

**4816 COLD FORMED LIGHT GAGE METAL:**

- ALL STRUCTURAL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH AISI-S10, "SPECIFICATION FOR THE DESIGN OF COLD FORMED STRUCTURAL MEMBERS", LATEST EDITION. PROVIDE SIGNED AND SEALED CALCULATIONS, BY A LICENSED FLORIDA ENGINEER AND DRAWINGS FOR ALL LIGHT GAGE STRUCTURAL ELEMENTS OF THE BUILDING, INCLUDING THE EXTERIOR METAL STUDS (CURTAIN WALL), AND ALL EXTERIOR CEILING.
- IT IS THE INTENTION OF THIS DESIGN THAT THE LIGHT GAGE METAL FRAMING STUD SIZE, GAUGE, AND CONNECTIONS ARE DESIGNED BY A DELEGATED ENGINEER. THE MINIMUM SIZE SHALL BE THE MINIMUM OF 16 GA. OR WHAT IS REQUIRED FOR WALL FIXTURES (I.E. DOORS, WINDOWS, LOUVERS, ETC.) TO CONNECT AND ACHIEVE THE FLORIDA PRODUCT OR NDA REQUIREMENTS.
- ALL STRUCTURAL STUDS AND JOISTS 20, 26, AND 18 GAUGES SHALL BE FORMED FROM GALVANIZED STEEL PER ASTM A653, G60 COATING MEETING THE REQUIREMENTS OF ASTM C955 WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI.
- ALL STRUCTURAL STUDS AND JOISTS 16, 14, AND 12 GAUGES SHALL BE FORMED FROM GALVANIZED STEEL PER ASTM A653, G60 COATING MEETING ASTM C955, WITH A MINIMUM YIELD STRENGTH OF 30,000 PSI.
- ALL STRUCTURAL TRACK AND BRIDGING SHALL BE FORMED FROM GALVANIZED STEEL PER ASTM A653, G60 COATING MEETING THE REQUIREMENTS OF ASTM C955, WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI.
- WITH EACH TYPE OF METAL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING, LINTELS, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATIONS INDICATED, AS NEEDED TO PROVIDE A COMPLETE METAL FRAMING SYSTEM PROVIDE GALVANIZED FINISH TO METAL FRAMING COMPONENTS COMPLYING WITH ASTM A653 FOR MINIMUM G60 COATING. ATTACH SIMILAR COMPONENTS BY WELDING. ATTACH DISSIMILAR COMPONENTS BY WELDING, BOLTING OR SCREW FASTENERS, AS STANDARD WITH MANUFACTURER. ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED AND EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK.
- INSTALL METAL FRAMING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED OR WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, UNLESS OTHERWISE INDICATED.
- INSTALL CONTINUOUS TRACKS SIZED TO MATCH STUDS.
- SET STUDS PLUMB, EXCEPT AS NEEDED FOR DIAGONAL BRACING OR REQUIRED FOR NON-PLUMB WALLS OR WARPED SURFACED AND SIMILAR REQUIREMENTS.
- WHERE STUD SYSTEM ABUTS STRUCTURAL COLUMN OR WALLS, ANCHOR ENDS OF STIFFENERS TO SUPPORTING STRUCTURE.
- SECURE STUDS TO TOP AND BOTTOM RUNNER TRACKS BY EITHER WELDING OR SCREW FASTENERS AT BOTH INSIDE AND OUTSIDE FLANGES.

**5520 RAILINGS:**

- ENGINEERED RAILING SYSTEM AND CONNECTION OF SAME TO THIS STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES.
- THE CONFIGURATION OF THE RAILING SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- RAILING SYSTEM AND CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE DRAWINGS AND IN THE BUILDING CODE.
- THE LOADS SHALL BE CLEARLY INDICATED ON SHOP DRAWINGS AND SHALL COMPLY WITH ALL APPLICABLE CODES.
- SHOP DRAWINGS SHALL SHOW AND SPECIFY CONNECTIONS UTILIZED WITHIN THE RAILING SYSTEM AS WELL AS CONNECTIONS TO AND LOADS IMPOSED UPON THE STRUCTURAL SYSTEM SHOWN ON THESE DRAWINGS.
- SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES.

**5714 STEEL STAIRS:**

- ENGINEERED STEEL STAIR SYSTEM AND CONNECTIONS OF SAME TO THIS STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES.
- THE CONFIGURATION OF THE STEEL STAIR SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- STEEL STAIR SYSTEM AND CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE DRAWINGS AND IN THE BUILDING CODE.
- THE LOADS SHALL BE CLEARLY INDICATED ON SHOP DRAWINGS.
- SHOP DRAWINGS SHALL SHOW AND SPECIFY CONNECTIONS UTILIZED WITHIN THE STEEL STAIR SYSTEM AS WELL AS CONNECTIONS TO AND LOADS IMPOSED UPON THE STRUCTURAL SYSTEM SHOWN ON THESE DRAWINGS.
- SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES.

**5800 ALUMINUM STRUCTURES AND ALUMINUM CANOPIES:**

- ALL ALUMINUM MEMBERS SHALL BE FABRICATED IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL, CURRENT EDITION.
- ENGINEERED ALUMINUM CANOPY SYSTEM AND CONNECTIONS OF CANOPIES TO THE STRUCTURE INDICATED IN THESE PLANS SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES.
- THE CONFIGURATION OF THE CANOPY SYSTEM SHALL BE AS INDICATED IN THE ARCHITECTURAL DRAWINGS.
- CANOPY SYSTEM AND CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE PLANS AND IN THE FLORIDA BUILDING CODE. THE LOADS SHALL BE CLEARLY INDICATED ON THE DRAWINGS.
- SHOP DRAWINGS SHALL SHOW AND SPECIFY CONNECTIONS UTILIZED WITHIN THE CANOPY SYSTEM AS WELL AS CONNECTIONS TO AND LOADS IMPOSED UPON THE STRUCTURAL SYSTEM INDICATED IN THESE PLANS.
- PROVIDE DISSIMILAR METAL SEPARATORS AT ALL JUNCTIONS OF ALUMINUM FRAMING AND STRUCTURAL STEEL, CONCRETE AND MASONRY.
- IF SHOWN, FOUNDATION SIZE INDICATED FOR CANOPY SUPPORTS SHALL BE THE MINIMUM ACCEPTABLE. CANOPY MANUFACTURER SHALL SUBMIT SIGNED/SEALED CALCULATIONS BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT RESIDES INDICATING SUPPORT REACTIONS BASED ON THE WIND LOADS GIVEN IN THE FLORIDA BUILDING CODE. FOUNDATION SIZES MAY BE ADJUSTED AFTER CALCULATIONS HAVE BEEN APPROVED AT NO ADDITIONAL COST TO THE OWNER.

**6103 WOOD:**

- WOOD CONSTRUCTION SHALL CONFORM TO AITC, NATIONAL DESIGN SPECIFICATION.
- ALL ROUGH CARPENTRY SHALL PRODUCE JOINTS TRUE AND TIGHT AND WELL NAILED WITH MEMBERS ASSEMBLED IN ACCORDANCE WITH THE DRAWINGS AND ALL PERTINENT BUILDING CODES. THE TRIMMING OF SILLS, JOISTS, SHORT STUDS, TRIMMERS, HEADERS, OR OTHER FRAMING MEMBERS SHALL NOT BE PERMITTED. ALL WALLS AND PARTITIONS SHALL BE STRAIGHT, PLUMB, AND ACCURATELY LOCATED. CAREFULLY SELECT ALL STRUCTURAL MEMBERS. INDIVIDUAL PIECES SHALL BE SELECTED SO THAT KNOTS AND OBVIOUS MINOR DEFECTS WILL NOT INTERFERE WITH THE PLACING OF BOLTS, OR PROPER NAILING OR THE MAKING OF SOUND CONNECTIONS. LUMBER MAY BE REJECTED BY THE ENGINEER OR ARCHITECT FOR EXCESSIVE WARP, TWIST, BOW OR CROOK, MILDREW, FUNGUS OR MOLD, AS WELL AS FOR IMPROPER GRADE MARKING. DEFECTS WHICH RENDER A PIECE UNABLE TO SERVE ITS INTENDED FUNCTION SHALL BE DISCARDED.
- EACH PIECE OF STRUCTURAL LUMBER, SHEATHING, AND TIMBER SHALL BE MARKED WITH THE GRADE BY SUCH COMPETENT AND RELIABLE ORGANIZATION WHOSE REGULAR BUSINESS IS TO ESTABLISH LUMBER GRADES. THE ORGANIZATION, GRADING, AND GRADE MARKING SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
- STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES OF SELECT STRUCTURAL SOUTHERN PINE CONFORMING TO THE LATEST EDITION OF NDS, AS FOLLOWS:
 

SHEAR	Fv	=	175	PSI
BENDING	2x6	Fb	=	2,100
BENDING	2x8	Fb	=	1,950
BENDING	2x10	Fb	=	1,700
BENDING	2x12	Fb	=	1,600
- STANDARD U.S.S. WASHERS SHALL BE USED BETWEEN WOOD AND BOLT HEADS AND NUTS. BOLTS AND SCREWS SHALL BE ASTM A-307; ALL SHALL BE GALVANIZED.
- WHERE BEAMS ARE FORMED WITH TWO OR MORE MEMBERS, THEY SHALL BE ADEQUATELY FASTENED TOGETHER THROUGHOUT THEIR LENGTH. FASTEN AS REQUIRED BY NDS AND THE FBC 2014
- ROUGH HARDWARE, JOIST HANGERS, STRAPS, HOLDDOWNS, ETC. SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUIVALENT. THE MAXIMUM SIZE AND NUMBER OF FASTENERS SPECIFIED BY THE MANUFACTURER SHALL BE USED UNLESS NOTED OTHERWISE. ALL HARDWARE SHALL BE STAINLESS STEEL OR GALVANIZED.
- INSTALL ALL BLOCKING AS REQUIRED TO SUPPORT ALL ITEMS OF FINISH SUCH AS BULKHEADS AND DOOR BUCKS. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS BOTH VERTICAL AND HORIZONTAL, BETWEEN CEILING AND FLOOR AREAS. VERIFY ALL REQUIRED BLOCKING WITH LOCAL BUILDING OFFICIAL.
- STUD WALLS SHALL BE:
  - BEARING WALLS: MIN. 2X6 SELECT STRUCTURAL SOUTHERN YELLOW PINE @ 16" O.C.
  - SHEAR WALLS: MIN. 2X6 SELECT STRUCTURAL SOUTHERN YELLOW PINE @ 16" O.C. WITH SHEATHING AS INDICATED PER PLAN. UNO IN PLAN DETAILS
  - NON-LOADBEARING WALLS: 2X8 SELECT STRUCTURAL SOUTHERN YELLOW PINE @ 16" O.C.
- ALL WOOD SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS ASSOCIATION STANDARDS USE AWPA TREATMENT C1 USING WATER-BORNE PRESERVATIVE.
- MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.
- PLYWOOD ROOF SHEATHING SHALL BE NAILED TO WOOD FRAMING IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND APA SPECIFICATION AFG-01, ADHESIVES FOR FIELD GLUING PLYWOOD TO WOOD FRAMING.
- BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT 1/16" LARGER THAN THE DIAMETER OF THE BOLT. BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NUTS SHALL BE PULLED TIGHT AND AGAIN CHECKED AND TIGHTENED JUST PRIOR TO ENCLLOSING BOLTED MEMBERS. COUNTER BORE FOR BOLTED HEADS OR NUTS ONLY WHERE SO INDICATED ON THE DRAWINGS, AND THEN ONLY TO SUFFICIENT DEPTH TO HOUSE THE BOLT OR HEAD OR NUT AND WASHER. CUT OFF EXCESSIVE BOLT PROJECTION WHERE NECESSARY. NICK THREADS TO PREVENT LOOSENING.
- LAG SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACE. LAG SCREWS FASTENING ONE WOOD MEMBER TO ANOTHER SHALL HAVE A PENETRATION INTO THE FAR MEMBER OF NOT LESS THAN 2/3 OF THE LENGTH OF THE LAG SCREW MEASURED UNDER THE HEAD. ALL LAG SCREWS SHALL BE FITTED WITH WASHERS UNDER THE HEAD. IN PLACING LAG SCREWS IN WOOD, A HOLE SHALL FIRST BE BORED OF THE SAME DIAMETER AND DEPTH OF THE SHANK OF THE SCREW, AFTER WHICH THE HOLE SHALL BE CONTINUED TO A DEPTH EQUAL TO THE LENGTH OF THE LAG SCREW WITH A DIAMETER EQUAL TO THE DIAMETER OF THE SCREW AT THE ROOT OF THE THREAD.
- COMMON NAILS SHALL BE USED WHEN NAILING IS SPECIFIED ON THESE PLANS, SUCH AS AT SHEAR WALLS AND DIAPHRAGMS. ALL OTHER NAILING SHALL BE SUBMITTED TO THE ENGINEER WITH APPROPRIATE TESTING CERTIFICATION PRIOR TO CONSTRUCTION FOR APPROVAL.

TRUSS TO SILL OR GIRDER, TOENAIL	3-8d
BRIDGING TO JOIST, TOENAIL EACH END	2-8d
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d @ 16" O.C.
TOP PLATE TO STUD, END NAIL	2-16d
STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d, END NAIL
DOUBLE STUDS, FACE NAIL	16d @ 24" O.C.
DOUBLE TOP PLATES, FACE NAIL	16d @ 16" O.C.
TOP PLATE LAPS AND INTERSECTIONS, FACE NAIL	2-16d
CONTINUOUS HEADER, TWO PIECES	16a @ 16" O.C. ALONG EACH SIDE
CEILING JOISTS TO PLACE, TOENAIL	3-8d
CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
CEILING JOISTS, LAPS OVER PARTITIONS FACE NAIL	3-16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
RAFTERS OR TRUSS TO PLATE, TOENAIL	3-8d*
BUILD-UP CORNER STUDS	16d @ 24" O.C.
BUILD-UP WOOD COLUMNS	16d @ 8" O.C. FOR 2x4'S 2 ROWS 16d @ 8" O.C. 2x8 OR GREATER
BUILD UP GIRDER AND BEAMS	20d @ 32" O.C. AT TOP AND BOTTOM AND STAGGERED, 2, 20d AT ENDS AND AT EACH SPLICE.

\* SUPPLY RATED CLIPS OR STRAPS FOR UPLIFT FORCES OVER 200 LBS. AS NOTED BY THE ROOF TRUSS MANUFACTURER ON THE SUBMITTED DESIGN SHEETS.

**6150 TIMBER DECKING:**

- SHALL BE HEAVY TIMBER DECKING OF THE SIZES INDICATED, PROVIDED IN ACCORDANCE WITH AITC 112.
- INSTALLATION SHALL BE IN CONTROLLED RANDOM LAY UP PATTERN FASTENED IN ACCORDANCE WITH AITC 112.
- TIMBER DECKING SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES:
 

BENDING	Fb	=	1,650	PSI
MODULUS OF ELASTICITY	E	=	1,600,000	PSI

**6178 WOOD FRAMING CONNECTORS:**

- CONNECTORS SHALL BE GALVANIZED OR STAINLESS STEEL.
- CONNECTOR MODEL NUMBERS SHOWN ARE Strong-Tie CONNECTORS AS MANUFACTURED BY SIMPSON Strong-Tie Co. USG CONNECTORS ARE ACCEPTABLE SUBSTITUTIONS.
- OTHER SUBSTITUTIONS ARE ACCEPTABLE WITH THE APPROVAL OF THE STRUCTURAL ENGINEER.
- UNLESS SHOWN OTHERWISE, INSTALL SIZE AND NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG.

**6188 STRUCTURAL GLUED LAMINATED TIMBER:**

- MATERIALS, MANUFACTURE, AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH STANDARD ANSI-AITC 1190.1 AMERICAN NATIONAL STANDARD FOR WOOD PRODUCTS - STRUCTURAL GLUED LAMINATED TIMBER.
- ALLOWABLE DESIGN VALUES FOR GLUED LAMINATED MEMBERS SHALL BE IN ACCORDANCE WITH COMBINATION SYMBOL 24F-V5 FOR SOUTHERN PINE. MEMBERS SHALL BE MARKED IN ACCORDANCE WITH ANSI-AITC 190.1.
- ADHESIVE AND LAMINATIONS SHALL MEET THE REQUIREMENTS OF WET CONDITION OF SERVICE.
- UNLESS OTHERWISE NOTED, A COAT OF SEALER SHALL BE APPLIED TO CUT AREAS OF MEMBERS IMMEDIATELY AFTER TRIMMING.

TO THE BEST OF THE STRUCTURAL ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM CODES AS DETERMINED BY LOCAL AUTHORITY IN ACCORDANCE WITH CHAPTER 553, FLORIDA STATUTES.

NO.	REVISIONS:	DATE:
1	ADDENDUM #1	06/29/2017