Rough-In Detail For Standard Units

CampbellRhea CaseWork

 = Service or Waste Stub-up.

 = Sink Outlet Location

 = Available Plumbing Space

HW = Hot Water

CW = Cold Water

G = Gas

E = 120 Volt, A.C. Electric

W = Waste

A = Air

V = Vacuum

P.C. = Pipe Chase

S.O. = Sink Outlet

Dimension following S.O. indicates height from finished floor to bottom of sink outlet.
If epoxy resin tailpiece is provided, subtract 4" from S.O.
If polypropylene tailpiece is provided, subtract 6" from S.O.

Building Conditions Guidelines

CampbellRhea Casework & Equipment

In order to provide the end user with the finest quality casework and furnishings at the completion of a project, and to assist the General Contractor, or Construction Manager, in properly sequencing and coordinating the casework delivery and installation activity with the other trades on the project, the following criteria has been established and defines the required degree of building readiness to facilitate the start of installation work. It is mandatory that these guidelines be met in order to minimize, or eliminate the potential damage to casework and equipment prior to acceptance by the end user. Installation firms should utilize the criteria to determine jobsite readiness during their pre-installation inspections.

From the earliest stages, project schedules should take into account the following parameters:

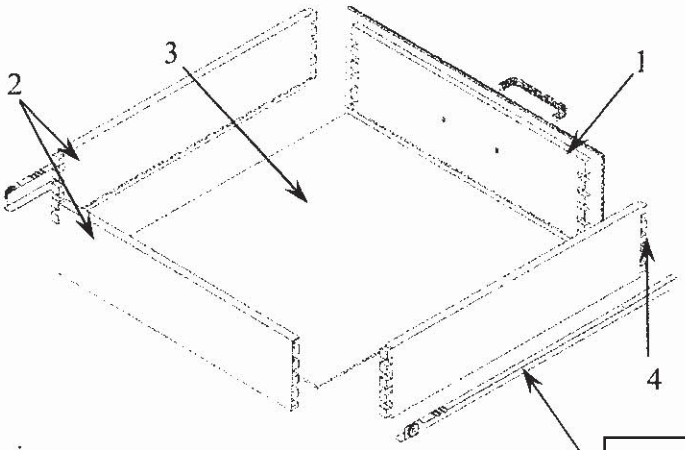
1. The building areas requiring the installation of casework and furnishings are to be dried-in and unexposed to any adverse weather conditions, which may damage finished materials.
2. For proper curing of epoxy sealant and adhesives, interior building temperatures are not to register below 65 degrees F. in areas of material installation.
3. Interior building temperature is not to exceed 80 degrees F. to avoid undue drying of materials, subsequently causing structural fatigue and damage. Additionally, frequent or excessive changes in temperature or humidity levels during the course of the installation, or once casework and equipment are installed, must be avoided to prevent damage.
4. To avoid undue stress or splitting of wood materials, moisture levels should not exceed 60% relative humidity.
5. All overhead mechanical, electrical, or plumbing rough-in work is to be complete prior to delivery of casework.
6. All mechanical, electrical, and plumbing rough-in work along walls or service islands where casework and equipment is to be installed is to be complete prior to delivery of materials. Final connections are to be coordinated with casework supplier.
7. Walls/ partitions (whether framed, demountable, or masonry) must be in place. It is recommended that all painting be completed prior to delivery of casework and furnishings in an effort to avoid damage to equipment. Walls / Partitions must have at least the primer coat of paint applied. If finish painting is to take place after installation, the painting trade must adequately protect the casework and equipment by covering and masking all surfaces prior to commencing to paint.
8. Wood or metal blocking (wall grounds) must be installed within partitions prior to delivery of casework and furnishings to allow for immediate installation on delivery.
9. Overhead soffits or ceiling grid (with or without acoustic tiles) must be in place prior to material installation.
10. Overhead lighting must be installed and connected prior to material installations.
11. Flooring required to be placed under casework and furnishings must be installed prior to material delivery.
12. Concrete floors must be level within acceptable trade tolerance. Specifically, the floor must be within 1/8" of level per 10 foot run, non-accumulative, when tested with a straight edge in any one direction. Floors, which exceed this requirement, will cause additional work during casework and furnishing installation. Unacceptable gaps at floor and tolerances at scribes and fillers, due to this problem, will not be the responsibility of the casework supplier.
13. Wet operations to be performed by other trades must be complete prior to materials delivery.

In order for delivery of casework and furnishings to take place, the following general guidelines must be applicable prior to shipment of materials:

1. Lock-up rooms available
2. Loading dock accessible
3. Entry to elevator or hoist must be accessible
4. Unobstructed use of hoist during delivery and easy distribution of materials must be possible
5. Marshaling area for materials to be available
6. Areas of installation to be broom clean
7. Minimum trade interference in area of installation

GC WILL COORDINATE
DG

Drawer Construction



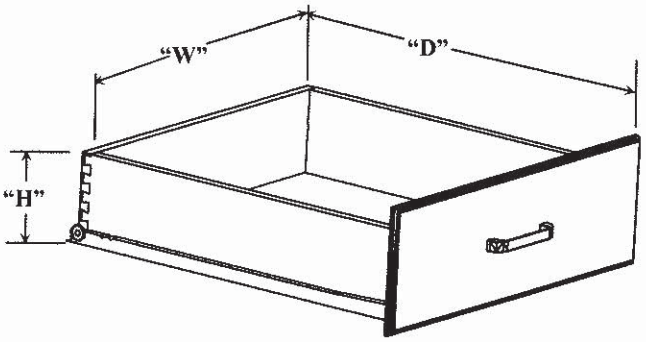
1. **Symphony** Fronts are made with 3/4" thick particleboard core with rift cut, Horizontal grain veneer on the face and a 3mm Solid Oak edge-banding.
2. Drawer Back and sides are 1/2" solid hardwood plywood with smooth top edge.
3. Drawer Bottom: 1/4" hardboard faced with wood grain melamine, set in and glued underneath, all four sides. Drawer over 24" wide to receive ½" drawer bottoms.
4. All corners are multi-finger, English dovetailed & glued.
5. Drawer has full extension EPOXY COATED SLIDES

DG

ACCURIDE MODEL 3832EHDSC

DRAWER WIDTHS I.D.

Base Cabinet Width	Number of Drawers Across			
	1	2	3	4
12-3/8" (314mm)	8-7/8' (225mm)			
15-5/16" (390mm)	11-13/16" (302mm)			
18" (457mm)	14-1/2" (369mm)			
21" (533mm)	17-1/2" (445mm)			
24" (609mm)	20-1/2'" (521mm)	8-7/8' (225mm)		
27" (685mm)	23-1/2" (597mm)	10-3/8" (264mm)		
30" (761mm)	26-1/2" (673mm)	11-7/8" (302mm)		
35-1/4" (895mm)	31-3/4" (807mm)	14-1/2" (368mm)	8-5/8" (219mm)	
41-1/4" (1047mm)	37-3/4" (959mm)	17-1/2" (445mm)	10-5/8" (269mm)	
47-1/4" (1199mm)	43-3/4" (1111mm)	20-1/2" (521mm)	12-5/8" (321mm)	8-11/16" (221mm)
58-1/4" (1480mm)			16-1/4" (414mm)	
70-1/4" (1784mm)			20-1/4" (515mm)	



Drawers are 17" (432mm) I.D. "D" Unless otherwise specified.

DRAWER CLEAR STORAGE HEIGHT (Opening minus 1"(25 mm))

Drawer Mark	35" (889mm) High Units	33" (837mm) High Units	29" (737mm) High Units	25" (635mm) High Units
2			10-1/4" (260mm)	8-1/4" (210mm)
3	8-1/4" (210mm)	7-1/2" (191mm)	6-1/4" (159mm)	5" (127mm)
4	5-3/4" (146mm)	5-1/4" (133mm)	4-1/4'" (108mm)	3-1/4" (83mm)
5	4-1/4'" (108mm)			
6	3-1/4" (83mm)	3-1/4" (83mm)	2-1/2" (64mm)	
8	2-1/4" (57mm)			
F	10-1/4" (260mm)	10-1/4" (260mm)	10-1/4" (260mm)	

Backs for casework

Our construction methods have been SEFA tested and approved and also recognized by AWI standards. Our construction methods are outlined within the construction details of the submittal. Below is quick overview of what we plan to provide.

Base cabinets: ¼" inset backs in cabinets installed along the wall unless noted otherwise on shop drawings. At all island units, instructor's desk, and areas where back will be exposed we will provide a ¾" finished back.

Wall case: ¼" inset backs with (2) crossrails at rear for mounting to wall.

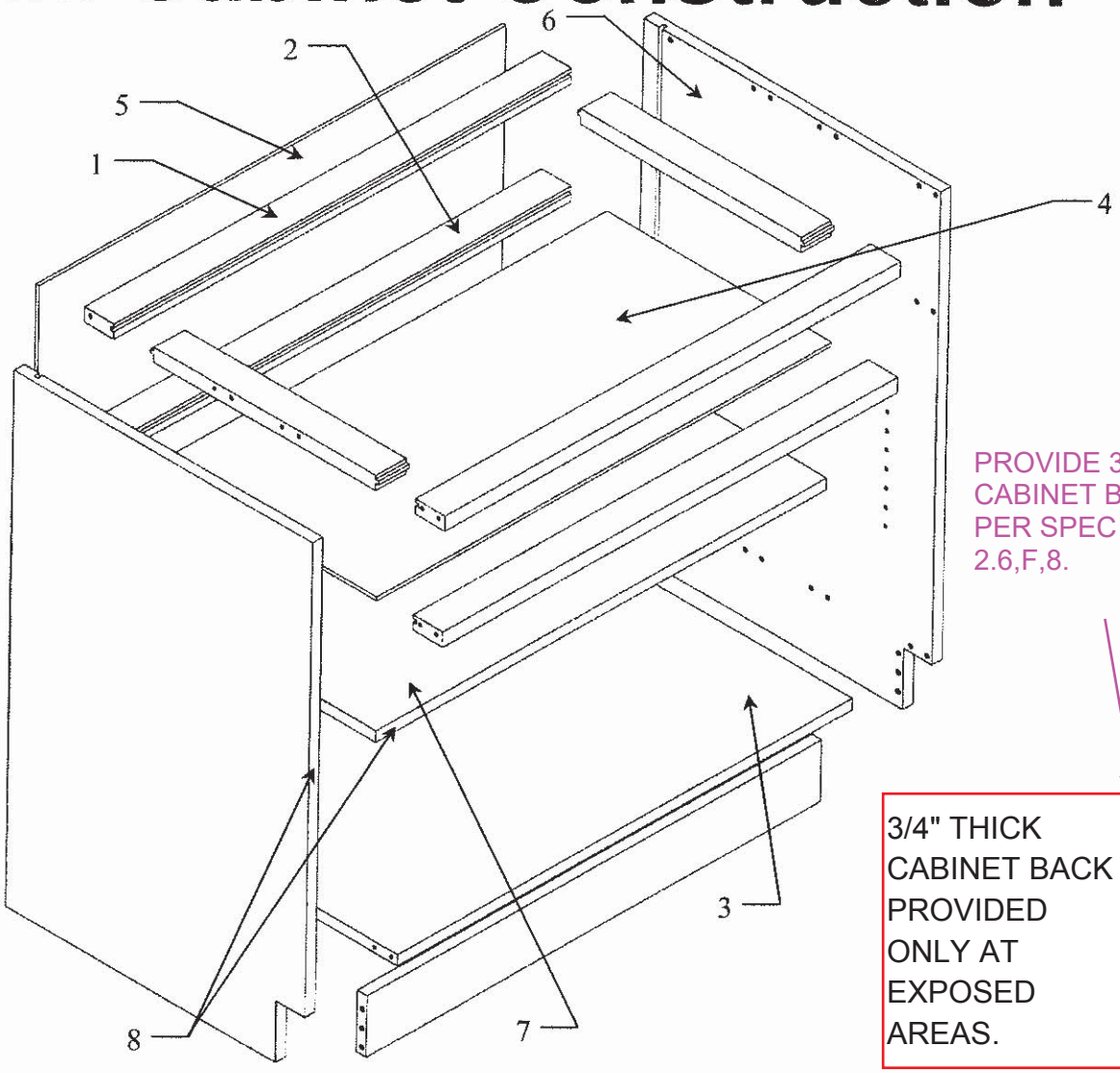
Note: If units will be filled to capacity and there is concern of weight issues, you might look at providing a wall cleat that will run from end panel to end panel of cabinet. Mount cleat in place so the crossrail of cabinet will rest directly on this cleat to help take some of the load off the screws/bolts used to anchor cabinet to wall.

Tall case: ¼" inset backs in cabinets unless noted otherwise on drawings. Like the wall cases, we provide (2) crossrails at rear to stabilize unit and also provide anchoring points to wall.

PROVIDE WALL CLEATS OR ADDITIONAL REINFORCEMENT
OR BRACING TO MEET THE PERFORMANCE REQUIREMENT
PER SPECIFICATIONS 123553, 1.3, A.

BACKS OF CABINETS TO BE 3/4" THICK PER SPECIFICATIONS 123553, 2.6, F, 8.

Base Cabinet Construction



PROVIDE 3/4" THK. CABINET BACKS PER SPEC 123553, 2.6,F,8.

3/4" THICK CABINET BACK PROVIDED ONLY AT EXPOSED AREAS.

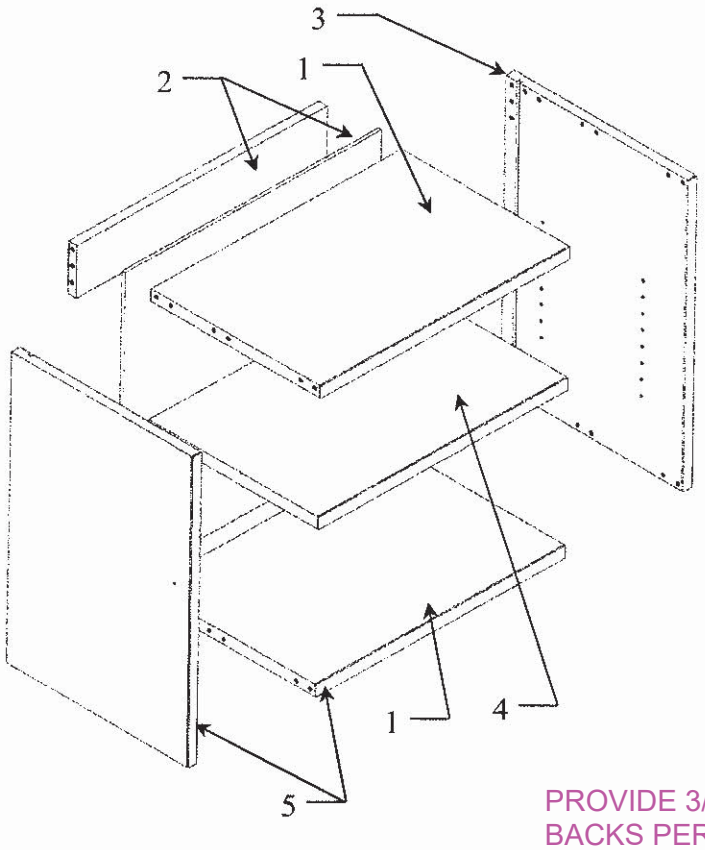
1. Full horizontal top frame is bored, doweled and glued to end panels. Front top rail: 2 1/4" x 1" solid hardwood with 3mm oak edgebanding on front edge; rear top rail: 2 1/8" x 1" solid hardwood; side rails: 2 1/8" x 1" solid hardwood tenoned, glued and stapled into front and back rails of the top frame.
2. All intermediate rails are bored, doweled and glued into end panels. Front rail: 2-1/2" X 3/4" solid OAK. Back rail: (when required) 2-1/2 X 3/4" solid hardwood.
3. Full, flush bottom panel is bored, doweled and glued into end panels. Exposed bottom is 3/4" OAK veneer with a plywood core and 3/4" hardwood veneer core for unexposed.
4. Drawer separators (furnished only when requested) are 1/4" hardboard faced with wood grain melamine secured into dadoed intermediate front and back rails.
5. Cabinets with exposed interiors have 1/4" OAK veneer with plywood core backs. Cabinets with unexposed interior have 1/4" hardboard faced with wood grain melamine backs. All backs are recessed and let into dadoed end panels and screwed to the back top rail and bottom panel. Cabinets with exposed backs are 3/4" uniform OAK veneer with a plywood core bored, doweled and glued into end panels.
6. End panels are 3/4" uniform OAK veneer with a plywood core when exposed and 3/4" hardwood veneer with a plywood core when unexposed.
7. Adjustable shelves are 1" uniform OAK veneer with a plywood core when exposed and ~~3/4"~~ hardwood veneer with a plywood core when unexposed. Shelves are supported on recessed metal standards and clips. Solid lumber edgebanding for all end panels, bottom panel and shelves is 1/8" (3mm) OAK.

DG

1"

PROVIDE 1" THICK SHELVES PER SPEC 123553, 2.6,F,4.

Wall Case Construction



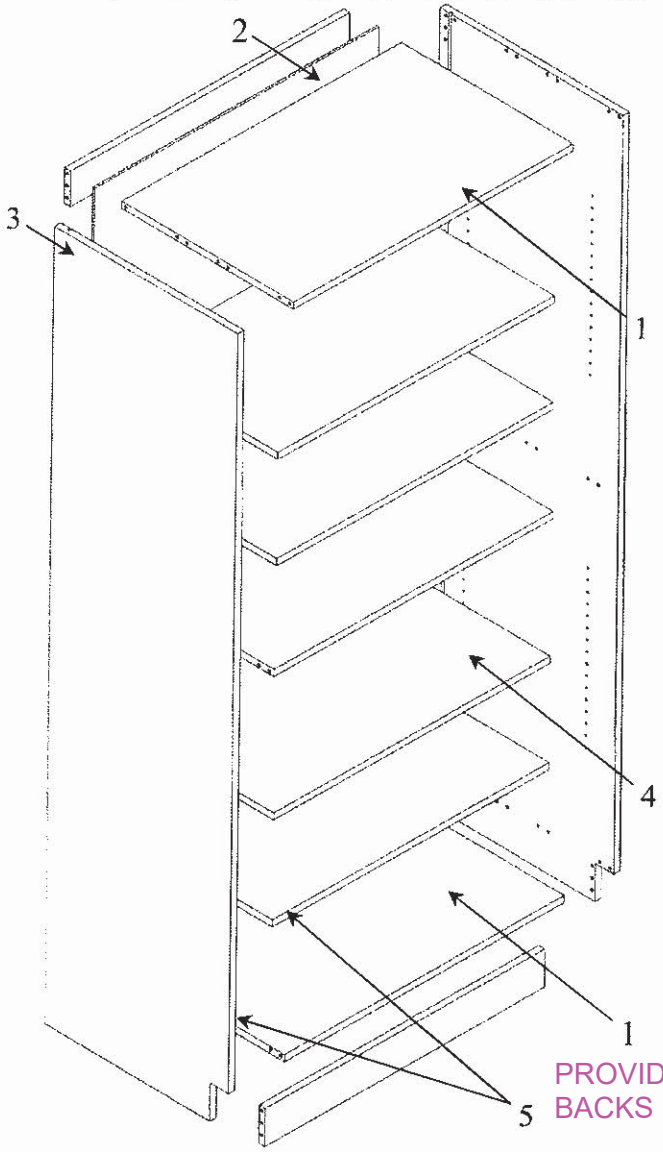
PROVIDE 3/4" THK. CABINET BACKS PER SPEC 123553, 2.6,F,8.

1. Top and bottom panels are bored, doweled and glued into end panels. Exposed interiors top and bottom are 1" OAK veneer with a plywood core and 1" hardwood veneer with a plywood core for unexposed.
2. Cases with exposed interiors have 1/4" OAK veneer with plywood core backs. Cases with unexposed interior have 1/4" hardboard faced with wood grain melamine backs. All backs are recessed and let into dadoed end panels and screwed to the back top rail and bottom panel.
3. End panels are 3/4" WHITE OAK veneer with a plywood core when exposed and 3/4" hardwood veneer with a plywood core when unexposed. DG
4. Adjustable shelves are 1" WHITE OAK veneer with a plywood core when exposed and 1" hardwood veneer with a plywood core when unexposed. Shelves are supported on recessed metal standards and clips.
5. Solid lumber edgebanding for all end panels, bottom and top panel, and shelves is 1/8" (3mm) WHITE OAK

Wall and upper cases are rigidly constructed, integral units utilizing bored, doweled, glued and screwed construction while providing a flush interior and exterior.

Top and bottom exterior back veneer with a plywood core hanger rails are bored, doweled and glued to the end panels and then screwed to the top or bottom panel.

Tall Case Construction



SOLID DOOR THICKNESS TO BE 1-1/8" PER SPEC 123553, 2.6,F,13.

DOOR THICKNESSES:

-SOLID DOORS ARE 3/4"

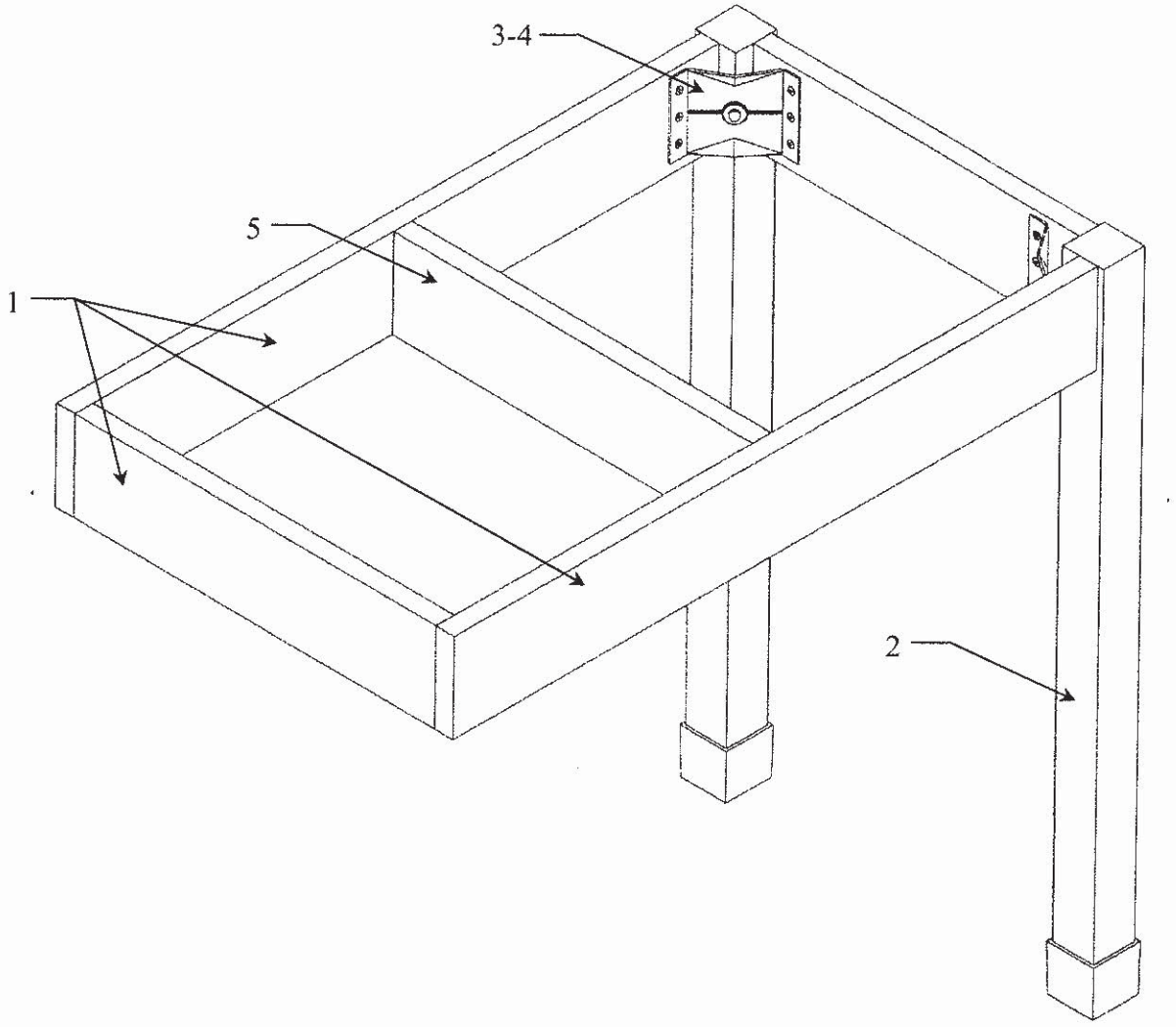
-GLAZED DOORS ARE 1 1/16" (REFER TO PAGE 68 FOR DETAIL)

PROVIDE 3/4" THK. CABINET BACKS PER SPEC 123553, 2.6,F,8.

1. Top panels are bored, doweled, and glued into end panels. Exposed top panels are 1" OAK veneer with a plywood core. Unexposed top panels are 1" hardwood veneer with a plywood core. Bottom panels are bored, doweled, and glued into end panels. Exposed bottom are 3/4" OAK veneer with a plywood core and 3/4" hardwood veneer with a plywood core for unexposed.
2. Cases with exposed interiors have 1/4" OAK veneer with plywood core backs. Cases with unexposed interior have 1/4" hardboard faced with wood grain melamine backs. All backs are recessed and let into dadoed end panels and screwed to the back top rail and bottom panel.
3. End panels are 3/4" WHITE OAK veneer with a plywood core when exposed and 3/4" hardwood veneer with a plywood core when unexposed.
4. Adjustable shelves are 1" WHITE OAK veneer with a plywood core when exposed and 1" hardwood veneer with a plywood core when unexposed. Shelves are supported on recessed metal standards and clips.
5. Solid lumber edgebanding for all end panels, bottom and top panel, and shelves is 1/8" (3mm) WHITE OAK. DG

Tall cases are rigidly constructed, integral units utilizing bored, doweled, glued and screwed construction while providing a flush interior and exterior.

Table Construction



1. 3/4" X 4-7/8" wide solid WHITE OAK RAILS. DG
2. Table legs are 2-1/4" X 2-1/4" solid WHITE OAK
3. Steel corner brackets are 13 gauge zinc plated cold rolled formed steel through which 5/16" table leg bolts are secured.
4. Six (6) Euro screws secure the steel brackets into the solid WHITE OAK RAILS.
5. Internal, unexposed, table support rails are 3/4" hardwood veneer with a plywood core bored, doweled, and glued into solid OAK apron rail.

WE MEET THE STANDARDS FOR UL AS CALLED OUT IN THE SPECIFICATIONS DG

TABLES SHOULD BE UL LABELED AND UL APPROVED PER SPEC 123553, 1.3, D.

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

DEVIN D GATES
SUBMITTED BY

123553-001 REV 2
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

123553
SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

CRITICAL

ITEM BEING SUBMITTED (check only one)

- ○ Shop Drawings
- ○ Samples (_____ copies)
- ○ LEED Submittal
- ○ Certification / Qualifications
- ○ Record Documents
- ○ Product Data
- ○ Coordination Drawing
- ○ Calculations
- ○ Schedules
- ○ O&M Manuals
- ○ Other _____

ITEM BEING SUBMITTED FOR (check only one)

- ◉ Action
- ○ Information Only
- ○ Record

REMARKS OR DEVIATIONS

Samples currently being produced, engineering judgement to confirm seismic requirements being calculated.

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

DEVIN D GATES — 1/31/17
REVIEWED BY — DATE

To be completed by Reviewer

12 3553-001 REV003
CANNON DESIGN SUBMITTAL NUMBER

2/1/17
RECEIVED DATE

- ○ A. No Exceptions Taken
  No further review of submittal is required.
- ◉ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ○ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ○ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ○ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ○ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ○ See attached sheet(s) for additional comments

RE-SUBMIT AS SEPARATE SUBMITTAL ONLY THE NON-APPROVED ITEMS.

SEE MARKUPS AND GENERAL COMMENTS ON NEXT PAGE.

APPROVAL OF MOBILE LABORATORY CASEWORK SYSTEM CONTINGENT ON APPROVED MANUFACTURER PER SPECIFICATIONS. PROVIDE SEPARATE SUBMITTAL CONFIRMING MANUFACTURER.

Kelvin Patel — Digitally signed by Kelvin Patel DN: C=US, E=kpatel@cannondesign.com, O=Cannon Design, OU=Architect, CN=Kelvin Patel Date: 2017.02.14 21:02:29-06'00' — 2/14/17
REVIEWED BY — DATE

GENERAL COMMENTS:

-ALL LAB CASEWORK TO MEET PERFORMANCE REQUIREMENT INFORMATION PER SPECIFICATION (SPEC.) 123553,1.3,A.

-TABLES TO MEET UL REQUIREMENT PER SPECIFICATION 123553,1.3,D.

-EW, DH & PRE-RINSE FIXTURE APPROVAL ON HOLD.

-ALL CABINETS (WOOD, METAL, FLAMMABLE, ACID) TO BE FLUSH OVERLAY.

-PRODUCT DATA FOR MOBILE LAB CASEWORK SYSTEM WHICH WAS PRESENT IN PREVIOUS SUBMITTAL WAS DELETED IN THIS RE-SUBMITTAL. THE MOBILE LABORATORY CASEWORK SYSTEM IS APPROVED PROVIDED IT IS ONE OF THE APPROVED MANUFACTURER PER SPECIFICATIONS, JAMESTOWN METAL PRODUCTS PER PREVIOUS SUBMITTAL. PROVIDE WRITTEN CONFIRMATION TO DOCUMENT THE MANUFACTURER & PRODUCT MEETS SPECIFICATIONS.

-PROVIDE WHITE COLOR CYLINDER RACKS.

-ALL PRE-WIRED TABLES CONNECTING TO FLOOR BOXES TO HAVE STANDARD ELECTRICAL PLUG.

-COORDINATE ALL ELECTRICAL OUTLETS WITH ELECTRICAL DRAWING & SPECIFICATIONS. TECHNICAL SPECIFICATIONS PER ELECTRICAL DRAWINGS.

PROVIDE SEPARATE SUBMITTAL FOR FOLLOWING:
-PROVIDE LOAD CAPACITY OF TABLES.

-PROVIDE SEPARATE SUBMITTAL OF TEST REPORTS FOR COUNTERTOP PER SPEC. 123553,1.5,C.

-HEAVY DUTY SLIDE PRODUCT DATA FOR GRADE 1HD-100 & 1HD-200 PER SPEC. 123553,2.12,E.

-PROVIDE PRODUCT DATA FOR V-5 AND A-5 (QUICK DISCONNECTS).

-PROVIDE PRODUCT DATA FOR E-5, E-6, D-5, D-6

-PROVIDE PRODUCT DATA FOR PAPER TOWEL DISPENSER.

-PROVIDE PRODUCT DATA FOR OVERHEAD SERVICE CARRIER & MOBILE LABORATORY CASEWORK SYSTEM (IDENTIFY MANUFACTURER).

-PROVIDE PRODUCT DATA FOR EPOXY COUNTERTOPS.

-PROVIDE SAMPLE & INFORMATION RELATED TO SIGNAGE FOR ACID (CORROSIVES) & FLAMMABLE CABINETS - CONSISTENT CLEAN GRAPHICS LETTERING.

-PROVIDE WHITE COLOR CYLINDER RACKS.

-ALL PRE-WIRED TABLES CONNECTING TO FLOOR BOXES TO HAVE STANDARD ELECTRICAL PLUG.

INSTITUTIONAL CASEWORK, INC.
1865 Highway 641 North
Paris, Tennessee 38242-8814
(731) 642-4251

DATE: 1/25/2017
JOB: 04437A, B, C, D

RE: Webster University
Webster Groves, MO

TO: Carroll Seating

ATTENTION: Eddie Scheer/Amanda Kohlbrecher

We are forwarding the following via FTP SITE:

- ● For Approval
- For Your Use
- For Review and Comment
- Returned for Corrections
- As Requested
- ● Return 1 Prints and Sets

COPIES	DATE	NO.	DESCRIPTION
1	1/25/17	04437AR1-E2 and 04337BR1-E4	Rough-In & Elevation Shop Drawings
1	1/25/17	04437DETAILS1 & 04437DETAILS2	Cabinet Sections
1	1/25/17	04437OHSC	OHSC detail/quantities Sheet
1	1/25/17	Set	Project Data Document

REMARKS:

We cannot schedule this project until we receive one copy indicating:

- ☐ Approval
- ☐ Casework finish
- ☐ Field dimensions

If you have any questions, please feel free to call.

CC:

BY: Mitzi A. Hutter

If enclosures are not as noted, kindly notify us at once.