



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. 4 TO PROJECT NO. 44482

**CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK, AND ELECTRICAL WORK
REHABILITATE SHOWERS
CELL BLOCKS D & E
SULLIVAN CORRECTIONAL FACILITY
325 RIVERSIDE DRIVE
FALLSBURG, NY**

May 15, 2014

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.

SPECIFICATIONS

1. **SECTION 088853 SECURITY GLASS AND GLAZING:** Discard the section in its entirety. Insert the attached **SECTION 088853 GLASS AND GLAZING.**
2. **SECTION 111901 DETENTION: In Part 2 Products, article 2.03 C. 3.,** insert, "Corbin Russwin", between the words, "existing", and "key".

DRAWINGS

1. **DRAWING S-502:** Replace the word, "Threshold", with the word, "Sill". At details 2/S-502 and 5/S-502 add the note, "Door frames are four-sided and fully welded."

END OF ADDENDUM

Margaret F. Larkin
Acting Executive Director

SECTION 088853
SECURITY GLAZING

PART 1 GENERAL

1.01 REFERENCES

- A. American Society for Testing and Materials (ASTM), ASTM International, 100 Barr Harbor Dr., PO Box C700, West Conshohocken, PA, 19428-2959, www.astm.org
- B. H. P. White Laboratory, Inc., 3114 Scarboro Rd., Street, MD 21154-1822, www.hpwhite.com.
- C. Glass Association of North America, 2945 SW Wanamaker Dr., Suite A, Topeka, KS 66614-5321, www.glasswebsite.com.
- D. American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268, www.aamanet.org.

1.02 DEFINITIONS

- A. Sheet Materials: The term “Sheet Materials” as used in this Section refers to laminated polycarbonate sheets specially fabricated for forced-entry resistance.

1.03 SUBMITTALS

- A. Waiver of Submittals: The “Waiver of Certain Submittals Requirements” in Section 013300 does not apply to this Section.
- B. Product Data: Catalog sheets, specifications, glazing details, and installation instructions for each type of sheet materials, and glazing materials specified.
- C. Quality Control Submittals:
 - 1. Test Reports: Test data to substantiate sheet material assemblies compliance with the requirements of this Section.
 - 2. Manufacturer’s Qualifications Data: Written certification that the manufacturer has been actively marketing security glazing materials for the past 3 years.
 - 3. Installer’s Qualifications Data:
 - a. Name of each person who will be installing the Work of this Section and their employer’s name, business address and telephone number.
 - b. Names and addresses of 3 similar projects that each person has worked on during the past 5 years.
 - 4. Compatibility: Written certification from sheet materials manufacturer that all proposed glazing materials are compatible with specified sheet material.

- D. Contract Closeout Submittals:
 - 1. Maintenance Data: Deliver 2 copies, covering installed products, to the Director's Representative.

1.04 QUALITY ASSURANCE

- A. Testing Laboratory: Independent testing laboratory with the test facilities, experience, and capability to demonstrate the proposed sheet material assemblies compliance with the requirements of this Section to the satisfaction of the Director.
- B. Manufacturer's Qualifications:
 - 1. The manufacturer shall have been actively marketing security glazing materials in the United States for a minimum of 3 years.
 - 2. The manufacturer shall have the technical expertise and qualified technical representatives to resolve questions or problems that may arise both during and after the Work is completed.
- C. Installer's Qualifications: The persons installing the security glazing and their Supervisor shall be personally experienced in security glazing systems and shall have been regularly employed by a Company installing security glazing systems for a minimum of 5 years.
- D. Product Identification Labels:
 - 1. Identify each piece of forced entry resistant sheet material with a one inch high x 3 inches long self-adhesive transparent label, indicating the manufacturer and product name. Place the stencil on the glass, if applicable, readable from the secure side. Locate label in the upper right corner 2 inches from the top and side of the frame.
- E. Laminated Glass Imperfections: Imperfections such as bubbles, blow-in, fuse, hair, lint, inside dirt (dirt spot), delamination, discoloration, short interlayer, unlaminated area chip, interlayer scuff, streak, scratches, will be cause for rejection of product. Comply with ASTM C-1349 for Glass Clad Polycarbonates
- F. Mismatch of Laminations:
 - 1. Maximum Allowable Mismatch: 3/16 inches.
 - 2. Length and Width Tolerances of Symmetrical Glass Clad Polycarbonate Laminates: Comply with ASTM C 1349, Table 2.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store sheet material assemblies with manufacturer's labels intact.
- B. Deliver exposed polycarbonate sheets with strippable water resistant protective masking intact. Do not capture protective masking in frame when installing sheet material. Protective masking to remain intact during installation. Where sheet material is in direct sunlight, remove protective masking.

- C. Protect sheet material assemblies from damage during handling, storage, and installation.

1.06 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with glazing materials manufacturer's printed recommendations regarding environmental conditions under which glazing materials can be installed.

PART 2 PRODUCTS

2.01 COMPANIES

- A. Oldcastle Glass, 375 East Church Ave., Telford, PA 18969-1003, (800) 750-3497, www.oldcastleglass.com.
- B. Global Security Glazing, 616 Selfield Rd., Selma, AL 36703-8702, (800) 633-2513, www.security-glazing.com.
- C. Sheffield Plastics, Inc., 119 Salisbury Rd., Sheffield, MA 01257-9706, (800) 628-5084, www.sheffieldplastics.com.
- D. North American Specialty Glass, LLC, 2175 Kumry Rd., PO Box 70, Trumbauersville, PA 18970-0070, (888) 785-5962, www.naspecialtyglass.com.
- E. Dlubak Corporation, 520 Chestnut Street, Blairsville, PA 15717, (800) 336-0562, www.dlubakglass.com.

2.02 MATERIALS

- A. Polycarbonate: Extruded polycarbonate, UV stabilized, mar-resistant surface coating, smoke density rating less than 75, ASTM D 2843; extent of burning characteristics less than one inch when tested in accordance with ASTM D 635.
- B. Interlayer for Laminating Polycarbonate to Polycarbonate: Polyurethane as recommended by the sheet manufacturer, or clear siloxan/polycarbonate copolymer resin, not to exceed 15 mils thick.

2.03 FORCED ENTRY RESISTANT SECURITY GLAZING TYPES

- A. Type S-9 Sheet:
 - 1. Laminated Polycarbonate Sheet: Multiple layers of polycarbonate fabricated to produce the required forced entry resistance listed below.
 - 2. Forced Entry Resistance: H.P. White TP-0500.01 Level II minimum Step 12, or ASTM F 1233 Class III minimum Step 15, or ASTM F1915 Grade 2.

3. Overall Nominal Thickness: 1/2 inch.
4. Color: Clear.
5. Products:
 - a. ArmorProtectMax500 by Oldcastle Glass.
 - b. Makrolon Hygard CG500 by Sheffield Plastics.
 - c. DLP 500 by Dlubak Corp.

2.04 GLAZING MATERIALS

- A. Setting Blocks: Comply with ASTM C 864, Shore A durometer hardness of 85 +/- 5 percent ASTM Test Method D 2240. Provide compatible setting blocks specifically recommended by the by the sheet material manufacturer for use with sheet materials and glazing materials used.
- B. Spacer Shims: Shore A durometer hardness of 50 to 60 ASTM Test Method D 2240. Provide compatible spacer shims of material, size, and shape specifically recommended by the sheet material manufacturer for the materials used.
- C. Glazing Tape: Preformed, 100 percent solid, butyl-based elastomeric tape or ribbon (coiled on release paper), non-staining and non-migrating, with continuous built-in shim (pre-shimmed), if recommended in writing by the glazing manufacturer for the application indicated, comply with AAMA 800.
- D. Glazing Sealant: Silicone, ASTM C 920, Type S, Grade NS, Class 25, Use G. Verify compatibility of sealant with sheet material other glazing materials, and frame with sealant manufacturer.
- E. Sealant 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.
- F. Cleaners, Primers, and Sealers: Types recommended by glazing material manufacturer, compatible with polycarbonate.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine glazing channels and stops for defects that will prevent satisfactory installation of sheet glazing system. Report unsatisfactory conditions to the Director in writing. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Inspect each piece of sheet material immediately before installation. Remove from the Site pieces that have observable damage or face imperfections.

3.02 PREPARATION

- A. Remove coatings that are not firmly bonded to the substrate.

- B. Clean the glazing channel, and other framing members to receive sheet material, immediately before glazing.
- C. Immediately prior to installation, peel back factory applied protective masking only to a dimension sufficient for edge engagement. Do not totally remove masking from sheet.

3.03 INSTALLATION

- A. Each installation shall withstand normal temperature changes without sheet material delamination, failure of glazing materials to remain watertight and airtight, deterioration of glazing materials and other defects in the work.
- B. Install sheet and glazing material in accordance with the recommend standards detailed in the “Glazing Manual” of the Glass Association of North America except as indicated and specified otherwise, and except as specifically recommended otherwise by the manufacturers of the sheet material and glazing materials.
- C. Primer: Apply primer to surfaces when recommended by glazing material manufacturer.
- D. Setting Blocks:
 - 1. Install a minimum of 2 identical setting blocks sized to provide 0.1 inch long for each square foot of sheet material area but not less than 4 inches long.
 - 2. Height of setting blocks to provide the recommended nominal bite and minimum edge clearance for the security glazing used.
 - 3. Width as required providing proper support of sheet materials but allowing water passage to weep holes.
 - 4. Install at quarter points in heal bead of sealant, do not block weeps.
- E. Glazing Tape:
 - 1. Cut glazing tape to proper length prior to application. Install strips in 4 separate sections. Do not run continuously around corners.
 - 2. Install tape continuously against permanent stop 3/16 to 1/4 inch below sightline. Do not permit gaps or joints in tape except at corners. Do not lap adjoining lengths of tape. Miter or butt ends of tape at corners and seal with compatible sealant.
- F. Sheet Glazing: Set sheet material on setting blocks and press against tape with sufficient pressure to ensure full contact and adhesion at perimeter. Install removable stop.
- G. Spacer Shims: Insert continuous spacer shims between sheet material and applied stop to keep sheet in compression against tape, do not displace glazing tape. Install shims in 4 separate sections. Do not run continuously around corners, or come in contact with sheet material cut edges.
- H. Glazing Sealant:

1. Install continuous cap bead on both sides of sheet material.
2. Force sealant into channel to eliminate air pockets and voids and to ensure a complete bond of sealant to sheet material and framing.
3. Tool exposed surfaces of sealant eliminate air pockets and to provide a substantial “wash” away from sheet material.
4. Clean off excess sealant as work progresses using methods that will not damage sheet or glazing material.
5. Cure glazing materials in accordance with manufacturer’s instructions and recommendations, to obtain high early bond strength, internal cohesive strength, and surface durability.

3.04 PROTECTION AND CLEANING

- A. Remove factory installed protective masking from sheet that is in high humidity or direct sunlight immediately after installation. Prolonged exposure can make removal of masking difficult.
- B. Mark glazed openings immediately upon installation of sheet material by attaching crossed streamers to framing. Do not apply markers of any type to surfaces of sheet material.
- C. Protect exposed surfaces of polycarbonate from construction operations with temporary covering. Do not apply tape to sheet material.
- D. Replace sheet material included in the Work that is broken or otherwise damaged from the time Work is started at the site until the date of physical completion.
- E. Maintain sheet material in a reasonably clean condition until the date of physical completion.
 1. Clean and trim excess glazing material from the sheet material and stops or frames promptly after installation.
- F. When directed, or just before the project is turned over to the State, remove temporary covering, dirt and other foreign material from both surfaces of sheet material installed under this Contract, and clean sheet material on both sides.

END OF SECTION