

ROOF PLAN

RF PLAN NOTES:

RF FRAMING:

1. BET all top chords there shall be NLT 2'x4' sleepers set flush at top chord's TDF at NGT 4' OC where layouts are based on flushing sleepers EQly on SHTG joints. This standard is intended to counteract RFing and RF SHTG sways, swales, and similar.

SKYLIGHT:

1. The Skylight - a.) shall be glazed w/ tempered glass on EXT and laminate Glass or Plexi on the INT; b.) MAX clearspan EQ to 25', and c.) curb w/ MIN 4" ABV roof plane, and d.) screened if operable; e.) rated at NLT 25# snow load (a LL).

RF SHTG:

1. NLT 5/8" CDX plywood rated EXT Exposure (and not EXT Exposure 1 and not EXT Exposure 2) shall be applied as RF SHTG, with face grain PERP to top chords, and arranged so that the butts EQly share a top chord's NLING surface, X where mating Front of House gable plane where materials shall the EQV to mate evenly and smoothly.
 2. RF SHTG may be applied with SHTG clips (AKA panel edge clips, H-clips) at midspans of top chord spacing to RNF and space.
 3. RF SHTG shall be applied with NLT than 10# NLS, preferably deformed shank, 4'OC at full edges, 8'OC in the field, doubled at 2' apart on crossing members.

RF TRUSSES:

1. RF trusses shall be braced on application in 3 ways taken together: First: bottom chords shall be braced w/ NLT 2'x4' nominal lumber, and atop bottom chords and PERP to bottom chords, and on NGT 10' centers, and FSned w/ NLT 2-10# CDM NLS, and face-NLED to each framing member; and Second: webs shall be braced w/ NLT 2'x4' nominal lumber, and in NGT 6' Ls and INT to top chords and on each slope, and diagonally at NGT 45' to top plate TDF and at each end of a RF STRC and NGT than 25' BET, and in an X pattern from the ISC of the web and top chord at the ridge line to the most distant ISC of web and bottom chord to which it can be FSned and to complete the X pattern, from the ISC of web and bottom chord directly BEL the ridge line to which the previous web brace was FSned and then up to the most distant point on the ISC of web and ridge to which this second brace can be FSned (most likely in VERT plane w/ the end of the first web brace), and FSned w/ NLT 2-10# CDM NLS Face NLED to each framing member; and Third: top chords shall be braced w/ NLT than 3/4" ply SHTG (face grain PERP to top chord lines or RFR lines) rated EXT Exposure (not EXT Exposure 1 or EXT Exposure 2) and FSned at NGT a) 4'OC on in-line structure; b) 6'OC in the field; c) twice at NLT 2' apart at crossing STRC.
 For further description and an illustration of same, please see: 'Common Engineering Problems in Frame Construction: Trusses require precise permanent bracing' by David Utterback at <http://www.taunton.com/finehomebuilding/pages/h00011.asp>

SHINGLES:

1. Shingles - a.) shall be applied over 30# felt paper; b) if pitch BEL 4:12, then at 4' reveal and 6 NLS to a 3-tab piece.

CLG/RF VENTILATION:

1. By whatever means necessary X compressing INSTN, BET RF SHTG BDF and INSTN TDF there shall be NLT 2" unobstructed area passage as BET soffit vents and ridge and as BET any 2 RFRs or trusses.

RUNOFF:

1. Leaders shall exhaust to smooth pipe at NLT 1/2 slope NLT 10' from FDN WL line to a FIN grade NLT 1/2 NLT 20' from FDN WL line.
 2. Runoff shall discharge to light, storm sewer, drywell, FDRN, or EQV, but not to sanitary or FTG DRNage systems.

NFVA NOTES:

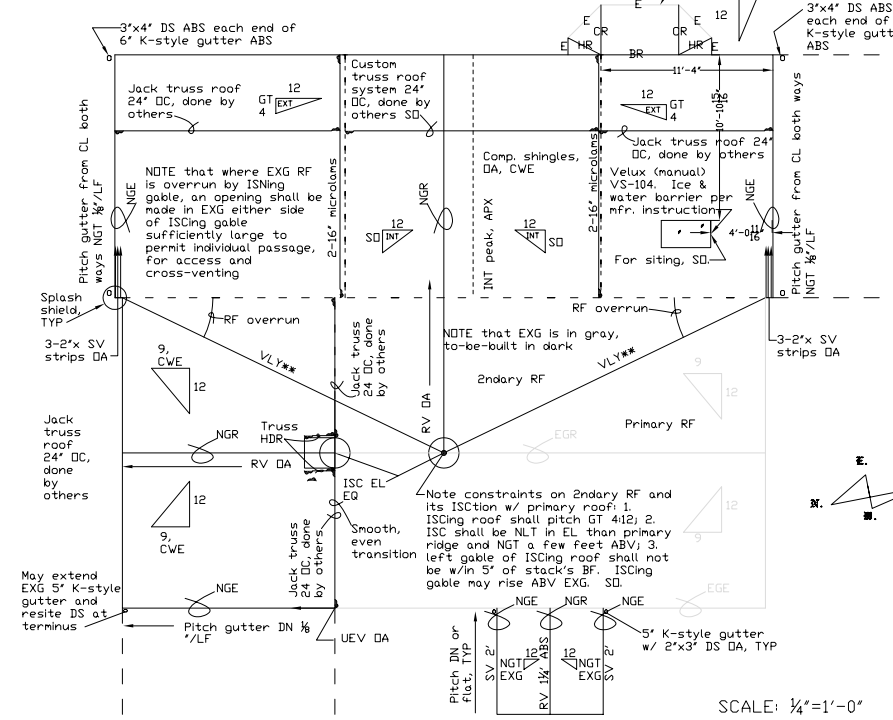
1. NFVA shall closely approximate indicated NFVA and shall closely approximate the proportion 1/2/HL/LO.
 2. NFVA shall include soffits and overhangs.
 3. Vent products purchased shall be only at high end, e.g., Headrick, CertainTeed, Owens Corning, GAF.
 4. NFVA shall be vent opening area adjusted by these factors: 1/4"-1/8" screen alone or louvers alone=1.25; 1/16" screen=2.00; louvers and 1/4"-1/8" screens=2.25; louvers and 1/16" screen=3.00
 5. All reasonable effort shall be made to cross-ventilate each vented area.
 6. Ventilation shall be not an offset or substitute for mitigations of, among others: continuous moisture, vapor, and thermal insulation, radiant barriers; RF covering color; reasonable sealing of INT; inadequate DRNage for runoff, footings, and sanitation; hygiene; poorly graded site and other landscaping matters including overhanging tree branches and flora of all kinds too close to the house.
 7. In no instance shall HI NFVA exceed LO NFVA/ridge.
 8. If pitches, runs, EXG gutters and leaders vary from assumptions herein under, please contact the following for further Runoff and NFVA calculations: Before The Architect, 2985 Heatherwyn Way, Cuming, GA 30040, 770-889-6964, http://www.beforethearchitect.com_jrp2n2000@yahoo.com.

GENERAL NOTE:

1. This analysis does not include a runoff or NFVA assessment of EXG.

NOTE Pitch of secondary roof shall be pitch GT 4:12, 1 layer 30# felt paper shall be CONT DA w/ EPDM or modified bitumen ('hot mop' only) at both VLYs up NLT 24' both RF planes from VLY CL and Ice & Snow or EQV NLT 6' up from each eave line DA.

If bay RF pitch NGT 4:12, primary moisture and vapor barrier shall be modified bitumen ('hot mop' only) or EPDM an RF SHTG DA and up WLS NLT 6'



***Closed VLY style w/ NLT 24' onto EXG gable plane w/ heavy CONT Black Jack or EQV seal at overlap but not to show.

WS CALCULATIONS FOR 5" K-STYLE GUTTER (CSF):

RF PLANE	AREA		MAX LEVEL		DS CAPACITY	
	RAW	ADJ**	RAW	ADJ**	2'x3'	3'x4'
Gable extension, front face	172	206	552	772	600	1200
ISning gable, either face	523	575	552	772	600	1200
Porch	32	35	552	772	600	1200

INDICATION:
 Extend EXG 5" K-style gutter, may resite EXG DS at new terminus. Prefer 2nd DS at S.W. CNR.
 Apply 6" K-style gutter ABS. Apply 3'x4' DS ABS.
 Apply 5" K-style and 1-2'x3' DS, each eave.

NFVA CALCULATIONS:

RF SECTION	AREA	NFVA, IDEAL:			RUN (LF on HDR):			NFVA, APPLIED:				
		HI	LD	20SI	Ridge	Eave	Rv:	Sv:	UEV:	HI	LD	20SI
Gable extension, exposed	215SF	75F	145F	101SI	14	14	5	N/A	14	90SI	147SI	99% or 72%
ISning gable, exposed	1209SF	405F	815F	576SI	26 1/2	32	26 1/2	96	N/A	472SI	1080SI	or 82% or 93%
Porch	49SF	165F	335F	23SI	7	14	1 1/2	4	N/A	225SI	455SI	or 98% or 94%

*Materials' assumptions: Ridge vents=CertainTeed Shingle Vent II (18SI NFVA/LF) or EQV; Soffit vents=Dwens-Corning VentSure Straight Edge Undereave Vent (90SI NFVA/BLF) or EQV; Undereave vents=Dwens-Corning VentSure Undereave Vent (42SI NFVA/4LF) or EQV

KEY TO ABBREVIATIONS:

- ABS = Absolute
- ADJ = ADjusted
- APX = APproximately
- BEL = BELOW
- BET = BEtween
- BM = BeM
- BDR = BeDRon DF face
- BR = Bay Ridge
- CL = CenterLine
- CNR = CorNer
- CDM = CDMon
- CONT = CONTinuous
- CR = CDM RFR
- CWE = Consistent w/ EXG
- D = Depth
- DN = DiMension
- DN = DoWn
- DRN = DRain
- DS = DrainSpout
- E = Eave
- E = East
- EGE = EXG Gable End
- EL = Elevation
- EQ = EQual
- EQV = EQuivalent
- EXG = EXisting
- EXT = EXTERIOR
- FBN = FounDation
- FDRN = FrenCh Drain
- FIN = FINISH
- FBN = FrenCh Drain
- FSN = FASSten
- GT = Greater Than
- HR = Hp Ridge
- INS = INSulate
- INT = INTERIOR
- ISC = InterSEct
- L = Length
- LDH = Left (side) DF House LF = Linear Foot (Feet)
- LP = Loud Point
- JST = JoIST
- MAX = MAXimum
- N = North
- NFVA = Net Free Vent Area
- NGE = New Gable Eave
- NGR = New Gable Ridge
- NGT = Not Greater Than
- NL = NAL
- NLT = Not Less Than
- DA = DverAll
- DC = DN Center
- PERP = PERPenicular
- R = Ridge
- RF = Roof
- RFR = RofR
- RNF = ReNFOrce
- RV = Ridge Vent
- S = South
- SF = Square Foot (Feet)
- SHTG = SheeTinG
- SD = See DWers
- SI = Square Inches)
- STRC = STRUCture
- SV = Soffit Vent
- TDF = Top DF Face
- TP = Top Plate
- TYP = TYPICAL
- UEV = Undereave Vent
- VERT = VERTICAL
- VLY = VLY
- W = Weat
- WDW = WinDoW
- WL = WaterShed
- X = EXcept

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 Errors & Omissions

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