BIND LEFT

Prepared for -
Custom Home Builder/Remodeler
Northeast U.S.

PLAN DETAIL - 1 of 3

Prepared by -
Before The Architect
Cumming, GA
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SHEET 2 of 17

KEY TO ABBREVIATIONS:

ABV = ABoVe
ADH = Adhesive
AHJ = Authority Having Jurisdiction
BEL = BELow
BET = BETween
BM = BeaM
BP = Bottom Plate (Sole)
CLG = CeiLinG
COM = Common
CONT = CONTinuous
DBL = DoubBLe
DIA = DIAmeter
DIM = DIMension
DL = Dead Load
DR = DooR
EQV = EQuiValent
EXT = EXTerior
FDN = FounDatioN
FIN = FINish
FLR = FLoor
FPO = Front POrch
FSN = FaSteN
GC = General Contractor
HDD = Heating Degree Days
HDR = HeaDeR
INS = INSulate
INT = INTerior
IPH = Inches Per Hour
ISN = InterSectioN
JST = JoiST
L = Length
LB = Load Bearing
LL = Live Load
MIN = MINimum
MTL = MeTaL
NGT = Not Greater Than
NL = NaiL
NLT = Not Less Than
OC = On Center
PERP = PERPendicular
PL = Point Load
RF = Roof
RFR = RaFteR
SF = Square Foot (Feet)
SHTG = SHeaThinG
STD = STanDard
STRC = Structure
TP = Top Plate
VERT = VERTical
WDW = WinDoW
WL = WaLl

DESIGN STANDARDS:

Seismic Zone (IRC2003):B
Basic Wind Speed:90MPH
Ground Snow Load:25#/SF
Rainfall Intensity (I2):10IPH
Termite Infestation Probability: Moderate to Heavy
Weathering Probability of Concrete:Moderate
Decay Probability:Slight to Moderate
HDD = 4918
Climate Zone = 10

NOTES OA:

1. All work - a.) shall comply with effective building code(s) of any AHJ in any and all aspects; b.) shall be executed in a neat and workmanlike manner.
2. The GC - a.) shall be responsible in all manner for the plans herewith, and b.) shall notify the designer, Before The Architect, 2985 Heatherwyn Way, Cumming, GA 30040, 770-889-6964, http://www.beforethearchitect, jrp2h2000@yahoo.com, of any errors or omission prior to start of construction, and c) having not acted on 2.b.) herein and having started construction, shall be solely responsible in all manner for the plans herewith.
3. Precedence of authority in contradictions: AHJ over engineer over text over drawing.
4. Design Loads (#/SF):
See Span Table for hand-framed.
Garage FLR: 2000# PL
Attic (hand-framed): 30 LL, 10 DL
*Shall be regarded as MIN, may be built over, and shall be adjusted only upwards if indicated by qualified engineering determination, local atmospheric and other environmental conditions, AHJ, other professional judgments, etc.
5. Sealing to elements. Certain building envelope areas shall be sealed to air, moisture, and vapor penetration: a.) joints around WDW and DR frames; b.) joints BET WL cavity and a WDW or DR frame; c.) joints BET WL (plates) and FDN; d.) joints BET WL panels in panelized applications; e.) utility penetratrations through a FLR, WL, or RF.
6. Thermal Insulation Limits (MIN): See Thermal Table.
7. Thermal Transmittance Limits (MIN): See Thermal Table.
8. Moisture INSTion. TYVEK or EQV, always lapped upper over lower, wrapped and FSNed at WL penetrations, e.g., WDW, DR, before FIN clad is applied.
9. Moisture and Vapor INSTion. Cross-laminated poly sheeting shall be applied in lieu of any other moisture and vapor INSTion.

FSNing STANDARDS:

(L and shank DIA)
Thanks to the Texas State Department of Insurance on whose work these design STDs are in part based.
Conversions: 1/4=.25, 1/2=.50 NL DIMs expressed in L-by-shank DIA, each in decimal inches.
FSNers shall be corrosion resistant for EXT applications..

NOTE: TOE-NLING FOR PERMANENT FSNING IN EACH APPLICATION REQUIRES ADDITIONAL MTL STRAP, TIE, CONNECTOR, BRACE OR EQV.

JST FRAMING:
1. JST to Sill, TP, BM, or Girder (Toe-NLed). 3 NLs: 2.50"x0.131" (8d COM); 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131". 4 NLs: 3"x0.120"; 3.25"x0.120".
2. End JST and Head JST to Sill or TP (Toe-NLed). 1 NL at 6" OC: 3.50"x0.162" (16d COM). 1 NL at 4" OC: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
3. JST Lap over BMs or Partitions (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
4. Blocking between FLR JSTs (Toe-NLed). 4 NLs, 2 at each end: 2.50"x0.131" (8d COM); 3"x0.128" (10 box); 3"x0.131"; 3.25"x0.131".
5. Bridging to JSTs (Toe-NLed), number of NLs at each end. 2 NLs: 2.50"x0.131" (8d COM); 3" x 0.128" (10d box). 4 NLs: 2"x0.113"; 2"x0.113"; 3 NLs: 3"x0.120"; 3.25"x0.120".
6. End JSTs and Head JSTs to COM JSTs (End-NLed). 3 NLs: 3.50" x0.162" (16d COM). 6 NLs: 3"x0.120"; 3.25"x0.120". 5 NLs: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
7. Ledger Strip to BM, End JST or Head JST (Face-NLed). Note: FSNers may be required BEL each FLR JST, and such strips shall be considered neither permanent STRC nor permanent structural support, unless NLT: a) 2"x4", and B) fully flushed to STRC on wider DIM; and c) plated as in 9. DBLd JSTs (Face-NLed) immediately BEL.
8. Wood Block Anchor (number of NLs each into JST and BM). 4 NLs: 31.2"x0.162" (16d COM); 3.25"x0.131"; 3.50"x0.135" (16d box).
9. DBLd JSTs (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131". Evenly spaced in rows of 2 to x6"s and rows of 3 for ABV, 6" OC, on 1 face.
10. Triple JSTs (Face-NLed.) 3 NLs: 3.50x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131". Evenly spaced in rows of 2 to x6"s and of 3 for ABV, 6" OC, both faces.

FLR SHTG (always set w/ face-grain PERP to members):
FSNERS SHALL BE APPLIED AFTER NLT 1/2" DIA CONT BEAD OF CONSTRUCTION ADH HAS BEEN APPLIED TO SUBORDINATE FRAMING MEMBER FACES TO WHICH SHTG IS TO BE APPLIED.
1. Wood Structural Panels (Plywood) To 1" thick. Screwing Pattern: NLT 2" into STRC at 4" OC along panel edges over CONT members and DBL at edges with crossing members and 6" OC in field.

WL FRAMING:
1. DBL TP - INT Non-LB WLs (Face-NLed). 1 NL at 24" OC: 3.50"x0.162" (16d COM). 1 NL at 16" OC: 3"x0.120"; 3.25"x0.120"; 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
2. TP Laps and ISNs (Face-NLed), number of NLs each side of lap. 2 NLs: 3.50"x0.162" (16d COM). 3 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
3. Stud to TP or Sole Plate (End-NLed). 2 NLs: 3.50"x0.162" (16d COM). 3 NLs: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
4. Stud to TP or Sole Plate (Toe-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 2.50"x0.131" (8d COM); 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131".
5. DBLd Studs (Face-NLed). 1 NL at 24" OC: 3.50"x0.162" (16d COM). 1 NL at 16" OC: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box)
6. BP to End and Head JSTs (Face-NLed) - when not used for shear transfer. 1 NL at 16" OC: 3.50"x0.162" (16d COM). 1 NL at 12" OC: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
7. BP to End and Head JSTs (Face-NLed) - when used for shear transfer. 1 NL at 6" OC: 3.50"x0.162" (16d COM). 1 NL at 4" OC: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box).
8. Blocking between WL Studs and RFRs (Toe-NLed). 4 NLs, 2 at each end: 2.50"x0.131" (8d COM); 3"x0.128" (10 box); 3"x0.131"; 3.25"x0.131".
9. Gable Offset L-Shaped Member to Gable Studs. 1 NL at 5" OC: 3.50"x0.162" (16d COM). 1 NL at 4" OC: 3.50"x0.131"; 3.50"x0.120" deformed shank.
10. Gable Offset 2"x Member to 2"x4" Member (FSNed to form VERT L shaped member). 1 NL at 18" OC: 3.50"x0.162" (16d COM). 1 NL at 18" OC: 3.50"x0.128" (12d box NL). 1 NL at 16" OC: 3"x0.120"; 1 NL at 12" OC: 2.50"x0.131"
11. HDRs. (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131". Evenly spaced in rows of 2 to x6"s, of 3 ABV, 6" OC, 1 face.
12. HDRs to Jack Studs. (Toe-NLed), number of NLs at each end. 2 NLs: 2.50"x0.131" (8d COM); 3" x 0.128" (10d box). 4 NLs: 2"x0.113"; 2"x0.113"; 3 NLs: 3"x0.120"; 3.25"x0.120".
13. HDRs to King Studs. (Face-NLed), number of NLs at each face. 2 NLs: 2.50"x0.131" (8d COM); 3" x 0.128" (10d box). 4 NLs: 2"x0.113"; 2"x0.113"; 3 NLs: 3"x0.120"; 3.25"x0.120".
14. Cripples to Plates (Toe-NLed), number of NLs at each end. 2 NLs: 2.50"x0.131" (8d COM); 3" x 0.128" (10d box). 4 NLs: 2"x0.113"; 3 NLs: 3"x0.120"; 3.25"x0.120".

WL SHTG not used for lateral resistance, i.e., EXT to STRC (always set w/ face-grain PERP to members).
FSNERS SHALL BE APPLIED AFTER NLT 1/2" DIA CONT BEAD OF CONSTRUCTION ADH HAS BEEN APPLIED TO SUBORDINATE FRAMING MEMBER FACES TO WHICH SHTG IS TO BE APPLIED.
Wood Structural Panels (Plywood). NLing Pattern: 4" OC along panel edges over CONT members and DBL NLed at edges with crossing members and 6" OC in field. 1 NL: 2.50"x0.131" (8d COM); 2.50"x0.131" deformed shank; 2.50"x0.120" deformed shank; 3"x0.120" deformed shank; 3"x0.128" (10d box);3"x0.131"; 3.25"x0.131".

RF FRAMING:
1. RFR to TP (Toe-NLed). 3 NLs: 2.50"x0.131" (8d COM); 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131". 4 NLs: 2"x0.113"; 3"x0.120"; 3.25"x0.120".
2. RFR to Ridge Board (Toe-NLed): 2 NLs: 3.50"x0.162" (16d COM). 3 NLs: 3"x0.131"; 3.25"x0.131"; 3.50"x0.135" (16d box). 4 NLs:3"x0.120"; 3.25"x0.120".
3. RFR to Ridge Board (Face-NLed). 2 NLs: 3.50"x0.162" (16d COM). 3 NLs: 3.25"x0.131"; 3.50"x0.135" (16d box). 4 NLs: 3"x0.120", 3.25"x0.120"; 3"x0.131".
4. Blocking and RF SHTG Supports BET RFRs or Trusses (Toe NLed). 4 NLs, 2 at each end. 2.50"x0.131" (8d COM); 3"x0.128" (10 box); 3"x0.131"; 3.25"x0.131".
5. Collar Tie or RFR Tie to RFR and Strongback to RFR (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
6. CLG JST to TP (Toe-NLed). 3 NLs: 2.50"x0.131" (8d COM); 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131". 4 NLs: 2"x0.113"; 3"x0.120"; 3.25"x0.120".
7. CLG JST to Parallel RFR (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
8. CLG JST Laps over Partitions (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
9. Strongback to CLG JST or Bottom Chord of Truss. 2 NLs: 31.2"x0.162" (16d COM). 3 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
10. RFR Splice (Face-NLed). MUST LAP NLT 4', NLING NLT 2-10d COMS AT NGT 4" OC, face-NLed. 22 NLs: 3.50"x0.162" (16d COM). 24 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
11. RF Brace to RFR (Face-NLed). 4 NLs: 3.50"x0.162" (16d COM). 5 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
12. Purlin Brace to RFR Brace (Face-NLed). NLing Pattern = NGT 12" OC along brace. 1 NL: 3.50"x0.162" (16d COM). 3 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
13. RFR Purlin to RFR Brace. 2 NLs: 3.50"x0.162" (16d COM). 3 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
14. RFR Brace to CLG JST (Face-NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25" x 0.131".
15. RFR Brace to TP (Toe-NLed). 3 NLs: 3.50" x 0.162" (16d COM). 4 NLs: 3" x 0.120"; 3.25" x 0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".

CLG FRAMING:
1. Block to Strongback - Gable EndWL Brace (Face NLed). 4 NLs: 3.50"x0.162" (16d COM). 6 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
2. Strongback to Gable EndWL Stud - Gable EndWL Brace (Face NLed). 3 NLs: 3.50"x0.162" (16d COM). 4 NLs: 3"x0.120"; 3.25"x0.120"; 3.25"x0.128" (12d box); 3"x0.131"; 3.25"x0.131".
3. 20 gauge let-in steel strap to Strongback; Gable End WL Stud - Gable EndWL Brace. 10 NLs each end: 2.50"x 0.131" (8d COM). 15 NLs each end: 3"x0.120"; 3.25"x0.120".

RFING SHTG (always set w/ face-grain PERP to members).
FSNERS SHALL BE APPLIED AFTER NLT 1/2" DIA CONT BEAD OF CONSTRUCTION ADH HAS BEEN APPLIED TO SUBORDINATE FRAMING MEMBER FACES TO WHICH SHTG IS TO BE APPLIED.
1. Wood Structural Panels (Plywood). To 1" thick. NLing Pattern (12d: 4" OC at panel edges over CONT members and DBL NLed at edges with crossing members, and 6" OC in field. NL: 2.50"x0.131" (8d COM); 2.50"x0.131" deformed shank; 2.50"x0.120" deformed shank; 3"x0.120" deformed shank; 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131".
2. Spaced Boards to RFRs. 1 NL: 2.50" x 0.131" (8d COM); 2.50"x0.131" deformed shank; 2.50"x0.120" deformed shank; 3"x0.120" deformed shank; 3"x0.128" (10d box); 3"x0.131"; 3.25"x0.131".
3. Wood Structural Panels (Plywood). 1" thick or less (Applied Over Spaced Boards). 1 NL per board, 4" OC at edges, over CONT members and DBL NLed at edges with crossing members, and 6" OC in field: 3"x0.128"; 3.25"x0.128" (12d box); 3"x0.120" deformed shank; 3"x0.131"; 3.25"x0.131".

AREA SCHEDULE:

SPACE	CONDITIONED (SF): YES	NO	TOTAL
FPO	35	21	56
DK	--	146	146
CRAWL	--	652	652
L1	682	294	976
L2	976	--	976
TOTAL	1693	1113	2806