



JOLIET
JUNIOR COLLEGE
—1901—

Project Manual
for
Joliet Junior College,
Illinois Community College District No. 525
Campus Center
Joliet, Illinois

BID RELEASE 24

Millwork, Fixture & Furnishings Work

Gilbane Project No. 4764-009

January 25, 2011

Volume 2 of 2

B.P. #

06K
12C

Description:

Library End Panel Work
Bookstore Fixture & Furnishings Work

Owner:

Joliet Junior College,
Illinois Community College District No. 525
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LEGATARCHITECTS

Gilbane

SECTION 00 0110

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END OF LIST OF DRAWINGS

SECTION 01 1000

SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: Joliet Junior College Campus Center.
- B. Owner's Name: Joliet Junior College.
- C. Legat Architects's Name: Legat Architects; herein referred to as 'Architect'.
- D. Construction Manager's Name: Gilbane Building Company; herein referred to as 'Construction Manager'.
- E. The Project consists of the fabrication, furnishing and installation of fixtures, fixturing and accessories for the Student Center Bookstore and endpanel for the Student Library.

1.02 CONTRACT DESCRIPTION

- A. Refer to Construction Manager's Scope of Work.

1.03 OWNER OCCUPANCY

- A. Joliet Junior College intends to continue to occupy adjacent portions of the existing buildings during the entire construction period.
- B. Cooperate with Joliet Junior College to minimize conflict and to facilitate Joliet Junior College's operations.
- C. Schedule the Work to accommodate Joliet Junior College occupancy. Refer to Construction Manager's scope document for schedule information.

1.04 CONTRACTOR USE OF SITE AND PREMISES

- A. Arrange use of site and premises to allow:
 - 1. Joliet Junior College occupancy of existing buildings and parking.
- B. Provide access to and from site as required by law and by Joliet Junior College:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit routes and exit signage as required.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- C. Utility Outages and Shutdown:
 - 1. Limit disruption of utility services to hours the building is unoccupied.
 - 2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Joliet Junior College and authorities having jurisdiction.
 - 3. Prevent accidental disruption of utility services to other facilities.

1.05 SPECIFICATION SECTIONS APPLICABLE TO ALL CONTRACTS

- A. Unless otherwise noted, all provisions of the sections listed below apply to all contracts. Specific items of work listed under individual contract descriptions constitute exceptions. Refer to CM scope of work for additional information.
- B. LEED related sections.
- C. Section 01 3216 - Construction Progress Schedule.
- D. Section 01 4000 - Quality Requirements.

- E. Section 01 4219 - Reference Standards.
- F. Section 01 7000 - Execution and Closeout Requirements.
- G. Section 01 7800 - Closeout Submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3000

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Site mobilization meeting.
- C. Progress meetings.
- D. Construction progress schedule.
- E. Coordination drawings.
- F. Submittals for review, information, and project closeout.
- G. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Construction Manager's Scope of Work.
- B. Division 1: LEED requirements.
- C. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 PROJECT COORDINATION

- A. Project Coordinator: Construction Manager.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for site access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to Legat Architects through the Project Coordinator:
 - 1. Requests for interpretation.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
 - 1. Contractor and Legat Architects are required to use this service.
 - 2. It is Contractor's responsibility to submit documents in PDF format.
 - 3. Subcontractors, suppliers, and Legat Architects's consultants will be permitted to use the service at no extra charge.
 - 4. Paper document transmittals will not be reviewed; emailed PDF documents will not be reviewed.
 - 5. All other specified submittal and document transmission procedures apply, except that electronic document requirements to not apply to samples or color selection charts.
- B. Submittal Service: The selected service is: Prolog Web

3.02 PRECONSTRUCTION MEETING

- A. Construction Manager will schedule a meeting after the Notice of Award.
- B. Attendance Required:
 - 1. Joliet Junior College.
 - 2. Legat Architects.
 - 3. Contractor.
 - 4. Construction Manager.
- C. Agenda:
 - 1. Execution of Joliet Junior College-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to Contract, Construction Manager and Legat Architects.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. LEED Submittal Requirements
 - 8. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Legat Architects, Joliet Junior College, participants, and those affected by decisions made.

3.03 SITE MOBILIZATION MEETING

- A. Attendance Required:
 - 1. Contractor.
 - 2. Joliet Junior College.
 - 3. Legat Architects.
 - 4. Contractor's Superintendent.
 - 5. Major Subcontractors.
- B. Agenda:
 - 1. Use of premises by Joliet Junior College and Contractor.
 - 2. Joliet Junior College's requirements and occupancy prior to completion.
 - 3. Construction facilities and controls provided by Joliet Junior College.
 - 4. Temporary utilities provided by Joliet Junior College.

5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
 13. LEED Process
- C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Legat Architects, Joliet Junior College, participants, and those affected by decisions made.

3.04 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Attendance Required: Job superintendent, major Subcontractors and suppliers, Joliet Junior College, Legat Architects, as appropriate to agenda topics for each meeting.
- C. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
 14. LEED Process
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Legat Architects, Joliet Junior College, participants, and those affected by decisions made.

3.05 CONSTRUCTION PROGRESS SCHEDULE

- A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.

3.06 COORDINATION DRAWINGS

- A. Provide information required by Project Coordinator for preparation of coordination drawings.
- B. Review drawings prior to submission to Legat Architects.

3.07 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.
 - 5. Coordination Drawings.
 - 6. LEED Requirements, forms, etc.
- B. Submit to Legat Architects for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - CLOSEOUT SUBMITTALS.

3.08 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. LEED submittals and reports.
 - 3. Certificates.
 - 4. Test reports.
 - 5. Inspection reports.
 - 6. Manufacturer's instructions.
 - 7. Manufacturer's field reports.
 - 8. Other types indicated.
- B. Submit for Legat Architects's knowledge or for Joliet Junior College. No action will be taken.
- C. LEED Submittals and Reporting Forms for all specification sections in Division 2 through 10, whether or not identified in the individual section.

3.09 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. As Built drawings.
 - 6. Other types as indicated.
- B. Submit for Joliet Junior College's benefit during and after project completion.

3.10 SUBMITTAL PROCEDURES

- A. Request for Electronic Architectural Drawings:
 - 1. Architectural Floor Plan background drawings can be made available for the production of shop drawings at no cost to the contractor.
 - 2. Shop drawings will not be accepted without specific submittal related information added to the background files. Submitting Architectural Floor Plan Backgrounds only, as the shop drawings, will be rejected.
 - 3. Architectural Floor Plan background drawings do not replace the Contractor's responsibility to verify current in-place field conditions that will affect their shop drawings and scope of work.

- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. Submittals not meeting these requirements will not be reviewed by the Architect.
- E. Deliver submittals to Construction Manager at the address directed.
- F. Schedule submittals to expedite the Project, and coordinate submission of related items.
- G. For each submittal for review, allow 15 days excluding delivery time to and from the Construction Manager.
- H. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- I. Provide space for Contractor and Legat Architects review stamps.
- J. When revised for resubmission, identify all changes made since previous submission.
- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- L. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 3514.01

LEED-NC 2009 CREDIT SUMMARY

PART 1 GENERAL

1.01 PROJECT INFORMATION

- A. Project Name: Joliet Junior College Campus Center.
- B. City: Joliet.
- C. State: Illinois.

1.02 DEFINITIONS

- A. LEED Rating System: LEED-NC 2009 edition.
- B. Required: Achievement of this credit is essential for certification of this project.
- C. Preferred: Achievement of this credit would be desirable but is not mandatory.
- D. Not Required: Achievement of this credit is not expected or not possible for this project.
- E. To Be Provided: Provided via one or more construction contracts.
- F. See Section 01 3515 - LEED Certification Procedures, for Contractor's responsibilities.

PART 2 CREDIT SUMMARY

2.01 CERTIFICATION TO BE ACHIEVED: LEED - NC Silver (minimum 33 points, Version 2.2, October 2005).

2.02 MATERIALS & RESOURCES: 8 Points To Be Achieved.

- A. MR Credit 3 - Not Required - 2 points - Materials Reuse, 10%.
- B. MR Credit 4 - Required - 2 points - Recycled Content: 20% (post-consumer plus 1/2 pre-consumer).
 - 1. The definition of recycled content for the purposes of the contract documents is included in Section 01 6000; qualifying products do not include plumbing, HVAC, electrical, or communications equipment, piping, conduit, ductwork, or wiring.
 - 2. This project is steel-framed and contains many other steel-containing products; submission of a complete list of all metal-containing products will be required, with documentation showing steel mill source and mill process, allowing computation by using industry-averages for recycled content; the forms are specified in Section 01 3516.
 - 3. Other specific products that must contain recycled content are specified in the appropriate section(s).
 - 4. Contractor is required to achieve this credit through selection of products (materials and equipment) plus any mandatory recycled content specified in the contract documents; this requirement is specified in Section 01 6000.
 - 5. Contractor's reporting and measurement requirements are specified in Section 01 3515 and Section 01 6000; calculation of project totals is the responsibility of the LEED Coordinator.
- C. MR Credit 5 - Required - 2 points - Regional Materials: 20% Extracted, Processed & Manufactured Regionally.
 - 1. For the purposes of the contract documents, the term "regionally-sourced" is used instead of "regional materials" and is defined in Section 01 6000 in the same way as for this credit.
 - 2. The Regionally-sourced Products Form is required for each product used; please submit this form with each product's information. The form is specified in Section 01 3516.

3. Major products that are specified to be regionally-sourced include, but are not limited to the following:
 - a. Wood Veneer.
 - b. Substrate Materials.
 4. Other specific products that must be regionally-sourced are specified in the appropriate section(s).
 5. Contractor is required to achieve this credit through selection of materials, plus any mandatory regionally-sourced product specified in the contract documents; this requirement is specified in Section 01 6000.
 6. Contractor's reporting and measurement requirements are specified in Section 01 3515 and Section 01 6000; calculation of project totals is the responsibility of the LEED Coordinator.
- D. MR Credit 6 - Preferred - 1 point - Rapidly Renewable Materials.
1. The definition of rapidly renewable content for the purposes of the contract documents is included in Section 01 6000.
 2. Major products that are specified to be made of rapidly renewable materials include the following:
 - a. Fixtures and Fixturing.
 3. Other specific products that must contain rapidly renewable material content are specified in the appropriate section(s).
 4. The Contractor may achieve this credit through selection of products (materials and equipment) plus any mandatory rapidly renewable material content specified in the contract documents; this requirement is specified in Section 01 6000.
 5. Contractor's reporting and measurement requirements are specified in Section 01 3515 and Section 01 6000; calculation of project totals is the responsibility of LEED Coordinator.
- E. MR Credit 7 - Required - 1 point - Certified Wood.
1. For the purposes of the contract documents, the term "sustainably harvested wood" is used instead of "certified wood" and is defined in Section 01 6000 in the same way as for this credit.
 2. The Contractor is required to achieve this credit through selection of materials plus any mandatory requirements specified in the contract documents; this requirement is specified in Section 01 6000.
 3. Specific wood products that must be sustainably harvested are specified in the appropriate section(s).
 - a. Finish woodwork is specified in Section 06 2000.
 - b. Custom cabinets are specified in Section 06 4100.
 - c. Countertops are specified in Section 12 3600.
 - d. Wood veneer paneling is specified in Section 06 4216.
 - e. Dooge Veneer, Anegre, Quartered Plain, Log # 10340, FSC.
 4. Contractor's reporting and measurement requirements are specified in Section 01 3515 and Section 01 6000; calculation of project totals is the responsibility of the LEED Coordinator.

2.03 INDOOR ENVIRONMENTAL QUALITY: 10 Points To Be Achieved.

- A. EQ Prerequisite 1 - Required - No points - Minimum IAQ Performance.
1. The building ventilation has been designed to meet the minimum requirements of ASHRAE 62.1-2004.
- B. EQ Prerequisite 2 - Required - No points - Environmental Tobacco Smoke (ETS) Control.
1. Joliet Junior College intends to prohibit smoking in the building.
 2. Exterior smoking areas are located at least 25 feet (8 meters) away from entries, outdoor air intakes, and operable windows.

- C. EQ Credit 4.1 - Required - 1 point - Low-Emitting Materials, Adhesives & Sealants.
 - 1. Product criteria and reporting requirements for VOC-restricted products are specified in Section 01 6116.
 - 2. All adhesives and sealants used in this project and will comply with the specified VOC restrictions of the LEED 2009 New Construction Reference Guide. All adhesives and sealants used on the project, whether explicitly specified or not, are considered VOC-restricted products.
- D. EQ Credit 4.2 - Required - 1 point - Low-Emitting Materials, Paints & Coatings.
 - 1. Product criteria and reporting requirements for VOC-restricted products are specified in Section 01 6116.
 - 2. Paints and stains are specified in Section 09 9000.
 - a. Water-based paints or solvent-based paints with VOC content meeting the credit criteria are used for all interior opaque applications.
 - b. Other coatings, such as stains and clear finishes, are specified to meet the most stringent of federal EPA, state, or local criteria.
- E. EQ Credit 4.4 - Required - 1 point - Low-Emitting Materials, Composite Wood & Agrifiber Products.
 - 1. Product criteria and reporting requirements for VOC-restricted products are specified in Section 01 6116.
 - 2. The products covered by this credit include ONLY particleboard, plywood, medium density fiberboard (MDF), wheatboard, strawboard, panel substrates, door cores, and laminating adhesives used on-site or in the shop.
 - 3. A project-wide prohibition on use of these products if they contain added urea-formaldehyde is specified.

2.04 INNOVATION & DESIGN PROCESS (ID): 3 Points To Be Achieved.

- A. ID Credit 1.1 - Required - 1 point - Innovation in Design: Recycled Content, 30%.
- B. ID Credit 1.2 - Required - 1 point - Innovation in Design: Regional Materials, 40%.
- C. ID Credit 1.3 - Preferred - 1 point - Innovation in Design: Sustainability in Education.
- D. ID Credit 1.4 - Preferred - 1 point - Innovation in Design: Environmentally Preferable Cleaning Products and Practices.
- E. ID Credit 2 - Required - 1 point - LEED Accredited Professional.
 - 1. At least one principal participant of the project team has successfully completed the LEED Accredited Professional exam.

END OF SECTION

SECTION 01 3515

LEED CERTIFICATION PROCEDURES

PART 1 GENERAL

1.01 PROJECT GOALS

- A. This project has been designed to achieve the LEED-NC Silver (minimum 33 points) rating, as defined in the LEED(r) Green Building Rating System(tm) for New Construction and Major Renovations, Version 2.2, October 2005.
- B. The contractor is responsible to submit all the information required for the LEED certification application. The construction manager is responsible to manage, track, and assemble the final application for all LEED Construction Credits for the Architect to compile and submit.
- C. Many of the LEED credits can be achieved only through intelligent design of the project and are beyond the control of the Contractor. However, certain credits relate to the products and procedures used for construction. Therefore, the full cooperation of the Contractor and subcontractors is essential to achieving final certification.
- D. Contractor shall familiarize himself with the relevant requirements and provide the necessary information and instruction to all subcontractors and installers.
- E. Since the Contractor and subcontractors may not be familiar with LEED requirements, this section includes a summary of the products and procedures intended to achieve LEED credits.
 - 1. Some credits are marked PREREQUISITE; these must be achieved regardless of the level of certification; many are dependent on proper performance by the Contractor and subcontractors.
 - 2. Other credits involve quantifying percentages by weight and cost; these require careful recordkeeping and reporting by the Contractor.
 - 3. See www.usgbc.org and Green Building Design and Construction Reference Guide 2009 Edition for more information.

1.02 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for additional submittal procedures.
- B. Submit LEED submittals and reports directly to the Construction Manager's LEED Coordinator or Consultant for preliminary review, then to the Legat Architects for final approval, unless otherwise indicated.
- C. LEED Submittal/Report: For each product, submit the LEED forms applicable to the product in question. LEED forms are specified in Section 01 35 16. The forms typically require, but not limited to the following information:
 - 1. Identify each product with:
 - a. Name and manufacturer.
 - b. Specification section number.
 - c. Applicable Credit(s).
 - d. Net weight per unit.
 - e. Total Recycled Content.
 - f. Total Regional Value.
 - g. Total material cost.
 - h. Tested VOC levels.
 - 2. Attach evidence of compliance from either the manufacturer or an independent agency.

END OF SECTION

SECTION 01 3516

LEED SUBMITTAL FORMS

1.01 PURPOSE

- A. These forms are for the Contractor's use in submitting documentation to be used to determine whether particular credits have been achieved. The cooperation of subcontractors, suppliers, and manufacturers is required.
- B. These forms apply to the following LEED Credits:
 - 1. MR Credits 4 - Recycled Content.
 - 2. MR Credits 5 - Regional Materials.
 - 3. MR Credit 6 - Rapidly Renewable Materials.
 - 4. MR Credit 7 - Certified Wood.
 - 5. IEQ Credit 4 - Low-Emitting Materials.

1.02 FORMS

- A. 01 3516.01 - LEED for New Construction Version 2009 Reporting Form for Credits MR4 and MR5: Certification by Contractor and/or Manufacturer.
- B. 01 3516.02 - LEED for New Construction Version 2009 Reporting Form for Credit MR7: Certification by Contractor and/or Manufacturer.
- C. 01 3516.03 - LEED for New Construction Version 2009 Reporting Form for Credit MR6: Certification by Contractor and/or Manufacturer.
- D. 01 3516.04 - LEED New Product Content Form: Including separate reporting of wood, steel, rapidly renewable, and recycled content; data certification by manufacturer of product; cost and quantity certification by Contractor.
- E. 01 3516.05 - LEED New Product Source Form: Data certification by manufacturer of product; cost and quantity certification by Contractor.

1.03 PROCEDURES

- A. All LEED submittal forms are to be submitted by Contractor; certifications are to be made by indicated party.
- B. Where a LEED Submittal is called for, fill out and submit the appropriate form.
 - 1. Fill out one form for each different brand name product and each different manufacturer of a lot of commodity products.
 - 2. Where required attachments are specified, attach the documentation to the back of the form.
- C. Each form must be signed by the entity capable of certifying the information.
 - 1. Certification signatures must be made by an officer of the company.
 - 2. For products, certification must be made by the manufacturer not the supplier.
 - 3. For custom fabricated products, certification by the fabricator is acceptable.
- D. Submit the completed forms in accordance with the requirements of Section 01 3000 - Administrative Requirements, as information submittals.
 - 1. Give each form a unique submittal number.
 - 2. Do not combine LEED forms with product data or shop drawing submittals, but submit them at the same time.

END OF SECTION

SECTION 01 3516.01

LEED MATERIAL COST SUMMARY FORM

1.01 LEED SUBMITTAL FORM

- A. Identification:
1. Project Name: _____
 2. Project No.: _____
 3. Legat Architects: _____
- B. This form applies to the following LEED Credits:
1. MR Credits 3.1 and 3.2 - Materials Reuse.
 2. MR Credits 4.1 and 4.2 - Recycled Content.
 3. MR Credits 5.1 and 5.2 - Regional Materials.
 4. MR Credit 6 - Rapidly Renewable Materials.
 5. MR Credit 7 - Certified Wood.
- C. Procedure:
1. Because the above listed credits require computations based on the material costs for the project, the Contractor is required to submit the following cost breakdown, in addition to any cost breakdown specified elsewhere.
 2. Costs are to be material costs excluding labor, overhead, and profit, but including delivery, storage, and handling charges. Revise cost summary whenever materials actually installed change due to contract modifications or Contractor preference.

1.02 CERTIFICATION

- 1.03 \$ _____ Total Cost of All Materials**
- 1.04 \$ _____ Total Cost of Plumbing, HVAC, Electrical, and Communications**
- 1.05 \$ _____ Total Cost of Architectural Equipment in Divisions 11 Through 14**
- 1.06 \$ _____ Total Cost of Wood and Wood-Based Materials, including temporary construction items that will neither be incorporated into the work nor returned to their supplier for re-use.**

1.07 CERTIFIED BY: (Contractor)

- A. Print Name: _____
- B. Signature: _____
- C. Title: _____ (officer of company), Date: _____

END OF SECTION

SECTION 01 3516.02

LEED WOOD-CONTAINING PRODUCT LIST

1.01 LEED SUBMITTAL FORM

- A. Identification:
 - 1. Project Name: _____
 - 2. Project No.: _____
 - 3. Legat Architects: _____
- B. This form applies to LEED MR Credit 7 (certified wood).

1.02 WOOD-CONTAINING PRODUCTS

- A. Wood-containing products are those made of solid wood, wood chip, or wood fiber, or containing components made of solid wood, wood chip, or wood fiber.
- B. Rationale: Because the computation for this credit is based on the total material costs for all wood and wood-based products on the project, the Contractor is required to submit the following itemization of wood and wood-based products, including materials used during construction but not incorporated into the finished work.
- C. Procedure: For each wood-containing product provided for this project, submit "LEED Material Content Form". At minimum, submit for the following products. Initial those for which the material content form is attached.
- D. Permanent Wood-Containing Product List:
 - 1. ___ Wood framing, furring, and supports
 - 2. ___ Molding and trim
 - 3. ___ Paneling
 - 4. ___ Architectural woodwork
 - 5. ___ Cabinets and casework
 - 6. ___ Wood shelving
- E. Temporary Wood-Containing Product List:

1.03 CERTIFICATION

- A. ___ All other wood-containing products used on this project are shown on the attached list.
- B. ___ I certify that there are no other wood-containing products used on this project that exceed 1 percent of total material cost.
- C. ___ I certify that there are no other temporary facilities or construction using wood-containing products that exceed 1 percent of the total material cost.
- D. CERTIFIED BY: (Contractor)
 - 1. Print Name: _____
 - 2. Signature: _____
 - 3. Title: _____ (officer of company), Date: _____

END OF SECTION

SECTION 01 3516.03

LEED METAL-CONTAINING PRODUCT LIST

1.01 LEED SUBMITTAL FORM

- A. Identification:
1. Project Name: _____
 2. Project No.: _____
 3. Legat Architects: _____
- B. This form applies to LEED Credits MR 4.1 and 4.2 (recycled content).

1.02 STEEL-CONTAINING PRODUCTS

- A. Rationale: Although all steel contains reused steel, steel products often cannot be traced to a certain mill lot and, even when they can, the mill's certificate usually does not indicate the proportion of new to reused steel.
- B. Procedure: Determine recycled steel content by estimating the proportion of reused steel based on trade association surveys of mill practices multiplied by the quantity of steel by weight in the product.
1. Referenced Mill Practices Survey: See the current edition of Steel Recycling Institute "Steel Takes LEED with Recycled Content," at http://www.recycle-steel.org/PDFs/leed/Steel%20Takes%20LEED_June06.pdf.
 2. If the mill source cannot be identified, the product will be considered to have the lowest reused steel content reported in referenced mill practices survey.
 3. For each steel-containing product provided for this project, submit "LEED New Product Content Form". At minimum, submit for the following products. Initial those for which the material content form is attached.
- C. Steel-Containing Product List:
1. ___ Light gauge steel framing and trusses.
 2. ___ Miscellaneous formed steel fabrications.
 3. ___ Steel casework and cabinets.
 4. ___ Other equipment with steel housings, casings, or boxes.

1.03 CERTIFICATION

- A. ___ All other steel- and cast iron-containing products used on this project are shown on the attached list.
- B. ___ I certify that there are no other steel-containing products used on this project that exceed 1 percent of total material cost less material cost attributed to mechanical and electrical.
- C. CERTIFIED BY: (Contractor)
1. Print Name: _____
 2. Signature: _____
 3. Title: _____ (officer of company), Date: _____

END OF SECTION

SECTION 01 3516.04

LEED MATERIAL CONTENT FORM

1.01 LEED SUBMITTAL FORM

- A. Identification:
 - 1. Project Name: _____
 - 2. Project No.: _____
 - 3. Legat Architects: _____
 - 4. Product Name: _____ (brand name, model number, etc.)
 - 5. Manufacturer: _____ www. _____
 - a. Contact: _____ tel: _____
 - 6. Supplier/Sub: _____ www. _____
 - a. Contact: _____ tel: _____
 - 7. Applicable Specification Section Number(s) _____
- B. This form applies to LEED Credits MR 4.1 and 4.2 (recycled content), MR 6 (rapidly renewable content), and MR 7 (certified wood).

1.02 PRODUCT CERTIFICATION

- A. FSC-Certified Solid Wood, Wood Chip, and Wood Fiber Content: _____ percent by weight (mass).
 - 1. _____ Product is FSC-trademarked.
 - 2. _____ FSC Chain-of-Custody certificate number is _____
 - 3. FSC: Forest Stewardship Council Chain-of-Custody number or physical trademark; computation of less than 100 percent certified content in accordance with FSC policy.
- B. Rapidly Renewable Content: _____ percent by weight (mass).
 - 1. Description of Rapidly Renewable Content: _____
 - 2. Definition: Made from plants that are harvested not more than 10 years after planting.
- C. Steel Content: _____ percent by weight (mass).
 - 1. _____ Steel Mill Source is: _____
 - 2. _____ Mill letter describing mill process and typical re-used steel content is attached.
- D. Other Content: (Percentages by weight (mass) may not add up to more than 100 percent.)
 - 1. Pre-Consumer/Post-Industrial Recycled Content: _____ percent by weight (mass).
 - 2. Post-Consumer Recycled Content: _____ percent by weight (mass).
 - 3. Description of Recycled Content: _____
 - 4. Definition: Recycled content is defined in accordance with FTC regulations, found in 16 CFR 260.7(e); see www.ftc.gov/bcp/grnrule/guides980427.htm.
- E. Total Weight (Mass): _____ per _____ (unit).
- F. CERTIFIED BY: (Manufacturer)
 - 1. Print Name: _____
 - 2. Signature: _____
 - 3. Title: _____ (officer of company), Date: _____

1.03 COST CERTIFICATION

- A. Unit Cost: \$ _____ per _____ (same unit as above); No. of Units Installed: _____
- B. OR (enter cost either above or below, not both)
- C. Total Installed Material Cost of This Product: \$ _____

D. CERTIFIED BY: (Contractor)

1. Print Name: _____
2. Title: _____ (officer of company), Date: _____

END OF SECTION

SECTION 01 3516.05

LEED NEW PRODUCT SOURCE FORM

1.01 LEED SUBMITTAL FORM

- A. Identification:
 - 1. Project Name: _____
 - 2. Project No.: _____
 - 3. Legat Architects: _____
 - 4. Product Name: _____ (brand name, model number, etc.)
 - 5. Manufacturer: _____ www. _____
 - a. Contact: _____ tel: _____
 - 6. Supplier/Sub: _____ www. _____
 - a. Contact: _____ tel: _____

B. This form applies to LEED MR Credits 5.1 and 5.2 for new products only; see separate form for reused products.

1.02 PRODUCT CERTIFICATION

A. The following percentages of this product were processed in the locations indicated. (Indicate N/A in first column if process is not applicable.)

Percent	Harvest, Extraction, Recovery, or Manufacturing Process	City/County, State, Country	Distance From Project
____ %	Raw Material _____:	_____	_____
____ %	Raw Material _____:	_____	_____
____ %	Raw Material _____:	_____	_____
____ %	Manufactured at: (primary)	_____	_____
____ %	Manufactured at: (primary)	_____	_____
____ %	Manufactured at: (secondary)	_____	_____
____ %	Manufactured at: (secondary)	_____	_____
____ %	Manufactured at: (final)	_____	_____
____ %	Manufactured at: (final)	_____	_____

- B. CERTIFIED BY: (Manufacturer)
 - 1. Print Name: _____
 - 2. Signature: _____
 - 3. Title: _____ (officer of company), Date: _____

1.03 COST CERTIFICATION

- A. Unit Cost: \$ _____ per _____ (unit); No. of Units Installed: _____
- B. Total Installed Material Cost: \$ _____
- C. CERTIFIED BY: (Contractor)
 - 1. Print Name: _____
 - 2. Signature: _____
 - 3. Title: _____ (officer of company), Date: _____

END OF SECTION

SECTION 01 4000

QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. References and standards.
- B. Quality assurance submittals.
- C. Mock-ups.
- D. Control of installation.
- E. Tolerances.
- F. Testing and inspection services.
- G. Manufacturers' field services.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittal procedures.
- B. Section 01 35 15 - LEED Certification Procedures.
- C. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 SUBMITTALS

- A. Design Data: Submit for Legat Architects's knowledge for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Joliet Junior College's information.
- B. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Legat Architects, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Legat Architects.
- C. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Joliet Junior College's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- D. Manufacturer's Field Reports: Submit reports for Legat Architects's benefit or for Joliet Junior College.
 - 1. Submit report in duplicate within 15 days of observation to Legat Architects for information.
 - 2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.04 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Legat Architects before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Legat Architects shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Legat Architects before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, and finishes.
- C. Accepted mock-ups shall be a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by Legat Architects and is specified in product specification sections to be removed, remove mock-up and clear area when directed to do so.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Legat Architects before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Legat Architects 30 days in advance of required observations.
 - 1. Observer subject to approval of Legat Architects.
 - 2. Observer subject to approval of Joliet Junior College.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.05 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Construction Manager and Legat Architects, it is not practical to remove and replace the Work, Legat Architects will recommend an appropriate remedy to the Owner's representative or adjust payment.

END OF SECTION

SECTION 01 5721

INDOOR AIR QUALITY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Construction procedures to promote adequate indoor air quality during construction.

1.02 PROJECT GOALS

- A. See Section 01 3515 - LEED Certification Procedures, for overall project goals relating to environment and energy.
- B. See Section 01 35 15 LEED Certification Procedures, for overall project goals relating to environment and energy.
- C. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
 - 1. Contractor shall bear the cost of cleaning required due to failure to protect ducts and equipment from construction dust.
 - 2. Establish condition of existing ducts and equipment prior to start of alterations.
- D. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants.
 - 1. Furnish products meeting the specifications.
 - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.
- E. Ventilation: HVAC system has been designed to achieve the minimum requirements for ventilation specified in ASHRAE 62.1.

1.03 RELATED REQUIREMENTS

- A. Section 01 35 15 - LEED Certification Procedures: LEED credits relating to indoor air quality.
- B. Section 01 4000 - Quality Requirements: Testing and inspection services.
- C. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

1.04 REFERENCE STANDARDS

- A. ASHRAE Std 62.1 - Ventilation For Acceptable Indoor Air Quality; 2007 (errata 2008).
- B. SMACNA (OCC) - IAQ Guideline for Occupied Buildings Under Construction; 2007.

1.05 DEFINITIONS

- A. Adsorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

1.06 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

- B. LEED Submittals: Submit all submittals required in this section in accordance with procedures specified in Section 01 35 15.
- C. Indoor Air Quality Management Plan: Describe in detail measures to be taken to promote adequate indoor air quality upon completion; use SMACNA IAQ Guidelines for Occupied Buildings Under Construction as a guide.
 - 1. Submit not less than 60 days before enclosure of building.
 - 2. Identify potential sources of odor and dust.
 - 3. Identify construction activities likely to produce odor or dust.
 - 4. Identify areas of project potentially affected, especially occupied areas.
 - 5. Evaluate potential problems by severity and describe methods of control.
 - 6. Describe construction ventilation to be provided, including type and duration of ventilation, use of permanent HVAC systems, types of filters and schedule for replacement of filters.
 - 7. Describe cleaning and dust control procedures.
 - 8. Describe coordination with commissioning procedures.
- D. Interior Finishes Installation Schedule: Identify each interior finish that either generates odors, moisture, or vapors or is susceptible to adsorption of odors and vapors, and indicate air handling zone, sequence of application, and curing times.
- E. Duct and Terminal Unit Inspection Report.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Low VOC Materials: See Section 01 6116.
- B. Low VOC Materials: See other sections for specific requirements for materials with low VOC content.

PART 3 EXECUTION

3.01 CONSTRUCTION PROCEDURES

- A. Procedures required to achieve EQ Credit 3.1, Construction IAQ Management Plan, During Construction. Refer to Division 23 specifications for additional information.
- B. Prevent the absorption of moisture and humidity by adsorptive materials by:
 - 1. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
 - 2. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
 - 3. Provide sufficient ventilation for drying within reasonable time frame.
- C. Begin construction ventilation when building is substantially enclosed.
- D. If extremely dusty or dirty work must be conducted inside the building, shut down HVAC systems for the duration; remove dust and dirt completely before restarting systems.
- E. When working in a portion of an occupied building, prevent movement of air from construction area to occupied area.
- F. Do not store construction materials or waste in mechanical or electrical rooms.
- G. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.
- H. Use other relevant recommendations of SMACNA IAQ Guideline for Occupied Buildings Under Construction for avoiding unnecessary contamination due to construction procedures.

END OF SECTION

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. LEED-related product requirements.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Section 01 3515 - LEED Certification Procedures: Requirements for LEED reports.
- B. Section 01 4000 - Quality Requirements: Product quality monitoring.
- C. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- D. Section 01 7419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.

1.03 REFERENCE STANDARDS

- A. 16 CFR 260 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; current edition.
- B. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.

1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 15 days after date of Agreement.
 - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project should be submitted for each assembly included in the Contractor's Scope of Work.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
- E. LEED Submittals to be submitted separate from each Product Data Submittal, but at the same time. Use forms provided in Section 01 3516.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Joliet Junior College, or otherwise indicated as to remain the property of the Joliet Junior College, become the property of the Contractor; remove from site.
- C. Reused Products: Reused products include materials and equipment previously used in this or other construction, salvaged and refurbished as specified.
- D. LEED Submittals: State cost of each reused product, quantity installed, and total cost of reused products.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
 - 1. Made using or containing CFC's or HCFC's.
 - 2. Made of wood from newly cut old growth timber.
- C. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. Are extracted, harvested, and/or manufactured closer to the location of the project.
 - 2. Have longer documented life span under normal use.
 - 3. Result in less construction waste.
 - 4. Are made of vegetable materials that are rapidly renewable.
- D. Regionally-Sourced Products:
 - 1. Overall Project Requirement: Provide materials amounting to a minimum of 40 percent of the total value of all materials (excluding plumbing, HVAC, electrical, elevators, and other equipment) that have been extracted, harvested, or recovered, as well as manufactured, within a radius of 500 miles (535 km) from the project site.
 - a. This provision is applicable to LEED Credit MR 5 (20%) and ID 1.2 (40%); show quantity on LEED report.
 - 2. Specific Product Categories: Provide regionally-sourced products as specified elsewhere.
 - 3. LEED Submittals: Indicate location of manufacture; in all cases indicate location of final assembly; for harvested products, indicate location of harvest; for extracted (i.e. mined) products, indicate location of extraction; for products involving multiple manufacturing steps, indicate all locations of manufacture or assembly; provide manufacturer or supplier certification of location information.
- E. Products with Rapidly Renewable Material Content:
 - 1. Definition: Materials made from plants that are typically harvested within 10 years or less after planting.
 - 2. Overall Project Requirement: Provide materials amounting to a minimum of 2.5 percent of the total value of all materials and products used on the project.
 - a. This provision is applicable to LEED Credit MR 6; show quantity on LEED report.
 - 3. Specific Product Categories: Provide renewable material content as specified elsewhere.
 - 4. Calculations: Where information about renewable material content is required to be submitted and an item is not made completely of rapidly renewable material, calculate content by dividing the renewable material content by weight by the total weight of the item.
 - 5. LEED Submittals: State unit cost, renewable material content percentage, quantity installed, total material cost, and total renewable material value; attach evidence of contents from either manufacturer or an independent agency.
- F. Products with Recycled Content:
 - 1. Overall Project Requirement: Provide products with recycled content such that the sum of post-consumer recycled content plus one-half of the post-industrial recycled content

constitutes at least 30 percent of the total value of all products installed, except mechanical and electrical components.

- a. This provision is applicable to LEED Credit MR 4 (20%) and ID 1.1 (30%) to show quantity and calculations on LEED report.
 2. Specific Product Categories: Provide recycled content as specified elsewhere.
 3. Calculations: Where information about recycled content is required to be submitted:
 - a. Determine percentage of post-consumer and post-industrial content separately, using the guidelines contained in 16 CFR 260.7(e).
 - b. Previously used, reused, refurbished, and salvaged products are not considered recycled.
 - c. Wood fabricated from timber abandoned in transit to original mill is considered reused, not recycled.
 - d. Determine percentage of recycled content of any item by dividing the weight of recycled content in the item by the total weight of all material in the item.
 - e. Determine value of recycled content of each item separately, by multiplying the content percentage by the value of the item.
 4. LEED Submittals: State unit cost, post-consumer and post-industrial content percentages, quantity installed, total material cost, and total recycled content value; attach evidence of contents from either manufacturer or an independent agency.
- G. Sustainably Harvested Wood:
1. Definition: Wood-based materials include but are not limited to structural framing, dimension lumber, flooring, wood doors, finishes, and furnishings that are permanently installed in the project. Wood and wood-based products not permanently installed in the project are not included in the definition.
 2. Overall Project Requirement: Provide a minimum of 50 percent of all wood-based materials made of sustainably harvested wood.
 - a. This provision is applicable to LEED Credit MR 7; show quantity on LEED report and submit certificates.
 3. Specific Wood-Based Fabrications: Fabricate of sustainably harvested wood when so specified elsewhere.
 4. Certification: Provide wood certified or labeled by an organization accredited by one of the following:
 - a. The Forest Stewardship Council, The Principles for Natural Forest Management; for Canada visit <http://www.fscscanada.org>, for the USA visit <http://www.fscus.org>.
 5. LEED Submittals: State unit cost of each wood-based item, quantity installed, quantity certified as sustainably harvested, total wood-based material cost, and total sustainably harvested value; provide letter of certification signed by supplier of each item, indicating compliance with the specified requirements and identifying the certifying organization.
 - a. Include the certifying organization's certification numbers for each certified product, itemized on a line-item basis.
 - b. Attach copies of invoices bearing the certifying organization's certification numbers.

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.
- B. Legat Architects will consider requests for substitutions only within 15 days after date of Agreement.
- C. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- E. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Joliet Junior College.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Will reimburse Joliet Junior College and Legat Architects for review or redesign services associated with re-approval by authorities.
- F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- G. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Legat Architects will notify Contractor in writing of decision to accept or reject request.

3.02 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.

- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Prevent contact with material that may cause corrosion, discoloration, or staining.
- I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

SECTION 01 6116

VOC CONTENT RESTRICTIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. VOC restrictions for product categories listed below under "DEFINITIONS."
- B. All products of each category that are installed in the project must comply; Joliet Junior College's project goals do not allow for partial compliance.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittal procedures.
- B. Section 01 3515 - LEED Certification Procedures.
- C. Section 01 4000 - Quality Requirements: Procedures for testing and certifications.
- D. Section 01 5721 - Indoor Air Quality Controls: Procedures and testing; LEED requirements.
- E. Section 01 6000 - Product Requirements: Fundamental product requirements, substitutions and product options, delivery, storage, and handling.
- F. Section 01 6116.01 - Accessory Material VOC Content Certification Form.

1.03 DEFINITIONS

- A. VOC-Restricted Products: All products of each of the following categories when installed or applied on-site in the building interior:
 - 1. Adhesives, sealants, and sealer coatings.
 - 2. Paints and coatings.
 - 3. Cabinet work.
 - 4. Student and teacher desks.
 - 5. Composite wood and agrifiber products used either alone or as part of another product.
 - 6. Any and all store fixtures, fixturing, accessories and library endpanels.
 - 7. Other products when specifically stated in the specifications.
- B. Interior of Building: Anywhere inside the exterior weather barrier.
- C. Adhesives: All gunnable, trowelable, liquid-applied, and aerosol adhesives, whether specified or not; including flooring adhesives, resilient base adhesives, and pipe jointing adhesives.
- D. Sealants: All gunnable, trowelable, and liquid-applied joint sealants and sealant primers, whether specified or not; including firestopping sealants and duct joint sealers.

1.04 REFERENCE STANDARDS

- A. CAL (CHPS LEM) - Low-Emitting Materials Product List; California Collaborative for High Performance Schools (CHPS); current edition at www.chps.net/manual/lem_table.htm.
- B. GEI (SCH) - GREENGUARD "Children and Schools" Certified Products; GREENGUARD Environmental Institute; current listings at www.greenguard.org.
- C. GreenSeal GS-36 - Commercial Adhesives; Green Seal, Inc.; 2000.
- D. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition; www.aqmd.gov.
- E. SCS (CPD) - SCS Certified Products; Scientific Certification Systems; current listings at www.scs-certified.com.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Evidence of Compliance: Submit for each different product in each applicable category.
 - 1. Identify evidence submittals with the words "LEED Report".
- C. Product Data: For each VOC-restricted product used in the project, submit product data showing compliance, except when another type of evidence of compliance is required.
- D. Installer Certifications for Accessory Materials: Require each installer of any type of product (not just the products for which VOC restrictions are specified) to certify that either 1) no adhesives, joint sealants, paints, coatings, or composite wood or agrifiber products have been used in the installation of his products, or 2) that such products used comply with these requirements.
 - 1. Use the form following this section for installer certifications.

1.06 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Adhesives and Joint Sealants: Provide only products having volatile organic compound (VOC) content meeting requirements of South Coast Air Quality Management District (SCAQMD) Rule 1168, effective July 1, 2005 in accordance with EQ Credit 4.1.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Report of laboratory testing performed in accordance with requirements.
 - b. Published product data showing compliance with requirements.
 - c. Certification by manufacturer that product complies with requirements.
- B. Aerosol Adhesives: Provide only products having volatile organic compound (VOC) content not greater than required by GreenSeal GS-36.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Current GreenSeal Certification.
 - b. Report of laboratory testing performed in accordance with GreenSeal GS-36 requirements.
 - c. Published product data showing compliance with requirements.
- C. Paints and Coatings:
 - 1. Provide coatings that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
 - 1) Opaque, Flat: 50 g/L, maximum.
 - 2) Opaque, Nonflat: 150 g/L, maximum.
 - 3) Opaque, High Gloss: 250 g/L, maximum.
 - 4) Varnishes: 350 g/L, maximum.
 - c. Architectural coatings VOC limits of State in which the project is located.
 - d. USGBC LEED Rating System, edition as stated in Section 013515; for anti-corrosive paints on interior ferrous metal and floor coatings.
 - 2. Determination of VOC Content: Testing and calculation in accordance with Green Seal standard GS-11, Paints, First Edition, May 20,1993; Green Seal standard GC-03,

Anti-Corrosive Paints, Second Edition, January 7, 1997; and South Coast Air Quality Management District (SCAQMD), Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

3. Evidence of Compliance: Acceptable types of evidence are:
 - a. Report of laboratory testing performed in accordance with requirements.
 - b. Published product data showing compliance with requirements.
 - c. Certification by manufacturer that product complies with requirements.
- D. Composite Wood and Agrifiber Products and Adhesives Used for Laminating Them: Provide products having no added urea-formaldehyde resins.
 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Current SCS "No Added Urea Formaldehyde" certification; www.scs-certified.com.
 - b. Published product data showing compliance with requirements.
 - c. Certification by manufacturer that product complies with requirements.
- E. Other Product Categories: Comply with limitations specified elsewhere.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

- A. Joliet Junior College reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to Joliet Junior College.
- B. All additional costs to restore indoor air quality due to installation of non-compliant products will be borne by Contractor.

END OF SECTION

SECTION 01 6116.01

MATERIAL VOC CONTENT CERTIFICATION FORM

1.01 FORM

- A. Identification:
 - 1. Project Name: Joliet Junior College Campus Center
 - 2. Project No.: _____
 - 3. Legat Architects: _____
- B. Use of This Form:
 - 1. Because installers are allowed and directed to choose accessory materials suitable for the applicable installation, there is a possibility that such accessory materials might contain VOC content in excess of that permitted, especially where such materials have not been explicitly specified.
 - 2. Contractor is required to obtain and submit this form from each installer of work on this project.
 - 3. For each product category listed, circle the correct words in brackets: either [HAS] or [HAS NOT].
 - 4. If any of these accessory materials has been used, attach to this form product data and MSDS sheet for each such product.
- C. VOC content restrictions are specified in Section 01 6116.

2.01 PRODUCT CERTIFICATION

- A. I certify that the installation work of my firm on this project:
 - 1. [HAS] [HAS NOT] required the use of any ADHESIVES.
 - 2. [HAS] [HAS NOT] required the use of any JOINT SEALANTS.
 - 3. [HAS] [HAS NOT] required the use of any PAINTS OR COATINGS.
 - 4. [HAS] [HAS NOT] required the use of any COMPOSITE WOOD or AGRIFIBER PRODUCTS.
- B. Product data and MSDS sheets are attached.

3.01 CERTIFIED BY: (Installer/Manufacturer/Supplier Firm)

- A. Print Name: _____
- B. Signature: _____
- C. Title: _____ (officer of company)
- D. Date: _____

END OF SECTION

SECTION 01 7000

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Surveying for laying out the work.
- D. Cleaning and protection.
- E. Demonstration and instruction of Joliet Junior College personnel.
- F. Closeout procedures, except payment procedures.
- G. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittals procedures.
- B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- D. Section 01 9113 - General Commissioning Requirements: Contractor's responsibilities in regard to commissioning.

1.03 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 - 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Joliet Junior College.
- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day, including jackhammers.
 - 2. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.
- D. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- E. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.04 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate completion and clean-up of work of separate sections.
- D. After Joliet Junior College occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Joliet Junior College's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- B. Examine and verify specific conditions described in individual specification sections.
- C. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- D. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- E. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.

- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify the Construction Manager, Joliet Junior College and Legat Architects four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 1. Review conditions of examination, preparation and installation procedures.
 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to the Construction Manager, Legat Architects, Joliet Junior College, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of starting points prior to starting work.
- B. Promptly notify Legat Architects of any discrepancies discovered.
- C. Protect survey control points prior to starting work; preserve permanent reference points during construction.
- D. Utilize recognized engineering survey practices.
- E. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- F. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
- G. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 1. Verify that construction and utility arrangements are as shown.
 2. Report discrepancies to Legat Architects before disturbing existing installation.
 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Remove existing work as indicated and as required to accomplish new work.
 1. Remove items indicated on drawings.
 2. Relocate items indicated on drawings.
 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 4. Where new surface finishes are not specified or indicated, patch holes and damaged

surfaces to match adjacent finished surfaces as closely as possible.

- C. Protect existing work to remain.
- D. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
 - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Legat Architects.
- E. Clean existing systems and equipment.
- F. Do not begin new construction in alterations areas before demolition is complete.
- G. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - 6. Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Restore work with new products in accordance with requirements of Contract Documents.
- F. Patching:
 - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - 2. Match color, texture, and appearance.
 - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.08 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.10 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of products to Joliet Junior College's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- C. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.

3.11 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.12 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.13 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Joliet Junior College, Legat Architects and the Construction Manager.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in Contractor's Notice of Substantial Completion.
- C. Notify Legat Architects when work is considered ready for Substantial Completion.

- D. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Legat Architects's review.
- E. Joliet Junior College will occupy all of the building as specified in Section 01 1000.
- F. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Joliet Junior College-occupied areas.
- G. Accompany Project Coordinator on preliminary final inspection.
- H. Notify Legat Architects when work is considered finally complete.
- I. Complete items of work determined by Legat Architects's final inspection.

3.14 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.

END OF SECTION

SECTION 06 2000

FINISH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Finish carpentry items.
- B. Wood casings and moldings.
- C. Hardware and attachment accessories.

1.02 REFERENCE STANDARDS

- A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; current edition.
- B. ANSI A135.4 - American National Standard for Basic Hardboard; 2004.
- C. ANSI A208.1 - American National Standard for Particleboard; 1999.
- D. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2010.
- E. AWI (QCP) - Quality Certification Program, www.awiqcp.org; current edition at www.awiqcp.org.
- F. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2009.
- G. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; Hardwood Plywood & Veneer Association; 2004.
- H. NEMA LD 3 - High-Pressure Decorative Laminates; National Electrical Manufacturers Association; 2005.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
 - 1. Minimum Scale of Detail Drawings: 1-1/2 inch to 1 foot (1:8).
 - 2. Provide the information required by AWI/AWMAC/WI Architectural Woodwork Standards.
- C. Samples: Submit two samples of finished materials, 12" x 12" in size illustrating wood grain and specified finish.
- D. LEED Report: Submit for wood products made from sustainably harvested wood, salvaged and reused wood, wood fabricated from recovered timber, and locally-sourced wood, as specified in Section 01 3515.

1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect work from moisture damage.

PART 2 PRODUCTS

2.01 FINISH CARPENTRY ITEMS

- A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI Architectural Woodwork Standards for Premium Grade.

2.02 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.
- B. Provide sustainably harvested wood, certified or labeled as specified in Section 01 6000.
- C. Provide wood harvested within a 500 mile (805 km) radius of the project site.

2.03 LUMBER MATERIALS

- A. Hardwood Lumber: Anegre species, quarter sawn, maximum moisture content of 6 percent; with vertical grain, of quality suitable for transparent finish, to match Architect's sample.

2.04 FABRICATION

- A. Shop assemble work for delivery to site, permitting passage through building openings.
- B. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

2.05 SHOP FINISHING

- A. Sand work smooth and set exposed nails and screws.
- B. Apply wood filler in exposed nail and screw indentations.
- C. On items to receive transparent finishes, use wood filler that matches surrounding surfaces and is of type recommended for the applicable finish.
- D. Finish work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5 - Finishing for Grade specified and as follows:
 - 1. Transparent:
 - a. System - 1, Lacquer, Nitrocellulose.
 - b. Stain: As selected by Legat Architects.
 - c. Sheen: Flat.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

3.02 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards requirements for grade indicated.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch (1 mm). Do not use additional overlay trim to conceal larger gaps.

3.03 TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch (1.5 mm).

B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch (0.7 mm).

END OF SECTION

SECTION 12 5000

FURNITURE, FIXTURES AND ACCESSORIES

PART 1 GENERAL

2.01 SECTION INCLUDES

- A. Retail Furniture, Fixtures, and Accessories..

2.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Contract descriptions, description of alterations work, work by others, future work, occupancy conditions, use of site and premises, work sequence.
- B. Section 01 2000 - Price and Payment Procedures: Applications for payment, Schedule of Values, modifications procedures, closeout procedures.
- C. Section 01 2200 - Unit Prices: Descriptions of unit price items, administrative requirements.
- D. Section 01 2300 - Alternates: Descriptions of items, administrative requirements.
- E. Section 01 3000 - Administrative Requirements: Submittal procedures, project meetings, progress schedules and documentation, reports, coordination.
- F. Section 01 3515 - LEED Certification Procedures.
- G. Section 01 4000 - Quality Requirements: Procedures for testing, inspection, mock-ups, reports, certificates; use of reference standards.
- H. Section 01 7000 - Execution Requirements: Examination, preparation, and general installation procedures; preinstallation meetings; cutting and patching; cleaning and protection; starting of systems; demonstration and instruction; closeout procedures except payment procedures; requirements for alterations work.

2.03 PRICE AND PAYMENT PROCEDURES

- A. Unit Prices: See Section 01 2200 - Unit Prices, for additional unit price requirements.

2.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by all affected installers.
- B. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.

2.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate complete, detailed layout with furniture tags and complete dimensioning information for installation as required.
- C. Selection Samples: manufacturer's standard selection for selection of colors where not specified.
- D. Verification Samples: Submit two specified samples for verification of selected finishes.
- E. Samples: Submit two finish samples, 12"x12" inch (mm) in size, illustrating each color or finish, as specified.
- F. Manufacturer's Qualification Statement.

- G. Specimen Warranty.
- H. Certificate: Certify that products of this section meet or exceed specified requirements.
- I. Installer's Qualification Statement.
- J. LEED Submittals: Indicate all procedures to achieve specified LEED points.
- K. Project Record Documents.
- L. Maintenance Data: Ordering information on optional components, owners manuals, maintenance and operational instructions..
- M. Accessories: All keys, locks, and spare parts required.
- N. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Joliet Junior College's name and registered with manufacturer.
- O. Maintenance Materials: Furnish the following for Joliet Junior College's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.

2.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Fabricator Qualifications: Company specializing in fabricating products in this section, with not less than three years of documented experience.
- C. Installer Qualifications: Company specializing in performing the work of this section with minimum three years of experience.

2.07 MOCK-UP

- A. Provide one mock-up, illustrating a 4' Textbook Wall Unit, Fixture Unit Number T-1.
- B. Locate where directed.
- C. Mock-up, if accepted, may remain as part of the Work.

2.08 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver furniture, fixtures or accessories until spaces where it is to be installed are complete and cleaned.
- B. Coordinate schedule, delivery, any required blocking, and electrical coordination with the General Contractor.

2.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide standard manufacturer's warranties for each item in project.

PART 2 PRODUCTS

3.01 Fabricators:

- A. Leggett and Platt Store Fixture Group, Spartan Showcase, P.O. Box 470, Union MO., 800.325.0775.
- B. Showbest Fixture Corp, 4112 Sarellen Road, Henricao, VA 23231, 804.222.5535
- C. The Carlson Company, 2305 Daniels Street, Madison, WI 53718, 698.222.4540.

3.02 Wood Veneer

- A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI Architectural Woodwork Standards for Premium Grade.
- B. Retail fixtures:
 - 1. Species: Anegre, FSC Certified Dooge Veneer Log # 10340 Quartered.
 - 2. Panel Veneer Cut: Quartered Plain Sliced.
 - 3. Joints: Fastened with dowels or biscuits.
 - 4. Finish: Transparent, shop finished.
- C. Flat Paneling:
 - 1. Species: Anegre, FSC Certified, Dooge Veneer Log #10340 Quartered .
 - 2. Cut: Quartered Plain Sliced.
 - 3. Panels: Veneer of full width and balanced sequence matched.
 - 4. Visible Edges and Reveals: Match faces.
 - 5. Inside Corners: As indicated on Drawings.
 - 6. Outside Corners: As indicated on the Drawings.

PART 3 EXECUTION

4.01 EXAMINATION

- A. Do not begin installation until spaces to receive fixtures have been completed and cleaned.
- B. Vendor shall verify all field dimensions prior to ordering products where furniture, furnishings, or equipment will interface with built conditions.

4.02 PREPARATION

- A. Protection of In-Place Conditions:

4.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install furniture and accessories as indicated on drawings, level and plumb, with separate units securely anchored..
- C. Verify that blocking is installed and secure as required.
- D. Adjust legs to height required.
- E. Completely clean installed product at completion of job according to manufacturer's instructions.

4.04 CLOSEOUT ACTIVITIES

- A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

4.05 PROTECTION

- A. Protect installed furniture, furnishings, and equipment from subsequent construction operations.
- B. Do not permit traffic over unprotected floor surface.

4.06 Drawings: See Attached

END OF SECTION