



Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 14-MAY-12
BID NUMBER: 7449725
TITLE: DESIGN MANUFACTURE AND INSTALL (2)
SKYLIGHTS - CCRI

BID CLOSING DATE AND TIME:15-JUN-2012 01:30:00

BUYER: Mosca, Gary
PHONE #: 401-574-8124

B
I
L
L
L
T
O
CCRI CONTROLLER'S OFFICE
ACCOUNTS PAYABLE
400 EAST AVENUE
WARWICK, RI 02886
US

S
H
I
P
T
O
CCRI FLANAGAN CAMPUS
1762 LOUISQUISSET PIKE
LINCOLN, RI 02865-4585
US

Requisition Number: 1267199

Note to Bidders: Questions concerning this solicitation may be emailed to gary.mosca@purchasing.ri.gov no later than 6/5/12 @ 12:00 NOON (EST) Questions should be submitted in a Microsoft word attachment Please reference the RFQ # on all correspondence. Questions received if any, will be posted on the internet as an addendum to this solicitation. It is the responsibility of all interested parties to download this information.

Line	Description	Quantity	Unit	Unit Price	Total
1	THERE WILL BE A MANDATORY PRE-BID CONFERENCE HELD 6/01/12 @ 9:30 AM CCRI - LISTON CAMPUS ONE HILTON STREET PROVIDENCE RI 02905. PLEASE REPORT AT SECURITY GUARD STATION DESIGN, MANUFACTURE AND INSTALL (2) TWO POLYGON SKYLIGHTS TO REPLACE EXISTING SKYLIGHTS AT THE PROVIDENCE CAMPUS PER ATTACHED SPECIFICATIONS	1 00	Job		

Delivery: _____

Terms of Payment: _____

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed The signed Certification Cover Form must be attached to the front of the offer

Contract Terms and Conditions

Table of Contents

Terms and Conditions	VI
BID STANDARD TERMS AND CONDITIONS	VI
TERMS AND CONDITIONS FOR THIS BID	VI
SURETY REQUIREMENTS	VI
START DATE	VI
WAGE REQUIREMENTS	VI
INSPECTION REQUIREMENTS	VI
INSURANCE REQUIREMENTS	VI
DELIVERY PER AGENCY	VII
RIVIP INFO - BID SUBMISSION REQUIREMENTS	VII
AWARD	VII
LICENSE REQUIREMENTS	VII
VENDOR SPECIFICATIONS	VII

Terms and Conditions

BID STANDARD TERMS AND CONDITIONS

TERMS AND CONDITIONS FOR THIS BID

SURETY REQUIREMENTS

BIDDER IS REQUIRED TO PROVIDE A BID SURETY IN THE FORM OF A BID BOND, OR A CERTIFIED CHECK PAYABLE TO THE STATE OF RHODE ISLAND, IN THE AMOUNT OF A SUM NOT LESS THAN FIVE PERCENT (5%) OF THE BID PRICE. BID SURETY MUST BE ATTACHED TO THE BID FORM. THE SUCCESSFUL BIDDER WILL ALSO BE REQUIRED TO FURNISH PERFORMANCE AND LABOR AND PAYMENT BONDS AT TIME OF TENTATIVE CONTRACT AWARD.

START DATE

STARTING DATE _____ NO. OF WORKING DAYS REQUIRED FOR COMPLETION

WAGE REQUIREMENTS

BIDDERS ARE ADVISED THAT ALL PROVISIONS OF TITLE 37 CHAPTER 13 OF THE GENERAL LAWS OF RHODE ISLAND APPLY TO THE WORK COVERED BY THIS REQUEST, AND THAT PAYMENT OF THE GENERAL PREVAILING RATE OF PER DIEM WAGES AND THE GENERAL PREVAILING RATE FOR REGULAR, OVERTIME, AND OTHER WORKING CONDITIONS EXISTING IN THE LOCALITY FOR EACH CRAFT, MECHANIC, TEAMSTER, OR TYPE OF WORKMAN NEEDED TO EXECUTE THIS WORK IS A REQUIREMENT FOR BOTH CONTRACTORS AND SUBCONTRACTORS. THE PREVAILING WAGE TABLE MAY BE OBTAINED AT THE RI DIVISION OF PURCHASES HOME PAGE BY INTERNET at www.purchasing.state.ri.us SELECT "INFORMATION" AND THEN SELECT "PREVAILING WAGE TABLE". THE STATE OF RHODE ISLAND USES THE GENERAL DECISION NUMBER RI20100001. PRINTING THE ENTIRE DOCUMENT AVERAGES APPROXIMATELY ONE MINUTE PER PAGE - YOU MAY WANT TO PRINT ONLY THE PAGES APPLICABLE TO YOUR BID. BIDDERS NOTE: IN THE EVENT THIS BID SPECIFIES PRICE OFFERS ON A TIME-AND-MATERIALS BASIS, i.e., AN HOURLY RATE, ANY OR ALL BIDS SUBMITTED IN AN AMOUNT LESS THAN THE PREVAILING RATE IN EFFECT FOR THE WORK COVERED BY THIS REQUEST AS OF THE DATE OF BID ISSUANCE SHALL BE REJECTED BY THE DIVISION OF PURCHASES.

INSPECTION REQUIREMENTS

BIDDERS ARE RESPONSIBLE FOR INSPECTION OF EQUIPMENT AND/OR LOCATION, TAKING MEASUREMENTS* WHEN REQUIRED, AND MAKING THEMSELVES AWARE OF THE TOTAL REQUIREMENT BEFORE SUBMITTING A BID. *MEASUREMENTS PROVIDED WITH ANY BID ARE FOR REFERENCE PURPOSES AND ARE NOT GUARANTEED TO BE COMPLETELY ACCURATE.

INSURANCE REQUIREMENTS

AN INSURANCE CERTIFICATE IN COMPLIANCE WITH PROVISIONS OF ITEM 31 (INSURANCE) OF THE GENERAL CONDITIONS OF PURCHASE IS REQUIRED FOR COMPREHENSIVE GENERAL LIABILITY, AUTOMOBILE LIABILITY, AND WORKERS'

COMPENSATION AND MUST BE SUBMITTED BY THE SUCCESSFUL BIDDER(S) TO THE DIVISION OF PURCHASES PRIOR TO AWARD. THE INSURANCE CERTIFICATE MUST NAME THE STATE OF RHODE ISLAND AS CERTIFICATE HOLDER AND AS AN ADDITIONAL INSURED. FAILURE TO COMPLY WITH THESE PROVISIONS MAY RESULT IN REJECTION OF THE OFFEROR'S BID. ANNUAL RENEWAL CERTIFICATES MUST BE SUBMITTED TO THE AGENCY IDENTIFIED ON THE PURCHASE ORDER. FAILURE TO DO SO MAY BE GROUNDS FOR CANCELLATION OF CONTRACT.

NOTE: IF THIS BID COVERS CONSTRUCTION, SCHOOL BUSING, HAZARDOUS WASTE, OR VESSEL OPERATION, APPLICABLE COVERAGES FROM THE FOLLOWING LIST MUST ALSO BE SUBMITTED TO THE DIVISION OF PURCHASES PRIOR TO AWARD: * PROFESSIONAL LIABILITY INSURANCE (AKA ERRORS & OMISSIONS) - \$1 MILLION OR 5% OF ESTIMATED PROJECT COST, WHICHEVER IS GREATER * BUILDER'S RISK INSURANCE - COVERAGE EQUAL TO FACE AMOUNT OF CONTRACT FOR CONSTRUCTION. * SCHOOL BUSING - AUTO LIABILITY COVERAGE IN THE AMOUNT OF \$5 MILLION * ENVIRONMENTAL IMPAIRMENT (AKA POLLUTION CONTROL) - \$1 MILLION OR 5% OF FACE AMOUNT OF CONTRACT, WHICHEVER IS GREATER. * VESSEL OPERATION - (MARINE OR AIRCRAFT) - PROTECTION & INDEMNITY COVERAGE REQUIRED IN THE AMOUNT OF \$1 MILLION.

DELIVERY PER AGENCY

DELIVERY OF GOODS OR SERVICES AS REQUESTED BY AGENCY

RIVIP INFO - BID SUBMISSION REQUIREMENTS

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer. When delivering offers in person to One Capitol Hill, vendors are advised to allow at least one hour additional time for clearance through security checkpoints.

AWARD

THE STATE, AT ITS SOLE DISCRETION, SHALL RESERVE THE RIGHT TO MAKE ONE OR MULTIPLE AWARDS FOR THIS REQUIREMENT AND/OR TO REJECT ANY OR ALL BIDS.

LICENSE REQUIREMENTS

VENDOR (OWNER OF COMPANY) IS RESPONSIBLE TO COMPLY WITH ALL LICENSING OR STATE PERMITS REQUIRED FOR THIS TYPE OF SERVICE. A COPY OF LICENSE/PERMIT SHOULD BE SUBMITTED WITH THIS BID. IN ADDITION TO THESE LICENSE REQUIREMENTS, BIDDER, BY SUBMISSION OF THIS BID, CERTIFIES THAT ANY/ALL WORK RELATED TO THIS BID, AND ANY SUBSEQUENT AWARD WHICH REQUIRES A RHODE ISLAND LICENSE(S), SHALL BE PERFORMED BY AN INDIVIDUAL(S) HOLDING A VALID RHODE ISLAND LICENSE.

VENDOR SPECIFICATIONS

ALL VENDORS MUST INCLUDE SPECIFICATIONS WITH BID PROPOSAL (EVEN THOSE BIDDING BRAND SPECIFIED). FAILURE TO SUBMIT SPECIFICATIONS WITH BID PROPOSAL MAY RESULT IN DISQUALIFICATION OF BID. ITEMS IN CATALOGS MUST BE CLEARLY MARKED AND PAGES TABBED.

COMMUNITY COLLEGE OF RHODE ISLAND
Replacement of the Skylight Domes at the Providence Liston Campus
Scope of Work

Page 1 of 2

GENERAL SCOPE OF PROJECT

VENDOR TO SUPPLY ALL LABOR AND MATERIALS REQUIRED TO REPLACE THE TWO (2) SKYLIGHT DOMES AT THE CCRI PROVIDENCE LISTON CAMPUS. PROJECT TO INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- A. VENDOR RESPONSIBLE TO PERFORM ANY AND ALL WORK REQUIRED TO REPLACE THE SIXTY-ONE (61) FOOT DIAMETER ATRIUM SKYLIGHT DOME AND THE FIFTEEN (15) FOOT ADMINISTRATION SKYLIGHT DOME. WORK INCLUDES BUT IS NOT LIMITED TO THE DEMOLITION AND REMOVAL OF THE EXISTING DOMES, ANY AND ALL STRUCTURAL MODIFICATIONS, ANY AND ALL FIRE SPRINKLER MODIFICATIONS, ASSEMBLY AND INSTALLATION OF THE NEW SKYLIGHT DOMES, TRAINING OF CCRI PHYSICAL PLANT IN MAINTENANCE REQUIREMENTS OF THE ~~NEW-SKYLIGHT-DOMES.~~
- B. VENDOR RESPONSIBLE FOR VERIFYING ANY AND ALL MEASUREMENTS.
- C. VENDOR RESPONSIBLE FOR ANY AND ALL ROOF SYSTEM FLASHING.
- D. IT IS THE RESPONSIBILITY OF THE AWARDED VENDOR TO OBTAIN ANY REQUIRED LOCAL AND STATE OF RHODE ISLAND BUILDING COMMISSION APPROVALS INCLUDING BUT NOT LIMITED TO OBTAINING STAMPED MECHANICAL AND STRUCTURAL ENGINEERING APPROVED PLANS FROM A RI LICENSED ENGINEER AS NEEDED.
- E. IT IS THE RESPONSIBILITY OF THE AWARDED VENDOR TO OBTAIN ANY AND ALL REQUIRED LOCAL AND STATE PERMITS AND INSPECTIONS.
- F. IT IS THE RESPONSIBILITY OF THE AWARDED VENDOR TO PERFORM FINAL COMMISSIONING OF THE NEW SKYLIGHT DOMES INCLUDING BUT NOT LIMITED TO ACCEPTABLE TIE-IN OF ALL ROOFING COMPONENTS, FIRE SPRINKLERS (INCLUDING COST TO RETEST AFFECTED ZONES), PANEL CAULKING, ATTACHMENT SYSTEM(S).
- G. IT IS THE RESPONSIBILITY OF THE AWARDED VENDOR TO SUBMIT FINAL AS-BUILT CAD DRAWINGS INCLUDING PDF ELECTRONIC VERSIONS AS WELL AS THREE (3) FULL SIZE DRAWING SETS.
- H. VENDOR AND/OR ITS SUBCONTRACTORS AND TECHNICIANS MUST BE TRAINED AND CERTIFIED IN THE CONSTRUCTION, ASSEMBLY, AND MAINTENANCE OF AWARDED SKYLIGHT SYSTEM.
- I. VENDOR MUST HAVE ALL OF THE EQUIPMENT NECESSARY TO COMPLETE THE PROJECT. NO EQUIPMENT, SUPPLIES, LIFTS, LADDERS, STAGING ETC OF ANY KIND WILL BE PROVIDED BY CCRI.
- J. PROJECT COMPLETION: **120 DAYS AFTER AWARD OF PURCHASE ORDER.** VENDOR MUST CONDUCT WEEKLY PROJECT PROGRESS MEETINGS AND ISSUE MINUTES BY THE NEXT BUSINESS DAY. MEETINGS WILL BE HELD ONSITE AT THE PROVIDENCE CAMPUS. THE LOCATION AND SCHEDULE FOR THE PROGRESS MEETING WILL BE ARRANGED WITH CCRI PHYSICAL PLANT AT THE TIME OF AWARD.
- K. VENDOR BIDDING MUST USE OSHA 10 CERTIFIED WORKERS AND MUST SUBMIT OSHA 10 CARDS WITH BID.
- L. VENDOR RESPONSIBLE FOR COMPLYING WITH ANY AND ALL OSHA SAFETY GUIDELINES AND WILL SUBMIT A SAFETY MANUAL FOR APPROVAL BY CCRI PRIOR TO START OF ANY ON CAMPUS WORK.
- M. VENDOR RESPONSIBLE FOR ENSURING THE PUBLIC SAFETY DURING ALL PHASES OF THE PROJECT. VENDOR TO SUPPLY ANY AND ALL BUT NOT LIMITED TO SAFETY SIGNAGE, BARRIERS, TAPE, SAFETY NETTING, SAFETY ROOF TIE-OFFS ETC.

APR-12

COMMUNITY COLLEGE OF RHODE ISLAND
Replacement of the Skylight Domes at the Providence Liston Campus
Scope of Work

Page 2 of 2

- O. WORK HOURS: PROJECT IS TO BE COMPLETED DURING NORMAL OPERATING BUSINESS HOURS 7 AM – 3:30 PM, MON-FRI. UNDER NO CIRCUMSTANCES CAN CLASSES OR BUSINESS ACTIVITIES BE INTERRUPTED. IF IT BECOMES NECESSARY FOR SOME WORK TO BE CONDUCTED DURING NON OPERATING HOURS IT MUST BE SCHEDULED IN ADVANCE WITH PHYSICAL PLANT DEPARTMENT.
- P. BEFORE STARTING ANY WORK, ALL VENDOR WORKERS AND SUBS MUST OBTAIN AND SUBMIT A CURRENT BCI AND STATE APPROVED PICTURE ID. ***CCRI RESERVES THE RIGHT TO DENY CAMPUS ACCESS TO ANY WORKER BASED ON INFORMATION PROVIDED ON THE SUBMITTED BCI.***
- Q. ALL WORKERS WILL SIGN IN DAILY AT THE OPERATIONS OFFICE AT THE PROVIDENCE CAMPUS. ALL COMPLETED WORK MUST BE INSPECTED AND APPROVED BY CCRI PHYSICAL PLANT.
- R. VENDOR RESPONSIBLE AT ALL TIMES DURING AND AT COMPLETION OF PROJECT, TO ENSURE THAT CONSTRUCTION AREAS ARE KEPT IN A CLEAN, SAFE AND ACCEPTABLE CONDITION. ALL PROJECT DEBRIS TO BE REMOVED OFF-SITE ON A DAILY BASIS.
- S. VENDOR MUST PROVIDE AT THEIR COST ALL NECESSARY TRASH BINS AND EXTERIOR WASTE CONTAINERS. LOCATION OF ANY EXTERIOR WASTE CONTAINERS TO BE APPROVED IN ADVANCE BY CCRI.
- T. AT THE TIME OF BID SUBMISSION VENDOR MUST PROVIDE PROOF OF COMPLETING SIMILAR SIZE SCOPE OF WORK PROJECTS. AT LEAST (3) REFERENCES FOR SIMILAR PROJECTS COMPLETED WITHIN THE LAST (18) MONTHS TO BE SUPPLIED AS PART OF BID SUBMISSION.

APR-12

COMMUNITY COLLEGE OF RHODE ISLAND

Replacement of the Skylight Domes at the Providence Liston Campus

General Specifications

Page 1 of 4

1.0 GENERAL SPECIFICATIONS

A. SUBMITTALS:

- i Shop Drawings: Indicate material types, gauges and finishes, fabrication details and installation details. Show glazing types, methods of attachment and thermal movement provisions.
- ii. Product data: Indicate materials, finishes and installation procedures recommended by manufacturer. Indicate compliance with specified design criteria. Include specific glazing details.
- iii Structural design calculations: Indicate compliance with specified structural design criteria.
- iv Samples: Submit samples of aluminum materials. Samples shall indicate full range of color to be expected in finished work.
- v. Test data: Indicate compliance with performance requirements specified herein.
- vi. Closeout Documents: Submit as fabricated drawings and specified warranty. Include instructions for general maintenance and repair of surfaces and finishes.

B. Quality Assurance:

- i. Manufacturer: Skylight manufacturer shall have a minimum of ten years experience in design, fabrication and installation of custom aluminum skylight systems.

C. Delivery, Storage and Handling

- i. Deliver and store components in manufacturer's protective packaging. Store in a dry space, off floor.
- ii. Handle materials to prevent damage to prefinished surfaces. Install no components which have been damaged or stained.

D. Project/Site Conditions:

- i. Field dimensions: Take field dimensions before preparation of shop drawings and fabrication.
- ii. Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids and other harmful surfaces as well as from careless handling, storage or machining.

E. Warranties

- i. Provide CCRI WITH A TEN (10) year written warranty covering all aspects of skylight installation. Warranty shall cover defective materials, workmanship and performance. Warranty shall be limited to repair or replacement of work described in this section and shall not provide for repair or replacement of work by others. Warranty of finish as specified by applicator. Glass warranty as specified by glass manufacturer.
- ii. Warranties shall begin on Date of final sign-off approval by CCRI.

2.0 PRODUCTS AND MATERIALS

A. Metal Framed Skylights

- i. Acceptable product: Series ** 350, 500, 700** as manufactured by Gammans Skylight Systems, 10 Beavers Street, Newnan, Georgia 30263. Phone (770-254-1992), Fax (770-251-7094)

COMMUNITY COLLEGE OF RHODE ISLAND

Replacement of the Skylight Domes at the Providence Liston Campus

General Specifications

Page 2 of 4

- ii. Aluminum components:
 - 1. Extrusions: Meeting ASTM B221; alloy, temper and wall thickness as required to meet design criteria. Structural characteristics of aluminum shall be in accord with AA, "Specification for Aluminum Structures"
 - 2. Sheet: 5005-H34 alloy meeting ASTM B209; minimum 0.040" thickness.
- iii. Finish:
 - 1. Aluminum components and components to which exterior sealant is applied:
 - a. ****Two-coat, three coat****, shop-applied, 70% resin with baked on fluoropolymer coating system based on Atofina, Kynar 500 or Ausimont U.S.A., Inc Hylar 5000 resin.
 - b. Color: ****Standard, Custom**** color as selected by CCRI at the time of award.
 - 2. Unexposed aluminum components: mill finish
- iv. Glazing material and accessories: Heat strengthening and thickness as required to meet loading conditions
 - 1. Standard Certification Requirements:
 - a. Heat treated glass: ASTM C1048, with surface stress of 5,000 +/- 1500 psi
 - b. Laminated glass: Two lites interleaved with polyvinyl butyral (PVB). Provide PVB layer of minimum 0.030-in.
 - c. Insulating glass: CBA rated by IGCC when tested in accordance with ASTM E773 and ASTM E774 Dual edge seals shall have secondary silicone seal. Exterior lite shall be (heat strengthened) (fully tempered) glass and interior lite shall be laminated glass
 - 2. Glazing Unit Composition:
 - a. Inboard lite: ****Clear**** color, laminated float glass, formed from two sheets of heat-strengthened glass laminated with PVB layer; **** _____** "thickness ******
 - b. Outboard lite: _____ heat-strengthened glass; **** _____** thickness. ******
 - c. ****OR**** Laminated unit composed of two lites **** __**** thick with **** 030, 060**** interlayer.
 - 3. Spacer of insulated units: Manufacturer's standard steel or aluminum spacer welded, soldered, fused, bent or butyl-injected corners and welded, soldered, fused or butyl-injected splices and joints, filled with desiccant; to provide a 1/2" thickness, hermetically sealed, dehydrated air space. Primary seal shall be polyisobutylene and secondary seal shall be two-part silicone
- v. Glazing gaskets: Glazing assembly manufacturer's standard extruded or molded neoprene or Ethylene Propylene Diene Monomer (EPDM) gaskets Glazing tapes as manufactured by Norton, Inc. or equal.
- vi. Perimeter sealant: As specified in Sealants and Caulking section.
- vii. Non-skinning sealant: Non-skinning butyl type, meeting AAMA "Joint Sealants" manual.
- viii. Fasteners and anchors: Corrosion resistant. Exposed fasteners to be stainless steel. Concealed/protected fasteners to be zinc coated. Anchors to be zinc coated

COMMUNITY COLLEGE OF RHODE ISLAND

Replacement of the Skylight Domes at the Providence Liston Campus

General Specifications

Page 3 of 4

- ix. Bituminous coating: Cold-applied, asphalt mastic meeting SSPC-Paint 12, minimum 30 mil thickness.
- x. Neoprene pads: Neoprene, 60-70 durometer hardness, meeting ASTM D1056

B. FABRICATION

- i. Factory fabricate skylights to dimensions and specifications called out on approved shop drawings. Aluminum to be used for reinforcement to greatest extent possible. Any steel reinforcement or clipwork shall be finished with a high zinc finish such as a zinc chromate primer
- ii. Make riveted joints in sheet metal flashing work using stainless steel solid shank rivets or closed end type pop rivets
- iii. Welding shall be by heliarc process in accord with AWS standards, with welds ground smooth prior to finishing.
- iv. Weep curbs to exterior. Provide weeps at each rafter intersection, minimum, for infiltration and condensation. Weep holes shall be baffled to prevent noise or whistling from wind.

3.0 INSTALLATION

A. INSTALLER

- i. Manufacturer of skylight system or skylight manufacturer's approved installer shall install skylight system.

B. PREPARATION:

- i. Inserts and anchorage: Furnish inserts and anchoring devices which must be preset in concrete on timely basis to avoid delay in the work. Furnish location drawings for use in installation of inserts and anchorages.
- ii. Coordinate setting drawings, diagrams, templates and instructions for installation of concrete inserts, anchor bolts and miscellaneous items having integral anchors cast in concrete construction.

C. INSTALLATION

- i. Verify location and alignment of preset anchors. Report deviations and proposed method for correction to CCRI prior to proceeding
- ii. Fastening to in-place construction: Provide anchorage devices and fasteners for securing skylights to in place construction, including threaded fasteners for concrete inserts, anchor bolts and erection bolts of types and sizes indicated on approved shop drawings
- iii. Cutting, fitting and placement: Perform cutting, drilling and fitting for installation of work. Set work in location, alignment and elevation, plumb and level, true and free of rack; measured from established lines and levels. Install work in accord with approved shop drawings
- iv. Protect aluminum from contact with dissimilar materials by separating with neoprene pads or bituminous coating
- v. Before securing skylight components in final position to structure, shim and brace work plumb and level and in designated location
- vi. Field connections: Provide welded or bolted connections as indicated on approved shop drawings. Join dissimilar metal by bolting with galvanic separators. Welding shall be performed by qualified welders.

COMMUNITY COLLEGE OF RHODE ISLAND

Replacement of the Skylight Domes at the Providence Liston Campus

General Specifications

Page 4 of 4

- vii. Welded connections: Conduct in accord with AWS standards for type of metal being welded. Clean surfaces to be welded as specified in shop cleaning. Do not weld finished, exposed members. Do not perform welding at locations where discoloration or other damage would result on exposed surfaces.
- viii. Bolted connections: Provide for alignment of skylight members with substrate.
- ix. Caulk metal-to-metal internal skylight joints using non-skinning type sealant. Install in accord with Joint Sealants section
- x. Caulk perimeter of skylights and exposed fastener heads using exterior sealant as specified in Joint Sealants section. Do not seal weep holes
- xi. Glaze units in accord with approved shop drawings and manufacturer's product data for weathertight installation
- xii. Flashings: Make weathertight fit, allowing for expansion and contraction. Provide 6" wide backup plate at joints, formed to profile of flashing. Set flashing over backup plate in double beads of non-skinning sealant. Form joints in flashings to allow for ½" minimum expansion maximum, and 8'-0" from corners
- xiii. Cleaning: Maintain skylight assemblies, including glazing, in reasonably clean condition during construction period. Immediately remove stains or materials having adverse effect on materials and finishes. Remove excess glazing sealants
- xiv. Allowable erection tolerances:
 - 1. Maximum variation from designated position: 1/8" in 10'-0", not exceeding ¼" in 40'-0" any direction.
 - 2. Maximum offset in alignment between two consecutive members in line, end to end: 1/16".
 - 3. Maximum offset between framing members at corners of glazing pocket: 1/32"

D. FIELD QUALITY CONTROL:

- i. Field tests: Conduct field testing of completed skylight assemblies to determine watertightness. Conduct testing in accord with AAMA 501.2 A minimum of (one test) (two tests) per skylight shall be performed. Correct deficiencies found in skylights to make assembly watertight. Conduct testing in presence of **Mechanical Engineer** and **CCRI**.

E. CLEANING:

- i. Final cleaning: Just prior to Date of Substantial Completion, clean entire skylight assemblies, including interior and exterior metal. Flush with clean water. Repair or replace work which cannot be cleaned or which has been damaged during construction operations.

F. PROTECTION

- i. Protect skylight system during remainder of work from damage caused by work of other trades



