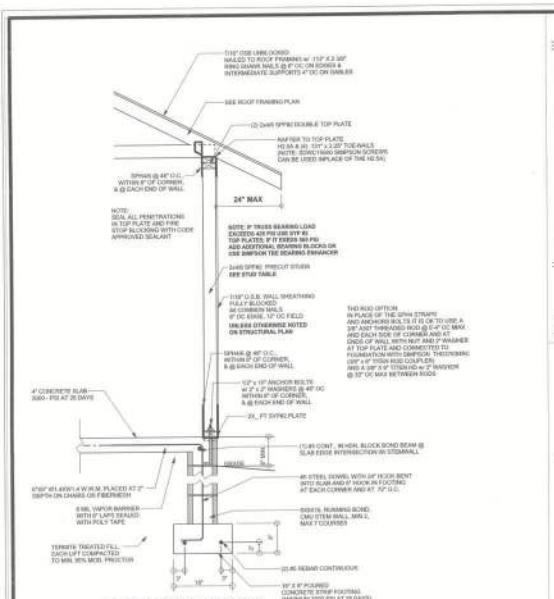
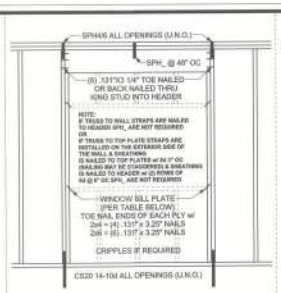
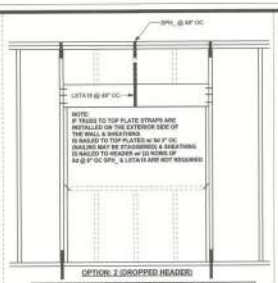




TYPICAL HEADER STRAPING DETAIL
ONE STORY WOOD FRAME w/ STRAPS & ANCHORS



SILL PLATE SPANS FOR 10'-4" WALL HEIGHT

DESIGN WIND SPEED	MAX. SPANS FOR SPF #2				
	(1) 2x4	(2) 2x4	(1) 2x6	(2) 2x6	
110-130 MPH	3'-0"	7'-0"	7'-0"	11'-0"	FOR OTHER WALL HEIGHTS SPAN SHALL BE LINEARLY SCALED
140-150 MPH	4'-4"	6'-8"	6'-8"	9'-0"	
160 MPH	4'-0"	6'-8"	5'-11"	8'-8"	

ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURERS ENGINEERING

TRUSS CONNECTOR	UPLIFT 5YP	UPLIFT SPF	F1 5YP	F2 5YP	F1 SPF	F2 SPF	TO RAFTER/TRUSS	TO PLATES
H5	405	285	115	205	165	175	4-8d x 1 1/2"	4-8d x 1 1/2"
H10	415	290	125	180	165	140	4-8d x 1 1/2"	4-8d x 1 1/2"
H2.5	415	385	155	150	155	130	5-8d x 1 1/2"	5-8d x 1 1/2"
H2.5A	490	480	110	110	110	110	5-8d x 1 1/2"	5-8d x 1 1/2"
H6	550	550					6-8d	6-8d
H8	740	665					8-10d x 1 1/2"	5-10d x 1 1/2"
H14-1	1465	1355	615	265	465	245	10-8d x 1 1/2"	10-8d
H14-2	1465	1355	615	265	465	245	10-8d x 1 1/2"	10-8d
H10	990	990	555	555	505	450	8-8d x 1 1/2"	8-8d x 1 1/2"
H16-2	790	650		365	350	240	8-10d	8-10d
H18	1470	1355					2-10d x 1 1/2"	16-10d x 1 1/2"
H16-2	1470	1355					2-10d x 1 1/2"	16-10d x 1 1/2"
LTS12 - LTS90	1090	920					8-10d x 1 1/2"	8-10d x 1 1/2"
MTS12 - MTS90	1090	990					7-10d x 1 1/2"	7-10d x 1 1/2"
HTS16 - HTS30	1450	1245					12-10d x 1 1/2"	12-10d x 1 1/2"
HEAVY GIRDER TIEDOWNS								TO FOUNDATION
LGT2	2080	1750	750	170	750	170	14-16d	14-16d
LGT2-SDS2.5	3080	2850	750	410	750	410	12 SDS 1/4" x 2 1/2"	36-16d
LGT4-SDS2	4080	3850	1080	475	1080	475	12 SDS 1/4" x 2"	36-16d
MGT	3855	3335					22-10d	50" ANCHOR
HGT-2	10855	8485					18-10d	2-5/8" ANCHOR
HGT-3	10930	9035					18-10d	2-5/8" ANCHOR
HGT-4	9250	9250					18-10d	2-5/8" ANCHOR
STUD STRAP CONNECTOR								TO STUDS
DSP DOUBLE TOP PLATE	455	430					3-10d	6-10d
DSP SINGLE SILL PLATE	365	430					1-10d	4-10d
DSP DOUBLE TOP PLATE	805	820					9-10d	8-10d
DSP SINGLE SILL PLATE	825	690					2-10d	8-10d
SP1	365	320					4-10d	6-10d
SP2	1665	690					8-10d	8-10d
SP4	865	790						6-16d x 1 1/2"
SPH4	1345	1165						10-16d x 1 1/2"
SP6	865	790						6-16d x 1 1/2"
SPH6	1345	1165						10-16d x 1 1/2"
LSTA18	1230	1110						14-10d
LSTA21	1230	1230						16-10d
CS20	1030	1030						14-10d
CS16	1705	1705						22-10d
STUD ANCHORS							TO STUDS	TO FOUNDATION
LTT19	1350	1305					6-16d	10" ANCHOR
LTT20	2210	2310					10-16d x 1 1/2"	5/8" ANCHOR
HDU4	2770	2575					3 5/8" BOLTS	5/8" ANCHOR
HTT16	4175	3805					16-16d	5/8" ANCHOR
HTT22	5360	5220					22-16d	5/8" ANCHOR
ABU44	2305	2205					12-16d	5/8" ANCHOR
ABU60	2305	2205					12-16d	5/8" ANCHOR
ABU90	2325	2320					16-16d	3 5/8" ANCHOR

(1) w/ INSTALLATION OF 6-16d5 OPTIONAL NAIL HOLES
(2) FOR SYP GIRDER & SPF STUDS

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE 2010 FBC8. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY VERIFY THE TRUSS DESIGNER FULLY SATISFIES ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTPRINT FOR INTERIOR BEARING WALLS. BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X8 RAFTERS WITH MIN UPLIFT CONNECTION HTU8 EACH END; 2X8 RAFTERS T08 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1500 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVIES OTHERWISE

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F'c = 3000 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4, F6 = 60KSI, WELDED WIRE REINFORCEMENT FABRIC (W IN lb / CONFORMING TO ASTM A185, LOCATED IN MIDDLE OF THE SLAB, SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB ON GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT WIRE REINFORCING STEEL (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS. FY = 60 KSI. ALL LAP SPLICES 40 * DB (20" FOR #5 BARS) UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-99, U.N.O.

GLULAM BEAMS: GLB, 24F-V3SP, Fb = 2.4ksi, E = 1800ksi UNO. SUPPLIER MAY SUPPLY AN ALTERNATE BEAM WITH EQUAL PROPERTIES OR MAY SUBMIT THEIR OWN SIZING CALCS.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS. 7/16" USB SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (.131), 6"OC PANEL EDGES, 12"OC INTERMEDIATE MEMBERS. (SHALE ENDS AND DIAPHRAGM BOUNDARY, 4"OC, UNO.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT MANDATORY. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

WASHERS: WASHERS USED WITH 1/2" BOLTS TO BE 2" x 2" x 3/16"; WITH 5/8" BOLTS TO BE 3" x 3" x 0/64"; WITH 3/4" BOLTS TO BE 3" x 3" x 0/64"; WITH 7/8" BOLTS TO BE 3" x 3" x 0/16"; UNO.

NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.

BUILDER'S RESPONSIBILITY

THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK:
CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DEBRIS ZONE, AND FLOOD ZONE.
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH 2010 FBC8 REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.
PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN LIMITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY
VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING INCLUDES TRUSS DESIGN, PLACEMENT PLAN, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

ROOF SYSTEM DESIGN

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH 2010 FBCR, SECTION R301.2.1.5 BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF 2010 FBCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE CHECKING THE ROOF DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.

DESIGN DATA

WIND LOADS PER 2010 FLORIDA BUILDING CODE RESIDENTIAL, SECTION R301.2.1
ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS; MEAN ROOF HEIGHT
BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE ZONE
BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION
1.) BASIC WIND SPEED = 130 MPH, (3 SEC GUST, 33 FT, EXP. C)
2.) WIND EXPOSURE = C, BUILDER MUST FIELD VERIFY
3.) EPGOGRAPHIC FACTOR = 1.0, BUILDER MUST FIELD VERIFY
4.) BUILDING CATEGORY = II, (MIN = 700 lb)
5.) ROOF ANGLE = 7-45 DEGREES
6.) MEAN ROOF HEIGHT = <30 FT
7.) INTERNAL PRESSURE COEFFICIENT = +/-0.18 (ENCLOSED BUILDING)
8.) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (TABLE R301.2(2))

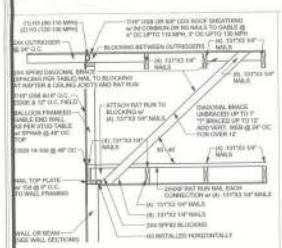
Zone	Effective Wind Area (ft2)		
	10		
1	39	-43	
2	39	-49	
3	39	-58	
4	43	-46	
5	43	-52	

Garage Door 2010 FBCR, Table R301.2 (4)		
8x7 Garage Door	37	-42
16x7 Garage Door	36	-40

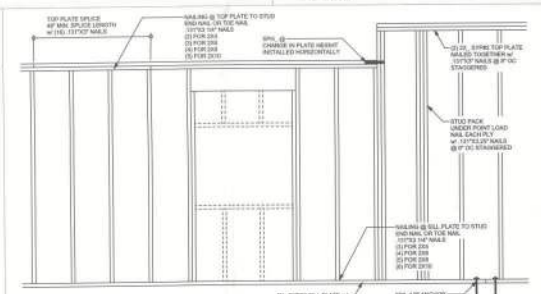
DESIGN LOADS
FLOOR: 40 PSF (ALL OTHER DWELLING ROOMS)
30 PSF (SLEEPING ROOMS)
30 PSF (ATTICS WITH STORAGE)
10 PSF (ATTICS WITHOUT STORAGE, <3/12)
ROOF: 20 PSF (FLAT OR <4/12)
16 PSF (4/12 TO <12/12)
12 PSF (12/12 AND GREATER)
STAIRS: 40 PSF (ONE & TWO FAMILY DWELLINGS)
SOIL BEARING CAPACITY: 1500PSF
NOT IN FLOOD ZONE (BUILDER TO VERIFY)

REVISIONS

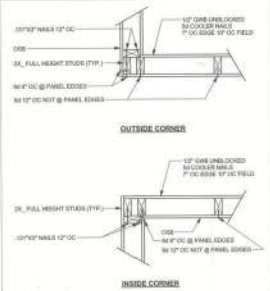
SOFTPLAN



(TYP.) GABLE BRACING DETAIL
WOOD FRAME



W51 (TYP.) FRAMED WALL CONNECTIONS
ONE STORY WOOD FRAME
N.T.S.



(TYP.) INTERSECTING WALL FRAMING
WOOD FRAME

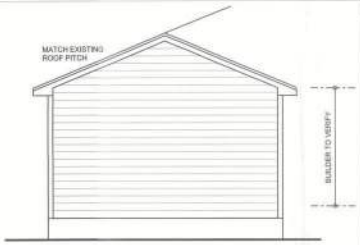
(TYP.) CORNER FRAMING
WOOD FRAME

TOTAL SHEAR WALL TABLE

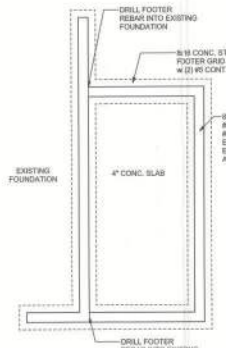
	TRANSVERSE	LONGITUDINAL
REQUIRED	7.5'	N/A
ACTUAL	16'	N/A

AREA SUMMARY

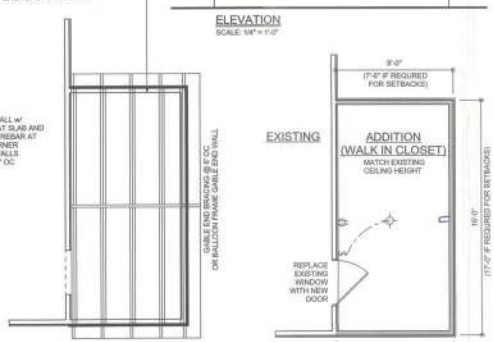
ADDITION AREA 128 S.F.



ELEVATION
SCALE: 1/4" = 1'-0"



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

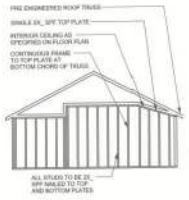


STRUCTURAL LAYOUT / ROOF FRAMING
SCALE: 1/4" = 1'-0"

FLOOR PLAN
SCALE: 1/4" = 1'-0"

GRADE & SPECIES TABLE

		Fb (psi)	E (10^6 psi)
2x8	SYP #2	1200	1.6
2x10	SYP #2	1050	1.6
2x12	SYP #2	975	1.6
GLB	24F-V3 SP	2400	1.8
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2900	2.0
PSL	PARALAM	2900	2.0



CONTINUOUS FRAME TO CEILING DIAPHRAGM DETAIL
WOOD FRAME

EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS

(1) 2x4 @ 16" OC	TO 10'-1" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-2" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 15'-7" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 17'-3" STUD HEIGHT

THIS STUD HEIGHT TABLE IS PER 2012 IRC8, TABLE 1.2.3(8A). EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS FOR WALLS WITH GWB EXTERIOR AND 1/2" CYP INTERIOR RESISTING INTERIOR ZONE WINDLOADS, 130 MPH, EXPOSURE C, STUD DEFLECTION LIMIT H/240 (NOT OK FOR SOME BRITTLE FINISHES). STUD SPACINGS SHALL BE MULTIPLIED BY 0.8 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. (END ZONE EXAMPLE: 16" O.C. x 0.8 = 12.8" O.C.)

WIND LOAD ENGINEER: Mark Disosway, PE No.53910, PO Box 868, Lake City, FL 32056, 386-754-5419

DIMENSIONS:
Stated dimensions in concrete scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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CERTIFICATION: I hereby certify that I have performed this plan, and that the applicable portions of the plan, relating to wind engineering, comply with section R301.2.1, 2010 Florida Building Code Residential, to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

Glenwood King Construction

Addition

ADDRESS:
415 SW Deanna Terrace
Lake City, FL

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P.O. Box 868
Lake City, Florida 32056
Phone: (386) 754 - 5419
Fax: (386) 269 - 4871

PRINTED DATE:
Monday, September 23, 2013

DRAWN BY:	STRUCTURAL BY:
Evan Beasley	Evan Beasley

FINALS DATE:
2013-09-23

JOB NUMBER:
1309042

DRAWING NUMBER
S-1
OF 1 SHEET