Chapter 4-6: Wood, Plastic, and Composites

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4-6.01 General

4-6.01A Work Included

The work listed under this section will normally always be included in Division 6 *Wood, Plastic, and Composites*. This section will include items such as rough carpentry; wood joist trusses; glued laminated (glulam) timbers; pre-engineered wood trusses; prefabricated wood joists; finished carpentry work; cabinets; and countertops.

Review any Standard Special Provisions (SSPs) from Section 99[1], *Building Construction*, Division 6, *Wood, Plastic, and Composites*, that have been included in the project *Special Provisions*, since much of the information therein typically will not be repeated in the following sections of this chapter.

4-6.01B Tips and Suggestions to Prepare for Inspection of Wood and Plastic

1. Check the delivered lumber to confirm that it is of the proper species, grade, and moisture content as required by the project plans and the *Special Provisions*. The lumber will normally be grade stamped from the mill.
2. Spot check the lumber bundles for splits, shake, decay, pockets, crooks, bows, cups, loose knots, and other defects that are not in compliance with the *Special Provisions*. An additional resource to determine compliance is the West Coast Grading and Dressing Rules (WCLB).
3. The lumber must be stored off the ground (typically on 4x cribbing) and remain bundled to prevent warping, twisting, and bending out of shape. The material shall be covered to protect it from the elements.
4. Pressure treated materials for installation against concrete, masonry, or other specified locations should be supplied with required affidavits or certificates from the mill. All cuts, holes, or other modifications made to the treated materials for placement and anchoring must also be re-treated with the specified preservative after the cuts or bores are made and before installation. Watch closely to ensure the Contractor has manually treated all cuts and holes.
5. Check all framing to confirm that it is level, plumb, and aligned in accordance with the project plans. All framing must be adequately braced until the entire assembly is completed.
6. Verify all connections for bolts, nails, and rough hardware are furnished and installed in accordance with the project plans.

[1] Caltrans internal use only

7. All joists should have adequate bearing as required by the project plans and be set with the crown up. Provide the specified allowances for expansion and contraction of the lumber, concrete, masonry, and steel assemblies.
8. Drilling, notching, cutting, or otherwise altering the framing members without specific approval of the structural designer is prohibited. Read through all of the "Framing Notes" on the structural sheets of the project plans for general guidance on permissible size and location of holes and notches.
9. Confirm the proper placement of all bridging, blocking, and bracing. This includes required fire blocking, as well as backing for attachment of other materials and equipment after the framing is complete.
10. Connectors and fasteners should not protrude to interfere with the finished surfaces. Framing members may be countersunk or dapped to allow for flush installation of minor items such as a bolt head, hold-down, or strap.
11. Confirm that all rough hardware and all fasteners installed are in accordance with the authorized submittals.
12. Verify headers are sized as designed and that they have proper bearing and/or suitable connectors and hangers.
13. Plywood grade, dimension, and type of glue shall comply with the requirements of the *Special Provisions* and the project plans. Nailing, blocking, and staggering of joints should also be checked for conformance to the project plans.
14. All screeds, furring, and grounds should be installed as required by the project plans and the *Special Provisions*.
15. Confirm the placement of caulking or sealing, especially in acoustical or waterproofed locations.

4-6.02 Pre-Fabricated Structural Wood Materials

Glued laminated timbers are discussed in Section 4-6.05D(2). Most glulam materials are delivered with a protective coating of plastic or paper. Inspect the materials to verify they have not been damaged during transport and off-loading.

Verify the type, species, grade, and dimensions of the glulam materials conform to the project plans. Also verify that the use of water-resistant adhesive is as required by the *Special Provisions* and the project plans. Note that glulam beams typically have an engineered orientation and may be fabricated with a considerable crown.

Cutting, notching, or drilling of any structural members, unless shown on the project plans, is **not** allowed unless special permission has been granted by the structural designer. Pre-engineered wood trusses are also included under this heading and should

be inspected to ensure that all connecting plates, clips, and fasteners have been installed in accordance with the approved submittals.

Confirm that adequate bracing is provided for all structural members until the entire system is completely erected and permanent bracing installed. Metal saddles and seats are normally provided under the miscellaneous and structural metals sections. Rough framing hardware and hangers (such as Simpson Strong-Tie) are normally provided under the carpentry section.

In recent years, there has been a marked increase in the use of structural composite lumber for beams requiring high strength and/or long spans. Similar to glulam, these beams are manufactured in a variety of cross-sectional sizes and lengths. Common examples are parallel strand lumber (PSL) beams or laminated veneer lumber (LVL). These engineered beams have a higher modulus of elasticity, along with higher allowable shear and bending stresses, when compared to traditional “sawn” lumber. These beams may be especially well suited to applications that are not exposed to the elements.

4-6.03 Shop Drawings

4-6.03A Trusses

The submittals will include drawings that may be 24-by-36-inch sheets or 8-1/2-by-11-inch drawings. These drawings shall show the layout, design loads, member sizes, species, grade, connection plate size, identification, and a stress diagram or other information as required by the *Special Provisions* and the project plans. For complicated members, additional detail may be required.

All designs, calculations, and other engineering documents prepared by the manufacturer must include a professional civil engineer’s stamp registered in the State of California. This is a requirement for all structural elements.

4-6.03B Casework (Cabinets)

Both shop and working drawings are required by the *Special Provisions*. The Woodwork Institute (WI) shall govern the quality of the work.

Submittals with working drawings shall bear the "WI Certification” compliance label on the first sheet of the drawings.

Shop drawings will also consist of color samples of factory-applied finishes and plastic laminate overlay, or possibly samples of resawn lumber surfacing. The color samples will be part of a submittal reviewed and authorized by the Project Architect.

4-6.04 Product Data Bulletins

These will be pre-printed, professionally prepared, typically 8-1/2-by-11-inch, full-color glossy productions listing all of the normal conditions addressed by the manufacturer with respect to the production, installation, use, and operation of the products.

- **Product Data Bulletins (Digital Format):**
  In modern building construction, product data bulletins are provided as professionally prepared digital documents—typically in PDF format—rather than printed glossy sheets. These bulletins contain detailed manufacturer information about building products, including material specifications, installation procedures, performance characteristics, safety guidelines, and maintenance requirements. They often include compliance certifications, sustainability data, and compatibility notes for integration with other building systems.

Once incorporated into an authorized submittal package, product data bulletins become a critical resource for architects, engineers, and contractors. They help ensure that selected products meet design intent, building codes, and project specifications. For construction teams, they provide clear guidance for proper installation and long-term durability, reducing risk and supporting quality assurance throughout the project lifecycle.

4-6.05 Rough Carpentry

This work shall consist of furnishing and installing materials and performing rough carpentry work including wood framing, furring, and sheathing. Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed (not visible in the completed work).

4-6.05A Wood Properties

Wood properties such as strength, hardness, and density are influenced by their category (dimensions) and species. Although there are hundreds, or even thousands, of different wood types in the world, the two main types of wood members used in building construction are sawn lumber and engineered lumber. Sawn lumber must be manufactured to comply with PS 20 “American Softwood Lumber Standard,” and with applicable grading rules of inspection. All lumber used must be nominally sized and dressed S4S (surfaced four sides) unless otherwise described. Engineered lumber consists of wood products manufactured by combining wood scraps such as sawdust, veneers, or even fast-growing wood species with adhesives, resins, or other binding agents.

4-6.05A(1) Wood Classifications

4-6.05A1(a) By Size (see note below):

1. Boards - 2 inches thick or less and wider than 2 inches
2. Dimensional lumber:
    a. Vertical framing lumber:
        i. Vertical framing lumber, nominal 2 by 2 through 4 by 4 inches, must be construction grade or better.
        ii. Vertical framing lumber, nominal 2 by 6 through 4 by 6 inches, must be No. 2 or better.
    b. Horizontal framing lumber:
        i. Horizontal framing lumber, nominal 2 by 4 inches and wider, including joists and rafters, must be No. 2 or better.
        ii. Horizontal framing lumber, nominal 4 by 4 inches and wider, including joists and rafters, must be No. 1 or better.
3. Timbers:
    a. Beams and stringers – 5 by 8 inches minimum
    b. Posts and timbers – 5 by 5 inches and larger
    c. Timbers (nominal 5 inches or thicker) – must be No.1 or better.

4-6.05A1(b) By Category:

1. Structural – stress-graded.
2. Factory and shop – Intended for pre-manufactured items such as molding, doors, and cabinets.
3. Specialties – for items such as siding, scaffold planks, and fence boards.

Note- verify required wood grades on the “Structural Plans” project sheets; likely included as a note in the wood framing section.

4-6.05A(2) Grading

Lumber grading is governed by various agencies and standards. The most common grades we work with are those applied to dimensional lumber. There are many grading agencies and rules applied to grading lumber. Most grading rules stipulate that a maximum of 5 percent of a shipment can fall outside of the requirements for a particular grade. Grade stamps are usually found on the face of structural lumber and on the ends of high-quality finish material other than trim and some siding. In general, it is best to

accept the grading stamp as correct, unless there is some obvious defect. When in doubt, consult with the structural designer.

4-6.05A(3) Dimensions

Dimensions will vary slightly due to drying of the wood fiber. Beams, stringers, studs, and posts are generally 1/2-inch less than the nominal dimensions for S4S lumber, e.g., a 2 x 4 board is actually 1.5 x 3.5 inches. Rough-sawn lumber is true to nominal dimensions but is not typically used for rough carpentry.

4-6.05A(4) Moisture

The industry controls the moisture to ensure that it is less than the value shown on the grading stamp. The amount of moisture in lumber and trim work will typically vary between 8 and 12 percent, depending on the location, type of material, and thickness. Moisture in wide members is more of a problem than in narrow trim stock. To allow for shrinkage, a common practice is to leave gaps at the edges of interior paneling and particleboard underlayment. These gaps will accommodate loss of moisture in the wood fiber and accompanying volume changes; however, this may not be a good practice for particle board.

Average 2-by framing lumber will dry in place sufficiently if left exposed for about four weeks before completely enclosing. If water comes out when a nail is driven in or it looks wet and is heavy, the wood is probably at the fiber saturation point, and should be rejected until the material is satisfactorily dried out. Installation of saturated material may lead to bowing and warping of framing elements in place. These elements would no longer meet the grading rules for the material's use. If the surface looks dry and the weight is about average, it may be assumed that the moisture content is about 19 percent. If the material looks very dry and feels light, it may be assumed that the moisture content is about 12 percent or less.

When using very dry lumber for framing, care must be taken. Very dry lumber used for top plate of a framed wall will be more likely to split when nails are driven. This is especially the case at the very end of the member. Predrilling at end nail locations can be utilized to avoid splitting, where the nailing is perpendicular to the wood grain.

4-6.05B Other Types of Wood

4-6.05B(1) Miscellaneous

a. **Hardwood Lumber**: Woods such as birch or oak may be specified for casework or locker room benches.

b. **Siding**: This material is not used very often. It may have to be custom-shaped to match some existing siding that will be tied into.

c. **Shelving**: This is usually specified as pine with sound and tight knots. The lowest grade that fits the description is No. 2 Common (Sterling) Grade.

4-6.05B(2) Treated Lumber

Wood in contact with concrete or masonry foundations must be preservative-treated Douglas Fir-Larch in accordance with AWPA U1, Category UC3B, or foundation grade redwood, No. 2 or better; verify requirement in the “Framing Notes” on the project structural plans. The treated lumber helps to resist decay and termites. Ledgers attached to the sides of walls may also be pressure-treated; check the requirements of the *Special Provisions* and the project plans. The type of chemical treatment will be listed in the *Special Provisions*, and a certificate of compliance will be required from the treating facility. Also, the wood will have stickers attached that indicate what type of treatment the wood has received. As mentioned earlier in this chapter- verify that the Contractor is manually applying preservative treatment to cut or drilled portions of treated lumber, as required.

4-6.05B(3) Kiln-Dried Lumber

Reserved.

4-6.05B(4) Plywood

The project plans may call for a thickness of 1/2 inch or 5/8 inch for finished plywood. Often, the actual thickness will be 15/32 inch or 19/32 inch, which would be acceptable. The project plans will give a span rating for plywood used as roof or wall sheathing, along with the grades of outer and inner plies and the type of glue used (exterior glue or interior). It is essential that the grading marks identify the material as meeting the requirements of the project plans or *Special Provisions*.

The veneer grades of the plywood specified will be, from best to worst, either N, A, B, C, or D. The plywood classifications range from sheathing (CDX –exterior glue), underlayment, Sturd-I-Floor 2.4.1 (Tongue & Groove), subfloor underlayment, interior appearance grades, to exterior appearance grades. Hardwood plywood is used for special architectural treatments and is manufactured in accordance with Product Standard (PS) 51-71.

4-6.05B(5) Oriented Strand Board (OSB)

The project plans may call out OSB in lieu of plywood. Oriented strand board (OSB) is a type of engineered wood, formed by adding adhesives and then compressing layers of wood strands (flakes) in specific orientations. OSB normally comes in thicknesses of 3/8 inch, 7/16 inch,19/32 inch, etc. One note of caution: OSB may experience rapid strength degradation if wet, such as from significant rainfall. If OSB plywood is placed on the roof and rain is expected, the Contractor should cover it with tarp/Visqueen until the more permanent protection (roofing paper/material) is in place.

4-6.05B(6) Particle Board

The specifications should be reviewed for any requirements for particle board. Particle board used for underlayment typically includes specific installation requirements for items such as nailing, glue-nailing, and layout.

4-6.05C Fasteners

Fasteners play a critical role in ensuring the structural integrity and proper performance of wood-framed construction, and the following guidance outlines the requirements, substitutions, and inspection considerations associated with nailing, hardware, washers, and anchor bolts.

4-6.05C(1) Nailing and Nail Substitution

“Wood Framing Standard-Notes” and “Wood Framing Standard-Details” sheets are included in the structural section of the project plans for projects with wood framing. These sheets include the following information:

1. Minimum nailing schedule for typical framing.
2. Nail edge distances (notes and details).
3. Nailing requirements for various blocking, framing, and splice details.
4. Framing locations where sheathing edge nailing occurs.
5. The note that all structural nailing shall be common wire nails, but that alternate fasteners may be substituted “as approved by the Engineer.” The term “Engineer” is defined by the *Special Provisions*.

Project plans will also provide details for all nailing patterns, which will include the nailing schedules for special job details and blocking~~,~~ and locations for edge and boundary nailing.

Roof and wall sheathing should be checked from the underside of the roof and the inside of the wall to ensure that the nails observed from the roof or outside are embedded in the intended backing or framing member. Nails that miss the framing (shiners) are easily spotted from the underside of the roof or the inside of the wall system.

The “Wood Framing Standard Notes” in the structural section of the project plans require that all structural nailing use common nails. The structural designer may approve alternate fasteners on a case-by-case basis, as outlined below in Section 4-6.05C(1)a.

4-6.05C1(a) Alternative Nailing

The structural designer will review and authorize any nail substitutions for ordinary framing only. However, there is apprehension about substituting 16d box nails for 16d common nails. Usually, the proposal will be for substituting sinkers for common nails, so the concern about 16d box nails will seldom be a problem. There is very little concern about the use of sinkers at the present time.

The approval of an alternate fastener shall include the following three steps:

1. A timely, written request by the Contractor, detailing what is proposed and providing any supplemental information necessary.
2. Concurrence of the project structural designer. This can be resolved by telephone discussion. As an option, the Contractor's request could be handled as a product submittal as long as the Structure Representative and the structural designer agree at that time.
3. Approval should be in writing, either by a job developed letter from the Structure Representative to the Contractor or as an approved submittal from the structural designer to the Contractor.

The requirement for common nails was not intended to apply to special fasteners, such as the approved nails used with framing hardware.

4-6.05C(2) Nailing for Framing Hardware

Hardware such as brackets, joist hangers, ties, clips, and tie-downs is designed for a specific type of nailing. The nailing must be done according to the manufacturer's recommendations in order for the hardware to perform as intended. These recommendations specify the number of nails and the type of nails to be used. Many manufacturers will supply the type of nails required along with the hardware. It is also important that the hardware be installed in accordance with the manufacturer's instructions. Sometimes clips need to be used in pairs to provide the design loading resistance. Since the majority of framing hardware is Simpson Strong-Tie products, field staff will find the Simpson Wood Construction Connectors Catalogue to be an invaluable aid when inspecting connections and hardware.

4-6.05C(3) Washers

Standard cut washers are usually required. However, the project plans may call for special types of washers, such as square washers of 1/4-inch thickness. It is important to use the proper size and thickness of washers, especially for structural connections.

4-6.05C(4) Anchor Bolts

The structural designer may allow or provide for anchor bolts or fasteners to be any of the following: embedded in the concrete or the masonry prior to the pour or the grouting; drilling and placing of expansion anchors in lieu of embedding anchor bolts; and powder actuated fasteners to anchor the plate or sill material to the floors and/or walls. In any case, the diameter, length, and type will be indicated on the details within the project plans. Note that if the project utilizes wooden shear walls, the size and spacing of anchor bolts are critical and will be found on the “Shear Wall Schedule” in the Structural sheets. In addition, these shear walls typically have a hold-down anchor at each end; the location and size of the corresponding anchor bolts would be found by cross-referencing the shear wall schedule, the foundation/framing plans, and the Simpson catalogue.

4-6.05D Prefabricated Structural Wood Members

This work shall consist of designing, furnishing, and installing prefabricated structural wood members including joist trusses, glue laminated timbers, parallel strand lumber, pre-engineered wood trusses, prefabricated wood I-beam joists, and prefabricated shear wall panels.

4-6.05D(1) Joist Trusses

This work shall consist of designing, fabricating, furnishing, and erecting pre-engineered, factory-fabricated joist trusses. Joist trusses shall have wood chords and metal tubular webs.

4-6.05D(2) Glued Laminated (Glulam) Timbers

This work consists of furnishing and erecting pre-engineered, factory-fabricated glued laminated timbers, including glulam beams, headers, and laminated decking. Project architects are generally looking for items that are either “off-the-shelf” or will be manufactured under an established quality control program by the supplier. The items shall arrive on the job with a certificate of compliance. Confirm that the materials are identified by the certificate, conform to what is shown on the approved submittals, and that the workmanship looks good. If the workmanship is questionable, the Project Architect or structural designer should be notified. Notification information should include the nature of the defects to determine acceptability.



Figure 4-6.1. Glulam Beam

4-6.05D2(a) Glulam Beams

The manufacturer utilizes grading and fabrication as required by the American Institute of Timber Construction (AITC) specifications. These specifications are referred to in the *Special Provisions* as PS 56. The grade of the beam will be either industrial, architectural, or premium. The architectural grade is a more readily available off-the-shelf item. It is important to make sure the beams are placed with the proper side up; see Figure 4-6.1 for an illustration of a glulam beam. The glulam is constructed with bottom fibers that are designed for the allowable tension stresses. Glulam beams can be fabricated to include camber. If beams are designed to be continuous, they will be marked “CB.” Wet-use glue will be specified by the *Special Provisions* and project plans and generally be for beams exposed to the elements; members with dry-use glue shall not be accepted.

The following points should be reviewed when checking the glulam:

1. Confirm the certificate of compliance accompanies the material.
2. The factory stamp should appear on each member bearing APA – The Engineered Wood Association (APA)/ Engineered Wood Systems (EWS) certification.
3. Verify the glulam is placed at the location called for on the project plans.
4. Confirm the glulam is placed at the spacing called for on the project plans.
5. Confirm the glulam is placed with the top (crown) up. The crown or top of the glulam will be marked “Top” on the member.
6. Confirm the connecting plates and seats are per the authorized submittals.
7. Confirm that the rough hardware attaching all members to the glulam and glulam to glulam is in accordance with the authorized submittals.

4-6.05D2(b) Laminated Decking

This product is often used for roof decking on roadside rest areas. It is made by gluing three or more layers of boards together in a tongue-and-groove pattern. The Project Architect will specify the requirements for this material.

4-6.05D2(c) Off-The-Shelf Beams

Wood beams are cut to various sizes and lengths. These are manufactured to their own specifications. They need to be evaluated to determine if they are suitable for the use intended as far as the design strength, type of species, and surface appearance. Confirm acceptability with the structural designer.

4-6.05D(3) Parallel Strand Lumber (PSL)

Parallel strand lumber (PSL) is a type of engineered wood made from wood strands that are bonded together. It is used in construction for beams, columns, headers, and posts. See Figure 4-6.2 for an illustration of a PSL beam.



Figure 4-6.2. Cross Section of a Typical Parallel Strand Lumber

4-6.05D(4) Pre-Engineered Wood Trusses

This work includes designing, fabricating, furnishing, and erecting pre-engineered, factory-fabricated wood trusses. See Figures 4-6.3 through 4-6.5 for illustrations.



Figure 4-6.3. Pre-Engineered Trusses

Project plans specify the roof loads to be used. Prior to truss fabrication, a shop drawing submittal for review and authorization is required with calculations, dimensions, and connector's capacity calculations. Any calculations provided in the form of computer output must be accompanied by an interpretation of the abbreviations in the California Building Code (CBC) on wood trusses. The submittals require a wet-signed engineer's stamp registered in the State of California.



Figure 4-6.4. Bundled Trusses Stockpiled on Jobsite

Check the approved submittals for manufacturer's handling instructions and proper storage directions. Also, check for any damage, confirm the manufacturer's stamp on trusses, and obtain a copy of the certificate of compliance.



Figure 4-6.5. Trusses Being Erected

Some of the points to be aware of when inspecting wood roof trusses are:

1. Check locations of any connectors.
2. Reject trusses with loose connectors unless repaired.
3. Verify hoisting per manufacturer recommendations and verify trusses are not damaged.
4. Reject field splicing or repair unless approved by the manufacturer.
5. Verify erection bracing is installed.
6. Verify permanent bracing is in place prior to further loading.
7. Trusses occasionally are required to be doubled, tripled, or even four-ply. Refer to the approved submittals for all nailing schedules and/or bolting requirements.

4-6.05D(5) Prefabricated Wood I-Beam Joists

This work includes designing, fabricating, furnishing, and erecting pre-engineered, factory-fabricated wood I-beam joists; see Figure 4-6.6 for illustration.



Figure 4-6.6. "I" Series Joist (not Plywood Webs)

4-6.05D(6) Prefabricated Shear Wall Panels

This work incorporates the designing, fabricating, furnishing, and installing prefabricated wooden shear wall panels. The diaphragm material for the shear wall may be plywood or metal. See Simpson Strong-Wall and MiTek Hardy Frame for two examples of this product. Note that the anchor bolt and/or hold-down bolt size and locations are critical for these products and must be considered prior to pouring the concrete foundation.

4-6.06 Finish Carpentry

This work consists of furnishing and installing materials and performing finish carpentry. This work includes exterior and interior trim, plywood soffits and panels, plywood and softwood paneling, and installing doors. Finished carpentry includes carpentry work not specified as part of other sections. Finished carpentry is work that is exposed to view.

Confirm that all materials delivered are of the species, grade, type, and sizes specified on the project plans. Also confirm that the material is kiln-dried to the specified moisture content per the project plans, if required. Kiln-dried materials should not be exposed to conditions that will affect the moisture content.

Inspect the condition of the materials for warping, splits, imperfections in the grain, and finishes. Verify that preventative treatment and back-priming have been performed in accordance with the requirements of the *Special Provisions*. Evaluate the workmanship for deficiencies and verify that cutting, fitting, splicing, joining, and mitering are within permissible tolerances to provide a furniture-quality appearance to the finished carpentry work. All fasteners are to be of the types and methods per the project plans and the *Special Provisions*.

Confirm the type of nail head required, the depth of set pattern, and the puttying or caulking of the nail holes prior to the application of finishes to the wood.

Confirm kerfing (shallow cut in wood allowing for bending) and hollow backs (back face hollowed out to allow for tighter installation against an irregular piece for flooring or wall panels similar to tongue and groove) are provided as specified for members. This is usually required for all door jambs and casings.

Confirm all surfaces are smoothly sanded and that edges have been eased as required. Any material split during the nailing should be removed and replaced with sound material. Hammer marks and dents or materials of poor quality must not be accepted.

Doors should be installed with the correct beveling, uniform margins, and tolerances as required for proper operation and aesthetics. The top and bottom edges of the door should be sealed with stain or paint or otherwise protected to avoid migration of moisture.

4-6.06A Architectural Woodwork Cabinetry

Manufactured casework will normally be specified under Section 99, Division 06; likely within SSP 99-06200, *Finish Carpentry*.

Specifications for paint, coatings, and finishings are normally specified under Division 09, *Finishes,* and the corresponding Chapter 4-9, *Finishes,* of this manual.

Verify all cabinetry and hardware are provided and fabricated in accordance with the authorized submittals.

Installation should be made by attaching through the connection strips at the back of the cabinets to the backing placed in the framing.

Confirm that the dimensional requirements per project plans are met. The dimensions per the project plans must satisfy the requirements of the Americans with Disabilities Act (ADA).

Confirm that the countertops are constructed, installed, and attached in accordance with the authorized submittals.

4-6.06B Cabinets

This work includes furnishing and installing a swinging gate, wood cabinets, and plastic laminate tops, splashes, shelving, and returns. See Figure 4-6.7 and Figure 4-6.8.

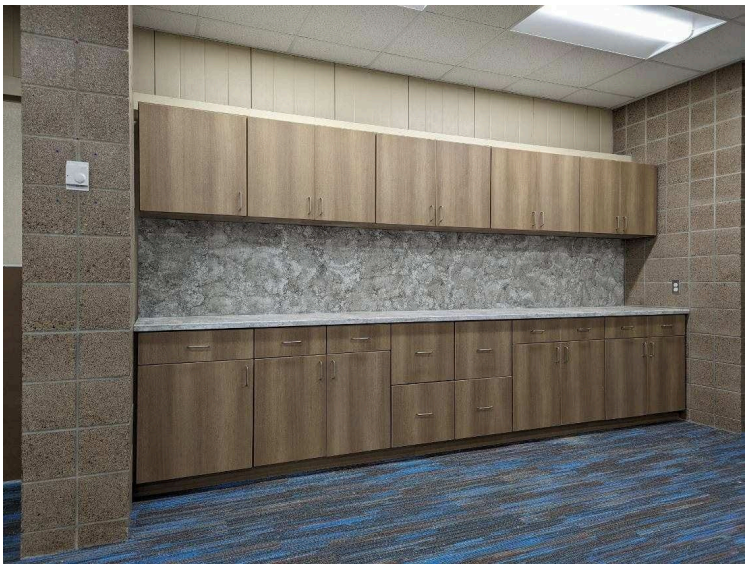


Figure 4-6.7. Standard Cabinets



Figure 4-6.8. Countertops and Shelving

4-6.06C WI Certification

The Woodwork Institute (WI) Certification is required for all interior cabinets and other specified finish work. It is important to make sure the material arrives with this certification, that the members have the certification label on them, and that they are certified for the quality rating specified. The manufacturer must submit the “WI Certification” compliance label prior to delivery.

4-6.06D Prefabricated Trim and Molding

Trim and moldings are used around doors and windows and in corners of walls. Softwood moldings are specified by type of wood, such as pine, and grade (N for natural finish and P for paint grade). Paint grade is usually made up of smaller pieces finger-jointed together. There are various patterns available. Hardwood moldings come in various types of wood, such as oak, and have either grade A (for natural finish) or B (for paint finish).

4-6.07 Plastics

Plastics are used for such things as glazing, fiberglass shower stalls, and overlays for wall panels, wainscoting, countertops (see Figure 4-6.9), and other casework. Most uses will be for plastic overlays of casework. These plastic materials will come in sheets of various thicknesses and will be either a high-pressure laminate or a low-pressure overlay. They are fastened in place with contact cement or other adhesives approved by the manufacturer. It is important to make sure the material is the proper type. The material should be identified with stickers that list the thickness and conform to the proper manufacturing specifications.

Plastic laminate tops shall bear the “WI Certification” compliance label. Prior to completion of the project, the Contractor shall supply “WI Certification” compliance label for the installation.



Figure 4-6.9. Finished Cabinet and Countertop