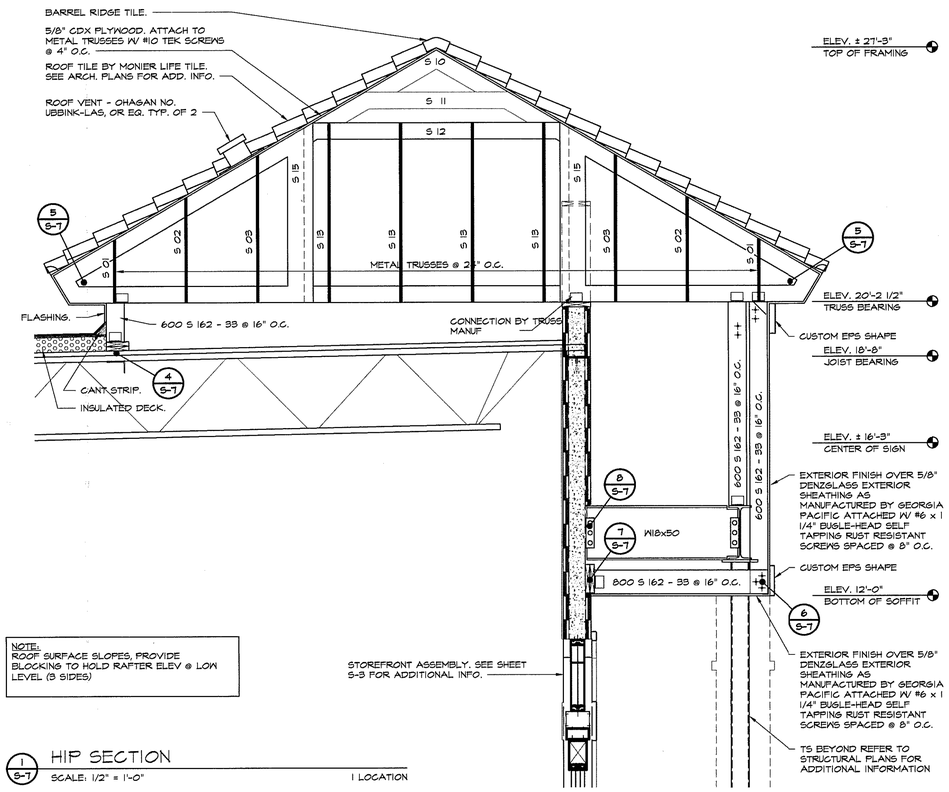
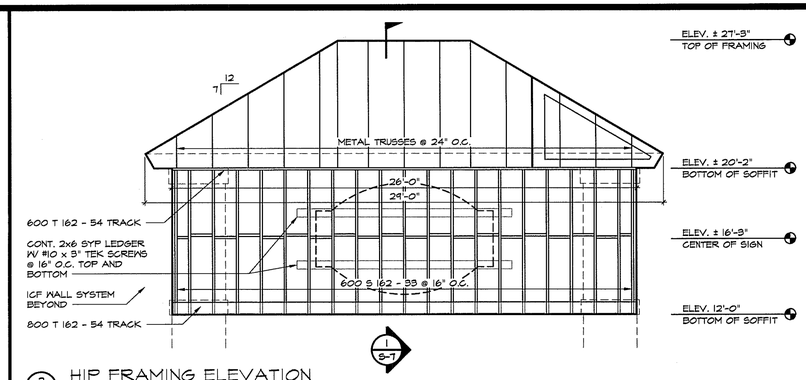
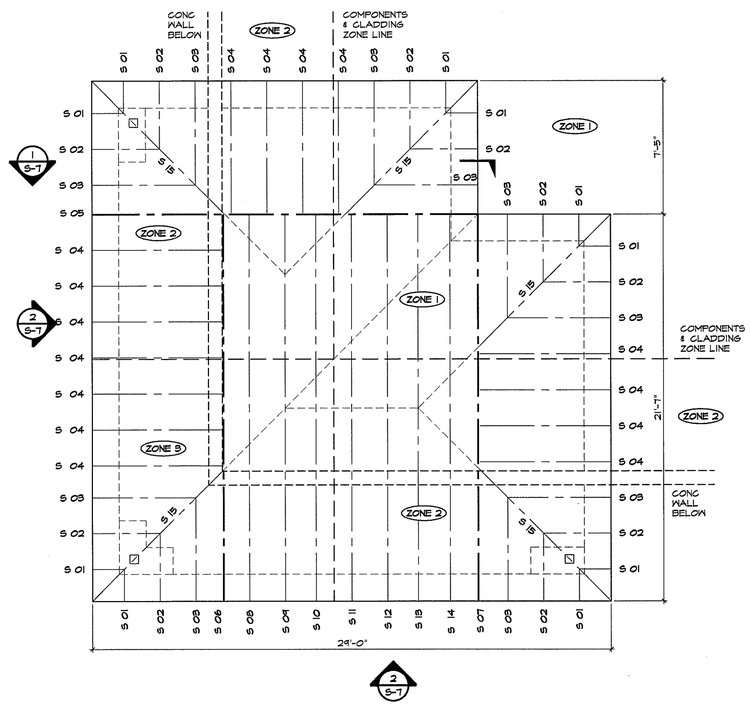


NOTE:
ROOF SURFACE SLOPES, PROVIDE BLOCKING TO HOLD RAFTER ELEV @ LOW LEVEL (3 SIDES)

1 S-7 HIP SECTION
SCALE: 1/2" = 1'-0"
1 LOCATION

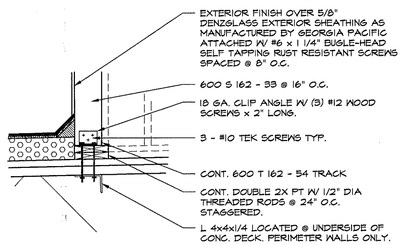


2 S-7 HIP FRAMING ELEVATION
SCALE: 1/4" = 1'-0"

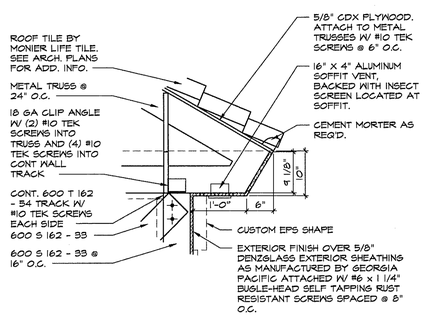


NOTE:
"S ##" DENOTES LABEL FOR METAL TRUSS NOTIFY ENGINEER OF RECORD IF LABELS VARY FROM THE TRUSS ENGINEER'S LAYOUT DRAWINGS.

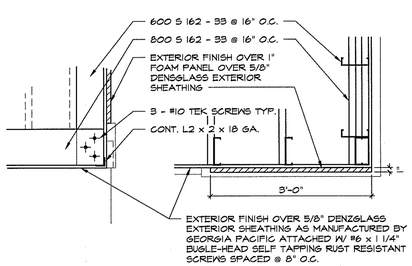
3 S-7 HIP FRAMING PLAN
SCALE: 1/4" = 1'-0"



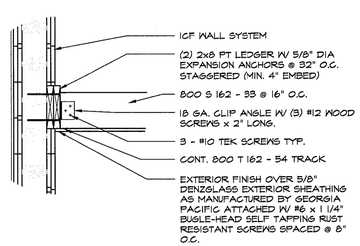
4 S-7 CONNECTION DETAIL
SCALE: 3/4" = 1'-0"



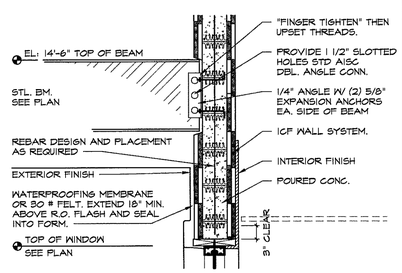
5 S-7 TRUSS END DETAIL
SCALE: 3/4" = 1'-0"



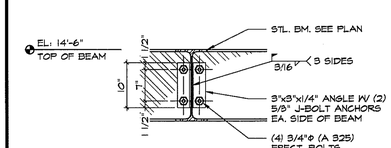
6 S-7 HIP CORNER DETAIL
SCALE: 3/4" = 1'-0"



7 S-7 CONNECTION DETAIL
SCALE: 1/2" = 1'-0"



8 S-7 STEEL BEAM CONN. TO CONC.
SCALE: 3/4" = 1'-0"
TYP. OF 2 LOCATIONS



9 S-7 STEEL BEAM CONN. TO STEEL
SCALE: 3/4" = 1'-0"
TYP. OF 5 LOCATIONS

GENERAL STRUCTURAL NOTES:

DESIGN CODE: FLORIDA BUILDING CODE, 2007 EDITION W/ 2009 AMENDMENTS

WIND LOAD DESIGN CRITERIA:

FLORIDA BUILDING CODE 2007 W/ 2009 AMENDMENTS
SECTION 1609
AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-05
BASIC WIND VELOCITY_____ 140 MPH (3 SECOND GUST, ANY DIRECTION)
BUILDING CATEGORY_____ II
IMPORTANCE FACTOR_____ 1.00 (TABLE 1604.5)
EXPOSURE CATAGORY_____ B
ENCLOSURE CLASS_____ ENCLOSED
MAIN WINDFORCE RESISTING SYSTEM PRESSURES:
ROOF_____ 37.3 PSF (GROSS UPLIFT)
NET UPLIFT_____ 26 PSF
WALLS_____ 31.1 PSF

WALL COMPONENTS & CLADDING
SEE ELEVATIONS

ROOF COMPONENTS & CLADDING (REFER TO DETAIL 10 SHEET S-6 FOR ADDITIONAL INFORMATION)

ZONE 1 : +14.3 / -35.3
ZONE 2 : +14.3 / -54.2
ZONE 3 : +14.3 / -84.0

ROOF SLAB / STEEL DECK:

1. STEEL ROOF DECK SHALL BE 1 1/2", 20 GA. TYPE B GALV AS MANUFACTURED BY VULCRAFT OR APPROVED EQUAL. 3 SPAN MAXIMUM CONSTRUCTION.
2. DECKING CONTRACTOR SHALL FURNISH AND INSTALL CLOSURE AT DECK END EDGES AND OPENINGS.
3. DECKING SHEETS SHALL BE CONTINUOUS FOR 3 SPANS MINIMUM
4. 1 1/2" 20 GA. METAL DECK WELDED TO JOISTS IN 36/4 PATTERN W/ 1 - #10 TEK SIDE LAP IN 3 SPAN CONDITION. PROVIDE 5/8" DIAMETER PUDDLE WELDS AT 6" O.C. TO STEEL ANGLES AT PERIMETER OF BUILDING

STRUCTURAL STEEL:

STEEL WORK SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC., LATEST EDITION.
1. STRUCTURAL STEEL SHALL BE ASTM A36, Fy=36KSI
2. MISC. STEEL SHALL BE ASTM A36, Fy=36KSI
3. STEEL TUBING SHALL BE ASTM 500, GRADE B, Fy=46KSI.
4. STEEL PIPE SHALL BE ASTM A501, Fy=36KSI.
ALL SHOP CONNECTIONS TO BE WELDED (UTILIZING E70XX ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED, UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS. WELDING TO CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY. STEEL TO RECEIVE ONE SHOP COAT AND ONE FIELD TOUCH UP COAT OF APPROVED PAINT.

ALL BOLTED CONNECTIONS SHALL CONSIST OF MINIMUM 3/4 INCH DIAMETER ASTM A-325 HIGH STRENGTH BOLTS. THE FABRICATOR SHALL DESIGN BEAM CONNECTION FOR THE REACTIONS SHOWN ON THE PLANS. IF NOT SHOWN, A REACTION OF W/2 KIPS FROM THE TABLES IN PART 2 "ALLOWABLE UNIFORM LOADS IN KIPS FOR BEAMS LATERALLY SUPPORTED" OF THE MANUAL OF STEEL CONSTRUCTION (9TH EDITION) SHALL BE USED, BUT CONNECTIONS SHALL NOT HAVE LESS THAN 2 ROWS OF BOLTS. ANCHORS BOLTS SHALL CONFORM TO ASTM A-307 OR A-36 (THREADED ROD).

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

WOOD:

STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES OF NO. 2 SOUTHERN PINE CONFORMING TO 2005 NDS, AS FOLLOWS:
SHEAR Fv=90 PSI
BENDING
2x4 Fb=1500 PSI
2x6 Fb=1250 PSI
2x8 Fb=1200 PSI
2x10 Fb=1050 PSI
2x12 Fb=975 PSI

WOOD IN CONTACT WITH CONCRETE OR MASONRY, AND AT OTHER LOCATIONS AS NOTED ON STRUCTURAL DRAWINGS, SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AITC-104. MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.

PLYWOOD FLOOR, WALL AND ROOF SHEATHING ARE DESIGNED AS DIAPHRAGMS AND SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE FLORIDA BUILDING CODE. SEE STRUCTURAL DRAWINGS FOR FASTENER SIZE AND SPACING REQUIRED.

STEEL JOISTS:

SHALL BE THE SIZE AND SPACING AS SHOWN ON THE STRUCTURAL DRAWINGS AND SHALL BE DESIGNED, FABRICATED, INSTALLED AND BRIDGED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE SPECIFICATIONS.

BRIDGING SHALL BE WELDED OR BOLTED AT ALL POINTS OF CONTACT WITH JOIST. WELD SHALL NOT DAMAGE THE JOIST. CROSS BRIDGING SHALL BE WELDED OR BOLTED AT ITS CENTER POINT.

K-SERIES JOISTS SHALL BEAR A MINIMUM OF 2-1/2" ON STEEL BEAMS AND 4" ON CONCRETE BEAMS. BEARING PLATES SHALL BE CAST INTEGRALLY WITH THE CONCRETE BEAM. SEE PLANS FOR SIZE OF BEARING PLATES. WELD JOISTS TO BEARING PLATES WITH A MINIMUM OF (2) 1/8 X 1" FILLET WELDS, UNLESS NOTED OTHERWISE. BACK TO BACK JOISTS SHALL BE OFFSET IF CONCRETE BEAM IS LESS THAN 8" NOMINAL WIDTH OR FLANGE OF STEEL BEAM IS LESS THAN 5" WIDE.

LH-SERIES JOISTS SHALL BEAR A MINIMUM OF 4" ON STEEL BEAMS AND 6" ON CONCRETE BEAMS. BEARING PLATES SHALL BE CAST INTEGRALLY WITH THE CONCRETE BEAM. SEE PLANS FOR SIZE OF BEARING PLATES. WELD JOISTS TO BEARING PLATE WITH A MINIMUM OF (2) 1/4 X 2" FILLET WELDS, UNLESS NOTED OTHERWISE. BACK TO BACK JOISTS SHALL BE OFFSET IF CONCRETE BEAM IS LESS THAN 12" NOMINAL WIDTH OR FLANGE OF STEEL BEAM IS LESS THAN 8" WIDE.

SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWING SUBMITTAL SHALL INCLUDE LAYOUT, COMPONENT DESIGNATION, BRIDGING, AND RELATED SECTIONS AND DETAILS. SUBMITTALS FOR JOISTS, OTHER THAN STANDARD SJI CATALOG SELECTIONS WHICH HAVE BEEN CHECKED BY SJI, SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

COLD FORMED METAL FRAMING

1. ALL COLD FORMED METAL FRAMING SHALL CONFORM TO AMERICAN IRON AND STEEL INSTITUTE (AISI), "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.
2. MEMBER SIZE DESIGNATIONS AS SHOWN ON THE PLANS ARE IN CONFORMANCE WITH THE STANDARDS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).
3. ALL STUDS AND/OR JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, STEEL THICKNESSAND SPACING SHOWN ON THE PLANS. STUDS, RUNNERS (TRACK), BRACING AND BRIDGING SHALL BE MANUFACTURED PER ASTM SPECIFICATION C955.
4. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES, 16GA AND HEAVIER, SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A653 WITH A YIELD OF 50 KSI MINIMUM.
5. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES, 18GA AND LIGHTER AND ALL TRACK SECTIONS SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A653 WITH A YIELD OF 33 KSI MINIMUM.
6. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES SHALL HAVE A MINIMUM G60 COATING IN CONFORMANCE WITH ASTM C955.
7. FASTENING OF COMPONENTS SHALL BE WITH #10 SELF DRILLING SCREWS MINIMUM.
8. VERTICAL WALL STUDS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO EACH FLANGE OF BOTH UPPER AND LOWER RUNNERS WITH #10 SELF DRILLING SCREWS. STUDS SHALL BE SEATED SQUARELY IN BOTH TOP AND BOTTOM TRACKS.
9. RUNNERS SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE AS SHOWN ON THE DRAWINGS.
10. SPLICES IN AXIAL LOAD BEARING MEMBERS SHALL NOT BE PERMITTED.
11. CUTTING OF STEEL FRAMING MEMBERS MAY BE ACCOMPLISHED WITH A SAW OR SHEAR.TORCH CUTTING OF LOAD BEARING MEMBERS IS NOT PERMITTED.
12. MECHANICAL BRIDGING IS TO BE INSTALLED AT 4'-0" O.C. MINIMUM IN CONFORMANCE WITH AISI AND SSMA STANDARDS.

REVISIONS	BY
BUILDING DEPT REVISION 1-26-10	MCM

Lindemann Bentzon Bojack
290 CITRUS TOWER BLVD. SUITE 200
CLERMONT, FLORIDA 34711
PHONE: (352) 242-0100
FAX: (352) 242-0302
>> ENGINEERING DESIGN INSPECTION <<

Professional Engineer, State of Florida, Pat Lindemann, Registration No. 49905
Lindemann Bentzon Bojack Engineering
Certificate No. EB-0020871
JAN 28 2010
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ABC LIQUORS, INC.
8989 S. ORANGE AVE. - ORLANDO, FLA. 32809

ABC STORE NO. 43
VERO BEACH CENTURY TOWN CENTER

HIP SECTIONS AND DETAILS

DRAWN:	M. MAISCO
CHECKED:	S. RIVERA
DATE:	3-13-09
SCALE:	AS NOTED
JOB No:	43
SHEET	S-7