



NON-FIRE-RATED ARCHITECTURAL WOOD FRAMES

Factory-fabricated interior wood frame specification

MANUFACTURER	Boreal Architectural Products Ltd.
PRODUCT	Non-fire-rated interior architectural wood door frames
MARKETS	Canada and United States
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SECTION 08 14 00

NON-FIRE-RATED ARCHITECTURAL WOOD DOOR FRAMES**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Factory-fabricated, knock-down, non-fire-rated interior architectural wood door frames, including jamb legs, headers, stops, mullions, removable glazing stops, optional casing, factory machining, and factory-applied finishes where specified.
- B. Frame Applications: Swinging single doors, paired doors, double-egress doors, Dutch doors, pocket doors, sliding doors, cased openings, sidelights, transoms, and borrowed-light assemblies, subject to approved shop drawings and fabrication feasibility.
- C. Frame Profiles: Applied-stop frames, single-rabbet frames, double-rabbet frames, and cased openings.
- D. Related work specified in other Sections includes rough-opening construction and blocking, wood doors, glazing, door hardware, field-applied coatings, sealants, access-control devices, and installation.
- E. This Section covers non-fire-rated frames only. Do not use these products where a fire-resistance rating, fire-protection rating, or certification label is required.

1.2 RELATED REQUIREMENTS

- A. Section 06 10 00 - Rough Carpentry: Framing, grounds, and blocking at openings.
- B. Section 08 14 00 - Wood Doors: Door leaves coordinated with specified frames.
- C. Section 08 71 00 - Door Hardware: Hardware sets, schedules, templates, fasteners, and installation.
- D. Section 08 80 00 - Glazing: Glass, glazing materials, and installation at sidelights, transoms, and borrowed lights.
- E. Section 09 91 00 - Painting: Field finishing of unfinished frames where indicated.
- F. Division 28 Sections: Electrified hardware, access control, and security interfaces where applicable.

1.3 REFERENCE STANDARDS

- A. General: Comply with the editions referenced by the Contract Documents and applicable codes. Where requirements conflict, obtain the Architect's interpretation before fabrication.
- B. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications.
- C. ANSI/BHMA A156.115W - Hardware Preparation in Wood Doors with Wood or Steel Frames.
- D. ANSI/AWI 0400-2022 - Factory Finishing.
- E. ANSI/AWI 0620-2024 - Finish Carpentry/Installation.
- F. Architectural Woodwork Manufacturers Association of Canada (AWMAC), North American Architectural Woodwork Standards (NAAWS), Edition 5.0, including applicable errata.

1.4 DEFINITIONS

- A. Applied Stop: Separate wood or MDF stop furnished loose for fastening to the jamb or header after the door and required components have been positioned.
- B. Fixed Stop: Stop machined as an integral feature of a frame component.
- C. Knock-Down Frame: Frame supplied as separate jamb, header, stop, mullion, glazing-stop, and casing components, as applicable, for assembly and fastening at the opening.
- D. Single Rabbet: Door-receiving recess machined directly into the wood frame component.
- E. Double Rabbet: Opposing door-receiving recesses formed by applied jamb components as standard, or machined through solid wood when specifically approved.
- F. Cased Opening: Trimmed opening without a door stop unless otherwise indicated.

1.5 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate rough-opening dimensions, wall construction, jamb depth, frame profile, door thickness, handing, swing, clearances, stops, casing, glazing, hardware, electrical preparation, and finish before preparing shop drawings.
- B. Hardware Coordination: Obtain the final approved hardware schedule and templates before fabrication. Confirm hardware locations, mortise dimensions, fastener requirements, and electrified preparations.
- C. Opening Verification: Verify field dimensions and wall conditions before release for fabrication, or obtain written acceptance of dimensions shown on approved shop drawings.
- D. Glazing Coordination: Coordinate glass thickness, glazing clearances, removable stops, setting materials, safety-glazing requirements, and installation responsibility.
- E. Preinstallation Conference: When required by the Contract Documents, review opening preparation, delivery, storage, environmental conditions, assembly, anchorage, hardware coordination, glazing, finishing, field fitting, and protection with affected trades.

1.6 ACTION SUBMITTALS

- A. Product Data: Submit manufacturer's information describing materials, profiles, available dimensions, fabrication, machining, finishing, delivery, storage, installation, maintenance, and warranty requirements.

- B. Shop Drawings: Prepare specifically for the Project. Identify each opening by mark and indicate frame type, configuration, material, species, finish, wall thickness, jamb depth, face dimensions, stop and rabbet dimensions, joint type, head and sill conditions, mullions, glazing stops, casing, overall dimensions, door size, door thickness, handing, swing, hardware machining, electrified preparation, and field assembly details.
- C. Coordination Drawings: Where sidelights, transoms, borrowed lights, double-egress conditions, pocket doors, sliding doors, electrified hardware, or other special conditions occur, show interfaces with adjacent construction and components.
- D. Samples: Submit a 5 by 10 inch (127 by 254 mm) sample for each selected exposed material and factory finish. Show species, colour, grain, sheen, profile, and workmanship as applicable.
- E. Finish Samples: Submit custom paint, stain, and clear-finish samples on the actual specified frame material. Approved samples establish the standard for colour, sheen, grain, appearance, and workmanship.

1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: Submit evidence of manufacturer's experience when requested.
- B. Product Certificates: Submit statements of compliance with specified materials and applicable referenced standards when requested.
- C. Composite-Wood Emissions Documentation: For MDF supplied into Canada or the United States, submit available documentation demonstrating compliance with governing formaldehyde-emission requirements.
- D. Certified-Wood Documentation: Where certified forest content is specified, submit available documentation identifying applicable material and chain-of-custody information for the product supplied.
- E. Sustainable-Design Documentation: Where the Project pursues LEED or another rating system, submit available product-specific information requested to evaluate potential contribution. Information supplied does not guarantee achievement of a credit.

1.8 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Submit cleaning, touch-up, repair, and protection recommendations for inclusion in operation and maintenance manuals.
- B. Warranty Documentation: Submit executed manufacturer's standard two-year limited warranty.
- C. Record Information: Submit final frame identification, material, finish, and hardware-machining information when required by the Contract Documents.

1.9 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm regularly engaged in factory fabrication and machining of custom architectural wood door frames of the types and scope specified.
- B. Quality Standard: Fabricate frames to applicable AWMAC NAAWS requirements and approved shop drawings.
- C. Single-Source Responsibility: Obtain specified wood frame components from Boreal Architectural Products Ltd. for consistent material, profiles, machining, appearance, and finish.
- D. Mockups: Provide where required by the Contract Documents to verify assembly, profile, joint appearance, hardware coordination, glazing, casing, and finish. Approved mockups may remain as part of the Work if undamaged at Substantial Completion.
- E. Non-Rated Limitation: Do not apply a fire label or represent frames furnished under this Section as fire-rated or suitable for a rated opening.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components after the building is enclosed and conditions permit immediate protected storage. Retain protective packaging and opening identification until required for installation.
- B. Inspect components promptly on receipt. Record transit or concealed damage and notify responsible parties in accordance with delivery requirements.
- C. Store components flat and fully supported in a clean, dry, ventilated, secure interior area. Separate layers with nonstaining spacers where required to prevent distortion and finish damage.
- D. Protect from exterior weather, standing water, excessive humidity, wet work, direct sunlight, dirt, impact, sparks, and abrupt changes in temperature or relative humidity.
- E. Do not store in direct contact with concrete, masonry, damp surfaces, or heat sources. Handle with clean gloves and methods that protect edges, joints, profiles, machining, and factory finish.

1.11 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver, assemble, or install frames until the building is enclosed, wet work is complete and dry, and permanent environmental-control systems maintain conditions representative of normal occupancy.
- B. Interior Use: Products are intended for conditioned interior locations, including ordinary mechanically conditioned washrooms. Do not install where exposed to exterior weather, standing water, continuously wet conditions, uncontrolled moisture, or persistently high humidity.
- C. Acclimatization: Condition materials in the installation area as recommended by Boreal while maintaining protection and required environmental conditions.
- D. Maintain suitable environmental conditions during installation and through Substantial Completion.

1.12 WARRANTY

- A. Manufacturer's Limited Warranty: Provide written warranty covering specified Boreal frame products against manufacturing defects under conditions of normal interior service.
- B. Warranty Period: Two years commencing on the date of Substantial Completion.
- C. Remedy: At Boreal's option, repair or replace a frame component determined to be defective under the warranty.
- D. Exclusions: Improper storage, handling, assembly, installation, field finishing, maintenance, or field alteration; moisture exposure; unsealed field cuts; abuse; impact; incompatible hardware; building movement; and environmental conditions outside manufacturer's requirements.
- E. Unless approved in writing by Boreal, the warranty remedy excludes labour, refinishing, removal, reinstallation, loss of use, and incidental or consequential costs.

PART 2 PRODUCTS**2.1 MANUFACTURER**

- A. Basis-of-Design and Acceptable Manufacturer: Boreal Architectural Products Ltd., Unit 2, 78 Trowers Road, Woodbridge, Ontario L4L 7K5; telephone 905-265-7677; email info@borealarchitectural.ca; website www.borealarchitectural.ca.
- B. Basis-of-Design Product: Boreal Model 260693-WF, Non-Fire-Rated Architectural Wood Door Frames.
- C. Substitutions: Not permitted.

2.2 DESIGN AND PERFORMANCE REQUIREMENTS

- A. General: Provide complete factory-fabricated frame components accurately sized, profiled, machined, and finished where specified for coordinated assembly at the opening.
- B. Classification: Non-fire-rated interior architectural wood frame. No fire-protection rating or fire label is included.
- C. Maximum Overall Assembly Size: 96 inches (2438 mm) wide by 120 inches (3048 mm) high. Do not provide assemblies exceeding 120 inches (3048 mm) in height.
- D. Jamb Depth: As indicated, up to 7-3/4 inches (197 mm), applicable to each specified frame type. No standard minimum jamb depth is established; confirm fabrication feasibility for shallow conditions.
- E. Frame Configuration and Dimensions: As indicated in Contract Documents and approved shop drawings. Do not scale drawings to determine fabrication dimensions.
- F. Service Environment: Conditioned interior use. Exclude exterior, continuously wet, and persistently high-humidity service.
- G. Compatibility: Coordinate frame profile, material, dimensions, joints, finish, glazing, casing, fasteners, door construction, and hardware preparations as a complete opening system.
- H. Performance Claims: No tested structural, impact, cycle, screw-holding, duty-level, or fire-resistance classification is specified unless separately documented in writing for the selected construction.

2.3 MATERIALS

- A. Default Solid Lumber: Premium poplar, kiln-dried and selected for straightness, stability, machining quality, and freedom from defects that would impair appearance or serviceability.
- B. Stain-Grade Solid Lumber: Premium white oak, premium red oak, premium maple, premium birch, premium poplar, or premium cherry, as selected by the Architect and confirmed in approved shop drawings.
- C. MDF Option: Interior-grade medium-density fiberboard complying with ANSI A208.2, furnished on request in place of solid lumber where approved for the application.
- D. Material Consistency: Provide jamb legs, header, stops, mullions, and glazing stops in the selected solid-lumber species or MDF unless a different coordinated material is indicated in approved shop drawings.
- E. Exposed Surfaces: Frames are solid lumber or MDF. Wood veneer, HPL, thermally fused laminate, and other laminated decorative face materials are not included.
- F. Fasteners and Anchors: Supplied by the Installer. Select types, lengths, finishes, spacing, and installation methods suitable for the frame material, substrate, wall construction, and exposure without splitting or distorting the frame.
- G. Glazing Materials: Glass, setting blocks, tapes, sealants, and glazing compounds are specified in Section 08 80 00 and are not included unless expressly indicated in the approved order.

2.4 FRAME CONSTRUCTION - GENERAL

- A. Component Thickness: Jamb legs and header shall be 3/4 inch (19 mm) thick.
- B. Fabrication: Machine components cleanly and accurately. Provide uniform profiles, straight edges, smooth exposed surfaces, and tight-fitting joints free of tear-out, chips, cracks, and defects affecting appearance or assembly.
- C. Assembly: Supply frames knock-down for field assembly and screw attachment. Clearly identify components by opening mark and orientation.
- D. Head-to-Jamb Joints: Provide 45-degree miter joints as standard. Provide other joint configurations only upon request and as shown on approved shop drawings.
- E. Applied Stops: Standard construction; furnish stops loose for field attachment unless otherwise indicated.
- F. Fixed Stops: Machine as integral frame profiles when specifically requested and confirmed in approved shop drawings.
- G. Frame Face, Stop, Rabbet, Reveal, Backbend, and Profile Dimensions: As indicated in approved shop drawings; no universal dimensions are implied by the model number.

- H. Edge Treatment: Ease exposed edges uniformly where appropriate to the selected profile and finish; keep joints and hardware interfaces square where required.
- I. Moisture Protection: Seal factory-cut end grain and concealed surfaces as appropriate for the selected finish system. Identify field-cut surfaces requiring immediate sealing.

2.5 FRAME TYPES AND CONFIGURATIONS

- A. Applied-Stop Frames:
 - 1. Provide flat jamb legs and header with separate loose stops for field attachment.
 - 2. Size, profile, placement, and door clearances as indicated in approved shop drawings.
- B. Single-Rabbet Frames:
 - 1. Machine the single rabbet directly into the wood jamb legs and header.
 - 2. Rabbet and stop dimensions as indicated in approved shop drawings.
- C. Double-Rabbet Frames:
 - 1. Form opposing rabbets with applied jamb components as standard.
 - 2. Integral rabbets machined through solid wood are available where requested and accepted for fabrication.
- D. Cased Openings:
 - 1. Provide jamb and header components without door stops unless otherwise indicated.
 - 2. Coordinate optional casing and finish with adjoining frame components.
- E. Special Door Configurations:
 - 1. Provide frames for single, pair, double-egress, and Dutch doors as detailed in approved shop drawings.
 - 2. Pocket-door and sliding-door frames are custom; coordinate pockets, tracks, guides, clearances, removable components, and access before fabrication.

2.6 SIDELIGHTS, TRANSOMS, AND BORROWED LIGHTS

- A. General: Fabricate coordinated non-fire-rated wood frame assemblies with wood mullions and removable glazing stops where indicated.
- B. Configuration: Provide sidelight, transom, and borrowed-light arrangement, divisions, member profiles, and overall dimensions as shown in approved shop drawings.
- C. Maximum Assembly Size: Do not exceed 96 inches (2438 mm) overall width or 120 inches (3048 mm) overall height.
- D. Mullions: Material and finish matching adjacent frame components unless otherwise indicated. Size and profile as required by approved shop drawings and fabrication feasibility.
- E. Glazing Stops: Removable wood or MDF stops matching the selected frame material and finish; machine and fit for clean joints and replaceable glazing.
- F. Glazing Coordination: Provide fabrication dimensions based on approved glass thickness, edge clearances, glazing materials, and installation details. Glazing is installed under another Section.

2.7 OPTIONAL CASING

- A. Casing is optional, separately priced, and provided only where indicated in the approved order.
- B. Profile, face dimensions, thickness, material, species, joint condition, and finish shall be selected by the Architect and confirmed in approved shop drawings.
- C. Provide matching casing in the same solid-lumber species or MDF material and finish as the frame unless another coordinated selection is approved.
- D. Furnish casing knock-down and accurately cut or machined for the approved joint condition. Field attachment is by the Installer.

2.8 HARDWARE AND ELECTRICAL PREPARATION

- A. Scope: Boreal provides frame machining only. Door hardware, electrical devices, metal reinforcements, anchors, fasteners, wiring, and device installation are not included.
- B. Preparation: Where requested, factory machine for hinges, strikes, closers, pivots, concealed hardware, flush bolts, coordinators, door-position switches, power-transfer devices, electric strikes, and other templated hardware shown in approved shop drawings.
- C. Standards and Templates: Locate and machine hardware in accordance with ANSI/BHMA A156.115W where applicable, approved hardware schedules, and current hardware manufacturers' templates.
- D. Electrified Hardware: Provide machining, drilling, and raceway preparation where needed and shown in coordinated shop drawings. Coordinate access, conductor path, device dimensions, and installer requirements before fabrication.
- E. Fastening to Wood or MDF: Installer shall use hardware fasteners suitable for the selected frame material and shall predrill where required to prevent splitting, mushrooming, or breakout.
- F. Silencers: Factory preparation and silencers are not included.
- G. Changes: Do not alter hardware preparation after release for fabrication without written acceptance of revised dimensions, cost, and schedule.

2.9 FINISHES

- A. Supply Condition: Frames are supplied unfinished by default. Factory painting, staining, and clear finishing are available upon request.
- B. Paint-Grade Material: Premium poplar unless MDF is specifically requested and approved.
- C. Stain-Grade Species: Premium white oak, premium red oak, premium maple, premium birch, premium poplar, or premium cherry, as selected by the Architect.
- D. Factory Paint: Colour, sheen, and appearance selected by the Architect and matched to the approved sample.
- E. Factory Stain: Stain colour and appearance selected by the Architect and matched to the approved sample on the specified species.
- F. Clear Finish: Available upon request; sheen and appearance as selected by the Architect and confirmed by approved sample.
- G. Factory Finishing: Comply with ANSI/AWI 0400-2022 and coating manufacturer's written instructions. Prepare surfaces and apply finish uniformly in a controlled factory environment.
- H. Natural Variation: Variations in colour, grain, figure, and texture inherent in solid wood are acceptable within the specified grade and approved sample range.
- I. Protection: Cure coatings before packaging and use materials that do not abrade, imprint, stain, or react with the finish.

2.10 FACTORY FABRICATION

- A. Fabricate to dimensions indicated on approved shop drawings, accounting for wall finish, floor finish, required clearances, door thickness, hardware, glazing, and field assembly.
- B. Cut miter joints accurately for tight alignment of exposed faces and profiles. Maintain full bearing at joint surfaces.
- C. Machine single rabbets integrally. Fabricate double-rabbet construction with applied jamb components as standard unless integral machining is approved.
- D. Prepare components for screw assembly and attachment without factory-supplied metal clips, concealed anchors, or metal hardware reinforcements.
- E. Machine hardware preparations from final approved templates. Keep mortises, pockets, holes, and raceways clean, accurately located, and free of breakout.
- F. Fit loose applied stops and removable glazing stops to their designated openings; identify orientation and location before packaging.
- G. Fabricate optional casing to the approved profile and dimensions and identify components by opening.
- H. Sand exposed surfaces uniformly and remove dust, oil, handling marks, adhesive residue from unrelated processes, and machining defects before finishing or packaging.
- I. Mark each component in a location concealed after installation to correspond with approved shop drawings.

2.11 SOURCE QUALITY CONTROL

- A. Inspect completed components for material selection, dimensions, straightness, profile, joint fit, surface defects, machining accuracy, finish quality, identification, and completeness before packaging.
- B. Reject or repair components exhibiting splits, open defects, excessive distortion, inaccurate machining, mismatched profiles, unacceptable finish defects, or damage affecting assembly or appearance.
- C. Package components by opening with adequate protection for edges, mitered ends, hardware preparations, profiles, and finished surfaces.

PART 3 EXECUTION**3.1 EXAMINATION**

- A. Examine rough openings, wall construction, blocking, floor elevations, adjoining finishes, environmental conditions, and related work with the Installer present before assembly or installation.
- B. Verify that openings are correctly located, sized, plumb, level, square, and capable of receiving screw-fastened wood frames without distortion.
- C. Verify that wall thickness, jamb depth, door size, handing, swing, hardware, glazing, and frame marks correspond with approved shop drawings.
- D. Confirm that frame components are undamaged, properly conditioned, and complete for each opening.
- E. Do not begin installation until unsatisfactory conditions have been corrected. Commencement of installation constitutes acceptance of conditions affecting the Work.

3.2 PREPARATION

- A. Acclimatize frame components in the installation area in accordance with Boreal's written instructions while maintaining required protection and environmental conditions.
- B. Match components to openings and verify marks, material, species, profile, finish, joint condition, hardware machining, stops, mullions, glazing stops, and casing before assembly.
- C. Provide Installer-supplied shims, fasteners, anchors, and blocking suitable for the frame material and wall construction.
- D. Coordinate concealed wiring and access for electrified hardware before closing or fastening frame components.

3.3 ASSEMBLY AND INSTALLATION

- A. Install by qualified personnel in accordance with approved shop drawings, Boreal's written instructions, ANSI/AWI 0620-2024, applicable AWMAC NAAWS requirements, and hardware manufacturers' instructions.
- B. Assemble knock-down components with tight, aligned joints. Keep jambs and header flush at exposed faces and maintain continuous profiles through corners.
- C. Set frames plumb, level, square, and true to line without twist, bow, open joints, or distortion. Shim at fasteners and hardware locations to maintain alignment.
- D. Screw frames securely to supporting construction using Installer-supplied fasteners appropriate to the substrate and frame material. Predrill solid wood and MDF where required to prevent splitting or breakout.
- E. Maintain uniform clearances and dimensions required for proper door and hardware operation. Coordinate final position with floor finish, casing, glazing, and adjoining construction.
- F. Install loose applied stops after the door and related components have been positioned. Fasten neatly and maintain consistent reveals.
- G. Install removable glazing stops after glazing in accordance with approved details. Do not damage glass or factory finish.
- H. Install optional casing with tight joints and consistent reveals. Casing is not included unless indicated in the approved order.

3.4 FIELD FITTING AND MODIFICATION

- A. Field fitting and modification are permitted as required, provided the work does not weaken frame joints, impair hardware support, expose unfinished material in the completed installation, or affect warranty coverage.
- B. Review modifications affecting miter joints, rabbets, fixed stops, mullions, glazing stops, hardware pockets, electrical raceways, or finished exposed surfaces before cutting.
- C. Use sharp tools and methods that avoid splitting, tear-out, chipping, delamination of MDF surfaces, and damage to factory finish.
- D. Seal exposed solid wood, MDF, end grain, and field-cut surfaces immediately with a finish compatible with adjacent material.
- E. Restore modified exposed surfaces to match the approved finish. Replace components that cannot be modified without impairing assembly, operation, appearance, or warranty coverage.

3.5 FIELD FINISHING

- A. Finish unfinished frames under Section 09 91 00 unless factory finishing is specified.
- B. Before finishing, clean and prepare exposed surfaces, repair minor permitted defects, and sand uniformly without rounding profiles or changing hardware clearances.
- C. Apply compatible sealer, primer, paint, stain, or clear finish to exposed and concealed surfaces as required for balanced protection. Seal field cuts and end grain promptly.
- D. Match approved samples for colour, sheen, and appearance. Do not apply coatings over hardware, glazing surfaces, labels, or electrical components.

3.6 ADJUSTING

- A. Adjust frame components, stops, casing, and related hardware interfaces for correct alignment, uniform reveals, and smooth door operation.
- B. Correct loose fasteners, open joints, bowed members, misalignment, and interference without damaging the frame or adjacent work.
- C. Replace components that are split, excessively distorted, incorrectly machined, or unable to meet the approved appearance and operating requirements.

3.7 CLEANING AND PROTECTION

- A. Remove temporary protective materials at the time recommended for the selected finish. Clean exposed surfaces using nonabrasive products compatible with the material and coating.
- B. Remove construction soil, marks, and residue without changing colour or sheen, raising wood grain, swelling MDF, or damaging joints and profiles.
- C. Protect installed frames from moisture, impact, abrasion, paint overspray, welding damage, and construction traffic until Substantial Completion.
- D. Maintain suitable interior environmental conditions. Repair minor finish damage by accepted methods and replace components that cannot be restored to the approved appearance.

END OF SECTION