SECTION 061753 - SHOP-FABRICATED WOOD TRUSSES

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
   * + 1. RELATED DOCUMENTS
          1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
       2. SUMMARY
          1. Section Includes:

Wood roof trusses.

Wood floor trusses.

Wood girder trusses.

* + - 1. DEFINITIONS
         1. Metal-Plate-Connected Wood Trusses: Planar structural units consisting of metal-plate-connected members fabricated from dimension lumber and cut and assembled before delivery to Project site.
      2. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
         2. Manufacturer’s installation instructions shall be provided along with product data.
         3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
         4. Product Data: For [**wood-preservative-treated lumber,**] [**fire-retardant-treated lumber,**] metal-plate connectors, metal truss accessories, and fasteners.

Include data for wood-preservative treatment from chemical treatment manufacturer and certification from treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.

Include data for fire-retardant treatment from chemical-treatment manufacturer and certification from treating plant that treated materials comply with requirements. Include physical properties of treated materials based on testing by a qualified independent testing agency.

For fire-retardant treatments, include physical properties of treated lumber both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D5664.

For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to truss fabricator.

* + - * 1. Sustainable Design Submittals:
        2. Shop Drawings: Show fabrication and installation details for trusses.

Show location, pitch, span, camber, configuration, and spacing for each type of truss required.

Indicate sizes, stress grades, and species of lumber.

According to TPI 1, building designer is responsible for "permanent bracing design for the building, including bracing to resist wind, seismic, or other lateral forces and permanent bracing for all structural elements and trusses," but the truss design must show the "approximate location for or maximum spacing between permanent lateral bracing of truss members." If building designer is responsible for design of bracing to prevent buckling of compression members, this bracing should be detailed on Drawings, subject to possible revision when truss Shop Drawings are received, or an allowance for it must be included in the Contract Sum if a Change Order is to be avoided. See the Evaluations.

Indicate locations of permanent bracing required to prevent buckling of individual truss members due to design loads.

According to the Council of American Structural Engineers (CASE), building designer is responsible for design of "primary structural system," but truss designer is responsible for design of "bracing needed to resist buckling of compression truss members," because this depends on truss design. Retain first subparagraph below instead of last subparagraph above if truss designer is required to design bracing of compression members.

Indicate locations, sizes, and materials for permanent bracing required to prevent buckling of individual truss members due to design loads.

Indicate type, size, material, finish, design values, orientation, and location of metal connector plates.

Show splice details and bearing details.

Retain "Delegated-Design Submittal" Paragraph below if design services have been delegated to Contractor.

* + - * 1. Delegated-Design Submittal: For metal-plate-connected wood trusses indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer, licensed in the State of New York, responsible for their preparation.

Coordinate "Qualification Data" Paragraph below with qualification requirements in "Quality Assurance" Article.

* + - * 1. Qualification Data: For [**metal connector-plate manufacturer**] [**professional engineer**] [**and**] [**fabricator**].

Retain "Material Certificates" Paragraph below to require submittal of material certificates from manufacturers.

* + - * 1. Material Certificates: For dimension lumber specified to comply with minimum specific gravity. Indicate species and grade selected for each use and specific gravity.

Retain "Product Certificates" Paragraph below if certificates are required by authorities having jurisdiction. The IBC waives requirement for special inspection if fabricator is approved and certifies compliance with the approved construction documents.

* + - * 1. Product Certificates: For metal-plate-connected wood trusses, signed by officer of truss-fabricating firm.

Insert specific model code organization in "Evaluation Reports" Paragraph below or revise if report must be from another source.

Design Consultant to review code references and verify that the referenced sections/tables are current. Note that code references shall be based on the current version of the Uniform Code.

* + - * 1. Evaluation Reports: For the following, from ICC-ES:

Revise list below to retain only those products retained in Part 2.

Wood-preservative-treated lumber.

Fire-retardant-treated wood.

Metal-plate connectors.

Metal truss accessories.

* + - 1. QUALITY ASSURANCE
         1. Metal Connector-Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with quality-control procedures in TPI 1 for manufacture of connector plates.

Manufacturer's responsibilities include providing professional engineering services needed to assume engineering responsibility.

Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer licensed in the State of New York.

TPI 1 added specific requirements for fabricator quality-assurance programs in the 2002 version, but does not require third-party inspection. Verify that local truss fabricators participate in third-party inspection programs; many do not. Third-party inspection is required by the IBC to be an approved fabricator and to waive requirement for special inspection. Retain third option in "Fabricator Qualifications" Paragraph below if required for LEED.

* + - * 1. Fabricator Qualifications: Shop that [**participates in a recognized quality-assurance program, complies with quality-control procedures in TPI 1, and involves third-party inspection by an independent testing and inspecting agency acceptable to Director’s Representative and authorities having jurisdiction**] [**and**] [**is certified for chain of custody by an FSC-accredited certification body**].
        2. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant-treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.
      1. DELIVERY, STORAGE, AND HANDLING
         1. Handle and store trusses to comply with recommendations in SBCA BCSI, "Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining, & Bracing Metal Plate Connected Wood Trusses."

Store trusses flat, off of ground, and adequately supported to prevent lateral bending.

Protect trusses from weather by covering with waterproof sheeting, securely anchored.

Provide for air circulation around stacks and under coverings.

* + - * 1. Inspect trusses showing discoloration, corrosion, or other evidence of deterioration. Discard and replace trusses that are damaged or defective.

1. PRODUCTS

Manufacturers and products listed in SpecAgent and Masterworks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications.

* + - 1. PERFORMANCE REQUIREMENTS

Retain "Delegated Design" Paragraph below if Contractor is required to assume responsibility for design.

* + - * 1. Delegated Design: Engage a qualified professional engineer, licensed and registered to practice in the State of New York, to design metal-plate-connected wood trusses.
        2. Structural Performance: Metal-plate-connected wood trusses shall be capable of withstanding design loads within limits and under conditions indicated. Comply with requirements in TPI 1 unless more stringent requirements are specified below.

Tabulate minimum load requirements here or on Drawings. Revise "Design Loads" Subparagraph below when design loads are included here. Include applicable live, dead, snow, collateral, seismic, wind, and uplift loads, and load combinations.

Design Loads: As indicated.

Maximum Deflection under Design Loads:

Retain deflection limits from options in "Roof Trusses" Subparagraph below or insert others as appropriate for floor, roof, and ceiling materials.

Roof Trusses: Vertical deflection of [**1/180**] [**1/240**] [**1/360**] of span.

Insert a subparagraph for horizontal (longitudinal) deflection limits if using scissor trusses.

Floor Trusses: Vertical deflection of [**1/360**] [**1/480**] [**1/600**] of span.

TPI publications listed below are by title without alphanumeric designations in which the number represents year of issue. Designations in effect when this Section was updated appear in "Referenced Standards" Article in the Evaluations.

* + - * 1. Comply with applicable requirements and recommendations of TPI 1, TPI DSB, and SBCA BCSI.
        2. Wood Structural Design Standard: Comply with applicable requirements in AF&PA's "National Design Specifications for Wood Construction" and its "Supplement."
      1. DIMENSION LUMBER
         1. Lumber: DOC PS 20 and applicable rules of any rules-writing agency certified by the American Lumber Standard Committee (ALSC) Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

Factory mark each piece of lumber with grade stamp of grading agency.

Delete first subparagraph below if authorities having jurisdiction require grade stamps on all materials.

For exposed lumber indicated to receive a stained or natural finish, omit grade stamp and provide certificates of grade compliance issued by grading agency.

Provide dressed lumber, S4S.

Retain one of two options in subparagraph below. Retain the first unless lumber with 15 percent maximum moisture content is unavailable.

Provide dry lumber with [**15**] [**19**] percent maximum moisture content at time of dressing.

Retain "Minimum Chord Size for Roof Trusses" Paragraph below if requirement for minimum chord sizes is needed to provide stiffer members for nailing.

* + - * 1. Minimum Chord Size for Roof Trusses: [**2 by 6 inches nominal for top chords**] [**2 by 6 inches nominal for bottom chords**] [**2 by 6 inches nominal for both top and bottom chords**].

Retain "Minimum Specific Gravity for Top Chords" Paragraph below if required for diaphragm construction.

* + - * 1. Minimum Specific Gravity for Top Chords: [**0.50**] <**Insert value**>.
        2. Permanent Bracing: Provide wood bracing that complies with requirements for miscellaneous lumber in [**Section 061000 "Rough Carpentry."**] [**Section 061053 "Miscellaneous Rough Carpentry."**]
      1. WOOD-PRESERVATIVE-TREATED LUMBER

Preservative treatment is usually limited to wood exposed in wet and humid locations or geographical areas where termite infestation is extensive. See the Evaluations for discussion of treatment chemicals. Some treatment chemicals increase rate of corrosion of galvanized truss plates.

* + - * 1. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with the ground, Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.

Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.

Delete subparagraph below if not using exposed trusses or if considered unnecessary.

For exposed trusses indicated to receive a stained or natural finish, use chemical formulations that do not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.

* + - * 1. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
        2. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.

Retain only first option in subparagraph below if authorities having jurisdiction require quality mark on all materials.

For exposed trusses indicated to receive a stained or natural finish, [**mark end or back of each piece**] [**or**] [**omit marking and provide certificates of treatment compliance issued by inspection agency**].

Retain first option in "Application" Paragraph below if total treatment is required; otherwise, retain second.

* + - * 1. Application: Treat [**all trusses unless otherwise indicated**] [**trusses where indicated on Drawings**].
      1. FIRE-RETARDANT-TREATED WOOD

See the Evaluations for discussion of fire-retardant-treated wood. Verify availability with truss fabricators.

* + - * 1. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products according to test method indicated by a qualified testing agency.
        2. Fire-Retardant-Treated Lumber by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E84, with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.

Use treatment that does not promote corrosion of metal fasteners.

Exterior type is suitable for both exterior and interior applications. Interior type is only for interior applications.

Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated lumber and plywood by pressure process after being subjected to accelerated weathering according to ASTM D2898. Use for exterior locations and where indicated.

Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D3201 at 92 percent relative humidity. Use for interior locations where exterior type is not indicated.

Delete option in "Design Value Adjustment Factors" Subparagraph below if not applicable. Revise description of locations to suit Project. Verify adjustment factors with Project's structural engineer.

Design Value Adjustment Factors: Treated lumber shall be tested according to ASTM D5664, and design value adjustment factors shall be calculated according to ASTM D6841.[**For enclosed roof framing and framing in attic spaces, and where high-temperature fire-retardant treatment is indicated, provide material with adjustment factors of not less than 0.85 modulus of elasticity and 0.75 for extreme fiber in bending for Project's climatological zone.**]

Pressure-treated lumber that is dried after treatment is typically only dried to 19 percent, which may be inadequate for trusses. Usually retain first option in first paragraph below, but only after verifying availability.

* + - * 1. Kiln-dry lumber after treatment to a maximum moisture content of [**15**] [**19**] percent.
        2. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.

Retain only first option in subparagraph below if authorities having jurisdiction require classification marking on all materials.

For exposed trusses and bracing indicated to receive a stained or natural finish, [**mark end or back of each piece**] [**or**] [**omit marking and provide certificates of treatment compliance issued by inspection agency**].

Delete or revise first paragraph below if no exposed trusses or if staining hides colorants.

* + - * 1. For exposed trusses indicated to receive a stained or natural finish, use chemical formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.

Retain first option in "Application" Paragraph below and delete subparagraphs if all trusses are required to be fire-retardant treated; otherwise, retain second option and appropriate subparagraphs.

* + - * 1. Application: Treat [**all trusses unless otherwise indicated.**] [**items indicated on Drawings, and the following:**]

Revise list below to suit local code and Project.

Floor trusses.

Roof trusses.

<**Insert category of trusses required to be treated**>.

* + - 1. METAL CONNECTOR PLATES

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=12069) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Alpine Engineered Products, Inc.; a division of ITW Building Components Group, Inc](http://www.specagent.com/Lookup?uid=123457137963).

[Cherokee Metal Products, Inc.; Masengill Machinery Company](http://www.specagent.com/Lookup?uid=123457137964).

[MiTek Industries, Inc](http://www.specagent.com/Lookup?uid=123457137968).

Approved equivalent.

* + - * 1. Fabricate connector plates to comply with TPI 1.
        2. Hot-Dip Galvanized-Steel Sheet: ASTM A653; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G60 coating designation; and not less than 0.036 inch thick.

Use for interior locations unless otherwise indicated.

Verify availability of connectors with heavy galvanized coating before retaining "Hot-Dip Heavy-Galvanized-Steel Sheet" Paragraph below.

* + - * 1. Hot-Dip Heavy-Galvanized-Steel Sheet: ASTM A653; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 coating designation; and not less than 0.036 inch thick.

Use for wood-preservative-treated lumber and where indicated.

Type 304 stainless steel is usually standard; Type 316 gives better corrosion resistance for exposed applications in coastal environments.

* + - * 1. Stainless Steel Sheet: ASTM A240 or ASTM A666, [**Type 304**] [**Type 316**], and not less than 0.035 inch thick.

Use for exterior locations[**, wood-preservative-treated lumber,**] [**fire-retardant treated lumber,**] and where indicated.

* + - 1. FASTENERS
         1. Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.

Provide fasteners for use with metal framing anchors that comply with written recommendations of metal framing manufacturer.

Where trusses are exposed to weather, in ground contact, made from pressure-preservative treated wood, or in area of high relative humidity, provide fasteners [**with hot-dip zinc coating complying with ASTM A153**] [**of Type 304 stainless steel**].

* + - * 1. Nails, Brads, and Staples: ASTM F1667.
      1. METAL FRAMING ANCHORS AND ACCESSORIES

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=12070) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Cleveland Steel Specialty Co](http://www.specagent.com/Lookup?uid=123457137971).

[Phoenix Metal Products, Inc](http://www.specagent.com/Lookup?uid=123457137973).

[Simpson Strong-Tie Co., Inc](http://www.specagent.com/Lookup?uid=123457137974).

Approved equivalent.

* + - * 1. Allowable design loads, as published by manufacturer, shall comply with or exceed those [**indicated**] [**of basis-of-design products**] [**of products of manufacturers listed**]. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.

Galvanized steel is typical for most manufacturers and is suitable for most applications.

* + - * 1. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A653, G60 coating designation.

Use for interior locations unless otherwise indicated.

* + - * 1. Hot-Dip Heavy-Galvanized-Steel Sheet: ASTM A653; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 coating designation; and not less than 0.036 inch thick.

Use for wood-preservative-treated lumber and where indicated.

Retain "Stainless Steel Sheet" Paragraph below if required. Type 304 is usually standard for stainless steel; Type 316 gives better corrosion resistance for exposed applications in coastal environments.

* + - * 1. Stainless Steel Sheet: ASTM A240 or ASTM A666, [**Type 304**] [**Type 316**].

Use for exterior locations and where indicated.

Remaining paragraphs below are examples only. Revise to suit Project or delete all if "Basis-of-Design Products" Paragraph above is used and they are not needed to provide salient characteristics for products.

"Truss Tie-Downs" Paragraph below, including option, is based on Simpson's "H-2."

* + - * 1. Truss Tie-Downs: Bent strap tie for fastening roof trusses to wall studs below, 1-1/2 inches wide by 0.050 inch thick.[**Tie fastens to one side of truss, top plates, and side of stud below.**]

"Truss Tie-Downs (Hurricane or Seismic Ties)" Paragraph below is based on Simpson's "H-7."

* + - * 1. Truss Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening roof trusses to wall studs below, 2-1/4 inches wide by 0.062 inch thick. Tie fits over top of truss and fastens to both sides of truss, top plates, and one side of stud below.

"Truss Tie-Downs (Hurricane or Seismic Ties)" Paragraph below is based on Simpson's "H-15."

* + - * 1. Truss Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening roof trusses to wall studs below, 2-1/2 inches wide by 0.062 inch thick. Tie fits over top of truss and fastens to both sides of truss, inside face of top plates, and both sides of stud below.
        2. Roof Truss Clips: Angle clips for bracing bottom chord of roof trusses at non-load-bearing walls, 1-1/4 inches wide by 0.050 inch thick. Clip is fastened to truss through slotted holes to allow for truss deflection.
        3. Floor Truss Hangers: U-shaped hangers, full depth of floor truss, with 1-3/4-inch- long seat; formed from metal strap 0.062 inch thick with tabs bent to extend over and be fastened to supporting member.

Description in "Roof Truss Bracing/Spacers" Paragraph below is based on MiTek's "Stabilizer."

* + - * 1. Roof Truss Bracing/Spacers: U-shaped channels, 1-1/2 inches wide by 1 inch deep by 0.040 inch thick, made to fit between two adjacent trusses and accurately space them apart, and with tabs having metal teeth for fastening to trusses.
        2. Drag Strut Connectors: Angle clip with one leg extended for fastening to the side of girder truss.

Description in two subparagraphs below are based on Simpson's "DSC2" and "DSC5," respectively.

Angle clip is 3 by 3 by 0.179 by 8 inches with extended leg 8 inches long. Connector has galvanized finish.

Angle clip is 3 by 3 by 0.239 by 10-1/2 inches with extended leg 10-1/2 inches long. Connector has painted finish.

* + - 1. MISCELLANEOUS MATERIALS
         1. Galvanizing Repair Paint: SSPC-Paint 20, with dry film containing a minimum of 92 percent zinc dust by weight.
      2. FABRICATION
         1. Cut truss members to accurate lengths, angles, and sizes to produce close-fitting joints.
         2. Fabricate metal connector plates to sizes, configurations, thicknesses, and anchorage details required to withstand design loads for types of joint designs indicated.
         3. Assemble truss members in design configuration indicated; use jigs or other means to ensure uniformity and accuracy of assembly, with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design camber indicated.

Manufacturing tolerances permitted by TPI 1 vary according to length and height of trusses as follows. Length: 1/2 inch up to 30 feet long, thereafter 3/4 inch. Height: 1/4 inch up to 60 inches high, thereafter 1/2 inch.

Fabricate wood trusses within manufacturing tolerances in TPI 1.

* + - * 1. Connect truss members by metal connector plates located and securely embedded simultaneously in both sides of wood members by air or hydraulic press.
      1. SOURCE QUALITY CONTROL

Retain this article if special inspection is required. Consider deleting if requiring that fabricator participates in a recognized quality-assurance program, which complies with quality-control procedures in TPI 1 and involves third-party inspection by an independent testing and inspecting agency, and if authorities having jurisdiction approve fabrication work without special inspections. Coordinate with "Fabricator Qualifications" Paragraph in "Quality Assurance" Article.

* + - * 1. Special Inspections: Director’s Representative will engage a qualified special inspector to perform special inspections.

Provide special inspector with access to fabricator's documentation of detailed fabrication and quality-control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards.

Provide special inspector with access to places where wood trusses are being fabricated to perform inspections.

* + - * 1. Correct deficiencies in Work that special inspections indicate do not comply with the Contract Documents.

1. EXECUTION
   * + 1. INSTALLATION
          1. Install wood trusses only after supporting construction is in place and is braced and secured.
          2. If trusses are delivered to Project site in more than one piece, assemble trusses before installing.
          3. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out-of-plane bending or other causes.
          4. Install and brace trusses according to TPI recommendations and as indicated.
          5. Install trusses plumb, square, and true to line and securely fasten to supporting construction.
          6. Space trusses [**16 inches o.c.**] [**24 inches o.c.**] [**as indicated**]; adjust and align trusses in location before permanently fastening.
          7. Anchor trusses securely at bearing points; use metal truss tie-downs or floor truss hangers as applicable. Install fasteners through each fastener hole in metal framing anchors according to manufacturer's fastening schedules and written instructions.

Retain first paragraph below if built-up girder trusses are required. TPI 1 states it is truss designer's responsibility to design truss-to-girder connection.

* + - * 1. Securely connect each truss ply required for forming built-up girder trusses.

Anchor trusses to girder trusses as indicated.

* + - * 1. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.

Install bracing to comply with [**Section 061000 "Rough Carpentry."**] [**Section 061053 "Miscellaneous Rough Carpentry."**]

Retain subparagraph below if floor trusses are required.

Install and fasten strongback bracing vertically against vertical web of parallel-chord floor trusses at centers indicated.

TPI 1 permits out-of-plumb tolerance of the lesser of D/50 or 2 inches maximum. Out-of-plane tolerances or bow is limited to the lesser of L/200 or 2 inches maximum. Location variances of 1/4 inch and a top-chord bearing gap of 1/2 inch for parallel-chord trusses are also permitted.

* + - * 1. Install wood trusses within installation tolerances in TPI 1.
        2. Do not alter trusses in field. Do not cut, drill, notch, or remove truss members.
        3. Replace wood trusses that are damaged or do not comply with requirements.

Damaged trusses may be repaired according to truss repair details signed and sealed by the qualified professional engineer responsible for truss design, when approved by Director’s Representative.

* + - 1. REPAIRS AND PROTECTION
         1. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
         2. Repair damaged galvanized coatings on exposed surfaces according to ASTM A780 and manufacturer's written instructions.
      2. FIELD QUALITY CONTROL
         1. Special Inspections: Director’s Representative will engage a special inspector and a qualified testing agency to perform tests and inspections in accordance with the requirements of BDC 406 Summary of Special Inspections and BDC 406.1 Statement of Special Inspections and as directed by the Code Compliance Manager.

END OF SECTION 061753