Proposed AWI Standard for Wood Frames

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Table of Contents

1.0 Purpose

a) Provide standards and tolerances for the quality and fit of wood frames, blinds and shutters, window sash, and related interior finishes (henceforth referred to as “Product”).

b) Establish ~~minimum~~ aesthetic and performance standards intended to provide a well-defined degree of control over a project’s quality of materials and workmanship for Product.

2.0 Scope

a) Provides aesthetic and performance standards for shop fabricated Product.

2.1 Included

a) Product as specified within the following sections per CSI's MasterFormat:

- 06 48 00 Wood Frames
  - 06 48 16 Interior Wood Door Frames
  - 06 48 19 Ornamental Wood Frames
  - 06 48 26 Wood-Veneer Frames
- 06 49 00 Wood Screens and Shutters
  - 06 49 16 Wood Blinds
  - 06 49 19 Wood Shutters

2.2 Not Included

~~a) Installation of Product~~

a) Exterior Product

b) Fire rated Product

c) Structural components, wood framing, timber, grounds, in-wall blocking, backing, furring, brackets, or other anchorage that becomes an integral part of the building's walls, floors, or ceilings, panel products, sheathing, siding, decking or planking are not furnished or installed under the scope of this standard's requirements.

d) Machining for hardware supplied by others

e) Product as specified within the following sections per CSI's MasterFormat:

- 06 48 13 Exterior Wood Door Frames
- 06 48 23 Stick-Built Wood Windows
- 06 49 13 Wood Screens
- 08 14 00 Wood Doors
- 08 52 00 Wood Windows

f) Product as specified under ANSI/WDMA I.S. 1A Interior Architectural Wood Flush Doors (latest edition) or ANSI/WDMA I.S. 6A Interior Architectural Wood Stile and Rail Doors (latest edition).

g) Wood frames at hot tubs, whirlpools, saunas, steam rooms, bathtubs, and showers

3.0 Requirements

3.1 General

a) The following requirements shall govern unless a project's contract documents require otherwise.

b) Should a conflict be discovered within this standard, the least restrictive requirement shall prevail.

c) Manufacturer/supplier shall provide drawings in accordance with AWI 100 - Submittals (latest edition).

d) When applicable, manufacturer/supplier shall verify field measurements.

e) Unless otherwise indicated, requirements apply equally to all aesthetic grades.

f) Any term used herein that is defined by the AWI Glossary uses only that definition for conformance to this standard.

3.1.1 Measurements

a) This standard is written with the International System of Units (SI) followed by the United States customary system of measurement in brackets.

b) The system of measurement used in the project's original contract documents and architectural drawings shall dictate which system of measurement within these standards is used for verification of compliance.

c) The United States customary measurement is typically a "soft" conversion of the SI measurement. In order to make the SI number more conceptually coherent and consistent, most conversions for less than 152.4 mm [6"] in dimension are "soft" converted to the nearest 0.1 mm. For measurements above 152.4 mm [6"], the "soft" value is converted to the nearest 1 mm.

d) "Inconspicuous," when used in this standard, means not readily visible without careful inspection at a distance of:

Premium	Custom	Economy
610 mm [24"]	1219 mm [48"]	1829 mm [72"]

e) Gaps and flushness between components shall be tested with a feeler gauge at points where components are required to contact as indicated within this standard.

3.1.2 Special Requirements

~~a) Shall be included when specified in the contract documents (special requirements include moisture resistant materials, fire retardant materials, seismic installation).~~

a) When seismic installation is required, such requirements and details shall be specified in the contract documents.

b) Requirements for Product, such as moisture resistant or fire-retardant materials, shall be specified in the contract documents.

3.1.3 Environmental Conditions

a) Requirements of this standard are contingent upon maintaining proper interior environmental controls prior to, during, and after installation. See AWI 200 - Care and Storage (latest edition).

3.1.4 ~~Manufacturer/Supplier~~ Requirements for Installation

~~a) Installation of Product shall be in accordance with ANSI/AWI 0620 - Finish Carpentry/Installation (latest edition).~~

a) Manufacturer/supplier shall provide drawings indicating required location of blocking and supports. See ~~the~~ AWI 100 - Submittals (latest edition).

b) Manufacturer/supplier shall provide documented instructions for Product installation, fastening/joinery methods, instructions and fastener details for attachment to adjacent panels and/or components.

c) Installation of Product shall be in accordance with ANSI/AWI 0620 - Finish Carpentry/Installation (latest edition).

3.1.5 Default Performance Requirements

a) Unless otherwise specified, Product shall comply with the following minimum defaults:

- Custom Grade
- Unfinished closed-grain hardwood intended for an opaque finish.

3.2 Material

a) Materials used for the construction of Product covered within the scope of this standard shall adhere to the requirements set forth in AWI 300 - Materials (latest edition) for specified aesthetic grade.

b) Materials used for the same purpose, within the scope of this standard, shall be consistent throughout a project.

c) Delamination or separation is not permitted.

d) Type II water-resistant adhesive is required.

e) Contact adhesive is not permitted.

f) Product within 152.4 mm [6”] of contact with the finished floor shall be solid wood, particleboard or fiberboard with a 24-hour thickness swell factor of 5.5% or less in accordance with ASTM D1037 (latest edition), or veneer core substrate with Type II adhesive.

3.2.1 Component Minimum Thickness

a) Split jamb, thinnest member:

Premium	Custom	Economy
19.1 mm [.750”]	19.1 mm [.750”]	17.5 mm [.689”]

b) Rabbeted frame:

Premium	Custom	Economy
38.1 mm [1.500”]	33 mm [1.300”]	27 mm [1.063”]

c) Cased opening/ornamental frame:

Premium	Custom	Economy
27 mm [1.063”]	19.1 mm [.750”]	17.5 mm [.689”]

d) Applied stop:

Premium	Custom	Economy
Not permitted	12.7 mm [.500”]	9.5 mm [.375”]

e) Ploughed-in stop 19.1 mm [.750”], let in a minimum of 6.4 mm [.250”] into frame.

f) Sash:

Premium	Custom	Economy
44.5 mm [1.750”]	34.9 mm [1.375”]	34.9 mm [1.375”]

g) Stiles and rails, blinds and shutters:

Premium	Custom	Economy
19.1 mm [.750”]	19.1 mm [.750”]	12.7 mm [.500”]

h) Flat panel, blinds and shutters:

Premium	Custom	Economy
12.7 mm [.500”]	12.7 mm [.500”]	6.4 mm [.250”]

i) Raised panel, blinds and shutters:

Premium	Custom	Economy
19.1 mm [.750”]	19.1 mm [.750”]	12.7 mm [.500”]

3.2.2 Solid Wood

a) Shall be of one hardwood species for the entire project, at the option of manufacturer/supplier.

b) Cut shall be at the option of the manufacturer/supplier and consistent throughout the project.

c) Finger-jointed trim shall be:

Premium	Custom	Economy
Not permitted	Not permitted	Permitted

d) Trim over 50.8 mm [2”] wide applied flat to wall surfaces and at doors and windows, shall have reverse side:

Premium	Custom	Economy
Backed out	Backed out	Backed out at the option of the manufacturer/supplier

3.2.2.1 Solid Wood, Opaque Finish

a) Shall be closed-grain hardwood

3.2.3 Panel Products

3.2.3.1 Panel Products, Transparent Finish

a) Flat panel core shall be:

Premium	Custom	Economy
Particleboard, MDF, or combination core	Particleboard, MDF, or combination core	At the option of the manufacturer/supplier

b) Veneer shall be of one species for the entire project, at the option of manufacturer/supplier.

c) Veneer face grade shall be:

Premium	Custom	Economy
ANSI/HPVA HP-1 (latest edition) Grade AA	ANSI/HPVA HP-1 (latest edition) Grade A	At the option of the manufacturer/supplier

d) Veneer slicing shall be:

Premium	Custom	Economy
Plain-sliced	Plain-sliced	At the option of the manufacturer/supplier

e) Veneer matching shall be:

Premium	Custom	Economy
Book matched and balanced within each panel face	Book matched	At the option of the manufacturer/supplier

3.2.3.2 Panel Products, Opaque Finish

a) Shall be:

Premium	Custom	Economy
MDF or closed-grain hardwood veneer ANSI/HPVA HP-1 (latest edition) minimum Grade B on MDF, particleboard, or combination core	MDF or closed-grain hardwood veneer ANSI/HPVA HP-1 (latest edition) minimum Grade C on MDF, particleboard, or combination core	MDF or closed-grain hardwood veneer ANSI/HPVA HP-1 (latest edition) minimum Grade D on MDF, particleboard, or combination core

3.2.4 Glass and Glazing

a) Glass class, type, thickness, color, and/or edge treatment shall be specified.

b) Glass used in conjunction with Product shall be in accordance with ANSI Z97.1 (latest edition).

~~b) Glass type, thickness, color, and/or edge treatment shall be specified.~~

c) Glazing material and method of glazing is at the option of the manufacturer/supplier.

d) Glass shall be sized to prevent binding and set to prevent shifting.

e) Glazed openings shall be trimmed with stops on both faces. One face shall have removable stops.

3.3 Structural

a) Construction methods and materials shall be consistent throughout the project.

b) Attached frame casing/trim shall be in accordance with ANSI/AWI 0622.0646 - Millwork & Wood Trim.

c) Panels shall have adequate space to move, float, expand, and/or contract as a result of temperature and/or relative humidity.

d) Assembled joints shall be securely attached with glue and/or mechanical fasteners.

e) Cut outs and/or other related alterations shall maintain the structural integrity of Product.

f) Door jambs shall be solid wood or veneer faced lumber core.

3.3.1 Frame, Straight

a) Shall include machining for specified hardware and/or gasketing when supplied by manufacturer/supplier.

b) Frame type shall be at the option of the manufacturer/supplier.

c) Square edge frame components shall be dadoed, notched, mortised, doweled or equivalent joinery method when intersecting each other.

d) Intersecting moulded edges other than square or with a radius of 1.6 mm [.063”] or more shall be:

Premium	Custom	Economy
Mitered or coped	Mitered or coped	At the option of the manufacturer/supplier

3.3.1.1 Door, Sidelite, or Transom

a) Jamb components and casing/trim shall be:

Premium	Custom	Economy
Factory sized with allowance for installation	Factory sized with allowance for installation	Oversized or sized at the option of the manufacturer/supplier with allowance for installation

b) Assembly of jamb components and casing/trim shall be:

Premium	Custom	Economy
Completed in the factory in the largest practical size with allowance for installation	Prepared and bundled in sets with allowance for installation	Prepared at the option of the manufacturer/supplier with allowance for installation

3.3.1.2 Cased Opening/Ornamental

a) Jamb components and casing/trim shall be:

Premium	Custom	Economy
Factory sized with allowance for installation	Factory sized with allowance for installation	Oversized or sized at the option of the manufacturer/supplier with allowance for installation

b) Assembly of jamb components and casing/trim shall be:

Premium	Custom	Economy
Completed in the factory in the largest practical size with allowance for installation	Prepared and bundled in sets with allowance for installation	Prepared at the option of the manufacturer/supplier with allowance for installation

3.3.1.3 Window

a) Jamb components and casing/trim shall be:

Premium	Custom	Economy
Factory sized with allowance for installation	Factory sized with allowance for installation	Oversized or sized at the option of the manufacturer/supplier with allowance for installation

b) Assembly of jamb components and casing/trim shall be:

Premium	Custom	Economy
Completed in the factory in the largest practical size with allowance for installation	Prepared and bundled in sets with allowance for installation	Prepared at the option of the manufacturer/supplier with allowance for installation

3.3.2 Frame, Radius

a) Assemblies shall be fabricated from components in the longest practical length.

b) Factory assembled in sections as large as practical for field installation.

c) Radius woodwork assemblies require construction of solid machined, laminated plies, core veneered, block laminated, or kerfed solid wood (See Figure 160).

d) Solid machined and block laminated components shall be divided to minimize the exposure of cross grain in the face of the member.

e) Angle of grain at the face of the curved member shall not exceed 30 degrees, unless a small part size requires otherwise (See Figure 161).

f) Dado joinery shall completely house the male member throughout the entire length of joint.

g) Chord segmentation is not permitted (See Figure 162).

3.3.2.1 Transparent Finish

a) Radius components shall be constructed of:

Premium	Custom	Economy
Laminated plies or veneer faced block cores	Laminated plies or veneer faced block cores	At the option of the manufacturer/supplier

b) When laminated, resawn solid wood shall be reassembled in the same order and orientation as sawn:

Premium	Custom	Economy
Required	Required	At the option of the manufacturer/supplier

c) Joinery at straight legs to radius members shall be:

Premium	Custom	Economy
Spline or half-lap, glued and mechanically fastened	Spline or half-lap, glued and mechanically fastened	At the option of the manufacturer/supplier

d) Block lamination at segmented materials shall be:

Premium	Custom	Economy
Cut from the same board when practical	Cut from the same board when practical	At the option of the manufacturer/supplier

e) Block lamination at segmented joints shall be staggered.

f) Block lamination shall have similar grain angle at adjacent segment ends.

3.3.2.2 Opaque Finish

a) Radius components shall be constructed of:

Premium	Custom	Economy
Laminated plies or veneer faced block cores	Laminated plies or veneer faced block cores	At the option of the manufacturer/supplier

b) When laminated, resawn solid wood is not required to be reassembled in the same order and orientation as sawn.

c) Joinery at straight legs to radius members shall be:

Premium	Custom	Economy
Spline or half-lap, glued and mechanically fastened	Spline or half-lap, glued and mechanically fastened	At the option of the manufacturer/supplier

d) Block lamination at segmented materials shall be of the same species and are not required to be cut from the same board.

e) Block lamination at segmented joints shall be staggered.

f) Block lamination shall have similar grain angle at adjacent segment ends.

3.3.3 Window Sash

a) Stile and rail profiles shall be at the option of manufacturer/supplier.

b) Joinery shall be splines, slots, mortises, or dowels at the option of manufacturer/supplier.

c) Half lap joints are permitted at intersecting muntins and shall be set at right angles both horizontally and vertically.

d) Bottom rails shall be beveled to fit the slope of the window frame sill.

3.3.4 Blinds and Shutters Components

a) Stiles, rails and slats, shall be fabricated from solid wood.

b) Stiles and rails shall be fabricated with mortise and tenon, dowel, or equivalent joinery method.

c) Slats shall be dadoed, doweled, or mortised into stiles.

d) Slats shall overhang each other by a minimum of 3.2 mm [.125”].

e) Stationary slats shall be at an angle of 45 to 60 degrees from horizontal, at the option of the manufacturer/supplier and consistent throughout the project.

f) Stationary slats with square edge profile, when dadoed into stiles shall have moulding trim that covers dado slots on exposed face(s).

g) Stationary slats with radius edge profiles shall be mortised into stiles.

h) Movable slats shall pivot on a dowel inserted into stiles.

i) Movable slats shall have a wood vertical connecting control bar that is fastened on center of slats. Control bar and slats shall allow the entire section of connected slats to freely pivot.

3.4 Aesthetic

a) Aesthetic performance, in relation to this standard, refers to and is an evaluation of surfaces exposed following installation.

b) The three levels of performance are Premium, Custom, and Economy:

Premium Grade	**Custom Grade**	**Economy Grade**
The aesthetic grade defining the highest degree of control over materials, workmanship, and manufacture	The aesthetic grade defining a high degree of control over materials, workmanship, and manufacture	The aesthetic grade defining the minimum degree of control over materials, workmanship, and manufacture

c) Cores shall not be exposed.

d) Exposed surfaces shall be consistent for color, pattern, and/or wood species throughout the entire project.

e) At opaque finish, natural characteristics and manufacturing defects are permitted, provided the surface is filled solid and inconspicuous.

~~f) Natural characteristics and manufacturing defects at exposed surfaces shall be inconspicuous.~~

f) Voids, wane, and unfilled knots are permitted when permanently concealed after installation.

g) Fastener holes in pre-finished Product shall be filled with matching joint filler (putty).

h) Exposed fasteners are not permitted, except at access panels. All other fasteners shall be inconspicuous.

i) Fasteners, at exposed surfaces, shall be kept to a minimum, countersunk, filled, and compatible for color. Wherever possible, penetrate through quirks and/or reliefs.

j) Repairs shall be inconspicuous.

k) Surfaces requiring factory finish shall be finished in accordance with ANSI/AWI 0400 Factory Finishing (latest edition).

3.4.1 Radius Components and Assemblies, Transparent Finish

a) Adhesives shall be compatible for color to laminated material.

3.4.2 Exposed Surfaces, Transparent Finish

a) Solid wood shall be:

Premium	Custom	Economy
Well-matched for color and grain	Compatible for color and grain	Color and grain at the option of the manufacturer/supplier

b) Laminated solid wood components shall be:

Premium	Custom	Economy
Well-matched for color and grain	Compatible for color and grain	Color and grain at the option of the manufacturer/supplier

c) Laminated veneer components shall be:

Premium	Custom	Economy
Well-matched for color and grain	Compatible for color and grain	Color and grain at the option of the manufacturer/supplier

d) Adjacent veneer and solid wood components shall be:

Premium	Custom	Economy
Compatible for color and grain	Compatible for color and grain	Color and grain at the option of the manufacturer/supplier

e) Adjacent veneer panels shall be:

Premium	Custom	Economy
Well-matched for color and grain	Compatible for color and grain	At the option of the manufacturer/supplier

3.4.3 Edges

a) Jamb edgebanding shall be a minimum of:

Premium	Custom	Economy
Hardwood 6.4 mm [.250”] or greater in thickness, same species as veneer face	Hardwood 3.2 mm [.125”] or greater in thickness, same species as veneer face	Hardwood or veneer tape, compatible species as veneer face

3.4.3.1 Transparent Finish

a) When not solid wood, visible edges shall be edgebanded with solid wood, veneer, or veneer tape a minimum of .5 mm [.018”] thick and:

Premium	Custom	Economy
Same species as panel face and well-matched for color and grain	Same species as panel face and compatible for color and grain	Same or compatible species at the option of the manufacturer/supplier

b) Edgebanding shall be applied before or after the face material.

c) Finger joints in veneer tape used as edgebanding are permitted.

d) Solid wood when applied as an exposed edge, finger joints are:

Premium	Custom	Economy
Not permitted	Permitted at one per 2438 mm [96”] of edge length	Permitted

3.4.3.2 Opaque Finish

a) Visible edges shall be filled and sanded MDF; or edgebanded with paintable PVC, paintable ABS, closed-grain hardwood veneer, or closed-grain solid wood.

b) Edgebanding shall be applied before or after the face material.

c) Finger joints in veneer tape used as edgebanding are permitted.

d) Solid wood when applied as an exposed edge, finger joints are:

Premium	Custom	Economy
Not permitted	Permitted at one per 2438 mm [96”] of edge length	Permitted

3.4.4 Tolerances

3.4.4.1 Machining, Exposed

a) Sharp edges shall be eased.

b) Flat wood surfaces require a minimum of:

Premium	Custom	Economy
150 grit sanding	120 grit sanding	15 KMPI or 100 grit sanding

c) Profiled and shaped wood surfaces require a minimum of:

Premium	Custom	Economy
120 grit sanding	20 KMPI or 120 grit sanding	15 KMPI or 100 grit sanding

d) Turned wood surfaces require a minimum of:

Premium	Custom	Economy
180 grit sanding	120 grit sanding	15 KMPI or 100 grit sanding

e) Visible sanding marks, excluding turned surfaces, shall be inconspicuous.

f) Tear out, nicks, and/or hit and miss machining is not permitted when visible after installation.

g) Glue or joint filler (putty), when used, shall be inconspicuous and match the adjacent surface for smoothness.

3.4.4.2 Joints

a) Shall be assembled to meet the tolerances defined within this standard and be securely attached, with any adhesive residue removed from exposed surfaces.

b) Exposed fasteners shall be countersunk through the exposed material surface, kept to a minimum, and shall be:

Premium	Custom	Economy
Set in reliefs and quirks where possible	Set in reliefs and quirks where possible	Placement at the option of the manufacturer/supplier

3.4.4.3 Gaps

a) Gaps at factory joints not exceeding the widths indicated shall be permitted if filled with color compatible material.

b) Gaps at miter or butt joinery shall not exceed:

Premium	Custom	Economy
.3 mm [.012”] by 20% of the joint length	.4 mm [.016”] by 20% of the joint length	.6 mm [.025”] by 20% of the joint length

c) Gaps at parallel surface joints shall not exceed:

Premium	Custom	Economy
.3 mm x 101.6 mm [.012” x 4”] and shall not occur within 1829 mm [72”] of a similar gap in the same joint	.4 mm x 152.4 mm [.016” x 6”] and shall not occur within 1524 mm [60”] of a similar gap in the same joint	.6 mm x 229 mm [.025” x 9”] and shall not occur within 1219 mm [48”] of a similar gap in the same joint

d) Gaps at exposed surface edge joints shall not exceed:

Premium	Custom	Economy
.3 mm [.012”]	.4 mm [.016”]	.6 mm [.025”]

3.4.4.4 Flushness

a) Wood to wood at miter or butt joinery shall not exceed:

Premium	Custom	Economy
.1 mm [.004”]	.2 mm [.008”]	.3 mm [.012”]

b) Wood to non-wood at miter or butt joinery shall not exceed:

Premium	Custom	Economy
.3 mm [.012”]	.4 mm [.016”]	.6 mm [.025”]

c) Non-wood to non-wood at miter or butt joinery shall not exceed:

Premium	Custom	Economy
.3 mm [.012”]	.4 mm [.016”]	.6 mm [.025”]

3.4.4.5 Warp

a) As a lineal ratio, per 305 mm [12”] in the diagonal, width, and/or length, warp ~~of Product (See Figure 5, E)~~ shall not exceed:

Premium	Custom	Economy
.8 mm [.031”] or portion thereof	1.2 mm [.047”] or portion thereof	1.6 mm [.063”] or portion thereof

b) Measurements for warp shall be taken on the concave face of the panel (See Figure 5, E).

Example: A panel with dimensions of 813 mm [32”] x 1219 mm [48”], as illustrated (See Figure 5-E) will have a diagonal measurement of 1465 mm [57.689”]. In custom grade, the maximum distance between the string and the face of the panel will be 5.8 mm. (1465 mm / 305 mm x 1.2 mm = 5.8 mm [57.689” / 12” x .047” = .226”])

4.0 Figures / Illustrations

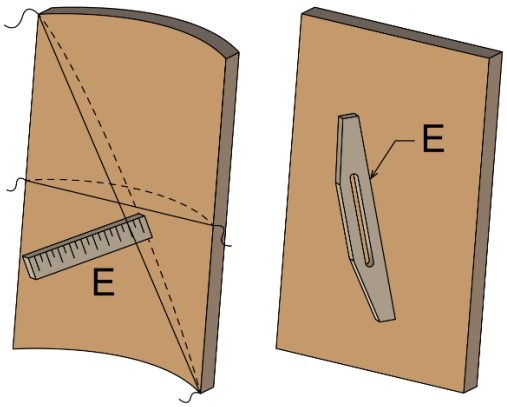

Figure 5 – Compliance Testing Measurement

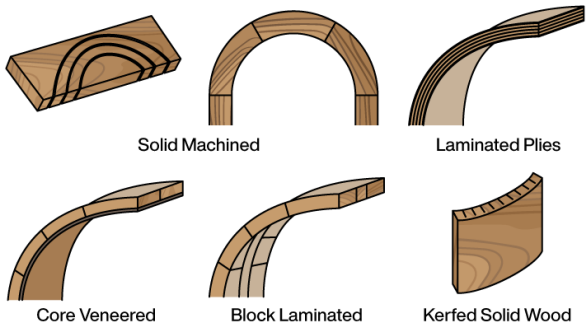

Figure 160 – Radius Woodwork Assemblies

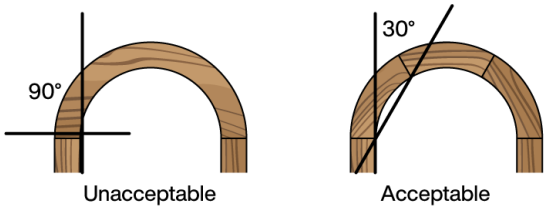

Figure 161 – Grain Angle

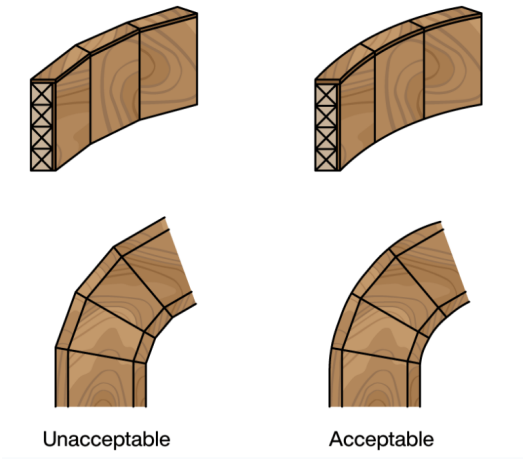

Figure 162 – Chord Segmentation

5.0 Supplemental

5.1 Glossary

a) The Architectural Woodwork Institute Glossary can be found at awinet.org

5.2 Design Professional Responsibilities

a) Examine product technical data sheets to determine if material performance (e.g., scratch and wear resistance) is appropriate for the project.

5.2.1 ~~Contract Document~~ General Specification Requirements

a) Accessories, cut outs, and locations

b) Hardware placement, manufacturer, product model numbers, product finish color and/or other related accessories

c) Grain or pattern direction

d) Chemical resistant finish or surfaces

e) Flame spread rating

f) Fire rated Product

g) Moisture resistance

h) Seismic fabrication and/or installation

i) Insulation from adjacent heating and cooling sources

j) Interior clearance

k) Illustrate/identify specific trim and/or moulding profiles required

l) Overall Product finished thickness

m) Color requirements for opaque finish

n) AWI Finishing System Number or Finishing Technology

o) Staining requirements for transparent finishes

p) Glass type, thickness, edge treatment and glazing requirements

q) Unique panel surface patterns on elevation illustrations

r) Specific installation hardware and/or related assembly mounting systems, including design, engineering, specifications and drawings for assembly suspension.

5.2.2 ~~Wood Specifications~~ Material Specification Requirements

~~a) Species~~

~~b) Grain direction~~

5.2.2.1 Solid Wood

a) Species

b) Grain direction

c) Cut (plain, quartered, rift)

5.2.2.2 Veneer

a) Species

b) Grain direction

c) Method of slicing (plain, quartered, rift, or rotary)

d) Core type

e) Veneer matching requirements

f) Veneer figure and other unique visual characteristics are not a function of a veneer species and/or its grade. If required, Design Professional/Specifier shall identify such veneer figure and visual characteristics in the contract documents.

g) If the Design Professional has pre-selected/identified specific veneer(s) for project, then the project specifications are to identify the veneer supplier and the flitch number(s).

~~5.2.4~~ 5.2.2.3 Decorative Laminate ~~Specifications~~

a) Pattern and color

b) Pattern direction

c) Core type

d) Material grade

e) Laminate finish

5.3 Surface Categories

5.3.1 Exposed

a) Surfaces normally visible after installation

5.3.2 Concealed

a) Surfaces not normally visible after installation

5.4 References

a) AWI 100 - Submittals (latest edition)

b) AWI 200 - Care & Storage (latest edition)

c) AWI 300 - Materials (latest edition)

d) ANSI/AWI 0400 - Factory Finishing (latest edition)

e) ANSI/AWI 0620 - Finish Carpentry/Installation (latest edition)

f) ANSI/HPVA HP-1 (latest edition)

g) ANSI Z97.1 (latest edition)

h) ANSI/AWI 0622/0646 Millwork & Wood Trim

i) ANSI/WDMA I.S. 1A- 2021 Industry Standard for Interior Architectural Wood Flush Doors (latest edition)

j) ANSI/WDMA I.S. 6A- 2021 Industry Standard for Interior Architectural Wood Stile and Rail Doors (latest edition)

k) ASTM D1037 (latest edition)