

GENERAL NOTES:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- IT IS THE OWNER'S SOLE RESPONSIBILITY TO EMPLOY ONE OR MORE SPECIAL INSPECTORS (IF REQUIRED) TO PROVIDE INSPECTIONS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF IBC 2006.

DESIGN NOTES:

- THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE.
- SNOW LOAD
 - GROUND SNOW LOAD = 60 PSF
 - FLAT ROOF SNOW LOAD = 46 PSF
 - SNOW LOAD IMPORTANCE FACTOR I = 1.0
 - SNOW EXPOSURE FACTOR C_e = 1.0
 - SNOW THERMAL FACTOR C_t = 1.1
 - BALANCE AND UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7/05
- WIND LOADS:
 - BASIC WIND SPEED V = 100 MPH
 - WIND LOAD IMPORTANCE FACTOR I = 1.0
 - WIND INTERNAL PRESSURE COEFFICIENT GC_p = ±.18
 - Wind Exposure = B
- ROOF DEAD LOAD
 - TOP CHORD = 15.0 PSF
 - BOTTOM CHORD = 10.0 PSF
 - HVAC UNIT(S) = TO BE DETERMINED
- ROOF LIVE LOAD
 - TOP CHORD = 20.0 PSF
 - BOTTOM CHORD = n/a
- EARTHQUAKE LOAD:
 - DESIGN OF EARTHQUAKE LOAD IN ACCORDANCE WITH ASCE 7/05
 - SEISMIC IMPORTANCE FACTOR I = 1.0
 - 0.2s MAPPED SPECTRAL RESPONSE ACCELERATION S_s = per code
 - 1.0s MAPPED SPECTRAL RESPONSE ACCELERATION S₁ = per code
 - SITE CLASS = CLASS D
 - SPECTRAL RESPONSE COEFFICIENT SDS = per code
 - SPECTRAL RESPONSE COEFFICIENT SDI = per code
 - SEISMIC DESIGN CATEGORY = CATEGORY B
 - BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM = LIGHT FRAMED WALL SYSTEMS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
 - RESPONSE MODIFICATION FACTOR R = 3
 - DEFLECTION AMPLIFICATION FACTOR CD = per code
 - ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE
- DEFLECTION CRITERIA
 - ROOF (LIVE) = L/360
 - ROOF (TOTAL) = L/240

FOUNDATION NOTES:

- FOUNDATION DESIGNED BASED ON AN ASSUMED MAXIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY. NOTIFY THE ENGINEER AND STOP WORK IF CLAY, WET SOILS, FILL, OR OTHER DELETERIOUS MATERIALS ARE ENCOUNTERED.
- DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A FROST DEPTH OF 4'-0" BELOW FINISHED GRADE.
- NO HORIZONTAL JOINT WILL BE PERMITTED IN THE WALLS UNLESS NOTED OTHERWISE.
- PROVIDE CONTROL JOINTS IN SLABS AT 12 FT O.C. MAX.
- EXCAVATING AND BACK FILLING AT NEW FOUNDATION WALLS SHALL BE DONE SUCH THAT SYMMETRICAL LOADING SHALL BE MAINTAINED ON BOTH SIDES. WHERE DESIGN CONDITIONS REQUIRE DIFFERENT BACK FILL HEIGHTS, WALLS SHALL BE FIRMLY SHORED IN POSITION, AND SHORES SHALL REMAIN UNTIL FLOORS ARE PLACED AND PROPERLY SET, TO PROVIDE FULL SUPPORT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, INSTALLATION, AND FINAL CLEARANCE OF ANY NEEDLING, SHORING, OR BRACING OF EXISTING STRUCTURES.
- VAPOR BARRIER BENEATH SLAB SHALL BE 10 MIL "STEGO WRAP" OR APPROVED EQUAL. POLYETHYLENE IS NOT AN ALTERNATE PRODUCT.

CONCRETE NOTES:

- ALL CONCRETE WORK SHALL CONFORM TO ACI-318.
- ALL CONCRETE EXCEPT INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 3000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4". ALL INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 4000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4". MAXIMUM SIZE AGGREGATE SHALL BE 3/4" (WALL/FOOTINGS) AND 1" (SLABS ON GROUND).
- CONCRETE TO REMAIN EXPOSED TO WEATHER SHALL BE AIR ENTRAINED. NO AIR ENTRAINMENT IN INTERIOR CONCRETE SLABS.
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. DEFORMED BARS SHALL BE DETAILED AND FABRICATED IN ACCORDANCE TO ACI-315 LATEST EDITION, AND PLACED IN ACCORDANCE WITH ACI-318.
- SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI-318.
- ANCHOR RODS SHALL CONFORM TO ASTM F1554-36.
- HOOKS NOT DIMENSIONED SHALL BE ACI STANDARD HOOKS.
- CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST EARTH	= 3"
CONCRETE EXPOSED TO EARTH OR WEATHER	= 1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	= 3/4"
- PROVIDE CONTROL JOINTS IN STRUCTURAL SLAB AT 12'-0" ON CENTER MAX.
- PROPORTION DESIGN MIXES TO PROVIDE CONCRETE FOR INTERIOR AND EXTERIOR SLABS-ON-GRADE WITH THE FOLLOWING PROPERTIES:
 - STRENGTH: 4000psi @ 28 DAYS, 3/4" AGGREGATE
 - W/C RATIO: 0.46
 - ENTRAINED AIR: 6% ±1%
 - SLUMP: 3" ± 1"

STRUCTURAL STEEL NOTES - GENERAL:

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9th EDITION.
- ALL STEEL SHAPES AND PLATES TO BE ASTM A36 UNLESS NOTED OTHERWISE. WF BEAMS SHALL BE A992 (50KSI).
- STEEL PIPES SHALL BE A53, GRADE B
- WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 - LATEST EDITION. ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES.
- STEEL BEAMS AND COLUMNS SHALL BE CUT FROM FULL LENGTH STOCK. UNAUTHORIZED SPLICES WILL BE CAUSE FOR REJECTION.
- STRUCTURAL STEEL SHALL BE PAINTED WITH A SHOP APPLIED COAT OF THE FABRICATOR'S RUST INHIBITIVE PRIMER.

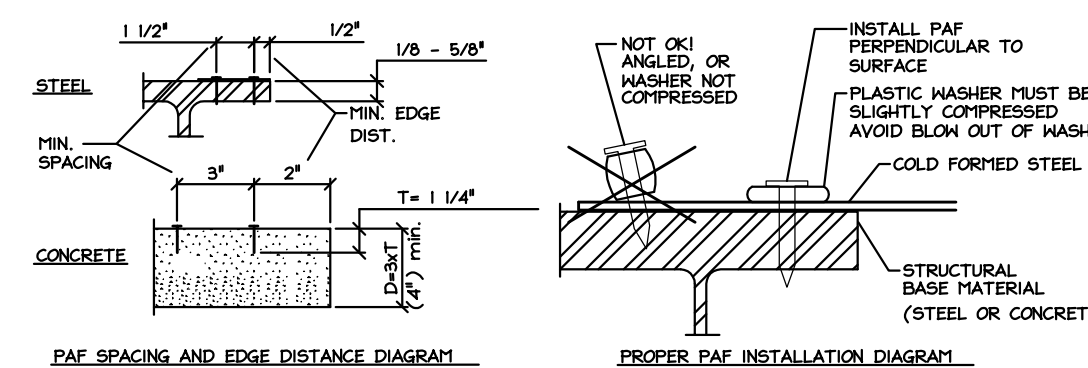
COLD FORMED STEEL NOTES - GENERAL:

- MATERIALS:**
- All Cold Formed Steel Materials shall comply with AISI Specifications and SSMA.
 - Steel shall meet F_y = 33ksi min. for materials 18ga and Lighter, 50ksi for 16ga and Heavier.
 - Galvanizing shall be G60 or per project specifications.
- GENERAL NOTES:**
- All conditions and dimensions shall be field verified prior to erection.
- INSTALLATION:**
- Temporary bracing is the responsibility of the contractor. Do not remove bracing until work is permanently stabilized. Installation means and methods are the responsibility of the contractor.

POWDER ACTUATED FASTENER NOTES:

- PAFs Based On Hilli Products.
- Attachment of Track to Structure - Provide (1) PAF at 16"oc, Typical UNO.
- Attachment of Clip Angles - See Window/Door Schedule on S3 and Wall Sections.
- See Table Below For Minimum Size, Edge Distance and Spacing Between PAFs.

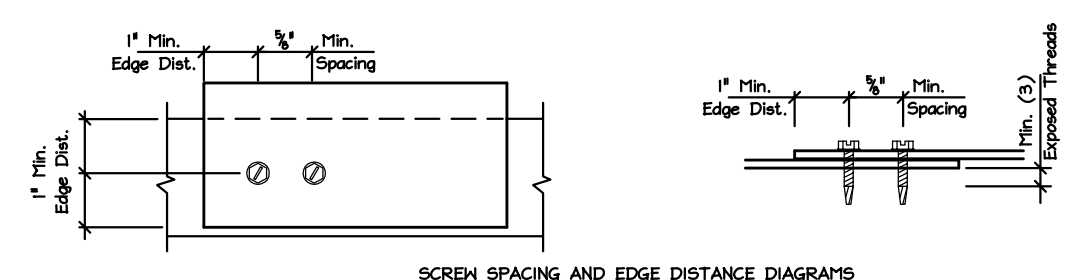
Fastener	Minimum Diameter	Material	Minimum Length	Minimum Edge Distance	Minimum Spacing
P.A.F.	0.145"min., 0.157"	Concrete	1 1/4"	2"	3"
P.A.F.	0.145"min., 0.157"	Steel	3/4"	1/2"	1 1/2"



SCREW NOTES:

- Screws Based On Buildex Products. Penetration through joined materials shall not be less than three exposed threads.
- Studs, Joists And Rafters, Attach To End Tracks With (1) #10-16 Screws At Each Flange, Typical UNO.
- Attachment of Track to Metal Deck, or CFS - Provide (2) #10-16 Ea. Stud, Typical UNO.
- All Stud Overlap Connections Shall Be (2) #10-16 Screws, Typical UNO.
- Clip Angles - Refer to Manufacturer for Special Screws Req'd.
- See Table Below For Minimum Size, Edge Distance and Spacing Between Screws.

Fastener	Diameter	Material	Length	Edge Distance	Spacing
Screw	#10-16	Light Gage	3/4"min.	1"	3/4"
Screw	#12-14	Clips	3/4"min.	1"	3/4"



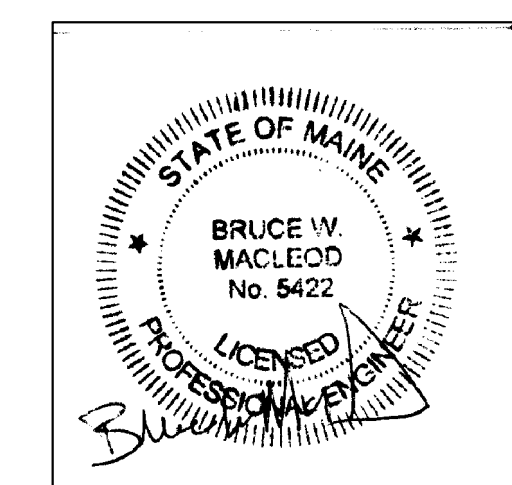
STRUCTURAL STEEL NOTES - BAR JOISTS:

- OPEN WEB STEEL BAR JOISTS SHALL CONFORM TO THE CURRENT ISSUE OF THE STEEL JOIST INSTITUTE'S "STANDARD SPECIFICATION FOR STEEL JOIST AND JOIST GIRDERS."
- ALIGN WEB OPENINGS IN JOIST TO ALLOW PASSAGE OF MECHANICAL AND ELECTRICAL SYSTEM COMPONENTS.
- ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. BRIDGING SHALL SUPPORT THE TOP CHORDS AGAINST LATERAL MOVEMENT DURING AND AFTER THE CONSTRUCTION PERIOD.
- ITEMS ATTACHED TO THE STEEL JOISTS SHALL BE ATTACHED TO PANEL POINTS OF JOISTS ONLY OR AN ADDITIONAL WEB MEMBER SHALL BE ADDED TO THE JOISTS.
- JOIST SHALL BE DESIGNED FOR A NET WIND UPLIFT OF 20 PSF.
- JOIST MANUFACTURER SHALL SUPPLY COMPLETE JOIST SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.

STRUCTURAL STEEL NOTES - METAL DECK:

- METAL ROOF DECK SHALL BE 1 1/2" DEEP, WIDE RIB, TYPE B FASTENED TO BAR JOISTS WITH #12 TEK SCREWS IN A 36/5 PATTERN AND (2)#10 STICH SCREWS SPACED EQUALLY BETWEEN EACH OTHER IN ACCORDANCE WITH THE LATEST EDITION OF "DESIGN MANUAL FOR FLOOR AND ROOF DECKS" BY THE STEEL DECK INSTITUTE, UNO. METAL DECK DESIGNED FOR MIN. 3 SPAN CONDITION.
- METAL FLOOR DECK SHALL BE 3/8" 0.6C-28 GALVANIZED FLOOR FORM EQUAL TO "VULCRAFT CONFORM" IN ACCORDANCE WITH THE "LATEST EDITION OF DESIGN MANUAL FOR FLOOR AND ROOF DECKS" BY THE STEEL DECK INSTITUTE.
- METAL FLOOR DECK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A525 G60.
- SUBMIT COMPLETE METAL DECK SHOP DRAWINGS FOR REVIEW PRIOR TO ANY FABRICATION.

10.29.14 FOR PERMIT



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FORM SYSTEMS
200 RIVERSIDE INDUSTRIAL PARKWAY
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TITLE: Notes

DATE: 6.18.14 DRAWN BY: BIM DRAWING NUMBER: S-5
SCALE: as noted PROJ. NO: 2014-108