

**C-828 REPLACE SKYLIGHT AND CANOPY GLASS
PROJECT SPECIFICATIONS**

PART 1

GENERAL SCOPE OF WORK

This project consists of the **Replacement of Skylight and Canopy Glass** at the Ernest N. Morial Convention Center New Orleans in accordance with the Bidding and Contract Documents.

QUALITY ASSURANCE

MANUFACTURER

The manufacturer of the canopy polycarbonate glazing and/or skylight glass systems shall have a minimum of ten (10) years experience in the manufacturing industry.

The manufacturer of the canopy polycarbonate glazing systems shall review and approve of the use and installation of his product in the existing window wall system prior to commencement of installation. Written proof of the review and approval shall be provided to the Owner.

The installer of the canopy polycarbonate glazing and/or skylight glass systems shall have a minimum of five (5) years experience in the installation industry.

PRIMARY GLAZING STANDARD: Comply with FS.DD- G-451as is applicable.

GLAZING STANDARDS: Comply with recommendations of the polycarbonate manufacturers' except where more stringent requirements are indicated. Comply with recommendations of Flat Glass Marketing Association (FGMA) "Glazing Manual" and "Sealant Manual" except where more stringent requirements apply for installation of skylight glass. Refer to those publications for definitions.

Where Safety Glass is indicated or required by authorities having jurisdiction, provide type of products indicated which comply with ANSI 297.1 and CPSC 16 CFR 1201, I, II (Consumer Product Safety Commission's Safety Standard for Architectural Glazing Materials for both Category I and Category II applications).

In-place exterior glazing shall withstand 30 p.s.f. positive and negative wind loads acting normal to plane of plane surface.

WARRANTY

WARRANTY TERMS AND CONDITIONS

All polycarbonate canopy glazing furnished and installed under this contract, shall be guaranteed against defects in design, materials and workmanship including but not limited to hazing, yellowing, coating failure and/or breakage for the full warranty period which shall be ten (10) years from the date of the purchase of the material.

All skylight glass furnished and installed under this contract shall be guaranteed against defects in design, materials and workmanship for the full warranty period of two (2) years from the date of final acceptance.

The Contractor shall furnish the Owner with a written guarantee certifying that all replacement work will be furnished and installed in complete accordance with the contract documents. This warranty shall certify that the installation shall be completely free of defects and materials and workmanship and shall remain completely watertight for a period of two (2) years from the date of final acceptance.

The Contractor shall, at no additional cost to the Owner, correct any defects arising out of installation defects, design faults, defective material, defective equipment and defective workmanship.

At the time of Substantial Completion, Contractor shall submit separate written warranties executed by the Contractor and Manufacturer, agreeing to the above conditions to and not a limitation of other rights the Owner may have against the Contractor and Manufacturer under the Contract Documents.

During the warranty period, the Contractor agrees to pay round trip freight on and, at the Contractor's expense, to insure any products requiring replacement under the warranty.

By submission of a proposal, Contractor agrees to honor the warranty as stipulated in the Proposal and Contract Documents.

All servicing personnel and supervisors employed by the Contractor shall be an authorized representative and factory trained by manufacturer of the glazing system.

PRODUCTS

CANOPY GLASS BID SCOPE: To furnish and install the polycarbonate panels as indicated on the attached photographs and replace the rubber gasket as needed to match existing glazing exactly.

SKYLIGHT GLASS BID SCOPE: To furnish and install the glass panels as indicated on the attached photographs and replace the rubber gasket as needed to match existing glazing exactly.

POLYCARBONATE GLAZING (CANOPY GLASS):

Polycarbonate glazing panels shall be 1/2" or 3/8" (as is applicable by panel size) thick sheet with a proprietary abrasion/UV resistant surface coating equal to the MARGARD II coating by GE Structured Products.

Polycarbonate glazing panels shall be **LEXAN MR10** as manufactured by GE Structured Products or approved equal.

Color of panels shall be "Light Green" equal to GE Structured Products Color Number 31035. A sample of the color to be used shall be submitted to the Owner for review prior to installation. The Owner shall have final approval of tint/color.

Polycarbonate glazing panels shall provide up to 250 times the impact resistance of glass and 30 times that of acrylic glazing.

SKYLIGHT GLASS:

Skylight glass in **Phases I and II** shall be 9/16" laminated – outboard lite 1/4" blue-green eclipse, inboard lite 1/4" clear with .060 PVB interlayer – lite heat strengthened.

Skylight glass in **Phase III** shall be 9/16" laminated – outboard lite 1/4" reflective glass but with coating on No.1 (exterior) surface, inboard lite 1/4" clear with .060 PVB interlayer – lite heat strengthened. Manufacturer's designation: PPG "Solarcool Azurlite" and/or Ford "Sunglas Jade Ice" or approved equal.

Glass shall be approved by PPG and Ford.

Heat-strengthened glass shall be strengthened in bending to not less than 2.0 times annealed glass strength.

TOLERANCES: Heat strengthened and tempered glass shall be examined by the glass manufacturer to detect and discard any lites which exceed the following tolerances: 1/16" bow in two (2) feet, 1/8" bow in five (5) feet and 1/4" bow in ten (10) feet.

Match tint and performance characteristics of existing glass.

Owner shall have final approval of tint/color.

GLAZING GASKETS

Skylights, canopies, glazing gaskets, setting blocks, spaces, and edge blocks shall be furnished as part of this contract.

GASKETS AND SEALANTS: Furnished and installed equal to with the following or as recommended by the polycarbonate and/or glass manufacturer:

Silicone: Dow 795 – Dow Corning Corp.
Dow 999 - Dow Corning Corp.
Trademate - Dow Corning Corp.
Silpruf – General Electric Co.
Construction 1200 – General Electric Co.

Gasket: Silicone (70D) – Tremco
EPDM (60, 70D) – Tremco

Tape: 440 – Tremco

Butyl Tape: 303 – KPTI
Isocryl 5600 - Schnee-Morehead

Gasket/Tape: Norrene Foam – Norton Company
V-2100 Urethane – Norton Company

Provide materials with proven record of compatibility with surfaces contacted in installation.

STANDARDS AND PERFORMANCE

Water tight and air tight installation of each piece of glazing is required. Each installation must withstand normal temperature changes, wind loading, and impact loading without failure of any kind including loss or breakage of glazing, failure of sealant or gaskets to remain water tight and air tight, deterioration of glazing materials and other defects in the work.

Protect glazing for edge damage during handling and installation; use a rolling block in rotating glazing units to prevent damage to glazing corners.

Do not impact glazing with metal framing. Use suction cups to shift glazing units within an opening; do not raise or drift glazing with a pry bar. Rotate glazing with flares or bevels along one horizontal edge which would occur in vicinity of setting blocks so that these are located to top of opening. Remove form projects and dispose of glazing units with edge damage or other imperfections of the kind that, when installed, weakens glazing and impairs performance and appearance.

The glazier is responsible for correct glazing size for each opening within the tolerances and necessary dimensions.

Comply with "Glazing Manual" Flat Glazing Marketing Association except as specifically recommended otherwise by the manufacturers of the glazing and glazing materials. Provide a minimum nominal glazing bite in accordance with manufacturers recommendations.

Inspect each piece of glazing immediately before installation, and eliminate any which have observable edge damage or face imperfections.

EXECUTION

REQUIREMENTS

Contractor shall comply with all city laws and ordinances pertaining to street and sidewalk barricading should the Contractor use a crane (lift) to raise materials, a New Orleans Police Officer will be required for traffic direction, together with appropriate traffic cones and barricades.

Progress of the work shall be noted daily by the Contractor's Superintendent and the Owner's representative. A work sheet and/or ticket noting the day's progress and number of sheets installed shall be presented to the Owner's representative for signature at the end of each working day.

INSTALLATION CONDITIONS:

The glazier must examine the framing and glazing channel surfaces, backing, removable stop design and the conditions under the glazing until unsatisfactory conditions (if any) have been corrected.

WEATHER CONDITIONS: Do not proceed with glazing under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation.

PREPARATION FOR GLAZING

Clean the glazing channel or other framing to receive glazing, immediately before glazing.

Apply primer or sealer to joint surfaces where recommended by sealant manufacturer.

GLAZIER: Install setting blocks of proper size in sill rabbet, located at quarter points but no closer than 6" from each corner. Set blocks in thin course of elastomeric heel-bead compound.

PROTECTION AND CLEANING

Cure glazing sealant and compounds in compliance with manufacturer's instructions and recommendations, to maintain high early bond strength, internal cohesive strength and surface durability.

Remove and replace glazing which is broken, chipped, cracked, abraded or damaged in other ways during the construction period, including natural causes, and accidents.

Maintain glazing in a reasonably clean condition during construction, so that it will not be damaged by corrosive action and will not continue (by wash-off) to the deterioration of glazing materials and other work.

Wash and polish glazing on both faces not more than 4 days prior to Owners' acceptance of the work. Comply with glazing manufacturer's recommendation.

Contractor shall provide cleaning instructions, product recommendations and a cleaning demonstration to the Owner's personnel prior to close out of project.