38 percent.
          4. Visible Light Reflectance Interior: 13 percent.
          5. Solar Transmittance: 16 percent.
          6. Solar Reflectance: 28 percent.
          7. Solar Absorptance: 56 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 55 percent.
          10. Shading Coefficient: 0.52.
          11. Solar Heat Gain Coefficient: 0.45.
          12. Luminous Efficacy: 0.31.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 80 percent.
      13. Film Type: RA GREY 15, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 11 percent.
          3. Visible Light Reflectance Exterior: 35 percent.
          4. Visible Light Reflectance Interior: 10 percent.
          5. Solar Energy Transmittance: 17 percent.
          6. Solar Energy Reflectance: 30 percent.
          7. Solar Energy Absorption: 53 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 69 percent.
          10. Shading Coefficient: 0.36.
          11. Solar Heat Gain Coefficient: 0.31.
          12. Luminous Efficacy: 0.31.
          13. Emissivity: 0.75.
          14. Winter Median U Value: 1.02.
          15. Glare Reduction: 88 percent.
          16. NIR Blocking At 1025 Nm: 68 +- 3.0.
          17. Visible Light Transmittance Tolerance: 11 +- 2.0.
      14. Film Type: RA GREY 15, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 10 percent.
          3. Visible Light Reflectance Exterior: 37 percent.
          4. Visible Light Reflectance Interior: 11 percent.
          5. Solar Transmittance: 14 percent.
          6. Solar Reflectance: 29 percent.
          7. Solar Absorptance: 57 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 57 percent.
          10. Shading Coefficient: 0.50.
          11. Solar Heat Gain Coefficient: 0.43.
          12. Luminous Efficacy: 0.20.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 88 percent.
      15. Film Type: RA CHARCOAL 20, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 18 percent.
          3. Visible Light Reflectance Exterior: 36 percent.
          4. Visible Light Reflectance Interior: 13 percent.
          5. Solar Energy Transmittance: 20 percent.
          6. Solar Energy Reflectance: 27 percent.
          7. Solar Energy Absorption: 53 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 65 percent.
          10. Shading Coefficient: 0.4.
          11. Solar Heat Gain Coefficient: 0.35.
          12. Luminous Efficacy: 0.45.
          13. Emissivity: 0.7.
          14. Winter Median U Value: 0.99.
          15. Glare Reduction: 80 percent.
          16. NIR Blocking At 1025 Nm: 68 +- 3.0.
          17. Visible Light Transmittance Tolerance: 17 +- 2.0.
      16. Film Type: RA CHARCOAL 20, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 17 percent.
          3. Visible Light Reflectance Exterior: 38 percent.
          4. Visible Light Reflectance Interior: 13 percent.
          5. Solar Transmittance: 17 percent.
          6. Solar Reflectance: 29 percent.
          7. Solar Absorptance: 54 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 54 percent.
          10. Shading Coefficient: 0.52.
          11. Solar Heat Gain Coefficient: 0.46.
          12. Luminous Efficacy: 0.33.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 79 percent.
      17. Film Type: RA CHARCOAL 10, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 10 percent.
          3. Visible Light Reflectance Exterior: 35 percent.
          4. Visible Light Reflectance Interior: 10 percent.
          5. Solar Energy Transmittance: 16 percent.
          6. Solar Energy Reflectance: 31 percent.
          7. Solar Energy Absorption: 53 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 70 percent.
          10. Shading Coefficient: 0.35.
          11. Solar Heat Gain Coefficient: 0.3.
          12. Luminous Efficacy: 0.29.
          13. Emissivity: 0.75.
          14. Winter Median U Value: 1.02.
          15. Glare Reduction: 89 percent.
          16. NIR Blocking At 1025 Nm: 68 +- 3.0.
          17. Visible Light Transmittance Tolerance: 11 +- 2.0.
      18. Film Type: RA CHARCOAL 10, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 09 percent.
          3. Visible Light Reflectance Exterior: 37 percent.
          4. Visible Light Reflectance Interior: 12 percent.
          5. Solar Transmittance: 13 percent.
          6. Solar Reflectance: 30 percent.
          7. Solar Absorptance: 57 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 58 percent.
          10. Shading Coefficient: 0.49.
          11. Solar Heat Gain Coefficient: 0.42.
          12. Luminous Efficacy: 0.18.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 89 percent.
      19. Film Type: REFLECTIVE GREEN 10, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 13 percent.
          3. Visible Light Reflectance Exterior: 23 percent.
          4. Visible Light Reflectance Interior: 56 percent.
          5. Solar Energy Transmittance: 12 percent.
          6. Solar Energy Reflectance: 32 percent.
          7. Solar Energy Absorption: 56 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 73 percent.
          10. Shading Coefficient: 0.32.
          11. Solar Heat Gain Coefficient: 0.27.
          12. Luminous Efficacy: 0.41.
          13. Emissivity: 0.66.
          14. Winter Median U Value: 1.01.
          15. Glare Reduction: 86 percent.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 12 +- 2.0.
      20. Film Type: REFLECTIVE GREEN 10, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 12 percent.
          3. Visible Light Reflectance Exterior: 27 percent.
          4. Visible Light Reflectance Interior: 56 percent.
          5. Solar Transmittance: 10 percent.
          6. Solar Reflectance: 29 percent.
          7. Solar Absorptance: 61 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 59 percent.
          10. Shading Coefficient: 0.47.
          11. Solar Heat Gain Coefficient: 0.41.
          12. Luminous Efficacy: 0.26.
          13. U Value (Day Winter): 0.45.
          14. Glare Reduction: 85 percent.
      21. Film Type: REFLECTIVE BLUE 15, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 13 percent.
          3. Visible Light Reflectance Exterior: 31 percent.
          4. Visible Light Reflectance Interior: 55 percent.
          5. Solar Energy Transmittance: 11 percent.
          6. Solar Energy Reflectance: 37 percent.
          7. Solar Energy Absorption: 52 percent.
          8. Ultraviolet Light Transmission: Less than 1 percent.
          9. Total Solar Energy Rejected: 75 percent.
          10. Shading Coefficient: 0.29.
          11. Solar Heat Gain Coefficient: 0.25.
          12. Luminous Efficacy: 0.45.
          13. Emissivity: 0.69.
          14. Winter Median U Value: 1.01.
          15. Glare Reduction: 86 percent.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 14 +- 2.0.
      22. Film Type: REFLECTIVE BLUE 15, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 12 percent.
          3. Visible Light Reflectance Exterior: 34 percent.
          4. Visible Light Reflectance Interior: 55 percent.
          5. Solar Transmittance: 10 percent.
          6. Solar Reflectance: 33 percent.
          7. Solar Absorptance: 57 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 62 percent.
          10. Shading Coefficient: 0.44.
          11. Solar Heat Gain Coefficient: 0.38.
          12. Luminous Efficacy: 0.27.
          13. U Value (Day Winter): 0.45.
          14. Glare Reduction: 85 percent.
      23. Film Type: REFLECTIVE GREY 05, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 4 percent.
          3. Visible Light Reflectance Exterior: 7 percent.
          4. Visible Light Reflectance Interior: 56 percent.
          5. Solar Energy Transmittance: 7 percent.
          6. Solar Energy Reflectance: 24 percent.
          7. Solar Energy Absorption: 69 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 74 percent.
          10. Shading Coefficient: 0.31.
          11. Solar Heat Gain Coefficient: 0.26.
          12. Luminous Efficacy: 0.13.
          13. Emissivity: 0.65.
          14. Winter Median U Value: 1.04.
          15. Glare Reduction: 95 percent.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 4.5 +- 1.5.
      24. Film Type: REFLECTIVE GREY 05, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 04 percent.
          3. Visible Light Reflectance Exterior: 14 percent.
          4. Visible Light Reflectance Interior: 53 percent.
          5. Solar Transmittance: 05 percent.
          6. Solar Reflectance: 19 percent.
          7. Solar Absorptance: 76 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 58 percent.
          10. Shading Coefficient: 0.48.
          11. Solar Heat Gain Coefficient: 0.42.
          12. Luminous Efficacy: 0.08.
          13. U Value (Day Winter): 0.45.
          14. Glare Reduction: 95 percent.
      25. Film Type: REFLECTIVE GREY 20, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 22 percent.
          3. Visible Light Reflectance Exterior: 9 percent.
          4. Visible Light Reflectance Interior: 22 percent.
          5. Solar Energy Transmittance: 25 percent.
          6. Solar Energy Reflectance: 23 percent.
          7. Solar Energy Absorption: 52 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 60 percent.
          10. Shading Coefficient: 0.45.
          11. Solar Heat Gain Coefficient: 0.40.
          12. Luminous Efficacy: 0.49.
          13. Emissivity: 0.77.
          14. Winter Median U Value: 1.12.
          15. Glare Reduction: 76.
          16. NIR Blocking At 1025 Nm: 55 +- 3.0.
          17. Visible Light Transmittance Tolerance: 21 +- 3.0.
      26. Film Type: REFLECTIVE GREY 20, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 20 percent.
          3. Visible Light Reflectance Exterior: 16 percent.
          4. Visible Light Reflectance Interior: 22 percent.
          5. Solar Transmittance: 21 percent.
          6. Solar Reflectance: 23 percent.
          7. Solar Absorptance: 56 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 49 percent.
          10. Shading Coefficient: 0.59.
          11. Solar Heat Gain Coefficient: 0.51.
          12. Luminous Efficacy: 0.34.
          13. U Value (Day Winter): 0.47.
          14. Glare Reduction: 75 percent.
      27. Film Type: REFLECTIVE GREY 35.
          1. Thickness: 1.5 mils.
          2. Visible Light Transmittance: 35 percent.
          3. Visible Light Reflectance Exterior: 8 percent.
          4. Visible Light Reflectance Interior: 15 percent.
          5. Solar Energy Transmittance: 37 percent.
          6. Solar Energy Reflectance: 11 percent.
          7. Solar Energy Absorption: 52 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 48 percent.
          10. Shading Coefficient: 0.61.
          11. Solar Heat Gain Coefficient: 0.52.
          12. Luminous Efficacy: 0.57.
          13. Emissivity: 0.84.
          14. Winter Median U Value: 1.03.
          15. Glare Reduction: 62 percent.
          16. NIR Blocking At 1025 Nm: 42 +- 3.0.
          17. Visible Light Transmittance Tolerance: 35 +- 3.0.
      28. Film Type: REFLECTIVE GREY 35.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 31 percent.
          3. Visible Light Reflectance Exterior: 15 percent.
          4. Visible Light Reflectance Interior: 16 percent.
          5. Solar Transmittance: 28 percent.
          6. Solar Reflectance: 13 percent.
          7. Solar Absorptance: 59 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 43 percent.
          10. Shading Coefficient: 0.66.
          11. Solar Heat Gain Coefficient: 0.57.
          12. Luminous Efficacy: 0.47.
          13. U Value (Day Winter): 0.47.
          14. Glare Reduction: 62 percent.
      29. Film Type: REFLECTIVE BRONZE 10, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 10 percent.
          3. Visible Light Reflectance Exterior: 21 percent.
          4. Visible Light Reflectance Interior: 56 percent.
          5. Solar Energy Transmittance: 10 percent.
          6. Solar Energy Reflectance: 31 percent.
          7. Solar Energy Absorption: 59 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 74 percent.
          10. Shading Coefficient: 0.31.
          11. Solar Heat Gain Coefficient: 0.26.
          12. Luminous Efficacy: 0.32.
          13. Emissivity: 0.66.
          14. Winter Median U Value: 1.01.
          15. Glare Reduction: 89 percent.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 12 +- 2.0.
      30. Film Type: REFLECTIVE BRONZE 10, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 09 percent.
          3. Visible Light Reflectance Exterior: 26 percent.
          4. Visible Light Reflectance Interior: 56 percent.
          5. Solar Transmittance: 09 percent.
          6. Solar Reflectance: 29 percent.
          7. Solar Absorptance: 62 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 59 percent.
          10. Shading Coefficient: 0.47.
          11. Solar Heat Gain Coefficient: 0.41.
          12. Luminous Efficacy: 0.19.
          13. U Value (Day Winter): 0.45.
          14. Glare Reduction: 89 percent.
      31. Film Type: REFLECTIVE GOLD 15.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 14.
          3. Visible Light Reflectance Exterior: 46.
          4. Visible Light Reflectance Interior: 56.
          5. Solar Energy Transmittance: 12.
          6. Solar Energy Reflectance: 44.
          7. Solar Energy Absorption: 44.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 76.
          10. Shading Coefficient: 0.28.
          11. Solar Heat Gain Coefficient: 0.24.
          12. Luminous Efficacy: 0.5.
          13. Emissivity: 0.69.
          14. Winter Median U Value: 1.01.
          15. Glare Reduction: 84.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 15 +- 3.0.
      32. Film Type: REFLECTIVE GREY 10 AMS, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 8 percent.
          3. Visible Light Reflectance Exterior: 56 percent.
          4. Visible Light Reflectance Interior: 13 percent.
          5. Solar Energy Transmittance: 9 percent.
          6. Solar Energy Reflectance: 52 percent.
          7. Solar Energy Absorption: 39 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 80 percent.
          10. Shading Coefficient: 0.23.
          11. Solar Heat Gain Coefficient: 0.2.
          12. Luminous Efficacy: 0.35.
          13. Emissivity: 0.64.
          14. Winter Median U Value: 1.01.
          15. Glare Reduction: 91 percent.
          16. NIR Blocking At 1025 Nm: 80 +- 3.0.
          17. Visible Light Transmittance Tolerance: 9 +- 2.0.
      33. Film Type: REFLECTIVE GREY 10 AMS, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 08 percent.
          3. Visible Light Reflectance Exterior: 57 percent.
          4. Visible Light Reflectance Interior: 14 percent.
          5. Solar Transmittance: 08 percent.
          6. Solar Reflectance: 46 percent.
          7. Solar Absorptance: 46 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 68 percent.
          10. Shading Coefficient: 0.36.
          11. Solar Heat Gain Coefficient: 0.32.
          12. Luminous Efficacy: 0.22.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 90 percent.
   7. FILM SERIES: EXTERIOR.
      1. Film Type: R SILVER 15 EXTERIOR (threeply), Single Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 14 percent.
         3. Visible Light Reflectance Exterior: 72 percent.
         4. Visible Light Reflectance Interior: 69 percent.
         5. Solar Energy Transmittance: 10 percent.
         6. Solar Energy Reflectance: 72 percent.
         7. Solar Energy Absorption: 18 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 85 percent.
         10. Shading Coefficient: 0.18.
         11. Solar Heat Gain Coefficient: 0.15.
         12. Luminous Efficacy: 0.78.
         13. Emissivity: 0.62.
         14. Winter Median U Value: 1.01.
         15. Glare Reduction: 85 percent.
         16. NIR Blocking At 1025 Nm: 85 +- 3.0.
         17. Visible Light Transmittance Tolerance: 15 +- 2.0.
      2. Film Type: R SILVER 15 EXTERIOR (threeply), Dual Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 13 percent.
         3. Visible Light Reflectance Exterior: 72 percent.
         4. Visible Light Reflectance Interior: 68 percent.
         5. Solar Transmittance: 09 percent.
         6. Solar Reflectance: 72 percent.
         7. Solar Absorptance: 19 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 88 percent.
         10. Shading Coefficient: 0.14.
         11. Solar Heat Gain Coefficient: 0.12.
         12. Luminous Efficacy: 0.93.
         13. U Value (Day Winter): 0.44.
         14. Glare Reduction: 84 percent.
      3. Film Type: R SILVER 20 EXTERIOR (threeply), Single Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 19 percent.
         3. Visible Light Reflectance Exterior: 63 percent.
         4. Visible Light Reflectance Interior: 58 percent.
         5. Solar Energy Transmittance: 14 percent.
         6. Solar Energy Reflectance: 63 percent.
         7. Solar Energy Absorption: 23 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 80 percent.
         10. Shading Coefficient: 0.23.
         11. Solar Heat Gain Coefficient: 0.20.
         12. Luminous Efficacy: 0.95.
         13. Emissivity: 0.64.
         14. Winter Median U Value: 1.01.
         15. Glare Reduction: 79 percent.
         16. NIR Blocking At 1025 Nm: 80 +- 3.0.
         17. Visible Light Transmittance Tolerance: 20 +- 3.0.
      4. Film Type: R SILVER 20 EXTERIOR (threeply), Dual Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 17 percent.
         3. Visible Light Reflectance Exterior: 62 percent.
         4. Visible Light Reflectance Interior: 55 percent.
         5. Solar Transmittance: 11 percent.
         6. Solar Reflectance: 63 percent.
         7. Solar Absorptance: 26 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 84 percent.
         10. Shading Coefficient: 0.19.
         11. Solar Heat Gain Coefficient: 0.16.
         12. Luminous Efficacy: 0.89.
         13. U Value (Day Winter): 0.45.
         14. Glare Reduction: 79 percent.
      5. Film Type: R SILVER 35 EXTERIOR (threeply), Single Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 36 percent.
         3. Visible Light Reflectance Exterior: 42 percent.
         4. Visible Light Reflectance Interior: 39 percent.
         5. Solar Transmittance: 28 percent.
         6. Solar Reflectance: 43 percent.
         7. Solar Absorptance: 29 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 64 percent.
         10. Shading Coefficient: 0.41.
         11. Solar Heat Gain Coefficient: 0.36.
         12. Luminous Efficacy: 0.88.
         13. Emissivity: 0.72.
         14. U Value (Day Winter): 1.02.
         15. Glare Reduction: 60 percent.
         16. NIR Blocking at 1025 nm: 68 +- 3.0.
         17. Visible Light Transmittance Tolerance: 35 +- 3.0.
      6. Film Type: R SILVER 35 EXTERIOR (threeply), Dual Pane.
         1. Thickness: 2.0 mils.
         2. Visible Light Transmittance: 33 percent.
         3. Visible Light Reflectance Exterior: 43 percent.
         4. Visible Light Reflectance Interior: 39 percent.
         5. Solar Transmittance: 23 percent.
         6. Solar Reflectance: 43 percent.
         7. Solar Absorptance: 34 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 70 percent.
         10. Shading Coefficient: 0.35.
         11. Solar Heat Gain Coefficient: 0.30.
         12. Luminous Efficacy: 0.94.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 59 percent.
      7. Film Type: ICE COOL GREY 70 Exterior (threeply), Single Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 68 percent.
         3. Visible Light Reflectance Exterior: 8 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 38 percent.
         6. Solar Energy Reflectance: 8 percent.
         7. Solar Energy Absorption: 54 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 47 percent.
         10. Shading Coefficient: 0.61.
         11. Solar Heat Gain Coefficient: 0.53.
         12. Luminous Efficacy: 1.11.
         13. Emissivity 0.89.
         14. Winter Median U Value: 1.04.
         15. Glare Reduction: 25 percent.
         16. NIR Blocking At 1025 Nm: 88 +- 3.0.
         17. Visible Light Transmittance Tolerance: 70 +- 3.0.
      8. Film Type: ICE COOL GREY 70 Exterior (threeply), Dual Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 63 percent.
         3. Visible Light Reflectance Exterior: 12 percent.
         4. Visible Light Reflectance Interior: 14 percent.
         5. Solar Transmittance: 39 percent.
         6. Solar Reflectance: 10 percent.
         7. Solar Absorptance: 51 percent.
         8. Total Solar Energy Rejected: 52 percent.
         9. Shading Coefficient: 0.55.
         10. Solar Heat Gain Coefficient: 0.48.
         11. Luminous Efficacy: 1.15.
         12. U Value (Day Winter): 0.47.
         13. Glare Reduction: 22 percent.
      9. Film Type: ICE COOL GREY 80 (threeply), Single Pane.
         1. Thickness: 2.5 mils.
         2. Visible Light Transmittance: 78 percent.
         3. Visible Light Reflectance Exterior 09 percent.
         4. Visible Light Reflectance Interior: 09 percent.
         5. Solar Transmittance: 46 percent.
         6. Solar Reflectance: 08 percent.
         7. Solar Absorptance: 46 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 41 percent.
         10. Shading Coefficient: 0.68.
         11. Solar Heat Gain Coefficient: 0.59.
         12. Luminous Efficacy: 1.15.
         13. Emissivity: 0.89.
         14. U Value (Day Winter): 1.04.
         15. Glare Reduction: 14 percent.
         16. NIR Blocking at 1025 nm: 76 +- 3.0.
         17. Visible Light Transmittance Tolerance: 79 +- 3.0.
      10. Film Type: CLEAR EXTERIOR SAFETY FILM.
          1. Thickness: 4 mils.
          2. Visible Light Transmittance: 90.
          3. Visible Light Transmittance Tolerance: 90 +- 3.0.
          4. Visible Light Reflectance Exterior: 9.
          5. Visible Light Reflectance Interior: 9.
          6. Solar Energy Transmittance: 83.
          7. Solar Energy Reflectance: 6.
          8. Solar Energy Absorption: 11.
          9. Ultraviolet Light Transmission: Less than 1 percent.
          10. Total Solar Energy Rejected: 47.
          11. Shading Coefficient: 0.98.
          12. Solar Heat Gain Coefficient: 0.87.
          13. Luminous Efficacy: 0.92.
          14. Emissivity 0.89.
          15. Winter Median U Value: 1.12.
          16. Glare Reduction: 1.
          17. NIR Blocking At 1025 Nm: 15 +- 3.0.
   8. FILM SERIES: HIGH PERFORMANCE.
      1. Film Type: HP NATURAL 35, Single Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 39 percent.
         3. Visible Light Reflectance Exterior: 14 percent.
         4. Visible Light Reflectance Interior: 20 percent.
         5. Solar Energy Transmittance: 36 percent.
         6. Solar Energy Reflectance: 16 percent.
         7. Solar Energy Absorption: 48 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 51 percent.
         10. Shading Coefficient: 0.56.
         11. Solar Heat Gain Coefficient: 0.49.
         12. Luminous Efficacy: 0.69.
         13. Emissivity: 0.8.
         14. Winter Median U Value: 1.11.
         15. Glare Reduction: 57 percent.
         16. NIR Blocking At 1025 Nm: 50 +- 3.0.
         17. Visible Light Transmittance Tolerance: 39 +- 3.0.
      2. Film Type: HP NATURAL 35, Dual Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 36 percent.
         3. Visible Light Reflectance Exterior: 19 percent.
         4. Visible Light Reflectance Interior: 22 percent.
         5. Solar Transmittance: 31 percent.
         6. Solar Reflectance: 17 percent.
         7. Solar Absorptance: 52 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 40 percent.
         10. Shading Coefficient: 0.67.
         11. Solar Heat Gain Coefficient: 0.6.
         12. Luminous Efficacy: 0.54.
         13. U Value (Day Winter): 0.47.
         14. Glare Reduction: 56 percent.
      3. Film Type: HP BLUE 35, Single Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 41 percent.
         3. Visible Light Reflectance Exterior: 10 percent.
         4. Visible Light Reflectance Interior: 12 percent.
         5. Solar Energy Transmittance: 40 percent.
         6. Solar Energy Reflectance: 11 percent.
         7. Solar Energy Absorption: 49 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 46 percent.
         10. Shading Coefficient: 0.62.
         11. Solar Heat Gain Coefficient: 0.54.
         12. Luminous Efficacy: 0.66.
         13. Emissivity: 0.80.
         14. Winter Median U Value: 1.1.
         15. Glare Reduction: 55 percent.
         16. NIR Blocking At 1025 Nm: 42 +- 3.0.
         17. Visible Light Transmittance Tolerance: 40 +- 3.0.
      4. Film Type: HP BLUE 35, Dual Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 37 percent.
         3. Visible Light Reflectance Exterior: 16 percent.
         4. Visible Light Reflectance Interior: 13 percent.
         5. Solar Transmittance: 33 percent.
         6. Solar Reflectance: 15 percent.
         7. Solar Absorptance: 52 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 38 percent.
         10. Shading Coefficient: 0.71.
         11. Solar Heat Gain Coefficient: 0.62.
         12. Luminous Efficacy: 0.52.
         13. U Value (Day Winter): 0.47.
         14. Glare Reduction: 54 percent.
      5. Film Type: BRONZE REFLECTIVE 30, Single Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 30 percent.
         3. Visible Light Reflectance Exterior: 13 percent.
         4. Visible Light Reflectance Interior: 21 percent.
         5. Solar Energy Transmittance: 32 percent.
         6. Solar Energy Reflectance: 17 percent.
         7. Solar Energy Absorption: 51 percent.
         8. Ultraviolet Light Transmission: Less than 1 percent.
         9. Total Solar Energy Rejected: 53 percent.
         10. Shading Coefficient: 0.53.
         11. Solar Heat Gain Coefficient: 0.47.
         12. Luminous Efficacy: 0.57.
         13. Emissivity: 0.73.
         14. Winter Median U Value: 1.08.
         15. Glare Reduction: 67 percent.
         16. NIR Blocking At 1025 Nm: 50 +- 3.0.
         17. Visible Light Transmittance Tolerance: 30 +- 3.0.
      6. Film Type: BRONZE REFLECTIVE 30, Dual Pane.
         1. Film Thickness: 1.5 mils.
         2. Visible Light Transmittance: 27 percent.
         3. Visible Light Reflectance Exterior: 18 percent.
         4. Visible Light Reflectance Interior: 21 percent.
         5. Solar Transmittance: 25 percent.
         6. Solar Reflectance: 17 percent.
         7. Solar Absorptance: 58 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 48 percent.
         10. Shading Coefficient: 0.6.
         11. Solar Heat Gain Coefficient: 0.52.
         12. Luminous Efficacy: 0.45.
         13. U Value (Day Winter): 0.46.
         14. Glare Reduction: 67 percent.
   9. FILM SERIES: SAFETY AND SECURITY (INTERIOR).
      1. Film Type: 4 MIL SAFETY FILM, Single Pane.
         1. Film Thickness: 4 mils.
         2. Visible Light Transmittance: 90 percent.
         3. Visible Light Reflectance Exterior: 9 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 83 percent.
         6. Solar Energy Reflectance: 6 percent.
         7. Solar Energy Absorption: 11 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 13 percent.
         10. Shading Coefficient: 0.98.
         11. Solar Heat Gain Coefficient: 0.87.
         12. Luminous Efficacy: 0.92.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.12.
         15. Glare Reduction: 1 percent.
         16. NIR Blocking At 1025 Nm: 15 +- 3.0.
         17. Visible Light Transmittance Tolerance: 90 +- 3.0.
      2. Film Type: 4 MIL SAFETY FILM, Dual Pane.
         1. Film Thickness: 4 mils.
         2. Visible Light Transmittance: 81 percent.
         3. Visible Light Reflectance Exterior: 15 percent.
         4. Visible Light Reflectance Interior: 09 percent.
         5. Solar Transmittance: 71 percent.
         6. Solar Reflectance: 12 percent.
         7. Solar Absorptance: 17 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 24 percent.
         10. Shading Coefficient: 0.88.
         11. Solar Heat Gain Coefficient: 0.76.
         12. Luminous Efficacy: 0.92.
         13. U Value (Day Winter): 0.49.
         14. Glare Reduction: 0 percent.
      3. Film Type: 7 MIL SAFETY FILM, Single Pane.
         1. Film Thickness: 7 mils.
         2. Visible Light Transmittance: 91 percent.
         3. Visible Light Reflectance Exterior: 9 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 81 percent.
         6. Solar Energy Reflectance: 7 percent.
         7. Solar Energy Absorption: 12 percent.
         8. Ultraviolet Light Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 15 percent.
         10. Shading Coefficient: 0.98.
         11. Solar Heat Gain Coefficient: 0.85.
         12. Luminous Efficacy: 0.93.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.12.
         15. Glare Reduction: 0 percent.
         16. NIR Blocking At 1025 Nm: 15 +- 3.0.
         17. Visible Light Transmittance Tolerance: 90 +- 3.0.
      4. Film Type: 7 MIL SAFETY FILM, Dual Pane.
         1. Film Thickness: 7 mils.
         2. Visible Light Transmittance: 81 percent.
         3. Visible Light Reflectance Exterior: 15 percent.
         4. Visible Light Reflectance Interior: 10 percent.
         5. Solar Transmittance: 70 percent.
         6. Solar Reflectance: 13 percent.
         7. Solar Absorptance: 17 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 24 percent.
         10. Shading Coefficient: 0.88.
         11. Solar Heat Gain Coefficient: 0.76.
         12. Luminous Efficacy: 0.92.
         13. U Value (Day Winter): 0.49.
         14. Glare Reduction: 0 percent.
      5. Film Type: 8 MIL SAFETY FILM, Single Pane.
         1. Film Thickness: 8 mils.
         2. Visible Light Transmittance: 91 percent.
         3. Visible Light Reflectance Exterior: 9 percent.
         4. Visible Light Reflectance Interior: 9 percent.
         5. Solar Energy Transmittance: 81 percent.
         6. Solar Energy Reflectance: 7 percent.
         7. Solar Energy Absorption: 12 percent.
         8. Ultraviolet Light Transmission: Less than 1 percent.
         9. Total Solar Energy Rejected: 15 percent.
         10. Shading Coefficient: 0.98.
         11. Solar Heat Gain Coefficient: 0.85.
         12. Luminous Efficacy: 0.93.
         13. Emissivity: 0.89.
         14. Winter Median U Value: 1.12.
         15. Glare Reduction: 0 percent.
         16. NIR Blocking At 1025 Nm: 15 +- 3.0.
         17. Visible Light Transmittance Tolerance: 90 +- 3.0.
      6. Film Type: 8 MIL SAFETY FILM, Dual Pane.
         1. Film Thickness: 8 mils.
         2. Visible Light Transmittance: 81 percent.
         3. Visible Light Reflectance Exterior: 15 percent.
         4. Visible Light Reflectance Interior: 10 percent.
         5. Solar Transmittance: 70 percent.
         6. Solar Reflectance: 13 percent.
         7. Solar Absorptance: 17 percent.
         8. Ultraviolet Transmission: less than 1 percent.
         9. Total Solar Energy Rejected: 24 percent.
         10. Shading Coefficient: 0.88.
         11. Solar Heat Gain Coefficient: 0.76.
         12. Luminous Efficacy: 0.92.
         13. U Value (Day Winter): 0.49.
         14. Glare Reduction: 0 percent.
      7. Film Type: C 4 MIL R SILVER 20.
         1. Film Thickness: 4 mils.
         2. Visible Light Transmittance: 17.
         3. Visible Light Transmittance Tolerance: 20 +- 3.0.
         4. Visible Light Reflectance Exterior: 54.
         5. Visible Light Reflectance Interior: 56.
         6. Solar Energy Transmittance: 12.
         7. Solar Energy Reflectance: 47.
         8. Solar Energy Absorption: 41.
         9. Ultraviolet Light Transmission: Less than 1 percent.
         10. Total Solar Energy Rejected: 78.
         11. Shading Coefficient: 0.26.
         12. Solar Heat Gain Coefficient: 0.22.
         13. Luminous Efficacy: 0.65.
         14. Emissivity: 0.6.
         15. Winter Median U Value: 0.98.
         16. Glare Reduction: 81.
         17. NIR Blocking At 1025 Nm: 80 +- 3.0.
      8. Film Type: C 4 MIL R SILVER 35.
         1. Film Thickness: 4 mils.
         2. Visible Light Transmittance: 36.
         3. Visible Light Transmittance Tolerance: 36 +- 3.0.
         4. Visible Light Reflectance Exterior: 37.
         5. Visible Light Reflectance Interior: 39.
         6. Solar Energy Transmittance: 27.
         7. Solar Energy Reflectance: 34.
         8. Solar Energy Absorption: 39.
         9. Ultraviolet Light Transmission: Less than 1 percent.
         10. Total Solar Energy Rejected: 62.
         11. Shading Coefficient: 0.43.
         12. Solar Heat Gain Coefficient: 0.38.
         13. Luminous Efficacy: 0.84.
         14. Emissivity: 0.72.
         15. Winter Median U Value: 1.02.
         16. Glare Reduction: 60.
         17. NIR Blocking At 1025 Nm: 68 +- 3.0.
      9. Film Type: C 4 MIL R SILVER 50.
         1. Film Thickness: 4 mils.
         2. Visible Light Transmittance: 50.
         3. Visible Light Transmittance Tolerance: 50 +- 3.0.
         4. Visible Light Reflectance Exterior: 25.
         5. Visible Light Reflectance Interior: 27.
         6. Solar Energy Transmittance: 37.
         7. Solar Energy Reflectance: 23.
         8. Solar Energy Absorption: 40.
         9. Ultraviolet Light Transmission: Less than 1 percent.
         10. Total Solar Energy Rejected: 52.
         11. Shading Coefficient: 0.55.
         12. Solar Heat Gain Coefficient: 0.48.
         13. Luminous Efficacy: 0.91.
         14. Emissivity: 0.76.
         15. Winter Median U Value: 1.04.
         16. Glare Reduction: 45.
         17. NIR Blocking At 1025 Nm: 55 +- 3.0.
      10. Film Type: 4 Mil CH 20 COMBINATION SAFETY, Single Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 20 percent.
          3. Visible Light Reflectance Exterior: 6 percent.
          4. Visible Light Reflectance Interior: 7 percent.
          5. Solar Energy Transmittance: 44 percent.
          6. Solar Energy Reflectance: 6 percent.
          7. Solar Energy Absorption: 50 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 42 percent.
          10. Shading Coefficient: 0.67.
          11. Solar Heat Gain Coefficient: 0.58.
          12. Luminous Efficacy: 0.30.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.12.
          15. Glare Reduction: 78 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 20 +- 3.0.
      11. Film Type: 4 Mil CH 20 COMBINATION SAFETY, Dual Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 18 percent.
          3. Visible Light Reflectance Exterior: 13 percent.
          4. Visible Light Reflectance Interior: 07 percent.
          5. Solar Transmittance: 35 percent.
          6. Solar Reflectance: 12 percent.
          7. Solar Absorptance: 53 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 36 percent.
          10. Shading Coefficient: 0.74.
          11. Solar Heat Gain Coefficient: 0.64.
          12. Luminous Efficacy: 0.24.
          13. U Value (Day Winter): 0.49.
          14. Glare Reduction: 78 percent.
      12. Film Type: 4 Mil CH 35 COMBINATION SAFETY, Single Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 35 percent.
          3. Visible Light Reflectance Exterior: 6 percent.
          4. Visible Light Reflectance Interior: 7 percent.
          5. Solar Energy Transmittance: 52 percent.
          6. Solar Energy Reflectance: 7 percent.
          7. Solar Energy Absorption: 41 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 37 percent.
          10. Shading Coefficient: 0.72.
          11. Solar Heat Gain Coefficient: 0.63.
          12. Luminous Efficacy: 0.49.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.12.
          15. Glare Reduction: 62 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 35 +- 3.0.
      13. Film Type: 4 Mil CH 35 COMBINATION SAFETY, Single Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 32 percent.
          3. Visible Light Reflectance Exterior: 13 percent.
          4. Visible Light Reflectance Interior: 07 percent.
          5. Solar Transmittance: 42 percent.
          6. Solar Reflectance: 12 percent.
          7. Solar Absorptance: 46 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 34 percent.
          10. Shading Coefficient: 0.76.
          11. Solar Heat Gain Coefficient: 0.66.
          12. Luminous Efficacy: 0.42.
          13. U Value (Day Winter): 0.49.
          14. Glare Reduction: 60 percent.
      14. Film Type: 4 Mil CH 50 COMBINATION SAFETY, Single Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 51 percent.
          3. Visible Light Reflectance Exterior: 6 percent.
          4. Visible Light Reflectance Interior: 7 percent.
          5. Solar Energy Transmittance: 59 percent.
          6. Solar Energy Reflectance: 7 percent.
          7. Solar Energy Absorption: 34 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 31 percent.
          10. Shading Coefficient: 0.79.
          11. Solar Heat Gain Coefficient: 0.69.
          12. Luminous Efficacy: 0.65.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.13.
          15. Glare Reduction: 45 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 50 +- 3.0.
      15. Film Type: 4 Mil CH 50 COMBINATION SAFETY, Dual Pane.
          1. Film Thickness: 4 mils.
          2. Visible Light Transmittance: 46 percent.
          3. Visible Light Reflectance Exterior: 14 percent.
          4. Visible Light Reflectance Interior: 8 percent.
          5. Solar Transmittance: 48 percent.
          6. Solar Reflectance: 12 percent.
          7. Solar Absorptance: 40 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 32 percent.
          10. Shading Coefficient: 0.79.
          11. Solar Heat Gain Coefficient: 0.68.
          12. Luminous Efficacy: 0.58.
          13. U Value (Day Winter): 0.49.
          14. Glare Reduction: 43 percent.
   10. FILM SERIES: PRIVACY AND SPECIALTY.
       1. Film Type: Blackout, Single Pane.
          1. Thickness: 2.5 mils.
          2. Visible Light Transmittance: 0 percent.
          3. Visible Light Transmittance Tolerance: 0 percent.
          4. Visible Light Reflectance Exterior: 4 percent.
          5. Visible Light Reflectance Interior: 5 percent.
          6. Solar Energy Transmittance: 0 percent.
          7. Solar Energy Reflectance: 34 percent.
          8. Solar Energy Absorption: 66 percent.
          9. Ultraviolet Light Transmission: less than 1 percent.
          10. Total Solar Energy Rejected: 82 percent.
          11. Shading Coefficient: 0.21.
          12. Solar Heat Gain Coefficient: 0.18.
          13. Luminous Efficacy: 0.
          14. Emissivity: 0.63.
          15. Winter Median U Value: 1.00.
          16. Glare Reduction: 100 percent.
          17. NIR Blocking At 1025 Nm: 97 +- 3.0.
       2. Film Type: Blackout, Dual Pane.
          1. Thickness: 2.5 mils.
          2. Visible Light Transmittance: 0 percent.
          3. Visible Light Reflectance Exterior: 11 percent.
          4. Visible Light Reflectance Interior: 05 percent.
          5. Solar Transmittance: 0 percent.
          6. Solar Reflectance: 30 percent.
          7. Solar Absorptance: 70 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 64 percent.
          10. Shading Coefficient: 0.41.
          11. Solar Heat Gain Coefficient: 0.36.
          12. Luminous Efficacy: 0.00.
          13. U Value (Day Winter): 0.45.
          14. Glare Reduction: 100 percent.
       3. Film Type: Whiteout 2M.
          1. Thickness: 2 mils.
          2. Visible Light Transmittance: 8 percent.
          3. Visible Light Reflectance Exterior: 59 percent.
          4. Visible Light Reflectance Interior: 83 percent.
          5. Solar Energy Transmittance: 12 percent.
          6. Solar Energy Reflectance: 47 percent.
          7. Solar Energy Absorption: 41 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 77 percent.
          10. Shading Coefficient: 0.27.
          11. Solar Heat Gain Coefficient: 0.23.
          12. Luminous Efficacy: 0.3.
          13. Emissivity: 0.87.
          14. Winter Median U Value: 1.02.
          15. Glare Reduction: 91 percent.
          16. NIR Blocking At 1025 Nm: 90 +- 3.0.
          17. Visible Light Transmittance Tolerance: 10 +- 3.0.
       4. Film Type: Whiteout 2M.
          1. Thickness: 2 mils.
          2. Visible Light Transmittance: 8 percent.
          3. Visible Light Reflectance Exterior: 59 percent.
          4. Visible Light Reflectance Interior: 58 percent.
          5. Solar Transmittance: 9 percent.
          6. Solar Reflectance: 44 percent.
          7. Solar Absorptance: 47 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 67 percent.
          10. Shading Coefficient: 0.38.
          11. Solar Heat Gain Coefficient: 0.33.
          12. Luminous Efficacy: 0.21.
          13. U Value (Day Winter): 0.46.
          14. Glare Reduction: 90 percent.
       5. Film Type: Matte White, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 66 percent.
          3. Visible Light Reflectance Exterior: 21 percent.
          4. Visible Light Reflectance Interior: 22 percent.
          5. Solar Energy Transmittance: 60 percent.
          6. Solar Energy Reflectance: 18 percent.
          7. Solar Energy Absorption: 22 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 34 percent.
          10. Shading Coefficient: 0.76.
          11. Solar Heat Gain Coefficient: 0.66.
          12. Luminous Efficacy: 0.87.
          13. Emissivity: 0.85.
          14. Winter Median U Value: 1.09.
          15. Glare Reduction: 28 percent.
          16. NIR Blocking At 1025 Nm: 40 +- 3.0.
          17. Visible Light Transmittance Tolerance: 67 +- 3.0.
       6. Film Type: Matte White, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 60 percent.
          3. Visible Light Reflectance Exterior: 26 percent.
          4. Visible Light Reflectance Interior: 9 percent.
          5. Solar Transmittance: 52 percent.
          6. Solar Reflectance: 21 percent.
          7. Solar Absorptance: 27 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 36 percent.
          10. Shading Coefficient: 0.74.
          11. Solar Heat Gain Coefficient: 0.64.
          12. Luminous Efficacy: 0.81.
          13. U Value (Day Winter): 0.48.
          14. Glare Reduction: 26 percent.
       7. Film Type: Matte Bronze, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 35 percent.
          3. Visible Light Reflectance Exterior: 7 percent.
          4. Visible Light Reflectance Interior: 9 percent.
          5. Solar Energy Transmittance: 43 percent.
          6. Solar Energy Reflectance: 11 percent.
          7. Solar Energy Absorption: 46 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 44 percent.
          10. Shading Coefficient: 0.65.
          11. Solar Heat Gain Coefficient: 0.56.
          12. Luminous Efficacy: 0.54.
          13. Emissivity: 0.86.
          14. Winter Median U Value: 1.14.
          15. Glare Reduction: 62 percent.
          16. NIR Blocking At 1025 Nm: 40 +- 3.0.
          17. Visible Light Transmittance Tolerance: 35 +- 3.0.
       8. Film Type: Matte Bronze, Dual Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 32 percent.
          3. Visible Light Reflectance Exterior: 16 percent.
          4. Visible Light Reflectance Interior: 8 percent.
          5. Solar Transmittance: 34 percent.
          6. Solar Reflectance: 15 percent.
          7. Solar Absorptance: 51 percent.
          8. Ultraviolet Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 38 percent.
          10. Shading Coefficient: 0.71.
          11. Solar Heat Gain Coefficient: 0.62.
          12. Luminous Efficacy: 0.45.
          13. U Value (Day Winter): 0.48.
          14. Glare Reduction: 60 percent.
       9. Film Type: Matte Grey, Single Pane.
          1. Thickness: 2.0 mils.
          2. Visible Light Transmittance: 35 percent.
          3. Visible Light Reflectance Exterior: 7 percent.
          4. Visible Light Reflectance Interior: 9 percent.
          5. Solar Energy Transmittance: 43 percent.
          6. Solar Energy Reflectance: 11 percent.
          7. Solar Energy Absorption: 46 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 44 percent.
          10. Shading Coefficient: 0.65.
          11. Solar Heat Gain Coefficient: 0.56.
          12. Luminous Efficacy: 0.54.
          13. Emissivity: 0.86.
          14. Winter Median U Value: 1.14.
          15. Glare Reduction: 62 percent.
          16. NIR Blocking At 1025 Nm: 40 +- 3.0.
          17. Visible Light Transmittance Tolerance: 35 +- 3.0.
       10. Film Type: Matte Grey, Dual Pane.
           1. Thickness: 2.0 mils.
           2. Visible Light Transmittance: 32 percent.
           3. Visible Light Reflectance Exterior: 16 percent.
           4. Visible Light Reflectance Interior: 8 percent.
           5. Solar Transmittance: 34 percent.
           6. Solar Reflectance: 15 percent.
           7. Solar Absorptance: 51 percent.
           8. Ultraviolet Transmission: less than 1 percent.
           9. Total Solar Energy Rejected: 38 percent.
           10. Shading Coefficient: 0.71.
           11. Solar Heat Gain Coefficient: 0.62.
           12. Luminous Efficacy: 0.45.
           13. U Value (Day Winter): 0.48.
           14. Glare Reduction: 60 percent.
       11. Film Type: Matte Silver, Single Pane.
           1. Thickness: 2.0 mils.
           2. Visible Light Transmittance: 19 percent.
           3. Visible Light Reflectance Exterior: 54 percent.
           4. Visible Light Reflectance Interior: 38 percent.
           5. Solar Energy Transmittance: 15 percent.
           6. Solar Energy Reflectance: 47 percent.
           7. Solar Energy Absorption: 38 percent.
           8. Ultraviolet Light Transmission: less than 1 percent.
           9. Total Solar Energy Rejected: 75 percent.
           10. Shading Coefficient: 0.29.
           11. Solar Heat Gain Coefficient: 0.25.
           12. Luminous Efficacy: 0.66.
           13. Emissivity: 0.7.
           14. Winter Median U Value: 1.05.
           15. Glare Reduction: 79 percent.
           16. NIR Blocking At 1025 Nm: 80 +- 3.0.
           17. Visible Light Transmittance Tolerance: 19 +- 3.0.
       12. Film Type: Matte Silver, Dual Pane.
           1. Thickness: 2.0 mils.
           2. Visible Light Transmittance: 18 percent.
           3. Visible Light Reflectance Exterior: 54 percent.
           4. Visible Light Reflectance Interior: 38 percent.
           5. Solar Transmittance: 14 percent.
           6. Solar Reflectance: 43 percent.
           7. Solar Absorptance: 43 percent.
           8. Ultraviolet Transmission: less than 1 percent.
           9. Total Solar Energy Rejected: 64 percent.
           10. Shading Coefficient: 0.41.
           11. Solar Heat Gain Coefficient: 0.36.
           12. Luminous Efficacy: 0.44.
           13. U Value (Day Winter): 0.48.
           14. Glare Reduction: 78 percent.
       13. Film Type: 2 MIL CW FILM.
           1. Mil Thickness: 2 mil.
           2. Visible Light Transmittance: 89 percent.
           3. Visible Light Reflectance Exterior: 6 percent.
           4. Visible Light Reflectance Interior: 7 percent.
           5. Solar Energy Transmittance: 81 percent.
           6. Solar Energy Reflectance: 6 percent.
           7. Solar Energy Absorption: 13 percent.
           8. Ultraviolet Light Transmission: less than 1 percent.
           9. Total Solar Energy Rejected: 15 percent.
           10. Shading Coefficient: 0.98.
           11. Solar Heat Gain Coefficient: 0.85.
           12. Luminous Efficacy: 0.91.
           13. Emissivity: 0.86.
           14. Winter Median U Value: 1.14.
           15. Glare Reduction: 2 percent.
           16. NIR Blocking At 1025 Nm: 14 +- 3.0.
           17. Visible Light Transmittance Tolerance: 89 +- 3.0.
   11. FILM SERIES: DESIGNER ( SPECIALTY ).
       1. Film Type: Graphic Blue 35.
          1. Mil Thickness: 1 mil.
          2. Visible Light Transmittance: 36 percent.
          3. Visible Light Reflectance Exterior: 7 percent.
          4. Visible Light Reflectance Interior: 5 percent.
          5. Solar Energy Transmittance: 55 percent.
          6. Solar Energy Reflectance: 7 percent.
          7. Solar Energy Absorption: 38 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 34 percent.
          10. Shading Coefficient: 0.76.
          11. Solar Heat Gain Coefficient: 0.66.
          12. Luminous Efficacy: 0.47.
          13. Emissivity: 0.86.
          14. Winter Median U Value: 1.14.
          15. Glare Reduction: 60 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 36 +- 3.0.
       2. Film Type: Graphic Yellow 80.
          1. Mil Thickness: 1 mil.
          2. Visible Light Transmittance: 83 percent.
          3. Visible Light Reflectance Exterior: 7 percent.
          4. Visible Light Reflectance Interior: 7 percent.
          5. Solar Energy Transmittance: 72 percent.
          6. Solar Energy Reflectance: 6 percent.
          7. Solar Energy Absorption: 22 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 22 percent.
          10. Shading Coefficient: 0.9.
          11. Solar Heat Gain Coefficient: 0.78.
          12. Luminous Efficacy: 0.92.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.13.
          15. Glare Reduction: 8 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 83 +- 3.0.
       3. Film Type: Graphic Red 20.
          1. Mil Thickness: 1 mil.
          2. Visible Light Transmittance: 23 percent.
          3. Visible Light Reflectance Exterior: 4 percent.
          4. Visible Light Reflectance Interior: 4 percent.
          5. Solar Energy Transmittance: 59 percent.
          6. Solar Energy Reflectance: 6 percent.
          7. Solar Energy Absorption: 35 percent.
          8. Ultraviolet Light Transmission: less than 1 percent.
          9. Total Solar Energy Rejected: 31 percent.
          10. Shading Coefficient: 0.8.
          11. Solar Heat Gain Coefficient: 0.69.
          12. Luminous Efficacy: 0.29.
          13. Emissivity: 0.89.
          14. Winter Median U Value: 1.13.
          15. Glare Reduction: 75 percent.
          16. NIR Blocking At 1025 Nm: 15 +- 3.0.
          17. Visible Light Transmittance Tolerance: 23 +- 3.0.
       4. Film Type: Decorative Films:
          1. Use: Home and office interior environments.
          2. Mil Thickness: 1 mil.
          3. Ultraviolet Light Transmission: Less than 1 percent.
          4. Pattern: ICE CUBE.
          5. Pattern: ICE LINE.
          6. Pattern: ICE BLINDS.
3. EXECUTION
   1. EXAMINATION
      1. Glass Examination:
         1. If preparation of glass surfaces is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
            1. Glass surfaces receiving new film should first be examined to verify that they are free from defects and imperfections, which will affect the final appearance.
         2. Do not proceed with installation until glass surfaces have been properly prepared and deviations from manufacturer's recommended tolerances are corrected. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result under the project conditions.
         3. Commencement of installation constitutes acceptance of conditions.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Film Installation, General:
         1. Install in accordance with manufacturer's instructions.
         2. Cut film edges neatly and square at a uniform distance of 1/8 to 1/16 inches (3.17 to 1.59 mm) of window sealant. Use new blade tips after 3 to 4 cuts.
         3. Spray the slip solution, composed of one capful of baby shampoo or dishwashing liquid to 1 gallon of water, on window glass and adhesive to facilitate proper positioning of film.
         4. Apply film to glass and lightly spray film with slip solution.
         5. Squeegee from top to bottom of window. Spray slip solution to film and squeegee a second time.
         6. Bump film edge with lint-free towel wrapped around edge of a 5-way tool.
   4. CLEANING AND PROTECTION
      1. Remove left over material and debris from Work area. Use necessary means to protect film before, during, and after installation.
      2. Touch-up, repair or replace damaged products before Substantial Completion.
      3. After application of film, wash film using common window cleaning solutions, including ammonia solutions, 30 days after application. Do not use abrasive type cleaning agents and bristle brushes to avoid scratching film. Use synthetic sponges or soft cloths.

END OF SECTION