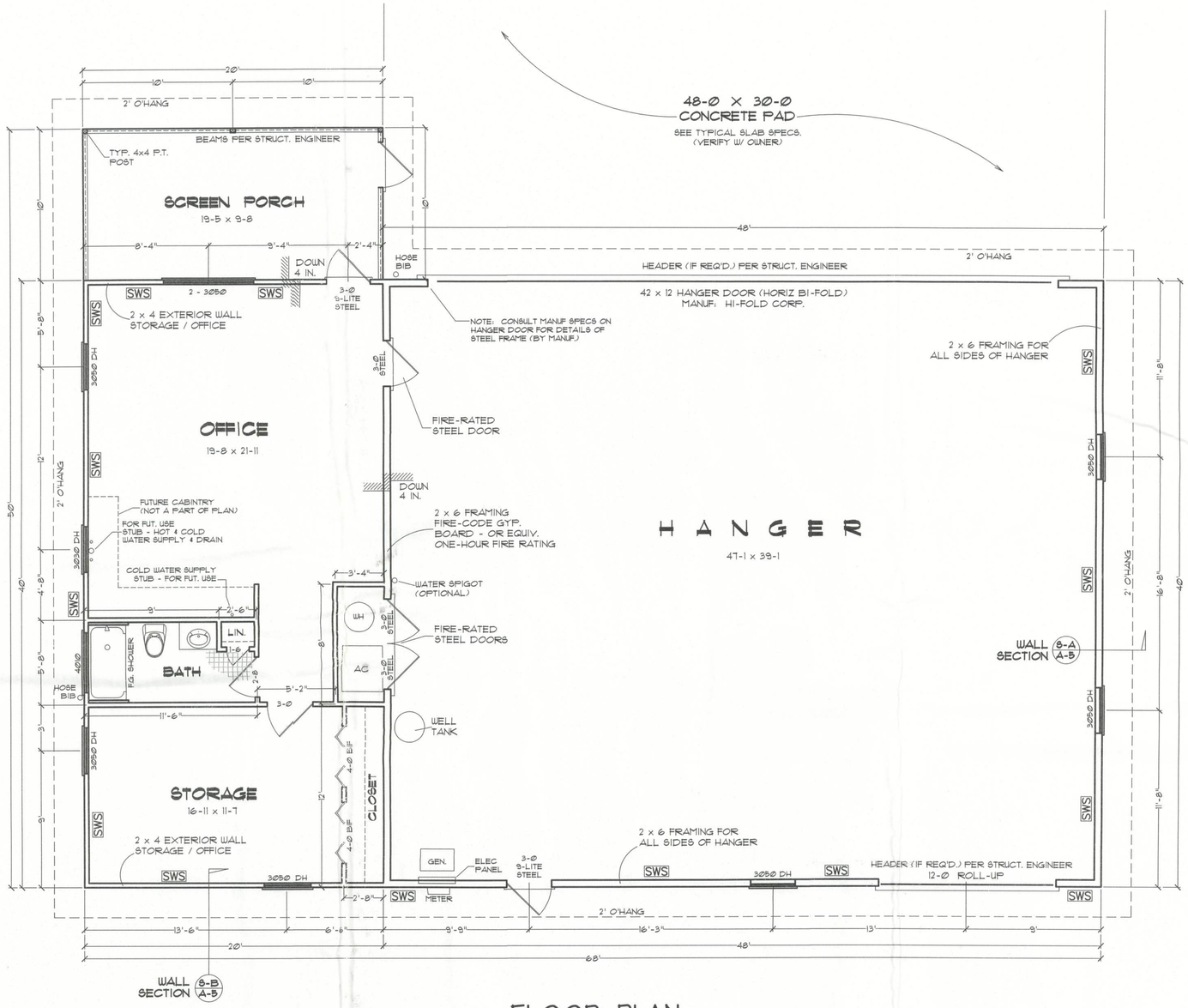
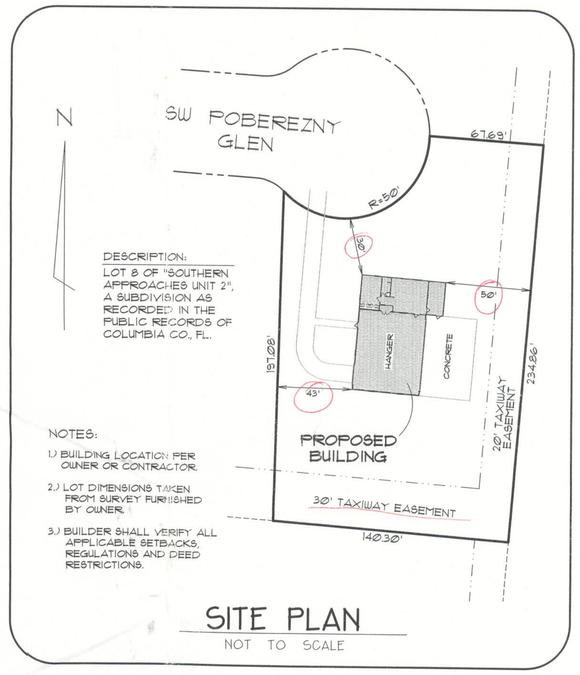
Hanger Building

FOR: Daniel & Jeanne Decker



FLOOR PLAN

SCALE: 1/4 IN. = 1 FT.



SITE PLAN

NOT TO SCALE

SWS = Indicates a shearwall segment location referring to the labeled section of wall lying between the adjacent window / door openings in either direction. The shearwall areas have a height/width aspect ratio of 3-1/2 : 1 or wider.

AREA SUMMARY

CONDITIONED	800 SF
HANGER	1920 SF
PORCH	200 SF
ROOF	2920 SF

Index to Sheets

GENERAL NOTES

1.) See structural / windload Engineer's Notes for data pertaining to Wind Design and compliance w/ Florida Building Code.

2.) All concrete used to be 3000 PSI strength or greater.

3.) HVAC duct and unit size/design is by engineered shop drawings from the AC contractor.

4.) Windows to be vinyl framed / Low E and double glazed. Sizes shown are nominal and may vary with manufacturer.

5.) Roof Truss design is the responsibility of the supplier.

6.) The Truss Manufactuer shall prepare Shop Drawings indicating Truss placement, Girder locations, Truss-to-Truss Connections and any point loads. The Contractor shall notify the Designer of any point loads in excess of 2.0k for Fnd. Modification.

7.) Site analysis or preparation information is not a part of this plan and is the responsibility of the owner.

8.) Cabinet and millwork detail is not a part of this plan. The plan is a general design and details shall be the responsibility of the owner and/or contractor.

COLUMBIA COUNTY BUILDING DEPARTMENT Received for FILE COPY Code Compliance PLANS EXAMINER

ENGINEERING NOTE:
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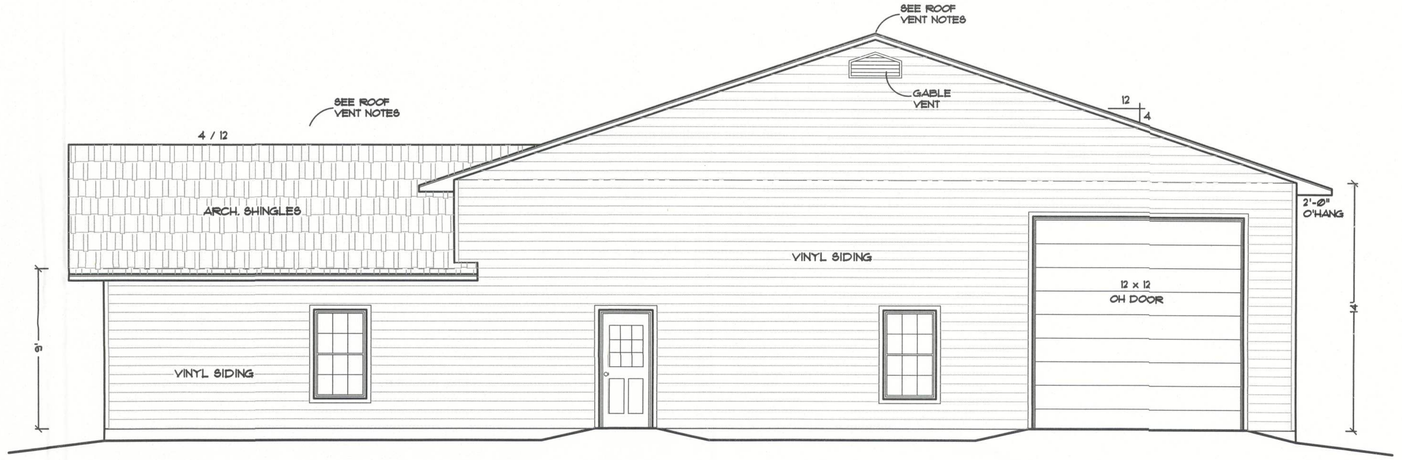
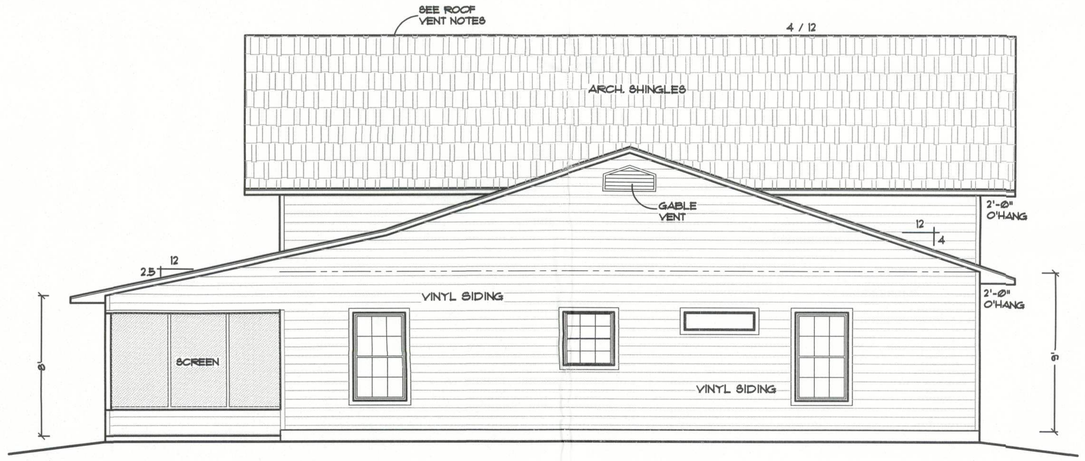
A-1

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 1 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting & Technical Services	REV: 5/12/13
CHECK: T A D	192 SW Sagewood Gln. Lake City, FL 32024 Phone (386) 755-5891	REV: 6/29/13



FRONT ELEVATION

SCALE: 1/4 IN. = 1 FT.



LEFT ELEVATION

SCALE: 1/4 IN. = 1 FT.

ATTIC VENTILATION

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain. Ventilating openings shall be provided with corrosion-resistant wire mesh, wit h 1 / 8 inch (3.2 mm) minimum to ¼ inch (6.4 mm) maximum openings.

The total net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

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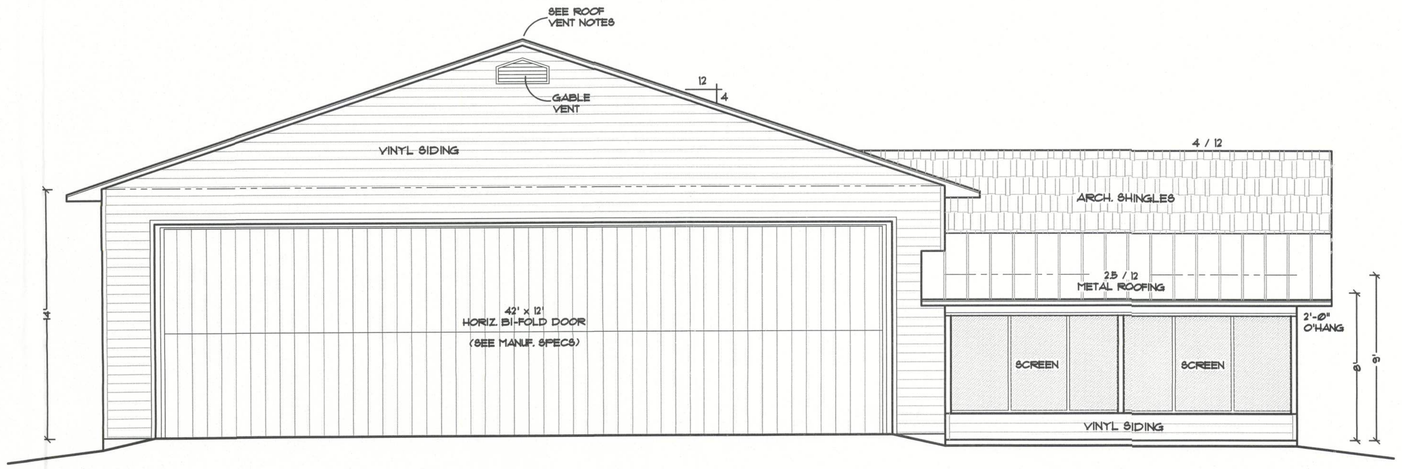
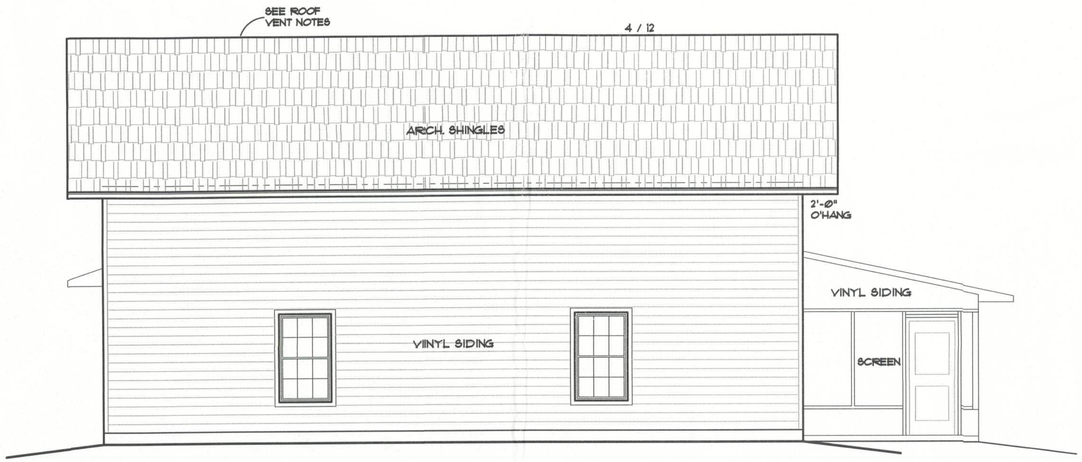
A-2

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 2 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV: 5/12/13
CHECK: T A D	192 SW Sagewood Gn. Lake City, FL 32024 Phone (386) 755-5891	REV:



REAR ELEVATION

SCALE: 1/4 IN. = 1 FT.



RIGHT ELEVATION

SCALE: 1/4 IN. = 1 FT.

ATTIC VENTILATION

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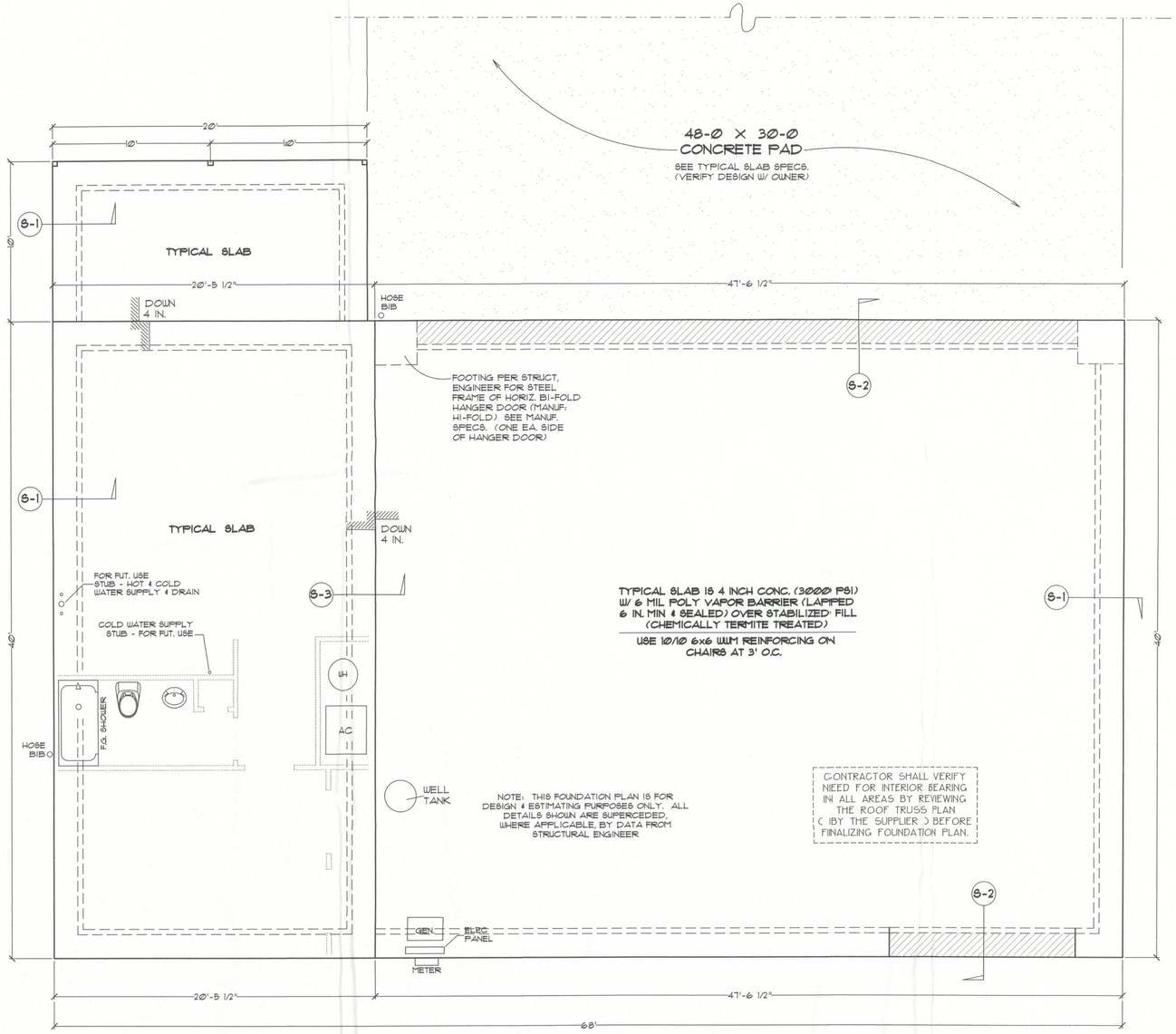
A-3

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 3 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV: 5/12/13
CHECK: T A D	192 SW Sagewood Gln., Lake City, FL 32024 Phone (386) 755-5841	REV:

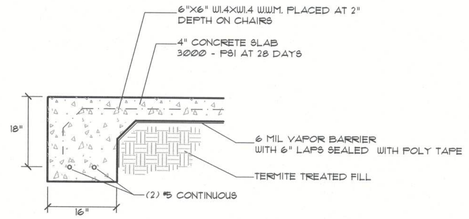
FOUNDATION NOTES:

- CONTRACTOR SHALL EXAMINE ROOF TRUSS PLAN (BY SUPPLIER) TO DETERMINE ANY ADDITIONAL BEARING REQUIREMENTS BEFORE FINALIZING THE FOUNDATION PLAN.
- ALL CONCRETE IS 3000 PSI STRENGTH (MIN.)
- VERIFY DIMENSIONS WITH FLOOR PLAN
- SITE ANALYSIS AND PREPARATION DATA IS NOT A PART OF THIS PLAN AND IS THE RESPONSIBILITY OF THE CONTRACTOR / OWNER.



FOUNDATION PLAN

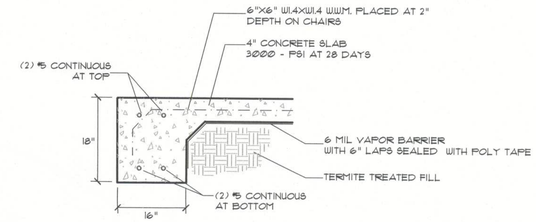
SCALE: 1/4 IN. = 1 FT.



S-1 TYP. MONOLITHIC FOOTING

SCALE: 1" = 1'-0"

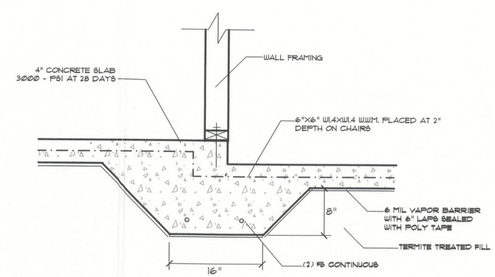
NOTE: THIS SECTION FOR DESIGN & ESTIMATING PURPOSES ONLY. ALL DETAILS SHOWN ARE SUPERCEDED, WHERE APPLICABLE, BY DATA FROM STRUCTURAL ENGINEER



TYP. MONOLITHIC FOOTING AT 42' HANGER DOOR & 12' OVERHEAD DOOR

S-2 SCALE: 1" = 1'-0"

NOTE: THIS SECTION FOR DESIGN & ESTIMATING PURPOSES ONLY. ALL DETAILS SHOWN ARE SUPERCEDED, WHERE APPLICABLE, BY DATA FROM STRUCTURAL ENGINEER



S-3 INTERIOR STEP FOOTING

SCALE: 1" = 1'-0"

NOTE: THIS SECTION FOR DESIGN & ESTIMATING PURPOSES ONLY. ALL DETAILS SHOWN ARE SUPERCEDED, WHERE APPLICABLE, BY DATA FROM STRUCTURAL ENGINEER

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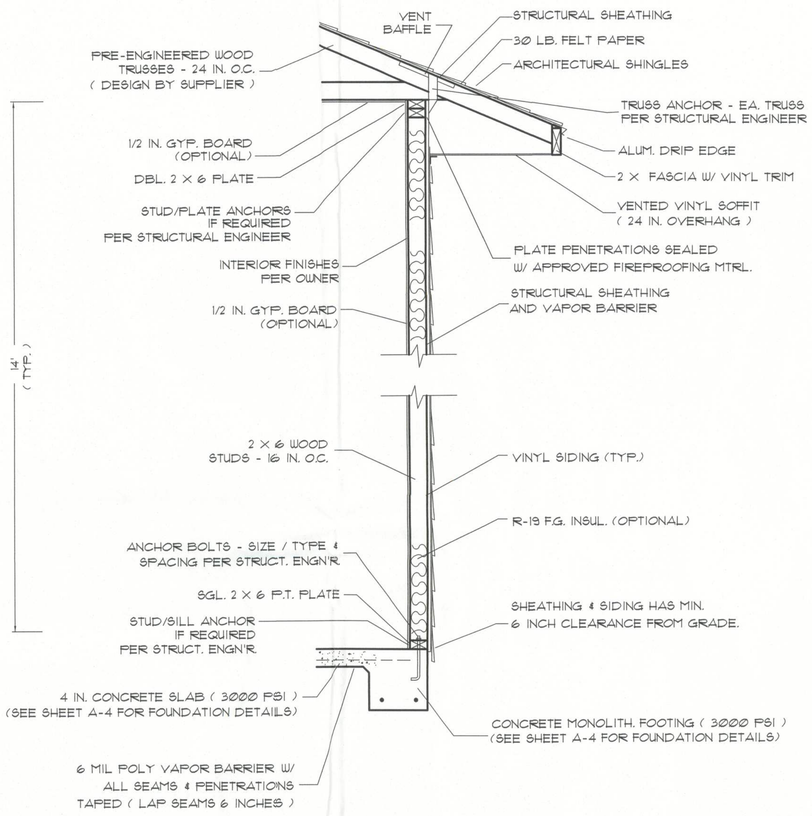
A-4

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 4 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV: 5/12/13
CHECK: T A D	142 SW Sagewood Gln., Lake City, FL 32024 Phone (386) 755-5891	REV: 6/29/13



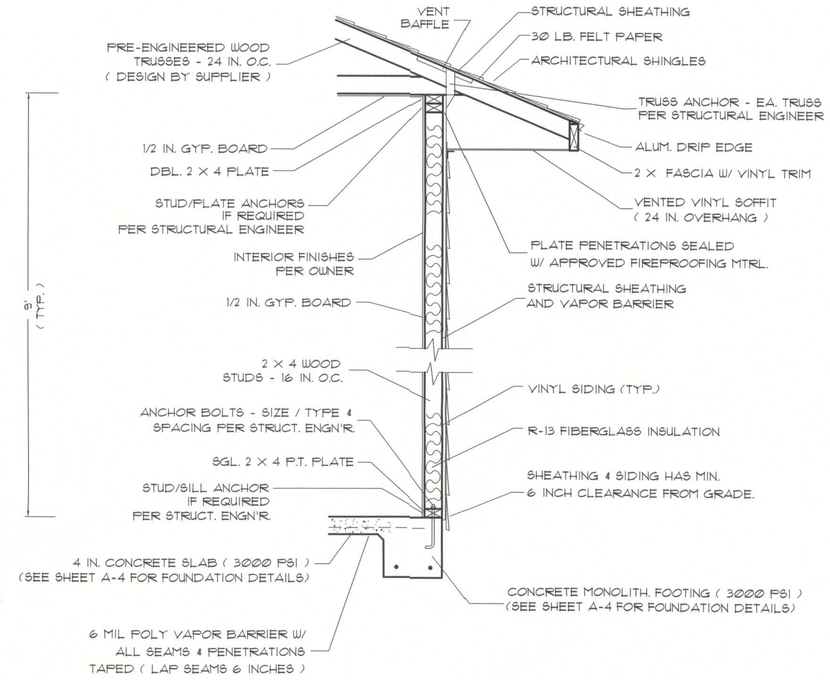
WALL SECTION NOTES:

- This Typical Wall Section is for Estimating purposes only.
- All data shown in this Wall Section shall be subject to review and final input by the Structural Engineer.

DESIGN WALL SECTION

S-A — NON-STRUCTURAL DATA

SCALE: 3/4 IN. = 1 FT.



WALL SECTION NOTES:

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- All data shown in this Wall Section shall be subject to review and final input by the Structural Engineer.

DESIGN WALL SECTION

S-B — NON-STRUCTURAL DATA

SCALE: 3/4 IN. = 1 FT.

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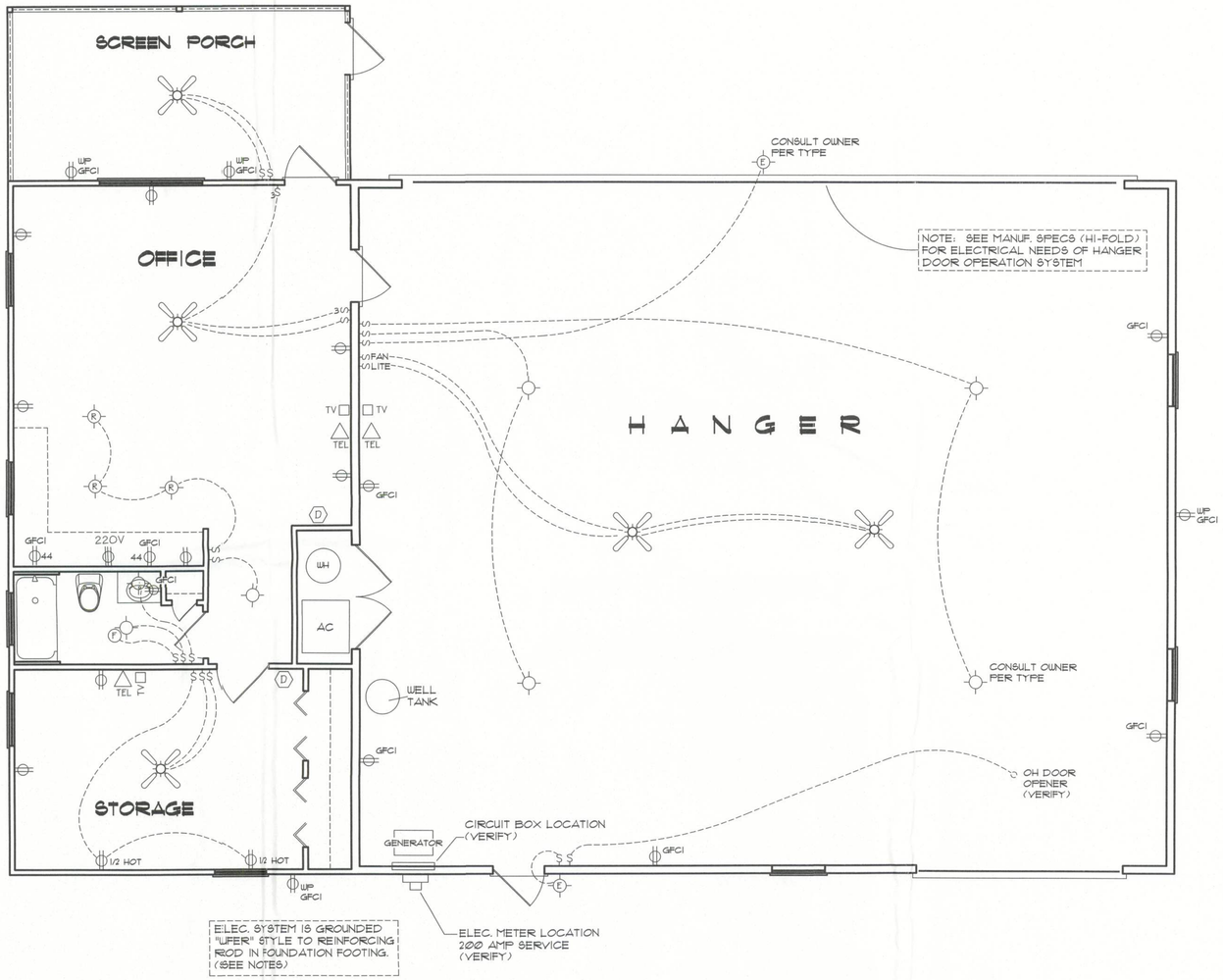
A-5

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 5 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV: 5/12/13
CHECK: T A D	192 SW Sagewood Gln, Lake City, FL 32024 Phone (386) 755-5891	REV:



ELECTRICAL PLAN

NOT TO SCALE

ELECTRICAL SYMBOL LEGEND

= 48" FLOURESCENT LIGHTING FIXTURE	AFCI = ARC FAULT CIRCUIT INTERRUPTER
= STANDARD CEILING LIGHTING FIXTURE OR CHANDELIER	WP = WEATHER PROOF
= EXTERIOR LIGHTING FIXTURE - WEATHERPROOF	= 110V DUPLEX OUTLET AFCI, UNLESS NOTED
= RECESSED (CAN) CEILING LIGHTING FIXTURE	42 = 110V DUPLEX OUTLET AFCI, UNLESS NOTED (SPECIAL HEIGHT NOTED)
$ = SGL. POLE LIGHT SWITCH.	GFCI = 110V DUPLEX OUTLET GROUND FAULT CIRCUIT INTERRUPTER TYPE
$3 = THREE-WAY SWITCH.	220V = 220 VOLT OUTLET (4 WIRE)
$4 = FOUR-WAY SWITCH.	= FAN LOCATION (CEILING)
$DIM = DIMMER SWITCH	F = FAN LOCATION (EXHAUST)
D = SMOKE & CARBON MONOXIDE DETECTOR (SEE NOTES)	
TEL = TELEPHONE JACK	DATA = DATA / COMPUTER NETWORK
TV = TV JACK LOCATION	

ELECTRICAL PLAN NOTES

-ALL INSTALLATIONS ARE PER NAT'L. ELECTRIC CODE (NEC) 2008.

-ALL RECEPTACLES, UNLESS NOTED OTHERWISE, SHALL BE ARC FAULT CIRCUIT INTERRUPTER (AFCI) TYPE. ALSO, RECEPTACLES, UNLESS NOTED, SHALL BE TAMPER RESISTANT.

-GROUNDING OF ELECTRICAL SYSTEM SHALL BE BY "UFER" STYLE GROUNDING METHOD TO REINFORCING ROD IN CONCRETE FOUNDATION FOOTING (NEC 250.52 - GROUNDING ELECTRODES).

-WIRE ALL APPLIANCES, HVAC UNITS AND OTHER EQUIPMENT PER MANUF. SPECIFICATIONS.

-ELECTRICAL CONT'R SHALL BE RESPONSIBLE FOR THE DESIGN & SIZING OF ELECTRICAL SERVICE AND CIRCUITS.

-ENTRY OF SERVICE (UNDERGROUND OR OVERHEAD) TO BE DETERMINED BY POWER COMPANY.

-TELEPHONE, TELEVISION AND OTHER LOW VOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, & IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION 2008.

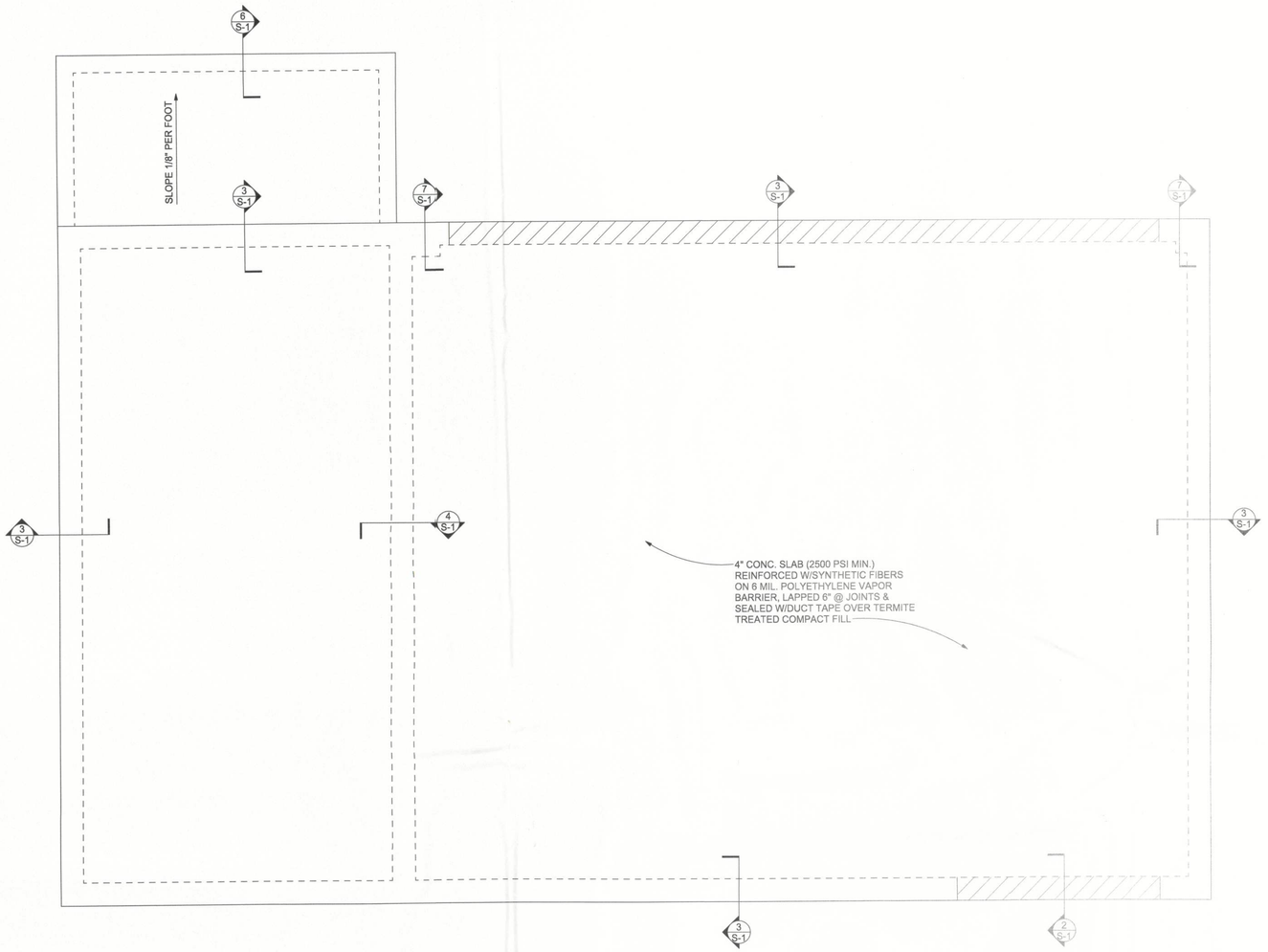
-CONSULT THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED.

-LOW VOLTAGE ITEMS (TELEPHONE, CATV, DATA CABLING) IS SHOWN, IF REQUESTED BY OWNER / BUILDER. CONSULT OWNER FOR REQUIREMENTS IF NOT SHOWN ON ELECTRICAL PLAN.

-ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER. THEY SHALL ALSO PROVIDE CARBON MONOXIDE DETECTION.

A-6

FILE: 13-012	HANGER BUILDING FOR: Daniel & Jeanne Decker	SHEET: 6 OF 6
DATE: 4-30-13		CAD FILE: 13-012
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV: 5/12/13
CHECK: T A D	192 SW Sagewood Gln, Lake City, FL 32024 Phone (386) 755-5891	REV: 5/27/13



FOUNDATION LAYOUT

CONTRACTOR TO PROVIDE FLOOR PLAN
WITH DIMENSIONS

FOUNDATION NOTES

CONCRETE:
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

REINFORCING STEEL:
THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40.

COVER OVER REINFORCING STEEL
FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFROCING BARS SHALL BE:
3 INCHES IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1 1/2 INCHES ELSEWHERE. REINFORCING BARS EMBEDDED IN GROUTED CELLS SHALL HAVE A MINIMUM CLEAR DISTANCE OF 1/4 INCH FOR FINE GROUT OR 1/2 INCH FOR COARSE GROUT BETWEEN REINFORCING BARS AND ANY FACE OF A CELL. REINFORCING BARS USED IN MASONRY WALLS SHALL HAVE A MASONRY COVER (INCLUDING GROUT) OF NOT LESS THAN
2 INCHES FOR MASONRY UNITS WITH FACE EXPOSED TO EARTH OR WEATHER
1 1/2 INCHES FOR MASONRY UNITS NOT EXPOSED TO EARTH OR WEATHER

REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:
1. ALL REINFORCEMENT IS BENT COLD,
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS AND
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.
EXCEPTION: WHERE BENDING IS NECESSARY TO ALIGN DOWEL BARS WITH A VERTICAL CELL, BARS PARTIALLY EMBEDDED IN CONRETE SHALL BE PERMITTED TO BE BENT AT A SLOPE OF NOT MORE THAN 1 INCH OF HORIZONTAL DISPLACEMENT TO 6 INCHES OF VERTICAL BAR LENGTH.

GALVANIZATION:
METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

CONCRETE SLABS ON GRADE:

1. ALL INTERIOR AND EXTERIOR SLABS AND WALKWAYS AS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL PLANS, SHALL BE FOUR INCHES THICK MINIMUM REINFORCED WITH 6 X 6 - W1.4 X W1.4 WELDED WIRE FABRIC (UNLESS OTHERWISE NOTED).

2. ALL SLABS ON GRADE TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST A.C.I - "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (A.C.I. - 302.1R)

3. JOINTS SHALL BE PROVIDED IN ALL INTERIOR SLABS ON GRADE AT COLUMN CENTER-LINES DIVIDING THE SLAB INTO SQUARE PANELS NOT TO EXCEED 20 X 20 FT. IN SIZE. CAST SLAB IN LONG ALTERNATE STRIPS. PROVIDE A CONTRACTION JOINT BETWEEN EACH STRIP. SEE PLAN FOR SAW-CUT, CONTRACTION AND ISOLATION JOINT DETAILS.

4. PROVIDE SAW-CUT JOINTS AT ALL SIDEWALKS AT A MAXIMUM SPACING OF FIVE FEET ON CENTERS AND ISOLATION JOINTS AT 20 FEET O.C. (U.O.N.).

5. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" AND COMPACTED TO 98 % MODIFIED PROCTOR (ASTM D-1557) WITHIN A DISTANCE OF 3 FEET BEYOND ALL FOOTING EDGES. TAKE AT LEAST ONE DENSITY TEST FOR EACH 1,600 SQ.FT. OF AREA AND 12" BELOW SURFACE. SEND RESULTS OF THE TEST TO OWNER, ARCHITECT AND ENGINEER.

6. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED FIXTURES AND ALL FORMS AND KEYWAYS.

TERMITE PROTECTION NOTES:

SOIL CHEMICAL BARRIER METHOD:

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR REINSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL. FBC 104.2.6

2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS. FBC 1503.4.4

3. IRRIGATION/SPRINKLER SYSTEMS INCLUDING ALL RISERS AND SPRAY HEADS SHALL NOT BE INSTALLED WITHIN 1'-0" FROM BUILDING SIDE WALLS. FBC 1503.4.4

4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION, BETWEEN WALL COVERINGS AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6". EXCEPTION: PAINT AND DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL. FBC 1403.1.6

5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. FBC 1816.1.1

6. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED OR FORMED. FBC 1816.1.2

7. BOXED AREAS IN CONCRETE FLOOR FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC., SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT. FBC 1816.1.3

8. MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION. IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT, RETREATMENT IS REQUIRED. FBC 1816.1.4

9. CONCRETE OVERPOUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. FBC 1816.1.5

10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURE SIDEWALLS. FBC 1816.1.6

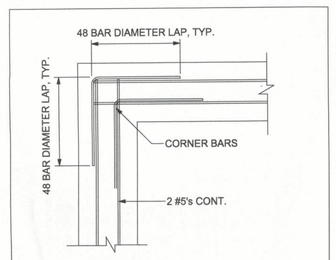
11. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. FBC 1816.1.6

12. ALL BUILDINGS ARE REQUIRED TO HAVE PER-CONSTRUCTION TREATMENT. FBC 1816.1.7

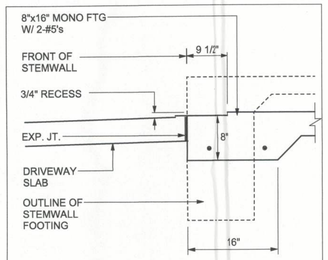
13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY # LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES". FBC 1816.1.7

14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL. FBC 2303.1.3

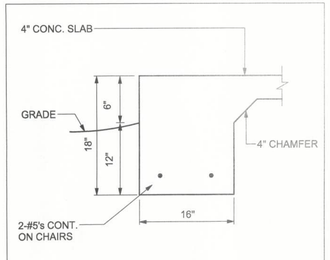
15. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING. FBC 2303.1.4



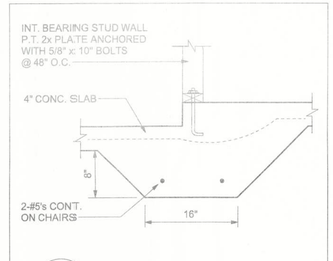
1 S-1 FOOTING REINFORCING AT CORNER (NTS)



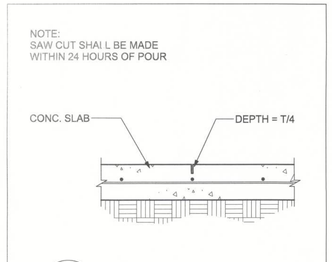
2 S-1 FTG. SECTION AT GARAGE



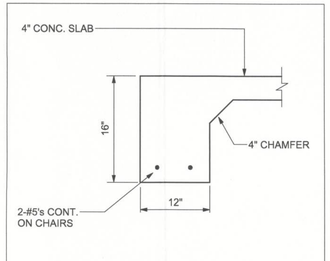
3 S-1 MONOLITHIC FOOTING



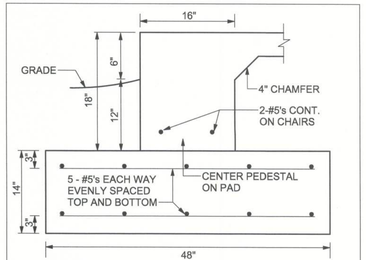
4 S-1 INTERIOR FOOTING



5 S-1 SAW CUT DETAIL



6 S-1 MONOLITHIC FOOTING AT PORCH



7 S-1 MONOLITHIC FOOTING

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC
CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
6-4-2013
Brett A. Crews, P.E. 65592

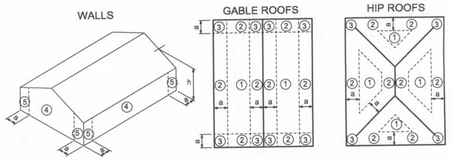
DRAWN BY: TM
APPROVED BY: BC

ZECHER HANGER-HOME

FOUNDATION AND DETAILS

CES PROJECT NO.: 2013-026
SHEET: S-1

ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609, FLORIDA BUILDING CODE, 2010, WITH REVISIONS		
FLOOR AND ROOF LIVE LOADS		
UNINHABITABLE ATTICS:	20 PSF	
HABITABLE ATTICS, BEDROOM:	30 PSF	
ALL OTHER ROOMS:	40 PSF	
GARAGE:	40 PSF	
ROOFS:	20 PSF UNIFORM	
WIND DESIGN DATA		
ULTIMATE WIND SPEED:	120 MPH	
NOMINAL (BASIC) WIND SPEED:	93 MPH	
RISK CATEGORY:	II	
WIND EXPOSURE:	B	
ENCLOSURE CLASSIFICATION:	ENCLOSED	
INTERNAL PRESSURE COEFFICIENT:	0.18 +/-	
COMPONENTS AND CLADDING		
ROOFING ZONE 1:	16.0 PSF MAX.	-16.0 PSF MIN.
ROOFING ZONE 2:	16.0 PSF MAX.	-24.9 PSF MIN.
ROOFING ZONE 3:	16.0 PSF MAX.	-36.7 PSF MIN.
ROOFING AT ZONE 2 OVERHANGS:	-29.1 PSF MIN.	
ROOFING AT ZONE 3 OVERHANGS:	-48.9 PSF MIN.	
STUCCO, CLADDING, DOORS AND WINDOWS		
ZONE 4:	16.0 PSF MAX.	-16.9 PSF MIN.
ZONE 5:	16.0 PSF MAX.	-20.9 PSF MIN.
9' WIDE O/H DR.:	16.0 PSF MAX.	-16.0 PSF MIN.
16' WIDE O/H DR.:	16.0 PSF MAX.	-16.0 PSF MIN.



a: 10% of least horizontal dim. or 0.4h, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft.
h: mean roof height, in feet.

COMPONENTS AND CLADDING

STRUCTURAL DESIGN CRITERIA

CODES: FLORIDA BUILDING CODE, 2010 EDITION WITH SUPPLEMENTS
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-05)
SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS (ACI 301-05)
BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-05)
NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2001 EDITION
APA PLYWOOD DESIGN SPECIFICATION

LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
RESIDENTIAL FLOOR, UNLESS OTHERWISE INDICATED	40 PSF
BALCONIES	40 PSF
STAIRS	40 PSF
LIGHT PARTITIONS (DEAD LOAD), U.N.O.	20 PSF

WIND LOADS: (F.B.C.) WIND LOADS BASED ON FBC, SECTION 1609
WIND VELOCITY: 120 M.P.H., USE FACTOR: 1.0

CONCRETE STRENGTH @ 28 DAYS	ALL CONCRETE UNLESS OTHERWISE INDICATED 2500 PSI PEA GRAVEL CONCRETE FOR MASONRY CELLS ONLY 3000 PSI (DO NOT USE FOR CONCRETE COLUMNS OR TIE BEAMS)
REINFORCING:	WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 ALL REINFORCING BARS ASTM A615-40 40,000 PSI ALL STIRRUPS AND TIES ASTM A615-40 40,000 PSI
CONCRETE MASONRY UNITS:	ASTM C90-99b, STANDARD WEIGHT UNITS, fm=1500 PSI MORTAR TYPE "S" 1800 PSI CONCRETE GROUT 3000 PSI CONTINUOUS MASONRY INSPECTION IS REQUIRED DURING CONSTRUCTION
STRUCTURAL STEEL:	ALL STRUCTURAL AND MISCELLANEOUS STEEL A36 36,000 PSI, U.N.O SHOP AND FIELD WELDS: E70XX ELECTRODES ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307

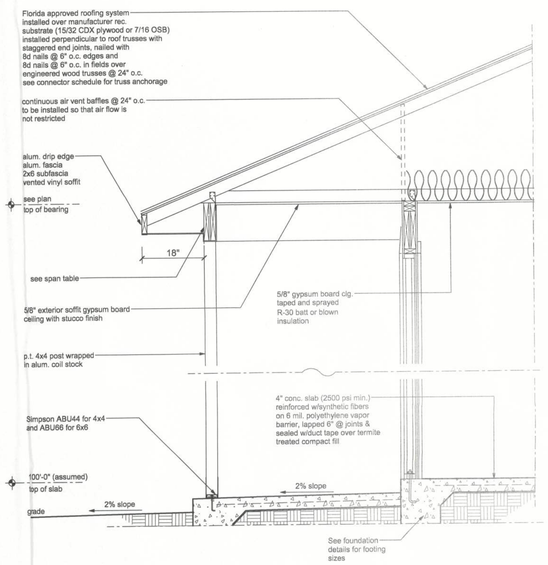
WOOD FRAMING: BEAMS, RAFTERS, JOIST, PLATES, ETC. U.N.O.
NO. 2 SOUTHERN YELLOW PINE (19% M.C.)
ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR, or OSB
FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24)
WALL SHEATHING: PLYWOOD C-C/C-D, EXTERIOR OR OSB
VERSA LAM BEAM Fb = 2900 PSI (2.0E)
WOOD COLS. PARALLAM 2.0E U.N.O.

WOOD ROOF TRUSSES: DESIGN LOADS:

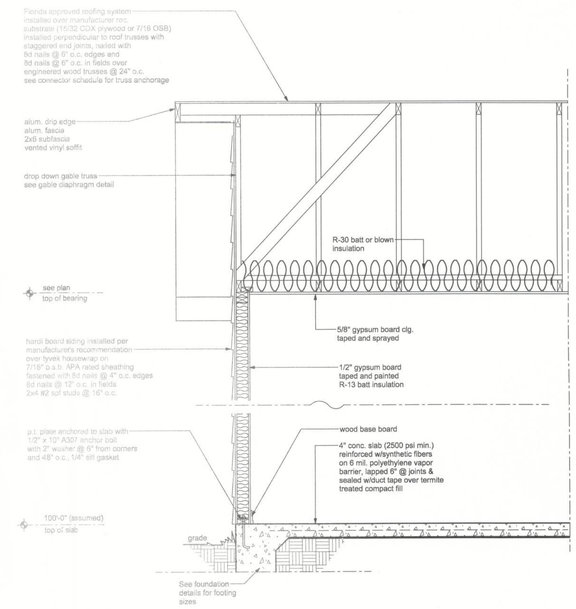
TOP CHORD LIVE AND DEAD LOAD:	30 PSF
BOTTOM CHORD DEAD LOAD:	10 PSF
TOTAL:	40 PSF

SEE DRAWINGS FOR SPECIAL CONCENTRATED LOADS. DESIGN FOR NEW WIND UPLIFT AS PER SPECIFIED CODES, DEDUCTING A MAXIMUM OF 5 P.S.F. DEAD LOAD, BUT NOT EXCEEDING ACTUAL DEAD LOAD.

SOIL BEARING VALUE: ASSUMED ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION: 1,500 PSF
SEE SOILS REPORT AND SPECIFICATIONS FOR COMPACTION REQUIREMENTS
IF SOIL CONDITIONS IN THE PROJECT DO NOT MEET OR EXCEED THE CAPACITY THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO FOUNDATION POUR FOR VERIFICATION OF FOUNDATION DESIGN.



TYPICAL WALL SECTION
NTS



TYPICAL WALL SECTION
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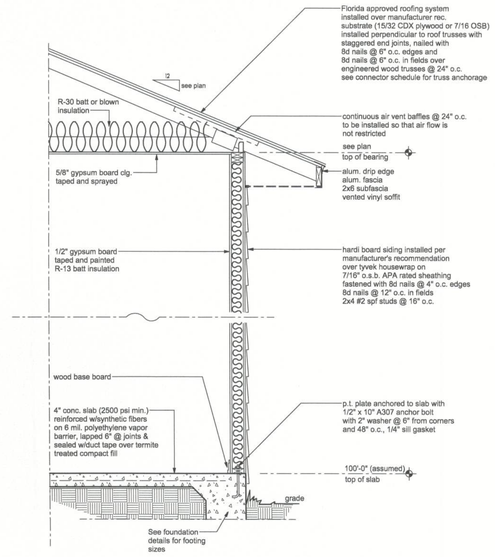


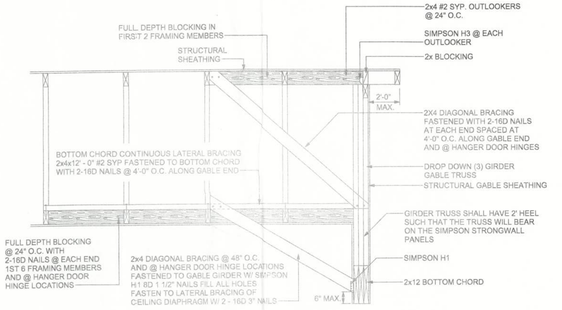
TYPICAL WALL SECTION
NTS

ROOF JACKS AND VENTS

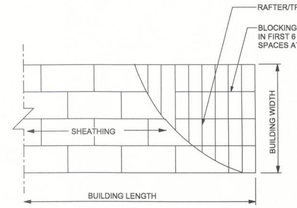
RIDGE VENT DETAIL

NOTE:
VENTILATION SHALL BE PROVIDED TO FURNISH CROSS VENTILATION OF EACH SEPARATE ATTIC SPACE WITH WEATHER PROTECTED VENTS. ALL VENTS SHALL BE SCREENED TO PROTECT THE INTERIOR FROM INTRUSION OF BIRDS. THE RATIO OF TOTAL NET FREE VENTILATION AREA TO THE AREA OF CEILING SHALL NOT BE LESS THAN 1\150.

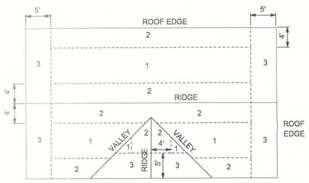
ROOF INTERSECTION CONNECTION DETAIL
NTS



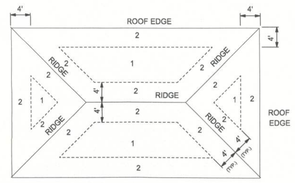
END WALL BRACING FOR CEILING DIAPHRAGM AT HANGER DOOR
NTS
NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE



ROOF SHEATHING LAYOUT AND ENDWALL ROOF BRACING



ROOF SHEATHING NAILING ZONES (GABLE)



ROOF SHEATHING NAILING ZONES (HIP)

ROOF SHEATHING FASTENERS			
NAILING ZONE	SHEATHING TYPE	FASTENER	SPACING
1	7/16" OSB & 15/32" CDX	8D GALV. RING SHANK NAILS	6" O.C. EDGE 6" O.C. FIELD
2			6" O.C. EDGE 6" O.C. FIELD
3			4" O.C. @ GABLES 6" O.C. EDGE 6" O.C. FIELD

ROOF SHEATHING FASTENING

GENERAL NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FORM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT.
2. THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING THE WORK DATE OF FINAL COMPLETION AND ACCEPTANCE BY THE OWNER. DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AND WORKMANSHIP SHALL BE CORRECTED AT NO FURTHER COST TO THE OWNER DURING THE ONE YEAR WARRANTY PERIOD.
3. AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE PERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURPOSE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED. THE CONTRACTOR SHALL BE PRESENT DURING THIS INSPECTION IF REQUESTED BY THE OWNER.
4. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES, TESTS AND THE LIKE THAT MAY BE REQUIRED BY THE VARIOUS AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT BE THEY CITY, COUNTY, STATE OR FEDERAL.
5. THE OWNER SHALL FILE A "NOTICE OF COMMENCEMENT" PRIOR TO THE BEGINNING OF THE PROJECT AND THE CONTRACTOR(S) SHALL FILE "NOTICE TO OWNER" AND PROVIDE "RELEASE OF LIEN" FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS.
6. ANY AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT BETWEEN THE OWNER, CONTACTOR(S) AND SUPPLIERS SHALL BE RESOLVED THROUGH BINDING ARBITRATION.
7. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK.
8. ALL INSULATION SHALL BE LEFT EXPOSED AND ALL LABELS LEFT INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED BY THE BUILDING OFFICIAL.
9. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

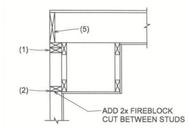
CONSTRUCTION DOCUMENTS:
THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITY FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR REVIEWING THE PLANS AND VERIFYING ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION INCLUDING FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION.

DO NOT SCALE THESE PLANS:
AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS. SIMPLE ARITHMATIC MAY BE USED TO DETERMINE THE LOCATION OF THOSE ITEMS NOT DIMENSIONED.

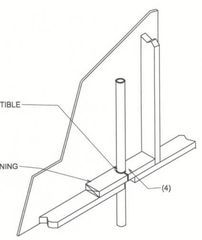
CHANGES TO PLAN SETS:
PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THES PLANS WITHOUT CONSULTING WITH THE ARCHITECT/ENGINEER. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATIONS ON THE PLANS.

FIREBLOCKING NOTES:
FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

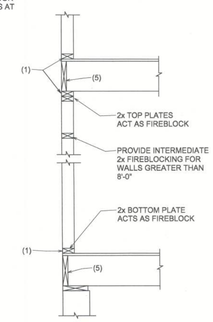
1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH PYROPANEL MULTIFLEX SEALANT.
5. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.



SOFFIT/DROPPED CLG.



PENETRATIONS



PLATFORM FRAMING

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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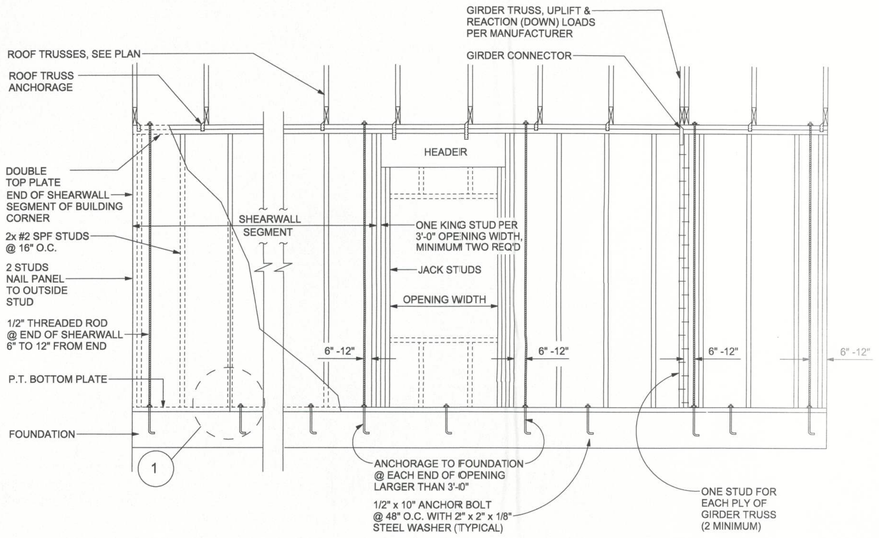
DRAWN BY: TM	ZECHER HANGER-HOME	CES PROJECT NO.: 2013-026
APPROVED BY: BC	SECTIONS AND FRAMING DETAILS	SHEET: S-2

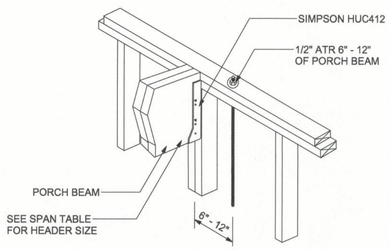


SHEARWALL DETAILS
NTS

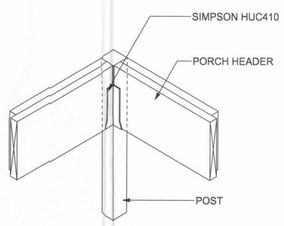
NOTE:
VERIFY GIRDER TRUSS LOCATION ON TRUSS LAYOUT FOR REQ'D ALL THREAD AT GIRDER LOCATION

CONNECTOR SCHEDULE FOR TRUSS ANCHORAGE				
CONNECTOR	TRUSS	TOP PLATE	UPLIFT PROVIDED	MANUFACTURER
H2.5	5-8d NAILS	5-8d NAILS	365 LBS	SIMPSON
H10	8-8d NAILS	8-8d NAILS	850 LBS	SIMPSON
MTS12	7-10d NAILS	7-10d NAILS	1,000 LBS	SIMPSON
H16	2-10d NAILS	10-10d NAILS	1,300 LBS	SIMPSON
(2)HTS20	10-10d NAILS	10-10d NAILS	2 x 1,450 = 2,900 LBS	SIMPSON

OPENING CONNECTION REQUIREMENTS				
CLEAR OPENING WIDTH	HEADER SIZE #2 GRADE OR BETTER	END BEARING	CONNECTOR AT EACH END OF OPENING	ANCHORAGE TO FOUNDATION @ EACH END OF OPENING
0' - 3'	(2) 2x8	1.5"	N/A	N/A
>3' - 6'	(2) 2x10	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>6' - 9'	(2) 2x12	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>9' - 12'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>12' - 15'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>15' - 18'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	4.5"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD



PORCH BEAM W/ ALLTHREAD
NTS



CORNER POST
NITS

RULES:
1. One all-thread rod at each corner.
2. One all-thread rod at each end of shearwalls.
3. One all-thread rod at each end of opening headers greater than 3'-0"
4. Check sub-sheathing to top plate connection for horizontal transfer capability.
5. If necessary, add all-thread rods to girders individually to exclude the from average uplift plf.
6. Check sole plate to slab connection, additional anchors may be required for lateral and shear load transfer.

ALLOWABLE VALUES	
Connection Type	Allowable Value
Foundation / S.Y.P. Top Plate	3840 lbs.
Foundation / Spruce-Pine-Fir Top Plate	3840 lbs.
Lintel or Bond Beam / S.Y.P. Top Plate	3840 lbs.
Lintel or Bond Beam / Spruce-Pine-Fir Top Plate	3840 lbs.

Placement at slab level:

Corners
When presetting the all-thread rod at a building corner, the rod should be placed 8 to 12 inches away from the corner so it does not set under the corner framing members. When a all-thread rod is specified at a building corner, it may be placed on either side of the corner.

Header ends
When presetting the all-thread rod at a header end, the rod should be placed 8 to 12 inches away from the header end so it does not fall under the stud pack framing members.

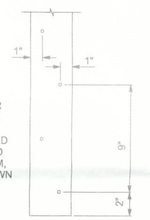
Top Connections
Top connections made at corners and header ends shall be made within 2 inches of the framing pack. A nut and 3X3 washer shall be applied to the top plates and tightened securely.

Intermediate Coupler Connections
When using the rod coupler, care should be taken to ensure full and equal thread engagement. This is easily achieved by threading the coupler all the way onto the rod, then standing the two rods end to end, then threading the coupler back over the rod joint so each rod is halfway into the coupler.

Retro-fits
In the case of an all thread rod misplacement, the rod may be epoxied into the concrete.

Sole plate to slab connection:
The slab level sole plate shall be connected to the slab with the connectors specified and at the spacing specified within the design documents. All-thread rods shall be placed as per the design specifications. All-thread rods with a nut and washer at the sole plate will qualify as a sole plate connection but may require other anchors intermediate of the all-thread rod locations to qualify the specified spacing requirements.

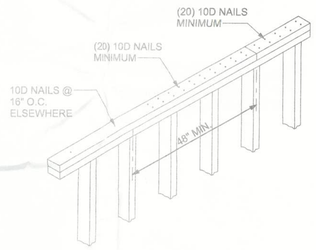
System Tightening:
On multiple story applications, the all-thread rod system shall be rechecked for proper tension just before the walls are veneered. This will allow the all-thread rod system to compensate for the buildings dead load compression.



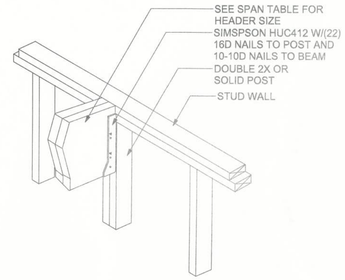
NOTE:
A SOLID MEMBER OF EQUAL OR GREATER SIZE THAN MULTIPLE MEMBERS MAY BE USED.
IF RATED SHEATHING IS APPLIED TO NARROW EDGES, NAILED TO EACH STUD AT 6" O.C. MAXIMUM, THE LAMINATION NAILING SHOWN HERE IS NOT REQUIRED.

END (TOP OR BOTTOM)

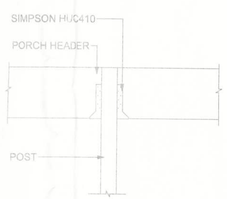
GIRDER COLUMN DETAIL
NTS



TOP PLATE SPLICE DETAILS
NTS



BEAM/WALL CONNECTION
MAX. CAPACITY - 3640# DOWN; 1810# UPLIFT NOT TO SCALE

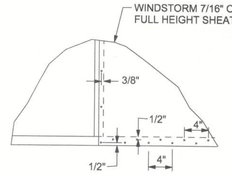


INTERMEDIATE POST
NTS

SHEARWALL NOTES:

1. ALL SHEARWALLS SHALL BE TYPE 2 SHEARWALLS AS DEFINED BY STD 10-99 305.4.3.
2. THE WALL SHALL BE ENTIRELY SHEATHED WITH 7/16" O.S.B. INCLUDING AREAS ABOVE AND BELOW OPENINGS.
3. ALL SHEATHING SHALL BE ATTACHED TO FRAMING ALONG ALL FOUR EDGES WITH JOINTS FOR ADJACENT PANELS OCCURING OVER COMMON FRAMING MEMBERS OR ALONG BLOCKING.
4. NAIL SPACING SHALL BE 6" O.C. EDGES AND 12" O.C. IN THE FIELD.
5. TYPE 2 SHEARWALLS ARE DESIGNED FOR THE OPENING IT CONTAINS. MAXIMUM HEIGHT OF OPENING SHALL BE 5/6 TIMES THE WALL HEIGHT. THE MINIMUM DISTANCE BETWEEN OPENINGS SHALL BE THE WALL HEIGHT/3.5 ie. FOR 8'-0" WALLS - (2'-3").

OPENING WIDTH	SILL PLATES	16d TOE NAILS EACH END
UP TO 6'-0"	(1) 2x4 OR (1) 2x6	1
> 6' TO 9'-0"	(3) 2x4 OR (1) 2x6	2
> 9' TO 12'-0"	(5) 2x4 OR (2) 2x6	3

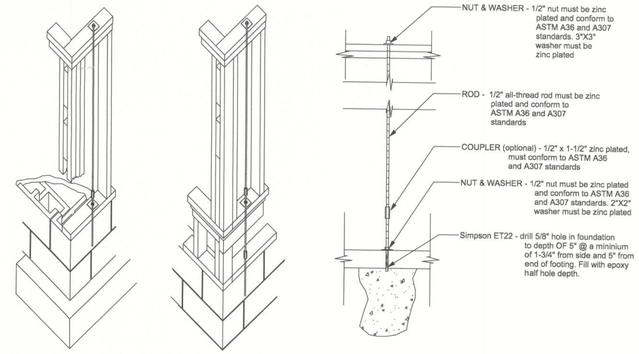


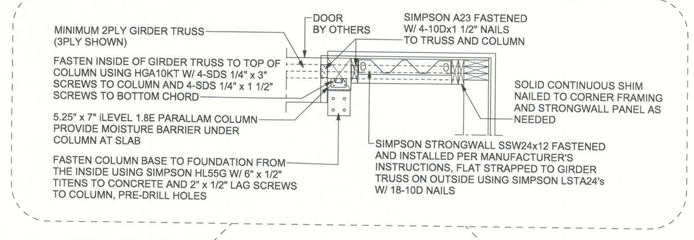
1 DOUBLE NAIL EDGE SPACING TOP AND BOTTOM PLATE
UPLIFT CAPACITY = 474 plf

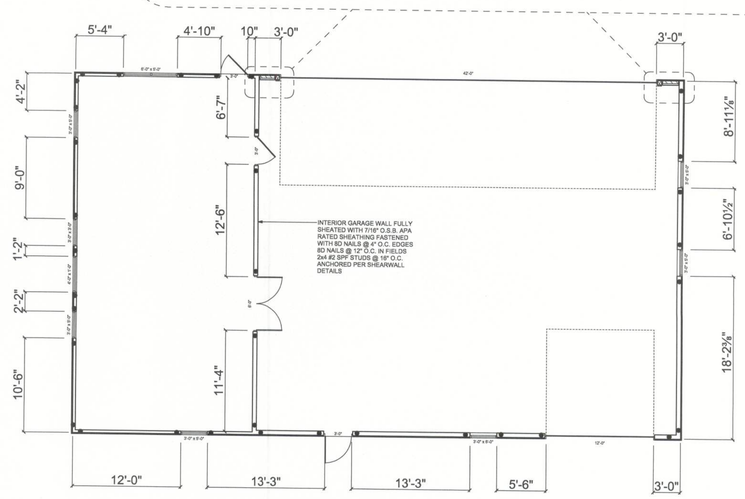
NOTE:
ALL WALL SHEATHING SHALL BE WINDSTORM 1 1/8" FULL HEIGHT SHEATHING-
SEE DETAIL 1 FOR NAILING

ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
rafters having slopes greater than 2/12 with no finished ceiling attached to rafters	L/180
interior walls and partitions	H/180
floors and plastered ceilings	L/360
all other structural members	L/240
exterior walls with plaster or stucco finish	H/360
exterior walls - wind loads with brittle finishes	L/240
exterior walls - wind loads with flexible finishes	L/120







SHEARWALL LAYOUT
● ALL THREAD LOCATION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC
CERTIFICATE OF AUTHORIZATION NO. 28022
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APPROVED BY: BC	SHEARWALL DETAILS		SHEET: S-3