This guide specification is intended to be used with the *North American Architectural Woodwork Standards* (*NAAWS*) the quality standard published by the Woodwork Institute and the Architectural Woodwork Manufacturers Association of Canada.

This is a narrow scope section covering architectural wood doors.

Woodwork Institute offers two quality assurance programs and a Certified Seismic Installation Program. The Certified Compliance Program allows manufacturers and installers who are accredited by the Woodwork Institute through a program of inspections and testing to certify their own work. Woodwork Institute inspectors will re-inspect work certified by accredited shops on request. The Monitored Compliance Program requires multiple inspections of both the manufactured product and of the installation, with reports issued to all parties after each inspection. Costs of these programs are borne by the door manufacturers and installers. Language requiring both programs is included in this guide spec: Please select one program, and delete the other. Don’t require both. More information is available at <http://woodworkinstitute.com>.

Where materials or grades need to be selected, possible choices are in brackets and in [**Bold**]. In some cases we may not have been able to list all available choices. We have tried to provide ample annotation. Notes and comments are in gray shaded text boxes such as this one.

We haven’t included language for sustainable building programs such as LEED. While careful material selections may contribute to several LEED credits, we are not qualified to provide the specification language. Please consult a qualified authority if green certification is a goal.

While we have tried to include ample annotation within the guide specification, helpful information may be found in the *North American Architectural Woodwork Standards*, which can be downloaded at no cost from <https://www.naaws-committee.com/>.

*Revised November 2016*

# GENERAL

## SUMMARY

### Section Includes

Select the applicable items from the list below

#### **[Flush wood foors]**

#### **[Stile and rail wood doors]**

#### **[Factory finishing]**

Factory finishing is strongly recommended. It is extremely difficult to get a quality finish under job-site conditions.

### Related sections

#### Rough carpentry: Wood blocking or grounds inside finished walls or above finished ceilings

#### Door hardware

#### Door frames

## REFERENCES

### Minimum standards for work in this section shall be in conformity with the *North American Architectural Woodwork Standards* (*NAAWS*), latest edition.

All of the other standards you would reference are themselves referenced within *NAAWS.*

## SUBMITTALS

### Shop Drawings

#### Submit shop drawings in conformance with the requirements of the *North American Architectural Woodwork Standards,*

#### **[Furnish a Woodwork Institute Certified Compliance Label on the first page of the shop drawings.]**

Include 2. if you specify Woodwork Institute Certified Compliance.

#### Submit two copies, one of which will be returned with reviewed notations. Make corrections noted (if any) and distribute required copies prior to the start of work.

### Samples

#### Submit four **[finished]** samples of each species and cut of wood to be used. Lumber samples should be a minimum of 6 inches by 12 inches, plywood samples should be a minimum of 12 inches by 12 inches. Samples shall represent the range of color and grain expected to be provided.

#### [Submit four additional samples of each material for the use of the paint trade.]

Include this item if doors are to be finished at the job site.

## QUALITY ASSURANCE

### Work shall be in accordance with grade or grades specified of the *North American Architectural Woodwork Standards.*

### **[Certified Compliance**

Woodwork Institute Certified Compliance provides a prequalification for the subcontractor. Bidders will either be Woodwork Institute Affiliates, or they will understand that their work will be inspected by a Woodwork Institute staff member. Architects, owners, and inspectors may request an inspection of Certified Compliance work at any point in the construction process. For better quality sssurance choose either Certified Compliance or Monitored Compliance NOT BOTH.

#### **Before delivery to the job site, the woodwork supplier shall provide a Woodwork Institute Certified Compliance Certificate indicating the millwork products being supplied and certifying that these products fully meet the requirements of the grade or grades specified.**

#### **At completion of installation, the woodwork installer shall provide a Woodwork Institute Certified Compliance Certificate indicating the products installed, and certifying that the installation of these products fully meets the requirements of the grade or grades specified.**

#### **All fees charged by the Woodwork Institute for its Certified Compliance program are the responsibility of the millwork manufacturer and/or installer and shall be included in their bid.]**

### **[Monitored Compliance**

Monitored Compliance requires that work be inspected by Woodwork Institute staff. Inspections are performed of the shop drawings, at the beginning of fabrication, at the time of delivery to the job, at the beginning of installation, and at completion. Select either Certified Compliance or Monitored Compliance NOT BOTH.

#### **All millwork and the installation thereof for this project shall be monitored for compliance to the contract documents by a Woodwork Institute Director of Architectural Services.**

##### **Full particulars of the Woodwork Institute Monitored Compliance Program may be found at the Institute website at [www.woodworkinstitute.com](http://www.woodworkinstitute.com/) or by calling the administrative office at (916) 372-9943.**

#### **Millwork and/or installation found to be noncompliant (and not corrected) will be rejected.**

#### **Issuance of a Monitored Compliance Certificate is a prerequisite of acceptance.**

#### **All fees charged by the Woodwork Institute for its Certified Compliance program are the responsibility of the millwork manufacturer and/or installer and shall be included in their bid.]**

### Qualification

#### Firm (woodwork manufacturer) with not less than 5 years of production experience similar to this project, whose qualifications indicate the ability to comply with the requirements of this section.

#### The woodwork manufacturer must have at least one project in the past 5 years where the value of the woodwork was within 20 percent of the cost of woodwork for this project.

### Single-source responsibility: A single manufacturer shall provide and install the work of this section.

## DELIVERY STORAGE AND HANDLING

### Deliver materials only when the project is ready for installation and the general contractor has provided a clean storage area.

#### Delivery of architectural millwork shall be made only when the area of operation is enclosed, all plaster and concrete work is dry, and the area broom clean.

#### The work area shall be well-ventilated and protected from direct sunlight, excessive heat, rain or moisture. Temperature shall be maintained between 60 and 90 degrees F and relative humidity between 45% and 65%. The HVAC system shall be on and functioning.

## SCHEDULING

### Coordinate fabrication, delivery, and installation with the general contractor and other applicable trades.

# PRODUCTS

## COMPONENTS

### Flush wood doors

If no flush doors are required, delete all of A.

#### Faces at wood veneered doors shall be **[species], [cut],** with **[\_\_\_\_\_\_]** veneer match.

The species is the species of tree, such as red oak, walnut, or cherry. If the species is maple, birch, or ash, you may want to specify all sapwood or all heartwood, as there is a big difference in color between the two. White birch, white maple, and white ash indicate all heartwood; red birch and brown maple indicate all heartwood. All heart maple is generally not used.

Veneer cut may be plain sliced, quarter sliced, rift, or rotary cut. The figure (appearance) of the grain differs according to the cut. Matching is the system of placing veneer leaves on the panel. Book matched is the most common system; slip match is also frequently used. Rotary-cut veneers may be wide enough to make single leaf faces, however the figure may be objectionable.

#### Faces at plastic laminate faced doors: **[Manufacturer], [pattern]**

#### Faces at doors for opaque finish: **[Closed grain hardwood] [MDO] [MDF]**

#### Core: **[Hollow-grid] [particle board] [staved lumber] [structural composite lumber] [per door schedule]**

Select one of the above, or door schedule. Structural composite lumber and particle board are recommended.

### Stile and rail doors

If there are no stile and rail doors, delete all of B.

#### Wood type: **[Species, cut] [Closed grain hardwood]**

See the note at A1 for a discussion of species and cut. Select closed grain hardwood for painted doors.

#### Construction:

##### Stiles and rails: **[Solid lumber][Veneered construction]**

##### Panels: **[Solid lumber][Veneered construction]**

##### **[Veneer shall be [book] [slip] match.]**

Delete c. if veneered construction isn’t selected for either stiles and rails or panels. Veneered construction will provide a better color and grain match of all elements of the door. Veneered doors may also be less likely to warp.

See the note at A1 for a discussion of species cut and match.

## FABRICATION

### Grade: *North American Architectural Woodwork Standards* **[Custom][Premium]** Grade.

Premium Grade is a higher standard aesthetically. There are no structural differences between the grades for slab doors. There are some small differences in construction for stile and rail doors.

### Doors shall be **[3] [5] [7]**-ply construction

Three-ply construction is only used at plastic laminate faced doors and MDF faced doors. Five- and seven-ply doors are equally durable.

### Assemble exterior doors with type 1 glue.

### Special characteristics: Type, size, and location of lights and louvers; astragals, edging, flashing and specialty hardware; X-ray and sound requirements; and transom panels shall be as indicated on the door schedule.

### Construction of fire-rated doors shall be per the requirements of the label service listing.

### **[Blueprint match: Work at room(s) [\_\_\_\_\_\_\_\_\_\_] shall be blueprint-matched.**

This item (2.02 F) is only necessary if there is an area where a blueprint match is desired. Similar language must be inserted in the sections specifying wood paneling, wood trim, and wood doors.

#### **All work in this/these area(s) shall be Woodwork Institute Premium Grade.**

#### **Casework, paneling, doors and wood trim shall be provided by the same manufacturer.**

#### **Veneers shall be taken from the same flitch, to be selected by the architect.**

#### **Faces at cabinet doors, drawer fronts and false fronts shall be sequence matched, shall run and match vertically, and shall be sequence matched with adjacent wall paneling and/or doors.**

#### **Faces at exposed ends of cabinets shall be selected from the same flitch, and shall be well matched to the adjacent paneling and to the cabinet fronts.**

#### **All components including casework, paneling, doors and trim shall be factory finished at the same time in the same facility.]**

### **[Factory finishing**

As noted above, factory finishing is strongly recommended. In addition to getting a better finish, you are moving the air quality problems off-site, where a proper spray booth will protect the environment and the health of the finishers. It is still worthwhile to select a low VOC finishing system, as some touch up will be required at the job site.

#### **All products provided in this section shall be factory finished using *North American Architectural Woodwork Standards* finish system [\_\_\_\_\_].**

#### **Finish shall be Woodwork Institute [Premium OR Custom] Grade.]**

# EXECUTION

## EXAMINATION

### Verify that frames are set square, plumb and level, and in plane.

#### Report openings that are not within tolerance to the general contractor for correction before hanging doors.

## INSTALLATION

### Install all work in conformance with the *North American Architectural Woodwork Standards,* latest edition.

#### Installation shall conform to the *NAAWS* grade of the items being installed.

### Doors shall be secured in place, square, plumb, and level.

### Hardware shall be installed complete and as recommended by the manufacturer

## ADJUSTING AND TOUCH UP

### Before completion of the installation, the installer shall adjust all moving and operation parts to function smoothly and correctly

### All nicks, chips and scratches in the finish shall be filled and retouched. Damaged items that cannot be repaired shall be replaced.

## CLEANUP

### Upon completion of installation, the installer shall clean all installed items of pencil and ink marks, and broom clean his area of operation, depositing debris in containers provided by the general contractor.

END OF SECTION