

SECTION 125083

CERTIFIED CUSTOM WOOD FURNITURE

CSI 3-PART **SHORT-FORM** GUIDE SPECIFICATION:  
USE FOR OUTLINE OR DD SPECIFICATION ISSUES.

EDIT TO SUIT PROJECT

PART 1 - GENERAL

1.1 SUMMARY

- A. Work of this Section consists of custom furniture made from certified sustainable wood, and includes but is not limited to the following:

NOTE: Edit to the type of furniture required for the project from the list below and delete that not selected.

1. Seating
    - a. Chair
    - b. Stool
    - c. Footstool
    - d. Bench
  2. Surfaces
    - a. Desk
    - b. Table
      - 1). Dining room
      - 2). Kitchen
      - 3). Folding, trestle, card
      - 4). Drop-leaf, gate-leg
      - 5). Coffee
      - 6). End
      - 7). Nightstand
  3. Storage
    - a. Dresser, chest (of drawers)
    - b. Credenza, sideboard
    - c. Armoire, wardrobe
    - d. Bookcase
    - e. Display cabinet, cupboard, china cabinet
    - f. Filing cabinet
    - g. Hall tree, hat stand
  4. Sleeping
    - a. Bed frame
    - b. Headboard
  5. Finishes
  6. Accessories including, but not limited to, hardware, fasteners, and inlays.
- B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to the following:
1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 General Requirements, Specification Sections, apply to this Section.

## 1.2 SUBMITTALS

- A. Product Data: Submit wood fabricator's printed descriptions of furniture, materials, components and systems, joinery, glues, adhesives, finishes, use limitations, recommendations and use information.

NOTE: Choose between using the AWI /AWMAC / WI standards for Shop Drawing submittals or as defined by the referenced Sections. Delete items not selected.

- B. Shop Drawings per AWI Architectural Woodwork Standards - 2009, Section 1, Submittals.

NOTE: Provide large-scale sections and details, OR a Prototype Mockup for Architect's review and approval. Delete the approach not used.

- C. Shop Drawings: Submit, sketches, plans, elevations, and details indicating materials, dimensions, joinery, finishes, hardware, cutouts and if provided, holes, power, cabling, wiring, and built-in appliances and equipment.

NOTE: Coordinate and edit to the correct Section number below.

- D. Samples per SECTION 013000 or 013300 and as follows:

1. Initial for Selection: Submit printed color charts or sample chains indicating fabricator's complete range for each type of material finish exposed to view.
2. Final Selection: Submit wood planks, veneer flitches, or veneer panels for transparent finish samples for acceptance.

- E. Quality Assurance Submittals: AWI Quality Certification Program Certificate; material recycled content certification; fire-retardant treatment certification; Test and Evaluation Reports for product VOC and formaldehyde content; and Qualification Statements.

NOTE: Edit LEED Requirements below to suit project.

- F. Sustainable Design (USGBC [LEED®](#)) Submittals:

1. LEED Credit MR, Materials & Resources. Submit completed LEED 2009-NC v.3 Submittal Templates, product data, and other required paperwork as follows:

NOTE: Furniture may be included, providing it is included consistently in MR Credits 3–7.

- a. MR 3.1, 5% Materials Reuse
- b. MR 3.2, 10% Materials Reuse
- c. MR 4.1, 10% Recycled Content
- d. MR 4.2, 20% Recycled Content
- e. MR 5.1, 10% Regional Materials
- f. MR 5.2, 20% Regional Materials
- g. MR 6, Rapidly Renewable Materials
- h. MR 7, FSC Certified Wood: Submit chain-of-custody certificates
2. LEED Credit IEQ, Indoor Environmental Quality. Submit completed LEED 2009-NC v.3 Submittal Templates, and required paperwork as follows:
  - a. IEQ 4.1, Low Emitting Materials, Adhesives & Sealants: Submit VOC Data
  - b. IEQ 4.2: Low Emitting Materials, Paints & Coatings, VOC Data
  - c. IEQ 4.4: Low Emitting Materials, Indoor Composite Wood & Agrifiber, No Added Urea-Formaldehyde Content

- G. Closeout Submittals: Operation and Maintenance Data, Bonds, Executed Warranty Documentation, and Record Documents.

NOTE: Edit LEED Requirements below to suit project.

1. Sustainable Design Closeout Documentation: Submit completed USGBC LEED® [Worksheet Templates](#) for the following credits:
  - a. MR 3.1, MR 3.2, MR 4.1, MR 4.2, MR 5.1, MR 5.2, MR 6, MR 7
  - b. IEQ 4.1, IEQ 4.2, IEQ 4.4

H. Maintenance Material Submittals:

1. Spare Parts: Provide five (5) percent additional sets of each different hardware type and finish.

1.3 QUALITY ASSURANCE

A. Qualifications: Minimum five (5) years experience for Fabricator/Woodworker.

B. Certifications

1. Provide furniture per AWI Architectural Woodwork Standards of Grade as selected by Architect.

**NOTE: Edit below to suit project selecting acceptable and deleting unacceptable certifications.**

2. Wood timber and manufactured wood products shall be sourced from sustainably managed forests as certified by SmartWood (SW), SCS, SGS, BVC, SFI, ATFS, CSA, or VFF, and displaying the FSC, PEFC, PEFC member or VFF label.

**NOTE: Edit sustainability standards and certifications below to suit project.**

C. Sustainability Standards and Certifications:

**NOTE: To incorporate project site cleared trees allow 3 or more months within the project schedule to accomplish proper air and/or kiln drying of cut timber.**

1. Adhesive and Sealant VOC Limits: According to South Coast Air Quality Management District [Rule 1168](#) and [GS-36](#) for aerosols.
2. VOC Limits: As tested using U.S. EPA Reference Test Method 24 and as defined by
  - a. South Coast Air Quality Management District Rules: In areas where exposure to freeze/thaw conditions and direct exposure to moisture will not occur.
    - 1). SCAQMD [Rule 1113](#), Architectural Coatings
    - 2). SCAQMD [Rule 1168](#), Adhesive and Sealant Applications
  - b. Bay Area Air Quality Management District Regulation: For containers larger than 16 oz., for areas where freeze/thaw conditions do exist or direct exposure to moisture can occur.
    - 1). BAAQMD [Regulation 8, Rule 51](#)
  - c. California Air Resources Board: For areas where freeze/thaw conditions do exist or direct exposure to moisture can occur.
    - 1). CARB for containers 16 oz. or less.
  - d. Green Seal Standards:
    - 1). [GS-11](#), Low Odor or Low VOC Paint
    - 2). [GC-03](#), Anti-Corrosive Paints, Second Edition, January 7, 1997
3. Composite wood and agrifiber products shall contain no added urea-formaldehyde resins.
4. Certified Wood Materials: According to [FSC-STD-40-004](#) chain-of-custody requirements.

D. Mockups: Assembled furniture required for testing, either in the field or off-site.

**NOTE: Either Mockups above or Prototypes below may satisfy the designer's selection process.**

E. Prototypes: Provide materials and full or partial assemblies of each furniture type for review and approval prior to fabrication production.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Handling per fabricator's written recommendations, industry standards, and DIVISION 01 requirements.

1.5 WARRANTY

- A. Fabricator Warranty: Contractor shall provide wood furniture fabricator's guarantee against structural defects in materials and workmanship for the lifetime of the original owner beginning on the date of Substantial Completion acceptance.

PART 2 - PRODUCTS

2.1 MANUFACTURERS / FABRICATORS

**GREEN NOTE:** For most current list of Vermont FSC Certified Products go to [http://www.vtwoodnet.org/certified\\_wood\\_sources.html](http://www.vtwoodnet.org/certified_wood_sources.html) .  
[http://www.vtwoodnet.org/resource\\_directory/resource\\_directory\\_detail.asp?res=fsc certified](http://www.vtwoodnet.org/resource_directory/resource_directory_detail.asp?res=fsc certified)

- A. Fabricator List of FSC Certified VT **Woodworker**. ([link](#)) Subject to compliance with requirements, provide products by one of the following:
1. Beeken Parsons, Inc., Shelburne, VT; [www.beekenparsons.com](http://www.beekenparsons.com); SCS-COC-001477 B
  2. Cotswold Furniture Makers, Stowe, VT; <http://cotswoldfurniture.com/>; SCS-COC-001477 O
  3. J.S. Benson Woodworking & Design LLC, Brattleboro, VT; 802-254-3515; SCS-COC-001477
  4. Stark Mountain Woodworking Company, New Haven, VT; [www.starkmountain.com](http://www.starkmountain.com); SCS-COC-001477 F
  5. William Laberge Cabinetmakers, Inc., Dorset, VT; [www.williamlaberge.com](http://www.williamlaberge.com); SCS-COC-001477 N
- B. Fabricator List of VT **Cabinetry and Millwork** using FSC Certified and Sustainable Materials. Subject to compliance with requirements, provide products by one of the following:
1. Fine Lines in Wood, Inc., New Haven, VT; 802.453.6451; SCS-COC-001477 H
  2. Vermont Green Cabinets, Hinesburg, VT; [www.vermontgreencabinets.com](http://www.vermontgreencabinets.com); SCS-COC-001477
- C. Other Vermont Custom Cabinet Makers. Subject to compliance with requirements, provide products by one of the following:

**GREEN NOTE:** Some of the companies below offer products made from FSC certified wood when requested.

1. Amoskeag Woodworking, Colchester, VT; [www.amoskeagwoodworking.com](http://www.amoskeagwoodworking.com)
2. Baynham Wood Products, Shelburne, VT; 802.985.9311
3. Birdseye Building Co., Richmond, VT; [www.birdseyebuilding.com](http://www.birdseyebuilding.com)
4. S. A. Fishburn, Inc. Danville, VT; [www.safishburn.net](http://www.safishburn.net)
5. Shelburne Fine Woodworking, Shelburne, VT; [www.sfwvermont.com](http://www.sfwvermont.com)
6. Steve Marshall Cabinet Maker, Burlington, VT; [www.stevemarshallcabinetmaker.com](http://www.stevemarshallcabinetmaker.com)

**GREEN NOTE:** The following list of CPA-EPP / CARB-compliant manufacturers meet the most rigorous formaldehyde emission and other environmental standards.  
At present no Vermont manufacturer of wood products have been accepted to the list.

- D. CPA [EPP Downstream Program Companies](#); Meets ANSI accreditation, uses 100 percent recycled or recovered wood fiber, formaldehyde emissions equal to or lower than CARB Phase I, ongoing testing, monthly audits, quarterly sample submission for third-party testing.
1. Custom Cabinets
    - a. Crystal Cabinet Works, Inc., Princeton, MN; 763.389.4187
    - b. Cullman Cabinets, Cullman, AL; [www.cullmancabinet.com](http://www.cullmancabinet.com)
    - c. JB Cutting Inc., Mount Clemens, MI; [www.jbcutting.com](http://www.jbcutting.com)
    - d. National Custom Millwork Inc., Beltsville, MD; [www.gahwd.com](http://www.gahwd.com)
    - e. Tharp Cabinet Corporation, Loveland, CO; [www.tharpcabinets.com](http://www.tharpcabinets.com)

**GREEN NOTE: Wood-Mode below uses wood harvested from the Northern Forest and Quebec.**

- f. Wood-Mode (Brookhaven), Kraemer, PA; [www.wood-mode.com](http://www.wood-mode.com)
- E. Manufacturer List of Environmentally Safe Wood **Finish Coatings**: Subject to compliance with requirements, provide products by one of the following:
1. Sutherland Welles Ltd., Morrisville, VT; [www.sutherlandwelles.com](http://www.sutherlandwelles.com)
  2. Vermont Natural Coatings, Hardwick, VT; [www.vermontnaturalcoatings.com](http://www.vermontnaturalcoatings.com)
- F. Substitution Limitations: Manufacturers of equivalent products beyond those listed above shall be considered when submitted per DIVISION 01, using CSI Substitution Request Form 1.5C (During the Bidding Phase) or Form 13.1 (After the Bidding Phase.) [link](#)
- G. Product Options
1. Materials:
    - a. Solid wood
    - b. Wood veneer
    - c. Wood composite
    - d. Inlay
  2. Wood Properties:
    - a. Wood Species: Design characteristics (resource [link](#))
    - b. Hardness per [USDA Janka Test](#)
    - c. Grain Types: Closed or Open
    - d. Grain Patterns: Straight, stripes, swirls, waves or curls, ripples, eyes, mottled effects
    - e. Color: White, pale yellow, red, purple, black

**NOTE: Color Contrast of Clear Finished Wood: Unless specifically called out, do NOT mix sapwood and heartwood where visible or semi-visible.**

3. Furniture Type:
  - a. Seating: Chair, Stool, Footstool, Bench
  - b. Surfaces: Desk, Table
    - 1). Tables: Dining room, Kitchen, Folding, trestle, card, Drop-leaf, gate-leg, Coffee, End, Nightstand
  - c. Storage: Dresser, chest (of drawers), Credenza, sideboard, Armoire, wardrobe, Bookcase, Display cabinet, cupboard, china cabinet, Filing cabinet, Hall tree, hat stand
  - d. Sleeping: Bed frame, headboard
4. Hardware:
  - a. Hinges, Pulls, Lever locks, Drawer guides, Drawer and Door locks, Adjustable shelf standards, Shelf supports, Finish
5. Joinery. Adhered or glued with:
  - a. Dovetails, exposed and concealed, Mortise and tenons, Dowels, Biscuits, Splines, Butts, Miters, Screws, exposed and concealed, Staples
6. Finish:
  - a. Transparent, Opaque, Prefinished, Distressed

## 2.2 DESCRIPTION / MATERIALS

### A. Regulatory Requirements

1. Hardwood Grades: NHLA American Hardwood Lumber [Grades](#)
2. Softwood Grades: NeLMA (WWPA) [Grade](#)

### B. Sustainability Characteristics - Furniture

1. FSC certified or SFI certified
2. Vermont sourced and produced
3. Salvaged and reused
4. Recycled material content
5. Non-HAP finish and adhesive: No-VOC or low-VOC; MIC-free agri-board

**NOTE: Verify that adhesive used in making agri-board or other wood composite boards used are MIC-free.**

### C. Assembly / Fabrication: Shop assemble each unit of furniture to dimensions, profiles, and details indicated by approved Shop Drawings.

1. Fit each component together to allow for wood expansion and contraction movement.
2. Locate hardware accurately using templates or roughing-in diagrams to produce accurately sized and shaped letting of integral hardware.

### D. Shop Finishing:

1. Wood Finishing Standards
  - a. AWI [finish system](#)
  - b. HMA basics of hardwood [finishing](#)
2. Wood Finishing Systems
  - a. Non-Petroleum Based Finish Systems: Vermont Natural Coatings / [PolyWhey™](#), or Sutherland Welles Ltd. / [Loc-Lamin®](#) Wood Finishing System
  - b. Varnishes: Tung Oil; Alkyd polyester resin; Polyurethane resin; Quick-drying or VT styrene modified alkyd resin

**NOTE: Select Shop Finish above or Field Finish below, deleting the one not chosen.**

### E. Field Finishing: Per DIVISION 09

### F. Cabinet Hardware and Accessories: Comply with BHMA 156.9 and 156.11

1. Exposed Hardware Finishes: Comply with BHMA A156.18 and RoHC

### G. Fasteners: RoHC compliant of appropriate type and length for wood product used to securely fasten to the substrate for the intended life and use of the unit.

## 2.3 SOURCE QUALITY CONTROL

### A. Tests and Inspections: Prototype Architect review for Benchmarking

**NOTE: By completing a Prototype Mockup Review the Section and Detail parts of the Shop Drawing requirement may be eliminated.**

### PART 3 - EXECUTION

#### 3.1 EXAMINATION, PREPARATION, AND INSTALLATION

- A. Examination, preparation, and installation per fabricator's written instructions, Owner's direction, DIVISION 01, and as follows:
  - 1. Environmental Limitations: Do not deliver wood furniture until building is enclosed, wet work is complete, overhead work is complete, area is clean, and HVAC system is operating and consistently maintaining temperature and relative humidity at occupancy levels, and in accordance with fabricator's recommendations.
  - 2. Acceptance of Conditions: Carefully examine installation areas with Installer present, for compliance with requirements affecting Work performance.
    - a. Verify that conditions are as required by the fabricator, and ready to receive Work.
    - b. Proceed with installation only after unsatisfactory conditions have been corrected.
  - 3. Product Preparation: Handle products in accordance with fabricator's instructions and warranty requirements including, but not limited to:
    - a. Remove shipping / storage protection per fabricator's recommendations.
    - b. Acclimatize product to installation location.
    - c. Strictly adhere to fabricator's handling and installation safety requirements.
  - 4. Place furniture per Drawings, and Owner's direction.
    - a. Adjust each moving part until operation is smooth and as required.

#### 3.2 CLEANING, MAINTENANCE, AND PROTECTION

- A. Provide Progress Cleaning, Waste Management, and Provide Final Cleaning per DIVISION 01 requirements.
- B. Provide Initial Maintenance per manufacturer's recommendations.
- C. Protect installed furniture from construction operations, including damage by work of other trades, until date of Final Completion or Owner occupancy, whichever occurs first.

#### 3.3 CLOSEOUT ACTIVITIES

- A. Substantial Completion Requirements per DIVISION 01.
- B. Correct Non-Conforming Work per General Conditions, and the acceptance of the Architect.

END OF SECTION

**NOTE:** Please **contact us** with comments, additions and deletions about this GuideSpec so we can make it better.

VERMONT SUSTAINABLE JOBS FUND

3 Pitkin Court, Suite 301E, Montpelier, Vermont 05602

Phone Number: **802.828.1260** Email: [greenspecfeedback@vsjf.org](mailto:greenspecfeedback@vsjf.org)

**RED NOTE:** Be sure to obtain the latest version of this Guide Specification.

This Guide Specification is not a completed document ready for use. It must be edited deleting, adding, or modifying text, as required to suit project requirements.

The professional stamping and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including any use of this Guide Specification.

**VSJF AND JMMA SPECS SHALL NOT BE LIABLE FOR DAMAGES ARISING OUT OF THE**

USE OF THIS GUIDE SPECIFICATION.