

ABBREVIATIONS

A	
AAC	AUTOCLAVED AERATED CONCRETE
AB	ANCHOR BOLT
ABV	ABOVE
A.C.I.	AMERICAN CONCRETE INSTITUTE
ADD'L	ADDITIONAL
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
A.I.S.C.	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
A.I.S.I.	AMERICAN IRON AND STEEL INSTITUTE
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
A.W.S.	AMERICAN WELDING SOCIETY

B	
B/	BOTTOM OF
BB	BOND BEAM
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BP	BASE PLATE
BRDG	BRIDGING
BRG	BEARING
BRK	BRICK
BS	BOTH SIDES
BTJ	BOLTED THE JOIST
BTWN	BETWEEN

C	
C/C	CENTER TO CENTER
CANT	CANTILEVER
CB	CONCRETE BEAM
CC	CONCRETE COLUMN
CFS	COLD-FORMED STEEL
CP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT OR CONTROL JOINT
CL	CENTERLINE
CLR	CLEARANCE
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CSK	COUNTER SINK
CTR	CENTER
CTR'D	CENTERED
CY	CUBIC YARD

D	
DIA	DIAMETER
DIAG	DIAGONAL
DL	DEAD LOAD
DN	DOWN
DTL	DETAIL
DWG	DRAWING
DWL	DOWEL

E	
EA	EACH
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
ENG	ENGINEER
EOS	EDGE OF SLAB
EL	ELEVATION
EQ	EQUAL
EQ SP	EQUAL SPACE(S) (ING)
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR

F	
F/	FACE OF
FD	FLOOR DRAIN
FDN	FOUNDATION
FF	FINISHED FLOOR
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FNG	FRAMING
FS	FAR SIDE
FT	FOOT
FTG	FOOTING

G	
GA ₉₀	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GFC	GROUT FILLED CELL(S)/ COURSE
GLB	GLU-LAM BEAM
GR	GRADE

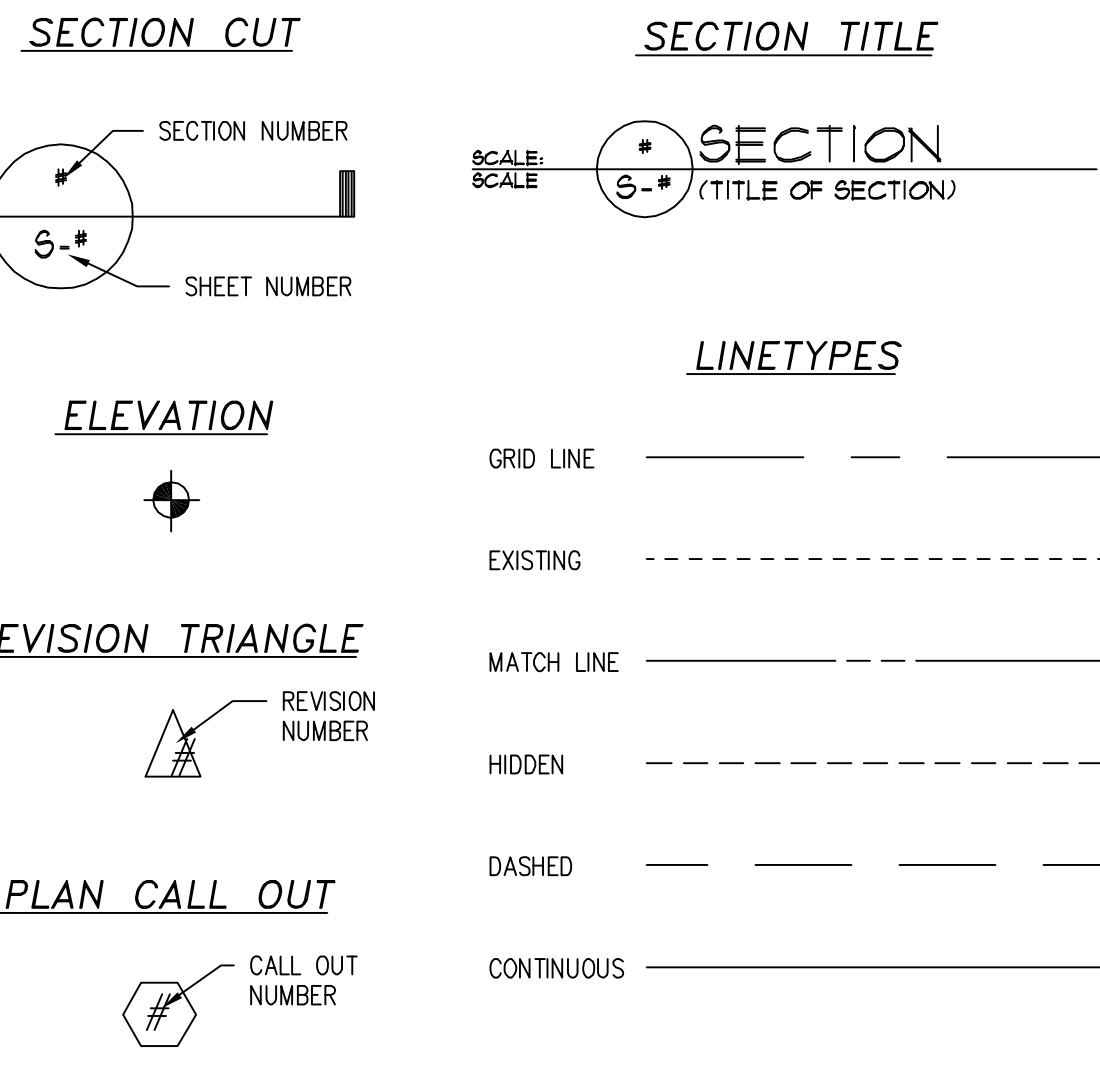
H	
HC	HOLLOW CORE
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HSS	HEADED STUD
HSS	HOLLOW STRUCTURAL SECTION

I	
ID	INSIDE DIAMETER
IF	INSIDE FACE
INT	INTERIOR

J	
JST	JOIST
JT	JOINT

K	
K	KIP
KO	KNOCK-OUT

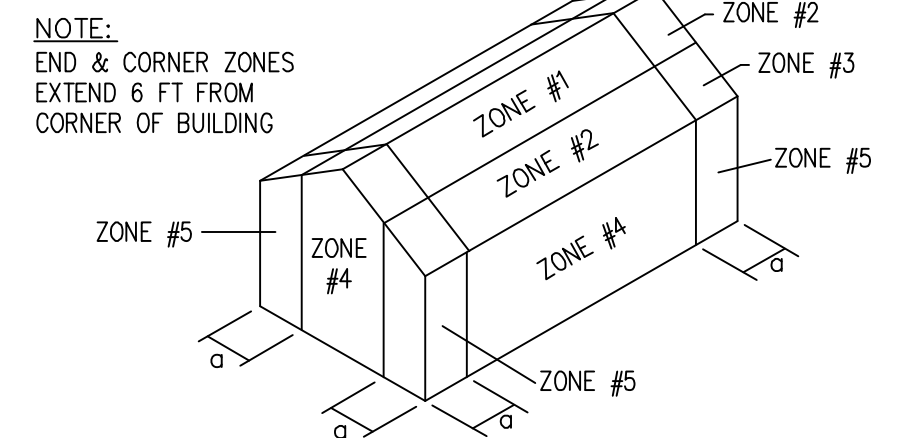
SYMBOLS LEGEND



WIND PRESSURE/SUCTION ON WALL/ROOF (PSF)

TRIB. AREA (SF)	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
10	10 -22	10 -37	10 -55	22 -24	22 -29
20	10 -21	10 -33	10 -46	21 -23	21 -27
50	10 -21	10 -28	10 -33	20 -21	20 -25
100	10 -20	10 -24	10 -24	19 -20	19 -23

BUILDING CODE: INTERNATIONAL BUILDING CODE (LATEST ADOPTED EDITION)
 BASIC WIND SPEED: 110 (3-SECOND GUST)
 IMPORTANCE FACTOR: 1.0
 EXPOSURE COEFFICIENT: B
 INTERNAL PRESSURE: ± 0.18



SCHEDULE (COMPONENTS & CLADDING WIND PRESSURES)

ROOF DESIGN LOADS

TRIB AREA	LOAD	DEAD LOAD
0-200 SF	20 PSF	20 PSF
201-600	16 PSF	
600+ SF	12 PSF	

NOTES:
 1. SEE SCHEDULE "A" FOR UPLIFT LOADS.
 2. SEE PLAN FOR CONCENTRATED LOADS.

LATERAL DESIGN LOAD

WIND VELOCITY = 110 MPH
 IMPORTANCE FACTOR = 1.0
 BUILDING CODE: 2007 FBC W/ 2009 SUPPLEMENTS

STRUCTURAL GENERAL NOTES

GENERAL

THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT ALL DIMENSIONS ARE COORDINATED BETWEEN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO COMMENCING WITH THE FABRICATION OF MATERIALS OR THE START OF CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION.

NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.

THE GENERAL CONTRACTOR SHALL COORDINATE ALL DESIGN PROFESSIONALS DRAWINGS AND SPECIFICATIONS, FOR ITEMS WHICH MAY ADVERSELY AFFECT THE STRUCTURE AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND/OR OMISSIONS.

SUBMITTAL SETS SHALL CONSIST OF A MAXIMUM OF 1 SEPIA AND 2 BLUE LINES, ADDITIONAL BLUE LINES WILL BE DISCARDED.

SUBMITTALS TO ENGINEER OF RECORD FOR REVIEW MUST CONTAIN THE GENERAL CONTRACTOR'S STAMP SIGNIFYING HIS REVIEW/ACCEPTANCE. SUBMITTALS SENT WITHOUT THE GS'S REVIEW STAMP WILL BE RETURNED AT HIS EXPENSE AND WITHOUT REVIEW.

ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TO BE TYPICAL OR SIMILAR UNLESS ANOTHER SECTION OR DETAIL IS REFERENCED ON THE PLANS.

DESIGN CRITERIA

ALL WORK SHALL BE DONE IN ACCORDANCE WITH, AT LEAST, THE MINIMUM REQUIREMENTS OF THE FLORIDA BUILDING CODE, LATEST ADOPTED EDITION.

SEE SCHEDULE SHEETS FOR DESIGN LOAD VALUES.

THE STRUCTURAL PLANS AND SPECIFICATIONS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE PREVIOUSLY REFERENCED BUILDING CODE.

EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE COORDINATION BETWEEN THESE DWGS AND THE BOUND STRUCTURAL SPECIFICATIONS. IF A DISCREPANCY IS DISCOVERED, THE CONTRACTOR SHALL, IN WRITING, REQUEST A CLARIFICATION. IN THE ABSENCE OF SAID REQ., THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

DEMOLITION

THE CONTRACTOR SHALL TEMPORARILY BRACE AND/OR SHORE EXISTING AND NEW CONSTRUCTION AS REQUIRED TO ENSURE THE STRUCTURAL STABILITY IS NOT COMPROMISED. BRACING AND/OR SHORING SHALL REMAIN IN PLACE UNTIL THE STRUCTURAL WORK IS COMPLETE AND HAS BEEN INSPECTED BY A TESTING AGENCY AND IS CERTIFIED TO BE IN SUBSTANTIAL COMPLIANCE W/ PLANS AND SPECIFICATIONS.

CONTRACTOR SHALL SUBMIT FOR ENGINEER'S APPROVAL A SHORING PLAN WITH SECTIONS AND CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN SAME STATE AS PROJECT LOCATION.

ALL SHORING SHALL REMAIN IN PLACE UNTIL REINFORCING AND STRUCTURAL ELEMENTS ARE IN PLACE AND IN CONFORMANCE WITH PLANS AND SPECS.

CONCRETE:

ALL CONCRETE SHALL HAVE THE FOLLOWING MIN. PROPERTIES:

LOCATION	28 DAY STRENGTH	SLUMP	MAX AGGR.
FOUNDATION	3,000 psi	4" ± 1"	1 1/2"
SLAB-ON-GRADE (UP TO 4" THICK)	3,000 psi	4" ± 1"	1 1/2"
SLAB-ON-GRADE (OVER 4" THICK)	4,000 psi	4" ± 1"	1 1/2"
TIE BEAMS	4,000 psi	4" ± 1"	3/4"
TIE COLUMNS	3,000 psi	4" ± 1"	3/4"
CAST-IN-PLACE BEAMS	4,000 psi	4" ± 1"	1"
CAST-IN-PLACE COLUMNS	4,000 psi	4" ± 1"	1"
EQUIPMENT SUPPORTS	4,000 psi	4" ± 1"	1"
TILT-UP PANELS	4,000 psi	4" ± 1"	1 1/2"
GROUT UNDER TILT-UP PANELS	5,000 psi	8" ± 11"	3/8"
ELEVATED SLABS FORMED AND POURED	4,000 psi	4" ± 1"	1"
ELEVATED SLABS FORMED W/ MTL DECK	3,500 psi	4" ± 1"	1"
GROUT FOR FILLED CELLS	2,500 psi	8" ± 11"	3/8"

NOTES:

- SLUMP FOR RAMPS AND SLOPING SURFACES SHALL NOT EXCEED 4".
- SEE MASONRY GENERAL NOTES FOR GROUT TESTING REQUIREMENTS.

CONCRETE PROPERTIES SHALL BE VERIFIED THROUGH INDUSTRY STANDARD TESTING PROCEDURES BY A CERTIFIED TESTING AGENCY. MIN. TEST REQUIRED SHALL INCLUDE SLUMP AND CYLINDER BEAKS FOR COMPRESSIVE STRENGTH. FINDINGS SHALL BE SUBMITTED TO THE ARCH/ENG. FOR REVIEW.

CONCRETE WORK SHALL CONFORM TO ACI 301 (LATEST EDITION) SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

CONCRETE MIX DESIGN SUBMITTALS SHALL MEET THE FOLLOWING CRITERIA:

- EACH MIX DESIGN SHALL BE LABELED TO INDICATE THE AREA IN WHICH THE CONCRETE IS TO BE PLACED. FAILURE TO DO SO WILL RESULT IN THE REJECTION OF SUBMITTALS.
- PROPOSED MIX DESIGN SHALL BE ACCORDANCE WITH ACI 301 METHOD 1 OR METHOD 2. SUPPORTING DATA SHALL BE PROVIDED IN TABULAR FORM FOR EACH SEPARATE PROPOSED MIX.
- ENTRAPPED AIR CONTENT SHALL NOT EXCEED 3%.
- ADMIXTURES USED TO ENTRAIN AIR ARE NOT ACCEPTABLE.

SITE ADDED WATER IS NOT ACCEPTABLE. ADDING WATER TO THE MIX WILL RESULT IN REJECTION OF THE RESULTS BY THE ENGINEER OF RECORD.

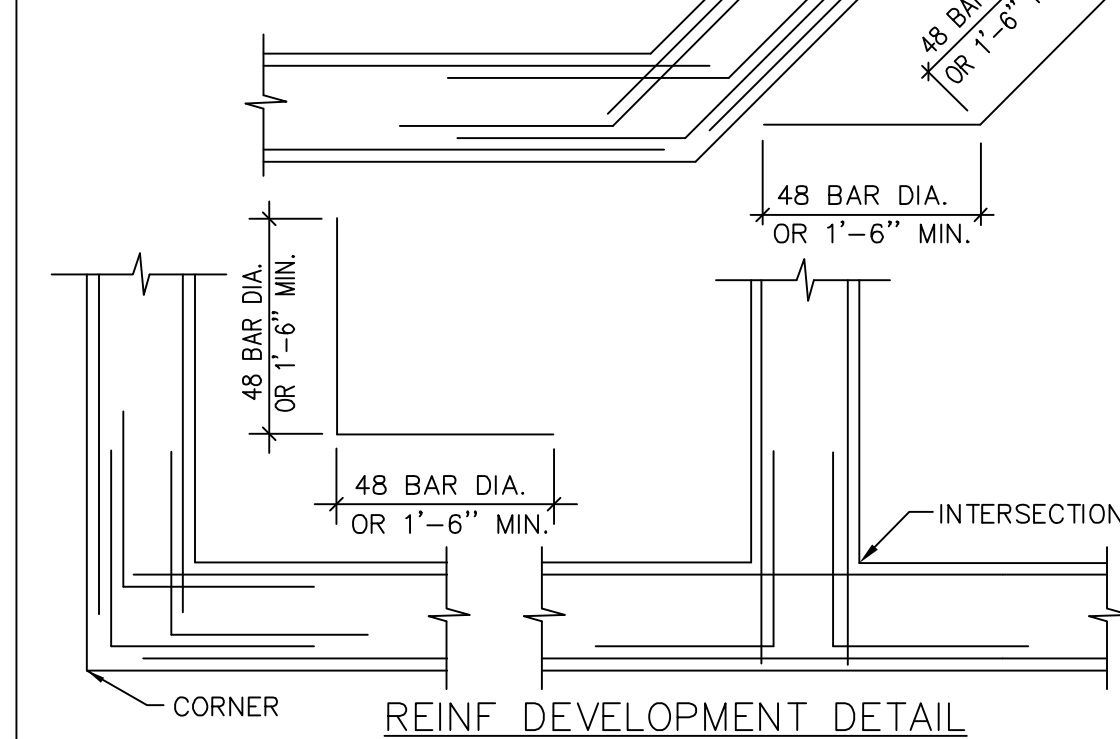
REINFORCING:

ALL REINFORCING SHALL BE DOMESTICALLY PRODUCED WITH REBAR CONFORMING TO ASTM-615 FOR GRADE 60 STEEL, AND WELDED WIRE FABRIC (WVF) TO ASTM A-185.

SPLICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

WELDED WIRE FABRIC	12" MIN.
POURED CONCRETE	36 X BAR DIA (12" MIN)
GROUTED CELLS	48 X BAR DIA

REINFORCEMENT IN WALLS, FOOTINGS AND BEAMS SHALL BE CONTINUOUS AND LAPPED AS SPECIFIED ABOVE, UNLESS NOTED OTHERWISE. HOOK AND LAP ALL CORNER AND INTERSECTING BARS. (SEE REINF DEVELOPMENT DTL BLW).



COVER FOR REINFORCING SHALL BE AS FOLLOWS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THRU #18 BARS: 2"
#5 BAR, W31 OR D31 WIRE AND SMALLER: 1 1/2"
- CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: #14 AND #18 BARS: 1 1/2"
#11 BAR AND SMALLER: 3/4"

STRUCTURAL STEEL

A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN STRICT CONFORMANCE WITH THE LATEST ADOPTED EDITION OF THE AISC MANUAL.

DESIGN OF STRUCTURAL STEEL ELEMENTS WAS COMPLETED UNDER THE REQUIREMENTS SET FORTH IN THE "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN (9TH EDITION)".

MATERIAL SPECIFICATIONS:

- ALL STEEL SHALL BE DOMESTICALLY PRODUCED.
- ASTM A36 - ROLLED SHAPES, PLATES AND BARS.
- ASTM A992 - WIDE FLANGE
- ASTM A500, TYPE E, GRADE B - PIPE.
- ASTM A500 GRADE B - TUBES.
- ASTM F1554 (A307) - ANCHOR BOLTS, RODS, NUTS & WASHERS.
- ASTM A108 GRADE 1015 THROUGH 1020, COLD FINISHED CARBON STEEL, AWS D1.1, TYPE B - HEADED STUDS.
- ASTM A325, TYPE N - BOLTED STRUCTURAL CONNECTIONS.
- ASTM A307 - FOR BOLTED CONN. OF LESS THAN 5/8" DIA.
- E70XX ELECTRODE (LOW HYDROGEN) - WELDED CONNECTIONS (U.N.O.).
- BOLTED CONNECTIONS SHALL BE MADE WITH A MIN. OF 3/4" DIA. BOLTS (U.N.O.).
- WELDED CONNECTIONS SHALL BE A MIN. OF 3/16" FILLET WELD ALL AROUND FOR CONNECTING MEMBERS UP TO 1/4" THICK. USE 1/4" FILLET WELD FOR ALL OTHER MEMBER THICKNESSES (U.N.O.).

ALL BOLTED CONNECTIONS SHALL BE "SNUG-TIGHT" AS DEFINED IN THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (ROSC). (U.N.O.)

BOLTED CONNECTIONS INDICATED TO BE "SLIP-CRITICAL" (SC) SHALL BE INSTALLED, TIGHTENED, TESTED, AND INSPECTED AS OUTLINED IN THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (ROSC). (U.N.O.)

BRACE AND MAINTAIN ALL STEEL IN ALIGNMENT UNTIL OTHER PARTS OF CONSTRUCTION NECESSARY FOR PERMANENT SUPPORT ARE COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TEMPORARY SHORING AS REQUIRED FOR THE STABILITY OF THE STEEL FRAME UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN COMPLETED AND BUILDING IS ENCLOSED.

ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.

GROUT FOR COLUMN BASE PLATES AND PRESET BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT. (5000psi MIN)

SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOADS AND TOLERANCES.

ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF ASTM A123.

STRUCTURAL STEEL SHALL RECEIVE SHOP COAT OF PRIMER (COLOR AS DIRECTED BY ARCHITECT) EXCEPT AREAS THAT WILL RECEIVE SPRAY-ON FIRE PROTECTION.

BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR FOP

J.P.A.

J. HOWARD NUDELL ARCHITECT
 31690 W. Twelve Mile Road
 Farmington Hills, Michigan 48334
 t 248 324 8800 f 248 324 5550
 OFFICES IN:
 Dallas Texas 972 387 5900
 Costa Mesa, California 714 979 8100
 Chicago, Illinois 321 558 1144
 Tempe, Arizona 480 446 3900

RBE CONSULTING SERVICES, LLC
 2517 Edgewater Dr Orlando FL 32804
 407 226 1111

State of Florida
 Registered Architect
 Joel Howard Nudell
 Reg. No. 7953

project title

 Suite - #2517
 Interior Modification
 David's World Cycle
OCCUPANCY:
 "M" Mercantile
 David's World Cycle
 2517 Edgewater Dr Orlando FL 32804

sheet title
STRUCTURAL GENERAL NOTES
 DO NOT SCALE DRAWINGS
 USE FIGURED DIMENSIONS ONLY

project number
2010-041
 drawn NS
 checked RMB
 approved RMB
 issued for date
 OWNER ISSUE 03-11-10
 OWNER ISSUE 03-18-10
 PRICING ISSUE 03-23-10
 PERMIT ISSUE 03-23-10
 sheet
S001