SECTION 08 84 00 - Plastic Glazing

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POLYCARBONATE SHEET GLAZING

\*\* NOTE TO SPECIFIER \*\* SABIC Innovative Plastics LEXAN sheet glazing.  
This section is based on LEXAN sheet glazing manufactured by SABIC Innovative Plastics at the following address:  
 1 Plastics Avenue  
 Pittsfield, MA, 01201  
 Tel: 812-831-4337  
 Fax: 812-831-4955  
 E-mail: [tfikkert@ameriluxinternational.com](mailto:tfikkert@ameriluxinternational.com)  
 Website: http://www.sabic-ip.com  
.  
With decades of experience, SABIC, formerly GE Plastics, has the broadest material portfolio in the building and constructions industry and unparalleled industry expertise in helping architects and builders realize the next breakthrough solution to meet their demanding application requirements. SABIC, Specialty Film and Sheet, provides a wide range of materials that combine the aesthetic appeal of glass with value-added performance. Based on Lexan\* polycarbonate resin, one of the most versatile materials in the world, these high performance materials are characterized by high impact strength, an excellent balance of low weight and high stiffness, impact and fire resistant, weatherability and naturally "crystal-clear" transparency and design freedom. SABIC products can be used to help deliver creative, easy-to-install glazing that is built to last. Many products are covered by a minimum 10-year limited written warranty against excessive yellowing, loss of light transmission and loss of strength due to weathering.  
 SABIC's versatile range of high technology, Lexan sheet, monolithic and multiwall products help provide exceptional design freedom due to their light weight, ability to be formed and offer different colors, prints, textures, special effects and coatings like superior weatherability, self-cleaning, and anti-drip.  
 Common applications include building cladding and facades, architectural interiors, residential glazing and conservatories, swimming pool covers, stadium roof glazing and arena applications, transportation infrastructure, sound walls, industrial glazing, greenhouses and security glazing.  
 The vast technical resources of SABIC make it easy for construction professionals to obtain the support, customized products and design assistance need to help complete projects on time and meet stringent specifications.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Solid polycarbonate plastic glazing.
    2. Multiwall polycarbonate plastic glazing.
    3. Corrugated polycarbonate plastic glazing.
    4. Accessories for installation of plastic glazing.
    5. Skylight Glazing.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Add sections relevant to this project as required.

* + 1. Section 08 83 13 - Mirrored Glass Glazing.
    2. Section 08 62 19 - Vaulted Unit Skylights.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.
    2. ANSI Z97.1 - American National Standard for Glazing Materials Used in Buildings.
    3. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position.
    4. ASTM D 648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load.
    5. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion.
    6. ASTM D 790/ASTM D 790M - Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
    7. ASTM D 1003 - Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics.
    8. ASTM D 1044 - Standard Test Method for Resistance of Transparent Plastic to Surface Abrasion.
    9. ASTM D 1929 - Standard Test Method for Ignition Properties of Plastics.
    10. ASTM D 2843 - Standard Test Method for Density of Smoke from the Burning and Decomposition of Plastics.
    11. ASTM D 3763 - Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of A Striker Impacted by A Falling Weight (40 ft-lbs).
    12. ASTM G 53 - Standard Practice for Operating Light and Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Non-Metallic Materials.
    13. QUV 313B - Accelerated Weathering Test of Non-Metallic Materials.
    14. ISO-9002 - International Standards Organization.
  1. SYSTEM DESCRIPTION

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraph for project requirements; delete requirements that do not apply. Delete entire paragraph if not applicable to project.

* + 1. Design requirements for installed plastic glazing systems:
       1. Windload resistance:
          1. Positive pressure: \_\_\_ pounds per square foot (\_\_ MPa).
          2. Negative pressure: \_\_\_ pounds per square foot (\_\_ MPa).
       2. Uplift resistance: \_\_\_ pounds per square foot (\_\_ MPa).
       3. Air infiltration: \_\_\_\_ cubic feet per minute (cu m/hr).
       4. Water infiltration: \_\_\_\_ cubic feet per minute (\_\_ cu m/hr).
    2. Performance requirements for polycarbonate sheet glazing: Conforming to requirements of 16 CFR 1201, ANSI Z97.1, and the following:
       1. Coefficient of expansion, when tested in accordance with ASTM D 696: .0000375 inch per inch per degree F (0.0000675 ratio per degree C).
       2. Modulus of elasticity, when tested in accordance with ASTM D 4065: 340,000 pounds per square inch (2343.96 MPa).
       3. Flexural strength, when tested in accordance with ASTM D 790: 13,500 pounds per square inch (93.06 MPa).
       4. Deflection temperature, when tested in accordance with ASTM D 648: 270 degrees F (132.2 degrees C) under 274 pounds per square inch (1.88 MPa) load.
       5. Self-ignition temperature, when tested in accordance with ASTM D 1929: Minimum 1000 degrees F (537.7 degrees C).
       6. Smoke density rating, when tested in accordance with ASTM D 2843: Maximum 75.
       7. Maximum allowable continuous service temperature: 180 degrees F (82.2 degrees C).
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Polycarbonate sheet manufacturer's descriptive literature for each glazing type specified, including documentation of code compliance; include descriptive literature for recommended installation accessories.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraph if colors are specified in this section.

* + 1. Selection Samples: Two sets of color chips representing polycarbonate sheet manufacturer's full range of available colors.
    2. Verification Samples: Two samples, minimum size 4 inches (102 mm) square, representing actual color and finish of products to be installed.
    3. Quality Control Submittals:

\*\* NOTE TO SPECIFIER \*\* Delete the following sub-paragraph if no design requirements are specified in SYSTEM DESCRIPTION Article in this section.

* + - 1. Design Data: Analysis by polycarbonate sheet manufacturer verifying compliance of polycarbonate sheet glazing; include details of glazing edge engagement, and allowance for anticipated thermal movements.
      2. Provide Computer Aided Sheet Engineering (CASE) report based on project information available prior to bidding.
      3. Manufacturer Qualifications: Documentation of specified manufacturer qualifications.
      4. Manufacturer's Instructions: Printed installation instructions for polycarbonate sheet glazing; include storage, requirements, recommended glazing techniques, and installation accessories.
      5. Specimen warranty documents.
    1. Closeout Submittals:
       1. Operation and maintenance data: Printed instructions on recommended cleaning and maintenance materials and methods.
       2. Warranty documents specified in WARRANTY Article of PART 1 of this section.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications:
        1. Minimum ten (10) years experience producing plastic glazing products.
        2. Minimum five (5) completed projects on which manufacturer has supplied plastic glazing, similar in type and scope to this project; each completed project to be minimum five (5) years old.
        3. Registered in accordance with ISO-9002 quality standards.
     2. Regulatory Requirements: Glazing materials to comply with the following building code:

\*\* NOTE TO SPECIFIER \*\* Delete any codes listed in the sub-paragraphs below which do not apply to project.

* + - 1. ICC Evaluation Report: ES22-21.
      2. International Building Code (IBC), 2006 Edition.
      3. International Residential Code (IRC), 2006 Edition.
      4. Dade County, FL.
    1. Mock-Ups: Supply materials for mock-ups required in affected sections.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Do not slide, drag, or drop polycarbonate sheet materials.
     2. Do not store polycarbonate sheet materials in areas subject to direct UV exposure.
     3. Store products of this section with polycarbonate sheet manufacturer's protective film intact.
     4. Maintain storage area in accordance with polycarbonate sheet manufacturer's instructions until installation of products.
  2. WARRANTY
     1. At project closeout, provide to Owner or Owners Representative an executed copy of the manufacturer's standard limited warranty against manufacturing defect, outlining its terms, conditions, and exclusions from coverage.

\*\* NOTE TO SPECIFIER \*\* 3 year warranty is only for Thermoclear Easy Clean Sheets. 5 year warranty is only for Lexan 9030 and Lexan 9030FR sheets. All others carry a 10 year warranty. Retain only those warranties applicable to the specified products and delete all others.

* + - 1. Duration: Three (3) year warranty against defects in Thermoclear Easy Clean materials.
      2. Duration: Five (5) year warranty against defects in Lexan 9030 and 9030FR materials.
      3. Duration: Ten (10) year warranty against defects in materials.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: SABIC, which is located at: 1 Plastics Ave.; Pittsfield, MA 01201; Tel: 812-831-4337; Fax: 812-831-4955; Email: [request info (amber.hoover@sabic-ip.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=SABIC&coid=32709&rep=&fax=812-831-4955&message=RE:%20Spec%20Question%20(08841sab):%20%20&mf=); Web: [www.sabic.com/sfs](http://www.sabic.com/sfs)

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following paragraphs; coordinate with Division 1 requirements.

* + 1. Requests for substitution will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
    2. Substitutions: Not permitted.
  1. SCOPE / APPLICATIONS

\*\* NOTE TO SPECIFIER \*\* Retain only those allocation related to the Work specified in this section and delete all others. Add additional applications where not listed.

* + 1. Provide polycarbonate glazing panels for use in glazed curtain wall assemblies.
    2. Provide polycarbonate glazing panels for use in signage applications.
    3. Provide polycarbonate glazing panels for use in unit skylight applications.
    4. Provide polycarbonate glazing panels for use in field fabricated skylight applications.
    5. Provide polycarbonate glazing panels for use in protective railing applications.
  1. SOLID PANELS
     1. LEXAN Margard MR10: Translucent polycarbonate sheet with UV-resistant and abrasion resistant hardcoat surface treatment both sides.

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete four of the next five paragraphs.

* + - 1. Sheet Thickness: 0.118 inch (3mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.177 inch (4.5mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.375 inch (9.5mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.5 inch (12.7mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete four of the next five paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.
      3. Color: Grey.
      4. Color: Light Green.
      5. Color: Green.
      6. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Solar Control IR Sheet:
       1. Grade/Type: XLD SC IR.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete three of the next four paragraphs.

* + - 1. Sheet Thickness: 0.118 inch (3mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.472 inch (12mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete one of the next two paragraphs.

* + - 1. Color: Light Green.
      2. Color: Green.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN XL102 UV Sheet:
       1. Grade/Type: XL102UV.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete four of the next five paragraphs.

* + - 1. Sheet Thickness: 0.118 inch (3mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.177 inch (4.5mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.375 inch (9.5mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.5 inch (12.7mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete five of the next six paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.
      3. Color: Grey.
      4. Color: Green.
      5. Color: Blue.
      6. Color: Opal White.
      7. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN 9030:
       1. Grade/Type: 9030.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete 11 of the next 12 paragraphs.

* + - 1. Sheet Thickness: 0.030 inch (0.75 mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.040 inch (1 mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.060 inch (1.5 mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.080 inch (2mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.118 inch (3mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.158 inch (4mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 0.197 inch (5mm) nominal, plus or minus 5 percent.
      8. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      9. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      10. Sheet Thickness: 0.375 inch (9.5mm) nominal, plus or minus 5 percent.
      11. Sheet Thickness: 0.472 inch (12mm) nominal, plus or minus 5 percent.
      12. Sheet Thickness: 0.5 inch (13mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete two of the next three paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze
      3. Color: Opal white.
      4. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
  1. MULTIWALL PANELS
     1. LEXAN Thermoclick Sheet:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Panel Thickness. Delete one of the next two paragraphs.

* + - 1. Panel Thickness: 1.58 inch (40mm) nominal, plus or minus 5 percent.
         1. Panel Width: 19.7 inches (0.5m).
      2. Panel Thickness: 1.97 inch (50mm) nominal, plus or minus 5 percent.
         1. Panel Width: 39.4 inches (1.0m).

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete eight of the next nine paragraphs.

* + - 1. Color: Opal White
      2. Color: Clear/Transparent.
      3. Color: Green.
      4. Color: Orange.
      5. Color: Purple.
      6. Color: Blue.
      7. Color: Grey.
      8. Color: Red.
      9. Color: Yellow.
      10. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete nine of the next ten paragraphs.

* + - 1. Sheet Thickness: 0.177 inch (4.5 mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 0.984 inch (25mm) nominal, plus or minus 5 percent.
      8. Sheet Thickness: 1.26 inch (32mm) nominal, plus or minus 5 percent.
      9. Sheet Thickness: 1.57 inch (40mm) nominal, plus or minus 5 percent.
      10. Sheet Thickness: 1.97 inch (50mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete six of the next seven paragraphs.

* + - 1. Color: Opal 40% LT.
      2. Color: White 20% LT.
      3. Color: Blue.
      4. Color: Light Green.
      5. Color: Dark Grey.
      6. Color: Bronze.
      7. Color: Clear/Transparent.
      8. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
    1. LEXAN Thermoclear IR:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete eight of the next nine paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 1.26 inch (32mm) nominal, plus or minus 5 percent.
      8. Sheet Thickness: 1.57 inch (40mm) nominal, plus or minus 5 percent.
      9. Sheet Thickness: 1.97 inch (50mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete two of the next three paragraphs.

* + - 1. Color: Green.
      2. Color: Light Green.
      3. Color: White.
      4. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
    1. LEXAN Thermoclear Softlite:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete eight of the next nine paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 1.26 inch (32mm) nominal, plus or minus 5 percent.
      8. Sheet Thickness: 1.57 inch (40mm) nominal, plus or minus 5 percent.
      9. Sheet Thickness: 1.97 inch (50mm) nominal, plus or minus 5 percent.
      10. Color: Light Diffusing Opal White.
      11. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Venetian:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete five of the next six paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Color: Clear/Transparent with Colored Strips.

\*\* NOTE TO SPECIFIER \*\* Insert Strip Color. Delete three of the next four paragraphs.

* + - * 1. Strip Color: Clear with White Strips.
        2. Strip Color: Clear with Light Blue Strips.
        3. Strip Color: Clear with Blue Strips.
        4. Strip Color: Clear with Yellow Strips.
      1. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Easy Clean:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete six of the next seven paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 1.26 inch (32mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete seven of the next eight paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Opal 40% LT
      3. Color: White 20% LT
      4. Color: Blue.
      5. Color: Green.
      6. Color: Dark Grey.
      7. Color: Bronze.
      8. Color: Clear/Transparent.
      9. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Plus:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete eight of the next nine paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Sheet Thickness: 1.26 inch (32mm) nominal, plus or minus 5 percent.
      8. Sheet Thickness: 1.57 inch (40mm) nominal, plus or minus 5 percent.
      9. Sheet Thickness: 1.97 inch (50mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete five of the next six paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: White.
      3. Color: Blue.
      4. Color: Green.
      5. Color: Bronze.
      6. Color: Grey.
      7. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Sun XP:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete four of the next five paragraphs.

* + - 1. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.984 inch (25mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 1.25 inch (32mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete four of the next five paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.
      3. Color: Opal White.
      4. Color: Grey.
      5. Color: Blue.
      6. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Dripgard:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete three of the next four paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete two of the next three paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: White 40% LT.
      3. Color: Bronze.
      4. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Hammered Glass:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete two of the next three paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete one of the next two paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAN Thermoclear Metallic Gray:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Select Sheet Thickness. Delete five of the next six paragraphs.

* + - 1. Sheet Thickness: 0.236 inch (6mm) nominal, plus or minus 5 percent.
      2. Sheet Thickness: 0.315 inch (8mm) nominal, plus or minus 5 percent.
      3. Sheet Thickness: 0.395 inch (10mm) nominal, plus or minus 5 percent.
      4. Sheet Thickness: 0.629 inch (16mm) nominal, plus or minus 5 percent.
      5. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
      6. Sheet Thickness: 0.98 inch (25mm) nominal, plus or minus 5 percent.
      7. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
    1. LEXAPANEL
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete six of the next seven paragraphs.

* + - 1. Color: Opal 40% LT.
      2. Color: White 20% LT.
      3. Color: Blue.
      4. Color: Light Green.
      5. Color: Dark Grey.
      6. Color: Bronze.
      7. Color: Clear/Transparent.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
    1. LEXAPANEL Solar Control IR:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete two of the next three paragraphs.

* + - 1. Color: Green.
      2. Color: Light Green.
      3. Color: White.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
    1. LEXAPANEL Softlite:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
       2. Color: Light Diffusing Opal White.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Venetian:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.
       2. Color: Clear/Transparent with Colored Strips.

\*\* NOTE TO SPECIFIER \*\* Insert Strip Color. Delete three of the next four paragraphs.

* + - * 1. Strip Color: Clear with White Strips.
        2. Strip Color: Clear with Light Blue Strips.
        3. Strip Color: Clear with Blue Strips.
        4. Strip Color: Clear with Yellow Strips.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Easy Clean:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete seven of the next eight paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Opal 40% LT
      3. Color: White 20% LT
      4. Color: Blue.
      5. Color: Green.
      6. Color: Dark Grey.
      7. Color: Bronze.
      8. Color: Clear/Transparent.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Plus:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete five of the next six paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: White.
      3. Color: Blue.
      4. Color: Green.
      5. Color: Bronze.
      6. Color: Grey.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Sun XP:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete four of the next five paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.
      3. Color: Opal White.
      4. Color: Grey.
      5. Color: Blue.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Dripgard:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete two of the next three paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: White 40% LT.
      3. Color: Bronze.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
    1. LEXAPANEL Metallic Gray:
       1. Sheet Thickness: 0.787 inch (20mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select panel connection system. Delete one of the next two paragraphs.

* + - 1. Connection System: LPS20C2 - Square Batten.
      2. Connection System: LPR20C2 - Round Batten.
      3. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
        11. Solar Heat Gain Coefficient: \_\_\_\_\_.
  1. CORRUGATED PANELS
     1. Lexan Corrugated Sheet Greca:

\*\* NOTE TO SPECIFIER \*\* Insert grade from manufacturer's literature.

* + - 1. Grade/Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      2. Sheet Thickness: 0.031 inch (0.787mm) nominal, plus or minus 5 percent.

\*\* NOTE TO SPECIFIER \*\* Select Glazing Color. Delete three of the next four paragraphs.

* + - 1. Color: Clear/Transparent.
      2. Color: Bronze.
      3. Color: Opal White 20% LT.
      4. Color: Softlite.
      5. Performance:

\*\* NOTE TO SPECIFIER \*\* Insert performance characteristics based on grade and color and thickness selected.

* + - * 1. Light transmission: Change not to exceed \_\_\_ percent.
        2. Thermal Transmission (U-Value): \_\_ as determined by calculations based on test data, in accordance with ASHRAE procedures.
        3. Sound Transmission: STC \_\_.
        4. Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): \_\_\_ foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.
        5. Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B:
        6. Yellowing intensity: Change not to exceed a delta of \_\_\_.
        7. Haze: Change not to exceed \_\_\_ percent.
        8. Coating integrity: Intact after testing period.
        9. Abrasion resistance after 500 hours QUV weathering, when tested for 100 cycles with 500-gram CS10F wheel in accordance with ASTM D 1044: Change in haze 5.0 percent maximum.
        10. Fire resistance rating: \_\_\_, as determined by governing building code.
  1. ACCESSORIES
     1. Supply related clips, L-collectors, end caps, joint sealers and other installation accessories specified in the polycarbonate sheet manufacturer's instructions, or approved by polycarbonate sheet manufacturer, for indicated installation conditions.

1. EXECUTION
   1. EXAMINATION
      1. Verification of Conditions:
         1. Openings are in accordance with approved shop drawings required in Section 08 83 13 - Mirrored Glass Glazing and polycarbonate sheet manufacturer's instructions, and are plumb and level to required tolerances.
         2. Glazing channels or recesses are sized for correct glazing edge engagement.
   2. PREPARATION
      1. Clean glazing channels or recesses free of obstructions, soil, debris, and other materials.
      2. Seal porous glazing channels or recesses with primer-sealer compatible with substrate and polycarbonate sheet materials.
      3. Cut polycarbonate sheet materials to exact sizes required, with clean edges free of notches; clean contact edges with solvent compatible with polycarbonate sheet materials, as specified or approved by polycarbonate sheet manufacturer.
   3. INSTALLATION
      1. Install plastic glazing in accordance with polycarbonate sheet manufacturer's instructions.
      2. Do not use glazing accessories not specified or approved by polycarbonate sheet manufacturer.
   4. CLEANING
      1. Immediately after completing construction activities relating to installation of polycarbonate sheet materials, remove remainder of strippable masking from surfaces of polycarbonate sheet glazing; do not expose masking to sunlight for an extended period of time.
      2. Immediately after removing masking, clean glazing in accordance with polycarbonate sheet manufacturer's instructions:
         1. Rinse surface with lukewarm water.
         2. Wash surface with mild soap and lukewarm water.
         3. Use soft cloth or sponge gently to loosen dirt and grime; scrubbing glazing surfaces, or using squeegee on glazing surfaces, is not permitted.
         4. Repeat rinse as above, and wipe surface dry with soft cloth until surfaces are spotless and dry.
   5. PROTECTION OF INSTALLED PRODUCTS
      1. Immediately after cleaning, cover polycarbonate sheet glazing surfaces with polyethylene sheeting, or other covering material approved by polycarbonate sheet manufacturer; secure covering in place by taping to framing members - do not tape covering to polycarbonate sheet materials.
      2. Protect installed glazing from damage to function or finish by subsequent construction activities.
      3. Repair minor damage to finishes in accordance with polycarbonate sheet manufacturer's recommendations.
      4. Replace glazing having damage to function, and glazing having damage to finishes which cannot be repaired to Architect's acceptance.

END OF SECTION