3.2 Manufacturer / Supplier Responsibility

Manufacturer Supplier Responsibility

a) Submittals shall be provided to the general contractor, design professional, and/or owner for review prior to fabrication. Submittals are the intellectual property of the manufacturer/supplier.

b) The manufacturer/supplier is encouraged to make technical suggestions and raise questions with the design professional. Changes and/or substitutions incorporated into shop drawings do not constitute a request for approval. Changes to material and/or design must be specifically identified within the submittal package. The manufacturer/supplier must then request approval of the suggested changes by submitting a formal request for approval. Means and methods of manufacturing, such as joinery details, are not considered material changes unless otherwise detailed in the specifications.

c) Descriptions of substitutions and/or change requests from contract requirements shall be itemized separately from the shop drawings and shall be submitted no later than the time of shop drawing submittal. Descriptions of substitutions shall include notation of the reason for the change request and a statement of the anticipated impact to schedule, cost, and possible impact to other trades.

d) The manufacturer/supplier shall show each component of Product in plan, elevation, and section view as needed to clearly indicate the Product being provided, its location, and its...
method(s) of construction and attachment. The manufacturer/supplier shall illustrate wall or ceiling-applied surfacing and/or standing and running trim, wall mounted shelf standards, door and window frames, and the attachment methods.

3.2.1 Cover or Title Sheet

a) A cover or title sheet is required and shall include the following as applicable: project name, address, specified AWI grade, and scope.

b) Each drawing set shall indicate the aesthetic and performance grade, duty level, and include a list of contact information, including phone numbers and email addresses of the design professional firm, general contractor, manufacturer/supplier, installation firm (if other than manufacturer/supplier), and finisher firm.

3.2.2 Table of Contents

a) The table of contents shall list all items in the manufacturer/supplier’s submittal package including the following:

b) Page number and title of each shop drawing; list of materials, hardware, and schedule that includes manufacturer/supplier’s name and model number; and description of each type of finish sample submitted.

3.2.3 Drawings, General

a) Shop drawings and sample submittals may also serve as a guide for other trades.

b) Typical drawings and universal minimum scale for drawings.

<table>
<thead>
<tr>
<th>View</th>
<th>Ratio</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Plan</td>
<td>1:50</td>
<td>6.4 mm [0.250&quot;] = 305 mm [12&quot;]</td>
</tr>
<tr>
<td>Plan &amp; Elevations</td>
<td>1:20</td>
<td>9.5 mm [0.375&quot;] = 305 mm [12&quot;]</td>
</tr>
<tr>
<td>Sections</td>
<td>1:10</td>
<td>38.1 mm [1.50&quot;] = 305 mm [12&quot;]</td>
</tr>
<tr>
<td>Details</td>
<td>1:4</td>
<td>76.2 mm [3&quot;] = 305 mm [12&quot;]</td>
</tr>
</tbody>
</table>

c) Drawing sheets shall be a minimum of 279 mm x 432 mm [11" x 17"] and a maximum of 610 mm x 914 mm [24" x 36"]]. Each sheet shall be sequentially numbered and dated. Drawings may be formatted as PDF electronic submittals.

d) Shop drawings shall be submitted for review and approval to the general contractor for submittal to the design professional.

e) Individuals tasked with review of shop drawings should be familiar with Product fabrication...
and have an understanding or working knowledge of the referenced standard as well as the
design concept. If not submitted electronically, two printed copies are required for review. After
review, one marked copy shall be returned to the general contractor or manufacturer/supplier
within 10 days.

f) The four common levels of approvals and corresponding actions are as follows:

<table>
<thead>
<tr>
<th>Review Stamp</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved</td>
<td>Design professional keeps one marked copy, returns a marked set to the</td>
</tr>
<tr>
<td>Approved as Noted</td>
<td>manufacturer/supplier through the general contractor, and requests the</td>
</tr>
<tr>
<td></td>
<td>required number of final copies. Proceed with production.</td>
</tr>
<tr>
<td>Revise and Resubmit</td>
<td>Design professional returns one set requesting correction and re-submittal and keeps one copy to check against re-submittal. Manufacturer/supplier revises as noted and resubmits for approval before proceeding with production.</td>
</tr>
<tr>
<td>Rejected</td>
<td>Do not proceed with production. Meet to determine modifications to be made to gain approval, then resubmit.</td>
</tr>
</tbody>
</table>

g) Reviews of submittals by the general contractor indicated as "Reviewed," "Reviewed for General Conformance," "No Exceptions Taken," or with similar language or notes shall be considered "Approved" or "Approved as Noted."

h) Drawings shall include a reference plan showing location of each Product as well as the relationship of Product to the building or its architectural features.

i) Drawings shall include orientation of grain and/or directional pattern.

j) Drawings shall include veneer species, cut, leaf match/balance, panel match, and room match for transparent finish and, if specified, flitch number and supplier.

3.2.3.1 Drawings, Casework

a) Drawing requirements shall include each of the items listed within this section, as applicable.

b) Trim and/or scribe shown in full-sized profile; casework shown in plan, elevation, and section view; dimensions necessary to construct cabinets; dimensions and attachment method of face frame members.

c) Type and thickness of drawer members (including heights and depths), type and thickness of cabinet doors, and section of each cabinet type or configuration.

d) Details of all joinery and connections, specification and location of special metal work
and/or specialty items, and provision for field dimensions.

e) Details showing method of cabinet attachment to walls and floors.

f) Blocking or strapping requirements and their locations (blocking to be furnished by others) shown on cabinet elevations with dimensions above finished floor (A.F.F.).

g) Details need not be drawn if properly referenced to a supplementary document.

3.2.3.2 Drawings, Wall and Ceiling Surfaces

a) Drawing requirements shall include each of the items listed within this section, as applicable.

b) Plan and elevation views for each panel, section, and detail, including the following: vertical and horizontal sections, corner joints (both inside and outside), panel to panel joints, panel to base or floor joint, panel to crown or ceiling joint, attachment, and hardware.

c) Trim profiles shown at full scale.

d) Details showing method of attachment to walls, ceilings, and floors, as well as hardware placement.

e) Code compliant handrail and guard rail systems.

3.2.3.3 Drawings, Standing and Running Trim

a) Drawing requirements shall include each of the items listed within this section, as applicable.

b) Trim in detail with elevations as necessary for coordination with other trades.

c) Column, pilaster, cornice, finial, and/or pediment construction details, sufficient in scale to clearly indicate unique features in construction.

d) Sections for corners (inside and outside), joints (within the Product and between Product and other trim), relationship to features provided by other trades, attachment, and relationship to adjacent trim members or features.

3.2.3.4 Drawings, Wood Stairs and Railings

a) Drawing requirements shall include each of the items listed within this section, as applicable.
b) Engineer seals shall be provided by the manufacturer/supplier if required by the design professional in the contract documents.

c) Rail and trim profiles shown at full scale.

d) Plan and elevation views for both rise and run of stair as well as section of balustrade.

e) Sections and details for joinery, attachment, relationships to adjacent figures, and handrail brackets and other hardware.

f) Locations of field joints for multiple-member stringers, risers, and treads (if such pieces can not be made out of one piece of material in length).

3.2.3.5 **Drawings, Integrated Door Opening Assemblies**

a) Drawing requirements shall include each of the items listed within this section, as applicable.

b) Trim profiles shown at full scale and manufacturer/supplier specifications or cut sheet(s) showing construction.

c) Sections of the construction for slab doors, panel core type, plies, and thickness, including but not limited to:

d) Stile and rail construction (including solid or veneered core, core type, and thickness).

e) Dimensions and locations of blocking, mortises and holes for hardware, and cut-outs.

f) Undercuts.

g) Hardware blocking locations for slab doors.

h) Stile and rail joinery, including any raised panels, additional mouldings, louvers, and/or lites.

i) Fire-protection ratings for fire-rated doors.

3.2.3.6 **Drawings, Countertops**

a) Drawing requirements shall include each of the items listed within this section, as applicable.

b) Each countertop in plan view, including indication of field joints and type, quantity, and layout of joint fasteners.
c) Sink size, type, mounting, and location if provided to manufacturer/supplier prior to shop drawing submittal.

d) Support brackets with notation, if furnished by others.

e) Attachment of casework (including fastener type, quantity, and layout).

f) For wall-mounted tops without cabinets below, plan view indicating build up locations and support locations.

g) Method of attachment to supports for wall mounted tops (including fastener type and quantity).

h) Elevation view and interface to casework and support brackets.

i) Detail showing front and/or end overhang, front and/or end edge types, splash type and height, drip groove, and end splash return.

3.2.4 Material List, General

a) Material list requirements shall include each of the items listed within this section, as applicable.

b) Panel core type and thickness with any special compliance requirements, such as moisture-resistant, fire retardant, NAF (No Added Formaldehyde) or ULEF (Ultra Low Emitting Formaldehyde), and CARB (California Air Resources Board).

c) Laminates (including the applicable ISO 4586-3 grade and thickness).

d) Solid phenolic core, solid surface product, and specialty work such as metal, glass, fabric, etc.

e) All adhesive types being used (including locations being used and adhesive type shown on detail drawings).

f) Hardware (except fasteners) with manufacturer/supplier's documented specifications.

g) Finishing requirements.

h) Material list shall include requirements for veneer matching.

3.2.4.1 Material List, Transparent Finish

a) Items to be used for exposed, semi-exposed, and/or concealed surfaces, including lumber species and cut for transparent finish (cut may not be relevant for items exposed on several sides such as turnings, railings, and some mouldings).
b) Orientation of grain and/or directional pattern as well as veneer species, cut, leaf match/balance, panel match, and room match for transparent finish and, if specified, flitch number and supplier.

3.2.4.2 Material List, Opaque Finish

a) Material listing requirements shall include lumber and veneer species.

3.2.4.3 Material List, Casework

a) Material listing requirements shall include each of the items listed within this section, as applicable.

b) Exposed, semi-exposed, and concealed surface materials. If HPDL is specified, indicate thickness, panel core type and thickness, and edgebanding material and thickness.

c) Door core type and thickness; and edgebanding material and thickness.

d) Drawer box material and construction, as well as drawer slides or guides.

e) Hinges (including finish), adjustable shelf pins, brackets, and/or standards (including finish).

f) Miscellaneous finish hardware (including finish), glass type(s) and thickness, and special metal work and/or specialty items.

g) Adhesive type(s) for panel layup and assembly, and/or any other materials such as plastic resin or acrylic.

3.2.4.4 Material List, Wall and Ceiling Surfaces

a) Material listing requirements shall include each of the items listed within this section, as applicable.

b) If wood veneer, cut, match, and balance of veneer leaves within the panel; match and balance of panels to adjacent panels; match and balance of panels within an elevation; match and balance of panels within a room; and match and balance of panels to adjacent doors or casework.

c) Panel core type and thickness.

d) Backing or balance sheet (including thickness and material description).

e) Edgebanding (including thickness and material description).
3.2.4.5 **Material List, Standing and Running Trim**

a) Material listing requirements shall include each of the items listed within this section, as applicable.

b) Related material requirements and specifications and, if applicable, wood treatments and adhesives.

c) Trim schedule for each room or area (including detail reference and blocking requirements).

d) Column, pilaster, cornice, finial, and/or pediment for each location (including opening number, location, elevation reference, and section reference).

3.2.4.6 **Material List, Wood Stairs and Railings**

a) Material listing requirements shall include related material requirements and specifications.

3.2.4.7 **Material List, Integrated Door Opening Assemblies**

a) Material listing requirements shall include each of the items listed within this section, as applicable.

b) Panel core type and thickness for slab doors.

c) Solid or veneer edgebanding (including adhesive type and any fire rated components).

d) Match and/or balance of door veneer leaves (including within door face and to adjacent paneling).

e) Stile and rail construction (including solid or veneered core, core type, and thickness).

f) Frame schedule (including, as applicable: opening number and location; elevation and/or screen references; handing and pre-machining requirements; hardware types and locations; glass lite openings with size, type, and location; and louver openings with size, type, and location).

3.2.4.8 **Material List, Countertops**

a) Material listing requirements shall include each of the items listed within this section, as applicable.
b) Panel core type and thickness, exposed material(s) description and thickness, and backing sheet material(s) and thickness at countertop and/or splash.

c) Adhesive type used for layup and sealing compound type used at sink cut-outs and/or splashes.

3.2.5 Samples

a) Sample requirements are the same for all Products regardless of the aesthetic grade specified.

3.2.5.1 Hardware

a) Samples, if required for hardware, shall include one sample of each decorative and functional item.

3.2.5.2 Finishing

a) Samples, if required, shall be on material representative of that used for the project and bear a label identifying the date, project name, design professional, general contractor, manufacturer/supplier, finisher, finish technology name and number, and steps used.

b) Panel product samples, if required, shall be a minimum of 203mm x 203mm [8" x 8"] and 6.4 mm [.250"] thick.

c) Lumber product samples, if required, shall be as wide as practical based on species and cut and shall be a minimum of 19.1 mm [.750"] thick by 203 mm [8"] in length.

d) For transparent or stained finishes, samples require a minimum of three sets, bound together, of three samples each. Samples shall indicate the range of color and grain to be expected for each finish selection.

e) For opaque finishes, a minimum of three samples are required for each color selection.

3.2.5.3 Samples and Mock-ups

a) Samples and mock-ups shall include the following:

b) Design professional's written acceptance of all representative visual qualities before proceeding with work (including any approved, altered, or modified methods and techniques used, as required, to achieve intended results)

c) For new work, prepared and approved samples representative of all new molding and/or decorative profiles; panel, frame, stile and rail door, railing, and/or otherwise unique Product assemblies; typical trim joinery and casework construction; and fasteners.
3.2.6 Mock-ups
   a) Mock-ups shall be provided as required by the contract documents.