

STRUCTURAL NOTES

MISCELLANEOUS

- 1. THE STRUCTURAL SYSTEM IS UNSTABLE UNTIL ALL CONNECTIONS HAVE BEEN MADE AND ALL CONCRETE HAS REACHED ITS MINIMUM DESIGN STRENGTH, AS SHOWN IN THE STRUCTURAL DOCUMENTS.
2. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION TO ENSURE THE SAFETY OF THE BUILDING UNTIL STRUCTURAL SYSTEM IS COMPLETED. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, SHORING, GUYS OR TIE-DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
3. CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION.
4. APPLICABLE BUILDING CODE: 2004 FLORIDA BUILDING CODE WITH 2006 AMENDMENTS.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE WITH 2006 AMENDMENTS.
6. DESIGN LOADS: AREA ROOF (SLOPED) ROOF (FLAT) SUPERIMPOSED LIVE LOAD 25 PSF 20 PSF DEAD LOAD AREA ROOF (SLOPED) ROOF (FLAT) 20 PSF 20 PSF
7. DESIGN WIND VELOCITY = 110 MPH USE FACTOR = 1.0
8. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
9. CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.
10. SUBMIT SHOP DRAWINGS AS REQUIRED HEREIN ALLOW FOR TWO WEEKS REVIEW (10 WORKING DAYS) TIME AFTER RECEIPT OF SUBMITTALS BY THIS FIRM. ALL SUBMITTALS SHALL BE CHECKED AND SIGNED BY THE GENERAL CONTRACTOR AND STAMPED/SEALED BY THE SPECIALTY ENGINEER, WHERE SPECIFIED HEREIN.
11. SUBMIT TWO PRINTS MINIMUM OF ALL SHOP DRAWINGS.

- 17. RESTRICT THE ADDITION OF MIX WATER AT THE JOB SITE. DO NOT ADD WATER WITHOUT THE APPROVAL OF THE GENERAL CONTRACTOR AND DO NOT EXCEED SLUMP LIMITATIONS OR TOTAL ALLOWABLE WATER TO CEMENT RATIO. USE COLD WATER FROM THE TRUCK TANK AND REMIX TO ACHIEVE CONSISTENCY. TEST REPORTS SHALL INDICATE QUANTITY OF WATER ADDED AT THE JOB SITE. ALL TESTS SHALL BE PREPARED AFTER THE ADDITION OF WATER TO THE MIX.
18. MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE: a) 4000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.44 b) 3000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.58 c) 4700 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.47
19. REINFORCING BAR COVER: a) FOOTINGS 3" b) COLUMNS 1-1/2" c) BEAMS 1-1/2" d) SLABS 3/4" (INTERIOR) 1-1/2" (EXTERIOR)
20. CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.
21. WHERE BAR LENGTHS ARE GIVEN ON DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.
22. PROVIDE COMMERCIAL FORM COATING COMPOUNDS THAT WILL NOT BOND, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES. WET FORMS BEFORE PLACING CONCRETE.
23. ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATORS.
24. REPAIR AND PATCH DEFECTIVE AREAS WITH CEMENT MORTAR IMMEDIATELY AFTER REMOVAL OF FORMS, EXCEPT WHERE REINFORCING IS VISIBLE. CONTACT STRUCTURAL ENGINEER FOR EVALUATION OF EXPOSED REINFORCING.
25. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CORNERS OF COLUMNS, BEAMS, AND WALLS UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.
26. PROVIDE CORNER BARS AT ALL BEAM AND WALL FOOTING CORNERS TO MATCH HORIZONTAL BARS.
27. SUBMITTALS: a) SUBMIT PROPOSED CONCRETE MIX DESIGN PRIOR TO CONSTRUCTION, INCLUDING BACKUP DATA IN ACCORDANCE WITH ACI 301-99 CHAPTER 4, SECTION 4.2.3, EXCLUDING SECTION 4.2.3.4 b) SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAM c) SUBMIT FORMWORK AND SHORING DRAWINGS TO LOCAL BUILDING DEPARTMENT WHEN REQUIRED BY FLORIDA THRESHOLD LAW.
28. ALL BUILDING AND SITE SLABS-IN-GRADE SHALL BE AT LEAST 4" THICK, REINFORCED WITH 6X6-W1.4 X W1.4 X W1.4 W.F., ON 15 MIL VAPOR BARRIER, SEE PLAN FOR CONTROL JOINTS AND OTHER CONDITIONS.
29. STEP AND SLOPE ALL WALKWAYS AWAY FROM THE BUILDING.

MASONRY

- 1. HOLLOW LOAD BEARING UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE 11. MINIMUM NET COMPRESSIVE UNIT STRENGTH = 1900 PSI. (NET AREA COMPRESSIVE MASONRY STRENGTH F'm = 1500 PSI).
2. MORTAR SHALL BE TYPE S AND CONFORM TO ASTM C270 (PROPORTION OR PROPERTY SPECIFICATION).
3. COURSE GROUT SHALL CONFORM TO ASTM C476: a) 2500 PSI AT 28 DAYS. b) 1/4" MAXIMUM AGGREGATE. c) 8" - 11" SLUMP.
4. CODES AND STANDARDS: a) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES PORTER NO. 298 b) ACI 530.1/ASCE 6 "SPECIFICATIONS FOR MASONRY STRUCTURES"
5. A REINFORCED TIE BEAM SHALL BE PROVIDED IN ALL WALLS SHOWN ON THE STRUCTURAL DRAWINGS THE ROOF AND AT TOP OF ANY PARAPET WALL. USE GALVANIZED MESH-TYPE CELL COPS. PROVIDE CORNER BARS AT ALL BEAM CORNERS TO MATCH HORIZONTAL BARS.
6. UNLESS NOTED OTHERWISE, TIE BEAMS SHALL BE AS FOLLOWS: a) ROOF LEVEL: DOUBLE COURSE KNOCK-OUT BLOCKS WITH (1) #5 IN EACH COURSE, FULLY GROUTED b) TOP OF PARAPET: (1) #5 BAR IN GROUTED KNOCK-OUT BLOCKS.
7. VERTICAL BARS SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM OF BAR AND AT 8" OR 9" O.C. MAXIMUM WITH A MINIMUM CLEARANCE OF 1/2" FROM MASONRY. THE CLEAR DISTANCE BETWEEN BARS SHALL NOT BE LESS THAN ONE BAR DIAMETER, NOR LESS THAN 1". CENTER BARS IN WALLS U.N.C.
8. VERTICAL REINFORCING SHALL BE AS SHOWN ON THE DRAWINGS. FILL CELLS WITH COURSE GROUT AS SPECIFIED. PROVIDE ACI 90 DEGREE STANDARD HOOKS INTO FOOTING AND ROOF TIE BEAM LAP SPlice. VERTICAL REINFORCEMENT ABOVE FOOTING AND ABOVE EACH FLOOR LEVEL UNLESS NOTED OTHERWISE. MAINTAIN VERTICAL REINFORCING SHOWN ON PLANS ABOVE AND BELOW MASONRY OPENINGS EXCEEDING 10" OF CLEAR. CONTINUE FOUNDATION DOWELS BELOW ALL MASONRY OPENINGS.
9. ALL REINFORCED FILL CELLS ARE TO BE CLEAN AND FREE OF ANY FOREIGN MATERIAL OR DEBRIS. REMOVE ANY FOREIGN MATERIAL FROM FILL CELLS, INCLUDING POLYSTYRENE INSULATING INSERTS, PRIOR TO GROUT POUR.
10. REINFORCING BARS SHALL BE STRAIGHT EXCEPT FOR BENDS AROUND CORNERS AND WHERE BENDS OR HOOKS ARE DETAILED ON THE PLANS.
11. REINFORCING BARS SHALL BE LAPPED 50 BAR DIAMETERS WHERE SPLICED AND SHALL BE WIRE TIED TOGETHER.
12. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICALS. DOWELS SHALL BE GROUTED INTO A CORE IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCEMENT.
13. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCING 9 GA GALVANIZED LADDER TYPE DWR-D-WALL (OR EQUIVALENT) AT 16" O.C.
14. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT DOORS AND WINDOWS FOR FIRST AND SECOND BLOCK COURSE ABOVE AND BELOW APERTURES. RUN REINFORCING CONTINUOUS OR EXTEND TWO FEET FROM APERTURE EDGE.
15. WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AT SPLICES AND SHALL CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.
16. CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF MASONRY IN EACH GROUT POUR WHEN THE POUR HEIGHT EXCEEDS 5'. CLEANOUTS TO BE SAW-CUT 4" X 4".
17. GROUT POUR HEIGHT SHALL NOT EXCEED 24". PLACE GROUT IN 5" MAX. LIFTS HEIGHTS.
18. CONSIDER GROUT POURS AT THE TIME OF PLACEMENT BY MECHANICAL MEANS AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT.
19. STORE BLOCKS ON PALLETS AND COVER WITH VISQUEUX.
20. PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS.
21. SEE DRAWINGS FOR MASONRY CONTROL JOINT LOCATIONS.
22. MASONRY INSPECTION SHALL BE PROVIDED BY A QUALIFIED AGENT IN ACCORDANCE WITH ACI 530-1.6. INSPECTION SERVICES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE WORK IN PROGRESS AS WELL AS MATERIALS, EQUIPMENT, AND PROCEDURES.

SITE WORK

- 1. A SUBSURFACE INVESTIGATION HAS BEEN COMPLETED AT THE PROJECT SITE BY UNIVERSAL ENGINEERING SCIENCES, INC. SOIL BORING LOGS AND SITE PREPARATION PROCEDURES ARE INCLUDED IN THE PROJECT SOILS REPORT, DATED APRIL 29, 2008, WHICH IS AN INTEGRAL PART OF THESE CONTRACT DOCUMENTS.
2. ALL SITE WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SOILS REPORT.
3. DESIGN SOIL BEARING PRESSURE = 2,500 PSF.
4. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS: a) ONE DENSITY TEST FOR EACH 2,000 SQUARE FEET OF COMPACTED SUBGRADE AND COMPACTED FILL b) ONE DENSITY TEST AT EACH COLUMN FOOTING c) ONE DENSITY TEST PER 50 FEET OF WALL FOOTING.
5. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
6. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
7. THE SIDES OF FOOTINGS MAY BE EARTH-FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE; OTHERWISE, PLYWOOD FORMS MUST BE USED.

CAST IN PLACE CONCRETE

- 1. CONCRETE TO BE NORMAL WEIGHT WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS: a) FOOTINGS, SLAB-IN-GRADE..... 3000 PSI b) COLUMNS, WALLS, BEAMS..... 4000 PSI
2. CONCRETE SHALL BE READY-MIX PER ASTM C94: a) PORTLAND CEMENT - ASTM C 150 b) AGGREGATES - ASTM C33 (34 MAX.) c) NO CALCIUM CHLORIDE d) AIR ENTRAINING - ASTM C260 e) WATER REDUCING - ASTM C494 f) FLYASH - ASTM C618 CLASS F (25% MAXIMUM BY WEIGHT) g) WATER - CLEAN AND POTABLE
3. REINFORCING STEEL - ASTM A615 GRADE 60.
4. REQUIRED SLUMP RANGE = 3" TO 5".
5. WELDED WIRE FABRIC - ASTM A-185. FURNISH IN SHEETS, NOT ROLLS.
6. MOISTURE BARRIER: 15 MIL POLYETHYLENE, LAP 6" AND TAPE ALL JOINTS.
7. CODES AND STANDARDS: (CURRENT EDITION) ACI 301 "SPEC FOR STRUCTURAL CONCRETE FOR BUILDINGS." ACI 305 "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING." ACI 318 "BLDG. CODE REQUIREMENTS FOR REINFORCED CONCRETE." ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
8. MINIMUM LAP SPlice = 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.
9. PROVIDE PROPERLY TIED SPACERS, CHAIRS, BOLSTERS, ETC., AS REQUIRED AND NECESSARY TO ASSEMBLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE. USE WIRE BAR TYPE SUPPORTS COMPLYING WITH CRSI RECOMMENDATIONS. USE PLASTIC TIE LEGS ON ALL EXPOSED SURFACES.
10. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, AND SLAB RECESSES AS REQUIRED BY OTHER TRADES BEFORE CONCRETE IS PLACED. NO SLEEVES, OPENING, OR INSERTS MAY BE PLACED IN BEAMS OR COLUMNS UNLESS APPROVED BY THE ENGINEER.
11. CONTRACTOR SHALL VERIFY EMBEDDED ITEMS, INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, BOLT CLUSTERS, WELD PLUGS, ETC., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.
12. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.
13. ALL CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OPERATIONS IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS: a) APPLY A 30 % SOLIDS LIQUID MEMBRANE FORMING CHEMICAL CURING COMPOUND IN ACCORDANCE WITH ASTM C-109. b) PROVIDE CONTINUOUS MOISTURE TO CONCRETE IN ACCORDANCE WITH ACI 301.
14. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER DESIGN AND CONSTRUCTION OF ALL FORMWORK, SHORING, AND RESHORING DESIGN SHALL BE PERFORMED BY A LICENSED FLORIDA ENGINEER.
15. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING CONCRETE TESTS ON SITE: a) CYLINDER STRENGTH TESTS: ASTM C39; ONE SET OF FOUR CYLINDERS FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF. TEST ONE CYLINDER AT 7 DAYS AND TWO AT 28 DAYS. HOLD THE FINAL CYLINDER IN RESERVE. b) SLUMP TESTS - ASTM C143
16. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.

- 23. SUBMITTALS: a) SUBMIT PROPOSED GROUT MIX DESIGN PRIOR TO CONSTRUCTION. b) SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS. c) SUBMIT COMPRESSIVE STRENGTH TESTS OF PROPOSED MASONRY UNITS PRIOR TO CONSTRUCTION. MASONRY UNITS ARE TO BE TESTED IN ACCORDANCE WITH ASTM C140.
24. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS: a) SAMPLE AND TEST GROUT IN ACCORDANCE WITH ASTM C1019 FOR EACH 5000 SQ. FT. OF MASONRY. b) SLUMP TESTS - ASTM C143.
25. PROVIDE 8" DEEP PRECAST REINFORCED CONCRETE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. MINIMUM END BEARING = 8". LINTEL WIDTH TO MATCH MASONRY WIDTH.
26. THE TOP OF PARTIALLY CONSTRUCTED WALLS SHALL BE COVERED WITH VISQUEUX AT THE END OF EACH WORK DAY AND WHENEVER RAIN OCCURS.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION, EXCEPT CHAPTER 4.2.1. CODE OF STANDARD PRACTICE.
2. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1. ALL WELDING SHALL BE PERFORMED USING E70XX, LOW HYDROGEN ELECTRODES, U.N.D. ELECTRODES ARE TO BE PROTECTED FROM MOISTURE.
3. ALL CONNECTIONS TO BE DOUBLE ANGLE FRAMED BEAM CONNECTION PER AISC UNLESS NOTED OTHERWISE. ALL BOLTS TO BE 3/4" DIAMETER UNLESS NOTED OTHERWISE. SHOP CONNECTIONS MAY BE WELDED OR BOLTED. WELDS ARE TO BE EQUAL IN STRENGTH TO BOLTS. ALL FIELD CONNECTIONS ARE TO BE BOLTED WITH ASTM A325N OR A490 BOLTS (BEARING TYPE BOLTS WITH THREADS IN THE SHEAR PLANE) INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT UNLESS OTHERWISE NOTED. DESIGN CONNECTIONS FOR THE LARGER OF EITHER THE SHEAR SHOWN ON THE DRAWINGS, (INDICATED AS "K" OR "K1" AT ENDS OF MEMBERS) OR 55% OF THE MAXIMUM SHEAR (V IN KIPS) LISTED IN THE TABLES FOR "ALLOWABLE UNIFORM LOADS IN KIPS FOR BEAMS LATERALLY SUPPORTED" AT THE BOTTOM OF EACH PAGE IN THE "PROPERTIES AND DESIGN VALUES", PART 2 OF THE LATEST EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION".
4. SIZE AND USE OF HOLES: SEE AISC TABLE J3.1 U.N.D. a) OVERSIZED OR LONG-SLOTTED HOLES ARE NOT PERMITTED U.N.D. MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 1/16". b) LARGER HOLES ARE PERMITTED IN STANDARD CEILING BASE PLATES, MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 3/8", HARDENED WASHERS, TO COVER THE LARGER HOLE, SHALL BE PROVIDED. c) LARGER HOLES ARE NOT PERMITTED IN WIND FRAME COLUMN BASE PLATES. MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 1/16". d) SLOTTED HOLES: A PLATE WASHER OR A CONTINUOUS BAR WITH STANDARD HOLES, HAVING A SIZE SUFFICIENT TO COMPLETELY COVER THE SLOT AFTER INSTALLATION, AND A MIN. OF 5/16" THICK SHALL BE PROVIDED. TACK WELD NUT TO BOLT AFTER ERECTION.
5. ALL STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCES) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.
6. VERIFY THE EXACT SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF MATERIALS.
7. SHOP PAINT - METAL ALKYL-DIOL PRIMER, ANY OF THE FOLLOWING: SEE ARCHITECT FOR PREFERRED COLOR.
8. MANUFACTURER DESIGNATION PORTER NO. 298 MOBILE NO. 13F812 VITENEG AMERON NO. 5102 AMERDART
9. SHOP PAINT ALL SURFACES OF STEEL EXCEPT ANCHOR BOLTS AND SURFACES TO BE FIELD WELDED. APPLY PAINT IN ACCORDANCE WITH SSPC-PA1, SHOP FIELD AND MAINTENANCE PAINTING. APPLY PAINT IN SUFFICIENT VOLUME OR COATS TO PROVIDE A MINIMUM DRY FILM THICKNESS OF AT LEAST 3 MILS BUT NOT MORE THAN 5 MILS.
10. SURFACE PREPARATION - PREPARE STEEL SURFACE IN ACCORDANCE WITH SSPC-SP9 POWER TOOL CLEANING. ANY METHOD IN CONFORMANCE WITH AN SSPC SPECIFICATION OF HIGHER QUALITY THAN LISTED WILL BE ACCEPTABLE. AT OPTION OF CONTRACTOR, WHEELABRATOR MAY BE USED FOR PREPARATION OF STEEL SURFACES, PROVIDING RESULTANT SURFACE IS EQUAL IN ALL RESPECTS TO THOSE REQUIRED.
11. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS: a) VISUALLY INSPECT ALL STEEL MEMBERS AND CONNECTIONS. b) TEST 50 PERCENT OF FULL PENETRATION WELDS.
12. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
13. STRUCTURAL STEEL SHAPES, TEES - ASTM A992.
14. STRUCTURAL STEEL ANGLES, CHANNELS, PLATES, BARS - ASTM A36.
15. STRUCTURAL STEEL TUBING - ASTM A500 GRADE B.
16. STEEL PIPE - ASTM A501.
17. ANCHOR BOLTS - F1554 GRADE 36.
18. OPENINGS THROUGH STEEL BEAMS SHALL BE PROVIDED AS DETAILED ON THE DRAWINGS. ALL SUCH OPENINGS SHALL BE MACHINE CUT IN THE SHOP. ALL RECTANGULAR OPENINGS SHALL HAVE A CORNER RADIUS OF 2 TIMES THE WEB THICKNESS, 1/2" MINIMUM.
19. COLUMN SPLICES SHALL BE DESIGNED IN ACCORDANCE WITH TABLE A-7, PAGE 11-41 OF THE AISC "STRUCTURAL STEEL DETAILING" MANUAL.
20. NO SPLICES SHALL BE PERMITTED IN ANY STRUCTURAL STEEL MEMBER UNLESS SHOWN ON APPROVED SHOP DRAWINGS.
21. SUBMITTALS: CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING ALL STRUCTURAL STEEL LAYOUTS AND DETAILS, SIZES OF MEMBERS, TYPE OF STEEL, CONNECTION DETAILS, WELDS, BOLTS, ETC., AS REQUIRED TO FABRICATE AND ERECT ALL STRUCTURAL STEEL FRAMING. ALL CONNECTIONS STRUCTURAL DRAWINGS SHALL BE BY THE DETAILER AND SUBMITTED ON SHOP DRAWINGS, SIGNED AND SEALED BY A REGISTERED FLORIDA ENGINEER. STEEL STAIRS SHALL ALSO BE SUBMITTED ON SEALED DRAWINGS.
22. NON-SHRINK GROUT SHALL BE: NONMETALLIC SHRINKAGE-RESISTANT GROUT, PRIMED, NONMETALLIC, NONCORROSIVE, NONSTAINING PRODUCT CONTAINING SELECTED SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AGENTS, PLASTICIZING AND WATER-REDUCING AGENTS, COMPLYING WITH CC-CR-0621.
23. NO FIELD WELDING OF GALVANIZED IS PERMITTED.
24. ERECTION: a) BEFORE ERECTION, THE CONTRACTOR IS TO REMOVE ALL MUD, DIRT OR OTHER FOREIGN MATTER, WHICH ACCUMULATES DURING HANDLING AND STORAGE. b) AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS WHERE SHOP COAT HAS BEEN DAMAGED. SPOT AND PRIME AREAS USING SAME MATERIAL AS SHOP COAT. c) SET ALL MEMBERS SO THAT, IN THEIR FINAL LOCATION, LEVEL, PLUMBNESS AND ALIGNMENT ARE WITHIN THE TOLERANCES PRESCRIBED BY AISC CODE.
25. FRAMING COMPONENTS MAY BE PREFABRICATED INTO PANELS PRIOR TO ERECTION. FABRICATE PANELS PLUMB, SQUARE, TRUE TO LINE AND BRACED AGAINST BACKING WITH JOINTS WELDED. PERFORM LIFTING OF PREFABRICATED PANELS IN A MANNER TO PREVENT DAMAGE OR DISTORTION.
26. INSTALL METAL FRAMING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED OR WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, UNLESS OTHERWISE INDICATED.

OPEN WEB STEEL JOISTS AND JOIST GIRDERS (NOTED "JOISTS" HEREIN)

- 1. STEEL JOIST MANUFACTURER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE.
2. STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE AISC STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS K-SERIES.
3. SEE STANDARD JOIST SPECIFICATIONS FOR CAMBER REQUIREMENTS.
4. VERIFY THE EXACT LOCATION AND WEIGHT OF ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF DETAILS. ALL HANGERS TO BE LOCATED AT THE CENTERLINE OF THE BOTTOM CHORD MEMBER.
5. PROVIDE BOTTOM CHORD CEILING EXTENSIONS WHERE REQUIRED BY ARCHITECT.
6. JOIST MANUFACTURER SHALL DESIGN ROOF JOISTS AND BRIDGING FOR THE NET WIND LOAD UPLIFT INDICATED ON THE DRAWINGS. PROVIDE UPLIFT BRIDGING AT FIRST JOIST PANEL POINTS ACCORDING TO S.J.1.
7. WHERE COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH STRUCTURAL STEEL MEMBERS, A BAR JOIST SHALL BE FIELD-BOLTED AT COLUMNS TO PROVIDE LATERAL STABILITY.
8. JOIST BRIDGING SHALL BE FURNISHED AND INSTALLED TO MEET THE DESIGN AND SPACING REQUIREMENTS OF THE S.J.I. STANDARD SPECIFICATIONS. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. REFER TO S.J.I. STANDARD SPECIFICATIONS FOR SPECIAL BRIDGING AND ERECTION REQUIREMENTS FOR SPANS OF 40' OR MORE.
9. RIGID X-BRIDGING AS SHOWN ON THE PLANS SHALL BE BOLTED OR WELDED AT THE INTERSECTION OF THE TWO ANGLES BETWEEN JOISTS.
10. JOISTS, JOIST GIRDERS, AND ACCESSORIES SHALL HAVE ONE SHOP COAT OF PAINT MEETING THE MINIMUM PERFORMANCE REQUIREMENTS OF THE LATEST S.J.I. SPECIFICATIONS. SEE ARCHITECT FOR PREFERRED COLOR.
11. SEE PLAN FOR ANY CONCENTRATED LOADS OR UNUSUAL CONDITIONS. ALL JOISTS SUBJECT TO SPECIAL LOADS OR CONDITIONS SHALL BE CONSIDERED "SPECIAL JOISTS".
12. SUBMITTALS: CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING JOISTS, BRIDGING, AND ALL CONNECTIONS. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED FLORIDA ENGINEER.
13. JOIST DESIGN ENGINEER MUST BE PROVIDED WITH A COPY OF THESE DRAWINGS AND SPECIFICATIONS.

METAL DECKING

- 1. ALL METAL DECK SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL DECK INSTITUTE.
2. METAL ROOF DECK SHALL BE 1 1/2" DEEP, 22 GA., WIDE RIB TYPE B AND GALVANIZED.
3. MINIMUM FASTENING OF ROOF DECK WITH (7) 5/8" DIA. PUDDLE WELDS AT EACH SUPPORT PER 36" WIDTH AND 6-#10 TEK SCREW AT MIDSPAN OF SIDELAPS. SEE PLANS FOR ADDITIONAL FASTENING.
4. MINIMUM FASTENING AT BUILDING PERIMETER OF DECK SHALL BE 5/8" DIAMETER Puddle WELDS AT 12" O.C.
5. INSTALL ALL DECKING 3 SPAN CONTINUOUS.
6. USE WELD WASHERS FOR ALL DECKING 24 GA. AND THINNER.
7. DO NOT HANG OR ATTACH DUCTWORK, CONDUIT, PIPING, EQUIPMENT, CEILING, ETC. FROM METAL DECKING.
8. ALL ROOF DECK OPENING 12" DIAMETER OR LARGER ARE TO HAVE SUPPORT ANGLES PER TYPICAL DECK OPENING DETAIL, INCLUDING OPENING FOR ROOF DUMP PUMPS.
9. SUBMITTALS: CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING LAYOUT OF DECK TYPE OF DECK, ALL CONNECTIONS INCLUDING END WELDS, SEAM WELDS, INTERMEDIATE WELDS, AND ALL ACCESSORY MATERIAL SUCH AS CLOSURES, SUMPS FOR DRAINS, ETC.
10. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO VISUALLY INSPECT ALL DECK WELDS AND FASTENERS.

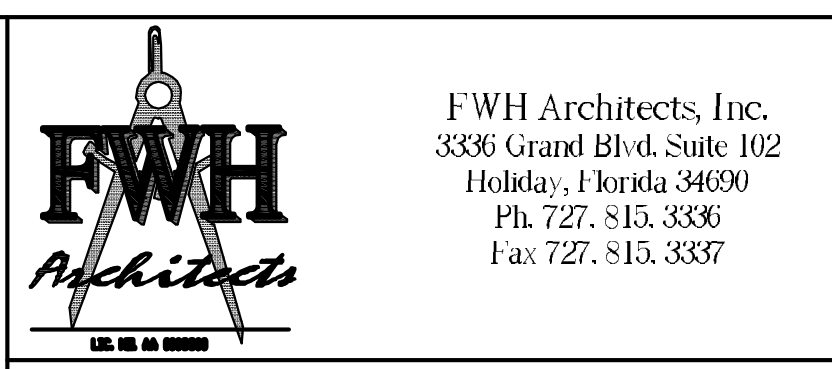
COLD-FORM STEEL FRAMING

- 1. ALL STEEL FRAMING SHALL CONFORM TO "THE SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION, BY THE AISC.
2. WELDED CONNECTIONS SHALL CONFORM TO "CODE FOR WELDING IN BUILDING CONSTRUCTION, D1.0" BY THE AWS.
3. ASTM A-568 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR STEEL, CARBON AND HIGH STRENGTH LOW-ALLOY HOT ROLLED SHEET AND COLD ROLLED SHEET.
4. ALL STEEL FRAMING SHALL BE INSTALLED BY PERSONNEL EXPERIENCED IN LIGHT GAUGE STEEL FRAMING INSTALLATION.
5. WHERE STEEL FRAMING MEMBERS ARE COMPONENTS OF ASSEMBLIES INDICATED FOR A FIRE-RESISTANCE RATING, INCLUDING THOSE REQUIRED FOR COMPLYING WITH GOVERNING REGULATIONS, PROVIDE MEMBERS WHICH HAVE BEEN APPROVED BY GOVERNING AUTHORITIES HAVING JURISDICTION.
6. PROTECT LIGHT GAUGE STEEL FRAMING MEMBERS FROM RUSTING AND DAMAGE. DELIVER TO PROJECT SITE IN BUNDLES, FULLY IDENTIFIED WITH NAME, BRAND, TYPE AND GRADE. STORE OFF GROUND IN A DRY VENTILATED SPACE OR PROTECT WITH SUITABLE WATERPROOF COVERINGS.
7. WITH EACH TYPE OF STEEL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING, LINTELS, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATIONS INDICATED, AS NEEDED TO PROVIDE A COMPLETE STEEL FRAMING SYSTEM.
8. FABRICATE METAL FRAMING COMPONENTS OF STRUCTURAL QUALITY SHEET STEEL WITH A MINIMUM YIELD POINT OF 50,000 PSI FOR STUDS, AND 33,000 PSI FOR RUNNERS; ASTM A653.
9. SCREWS SHALL BE AS RECOMMENDED BY MANUFACTURER.
10. PROVIDE GALVANIZED FINISH TO METAL FRAMING COMPONENTS COMPLYING WITH ASTM A95 WITH A G60 COATING.
11. PROVIDE MANUFACTURER'S STANDARD STRUCTURAL "C" SHAPED STEEL STUDS OF SIZE, SHAPE, AND GAUGE INDICATED, WITH A NOMINAL 1-5/8" FLANGE AND MINIMUM 1/2" FLANGE RETURN LIP BY UNIMAST, INC. OR PRIOR APPROVED EQUAL.
12. THE EXTERIOR WALL SYSTEM SHALL BE DESIGNED TO WITHSTAND BOTH POSITIVE AND NEGATIVE WIND PRESSURE WITH A MAXIMUM DEFLECTION BASED UPON THE APPLICABLE CODE AND MATERIAL REQUIREMENTS OF THE VENEER, BUT SHALL NOT EXCEED L/360.
13. FRAMING COMPONENTS MAY BE PREFABRICATED INTO PANELS PRIOR TO ERECTION. FABRICATE PANELS PLUMB, SQUARE, TRUE TO LINE AND BRACED AGAINST BACKING WITH JOINTS WELDED. PERFORM LIFTING OF PREFABRICATED PANELS IN A MANNER TO PREVENT DAMAGE OR DISTORTION.
14. TRUSS ERECTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING OF TRUSS SYSTEM DURING CONSTRUCTION.
15. HANDLING, INSTALLATION, AND BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH "TPI 1-95", PUBLISHED BY THE TRUSS PLATE INSTITUTE.

- 16. INSTALL CONTINUOUS TRACKS SIZED TO MATCH STUD DEPTH. ALIGN TRACKS ACCURATELY TO LAYOUT AT BASE AND TOPS OF STUDS. SECURE TRACKS AS RECOMMENDED BY STUD MANUFACTURER FOR TYPE OF CONSTRUCTION INVOLVED. EXCEPT DO NOT EXCEED 24" O.C. SPACING FOR NAIL OR POWDER-DRIVEN FASTENERS, OR 16" O.C. FOR OTHER TYPES OF ATTACHMENT. PROVIDE FASTENERS AT CORNERS AND ENDS OF TRACKS.
17. FRAME BOTH SIDES OF EXPANSION AND CONTROL JOINTS, AS SHOWN FOR THE WALL SYSTEM, WITH SEPARATE STUDS AND DO NOT BRIDGE THE JOINT WITH COMPONENTS OF THE STUD SYSTEM.
18. WHERE REQUIRED, TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.
19. RESISTANCE TO BENDING AND ROTATION ABOUT THE MINOR AXIS SHALL BE PROVIDED BY MECHANICAL LATERAL BRACING WHERE REQUIRED.
20. ATTACHMENTS OF SIMILAR COMPONENTS SHALL BE DONE BY WELDING, SCREW ATTACHMENT, OR BOLTING. WIRE TYING OF FRAMING COMPONENTS SHALL NOT BE PERMITTED.
21. WELDING OF MEMBERS LIGHTER THAN 18 GAUGE SHALL NOT BE PERMITTED.
22. SPLICES SHALL NOT BE PERMITTED.
23. MINIMUM NUMBERS OF EQUALLY SPACED JOIST BRIDGING FOR THE SPANS SHOWN: UP TO 14' - 1 ROW 14' TO 20' - 2 ROWS
24. MINIMUM NUMBER OF EQUALLY SPACED HORIZONTAL WALL BRIDGING FOR THE HEIGHTS SHOWN: UP TO 10' - 1 ROW 10' TO 14' - 2 ROWS ABOVE 14' - AT 4 CENTERS
25. FULLY INSTALL ALL BRIDGING BEFORE APPLYING LOADS.
26. JOIST SHALL BEAR DIRECTLY ON STUDS UNLESS HEADERS ARE USED.
27. PROVIDE JOIST WEB STIFFENERS WHERE JOIST BEARING IS LESS THAN 3-1/2".
28. FOR WELDED CONNECTIONS, FUSION WELDING IS RECOMMENDED WITH A DIRECT CURRENT WELDER OF 200 OR MORE AMPERE CAPACITY. USE A HEAT OF 60 TO 90 AMPERES (DEPENDING ON THE GAUGE OF METAL) ALONG WITH ASTM E60 ELECTRODES.
29. CONTRACTOR TO SUBMIT THE FOLLOWING: a) SUBMIT COMPLETE STRUCTURAL CALCULATIONS FOR THE STEEL FRAMING SYSTEM. CALCULATIONS SHALL COVER ALL STUDS, JAMB STUDS, RUNNER TRACK, BRACING, ATTACHMENT OF LIGHT GAUGE FRAMING TO LIGHT GAUGE FRAMING, AND ATTACHMENT OF LIGHT GAUGE FRAMING TO CONCRETE OR STRUCTURAL STEEL. b) SUBMIT DETAILED SHOP DRAWINGS FOR STEEL FRAMING SHOWING THE TYPE AND SPACING OF ALL MEMBERS. ALL ATTACHMENTS SHALL BE CLEARLY DETAILED ON THE DRAWINGS. INDICATED SUPPLEMENTAL STRAPPING, BRACING, CLIPS, AND OTHER ACCESSORIES REQUIRED FOR PROPER INSTALLATION. c) SUBMIT CERTIFICATION OF MATERIALS FROM THE MANUFACTURER TO SHOW COMPLIANCE WITH THESE SPECIFICATIONS AND RELATED DRAWINGS.
30. ALL SUBMITTALS SHALL BEAR THE SEAL OF A LICENSED FLORIDA ENGINEER.
31. SUBMITTED SHOP DRAWINGS MUST BE CHECKED AND SIGNED BY THE GENERAL CONTRACTOR.

PRE-ENGINEERED WOOD TRUSSES

- 1. THIS SECTION DEFINES PRE-ENGINEERED, PREFABRICATED, METAL PLATE CONNECTED WOOD ROOF TRUSSES AS "WOOD TRUSSES".
2. WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" 1991 EDITION, PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION. "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" (TP1-1-95) PUBLISHED BY THE TRUSS PLATE INSTITUTE; AND THE APPLICABLE BUILDING CODE LISTED IN THE MISCELLANEOUS SECTION OF THESE SPECIFICATIONS.
3. THE WOOD TRUSS MANUFACTURER MUST PARTICIPATE IN A CODE APPROVED THIRD PARTY QUALITY ASSURANCE PROGRAM SUCH AS THE TRUSS PLATE INSTITUTE'S "QUALITY CONTROL INSPECTION PROGRAM" OR EQUIVALENT.
4. WOOD TRUSS MEMBERS AND CONNECTIONS SHALL BE DESIGNED FOR ALL LOADS SHOWN ON THE CONTRACT DOCUMENTS INCLUDING UNIFORM AND CONCENTRATED LOADS, PLUS WIND LOADS IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE: 1. TOP CHORD 15 PSF 2. BOTTOM CHORD 10 PSF
5. DURATION OF LOAD FACTORS: ROOF DL+LL+WL 1.33 ROOF DL+LL 1.25 FLOOR DL+LL 1.00
6. WOOD TRUSS DESIGN SHOP DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: a) SPAN LENGTH, OVERHANG AND EAVE DIMENSIONS, SLOPE AND SPACING OF THE WOOD TRUSSES. b) ALL DESIGN LOADS AND THEIR POINTS OF APPLICATION, VALLEY AND CONVENTIONAL FRAMING MUST BE CONSIDERED. c) ADJUSTMENTS TO ALLOWABLE VALUES. (DURATION OF LOAD FACTORS, ETC.) d) REACTIVE FORCES AND THEIR LOCATIONS. e) BEARING TYPE AND MINIMUM BEARING LENGTH. f) DEFLECTIONS, SPAN AND REACTION. g) METAL CONNECTION PLATE TYPE, GAUGE, SIZE, AND LOCATION. h) LUMBER SIZE, SPECIES, GRADE AND MOISTURE CONTENT. i) LOCATION AND CONNECTION DESIGN OF REQUIRED CONTINUOUS LATERAL BRACING. j) TRUSS SPLICES MUST BE DETAILED. THIS INCLUDES "PIGGY BACK" TRUSSES. k) CONNECTION DETAILS: TRUSS TO BEARING, TRUSS TO TRUSS, TRUSS TO TRUSS GIRDER, PIGGY BACK TO TRUSS, ETC. l) BRACING: NOTE MINIMUM BOTTOM CHORD BRACING AND CROSS BRACING REQUIREMENTS BELOW.
7. DEFLECTIONS: (UNLESS NOTED OTHERWISE) a) SPAN LIVE LOAD- LESS THAN OR EQUAL TO SPAN/360 b) SPAN TOTAL LOAD- LESS THAN OR EQUAL TO SPAN /240.
8. FIRE RETARDANT WOOD IS NOT ALLOWABLE.
9. SUPPORTS: WOOD TRUSSES SHALL BE DESIGNED WITH AT LEAST ONE HORIZONTAL ROLLER CONNECTION PER SPAN SO THAT NO HORIZONTAL REACTIONS ARE INDUCED ON SUPPORTS UNDER DEAD OR LIVE LOADS.
10. WOOD TRUSSES MUST BE CHECKED FOR WIND, WIND VELOCITY, DESIGN VELOCITY PRESSURES, AND TYPE OF STRUCTURE FOR WIND, MUST BE SHOWN ON THE SUBMITTED SHOP DRAWINGS.
11. CONTINUOUS BOTTOM CHORD LATERAL BRACING IS REQUIRED AT A MAXIMUM SPACING OF 18' O.C. UNLESS NOTED OTHERWISE. BOTTOM CHORD BRACING IS CONTINUOUS FROM ONE END OF THE BUILDING TO OTHER END. OVERLAP CONTINUOUS BRACING AT LEAST ONE TRUSS SPACING. USE A MINIMUM OF 2 X 4 GRADE MARKED LUMBER AT LEAST 10' LONG, WITH 2-16# NAILS AT INTERMEDIATE AND 3-16# NAILS AT END CONNECTIONS.
12. CROSS BRACING IS REQUIRED AT CONTINUOUS LATERAL BRACING UNLESS NOTED OTHERWISE. LOCATE CROSS BRACING AT OR NEAR THE BOTTOM CHORD BRACING. INSTALL CROSS BRACING AT EACH END AND AT 20' O.C. ALONG THE LENGTH OF THE LATERAL BRACING. CROSS BRACING IS ACCOMPLISHED BY ATTACHING DIAGONAL WEB BRACING TO OPPOSITE SIDES OF THE SAME GROUP OF SIMILAR WEB MEMBERS. SLOPE CROSS BRACING IN OPPOSITE DIRECTIONS AT APPROXIMATELY 45 DEGREES FORMING A CROSS 'X'. USE A MINIMUM OF 2 X 4 GRADE MARKED LUMBER WITH AT LEAST 2-16# NAILS AT EACH CONNECTION.
13. TRUSS ERECTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING OF TRUSS SYSTEM DURING CONSTRUCTION.
14. HANDLING, INSTALLATION, AND BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH "TPI 1-95", PUBLISHED BY THE TRUSS PLATE INSTITUTE.
15. ALL WOOD TRUSSES SHALL BE FASTENED TO THEIR SUPPORTS WITH APPROVED HURRICANE CLIPS OR STRAPS.



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PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY: [] HALGREENS' CONSULTANT [] LANDLORD'S CONSULTANT

CONSTRUCTION WORK BY: (UNLESS NOTED OTHERWISE) [] HALGREENS' CONTRACTOR [] LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

Table with 2 columns: STORE, BUILDING. Rows for NEW, REMODELING, RELOCATION, OTHER.



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Table with 3 columns: NO., DATE, DESCRIPTION. Includes a REVISIONS section.

CERTIFICATION AND SEAL I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA AS SIGNIFIED BY MY HAND AND SEAL. ALAN C. GUENTHER, P.E. FL. P.E. NO. 53308

PROJECT NAME: STORE #13450 SWC OF FOURAKER & NORMANDY JACKSONVILLE, FLORIDA DRAWING TITLE: STRUCTURAL NOTES

Table with 3 columns: DRAWN BY: MAK, REVIEWED BY: ACG, HALGREENS STORE NO: 13450, DRAWING NO: S5.1, FWH PROJECT NO: 0913