



STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 3 TO PROJECT NO. 43994

**CONSTRUCTION WORK, , PLUMBING WORK, ELECTRICAL WORK
UPGRADE OBSERVATION CELLS
BUILDING NO. 8
SING SING CORRECTIONAL FACILITY
354 HUNTER STREET
OSSINING, NY**

December 12, 2011

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual.
Acknowledge receipt of this Addendum in the space provided on the Bid Form.

CONSTRUCTION SPECIFICATION

1. SECTION 088100 GLASS AND GLAZING: Add the attached Section (pages 088100 – 1 and 088100 – 4) to the Project Manual.

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

SECTION 088100

GLASS AND GLAZING

PART 1 GENERAL

1.01 REFERENCES

- A. Comply with recommendations in the "Glazing Manual" of the Glass Association of North America and the "Sealant Manual" of the Flat Glass Marketing Association except as shown or specified otherwise, and except as specifically recommended otherwise by the manufacturers of the glass and glazing materials.

1.02 SUBMITTALS

- A. Product Data: Manufacturer's specifications and installation instructions for each type of glass and glazing material specified, and spacers and compressible filler rod.
- B. Samples:
 - 1. Glass: 12 x 12 inch pieces for each type of glass specified.
 - 2. Setting blocks, full size.
 - 3. Pattern Samples:
 - a. Type C-1 Glass: Manufacturer's standard patterns.
- C. Quality Control Submittals:
 - 1. Test Reports: Certified test data to sufficiently substantiate glass or glass assembly compliance with requirements specified.
 - 2. Certificates:
 - a. Affidavit required under Quality Assurance Article.
 - b. Wired Glass: Affidavit required under Quality Assurance Article.

1.03 QUALITY ASSURANCE

- A. Compatibility of Materials: All components of the glazing system shall be manufactured or recommended by one manufacturer to assure the compatibility of materials.
- B. Certification:
 - 1. Affidavit by the material supplier, certifying type and quality of glass furnished.
 - 2. Wired Glass: Affidavit by the material supplier, certified as bearing the Underwriter's Laboratories (UL) classification marking for fire resistance.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Protect glass from edge damage during handling, storage, and installation.

1.05 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with glazing materials manufacturer's written recommendations regarding environmental conditions under which glazing materials can be installed.
- B. Glazing channel dimensions shown are intended to provide for necessary minimum bite on the glass, minimum edge clearance and adequate glazing material thicknesses, with reasonable tolerances. Provide correct glass size for each opening, within the tolerances and necessary dimensions required.

PART 2 PRODUCTS

2.01 GLASS

- A. Type C Glass: Clear Wired Glass; ASTM C 1036, Type II, Class 1, Form 1, quality q8.
 - 1. Thickness: 1/4 inch.
 - 2. Wire Mesh: Square, welded; approximate 1/2 inch to 5/8 inch size squares.

2.02 GLAZING MATERIALS

- A. Type 1 Glazing Material: Silicone Rubber Glazing Sealant; silicone rubber one-part elastomeric sealant; FS TT-S-001543, Class A; acid-type for non-porous channel surfaces, and non-acid type where any of the channel surfaces are porous.
- B. Type 7 Glazing Material: Preformed-Preshimmed Butyl Rubber Glazing Sealant; tape or ribbon (coiled on release paper) of polymerized butyl, or mixture of butyl and polyisobutylene, compounded with inert fillers and pigments, solvent based with minimum 95 percent solids, thread or fabric reinforcement, and encased continuous rubber shim of approximately 50 durometer hardness, tack-free within 24 hours, paintable, and non-staining.
- C. Colors: For exposed materials provide color as indicated or, if not indicated, as selected by the Director from the manufacturer's standard colors. For concealed materials, provide any of the manufacturer's standard colors.
- D. Setting Blocks: Neoprene, 70-90 durometer hardness, with proven compatibility with sealants used.
- E. Spacers: Neoprene, 40-50 durometer hardness, with proven compatibility with glazing materials used.

- F. Compressible Filler Rod: Closed-cell or waterproof-jacketed rod stock of synthetic rubber or plastic foam, proven to be compatible with glazing materials used, flexible and resilient, with 5-10 psi compression strength for 25 percent deflection.
- G. Cleaners, Primers and Sealers: Type recommended by glazing material manufacturer.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clean the glazing channel, or other framing members to receive glass, immediately before glazing. Remove coatings which are not firmly bonded to the substrate. Remove lacquer from metal surfaces wherever elastomeric sealants are used.
- B. Inspect each piece of glass immediately before installation, and eliminate pieces which have observable damage or face imperfections.
- C. Apply primer or sealer to joint surfaces wherever recommended by sealant manufacturer.

3.02 INSTALLATION

- A. Install glass in accordance with the standards detailed in the "Glazing Manual" of the Glass Association of North America and the "Sealant Manual" of the Flat Glass Marketing Association except as shown and specified otherwise, and except as specifically recommended otherwise by the manufacturers of the glass and glazing materials.
- B. Unify appearance of each series of lights by setting each piece to match others as nearly as possible. Inspect each piece and set with pattern, draw and bow oriented in the same direction as other pieces.
- C. Install glazing materials in accordance with the manufacturer's printed instructions.

3.03 GLAZING

- A. Install setting blocks of proper size at quarter points of sill rabbet. If required to keep in place set blocks in thin course of the heel-bead compound.
- B. Provide spacers inside and out, and of proper size and spacing, for all glass sizes larger than 50 united inches, except where gaskets are used for glazing. Provide 1/8 inch minimum bite of spacers on glass and use thickness equal to sealant width, except with sealant tape use thickness slightly less than final compressed thickness of tape.

- C. Voids and Filler Rods: Prevent exudation of sealant or compound by forming voids or installing filler rods in the channel at the heel of jambs and head (do not leave voids in the sill channels) except as otherwise indicated, depending on light sizes, thickness and type of glass, and complying with manufacturer's recommendations.
- D. Force glazing materials into channel to eliminate voids and to ensure complete "wetting" or bond of glazing material to glass and channel surfaces.
- E. Tool exposed surfaces of glazing sealants and compounds to provide a substantial "wash" away from the glass. Install pressurized tapes and gaskets to protrude slightly out of the channel, so as to eliminate dirt and moisture pockets.
- F. Where wedge-shaped gaskets are driven into one side of the channel to pressurize the sealant or gasket on the opposite side, provide adequate anchorage to ensure that gasket will not "walk" out when subjected to dynamic movement. Anchor gasket to stop with matching ribs, or by proven adhesives, including embedment of gasket tail in cured heel bead.

3.04 CURE, PROTECTION AND CLEANING

- A. Cure glazing materials in accordance with manufacturer's printed instructions and recommendations, to obtain high early bond strength, internal cohesive strength, and surface durability.
- B. Mark glazed openings immediately upon installation of glass by attaching crossed streamers to framing. Do not apply markers of any type to surfaces of glass.
- C. Replace glass included in the work which is broken, or otherwise damaged, from the time Work is started at the site until the date of physical completion.
- D. Maintain glass in a reasonably clean condition until date of physical completion.
 - 1. Clean and trim excess glazing material from the glass and stops or frames promptly after installation.
- E. When directed, or just before the project is turned over to the State, remove dirt and other foreign material and wash and polish glass included in the work on both sides.

END OF SECTION