

# Architectural Woodwork Standards

## USER'S GUIDE

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Sponsored by the Architectural Woodwork Institute, the Architectural Woodwork Manufacturers Association of Canada, and the Woodwork Institute (hereinafter called the Associations), these new joint standards represent the best of what all three organizations had to offer in defining the minimum requirements of material and workmanship for the fabrication and installation of architectural woodwork. The joint standards are based on three definitive levels of work: Economy, Custom, and Premium Grade.

These standards are a combination and refinement of what the Associations previously offered individually. They are different and distinctly new in their layout, requirements, etc., and nothing should be assumed to have transferred across unaltered. It is advised, whether you are a design professional, manufacturer, or installer, to thoroughly review these standards.

These standards are both a voluntary and a definitive document, intended to spell out the requirements for satisfactory performance when referenced as part of contract documents. The document is intended to be used in total, not in part. For example, if a project specification requires compliance with Section 10, then compliance with the Preface and the Product, Execution, and Compliance portions of Sections 1-5 (along with Appendix A and the Glossary as referenced) is also required, as applicable. The Introduction, Table of Contents, Suggestion Form, General portions of Sections 1-12, and the Appendixes are generally not part of these standards for compliance purposes.

**STANDARDS DOCUMENT** is divided as follows:

<b>Introduction</b>	<b>Section 6 - Interior &amp; Exterior Millwork</b>
<b>User's Guide</b>	<b>Section 7 - Stairwork &amp; Rails</b>
<b>Suggestion Form</b>	<b>Section 8 - Wall Surfacing</b>
<b>Table of Contents</b>	<b>Section 9 - Doors</b>
<b>Preface</b>	<b>Section 10 - Casework</b>
<b>Section 1 - Submittals</b>	<b>Section 11 - Countertops</b>
<b>Section 2 - Care &amp; Storage</b>	<b>Section 12 - Historic Restoration Work</b>
<b>Section 3 - Lumber</b>	<b>Appendix A</b>
<b>Section 4 - Sheet Products</b>	<b>Glossary</b>
<b>Section 5 - Finishing</b>	<b>Appendix B</b>

**USER'S GUIDE** is intended as a tool to enhance your understanding of the philosophy behind the layout of these standards.

**SUGGESTION FORM** is provided as a common means for the users of these standards to submit comments and suggestions for improvement. The form is located at the end of this User's Guide.

**PREFACE** covers those areas of importance to be reviewed in advance of using the standards.

**SECTION 1** addresses minimum submittal requirements, including shop drawings, samples, etc.

**SECTION 2** addresses minimum care and storage (environmental condition) requirements to be maintained before, during, and after the delivery, storage, and installation of product.

## USER'S GUIDE

**SECTIONS 3-5** address the minimum acceptable performance and appearance characteristics of lumber panel and finishing materials to be used within the standards' product sections (Sections 6-12). These sections do not attempt to establish raw material grades. They define the minimum characteristics for these materials when used in a product governed by Sections 6-12 based on the specified Grade of work (Economy, Custom, or Premium).

**SECTIONS 6-12** address minimum acceptable millwork product fabrication and installation requirements based on the specified Grade of work (Economy, Custom, or Premium).

**APPENDIX** pages provide guidance and information related to the work and should be reviewed in advance of using the standards.

**GLOSSARY** provides definitions of terms used throughout these standards.

**EACH SECTION** is organized into four areas of importance:

**GENERAL** - covers general information about the subject matter, the scope of work, and the requirements applicable to the scope of work in the absence of specifications. The general information portion of Part I contains: Basic Considerations (important information for a design professional), Recommendations (for consideration by design professionals), Acknowledgments (of materials or products relative to this section that might not otherwise be readily known), and Industry Practices (methods of work and material selections applicable to the sections in the absence of specifications).

**PRODUCT** - covers minimum material, machining, and assembly (manufacturing) requirements for the Grade of work selected or required.

**EXECUTION** - covers minimum installation requirements for the Grade of work selected or required.

**COMPLIANCE** - covers ways of verifying compliance with the standards.

**SECTION TEXT** is laid out in a numerical, indented, outline format, wherein each statement, issue, or rule becomes a specific, uniquely referenced item. Additional discussion or qualifications to an item are indented to the right, immediately below, creating a columnar effect.

In the **PRODUCT** and **EXECUTION** portions of each section, an additional table format illustrates particular requirements that are applicable only to a particular Grade or Grades of work.

The concept of "**UNLESS SPECIFIED OTHERWISE**" is a significant aspect of these standards. When referenced in contract documents, these standards shall establish the minimum contractual compliance requirements for materials, fabrication, installation, and workmanship - in the absence of any specific contractual requirement to the contrary. If there is a conflict between the plans, specifications, and these standards, the **PLANS** and **SPECIFICATIONS SHALL PREVAIL**.

# USER'S GUIDE

As a rule of thumb, unless otherwise noted, the statements or rules contained within the **GENERAL**, **COMPLIANCE**, and the beginning of the **EXECUTION** portions of each section are equally applicable to all Grades of work, as shown in the following format example taken from Section 7:

1.2 **BASIC CONSIDERATIONS**

- 1.2.1 **ACCEPTABLE REQUIREMENTS** of lumber and/or sheet products used within this woodwork product section are established by Sections 3 and 4, unless otherwise modified herein.
- 1.2.2 **CONTRACT DRAWINGS** and/or **SPECIFICATIONS**, furnished by the design professional, shall clearly indicate or delineate all material, fabrication, installation and applicable building code/regulation requirements.
- 1.2.3 **CROSS GRAIN** in band-sawn or laminated members might cause objectionable color variation when finished.
- 1.2.4 **EDGES** in veneer-laminated members or where multiple layers are exposed by shaping might cause objectionable color variation when finished.

**OTHERWISE**, within the **PRODUCT** or **EXECUTION** portions, when a rule applies specifically to a particular Grade or Grades of work, it is shown with a bullet mark in one of the right-hand columns. These columns are both color-coded and headed with an E, C, or P to indicate Economy, Custom, or Premium Grade, respectively. A sample from the Section 7 **PRODUCT** portion is shown below:

DESCRIPTION				E	C	P			
M A T E R I A L	↑↑	<b>MATERIAL</b> (continued)							
	4.2	↑↑	At <b>EXPOSED SURFACES</b> (continued)						
		4.2.12	↑↑	For <b>TRANSPARENT FINISH</b> (continued)					
			4.2.12.7	4.2.12.7.10	Have visible panel <b>EDGES, REVEALS</b> , and/or <b>SPLINES</b> , when appropriate, that are:				
				4.2.12.7.10.1	Full length.				
				4.2.12.7.10.2	<b>MILL-OPTION.</b>			●	
				4.2.12.7.10.3	<b>MATCH</b> species of panel face.			●	●
				4.2.12.7.10.4	<b>COMPATIBLE</b> for color and grain.			●	
				4.2.12.7.10.5	<b>WELL-MATCHED</b> for color and grain.			●	
				4.2.12.7.10.6	A minimum of 0.020" (0.5 mm) nominal <b>THICKNESS</b> that precludes show-through of core.			●	●
	4.2.13	At <b>SEMI-EXPOSED SURFACES:</b>							
		4.2.13.1	For <b>OPAQUE</b> finish, permits natural and manufacturing defects, provided the surface is filled solid.						

The **ARROW** in the above example is used on a page-by-page basis to indicate where there is additional coverage of a topic on a previous or a subsequent page. The following description shown is included at the beginning of each table:

ARROWS INDICATE TOPIC IS CARRIED FROM ↑ OR ONTO ↓ ANOTHER PAGE.

Where space allows, **VERTICAL TITLES** are also provided within the first three left-hand columns of the tables to help keep track of subject areas.

# USER'S GUIDE

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**UNIQUE** to Sections 3, 4, 6, 9, 10, and 11, the numerical outline also incorporates an alpha character to further separate or define the outline string. For example, within **SECTION 3**, the alpha character is used to differentiate between **HARDWOOD** and **SOFTWOOD**, as shown in the following example from Section 3:

		DESCRIPTION		E	C	P											
↑↑ <b>4.2</b>	<b>MATERIAL</b> (continued)																
	↑↑ <b>4.2.2</b>	<b>FINISH WIDTH</b> (continued)															
		4.2.2.9	Nominal 12" (305+ mm) =		11" (279 mm)												
		4.2.2.10	Nominal 12+" (305+ mm) =		1" (25 mm) Less than nominal size												
4.2.3	When <b>MACHINE SANDED</b> , a reduction of 1/32" (1 mm) off the above thicknesses or widths is permitted.																
↓↓ <b>4.2a</b>	<b>MATERIAL - HARDWOOD</b>																
	4.2a.1	Rules shall apply only to the following species:															
	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><b>ALDER</b></td> <td style="width: 33%;"><b>LAUAN</b></td> <td style="width: 33%;"><b>OAK, WHITE</b></td> </tr> <tr> <td><b>ASH</b></td> <td><b>MAHOGANY, HONDURAS</b></td> <td><b>POPLAR</b></td> </tr> <tr> <td><b>BIRCH</b></td> <td><b>MAPLE, HARD &amp; SOFT</b></td> <td><b>TEAK</b></td> </tr> <tr> <td><b>CHERRY, AMERICAN</b></td> <td><b>OAK, RED</b></td> <td><b>WALNUT, AMERICAN</b></td> </tr> </table>						<b>ALDER</b>	<b>LAUAN</b>	<b>OAK, WHITE</b>	<b>ASH</b>	<b>MAHOGANY, HONDURAS</b>	<b>POPLAR</b>	<b>BIRCH</b>	<b>MAPLE, HARD &amp; SOFT</b>	<b>TEAK</b>	<b>CHERRY, AMERICAN</b>	<b>OAK, RED</b>
<b>ALDER</b>	<b>LAUAN</b>	<b>OAK, WHITE</b>															
<b>ASH</b>	<b>MAHOGANY, HONDURAS</b>	<b>POPLAR</b>															
<b>BIRCH</b>	<b>MAPLE, HARD &amp; SOFT</b>	<b>TEAK</b>															
<b>CHERRY, AMERICAN</b>	<b>OAK, RED</b>	<b>WALNUT, AMERICAN</b>															
4.2a.1.1	For <b>SPECIES NOT LISTED</b> , length requirements and size/exposed area of permitted natural characteristics shall be as agreed to between owner/design professional and manufacturer/installer.																

**UNIQUE** to Sections 10 and 11, additional specific material, fabrication, and installation requirements have been provided for casework and/or countertops to be used in a laboratory-type setting. These requirements are only applicable if a project's contract documents specifically require compliance to such.

For further clarification or explanation, call your local Association representative.

# Architectural Woodwork Standards

## Improvement Suggestion Form

I believe that the following suggestion will improve the Architectural Woodwork Standards.

Please look at Section # \_\_\_\_\_, Page # \_\_\_\_\_, Item # \_\_\_\_\_

Suggestion (please fully describe the addition, deletion, and/or revision you feel will improve these standards):

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Please include any additional descriptive sheets, drawings, or product data that may be needed to fully explain your suggestion.

For further clarification or input, you may contact me at:

Company Name: \_\_\_\_\_

My Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Fax, mail, or e-mail your completed suggestion form to one of the following sponsor Associations:**

**AWI**  
Architectural Woodwork Institute  
46179 Westlake Drive, Suite 120  
Potomac Falls, VA 20165  
Fax: 571-323-3630  
www.awinet.org

**AWMAC**  
Architectural Woodwork  
Manufacturers Association of Canada  
516 - 4 Street West  
High River, Alberta, T1V 1B6, Canada  
Fax: 403-652-7384  
www.awmac.com

**WI**  
Woodwork Institute  
P. O. Box 980247  
West Sacramento, CA 95798-0247  
Fax: 916-372-9950  
www.woodworkinstitute.com