

Virginia Wood Solutions Fair

What's Changed in Architectural Cabinets?

AWS Section 10 Casework



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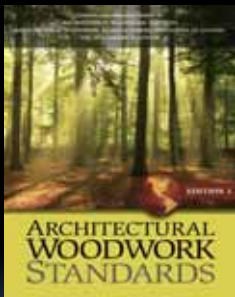
Learning Objectives

- Learn how the **AWI Quality Standards evolved** into the Architectural Woodwork Standards
- Learn how to navigate the new Architectural Woodwork Standards for Casework
- Gain specific knowledge about exposed, semi-exposed and concealed surfaces on Casework
- Learn how to integrate design and specification for balanced cost-benefit decisions for Casework

Evolution of the AWS

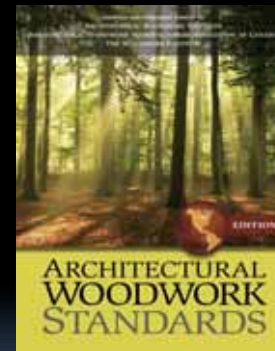


How has the QSI evolved into the AWS



- 1. New layout
- 2. Information grouped and organized differently.
 - Basic considerations
 - Recommendations
 - Industry Practices
 - Product Rules
 - Execution
 - Compliance

How has the QSI evolved into the AWS?



- Installation of casework included in section 10
- Execution, compliance sections address installation
- Counters in separate section

Evolution of the AWS

SECTION 10

Section 10

Natural Variations in Wood

Wood is a natural material, with variations in color, texture and figure. These variations are influenced by the natural growing process and are uncontrollable by the woodworker. The color of wood within a tree varies between the “sapwood” (the outer layers of the tree which continue to transport sap), which is usually lighter in color than the “heartwood” (the inner layers in which the cells have become filled with natural deposits). Various species produce different grain patterns (figures), which influence the selection process. There will be variations of grain patterns within any selected species. The architectural woodworker cannot select solid lumber cuttings within a species by grain and color in the same manner in which veneers may be selected. Color, texture, and grain variations will occur in the finest architectural woodworking.

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Without Specification to the contrary

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Adjustable Shelf Loads

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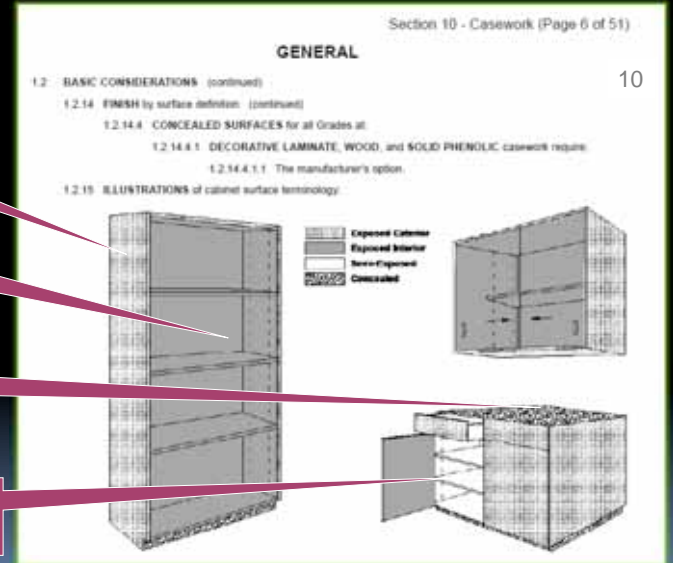
Basic Considerations: Surface Finish

Exposed Exterior

Exposed Interior

Concealed

Semi-Exposed



Basic Considerations: Casework Styles

Style 1

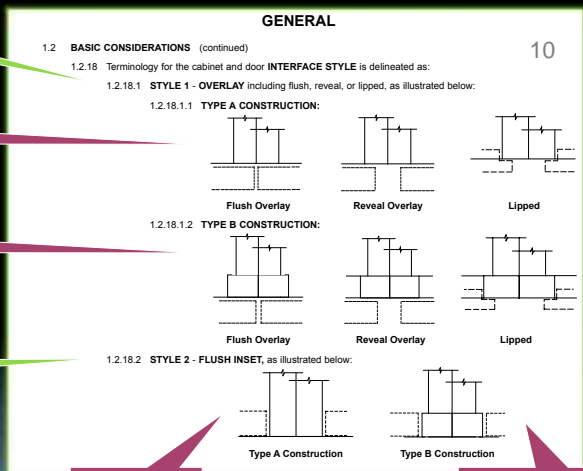
Type A

Type B

Style 2

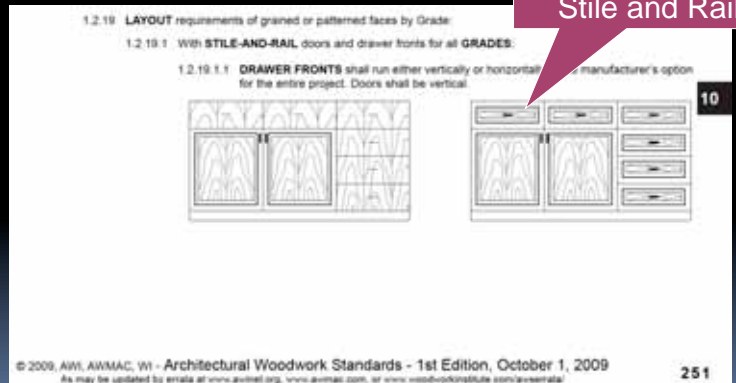
Type A

Type B



Basic Considerations: Grain Direction at Stile-and-Rail Doors & Drawer Fronts

Stile and Rail



Product Rules: Exposed Exteriors

ECP

Section 10 - Casework (Page 19 of 51)

PRODUCT MATERIAL, MACHING, AND ASSEMBLY RULES (continued)		E	C	P	
DESCRIPTION					
MATERIAL	4.2.2	The BOTTOM EDGE of LIGHT APRONS shall be considered an exposed surface.			
	4.2.3	VINYL covered material is acceptable for cabinet construction.			
	4.2.4	GLASS SHELVES shall be tempered or laminated safety glass, with all four edges polished.			
	4.2.5	At SEMI EXPOSED SURFACES , including DRAWER BOXES , requires:			
	4.2.5.1	CONSISTENT color or species to be used throughout entire project.			
	4.2.5.2	MATCHING EXPOSED SURFACE is only required if so specified.			
	4.2.5.3	VINYL overlay is acceptable at CABINET BACKS and DRAWER BOTTOMS , if matched in color to other semi-exposed materials.			
	4.2.5.4	HARDBOARD used as vertical or horizontal shelves and/or dividers shall be tempered and smooth on both sides.			
	4.2.5.4.1	PAINTED to match other semi-exposed portions is required only if so specified.			
	4.2.5.5	VERTICAL or HORIZONTAL SHELVES and/or DIVIDERS shall match other semi-exposed surfaces.			
4.2.6	At CONCEALED SURFACES shall be the manufacturer's option:				
4.2.6.1	If specified to have a MOISTURE RESISTANT BASE , all base components shall be any material complying with the BASE CABINET SUBMERSION TEST , as explained in APPENDIX A .				
MATERIAL	4.2.7	At WOOD CASEWORK :			
	4.2.7.1	EXPOSED EXTERIOR surfaces:			
	4.2.7.1.1	Require WOOD of the specified species, cut, and match.			
	4.2.7.1.2	For TRANSPARENT FINISH require:			
	4.2.7.1.2.1	Use of one species for the entire project.			
	4.2.7.1.2.2	No use of ROUNDOFF VENEER .			
	4.2.7.1.2.3	Solid stock and/or plywood to be COMPATIBLE IN COLOR AND GRAIN .			
	4.2.7.1.2.4	Solid stock to be WELL-MATCHED FOR COLOR AND GRAIN ; plywood shall be COMPATIBLE IN COLOR with solid stock; and adjacent plywood panels shall be WELL-MATCHED FOR COLOR AND GRAIN .			
	4.2.7.1.3	For OPAQUE FINISH permit:			
	4.2.7.1.3.1	Use of particulate, MDI, MDO, softwood plywood, hardwood plywood, and solid stock.			
4.2.7.1.3.2	Use of MDF, MDO, close-grain hardwood plywood, and solid stock.				
4.2.7.1.3.3	Use of MDF and MDO.				
4.2.7.2	EXPOSED INTERIOR surfaces, except at doors and drawer fronts, require:				
4.2.7.2.1	LPDL or WOOD of the manufacturer's option.				
4.2.7.2.2	WOOD , the same species as the exposed exterior surface.				
4.2.7.2.3	WOOD , the same species and cut as the exposed exterior surface, and:				
4.2.7.2.3.1	HPVA GRADE C .				
4.2.7.2.3.2	HPVA GRADE B .				
4.2.7.2.3.3	HPVA GRADE A .				

Material Wood Casework Exposed Exterior

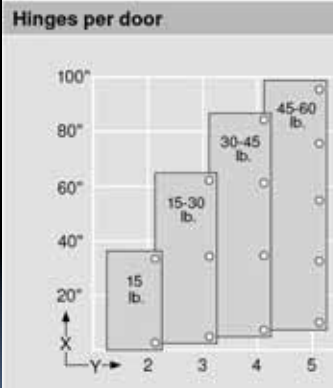
Product Rules: Hinges

WRAPAROUND hinges, as applicable, shall be let into the edge of the door to maintain proper gap tolerance.

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PRODUCT MATERIAL, MACHING, AND ASSEMBLY RULES (continued)		E	C	P	
DESCRIPTION					
ASSEMBLY	4.4	DOORS (continued)			
	4.4.6	HINGES shall be installed by the manufacturer, and (continued)			
	4.4.6.9	At GRADE I hinges, doors (continued)			
	4.4.6.9.2	HINGES (continued)			
	4.4.6.9.2.5	At GRADE I hinges, doors (continued)			
	4.4.6.9.2.5.3	60" (1524 mm) to 80" (2031 mm) in height shall have a minimum of four hinges.			
	4.4.6.9.2.5.4	Over 80" (2031 mm) in height shall have a minimum of five hinges and an additional hinge for every 18" (457 mm) of additional height.			
	4.4.6.9.2.6	WRAP-AROUND hinges, as applicable, shall be let into the edge of the door to maintain proper gap tolerance.			
	4.4.6.9.2.6.1	Exposed door edges resulting from the NOTCHING for hinges are NOT required to be finished.			
	4.4.6.9.2.6.2	Exposed door edges resulting from the NOTCHING for hinges are required to be painted or stained to match.			
4.4.6.9.2.7	CONCEALED 1-3/8" (35 mm) cap hinge assembly installation, when required to be installed with screws, requires dovetail screws or screws recommended by the manufacturer.				
ASSEMBLY	4.4.6.9.3	LOCKING PAIRS:			
	4.4.6.9.3.1	Shall be equipped with an ELBOW CATCH and a STOP BLOCK on the inactive leaf, and:			
	4.4.6.10.3.1.1	STOP BLOCK shall be adequate to prevent the latch of the elbow catch from being deflected by applying vertical pressure on the door.			
	4.4.6.9.3.2	FULL-HEIGHT DOORS with a FIXED MID-HEIGHT SHELF shall have an ELBOW CATCH on the inactive leaf at the fixed shelf.			
	4.4.6.9.3.3	FULL-HEIGHT DOORS (without fixed shelf) shall be equipped with surface-mounted SLIDE BOLT or spring-actuated CHAIN BOLT with shelf depth adjusted accordingly.			
	4.4.6.10	When STYLE and RAIL (see the Hinged and Sliding Sub-headings for additional requirements as applicable):			
	4.4.6.10.1	WELDED PROFILE (sliding) shall be the manufacturer's option, unless specified otherwise.			
	4.4.6.10.1.1	OF SOLID LUMBER shall be a minimum of 2-1/2" (63.5 mm) in length.			
	4.4.6.10.1.2				

4.4.6.9.2.4	At GRADE I hinges, doors:
4.4.6.9.2.4.1	Under 48" (1219 mm) in height shall have a minimum of two hinges.
4.4.6.9.2.4.2	48" (1219 mm) to 84" (2134 mm) height shall have a minimum of three hinges.
4.4.6.9.2.4.3	Over 84" (2134 mm) in height shall have a minimum of four hinges.



4.4.6.9.2.5	At GRADE II hinges, doors:
4.4.6.9.2.5.1	Under 40" (1016 mm) in height shall have a minimum of two hinges.
4.4.6.9.2.5.2	40" (1016 mm) to 60" (1524 mm) in height shall have a minimum of three hinges.

HINGES (continued)

4.4.6.9.2.5	At GRADE II hinges, doors (continued)
4.4.6.9.2.5.3	60" (1524 mm) to 80" (2031 mm) in height shall have a minimum of four hinges.
4.4.6.9.2.5.4	Over 80" (2031 mm) in height shall have a minimum of five hinges and an additional hinge for every 18" (457 mm) of additional height.

X = Door height
Y = Number of hinges

NOTE: The distance between the top and bottom hinges must be greater than the width of the door.

Product Rules: Fixed and Adjustable Shelving

Fixed / Adjustable Shelves

Section 10 - Casework (Page 33 of 51)

PRODUCT MATERIAL, MACHING, AND ASSEMBLY RULES (continued)		E	C	P		
DESCRIPTION						
ASSEMBLY	4.4	TOE BASES, KICKS, AND SLEEPERS (continued)				
	4.4.13	LEVELERS:				
	4.4.13.1	May be used at the manufacturer's option.				
	4.4.13.2	At cabinets over 15-1/2" (394 mm) in depth, shall require four levelers per unit up to 37-1/2" (953 mm) in width and six per unit up to 48" (1219 mm) in width.				
	4.4.13.3	At cabinets less than 15-1/2" (394 mm) in depth, levelers are only required at the front and shall require two levelers per unit up to 37-1/2" (953 mm) in width and three per unit up to 48" (1219 mm) in width.				
	ASSEMBLY	4.4.14	SHELVES require:			
		4.4.14.1	CORE to be a minimum of 3/4" (19 mm) in THICKNESS .			
		4.4.14.2	When THICKER SHELVES or CENTER SUPPORTS are desired due to heavy loads, they shall be so specified.			
		4.4.14.3	GRAIN or DIRECTIONAL PATTERN of the face to run the length of the shelf.			
		4.4.14.4	DIVIDERS , vertical or horizontal, to match the exposed or the semi-exposed surface, as applicable.			
4.4.14.5		UNIFORM SHELF THICKNESS at each elevation or connected elevations at open casework.				
4.4.14.6		HARDBOARD used for shelves or vertical or horizontal dividers be smooth on both sides and tempered.				
4.4.14.7		CABINETS over 72" (1829 mm) high, not immediately abutting a structural wall or another cabinet, have a fixed shelf at approximate mid-height.				
4.4.14.8		GLASS be tempered float glass conforming in thickness to the MAXIMUM ADJUSTABLE SHELF LENGTHS listed herein, and:				
4.4.14.8.1		Have all four edges polished.				
ASSEMBLY	4.4.14.9	FIXED SHELVES:				
	4.4.14.9.1	With a THICKNESS of 1" (25.4 mm) minimum when made with particulateboard core and are 42" (1067 mm) and over in length.				
	4.4.14.9.2	CORES to be subject to a 40 lb (18.1 kg) load capacity of the manufacturer's option.				
	4.4.14.9.3	With a 50 lb (22.7 kg) load capacity at SCHOOLS, HOSPITALS, and LIBRARY BOOKSHELVES.				
	4.4.14.9.4	Be SECURED to ends, dividers, and back.				
	4.4.14.9.5	OVER 48" (1219 mm) in length, be supported as applicable on COISTS at the back, or secured through the back.				
	4.4.14.9.6	OVER 48" (1219 mm) have a center support.				
	4.4.14.10	ADJUSTABLE SHELVES:				
	4.4.14.10.1	Shall CONFORM in thickness to the listing below of materials and MAXIMUM PERMITTED LENGTHS , with:				
	4.4.14.10.1.1	LENGTH and GRAIN DIRECTION running left to right.				
4.4.14.10.1.2	CREEP not taken into consideration and not considered a defect.					
4.4.14.10.1.3	INFORMATION/RATINGS representing calculations believed to be reliable; however, due to variations in use not known or out of our control, no warranties or guarantees are made as to the end results.					

Product Rules: Metal Shelf Standards and Bored Hole Shelf Supports

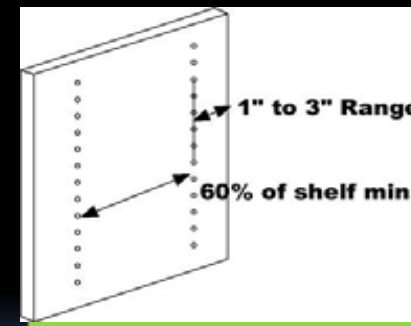
Metal Shelf Standards

Bored Hole Shelf Supports

PRODUCT		MATERIAL, MACHINING, AND ASSEMBLY RULES (continued)		E	C	P
ASSEMBLY (continued)		DESCRIPTION				
4.4	ASSEMBLY	SHELVES require (continued)				
		4.4.14.10	ADJUSTABLE SHELVES (continued)			
		4.4.14.10.16	Tempered float glass			
		4.4.14.10.16.1	At 1/4" (6.4 mm) in thickness allows for a maximum of:			
		4.4.14.10.16.1.1	28" (727 mm) in length at a 40 lbs/ft load			
		4.4.14.10.16.1.2	28" (600 mm) in length at a 50 lbs/ft load			
		4.4.14.10.16.2	At 5/16" (7.9 mm) in thickness allows for a maximum of:			
		4.4.14.10.16.2.1	35" (890 mm) in length at a 40 lbs/ft load			
		4.4.14.10.16.2.2	35" (838 mm) in length at a 50 lbs/ft load			
		4.4.14.10.16.3	At 3/8" (9.5 mm) in thickness allows for a maximum of:			
		4.4.14.10.16.3.1	42" (1067 mm) in length at a 40 lbs/ft load			
		4.4.14.10.16.3.2	39" (991 mm) in length at a 50 lbs/ft load			
		4.4.14.10.16.4	At 1/2" (12.7 mm) in thickness allows for a maximum of:			
		4.4.14.10.16.4.1	51" (1295 mm) in length at a 40 lbs/ft load			
		4.4.14.10.16.4.2	45" (1130 mm) in length at a 50 lbs/ft load			
10	ASSEMBLY	4.4.14.10.17	Be a maximum of 1/8" (3.2 mm) less than the INSIDE CABINET WIDTH, regardless of the shelf support system, except where:			
		4.4.14.10.17.1	Shelf support clips require notching; ends may exceed this requirement provided both ends of the shelf are banded and the total clearance between shelf clips is a maximum of 1/8" (3.2 mm)			
		4.4.14.10.18	Be a maximum of 1/4" (6.4 mm) less than the INSIDE CABINET DEPTH			
		4.4.14.10.19	Be SUPPORTED on evenly spaced, clearly bored holes a maximum of 2' (50.8 mm) on center with shelf rests or on metal shelf standards with metal shelf rests, and:			
		4.4.14.10.19.1	CENTER LINE of rests shall not exceed a minimum of 1" (25.4 mm) to a maximum of 3" (76.2 mm) from the front and back of the interior cabinet body.			
		4.4.14.10.19.2	SUPPORT placement shall not conflict with hinge placement.			
		4.4.14.10.19.3	The dimension between the CENTER LINE of the rests shall not be less than 100% of the shelf's depth.			
		4.4.14.10.19.4	With THREE SUPPORTS at each end of shelves over 29-3/4" (756 mm) DEEP.			
		4.4.14.10.20	METAL SHELF STANDARDS shall extend vertically the entire interior length of the cabinet body side member, and:			
		4.4.14.10.20.1	Be recessed in a plow, slightly proud of the face with the core not visible.			
		4.4.14.10.21	BORED-HOLE SHELF-SUPPORT SYSTEMS shall extend vertically to within 6" (152.4 mm) of the interior top or bottom of the cabinet body.			
		4.4.16	PULLOUT SHELVES require:			
		4.4.16.1	BREACING CUTTING BOARDS to be solid stock a minimum of 3/4" (19 mm) in thickness, with:			
		4.4.15.1.1	TONGUE and GROOVE bands front and back, all securely glued with TYPE I adhesive.			
		4.4.15.1.2	Use of EXTERIOR PLYWOOD is permitted.			

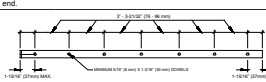
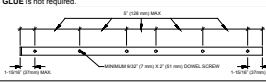
Modified Shelf Hole Drills

- Adjustable Shelf Techniques/Support
- Dual Pins ??
- Premium Grade
- Centerline of hole described



Product Rules: Joinery

Dadoes, Lock Joints, Plows, Rabbits, Dowels, Dowel Screws, or Biscuit Joining Plates.

PRODUCT		MATERIAL, MACHINING, AND ASSEMBLY RULES (continued)		E	C	P
ASSEMBLY (continued)		DESCRIPTION				
4.4	ASSEMBLY	JOINERY require (continued)				
		4.4.20.5	DADOES, LOCK JOINTS, PLOWS, RABBETS, DOWELS, DOWEL SCREWS, or BISCUIT-JOINING PLATES.			
		4.4.20.6	At DOWEL joints (see end-view diagram below):			
		4.4.20.6.1	DOWEL to be a minimum of 5/16" x 1-3/16" (8 mm x 30 mm), and:			
		4.4.20.6.1.1	Be GLUED and CLAMPED.			
		4.4.20.6.2	MINIMUM of two dowels per joint.			
		4.4.20.6.3	FIRST dowel to be spaced a maximum of 1-1/16" (37 mm) from each edge or end.			
		4.4.20.6.4				
		4.4.20.7	At DOWEL SCREW joints (see end-view diagram below):			
		4.4.20.7.1	DOWEL SCREW shall be a minimum of 9/32" x 2" (7 mm x 50 mm).			
		4.4.20.7.2	FIRST dowel screw shall be spaced a maximum of 1-1/16" (37 mm) from each edge or end.			
		4.4.20.7.3	SUBSEQUENT dowel screws shall be spaced a maximum of 5" (128 mm) on center.			
		4.4.20.7.4	GLUE is not required.			
		4.4.20.7.5				
		4.4.20.8	At BISCUIT-JOINING PLATE joints:			
4.4.20.8.1	PLATES shall be a minimum #30 or equal, located a maximum of 2" (51 mm) from each edge or end to the center of the plate, and:					
4.4.20.8.1.1	Be GLUED and CLAMPED.					
4.4.20.8.2	SUBSEQUENT plates shall be spaced a maximum of 6" (152 mm) on center.					
10	ASSEMBLY	SCRIBING require:				
		4.4.21.1	SCRIBE FILLERS or MOLDS to not exceed 1-1/2" (38.1 mm) in width, and shall:			
		4.4.21.1.1	Match exposed surfaces.			
		4.4.21.1.2	Be furnished in maximum available lengths, given material availability.			
		4.4.21.2	NO scrobing.			
4.4.21.3	SCRIBING to be furnished by the manufacturer, and:					
4.4.21.3.1	SCRIBE FILLERS or MOLDS are not permitted.					
4.4.21.3.2	END JOINTS at scrobing to be beveled.					
4.4.21.3.3	CORNERS of scrobing to be mitered.					

Execution

Well Matched for Color & Grain

REPAIRS are allowed, provided they are neatly made and inconspicuous when viewed at:

- 6.1.3.1 72" (1830 mm) E
- 6.1.3.2 48" (1219 mm) C
- 6.1.3.3 24" (610 mm) P

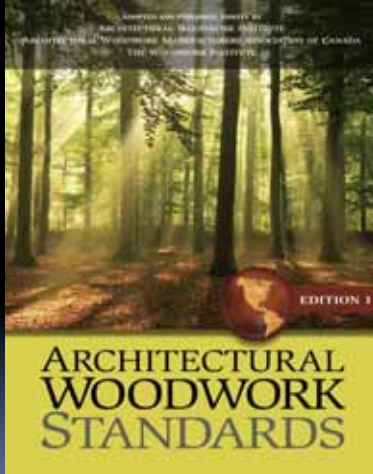
EXECUTION

- 6 RULES - The following RULES shall govern unless a project's contract documents require otherwise. These rules are intended to provide a well-defined degree of control over a project's quality of installation. Where E, C, or P is not indicated, the rule applies to all Grades equally.
- ERRATA, published on the Associations' websites at www.awinet.org, www.awmac.com, or www.woodworkinstitute.com, shall TAKE PRECEDENCE OVER THESE RULES, subject to their date of posting and a project's bid date.

GENERAL		DESCRIPTION		E	C	P
6.1	GENERAL	ARROWS INDICATE TOPIC IS CARRIED FROM 1 OR ONTO 1 ANOTHER PAGE.				
		6.1.1	Aesthetic GRADE RULES apply only to exposed and semi-exposed surfaces visible after installation.			
		6.1.2	For TRANSPARENT FINISH, woodwork shall be installed:			
		6.1.2.1	With CONSIDERATION of color and grain.			
		6.1.2.2	COMPATIBLE in color and grain.			
		6.1.2.3	WELL MATCHED for color and grain.			
		6.1.3	REPAIRS are allowed, provided they are neatly made and inconspicuous when viewed at:			
		6.1.3.1	72" (1830 mm)			
		6.1.3.2	48" (1219 mm)			
		6.1.3.3	24" (610 mm)			
		6.1.4	INSTALLER MODIFICATIONS shall comply to the material, machining, and assembly rules within the PRODUCT portion of this section and the applicable finishing rules in Section 5.			
		6.1.5	CASEWORK or related items:			
		6.1.5.1	Shall be SECURELY fastened and tightly fitted with flush joints.			
		6.1.5.1.1	Covers shall be CONSISTENT throughout the project.			
		6.1.5.2	Such as SCRIBE MOLDS shall be of maximum available and/or practical lengths and:			
6.1.5.2.1	MITERED at outside corners					
6.1.5.3	Shall be INSTALLED plumb, level, square, and flat within 1/8" (3.2 mm) in 96" (2438 mm), and when required:					
6.1.5.3.1	GROUNDING AND HANGING SYSTEMS set plumb and true.					
6.1.5.4	Shall be installed FREE OF:					
6.1.5.4.1	Warp, twisting, cupping, and/or bowing that cannot be held true.					
6.1.5.4.2	Open joints, visible machine marks, cross-sanding, tear-outs, nicks, chips, and/or scratches.					
6.1.5.4.3	Natural defects exceeding the quantity or size limits defined in Sections 3 and 4.					
6.1.5.4.4	EXPOSED FASTENERS at exposed exterior surfaces.					
6.1.5.5	Shall be SMOOTH and SANDED without CROSS-SCRATCHES in conformance to the PRODUCT portion of this section.					
6.1.6	Shall be SCRIBED at:					
6.1.6.1	6.1.6.1.1 Flat surfaces.					
6.1.6.1.2	6.1.6.1.2 Shaped surfaces.					
6.1.6.2	GAPS (see Test A.C. illustrations in COMPLIANCE):					
6.1.6.2.1	CAUSED BY EXCESSIVE DEVIATIONS (deviations in excess of 1/4" [6.4 mm] in 144" [3658 mm] of being plumb, level, flat, straight, square, or of the correct size) in the building's walls and ceilings, or 1/2" (12.7 mm) for floors, shall not be considered a defect or the responsibility of the installer.					

AWS Review

6 quick questions



AWS - Section 10 Casework

“TYPE A” construction for cabinets is:

1. Flush overlay
2. Reveal overlay
3. Lipped
4. All the above

AWS - Section 10 Casework

“TYPE A” construction for cabinets is:

1. Flush overlay
2. Reveal overlay
3. Lipped
4. **All the above**

AWS - Section 10 Casework

Exposed exterior surfaces required to be finished include:

1. The underside of cabinet bottoms over 42” AFF
2. The underside of cabinet bottoms over 48” AFF
3. The underside of cabinet bottoms over 50” AFF

AWS - Section 10 Casework

Exposed exterior surfaces required to be finished include:

1. **The underside of cabinet bottoms over 42" AFF**
2. The underside of cabinet bottoms over 48" AFF
3. The underside of cabinet bottoms over 50" AFF

AWS - Section 10 Casework

Requirements for Wood Casework exposed exterior, transparent finish-Custom Grade include:

1. Use of one species for the entire project
2. No use of ROTARY-CUT VENEER
3. Solid stock and/or plywood to be COMPATIBLE IN COLOR AND GRAIN
4. All the above

AWS - Section 10 Casework

Requirements for Wood Casework exposed exterior, transparent finish-Custom Grade include:

1. Use of one species for the entire project
2. No use of ROTARY-CUT VENEER
3. Solid stock and/or plywood to be COMPATIBLE IN COLOR AND GRAIN
4. **All the above**

AWS - Section 10 Casework

The following requirements apply to which grade?

4.4.6.9.2.6 WRAPAROUND hinges, as applicable, shall be let into the edge of the door to maintain proper gap tolerance.

Exposed door edges resulting from the **NOTCHING for hinges** are required to be painted or stained to match.

1. Economy
2. Custom
3. Premium

AWS - Section 10 Casework

The following requirements apply to which grade?

4.4.6.9.2.6 WRAPAROUND hinges, as applicable, shall be let into the edge of the door to maintain proper gap tolerance.

Exposed door edges resulting from the **NOTCHING for hinges** are required to be painted or stained to match.

1. Economy
2. Custom
3. **Premium**

AWS - Section 10 Casework

Is Miter-Fold drawer construction compliant for Custom Grade?

1. Yes
2. No
3. Only in the Northwest

AWS - Section 10 Casework

Is Miter-Fold drawer construction compliant for Custom Grade?

1. Yes
2. **No**
3. Only in the Northwest

AWS - Section 10 Casework

Drawer bottoms plowed into sides fronts and sub-fronts shall have how many inches of shoulder remaining?

1. 1/4" [6.4mm]
2. 3/8" [9.5mm]
3. 1/2" [12.7mm]

AWS - Section 10 Casework

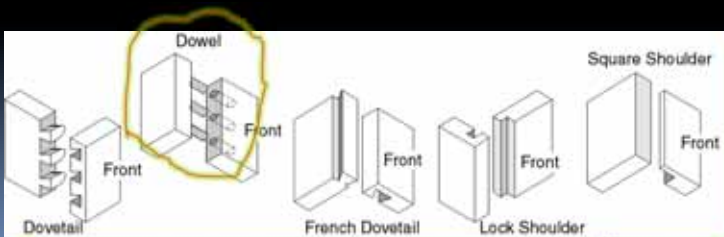
Drawer bottoms plowed into sides fronts and sub-fronts shall have how many inches of shoulder remaining?

1. 1/4" [6.4mm]
2. **3/8" [9.5mm]**
3. 1/2" [12.7mm]

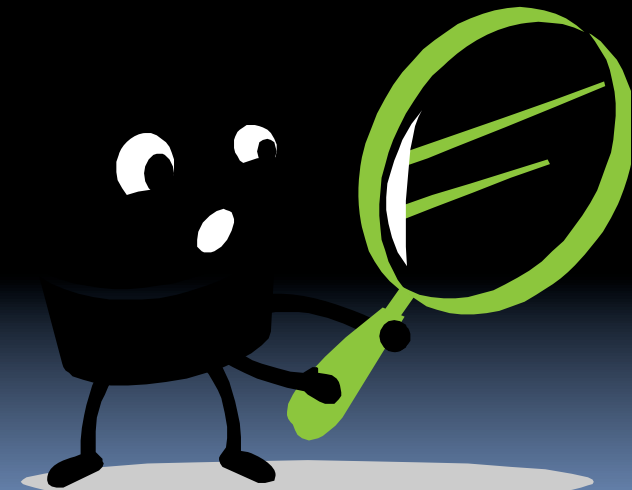
Errata Website - www.aws-errata.com

Errata ID	Description	Effective Date
4.4.26.4	All APOL and PVC, edges shall be machined flush and filed, sanded, or buffed to remove machine marks and sharp edges, and	
4.4.26.4.1	VISIBLE OVERLAP (over-foam) shall not occur	
4.4.26.4.1.1	0.001" (0.025 mm) for a maximum length of 2" (50.8 mm) or any 48" (1219 mm) run	
4.4.26.4.1.2	0.001" (0.025 mm) for a maximum length of 1" (25.4 mm) or any 24" (610 mm) run	
4.4.26.4.1.3	NO VISIBLE OVERLAP	
4.4.26.4.2	Chip Out shall be inconspicuous when viewed at	1/24/2010
4.4.26.4.2.1	1/2" (12.7 mm)	
4.4.26.4.2.2	48" (1219 mm)	
4.4.26.4.2.3	24" (610 mm)	
4.4.26.4.3	REMOVAL of color or pattern of face material due to over-machining limited to	
4.4.26.4.3.1	3/16" x 4" (1.9 mm x 102 mm) and may not occur within 48" (1219 mm) of a similar occurrence	
4.4.26.4.3.2	1/8" x 4" (1.6 mm x 102 mm) and may not occur within 80" (2032 mm) of a similar occurrence	
4.4.26.4.3.3	1/16" x 4" (1.6 mm x 102 mm) and may not occur within 12" (305 mm) of a similar occurrence	
4.1.10.3	Change to read: "Installed using all functional fasteners or fastener provisions and when fastener provisions are counterbore, fasteners shall be counterbore."	12/24/2009

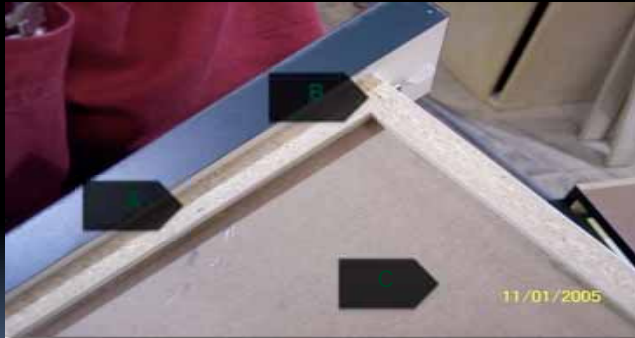
Glossary page 386 – Dowel?
Errata ??



Know what to Look for

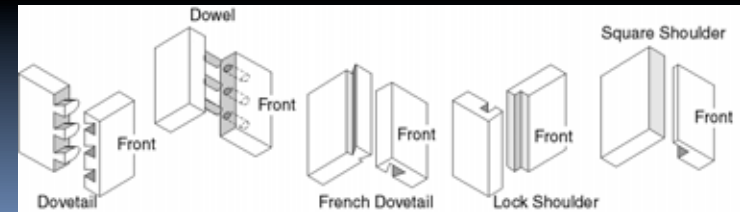


Drawer Construction



Drawer Construction

- Sides and Backs
- Bottoms
- Construction Techniques/Supports
- Suggested Joinery & Material matches



Balanced Construction



- ▶ Section 10-4.2.8.2.4
 - ▶ Premium Grade:
Same Pattern, Color & Thickness Both Faces
Page 264
- ▶ Section 10-4.2.8.2.4
 - ▶ Custom and Economy Grades:
Laminate of Same Material and Thickness as the Face Page 264

AWS...The Common Language

- ▶ Design Intent or Design Concept
- ▶ Finishes
- ▶ Level of Quality
- ▶ Details



Grain Direction



10-4.2.1.2 CUSTOM GRADE
[Grain] Shall run and match
VERTICALLY within each
cabinet unit, including doors,
drawers, false fronts, and
finished ends.

See 1.2.19.2.2, page 252

45

Blocking



**Blocking
Requirements:
Who is
responsible and
what is required?**

–Section 6.1.12.1,
Page 291

Who is Going to Clean Up This Mess?



A Closer Look



Review Objectives

- **How the AWI Quality Standards evolved** into the Architectural Woodwork Standards
- How to navigate the new Architectural Woodwork Standards for Casework
- Gain specific knowledge about exposed, semi-exposed and concealed surfaces on Casework
- How to integrate design and specification for balanced cost-benefit decisions for Casework

Questions?

This concludes The American
Institute of Architects Continuing
Education Systems Course

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WOODWORK
INSTITUTE

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