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Inspection Issues

DO IT RIGHT THE FIRST TIME AND SAVE. When WOODWORK INSTITUTE Compliance is called for in specifications (whether certified or not), an inspection can always be requested by an architect, general contractor, fabricator, or installer. If there are any problems discovered during an inspection, the cost can be tremendous. It's important that your shop conforms to the architect's specifications and the Institute's standards.

When an inspection is requested, the INSTITUTE starts by viewing the plans and specifications, the approved shop drawings and any written modifications and/or changes. Next, the overall work and appearance is inspected, working down to the smaller details. At the time of inspection, all work must be complete, including installation, clean-up and finishing. All cabinet doors, drawers, adjustable shelves, and hardware must be in place.

SHOP DRAWINGS are legal documents containing information directed to the project architect/designer from the manufacturer/supplier as their interpretation of the contract drawings and specifications. They are representative of the manufacturer's and/or supplier's intended use of materials, methods of fabrication and means of installation.

The design professional is not responsible for the fabrication and/or installation of the product, but is responsible for the overall concept and design.

Shop drawings must be very detailed to enable the design professional to interpret the drawings to confirm and ensure the design. Any deviations from the original design in materials and/or physical substance must specifically be acknowledged and approved by all parties in writing.

Shop drawings must include all necessary information, including construction methods being use to comply with the original contract design concept. When a design professional specifies that all cabinets and countertops be manufactured in accordance with the latest edition of the WOODWORK INSTITUTE **ARCHITECTURAL WOODWORK STANDARDS**, a specific grade will be indicated (lack of which defaults to Custom Grade). When so specified, the design professional is expecting and will demand that all materials, methods of fabrication and/or installation comply with that grade.

In most cases, the design professional is expecting WOODWORK INSTITUTE to oversee and monitor projects specified to conform to the WOODWORK INSTITUTE **ARCHITECTURAL WOODWORK STANDARDS** and grant Certified Compliance. Shop drawings are the first step in the process, and one of the most important tools. Some firms take the attitude that shop drawings are an unnecessary requirement of the architect. In reality, they are the design, fabrication, material requisition, delivery and installation planning tools. Our WOODWORK INSTITUTE Directors of Architectural Services are available to assist in making sure shop drawings comply with the specifications and the **ARCHITECTURAL WOODWORK STANDARDS** for the grade specified. Call and ask for help, the Directors of Architectural Services can help save time and money. Remember, the fabricated product may conform to the design concept, but be lacking material and/or fabrication requirements.

When a problem is detected at the job site, it is generally too late. The labor and materials used to repair/replace the problem are costly and reduce the profit potential. A properly designed, approved, and implemented shop drawing will save you time and money.

SHOP DRAWING CONSIDERATIONS:

- ✓ Undergo a thorough review and understanding of the project contract documents, including your contract, plans and specifications.
- ✓ If there is any doubt of the intent and/or of the requirements, ask!
- ✓ Do not assume or take anything for granted.
- ✓ Resolve, confirm, and acknowledge in writing (signed by both parties), any and all agreements reached that clarify and/or modify the contract documents.
- ✓ When the architect places his signature on the shop drawing, it is for design only.
- ✓ Develop and design shop drawings to be the overall inclusive document that it is intended to be. Furnish the necessary information so that personnel can order the materials, machine the components, assemble the product, deliver it to the job site and install it without having to ask additional questions.

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For a list of our Directors of Architectural Services, please visit:

www.woodworkinstitute.com,

or call the WI Administrative Office, (916) 372-9943

- ✓ Shop drawings should never be cluttered with unnecessary information.
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- ✓ WOODWORK INSTITUTE's minimum size for shop drawings is 11" x 17"
- ✓ WOODWORK INSTITUTE recommends that two copies of shop drawings be sent to the design professional for review, unless otherwise specified. After review, the design professional will retain one set and return the other for corrections, if necessary, and production and distribution of the required number of final prints.
- ✓ Remember, shop drawings are the project road map. They tell the design professional and contractor the exact description of what will be furnished and installed on the job site.

SHOP DRAWING

- ✓ Size, type, and location of anchor screws not indicated.
- ✓ Material used on inside face of door/drawer not indicated.
- ✓ Shelf thickness and length not in compliance with T.B. 435, for material used.
- ✓ Clearance not indicated between back of drawer and cabinet back must not exceed 2".
- ✓ Attachment method of light valance to bottom of uppers not indicated.
- ✓ Type of fastener not indicated to anchor toe base, walls and ceiling.
- ✓ Joinery used in fabricating cabinet box not indicated.
- ✓ Joinery used in fabricating drawer box not indicated.
- ✓ Material and construction used in drawer over 30" in width not indicated.
- ✓ A stop/stretcher under top drawer not indicated.
- ✓ Adj. shelf standards/holes not properly spaced at front and back (within 2").
- ✓ Adj. shelf standards/holed not full length of cabinet.
- ✓ Wall scribe exceed maximum width allowed (1-1/2").
- ✓ Wall gap at top and bottom of upper units not closed.
- ✓ Attachment used to anchor scribe stile to cabinet box not indicated.
- ✓ Anchor cleats behind cabinet backs, not indicated.
- ✓ Joinery used in counter top construction, not indicated.
- ✓ Backing under counter top splash, not indicated.
- ✓ Type of core material used in counter tops, not indicated.
- ✓ Type of attachment used to anchor counter top to cabinet body, not indicated.
- ✓ Edge banding used on doors, drawers and cabinet box not in compliance.
- ✓ Location and type of screws used to attach drawer face to drawer box, not indicated.
- ✓ Method of fitting underside of upper to wall not indicated (scribe mold or scribe).
- ✓ Door and drawer clearance not indicated.
- ✓ Hardware or material used not in compliance with architectural specifications.

CASEWORK

- ✓ Are cabinet door, drawer, and false front panel gaps uniform, in alignment and conforming to the WOODWORK INSTITUTE grade specified?
- ✓ Are there any noticeable defects, including chipping?
- ✓ Are scribe areas including the top and bottom of wall hung cabinets filled within allowable tolerance?
- ✓ Do cabinet doors operate properly?
- ✓ Are hinges of the correct type, with correct quantity, and installed properly? (Are they notched if necessary?)
- ✓ Are cabinet doors flat, not warped?
- ✓ Are edge bands securely attached to doors, drawer fronts, false panels, scribes, and the cabinet body?
- ✓ Are locks required?
- ✓ Are locks installed correctly and of the correct size for the thickness of the cabinet doors and/or drawers?
- ✓ Are cabinets clean of any pencil and ink marks, dirt and debris?
- ✓ Are cabinets installed plumb and level?
- ✓ Do cabinet drawers operate smoothly and properly with little or no side play?
- ✓ Are drawers properly stopped to prevent drawer fronts from contacting the cabinet body?
- ✓ Are drawer fronts attached to drawer boxes properly with the correct screws in the correct locations?
- ✓ Are drawer boxes the correct depth and width to eliminate side play?
- ✓ Are drawer sides the correct thickness and material?
- ✓ Do the drawer boxes comply with WOODWORK INSTITUTE construction standards?
- ✓ Are the drawer bottoms glued in place?
- ✓ Are drawer boxes correct in height for the opening?
- ✓ Are drawer box depths correct for the depth of the cabinet?
- ✓ Are there bumpers on the inside surface of cabinet doors?
- ✓ Are cabinet doors, drawer fronts and false front panels flush?
- ✓ Are drawers removable from the drawer opening?
- ✓ Are stop stretchers installed between the drawer and the cabinet door?
- ✓ Are security panels installed correctly?
- ✓ Are elbow catches installed correctly so door stays locked?
- ✓ Are the finished ends of base cabinets closed between the bottom of the countertop and the top of the cabinet?
- ✓ Are cabinets scribed tight to the wall at finished ends?
- ✓ Are the bottoms of the wall hung cabinets scribed tight to the wall?
- ✓ Are metal shelf standards installed correctly without showing any exposed core or chipping?
- ✓ Are cabinet backs securely fastened to the cabinet bodies without open joints?
- ✓ Are cabinets constructed to Title 23 Earthquake Requirements, if required?

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- ✓ Are shelf spans correct for the thickness and core material used?
- ✓ Are correct shelf pins used?
- ✓ Are adjustable shelves, if required, installed to meet seismic requirements?
- ✓ Do bored holes or metal standards run completely to the top and bottom of the cabinet ends?
- ✓ Are bottoms of the wall hung cabinets the proper thickness for the span?
- ✓ Are bottoms of the wall hung cabinets the correct material on the exposed surface?
- ✓ Are cabinets secured to adjoining cabinets correctly and without open joints?
- ✓ Are correct anchor screws used to secure cabinets to wall?
- ✓ Are anchor screws located correctly at top and bottom of cabinets?
- ✓ Are there proper clearances at 90 degree corners for drawers to open without hitting opposing drawers?
- ✓ Are access holes cut into cabinet backs for plumbing and electric done correctly so they can be trimmed?

COUNTERTOPS

- ✓ Are countertops fabricated to the WOODWORK INSTITUTE Grade specified?
- ✓ Are front self edges fabricated per the specifications and/or WOODWORK INSTITUTE requirements?
- ✓ Are countertops coved or fully formed, if required?
- ✓ Are there any visual cracks in the coved back splash?
- ✓ Are scribe allowances for the back and return splashes within tolerance?
- ✓ Do joints in the edge banding meet those of the adjoining members?
- ✓ Has the longest piece of laminated plastic available been used for the span?
- ✓ Are splashes sealed tightly to the countertop deck?
- ✓ Has the proper backing sheet been used on the bottom of the countertop and the back of the splashes?
- ✓ Are there no joints in the countertop at a sink?
- ✓ Are joints in the countertop tight and flush?
- ✓ Are sink cut-outs properly sealed?
- ✓ Is there any delaminating on the countertop or splash?
- ✓ Is there any chipping on the countertop?
- ✓ Are cut-outs for grommets, if required, furnished complete with grommets?
- ✓ Are back splashes a minimum of 4" in height?
- ✓ Are the countertops properly scribed and sealed to wall?
- ✓ Are the countertops properly secured to the base cabinets?
- ✓ Are the countertops level?
- ✓ Are there any deviations in color of laminated plastic from section to section?
- ✓ Are back splashes and returns securely attached to countertop, not glued to wall as separate pieces?

DOORS

- ✓ Are door skins of proper quality for the WOODWORK INSTITUTE Grade specified?
- ✓ Does the wood species match specification requirements?
- ✓ Is there any evidence of adhesive bleed-through?
- ✓ Is there any evidence of sand-through?
- ✓ Are the door edge bands proper for the WOODWORK INSTITUTE Grade specified?
- ✓ Are stiles and rails securely bonded to the core?
- ✓ Are all cut-outs sealed?
- ✓ Are the tops and bottoms of the door sealed?
- ✓ Are doors flat, without warp?
- ✓ Is telegraphing within WOODWORK INSTITUTE standards?
- ✓ Is gap tolerance in reference to the door frame and floor within WOODWORK INSTITUTE Grade specified?
- ✓ Is hardware installed correctly?
- ✓ Does door thickness match architects specifications?
- ✓ Are door frames installed plumb and true?

PANELING

- ✓ Is paneling per the WOODWORK INSTITUTE Grade specified?
- ✓ Is paneling installed correctly?
- ✓ Are there expansion and contraction joints built into the paneling?
- ✓ Are the veneers correctly matched?
- ✓ Is paneling balanced to reduce warping?
- ✓ Is there any delaminating or bubbling of the veneers?
- ✓ Do veneers comply in matching for color and grain for the WOODWORK INSTITUTE Grade specified?

RUNNING & STANDING TRIM

- ✓ Are joints scarfed?
- ✓ Are joints tight?
- ✓ Do the joints comply in matching for color and grain for the WOODWORK INSTITUTE Grade specified?
- ✓ Is trim securely fastened to the wall?
- ✓ Is trim properly backed out?
- ✓ Is trim coped or mitered at finished ends so the end grain does not show?
- ✓ Are nails properly set?
- ✓ Are joints flush and well matched at corners and continuing runs?

MISCELLANEOUS

- ✓ Screws to access panels exposed to traffic areas must be flat head so as to not catch on clothing, etc.
- ✓ If back priming is required, it is up to the fabricator to do this work.
- ✓ Are jobsite conditions correct and acceptable for storing and installation of product?

COMMON INSPECTION ISSUES

Description	Shop Drawings	Fabrication	Installation
Evidence of Seismic Compliance	●	●	●
ADA Compliance	●	●	●
Documentation of Approvals or Substitutions	●	●	●
Indication of Scribes and Fillers and/or Their Method of Attachment	●		
Layout, Type, and Size of Installation Fasteners	●		
Improper Hinges	●	●	
Improper Drawer Slides, Type and/or Length	●	●	
Improper Drawer Stop Provisions	●	●	
Improper Semi-exposed Materials	●	●	
Improper Edge Banding Materials	●	●	
Improper Material at Interior Surfaces of Doors and Drawer Fronts	●	●	
Improper Joinery of Casework and/or Drawer Boxes	●	●	
Improper Layout of Hardware or Line Holes for Adjustable Shelves	●	●	
Improper Thickness and Core Construction of Adjustable Shelves for Load/Span	●	●	
Lack of Door Stop/Stretcher below Drawers and/or Aprons		●	
Excessive Chipping From Machining		●	
Poor or Excessive Filing of HPL		●	
Improper Attachment of Drawer Front to Drawer Box		●	
Excessive Clearance of Drawer Box to Cabinet Back		●	
Lack of Drawer Box Height Versus Available Opening		●	
Improper Installation of Adjustable Shelf Standards		●	
Improper Alignment of Adjustable Shelves Between Adjacent Cabinets		●	
Improper Cabinet Door and/or Drawer Reveal and/or Alignment		●	●
Improper Grain and/or Color Match		●	●
Improper Machining, Joinery, and Joints		●	●
Improper Finish Sanding		●	●
Improper Hardware Installation		●	●
Improper Blocking or Lack Thereof			●
Improper Furring or Lack Thereof			●
Improper Fasteners or Frequency Thereof			●
Improper Capping or Filling of Exposed Fasteners			●
Excessive Open Joints and/or Improper Trim Cuts			●
Improper Scribing, Scribe Molds and/or Fillers			●
Improper Plumbing/Electrical and Miscellaneous Field Cutouts			●
Improper Alignment of Window/Door Frames and Standing/Running Trim			●
Improper Alignment and/or Tightness of Countertop Joints			●
Lack of First Class Workmanship		●	●
Improper Job-site Conditions			●
Improper Material Storage/Protection			●
Improper Cleanup		●	●