

MISCELLANEOUS

- THE STRUCTURAL SYSTEM IS UNSTABLE UNTIL ALL CONNECTIONS HAVE BEEN MADE AND ALL CONCRETE REACTS TO ITS MINIMUM DESIGN STRENGTH, AS SHOWN IN THE STRUCTURAL DOCUMENTS.
- THE STRUCTURAL DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES AND SEQUENCES.
- CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION.
- APPLICABLE BUILDING CODE: FLORIDA BUILDING CODE 8TH EDITION (2023).
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 8TH EDITION (2023).
- DESIGN GRAVITY LOADS:

AREA	SUPERIMPOSED LIVE LOAD (FBC, TABLE 1607.1)
ROOF	20 PSF
FLOOR	125 PSF (LIGHT STORAGE)
STEEL STAIRS	100 PSF
AREA	DEAD LOAD
ROOF	10 PSF (REFER TO METAL BUILDING DRAWINGS)
FLOOR	52 PSF
- ULTIMATE DESIGN WIND SPEED = 139 MPH (FBC, 1620.2) ASD NOMINAL DESIGN WIND SPEED = 108 MPH RISK CATEGORY (FBC, TABLE 1604.5) REFER TO 1/511 FOR WIND PRESSURES AND MORE INFO.
- RAIN LOAD: 7.12 IN/H (15-MIN), 3.9 IN/H (60-MIN)
- COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
- CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.
- IF THIS PROJECT IS CLASSIFIED AS A THRESHOLD BUILDING BY THE BUILDING DEPARTMENT, A SPECIAL INSPECTOR SHALL BE RETAINED IN ACCORDANCE WITH FLORIDA STATUTES.
- THE SPECIAL INSPECTOR SHALL BE LICENSED BY THE FLORIDA BOARD OF PROFESSIONAL ENGINEERS.
- RESUMES OF THE SPECIAL INSPECTOR AND ANY OF HIS AUTHORIZED REPRESENTATIVES SHALL BE SUBMITTED TO THIS OFFICE FOR REVIEW. THIS OFFICE RESERVES THE RIGHT TO REJECT ANY INSPECTOR THAT DOES NOT MEET OUR QUALIFICATIONS.
- THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.
- THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. EXCESSIVE CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- THE CONTRACTOR SHALL INFORM THE PROFESSIONAL OF RECORD IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE PROFESSIONAL OF RECORD'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.

MATERIAL AND SHOP DRAWING SUBMITTALS

- SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND MARKED "APPROVED" PRIOR TO SUBMITTING TO THE ARCHITECT. NON-CONFORMING SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.
- SUBMIT SHOP DRAWINGS AS REQUIRED HEREIN IN DIGITAL PDF FORMAT WITH A HIGH-RESOLUTION, ALLOW FOR TWO WEEKS REVIEW TIME AFTER RECEIPT OF SUBMITTALS BY THIS FIRM. ALL SUBMITTALS SHALL BE SIGNED/SEALED BY THE SPECIALTY OR DELEGATED ENGINEER, AS NOTED BELOW, REFER TO THE SPECIFIC SECTION ON THIS SHEET FOR MORE INFORMATION REGARDING THE SHOP DRAWING SUBMITTAL:
 - A) CONCRETE MIX DESIGN AND CURING COMPOUND/PROCESS
 - B) PRECAST CONCRETE MASONRY
 - C) MASONRY REINFORCING STEEL
 - D) METAL BUILDING FRAMING SYSTEM (AND REACTIONS)
 - E) CONCRETE TILT-UP WALL PANEL ELEVATIONS
 - F) STRUCTURAL STEEL AND METAL DECK
 - G) STRUCTURAL STEEL BEAM CONNECTIONS (SIGNED AND SEALED)
- CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS OR MIX DESIGNS BY THE ENGINEER'S REVIEW THEREOF.
- SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTHS, DIMENSIONS, ETC.
- SHOP DRAWING REVIEW COMMENTS BY THIS FIRM SHALL BE TRANSMITTED TO THE ARCHITECT OF RECORD ONLY FOR THEIR REVIEW. THE ARCHITECT WILL TRANSMIT AN ELECTRONIC COPY OF ALL REVIEWED SUBMITTALS TO THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DISTRIBUTING THE REVIEWED SHOP DRAWINGS TO THE IMPACTED TRADES OR SUBCONTRACTORS.
- CHANGES AND ADDITIONS MADE ON SHOP DRAWING RE-SUBMITTALS SHALL BE CLEARLY FLAGGED AND NOTED AS SUCH. THE PURPOSE OF THE RE-SUBMITTAL SHALL BE NOTED IN THE SUBMITTAL OR ON TRANSMITTAL ATTACHED TO THE SHOP DRAWINGS. A RE-SUBMITTAL OF THE REVISED SHOP DRAWING SUBMITTAL WILL BE LIMITED TO THOSE ITEMS CAUSING THE RE-SUBMITTAL. THE CONTRACTOR IS RESPONSIBLE FOR THE COSTS ASSOCIATED WITH RE-SUBMITTING MULTIPLE (MORE THAN ONE) SHOP DRAWING SUBMITTALS AT THE ENGINEER OF RECORD'S HOURLY RATES.

DELEGATED ENGINEER (PRE-ENGINEERED BUILDING SYSTEMS AND BEAM CONNECTIONS)

- A LICENSED PROFESSIONAL (DELEGATED) ENGINEER SHALL BE RETAINED TO DESIGN THE STEEL FRAMED METAL BUILDING SYSTEM AND/OR THE STEEL BEAM BOLTED CONNECTIONS.
- THE DELEGATED ENGINEER SHALL BE EXPERIENCED IN THE DESIGN OF THE REFERENCED PRODUCT OR ASSEMBLY.
- THE DELEGATED ENGINEER MUST BE PROVIDED WITH A COPY OF THESE DRAWINGS AND SPECIFICATIONS.
- IT IS THE DELEGATED ENGINEER'S RESPONSIBILITY TO REVIEW THE ENGINEER OF RECORD'S WRITTEN ENGINEERING REQUIREMENTS AND AUTHORIZATION FOR THE DELEGATED ENGINEERING DOCUMENT TO DETERMINE THE APPROPRIATE SCOPE OF ENGINEERING.
- THE DELEGATED ENGINEERING DOCUMENT SHALL COMPLY WITH THE WRITTEN ENGINEERING REQUIREMENTS RECEIVED FROM THE ENGINEER OF RECORD. THEY SHALL INCLUDE THE PROJECT IDENTIFICATION AND THE CRITERIA USED AS A BASIS FOR ITS PREPARATION. IF A DELEGATED ENGINEER DETERMINES THERE ARE DETAILS, FEATURES OR UNANTICIPATED PROJECT LIMITS WHICH CONFLICT WITH THE WRITTEN ENGINEERING REQUIREMENTS PROVIDED BY THE ENGINEER OF RECORD, THE DELEGATED ENGINEER SHALL TIMELY CONTACT THE ENGINEER OF RECORD FOR RESOLUTION OF CONFLICTS.
- THE DELEGATED ENGINEER SHALL FORWARD THE DELEGATED ENGINEERING DOCUMENT TO THE ENGINEER OF RECORD FOR REVIEW. ALL FINAL DELEGATED ENGINEERING DOCUMENTS REQUIRE THE SEAL AND SIGNATURE OF THE DELEGATE ENGINEER AND INCLUDE:
 - A) DRAWINGS INTRODUCING ENGINEERING INPUT SUCH AS DEFINING THE CONFIGURATION OR STRUCTURAL CAPACITY OF STRUCTURAL COMPONENTS AND/OR THEIR ASSEMBLY INTO STRUCTURAL SYSTEMS
 - B) CALCULATIONS

SITE WORK

- A SUBSURFACE INVESTIGATION HAS BEEN COMPLETED AT THE PROJECT SITE BY **ATLAS TECHNICAL CONSULTANTS, LLC, PROJECT NO. 1055785003**. SOIL BORING LOGS AND SITE PREPARATION PROCEDURES ARE INCLUDED IN THE PROJECT SOILS REPORT, DATED **FEBRUARY 7, 2023**, WHICH IS AN INTEGRAL PART OF THESE CONTRACT DOCUMENTS.
- ALL SITE PREPARATION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SOILS REPORT. THE SITE SHALL BE CLEARED OF ANY DELETERIOUS MATERIALS, ORGANICS AND BURIED DEBRIS AND PROOF-ROLLED. COMPACTION OF THE SOIL SHALL MEET 90% STANDARD PROCTOR DRY DENSITY (MINIMUM).
- DESIGN SOIL BEARING PRESSURE = 3,000 PSF.

- THE SLAB/FOUNDATION DESIGN IS BASED ON A "SPREAD OR CONTINUOUS FOOTINGS" AND A FIBER REINFORCED MAT/SLAB. THE CONTRACTOR SHALL PREPARE THE SUBGRADE AS OUTLINED IN THE REPORT. EXTEND THE FOOTPRINT OF THE EXCAVATED AREA A MINIMUM OF 5 FEET BEYOND THE GENERAL BUILDING LINES. EXCAVATED AREAS SHALL EXTEND TO THE OUTER LIMITS OF THE SUEWALKS AS A MINIMUM AS WELL. THE MAT SLAB SUPPORT AREAS SHALL HAVE A MODULUS OF SUBGRADE REACTION OF 125 PCF OR BETTER.
- A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE PRESENT TO OVERSEE THE SUBGRADE MODIFICATION, TO EVALUATE THE SUBGRADE SOILS FOR SUITABILITY, TO DETERMINE THE DRY DENSITY. THE CONTRACTOR/OWNER SHALL USE THE SAME GEOTECHNICAL ENGINEER THAT PREPARED THE GEOTECHNICAL 27. REPORT FOR FOUNDATION TESTING/INSPECTIONS.
- THE FOLLOWING TESTS SHALL BE PERFORMED (MINIMUM):
 - 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.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND TESTING LABORATORY AT LEAST 24 HOURS PRIOR TO PLACEMENT OF CONCRETE.
- ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- A GEOTECHNICAL ENGINEER SHALL VERIFY THAT SOILS OF THE DESIGN BEARING CAPACITY HAVE BEEN ENCOUNTERED AND THAT THE BUILDING PAD IS SUITABLE FOR CONSTRUCTION.
- THE SIDES OF FOOTINGS MAY BE EARTH-FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE; OTHERWISE, PLYWOOD FORMS MUST BE USED.
- FOUNDATION WALLS THAT RETAIN EARTH SHALL BE GRADED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
- POSITIVE SITE DRAINAGE SHALL BE MAINTAINED TO DIVERT WATER AWAY FROM THE BUILDING AREAS.
- THE ABOVE REQUIREMENTS ARE A SUMMARY OF THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL NOT BE ABSOLVED FROM THE RESPONSIBILITY OF REVIEWING AND COMPLYING WITH THE ENTIRE GEOTECHNICAL REPORT.

CAST-IN PLACE CONCRETE

- CONCRETE TO BE NORMAL WEIGHT WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
 - A) FOOTINGS.....3000 PSI
 - B) SLAB-ON-GROUND.....4000 PSI
 - C) SECOND FLOOR.....3500 PSI
 - D) TILT-UP WALL PANELS.....4000 PSI
- CONCRETE SHALL BE READY-MIX PER ASTM C94:
 - A) PORTLAND CEMENT - ASTM C 150
 - B) AGGREGATES - ASTM C33 (3/4" MAX.)
 - C) NO CALCIUM CHLORIDE
 - D) AIR ENTRAINING - ASTM C260
 - E) WATER REDUCING - ASTM C494
 - F) FLYASH - ASTM C618 CLASS F (20% MAXIMUM BY WEIGHT)
 - G) WATER - CLEAN AND POTABLE
- REINFORCING STEEL: ASTM A615 GRADE 60, GALVANIZED REINFORCEMENT: ASTM A767, CLASS II
- ALL REINFORCING STEEL BELOW GRADE SHALL BE HOT-DIPPED GALVANIZED.
- REQUIRED SLUMP RANGE = 3" TO 5".
- WELDED WIRE FABRIC: ASTM A-185, FURNISH IN SHEETS, NOT ROLLS.
- MOISTURE/VAPOR RETARDER: TO MIL POLYETHYLENE, LAP 6" AND TAPE ALL JOINTS.
- CODES AND STANDARDS: (CURRENT EDITION)
 - ACI 301 "SPEC FOR STRUCTURAL CONCRETE FOR BUILDINGS."
 - ACI 305 "RECOMMENDED PRACTICE FOR CAST-IN-PLACE WEATHER CONCRETING."
 - ACI 318 "BUID. CODE REQUIREMENTS FOR REINFORCED CONCRETE."
 - ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
- MINIMUM LAP SPICE = 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.
- PROVIDE PROPERLY TIED SPACERS, CHAIRS, BOLSTERS, ETC. AS REQUIRED AND NECESSARY TO STABLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE. USE WIRE BAR TIE SUPPORTS COMPLYING WITH CRSI RECOMMENDATIONS. USE PLASTIC TIP LEGS ON ALL EXPOSED SURFACES.
- CONTRACTOR SHALL VERIFY EMBEDDED ITEMS, INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, BOLT CLUSTERS, WELD PLATES, ETC., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.
- SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.
- 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.
- 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.
- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING LABORATORY 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
- ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- 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.
- MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE:
 - A) 4000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.44 MAXIMUM (NON-AIR-ENTRAINED), 0.36 MAXIMUM (AIR-ENTRAINED).
 - B) 3000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.58 MAXIMUM (NON-AIR-ENTRAINED), 0.47 MAXIMUM (AIR-ENTRAINED).
 - C) 3500 PSI, 28-DAY COMPRESSIVE STRENGTH, LIGHT WEIGHT CONCRETE BY FIRE ASSEMBLY REQUIREMENTS (COORDINATE WITH ARCHITECT DRAWINGS), (110 PCF), 4% TO 7% AIR ENTRAINMENT; MAX AGGR - 1"; (F0, 50, P0, C1)
- 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)
- CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.
- WHERE BAR LENGTHS ARE GIVEN ON DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.
- PROVIDE COMMERCIAL FORM COATING COMPOUNDS THAT WILL NOT BOND, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES. WET FORMS BEFORE PLACING CONCRETE.
- ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATORS.
- 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.
- PROVIDE CORNER BARS AT ALL BEAM AND WALL FOOTING CORNERS TO MATCH HORIZONTAL BARS.
- SUBMITTALS:

- CONCRETE TO BE NORMAL WEIGHT WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
 - A) FOOTINGS.....3000 PSI
 - B) SLAB-ON-GROUND.....4000 PSI
 - C) SECOND FLOOR.....3500 PSI
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- ALL REINFORCING STEEL BELOW GRADE SHALL BE HOT-DIPPED GALVANIZED.
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- SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.
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 - B) PROVIDE CONTINUOUS MOISTURE TO CONCRETE IN ACCORDANCE WITH ACI 301.
- 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.
- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING LABORATORY 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
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- 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.
- MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE:
 - A) 4000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.44 MAXIMUM (NON-AIR-ENTRAINED), 0.36 MAXIMUM (AIR-ENTRAINED).
 - B) 3000 PSI, 28-DAY COMPRESSIVE STRENGTH, W/C RATIO, 0.58 MAXIMUM (NON-AIR-ENTRAINED), 0.47 MAXIMUM (AIR-ENTRAINED).
 - C) 3500 PSI, 28-DAY COMPRESSIVE STRENGTH, LIGHT WEIGHT CONCRETE BY FIRE ASSEMBLY REQUIREMENTS (COORDINATE WITH ARCHITECT DRAWINGS), (110 PCF), 4% TO 7% AIR ENTRAINMENT; MAX AGGR - 1"; (F0, 50, P0, C1)
- 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)
- CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.
- WHERE BAR LENGTHS ARE GIVEN ON DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.
- PROVIDE COMMERCIAL FORM COATING COMPOUNDS THAT WILL NOT BOND, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES. WET FORMS BEFORE PLACING CONCRETE.
- ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATORS.
- 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.
- PROVIDE CORNER BARS AT ALL BEAM AND WALL FOOTING CORNERS TO MATCH HORIZONTAL BARS.
- SUBMITTALS:

PRE-ENGINEERED METAL BUILDING

- PROVIDE COMPLETE SHOP DRAWINGS SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
- DESIGN SHALL BE IN COMPLIANCE WITH THE BUILDING CODE.
- CONTRACTOR SHALL INCLUDE SUPPORT FOR MECHANICAL EQUIPMENT AND OTHER COLLATERAL LOADS WHERE SPECIFIED. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS AND EQUIPMENT MANUFACTURER DRAWINGS.
- FOUNDATION DESIGN IS BASED ON PRELIMINARY INFORMATION AND ESTIMATED COLUMN REACTIONS, LOCATIONS AND BASE PLATE CONFIGURATIONS. FINAL FOUNDATION DESIGN SHALL BE BASED ON THE METAL BUILDING MANUFACTURER'S DESIGN WHEN THEIR FINAL DRAWINGS ARE SUBMITTED AND RECEIVED.
- ANCHOR BOLT SIZE AND EMBEDMENT FOR THE METAL BUILDING ATTACHMENT TO THE CONCRETE FOUNDATION WILL BE DETERMINED UPON RECEIPT OF THE METAL BUILDING MANUFACTURER'S ANCHOR BOLT PLAN AND REACTIONS.

TILT-UP CONCRETE PANELS

- REFER TO CAST-IN-PLACE CONCRETE SECTION FOR ALL ADDITIONAL REQUIRED INFORMATION.
- CONCRETE TO BE NORMAL WEIGHT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- MINIMUM CONCRETE STRENGTH AT LIFTING TO BE 2500 PSI UNLESS SPECIFIED OTHERWISE BY LIFTING INSPECT ENGINEER.
- SEE DRAWINGS FOR PANEL THICKNESS.
- ERECTOR SHALL HAVE AT LEAST TWO (2) YEARS OF EXPERIENCE IN ERECTION OF TILT-UP WALL PANELS.
- LOCATIONS OF LIFTING INSERTS AND ANY ADDITIONAL REINFORCEMENT OR STROBOLGAS REQUIRED FOR ERECTION SHALL BE DESIGNED BY A LICENSED FLORIDA ENGINEER.
- COORDINATE INSTALLATION OF INSERTS AND ANCHORAGES REQUIRED TO BE SET INTO CONCRETE SLABS PRIOR TO CASTING PANELS.
- CAST PANELS INDIVIDUALLY ON BUILDING FLOOR SLAB, OR TEMPORARY CASTING PLATFORM, AT CONTRACTOR'S OPTION.
- SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING PANEL DIMENSIONS, OPENINGS, REINFORCEMENT AND CONNECTION DETAILS. LOCATIONS OF ITEMS CAST INTO PANELS, LIFTING DEVICES, AND OTHER PERTINENT INFORMATION.
- PANELS SHALL BE CAST WITH INTERIOR FACE UP.
- MINIMUM REBAR COVER = 1-1/2 INCHES.
- SEE ARCHITECTURAL DRAWINGS FOR CHAMFERS, REVEALS, AND ANY EMBEDDED ITEMS.
- PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CORNERS OF COLUMNS, BEAMS, AND WALLS UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS.
- PANELS SHALL BE ERECTED AND BRACED BY A COMPETENT AND EXPERIENCED ERECTOR WHO SHALL HOLD THE NEXT PORTIONS OF THE STEEL THAT CONNECT THE PANELS TO THE BRACED SECTIONS OF THE FRAME.
- LIFT PANELS IN ACCORD WITH RECOMMENDATIONS OF LIFTING HARDWARE SUPPLIER.
- PANELS SHALL BE ACCURATELY SET AND PLUMBED. STEEL SHIMS AND WEDGES SHALL BE USED TO PLUMB THE PANELS IN THE VERTICAL POSITION. AS PANELS ARE ERECTED AND PLUMBED, THE BASE SHALL BE GROUDED AT THE FOUNDATION WITH A READY MIX NON-SHRINK GROUT U.N.O.
- AFTER PLACING, PROVIDE TEMPORARY BRACES AND SUPPORTS TO SECURELY HOLD PANELS IN POSITION. MAINTAIN BRACES AND SUPPORTS IN PLACE, UNDISTURBED UNTIL CLOSURES, COLUMNS OR OTHER SUPPORTING STRUCTURES HAVE BEEN INSTALLED AND ARE CAPABLE OF RECEIVING PANELS.
- PATCH HOLES IN PANEL SURFACES CAUSED BY LIFTING AND BRACING DEVICES WITH A PREMIXED NON-SHRINK EPOXY GROUT.

STRUCTURAL STEEL

- 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.
- 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.O. DEW ELECTRODES ARE TO BE PROTECTED FROM MOISTURE.
- 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 SNAIG LIGHT UNLESS OTHERWISE NOTED. DESIGN CONNECTIONS FOR THE LARGER OF EITHER THE SHEAR SHOWN ON THE DRAWINGS, (INDICATED AS "V-K" AT ENDS OF MEMBER) 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 REACTION VALUES", PART 2 OF THE LATEST EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION".
- SIZE AND USE OF HOLES: SEE AISC TABLE J3.3 UN.O.
 - A) OVERSIZED OR LONG-SLOTTED HOLES ARE NOT PERMITTED UN.O. MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 1/16".
 - B) LARGER HOLES ARE PERMITTED IN STANDARD COLUMN 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 WELD 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.
- ALL STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCE) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.
- VERIFY THE EXACT SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF MATERIALS.
- SHOP PAINT - METAL ALKYL-DL PRIMER, ANY OF THE FOLLOWING: SEE ARCHITECT FOR PREFERRED COLOR.

MANUFACTURER	DESIGNATION
PORTER	298
MOBILE	NO. 15F812
TIMECOR	NO. 1009
AMERON	NO. 5102 AMERCOAT
- DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT.
- BORE HOLE CLEANING PROCEDURES MUST COMPLY WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE A DRY, CLEAN BORE HOLE.
- INJECTION OF ADHESIVE SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE AN AIR-VOID FREE INJECTION.
- SURFACE PREPARATION - PREPARE STEEL SURFACE IN ACCORDANCE WITH SSPC-SP3 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

- SPECIAL CONDITIONS SUCH AS WATER SATURATED CONCRETE, WATER-FILLED HOLES, UNDERWATER AND OVERHEAD INSTALLATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND COMPLY WITH THE APPLICABLE ICC-ES REPORT.
- STEEL ANCHORING ELEMENTS SHALL BE THE SIZE AND GRADE SHOWN ON THE DRAWINGS AND MUST BE CLEAN, DRY AND FREE OF ANY OIL OR CONTAMINANTS.
- SUBSTITUTIONS FOR ANCHOR SYSTEMS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO INSTALLATION AND SHALL HAVE A VALID ICC-ES EVALUATION IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE.
- ALL ANCHOR EMBED DEPTHS SPECIFIED ON THESE DRAWINGS ARE EFFECTIVE EMBEDMENT DEPTHS. ADDITIONAL ANCHOR LENGTH AND OR HOLE DEPTH SHALL BE PROVIDED AS REQUIRED BY THE ANCHOR MANUFACTURER AND ASSOCIATED CODE APPROVALS.

MASONRY

- MASONRY INSPECTION SHALL BE PROVIDED BY A QUALIFIED AGENT IN ACCORDANCE WITH ACI 530.1-1.6. INSPECTION SERVICES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE WORK IN PROGRESS AS WELL AS MATERIALS, EQUIPMENT, AND PROCEDURES.
- HOLLOW LOAD BEARING UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE II, MINIMUM NET COMPRESSIVE UNIT STRENGTH = 1900 PSI. (NET AREA COMPRESSIVE MASONRY STRENGTH F_m = 1500 PSI).
- MORTAR SHALL BE TYPE M OR S AND CONFORM TO ASTM C270 (PROPORTION OR PROPERTY SPECIFICATION).
- COARSE GROUT SHALL CONFORM TO ASTM C476:
 - A) 3000 PS AT 28 DAYS.
 - B) 1/4" MAXIMUM AGGREGATE.
 - C) 8" - 11" SLUMP.
- CODES AND STANDARDS:
 - ACI 530/ASCE 5 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
 - ACI 530.1/ASCE 6 "SPECIFICATIONS FOR MASONRY STRUCTURES"
- PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE FACE SHELL MORTAR BEDDING, HORIZONTAL AND VERTICAL, FULLY MORTAR WEBS IN ALL COURSES OF PIERS, COLUMNS, AND PLASTERS AND ADJACENT TO GROUDED CELLS.
- A REINFORCED CONCRETE BEAM SHALL BE PROVIDED IN ALL WALLS SHOWN ON THE STRUCTURAL DRAWINGS AT EACH FLOOR, THE ROOF, AND AT TOP OF ANY PARAPET WALL. USE GALVANIZED MESH-TYPE CELL CAPS. PROVIDE CORNER BARS AT ALL BEAM CORNERS TO MATCH HORIZONTAL BARS.
- UNLESS NOTED OTHERWISE, THE BEAMS SHALL BE AS FOLLOWS:
 - A) ROOF LEVEL: DOUBLE COURSE KNOCK-OUT BLOCKS WITH (1) #5 BAR IN EACH COURSE, FULLY GROUDED.
 - B) TOP OF PARAPET: (1) #5 BAR IN GROUDED KNOCK-OUT BLOCKS.
 - C) FLOOR LEVELS: DOUBLE COURSE KNOCK-OUT BLOCKS WITH (1) #5 BAR IN EACH COURSE, FULLY GROUDED.
- VERTICAL BARS SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM OF BAR AND AT 8'-0" 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.O.
- VERTICAL REINFORCING SHALL BE AS SHOWN ON THE DRAWINGS. FILL CELLS WITH COARSE GROUT AS SPECIFIED. PROVIDE AICI 90 DEGREE STANDARD HOOKS INTO FOOTING AND ROOF THE BEAM. LAP SPICE 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'-0" CLEAR. CONTINUE FOUNDATION DOWELS BELOW ALL MASONRY OPENINGS.
- 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.
- REINFORCING BARS SHALL BE STRAIGHT EXCEPT FOR BENDS AROUND CORNERS AND WHERE BENDS OR HOOKS ARE DETAILED ON THE PLANS.
- WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED. MAKE ONE HORIZONTAL IN SIX VERTICALS. DOWELS SHALL BE GROUDED INTO A CORE IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCEMENT.
- PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCING 9 G. GALVANIZED LADDER TYPE DUR-O-WALL (OR EQUIVALENT) AT 16" O.C.
- APPLY A 30% SOLIDS LIQUID MEMBRANE FORMING CHEMICAL CURING COMPOUND IN ACCORDANCE WITH ASTM C-109
- 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.
- WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AT SPICES AND SHALL CONTACT AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.
- 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 3" X 3".
- GROUT POUR HEIGHT SHALL NOT EXCEED 24". PLACE GROUT IN 5' MAX. LIFT HEIGHTS.
- CONSOLIDATE GROUT POURS AT THE TIME OF PLACEMENT BY MECHANICAL MEANS AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT.
- SEE ARCHITECT DRAWINGS FOR MASONRY CONTROL JOINT LOCATIONS. SPACE AT 32'-0" O.C. MAXIMUM, UNLESS NOTED OTHERWISE.
- SUBMITTALS:
 - A) SUBMIT PROPOSED GROUT MIX DESIGN PRIOR TO CONSTRUCTION.
 - B) SUBMIT PROPOSED MORTAR MIX DESIGN PRIOR TO CONSTRUCTION.
 - C) SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS.
 - D) SUBMIT COMPRESSIVE STRENGTH TESTS OF PROPOSED MASONRY UNITS PRIOR TO CONSTRUCTION. MASONRY UNITS ARE TO BE TESTED IN ACCORDANCE WITH ASTM C140.
- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS ON SITE:
 - A) SAMPLE AND TEST GROUT IN ACCORDANCE WITH ASTM C1019 FOR EACH 5000 SQ. FT. OF MASONRY.
 - B) SLUMP TESTS - ASTM C143.
- 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.

POST-INSTALLED ANCHORS

- POST-INSTALLED ANCHORAGES, WHERE SPECIFIED ON THE DRAWINGS, SHALL CONFORM TO THE FOLLOWING - CONCRETE ADHESIVE ANCHORS:
 - HLTI HIT-RE 500-V3 ESR-3814
 - HLTI HIT-HY270
 - EXPANSION ANCHORS: HLTI KWIK BOLT 3
- DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT.
- BORE HOLE CLEANING PROCEDURES MUST COMPLY WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE A DRY, CLEAN BORE HOLE.
- INJECTION OF ADHESIVE SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE AN AIR-VOID FREE INJECTION.
- SURFACE PREPARATION - PREPARE STEEL SURFACE IN ACCORDANCE WITH SSPC-SP3 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.
- 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.
- ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- STRUCTURAL STEEL SHAPES, TEES - ASTM A992.
- STRUCTURAL STEEL ANGLES, CHANNELS, PLATES, BARS - ASTM A36.
- STRUCTURAL STEEL TUBING - ASTM A500 GRADE B OR C.
- STEEL PIPE - ASTM A53 GRADE B.
- ANCHOR BOLTS - F1554 GRADE 36.
- 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.
- COLUMN SPICES SHALL BE DESIGNED IN ACCORDANCE WITH TABLE A-7, PAGE 11-A12 OF THE AISC "STRUCTURAL STEEL DETAILING" MANUAL.
- NO SPICES SHALL BE PERMITTED IN ANY STRUCTURAL STEEL MEMBER UNLESS SHOWN ON APPROVED SHOP DRAWINGS.
- 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 STE

STEEL CONSTRUCTION (1704.3)		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS:		
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	PERIODIC	AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	PERIODIC	
2. INSPECTION OF HIGH-STRENGTH BOLTING:		
a. SNUG-TIGHT JOINTS.	PERIODIC	1704.3.3; AISC 360, SECTION M2.5
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:		
a. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.	PERIODIC	AISC 360, SECTION M5.5
b. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	PERIODIC	APPLICABLE ASTM MATERIAL STANDARDS
c. MANUFACTURER'S CERTIFIED TEST REPORTS.	PERIODIC	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:		
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS	PERIODIC	AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	PERIODIC	
5. INSPECTION OF WELDING:		
a. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:		
1) COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS	CONTINUOUS	1704.3.1; AWS D1.1
2) MULTI-PASS FILLET WELDS	CONTINUOUS	
3) SINGLE-PASS FILLET WELDS > 3/8"	CONTINUOUS	
4) PLUG AND SLOT WELDS.	CONTINUOUS	
5) SINGLE-PASS FILLET WELDS ≤ 3/8"	PERIODIC	
6) FLOOR AND ROOF DECK WELDS	PERIODIC	
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:		
a. DETAILS SUCH AS BRACING AND STIFFENING	PERIODIC	1704.3.2
b. MEMBER LOCATIONS		
c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION		

CONCRETE CONSTRUCTION (1704.4)		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT	PERIODIC	1913.4; ACI 318-3.5, 7.1-7.7
2. INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	CONTINUOUS	1911.5, 1912.1; ACI 318-8.1.3, 21.2.8
3. INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.	PERIODIC	1912.1; ACI 318-3.8.6, 8.1.3, 21.2.8
4. VERIFYING USE OF REQUIRED DESIGN MIX	PERIODIC	1904.2.2, 1913.2, 1913.3; ACI 318 Ch. 4, 5.2-5.4
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	1913.10; ASTM C172; ASTM C31; ACI 318-5.6, 5.8
6. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	CONTINUOUS	1913.6, 1913.7, 1913.8; ACI 318-5.9, 5.10
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	1913.9; ACI 318-5.11-5.13
8. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	ACI 318-6.1.1

TILT-UP CONCRETE WALL CONSTRUCTION		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. INSPECTION OF PANEL LENGTH, WIDTH AND THICKNESS PER PANEL DESIGNATION NUMBER. INSPECTION OF PANEL OPENINGS) SIZE AND LOCATION.	PERIODIC	
2. INSPECTION OF REINFORCING STEEL, PLACEMENT AND CONCRETE COVER.	PERIODIC	
3. INSPECTION OF BOLTS AND/OR EMBEDS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	PERIODIC	
4. VERIFYING USE OF REQUIRED DESIGN MIX	PERIODIC	
5. INSPECTION OF LIFTING INSERTS, ADDITIONAL LIFTING REINFORCING BARS AND/OR STRING-BACKS FOR PANEL ERECTION AND PLACEMENT.	PERIODIC	
6. INSPECTION OF TEMPORARY PANEL BRACES AND SUPPORTS.	PERIODIC	
7. INSPECTION OF PANEL BASE SHIMS AND GROUT.	PERIODIC	
8. INSPECTION OF PATCHING OF HOLES/POCKETS FROM LIFTING INSERTS AND BRACING ATTACHMENTS.	PERIODIC	

MASONRY CONSTRUCTION (IBC 1704.5, TMS 402 LEVEL B)			
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD	
		TMS 402/ACI 530/ASCE 5	TMS 602/ACI 530.1/ASCE 6
1. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	PERIODIC	ART. 1.5	
2. VERIFICATION OF F'm PRIOR TO CONSTRUCTION	PERIODIC	ART. 1.4B	
3. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
a. PROPORTIONS OF SITE-PREPARED MORTAR.	PERIODIC	ART. 2.6A	
b. CONSTRUCTION OF MORTAR JOINTS.	PERIODIC	ART. 3.3B	
c. LOCATION OF REINFORCEMENT AND CONNECTORS.	PERIODIC	ART. 3.4, 3.6A	
4. DURING CONSTRUCTION THE INSPECTION PROGRAM SHALL VERIFY:			
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	PERIODIC	ART. 3.3F	
b. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.	PERIODIC	SEC. 1.2.2(e), 1.16.1	
c. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT AND ANCHOR BOLTS.	PERIODIC	SEC. 1.15	ART. 2.4, 3.4
d. WELDING OF REINFORCING BARS.	CONTINUOUS	SEC. 2.1.9.7.2, 3.3.3.4(b)	
e. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F).	PERIODIC	18C, 2104.3, 2104.4	ART. 1.8C, 1.8D
5. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
a. GROUT SPACE IS CLEAN.	PERIODIC		ART. 3.2D
b. PLACEMENT OF REINFORCEMENT AND CONNECTORS.	PERIODIC	SEC. 1.13	ART. 3.4
c. PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC		ART. 2.6B
d. CONSTRUCTION OF MORTAR JOINTS.	PERIODIC		ART. 3.3B
6. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE.	CONTINUOUS		ART. 3.5

SOILS (IBC 1704.7)		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	GEOTECHNICAL ENGINEERING REPORT
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	

1705.2.2 STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:		
a. IDENTIFICATION MARKINGS	PERIODIC	
b. MANUFACTURER'S CERTIFIED TEST REPORTS	EACH SUBMITTAL	
2. CONNECTION OF COLD-FORMED STEEL DECK TO SUPPORTING STRUCTURE:		
a. WELDING	PERIODIC	
b. OTHER FASTENERS (IN ACCORDANCE WITH AISC 360, SECTION N6)		
1) VERIFY FASTENERS ARE IN CONFORMANCE WITH APPROVED SUBMITTAL	PERIODIC	
2) VERIFY FASTENER INSTALLATION IS IN CONFORMANCE WITH APPROVED SUBMITTAL AND MANUFACTURER'S RECOMMENDATIONS	PERIODIC	

WIND RESISTANCE (IBC 1705.11)		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1705.11.2 COLD-FORMED STEEL SPECIAL INSPECTIONS FOR WIND RESISTANCE		
1. INSPECTION DURING WELDING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM	PERIODIC	
2. INSPECTIONS FOR SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN WINDFORCE-RESISTING SYSTEM	PERIODIC	
1705.11.3 WIND-RESISTING COMPONENTS		
1. ROOF CLADDING	PERIODIC	
2. WALL CLADDING	PERIODIC	

PRECAST CONCRETE		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. INSTALLATION OF PRECAST ELEMENTS AND COMPONENTS:		
a. MEMBER CONFIGURATION.	PERIODIC	
b. END CONNECTIONS - WELDING, BOLTED OR GROUTED.	PERIODIC	

POST-INSTALLED ANCHORS		
VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. ADHESIVE, EXPANSION AND SCREW ANCHORS		
a. PRIOR TO COMMENCEMENT OF WORK: REVIEW CONTRACTOR'S INSTALLATION PROCEDURE.	PERIODIC	
b. FASTENER TYPE, DIAMETER, LENGTH, SPACING AND EDGE DISTANCE	PERIODIC	
c. VERIFY INSTALLATION OF ANCHOR: TOTAL NUMBER, FULLY SEATED AND FLUSH WITH RECEIVING SURFACE	100% VISUAL	
d. VERIFY FULL CURE TIME OF ADHESIVE ANCHORS HAS ELAPSED PRIOR TO TORQUE OR LOAD OF ANCHOR.	100% VISUAL	
e. PUNCHOUTS: VERIFY SPACING REQUIREMENTS	PERIODIC	

SPECIAL INSPECTIONS:

- THE OWNER WILL EMPLOY THE SERVICES OF ONE OR MORE SPECIAL INSPECTORS TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS DURING CONSTRUCTION.
- THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
- DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
 - THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE INSPECTOR MAY NOT ALTER, MODIFY, ENLARGE OR WAIVE ANY OF THE REQUIREMENTS OF THE DOCUMENTS.
 - THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE PROFESSIONAL-OF-RECORD, AND THE CONTRACTOR. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF UNCORRECTED, SUBMIT A COMPLETE LIST OF ALL OUTSTANDING DISCREPANCIES ON A WEEKLY BASIS TO THE OWNER, THE BUILDING OFFICIAL, AND THE PROFESSIONAL-OF-RECORD, UNTIL ALL CORRECTIONS HAVE BEEN COMPLETED.
 - THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE BUILDING CODE.
 - WHERE SPECIAL INSPECTION REQUIREMENTS DUPLICATE THE REQUIREMENTS OF OTHER SPECIFIED TESTING, DUPLICATE INSPECTIONS SHALL NOT BE REQUIRED.
 - STRUCTURAL OBSERVATION (AS DEFINED IN CHAPTER 17 OF THE BUILDING CODE) IS NOT REQUIRED, UNLESS SPECIFICALLY REQUIRED BY THE BUILDING OFFICIAL.
 - SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING TABLES ON THIS SHEET.

DEFINITIONS:

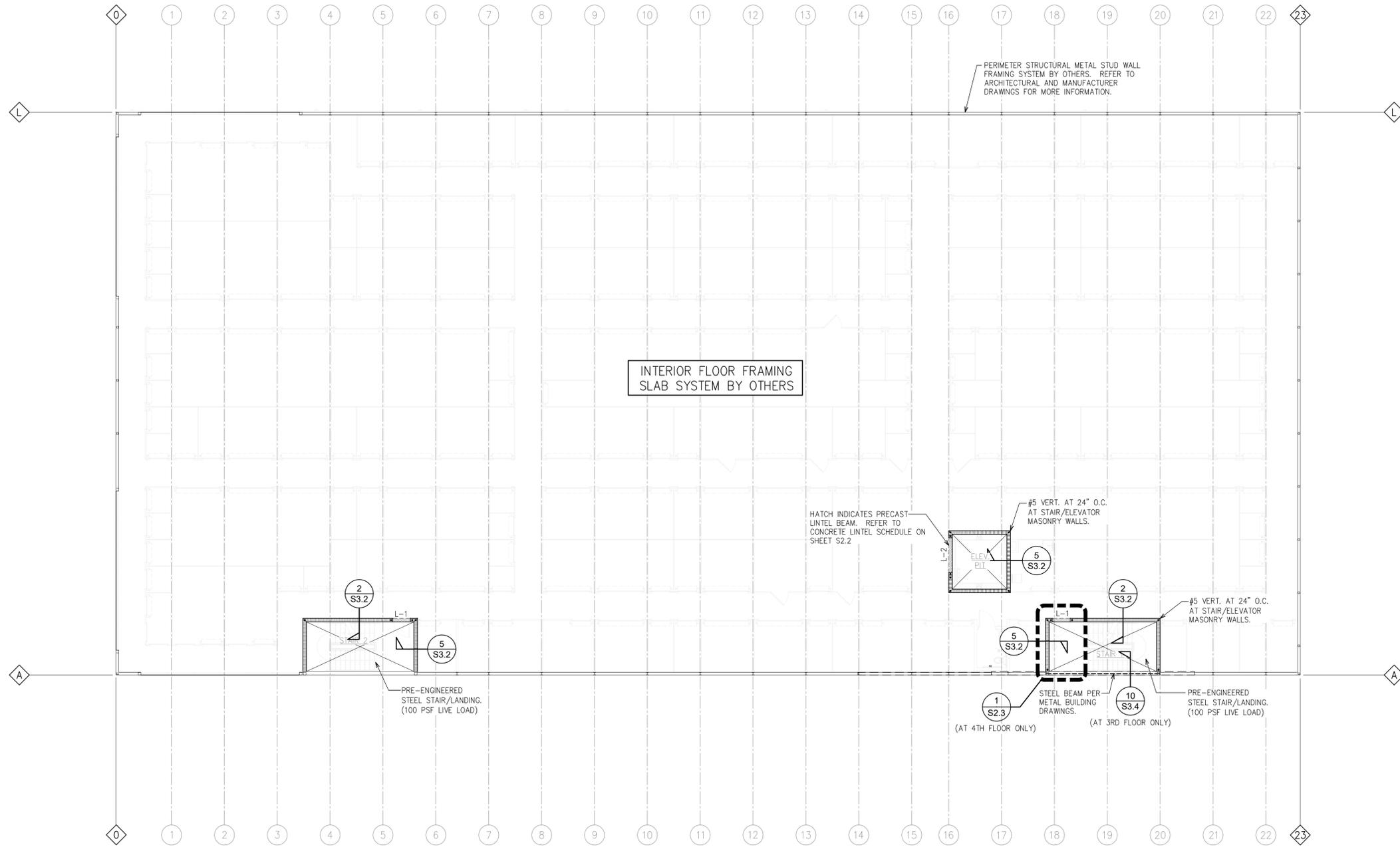
- SPECIAL INSPECTION: INSPECTION OF CONSTRUCTION REQUIRING THE EXPERTISE OF AN APPROVED SPECIAL INSPECTOR IN ORDER TO ENSURE COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
- SPECIAL INSPECTOR: QUALIFIED FIRM OR INDIVIDUAL RESPONSIBLE FOR PERFORMING SPECIFIC TESTS OR INSPECTIONS AS PART OF THE SPECIAL INSPECTION PROGRAM.
- PERIODIC SPECIAL INSPECTION: THE PART TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. MAY BE ALLOWED WHEN COMPLIANCE OF THE WORK OR PRODUCT CAN BE DETERMINED AFTER BEING INCORPORATED INTO THE STRUCTURE.
- CONTINUOUS SPECIAL INSPECTION: THE FULL TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.

no.	date	revision descriptions

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 INSPECTION NOTES

S1.2

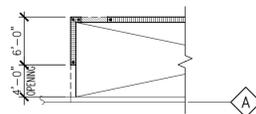


THIRD AND FOURTH FLOOR FRAMING PLAN
 SCALE: 3/32" = 1'-0"



FLOOR FRAMING PLAN NOTES:

1. TOP OF 3RD FLOOR SLAB ELEVATION = 23'-2"
 TOP OF 4TH FLOOR SLAB ELEVATION = 33'-10"
2. REFER TO 1/S1.1 FOR DESIGN WIND CRITERIA.



1 PARTIAL STAIR 1 PLAN - 4TH FLOOR
 SCALE: 3/32" = 1'-0"

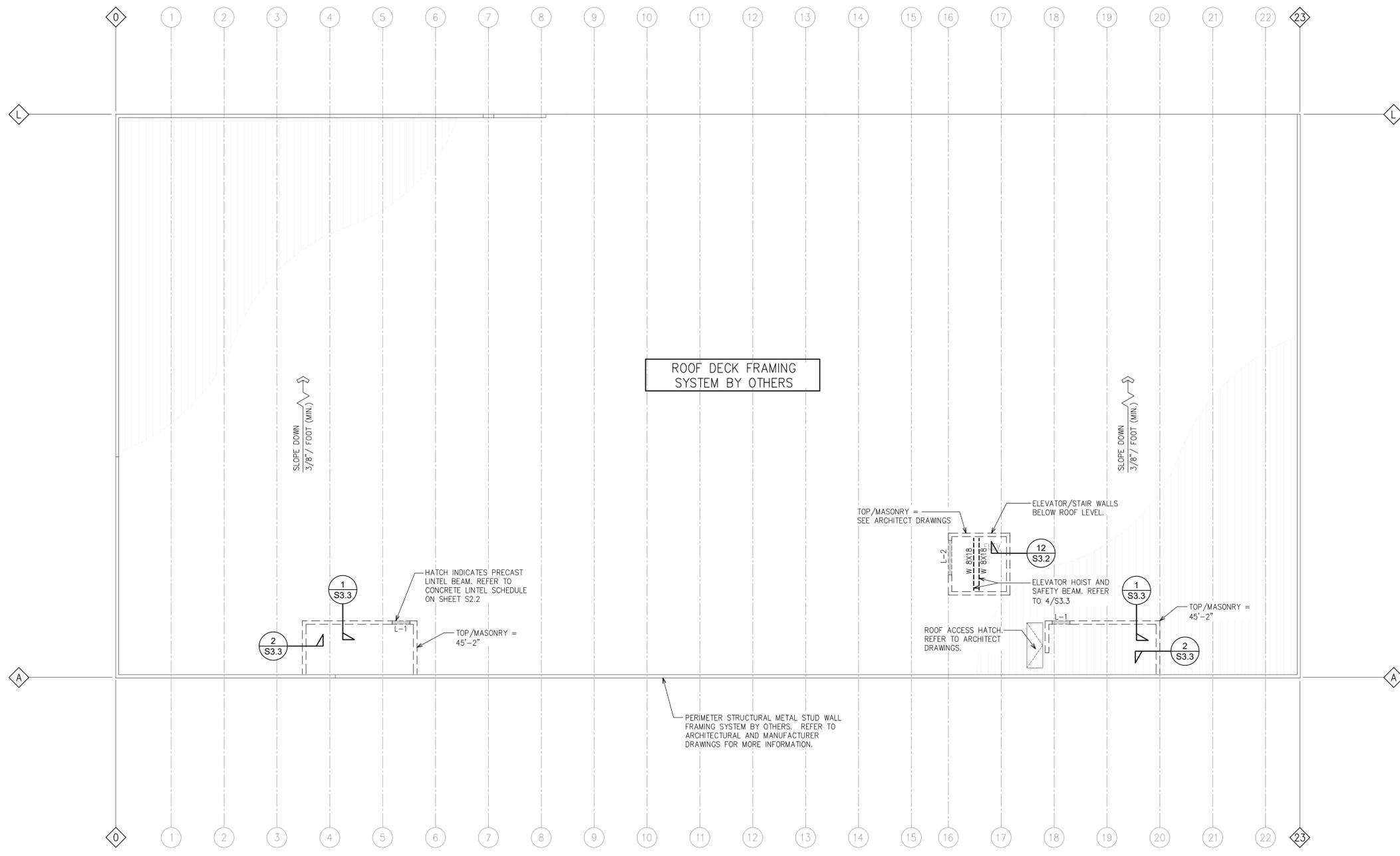
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**THIRD AND
 FOURTH FLOOR
 FRAMING PLAN**

S2.3



ROOF FRAMING PLAN
 SCALE: 3/32" = 1'-0"
 NORTH

ROOF FRAMING PLAN NOTES:
 1. REFER TO 1/S1.1 FOR DESIGN WIND CRITERIA.

EXTERIOR CONCRETE WALLS AND INTERIOR MASONRY WALLS HAVE BEEN ASSUMED TO BE LATERALLY BRACED BY PRE-ENGINEERED DIAPHRAGM ROOF SYSTEM AND INTERIOR LIGHT GAGE WALL SYSTEM. METHOD OF ATTACHMENT OF THE INTERIOR METAL BUILDING POSTS/SHEAR WALLS AND ROOF PURLIN SYSTEM SHALL BE DESIGNED BY METAL BUILDING SPECIALTY ENGINEER TO TRANSFER THE BUILDING LATERAL WALL FORCES THROUGH THE ROOF PANEL/WALLS INTO A LATERAL RESISTING SYSTEM DESIGNED BY THE BUILDING ENGINEER.

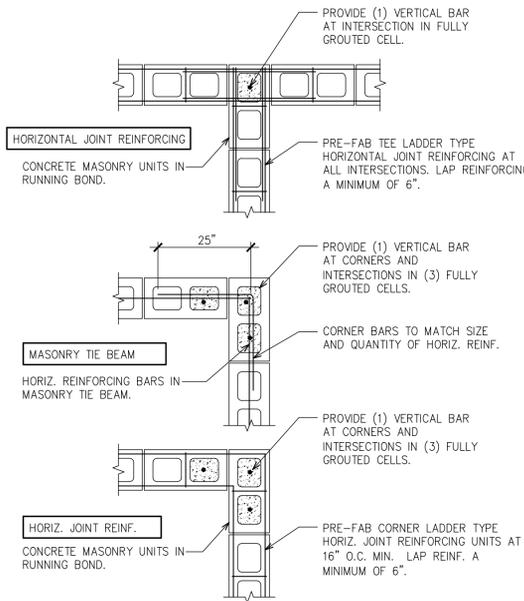
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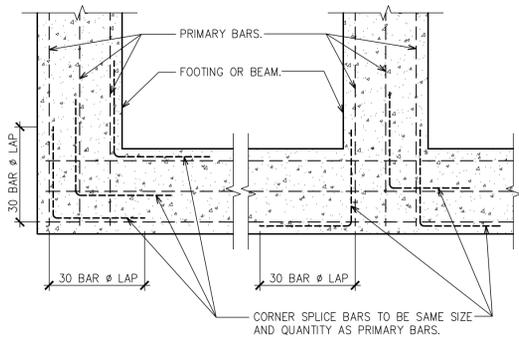
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ROOF FRAMING PLAN

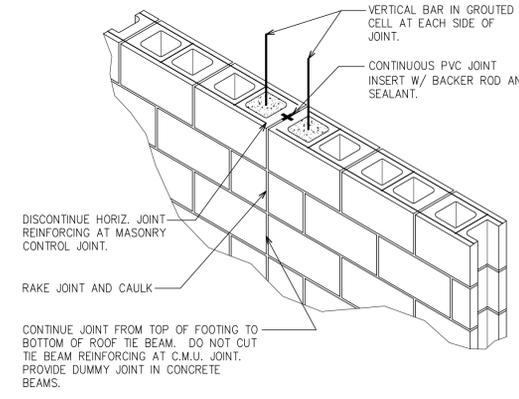
S2.4



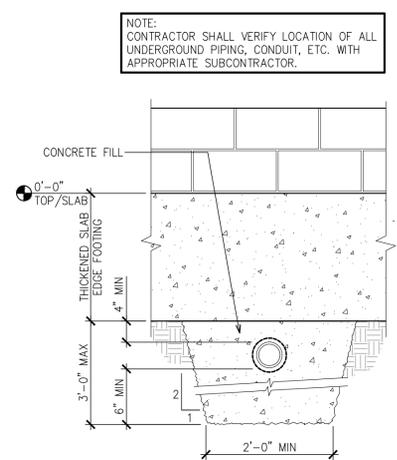
1 TYPICAL REINF. DETAIL AT CORNERS AND INTERSECTIONS
SCALE: N.T.S.



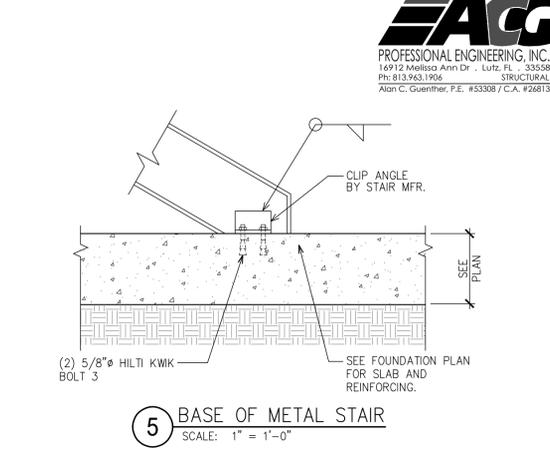
2 CORNER BAR DETAIL
NOT TO SCALE



3 MASONRY CONTROL JOINT DETAIL
SCALE: 1 1/2" = 1'-0"

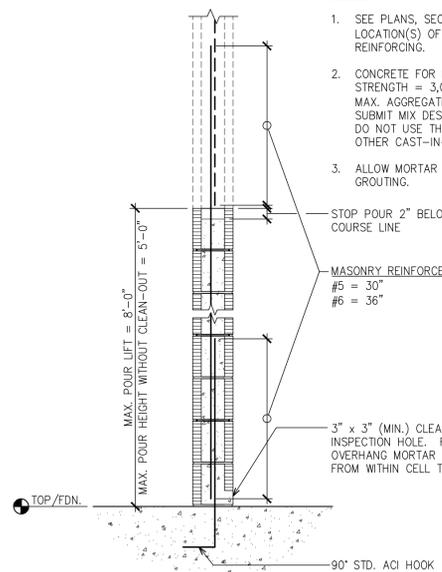


4 FOUNDATION DETAIL AT CONDUIT/PIPE
NOT TO SCALE

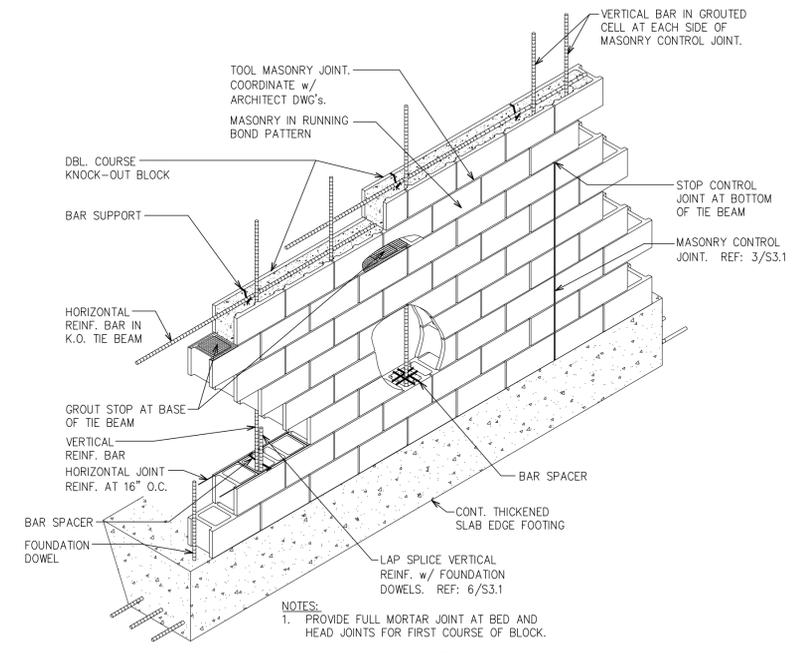


5 BASE OF METAL STAIR
SCALE: 1" = 1'-0"

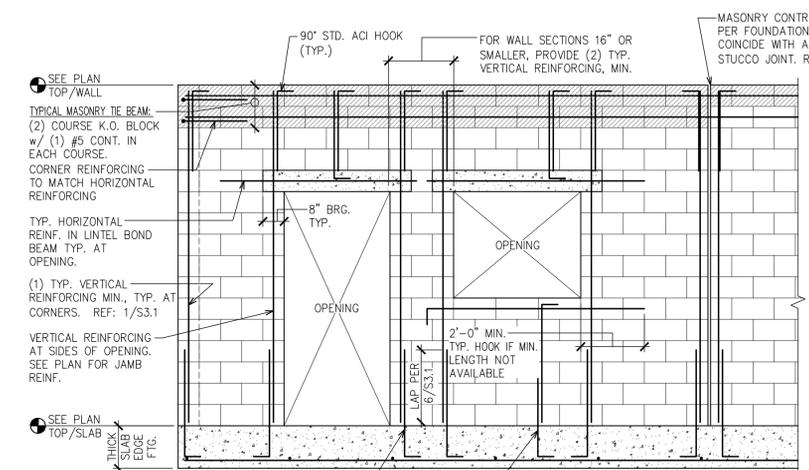
- NOTES:**
- SEE PLANS, SECTIONS AND NOTES FOR LOCATION(S) OF FILLED CELLS AND FOR REINFORCING.
 - CONCRETE FOR FILLED CELLS: STRENGTH = 3,000 PSI MIN. AT 28 DAYS MAX. AGGREGATE SIZE = 3/8" (PEA GRAVEL) SUBMIT MIX DESIGN FOR REVIEW BY THE ENGINEER. DO NOT USE THE SAME MIX AS DESIGNED FOR OTHER CAST-IN-PLACE CONCRETE.
 - ALLOW MORTAR TO SET PRIOR TO COMMENCING GROUTING.



6 MASONRY LIFT DETAIL
SCALE: 3/4" = 1'-0"

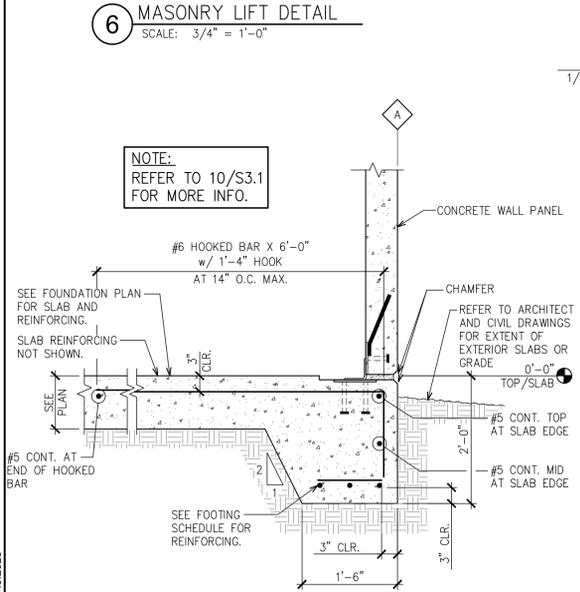


7 TYPICAL MASONRY CONSTRUCTION
NOT TO SCALE

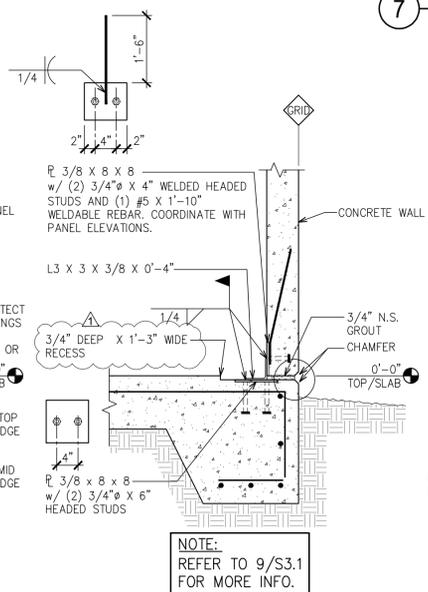


8 TYPICAL MASONRY REINFORCING AT OPENINGS - ELEVATION
NOT TO SCALE

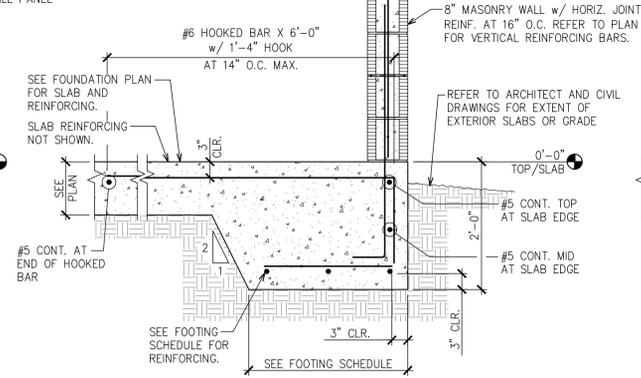
NOTE: REFER TO 10/S3.1 FOR MORE INFO.



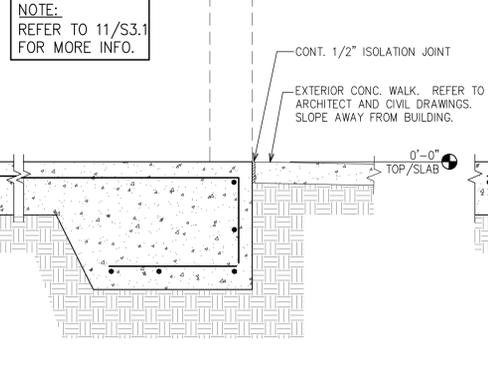
9 THICKENED SLAB AT CONCRETE PANEL
SCALE: 3/4" = 1'-0"



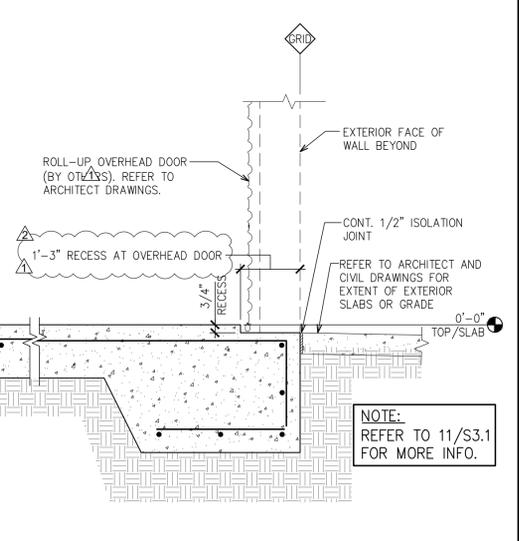
10 FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



11 THICKENED SLAB AT PERIMETER
SCALE: 3/4" = 1'-0"



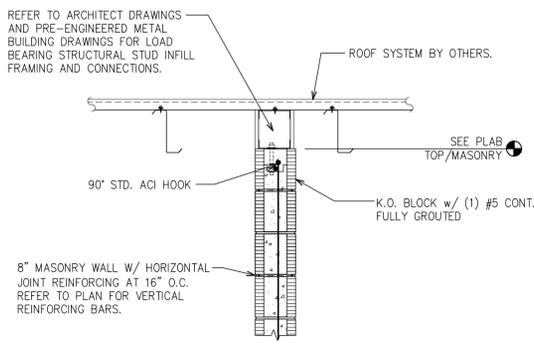
12 THICKENED SLAB AT MASONRY OPENING
SCALE: 3/4" = 1'-0"



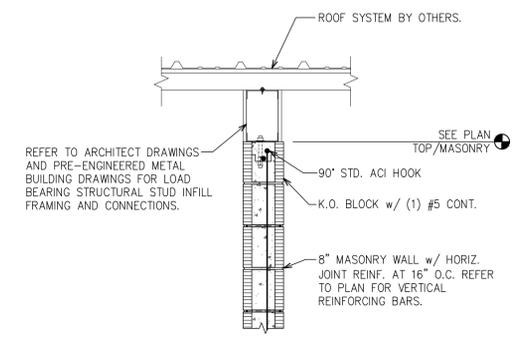
13 THICKENED SLAB AT OVERHEAD DOOR
SCALE: 3/4" = 1'-0"

NOTE: REFER TO 11/S3.1 FOR MORE INFO.

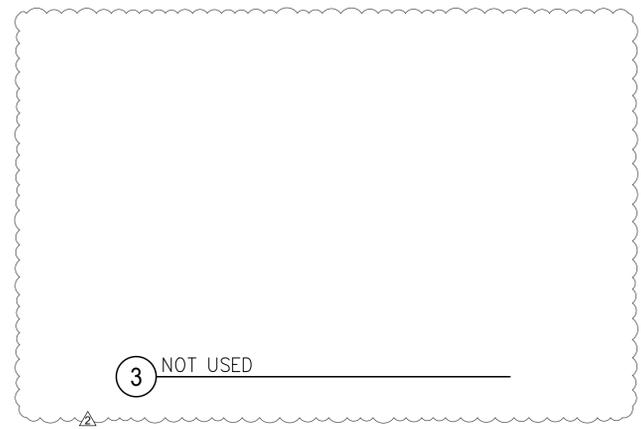
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1	REVISIONS PER BUILDING REVIEW COMMENTS/ISS.	
2	REVISIONS PER BUILDING REVIEW (2ND) / UH COMMENTS	



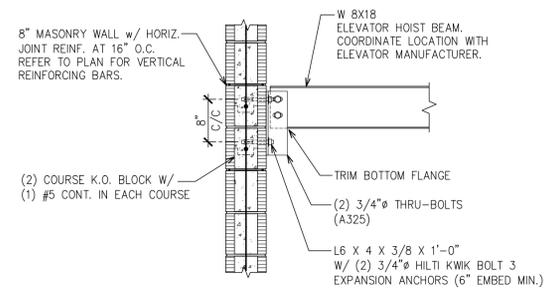
1 SECTION AT ROOF
 SCALE: 3/4" = 1'-0"



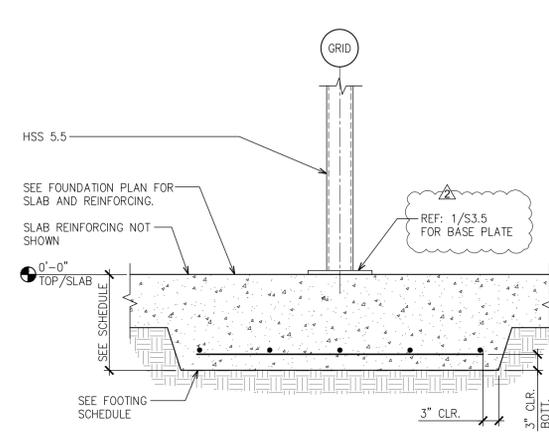
2 SECTION AT ROOF
 SCALE: 3/4" = 1'-0"



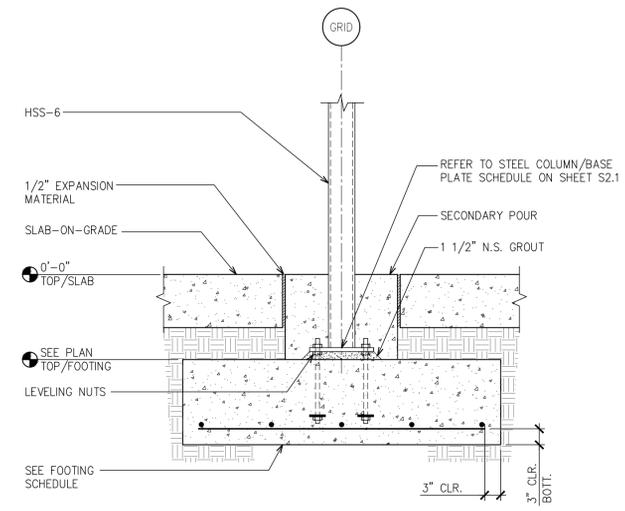
3 NOT USED



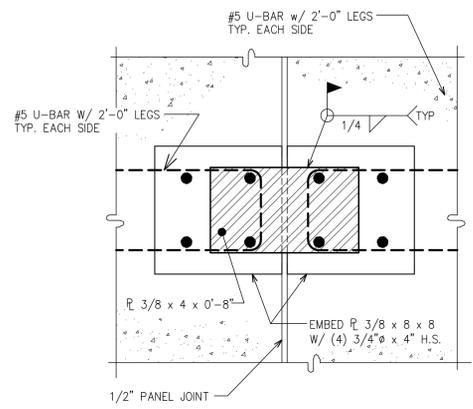
4 SECTION AT ELEVATOR HOIST BEAM
 SCALE: 3/4" = 1'-0"



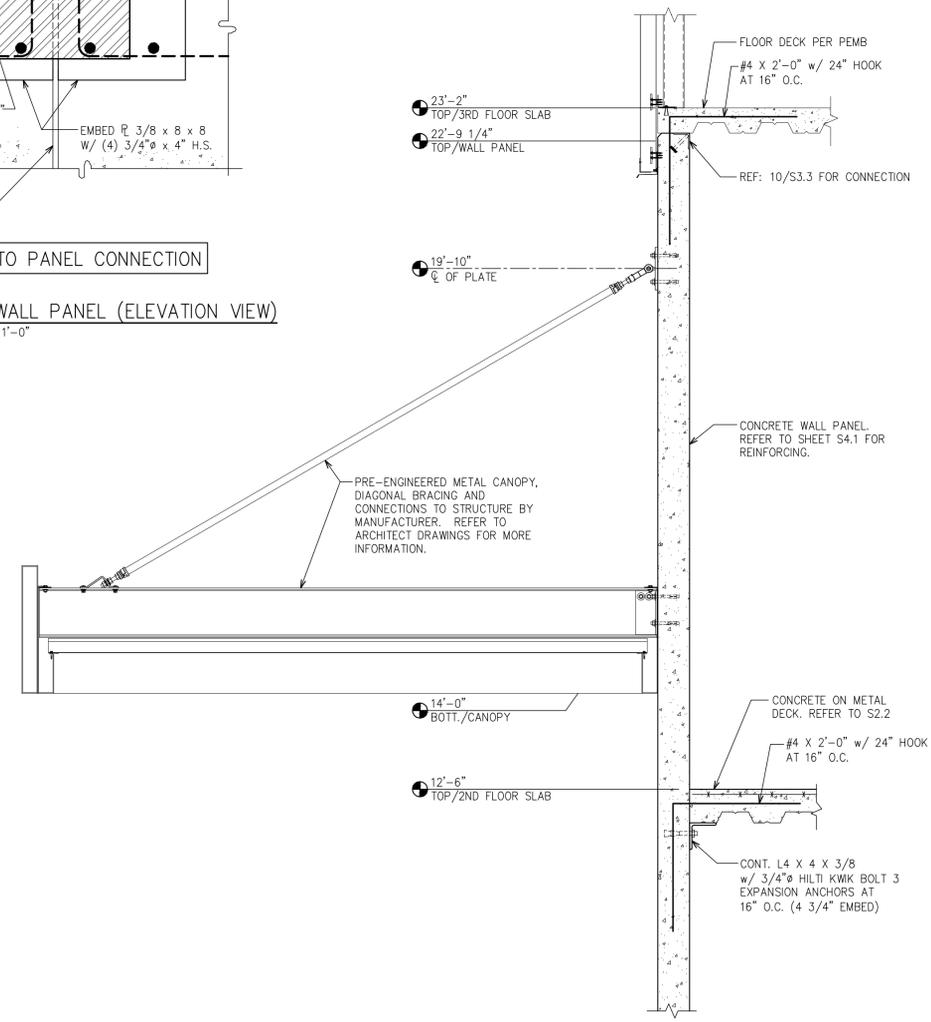
5 STEEL COLUMN FOUNDATION (HSS-5.5)
 SCALE: 3/4" = 1'-0"



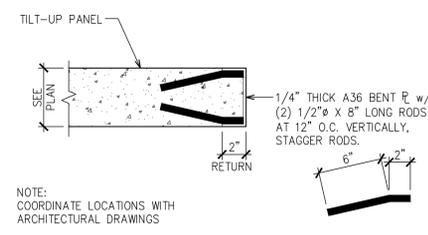
6 STEEL COLUMN FOUNDATION (HSS-6)
 SCALE: 3/4" = 1'-0"



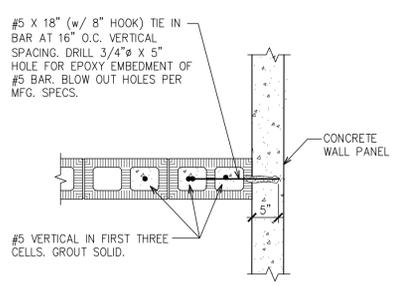
7 CONCRETE WALL PANEL (ELEVATION VIEW)
 SCALE: 1 1/2" = 1'-0"



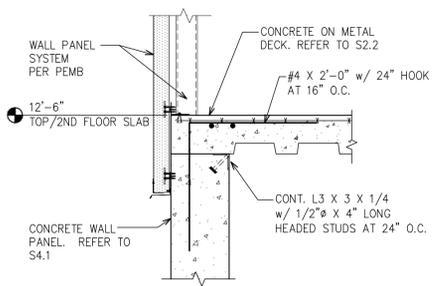
11 SECTION
 SCALE: 3/4" = 1'-0"



8 TILT-UP PANEL OPENING PROTECTION
 SCALE: 1 1/2" = 1'-0"



9 MASONRY TO TILT-UP PANEL CONNECTION
 SCALE: 3/4" = 1'-0"



10 SECTION
 SCALE: 3/4" = 1'-0"

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1	07.10.25	REVISIONS PER BUILDING REVIEW (2ND) / UH COMMENTS
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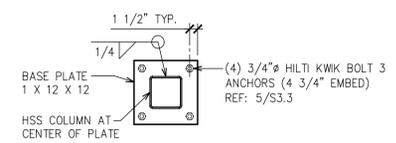
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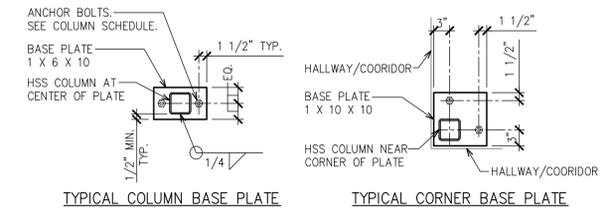
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SECTIONS
 AND DETAILS

S3.3

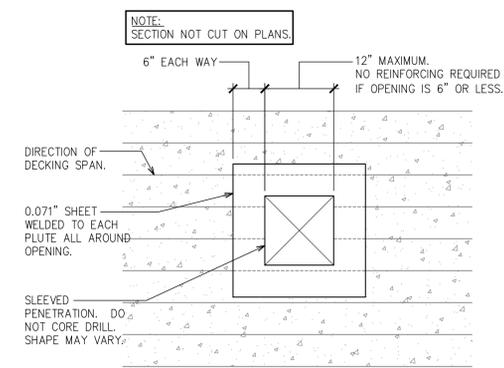


1 COLUMN BASE PLATE
 SCALE: 3/4" = 1'-0"

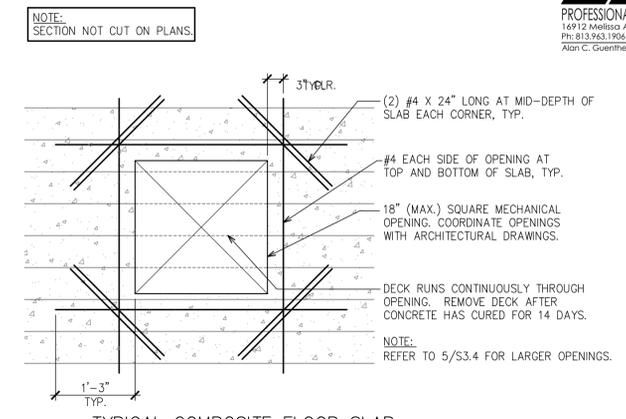


2 DETAIL TYPICAL COLUMN BASE PLATES
 SCALE: 3/4" = 1'-0"

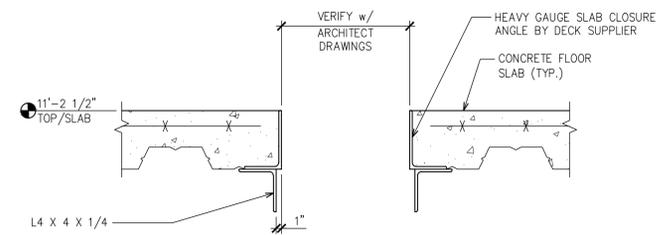
ANCHOR BOLT AND BASE PLATE NOTES:
 1. SEE ANCHORS BOLTS AND BASE PLATES IN COLUMN SCHEDULE; OTHERWISE, FOR OTHER LOCATIONS, TYPICAL ANCHORS BOLTS ARE (2) HILTI KWIK BOLT 3, 3/4" (4 3/4" EMBED).
 2. THE LARGER ANCHOR SHALL CONTROL WHERE THERE IS A CONFLICT.
 3. SEE ARCHITECTURAL FOR BASE PLATE ORIENTATION.



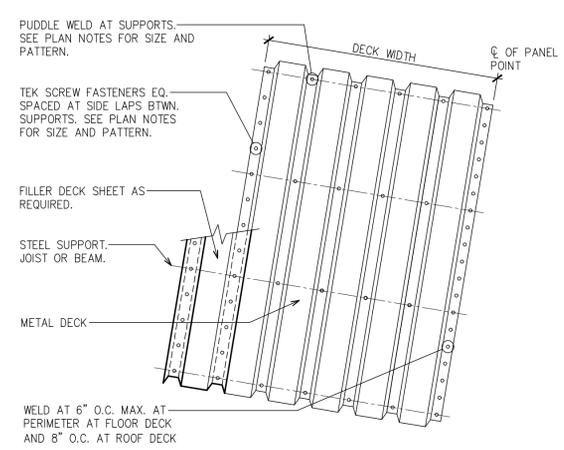
3 TYPICAL REINFORCING REQUIREMENTS AT DECK PENETRATIONS
 SCALE: 3/4" = 1'-0"



4 TYPICAL COMPOSITE FLOOR SLAB OPENING WITHOUT BEAM SUPPORT
 SCALE: 3/4" = 1'-0"

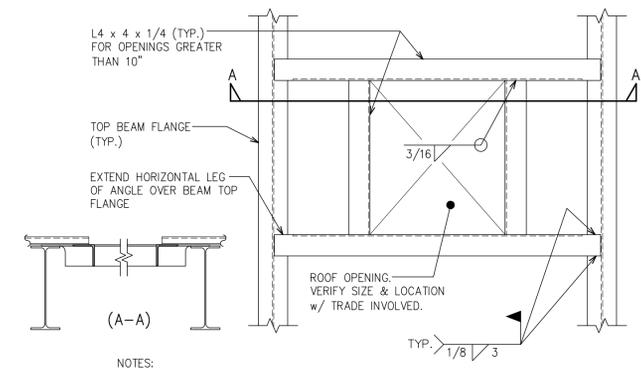


5 SLAB OPENING 18" OR GREATER
 SCALE: 1 1/2" = 1'-0"



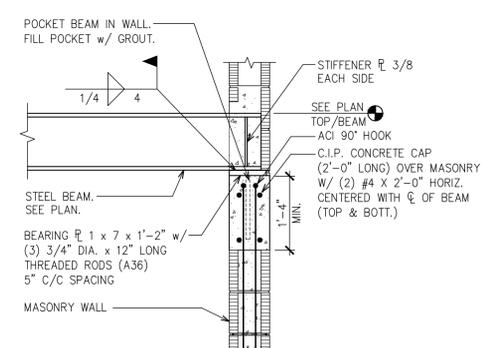
6 METAL FLOOR DECK ATTACHMENT
 NOT TO SCALE

NOTES:
 1. MINIMUM DECK BEARING AT END SUPPORTS = 2 1/2"
 2. MINIMUM DECK LAP OVER SUPPORTS = 2"

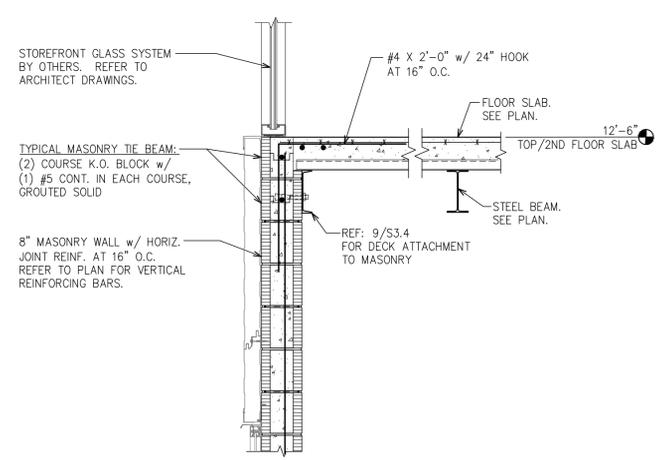


7 ROOF DECK OPENING
 NOT TO SCALE

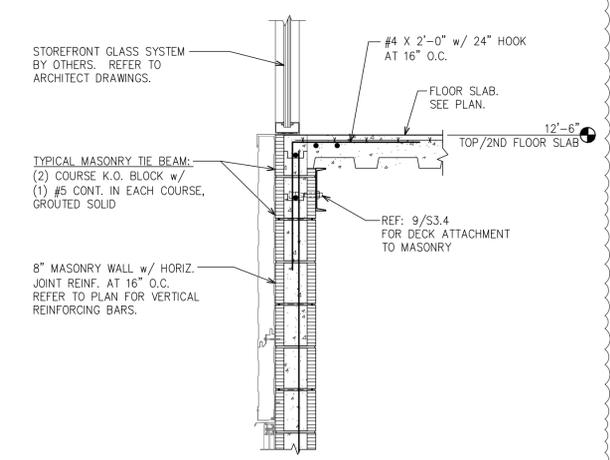
NOTES:
 1. LOCATE L4 x 4 x 1/4 FRAMES AROUND ALL ROOF OPENINGS GREATER THAN 8".
 2. CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF OPENINGS PRIOR TO STEEL FABRICATION.
 3. NOT INTENDED FOR ROOF TOP MECHANICAL EQUIPMENT SUPPORT.



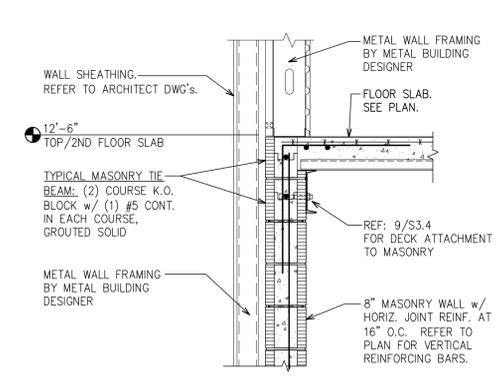
14 STEEL BEAM BEARING
 SCALE: 3/4" = 1'-0"



9 SECTION
 SCALE: 3/4" = 1'-0"



10 SECTION
 SCALE: 3/4" = 1'-0"



11 SECTION
 SCALE: 3/4" = 1'-0"

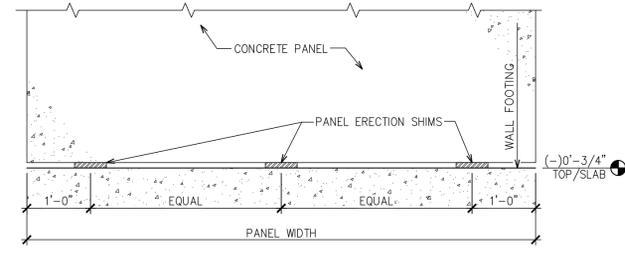
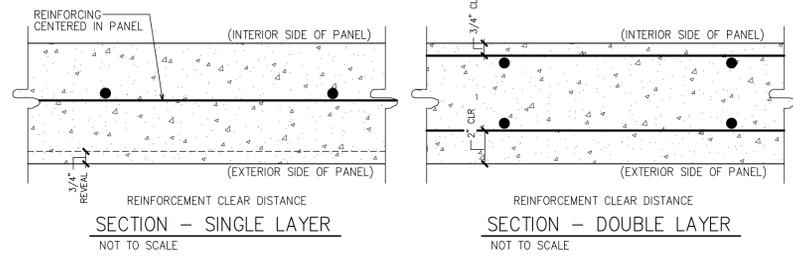
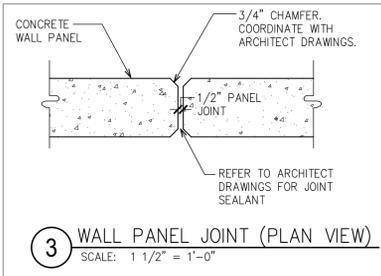
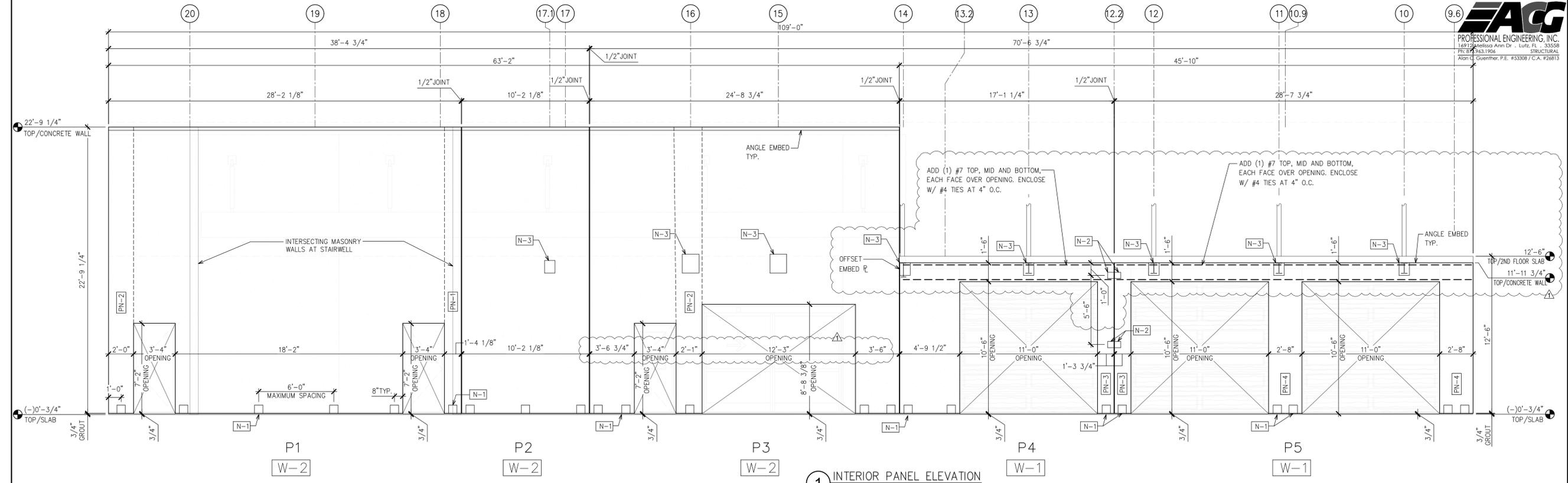
no.	date	revision descriptions
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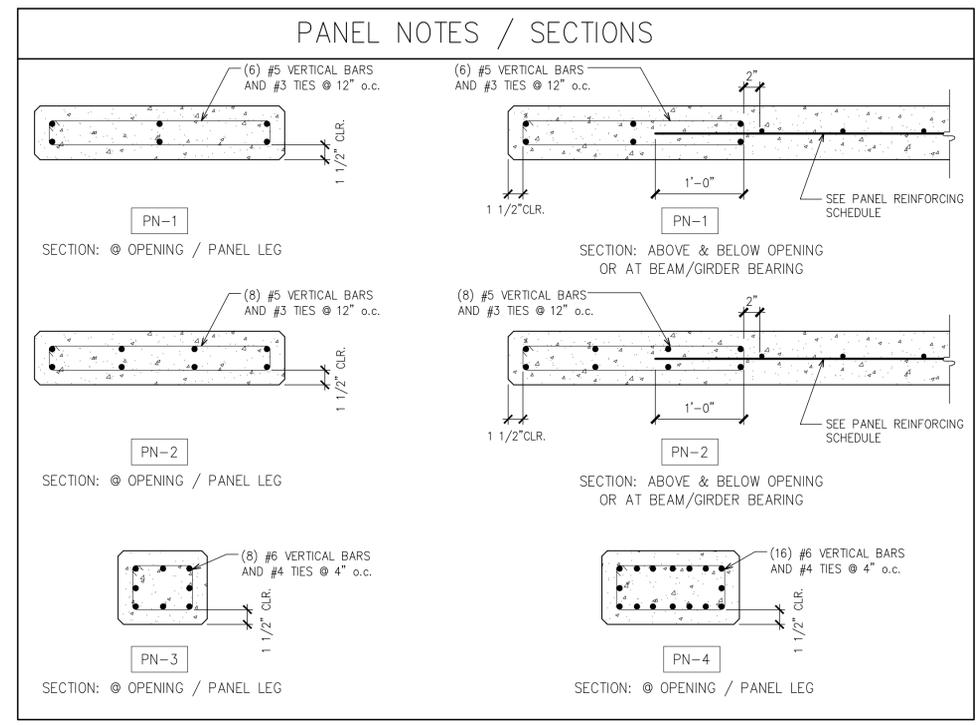
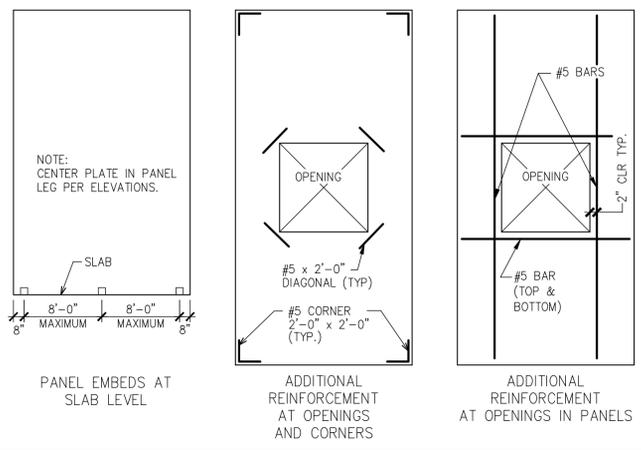
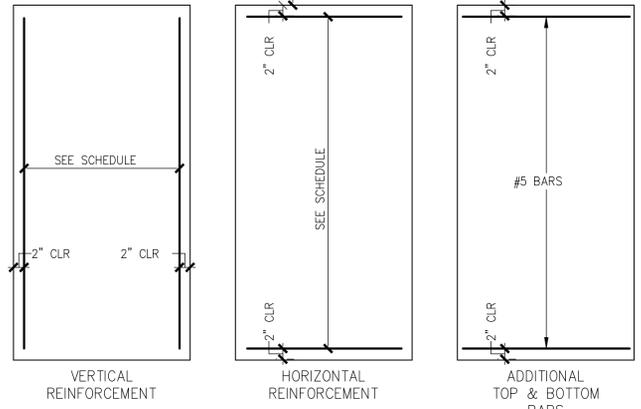
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SECTIONS
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S3.5



- PANEL ELEVATION NOTES:**
- ALL WALL PANEL ELEVATIONS ARE INTERIOR FACE. PANELS ARE TO BE CAST EXTERIOR FACE DOWN.
 - THE GENERAL CONTRACTOR SHALL VERIFY AND APPROVE ALL WALL PANEL AND BEARING POCKET AND WELD PLATE LOCATIONS, AND ALL OPENING DIMENSIONS, OTHER EMBEDDED ITEM LOCATIONS WITH THE ARCHITECTURAL, ENGINEERING, AND MECHANICAL CONTRACT DOCUMENTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE THE CASTING OF ANY WALL PANELS.
 - STRUCTURAL CONCRETE FOR ALL WALL PANELS SHALL BE NORMAL WEIGHT STONE AGGREGATE AND SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
 - ALL EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS NOTED OTHERWISE.
 - ALL EMBEDDED ITEMS SHOWN ARE TO BE CAST INTO THE INSIDE (UP) FACE UNLESS NOTED OTHERWISE.
 - NO OPENINGS SHALL BE MADE IN THE TILT-UP WALL PANELS, EXCEPT AS SHOWN ON THE DRAWING WITHOUT PRIOR APPROVAL OF THE ENGINEER.
 - REFER TO PANEL REINFORCING SCHEDULE ON THIS SHEET FOR REQUIRED VERTICAL AND HORIZONTAL PANEL REINFORCING.
 - BOTTOM OF WALL PANELS MUST BE FULLY GROUTED AND FOOTING ANGLES INSTALLED PER 5/S3.3 PRIOR TO INSTALLATION OF SUPPORT METAL BUILDING SYSTEMS FLOOR FRAMING.
 - SLAB-ON-GRADE CONNECTION ANGLES AND WALL FRAMING SUPPORT BEAMS TO BE FULLY INSTALLED PRIOR TO REMOVAL OF WALL PANEL BRACING/SHORING.



PANEL ELEVATION TAG LEGEND

PN-1	PANEL TO FOUNDATION CONNECTION (SEE 5/S3.3)	N-#	INDICATES PANEL NOTES/SECTIONS (SEE THIS SHEET)
PN-2	PANEL TO PANEL CONNECTION (SEE 7/S3.3)	W-#	INDICATES PANEL REINFORCEMENT (SEE SCHEDULE ON THIS SHEET)
PN-3	FLOOR BEAM BEARING EMBED (1/S3.4)	P#	INDICATES PANEL NUMBER

PANEL REINFORCING SCHEDULE

PANEL MARK	PANEL THICKNESS	VERTICAL REINF	HORIZONTAL REINF	COMMENTS
W-1	11"	#6 AT 6" O.C.	#6 AT 6" O.C.	TWO LAYER
W-2	7 1/4"	#5 AT 12" O.C.	#5 AT 12" O.C.	ONE LAYER

- TYPICAL PANEL REINFORCING NOTES**
- THE DETAILER SHALL USE THESE SKETCHES ALONG WITH THE SCHEDULE IN THE PREPARATION OF SHOP DRAWINGS FOR PANELS AND THEIR REINFORCING.
 - THE REINFORCING IN EACH SKETCH TO THE LEFT IS ADDITIVE. ALL PANELS HAVE VERTICAL REINFORCING, HORIZONTAL REINFORCING, PERIMETER BARS AND SLAB TIE BARS. PANELS WITH OPENINGS HAVE ADDITIONAL REINFORCING AROUND OPENINGS, AS SHOWN.
 - SEE PANEL NOTE SECTIONS FOR ADDITIONAL REINFORCEMENT.
 - CENTER VERTICAL REINFORCEMENT IN PANELS REINFORCED WITH ONE LAYER. HORIZONTAL REINFORCEMENT SHALL BE PLACED TO THE INTERIOR SIDE.

US-29-25 REVISIONS PER BUILDING REVIEW COMMENTS/REQ.

no.	date	revision descriptions

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ORLANDO, FLORIDA

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PANEL ELEVATIONS AND NOTES

S4.1