

# AWS and Quality Assurance in Architectural Woodwork

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Charlotte, NC

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## Tool Box

- Attendance Sheet
- Evaluation Sheet
- Architectural Woodwork Standard (AWS)
- Design Solutions



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## Program Content



1. Architectural Woodwork Standards (AWS) and Brief History
2. Quality Certification Program

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## Learning Objectives

1. Become familiar with the Architectural Woodwork Standards
2. Recognize value in using the AWS
3. Benefits of Quality Certification
4. Registering your project
5. Learn how QCP monitors the project.

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# Quality Standards Evolution

The History of the Woodwork Quality Standards at a glance:



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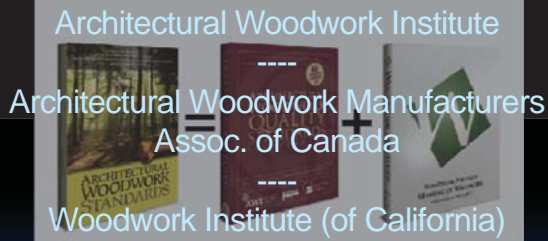
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Integrating Over 100 Years of Experience and Application:



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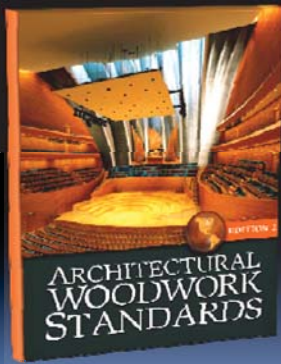
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## 2014 – Second Edition



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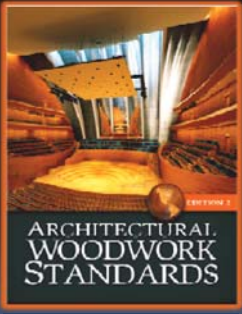
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## How the AWS changes in Edition 2



- New layout
- Information grouped and organized:
  - Introduction
  - General
  - Product
  - Installation
  - Tests

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## What's More Important to your Owner?

Look and feel  
vs.  
Fabrication and function?

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## Shop Drawing Review

Not fixing  
problems,  
avoiding problems



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Work In Progress Inspections

Active Quality Assurance

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Monitoring Installation



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Request Inspection on Registered Projects!

Independent evaluation of compliance  
(855) 345-0991

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<http://awiqcp.org/project/RegisterProject.asp>

Quick – Easy - Free

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<http://awiqcp.org/project/RegisterProject.asp>



The screenshot shows a web browser window displaying the 'Register a Project' page on the AWI Quality Certification website. The page features a navigation menu on the left with links for 'Q for Design Professionals', 'Q for Manufacturers', 'Projects', 'Find Q Firms', 'About the Q', 'News', 'Resources', 'Contact', and 'Home'. The main content area is titled 'Register a Project' and includes a sub-header 'Ensuring Quality Work in Every Project'. Below this, there is a paragraph explaining the registration process and a form with fields for 'Project Name', 'Project City', and 'Project Stage'. A legend indicates that red text denotes required fields.

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We've all had projects with problems

This is how QCP and the AWS protects you...???

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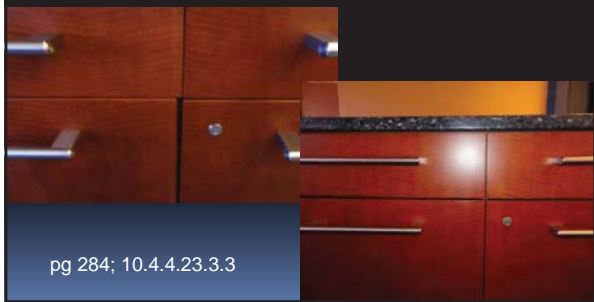
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## Alignment and Gap on cabinets

4.4	↑ 4.4.23 C L	<b>CLEARANCES and TOLERANCES</b> (continued)
		<b>4.4.23.3</b> At <b>FLUSH OVERLAY</b> and <b>INSET</b> construction, the maximum uniform gap variance (see Test H illustrations in <b>COMPLIANCE</b> ) within a cabinet elevation, between any edge of a door and/or drawer and another door and/or drawer or finished end, and doors hung in pairs, shall be (based on the elevations below):
		

pg 284; 10.4.4.23.3.3

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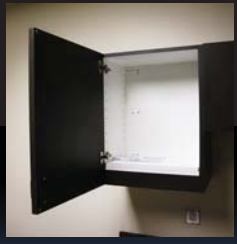
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## Plastic laminate doors - unbalanced construction

pg 260; 10.4.1.11

<b>4.1.11</b>	<b>PANEL COMPONENTS</b> shall be:
4.1.11.1	Constructed of particleboard, MDF, or a non-telegraphing core.
4.1.11.2	Of <b>BALANCED CONSTRUCTION</b> , constructed in such a way as not to warp in its intended use.
<small>At TYPE A CONSTRUCTION, self-adhesive of adhesive joints shall be beveled a maximum of 15° for the</small>	

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## Balanced Construction



- ▶ **Section 10**
- ▶ **Premium Grade:**  
Same Pattern, Color & Thickness Both Faces
- ▶ **Custom Grade:**  
Laminate of Same Material & Thickness as the Face

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## Sagging ¾" thick adjustable shelves

4.4.14.10.7	MBF (Medium-Density Fiberboard), 525,000 MOE, with or without LPDL:
4.4.14.10.7.1	At ¾" (19 mm) in thickness allows for a maximum of:
4.4.14.10.7.1.1	32" (813 mm) in length at a 40 lbs/sq ft load.
4.4.14.10.7.1.2	30" (762 mm) in length at a 50 lbs/sq ft load.



Page 278: 10-4.4.14.10.7.1

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## Countertops and Cores



4.4.15.6	<b>BACKING SHEET</b> shall cover the underside of all countertops, the backside of all splashes and be the same for the entire project.	
4.4.15.7	<b>LAMINATIONS</b> shall be made securely to the core with <b>TYPE II</b> adhesive applied as recommended by the adhesive manufacturer, and:	11

Pg 309; 11.4.4.15.6

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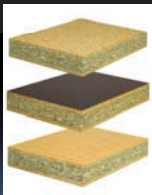
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## Countertops with sinks

pg 305; 11.4.2.5.3.1

H P D L	or otherwise approved engineered core, and:	
	At <b>SINK TOPS</b> and their <b>SPLASHES</b> , use of veneer core plywood with Type II adhesive, industrial-grade particleboard or fiberboard with a 24-hour thickness swell factor of 5% or less and a 24-hour water-absorption factor of 10% or less is required for the entire countertop, elevation and/or return elevation.	

Pg 82; 4-4.1.5.2



4.1.5.2	<b>MOISTURE-RESISTANT CORE</b> , which:	
4.1.5.2.1	If particleboard, shall be dyed green	

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## Who is Going to Clean Up This Mess?



pg 275; 4.4.12.8

4.4.12.8 Require ANCHOR or HANGING STRIPS  
4.4.12.8.1 Except when backs are 1/2" (12.7 mm) or thicker:

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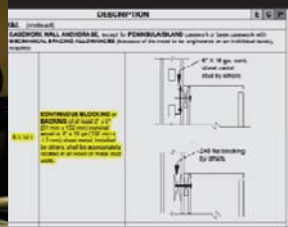
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## Improper Blocking



pg 291; 6.1.12.1



Pg 287; 5.2.1

5.2 CONTRACTOR IS RESPONSIBLE FOR:  
5.2.1 Furnishing and installing structural members, grounds, blocking, backing, furring, brackets, or other anchorage required for architectural woodwork installation that becomes an integral part of walls, floors, or ceilings to which architectural woodwork shall be installed.

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- How do you protect your reputation when specifying architectural woodwork?
- How do you provide consumer confidence?

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## Due Diligence

### Be Proactive

- ▶ Review every bidder & check their references.
- ▶ Visit their plant.
- ▶ Review some existing projects of equal size and complexity.
- ▶ Provide due diligence needed to assure that a woodworking firm has the ability to comply with AWS.
- ▶ Pre-qualification of the Woodworker

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## Alternative Solution

AWI has a program called  
The Quality Certification Program (QCP)



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## Register & Specify Your Project

### QCP Specification Language

Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Standards" for grades of interior architectural woodwork, construction, finishes, and other requirements.

Provide AWI Quality Certification Program [labels] [and] [certificates] indicating that woodwork, [including installation] complies with requirements of grades specified.

This project has been registered as AWI/QCP Number xxxxxxx.

(855) 345-0991 or <http://www.awiqcp.org>

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## Project Certification

- ▶ Projects must be registered with QCP prior to fabrication start
- ▶ Woodworker's fee: 0.005% of woodwork contract – minimum \$500
- ▶ Any party to the contract may request an inspection
- ▶ Inspection reports are available 7 days after issued to the woodworker

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## Woodworker Accreditation



### To become accredited:

- Application Fee
- AWS Test; QCP Test
- 10 References (Architect/GC/Owner)
- Plant Inspections and Qualification Visit
  - Examples of Work for each AWS Section & Grade
  - Review of Completed Projects and Shop Drawings

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## Accreditation Process

- Woodworkers are inspected at least 3 times.
- Must undergo at least 2 project inspections and 1 plant inspection before they become fully accredited
- All woodworkers must be re-inspected every 3 years in order to maintain their accreditation

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## No Restraint of Trade

No requirement of AWI membership to be accredited.

Must understand and comply with the AWS.

OK to BID, but be sure the firm can qualify before awarding contract.

“Public Work” – That’s OK. In your Contract Documents you say any **qualified** woodworker.

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## How to find QCP participant firms:

Back of Book

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## Impartial QCP Inspections

- Upon Request
- As Required
- At Random

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## Installation

Certified Fabrication is Prerequisite for Certified Installation



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## Proof of Certification



### Inspection Labels

### Final Certification Letter



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## Reminder

- 1 Specify Q-Certification**  
Use the language below in your specification
- 2 Register Your Project**  
Complete the brief form at [www.awiqcp.org/register](http://www.awiqcp.org/register) and receive a project number
- 3 Record Your Number**  
Put the project number into your project specification

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## Quality Certification . . .

- Enhances reputation
- Reduces management cost
- Reduces exposure to liability



**Consider the Consequences**

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Thank You!



46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165  
571-222-6559 or 855-345-0991

[www.awiqcp.org](http://www.awiqcp.org) [info@awiqcp.org](mailto:info@awiqcp.org)

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## Questions?

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January 29, 2014



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