

# EMERALD MA BUILDER: NW HOMEFINDERS INC PROJECT: 5003 OCEAN AVE, EVERETT, DATE: 5/4/2022 EHD JOB: 2552 SHEET:

3

com www.emeraldplans.

SERVICE

PLAN

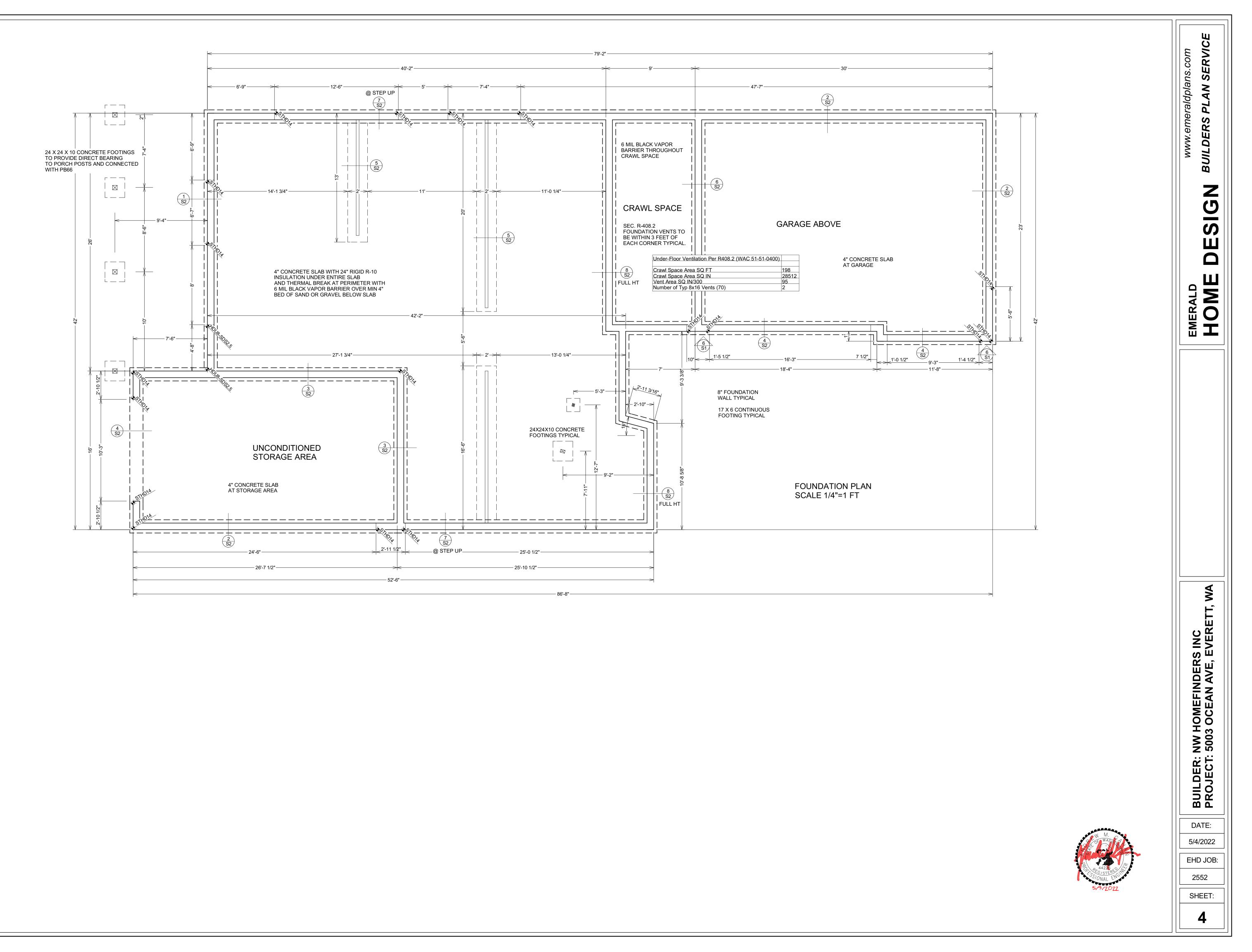
BUILDERS

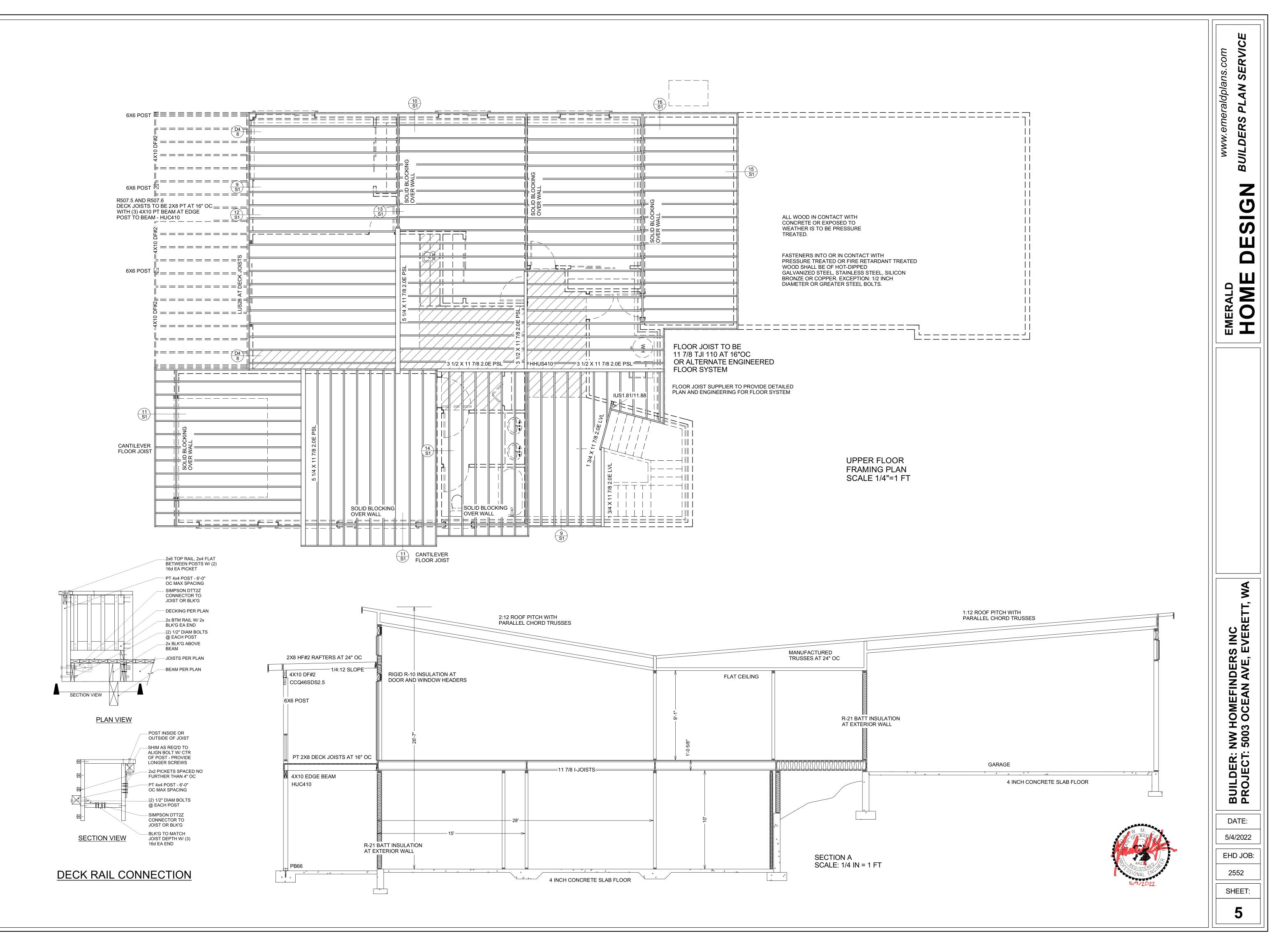
Ζ

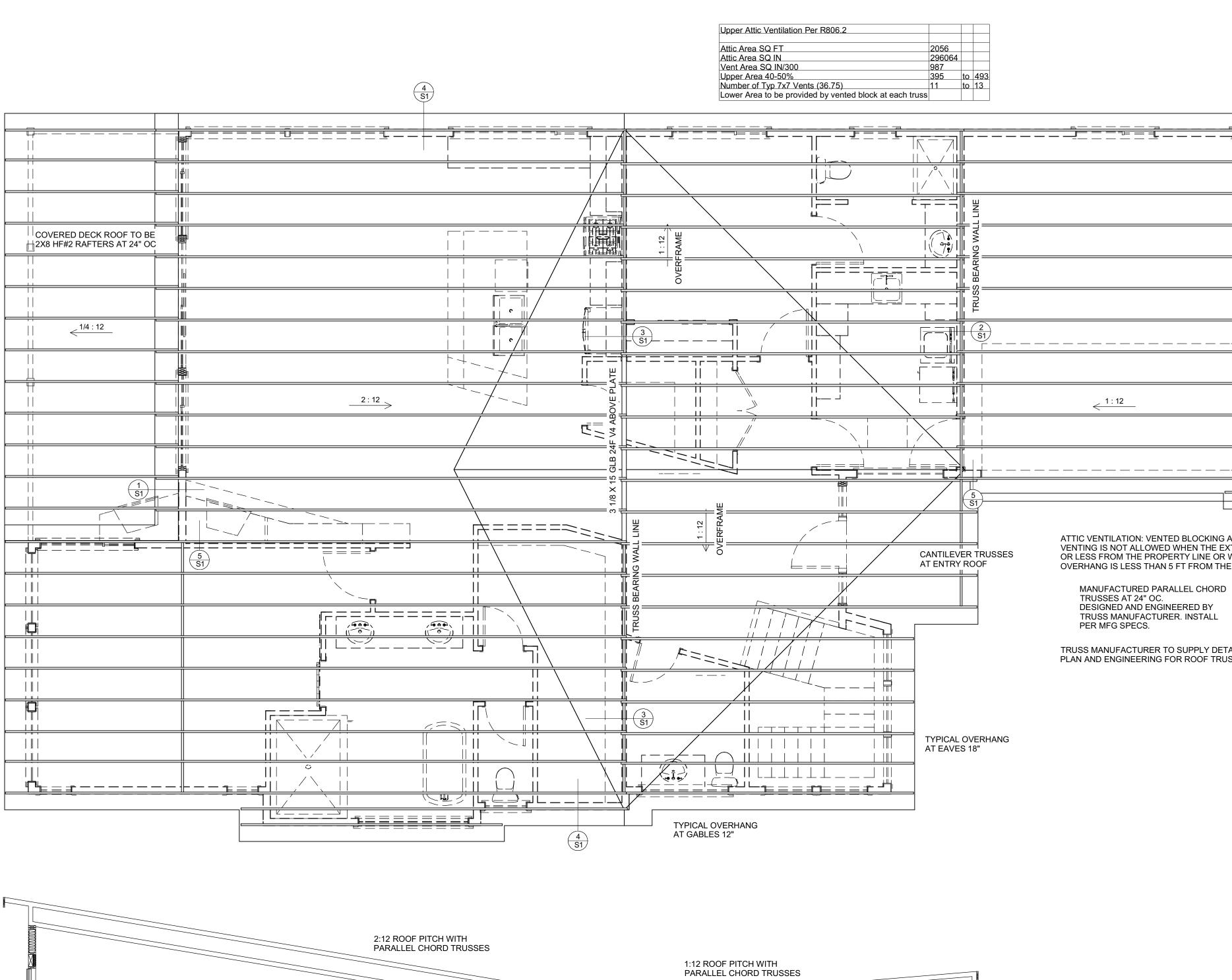
0

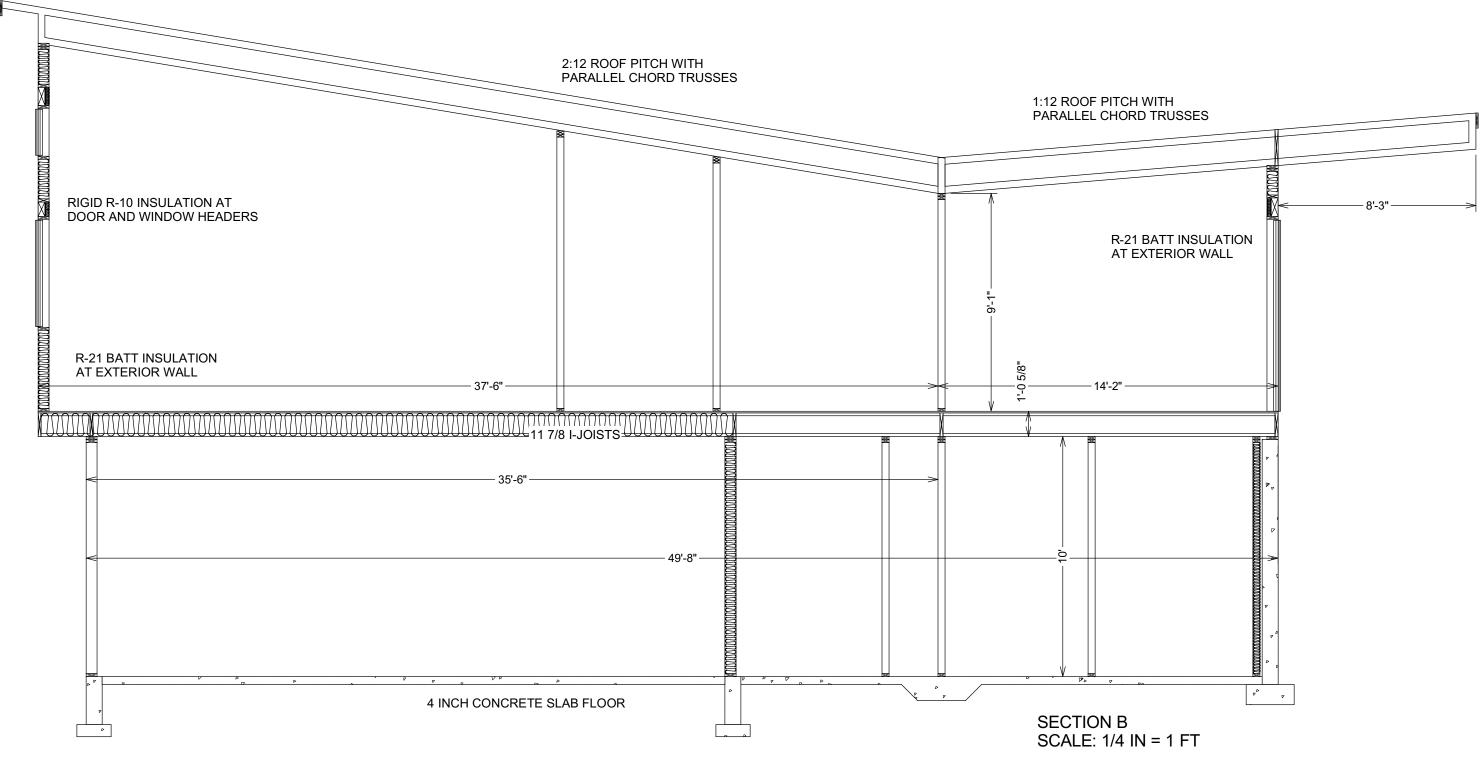
S

Ш









<u> </u>		
		  ¤ੑੑੑਸ਼ਗ਼
		ι μ     
	]	

ATTIC VENTILATION: VENTED BLOCKING AND GABLE END VENTING IS NOT ALLOWED WHEN THE EXTERIOR WALL IS 5 FT OR LESS FROM THE PROPERTY LINE OR WHEN THE EAVE OR OVERHANG IS LESS THAN 5 FT FROM THE PROPERTY LINE.

TRUSS MANUFACTURER TO SUPPLY DETAILED PLAN AND ENGINEERING FOR ROOF TRUSSES

> ROOF PLAN SCALE 1/4"=1 FT



**SERVICE** com www.emeraldplans. PLAN BUILDERS Ζ 0 S Ш 

EMERALD

BUILDER: NW HOMEFINDERS INC PROJECT: 5003 OCEAN AVE, EVERETT, WA DATE: 5/4/2022

EHD JOB: 2552 SHEET:

6

ALL CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE, 2018 INTERNATIONAL BUILDING CODE, AND THE 2018 WASHINGTON STATE ENERGY CODE.

R-408.2 (WAC 51-51) UNDERFLOOR VENTILATION REQUIRES 1 SQ FT OF NET FREE CROSS VENTILATION FOR EACH 300 SQ FT OF UNDERFLOOR AREA COVERED.

R-408.4 UNDERFLOOR ACCESS: MINIMUM 18" X 24" CLEAR ACCESS THROUGH FLOOR, MIN 16" X 24" THROUGH EXT WALL.

R-317.1 WOOD FLOOR JOIST CLOSER THAN 18" AND WOOD GIRDERS CLOSER THAN 12" FROM THE EXPOSED GROUND MUST BE PRESSURE TREATED.

FASTENERS INTO OR IN CONTACT WITH PRESSURE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. EXCEPTION: 1/2 INCH DIAMETER OR GREATER STEEL BOLTS.

R-806.2 ATTIC VENTILATION REQUIRES NET FREE CROSS VENTILATION 1/150 OF ATTIC AREA. OR 1/300 IF 40-50 PERCENT IS UPPER VENTILATION. VENTED BLOCKING AND GABLE END VENTING IS NOT ALLOWED WHEN THE EXTERIOR WALL IS 5 FT OR LESS FROM THE PROPERTY LINE OR WHEN THE EAVE OR OVERHANG IS LESS THAN 5 FT FROM THE PROPERTY LINE. WHEN APPLICABLE SEE D2

R-807 ATTIC ACCESS REQUIRES 22" X 30" MIN CLEAR OPENING IN A READILY ACCESSIBLE AREA. 30" MIN HEADROOM, INSULATE AND WEATHERSTRIP

R-310 EGRESS OPENINGS SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR WITH A MIN OF 5.7 SQUARE FEET, A MIN WIDTH OF 20" AND A MIN HEIGHT OF 24".

R-314.3 INTERCONNECTED SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM, IN THE IMMEDIATE VICINITY OUTSIDE EACH SLEEPING AREA AND ON EACH STORY.

SMOKE DETECTORS SHALL BE INSTALLED NOT LESS THAN 3 FT HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A TUB OR SHOWER. R314

IONIZATION SMOKE ALARMS: SHALL NOT BE INSTALLED LESS THAN 20 FT HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH SHALL NOT BE INSTALLED LESS THAN 10 FT HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

PHOTO ELECTRIC SMOKE ALARMS: SHALL NOT BE INSTALLED LESS THAN 6 FT HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

R315.1 CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

R-308.4 SAFETY GLAZING IS REQUIRED AT ENCLOSURES FOR TUBS AND SHOWERS AND WHEN PLACED WITHIN 24" ARC OF EITHER VERTICAL EDGE OF DOOR AND GLAZING IS LESS THAN 60" ABOVE FLOOR.

M-1503 RANGE HOOD SHALL DISCHARGE TO THE OUTDOORS THROUGH A SINGLE WALL DUCT THE DUCT SERVING THE HOOD SHALL HAVE A SMOOTH INTERIOR SURFACE, SHALL BE AIR TIGHT AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER.

R319.1 BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS. MIN SIZE 4 IN WITH 1/2 IN STROKE AND CONTRASTING BACKGROUND AND VISIBLE FROM STREET.

ROOFING MATERIAL TO BE COMPOSITION OVER 30LB FELT 7/16" OSB ROOF SHEATHING. 8D AT 6" OC AT EDGES AND 12" OC AT FIELD H1 ROOF TO TOP PLATE CONNECTION AT EACH TRUSS VENTED 2X BLOCKING HEADER PER PLAN SHEATHING PER SW SCHEDULE 2X6 WALL FRAMING AT 16" OC			
12" OC AT FIELD H1 ROOF TO TOP PLATE CONNECTION AT EACH TRUSS VENTED 2X BLOCKING HEADER PER PLAN SHEATHING PER SW SCHEDULE 2X6 WALL FRAMING AT 16" OC HAI ABU INSULATION BAFFLE WITH 1" MIN AIR SPACE TO EXTEND TO 12" VERTICALLY ABOVE INSULATION 3/4"-	SHEATHING. 8D AT 6"		THE G FLIGH SMALL
PLATE CONNECTION AT EACH TRUSS       2X11         VENTED 2X BLOCKING       INSULATION BAFFLE WITH 1" MIN AIR SPACE TO EXTEND TO 12" VERTICALLY ABOVE INSULATION       2X11         HEADER PER PLAN SHEATHING PER SW SCHEDULE       INSULATION       MIN R MAX F         2X6 WALL FRAMING AT 16" OC       3/4" -			HANDF ABOVE
BLOCKING BLOCKING HEADER PER PLAN SHEATHING PER SW SCHEDULE 2X6 WALL FRAMING AT 16" OC INSULATION BAFFLE WITH 1" MIN AIR SPACE TO EXTEND TO 12" VERTICALLY ABOVE INSULATION MIN R MAX F 3/4" -	PLATE CONNECTION		
SHEATHING PER SW SCHEDULE     INSULATION     MAX F       2X6 WALL FRAMING AT 16" OC     3/4" -			2X12 ST
SW SCHEDULE 2X6 WALL FRAMING AT 16" OC 3/4" -	HEADER PER PLAN		MIN RUN MAX RISE
3/4" -			
	2X6 WALL FRAMING AT 1	5" OC	
TYPICAL ROOF TO WALLD1AND HEADER SECTION			A4 - 1 1

Mechanical Ventilation

This Project Floor Area	3518
This Project Number of Bedrooms	5
This Project Requires	90 CI

Whole House Ventilation fresh air supply to be provided by exhaust fans

Table M1505.4.3(1) Continuous Whole House Mechanical Ventilation

FI Area	0-1 Bdrs	2-3 Bdrs	4-5 Bdrs	6-7 Bdrs	>7 Bdrs
<1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-7500	90	105	120	135	150
>7500	105	120	135	150	165

Table M1505.4.3(2)

Runtime P	ercentage	and Multipl	ying Factor	
25%	33%	50%	66%	

4 3 2 1.5

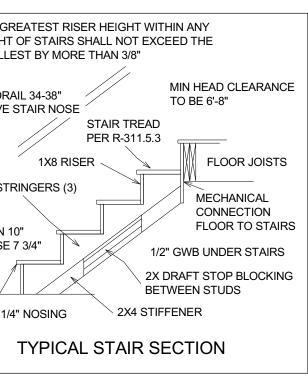
M1505.4.1 System design. The whole-house ventilation system shall consist of one or more supply or exhaust fans, or a combination of such, and associated ducts and con-trols. Local exhaust or supply fans are permitted to serve as such a system. Outdoor air ducts connected to the return side of an air handler shall be considered as providing sup-ply ventilation.

M1505.4.2 System controls. The whole-house mechani-cal ventilation system shall be provided with controls that enable manual override.

M1505.4.3 Mechanical ventilation rate. The whole-house mechanical ventilation system shall provide outdoor air at a continuous rate as determined in accordance with Table M1505.4.3(1) or Equation 15-1. Ventilation rate in cubic feet per minute = (0.01 × total square foot area of house) + [7.5 × (number of bedrooms + 1)] Equation 15-1

Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25 percent of each 4-hour segment and the ventila-tion rate prescribed in Table M1505.4.3(1) is multiplied by the factor determined in accordance with Table M1505.4.3(2).

M1505.4.4 Local exhaust rates. Local exhaust systems shall be designed to have the capacity to exhaust the mini-mum airflow rate determined in accordance with Table M1505.4.4.



Project Info	rmation	Message	s / Results				
Adair Enterpri	ses		ed UA is better than bas	eline by 7%			
	SET UP						
	What code compliance pathway are you using? Project Building Type? Occupancy Type? Code Version? Classification: Baseline Description: About Your Selection:	Prescriptive Path Com New Construction R3 Single family home WSEC 2018 Medium Dwelling Unit Code Baseline - Baseline Up to 15 sf exempt wind	s and duplexes 3518 sq. ft. e and proposed window	areas are equal.			
	Comparison of Baseline and Proposed Design						
	Component Performance, R occupancies Doors U = Overhead Glazing U = Vertical Glazing U = Flat/Vaulted Ceilings U = Wall (above grade) U = Floors over Crawlspace U = Slab on Grade F = Below Grade Wall U =	U         Baseline           0.300         192           0.500         0           0.300         719           0.027         2,056           0.056         3,471           0.029         641           0.540         62           0.042         648           0.570         112	UA 57.6 0.0 215.6 55.5 194.4 18.6 33.5 27.2		Proposed Desig           U         Area           .300         192           .200         719           .027         2,056           .054         3,471           .025         641           .540         62           .055         648           .293         112	UA 57.6 0.0 201.2 55.5 187.4 16.0 33.5 35.6	
	Below Grade Slab F = posed UA ≤ the Target UA, and the Proposed Credits from Table 4 406.2 Fuel Normalization Credits Full Description For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord	ndards for the equipment p units that are	6.0	en the home m	Proposed UA Total Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.	6.0 from Table	_
Table R4	posed UA ≤ the Target UA, and the Proposed Credits from Table 4 406.2 Fuel Normalization Credits Full Description For an initial heating system using a heat pump that meets federal star	Target Credits	6.0	nen the home mo	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.	6.0 7% 46.5	Total Cred
Table R4 System No.	Proposed UA ≤ the Target UA, and the Proposed Credits from Table 4 406.2 Fuel Normalization Credits Full Description For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementar compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret	Target Credits	6.0 d in Section R406.2, th Select Syster	nen the home mo	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC. Fuel Normalization Credits	6.0 7% 46.5 Energy Credits	Total Cred
Table R4	406.2 Fuel Normalization Credits         406.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementar compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).	Target Credits	6.0 d in Section R406.2, th Select Syster	nen the home mo	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0	6.0 7% 46.5 Energy Credits	Total Cred
Table R4 ystem No. 2 Table R4	406.2 Fuel Normalization Credits         406.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementar compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).         406.3 Energy Credits	Target Credits	6.0 d in Section R406.2, th Select Syster Heat Pump, air-to-air	or air to water	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0 Brief Des	6.0 7% 46.5 Energy Credits 5.0	Total Crec 6.0
Table R4 ystem No. 2 Table R4 Option No.	406.2 Fuel Normalization Credits         406.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).         406.3 Energy Credits	Target Credits	6.0 d in Section R406.2, th Select Syster Heat Pump, air-to-air Select Options	m Type	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0 Brief Des	6.0 7% 46.5 Energy Credits 5.0	Total Crea 6.0
Table R4 ystem No. 2 Table R4 pption No. 1	Adde.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).         406.3 Energy Credits         Category         Efficient Building Envelope	Target Credits	6.0 d in Section R406.2, th Select Syster Heat Pump, air-to-air Select Options	m Type or air to water Energy Credits 0.5	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0  U 0.28 Windows / R-3	6.0 7% 46.5 Energy Credits 5.0	Total Cree 6.0
Table R4 iystem No. 2 Table R4 Dption No. 1 2	Adde.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).         406.3 Energy Credits         Category         Efficient Building Envelope         Air Leakage Control and Efficient Ventilation	Target Credits	6.0 d in Section R406.2, th Select Syster Heat Pump, air-to-air Select Options Option 1.3	m Type or air to water Energy Credits 0.5 0.0	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0  Brief Des U 0.28 Windows / R-3 Heat Pump: Air Source	6.0 7% 46.5 Energy Credits 5.0 5.0	ions*
Table R4 iystem No. 2 Table R4 Dption No. 1 2 3	Adde.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1) C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpret 2020).         406.3 Energy Credits         Category         Efficient Building Envelope         Air Leakage Control and Efficient Ventilation         High Efficiency HVAC	Target Credits	6.0 d in Section R406.2, th Select System Heat Pump, air-to-air Select Options Option 1.3 Option 3.5	nen the home more than the home more that the home more the home more that the home more the home more the h	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0  Brief Des U 0.28 Windows / R-3 Heat Pump: Air Source	6.0 7% 46.5 Energy Credits 5.0 Scription of Selected Opt 18 floors or R-10 Fully insu	ions*
Table R4 ystem No. 2 Table R4 Dption No. 1 2 3 4	Augest State       State         Augest State       Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1) C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpref 2020).         Augest State       Category         Efficient Building Envelope       Air Leakage Control and Efficient Ventilation         High Efficiency HVAC       High Efficiency HVAC Distribution System	Target Credits	6.0 d in Section R406.2, th Select System Heat Pump, air-to-air Select Options Option 1.3 Option 3.5	Energy Credits 0.5 0.0 1.5 1.0	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC.  Fuel Normalization Credits  1.0  Brief Des U 0.28 Windows / R-3 Heat Pump: Air Source	6.0 7% 46.5 Energy Credits 5.0 Scription of Selected Opt 18 floors or R-10 Fully insu	ions*
Table R4 iystem No. 2 Table R4 Dption No. 1 2 3 4 5.1	Aude.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1) C or C403.3.2(2). OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpref 2020).         406.3 Energy Credits         Category         Efficient Building Envelope         Air Leakage Control and Efficient Ventilation         High Efficiency HVAC         High Efficiency HVAC Distribution System         Efficient Water Heating	Target Credits	6.0 d in Section R406.2, th Select System Heat Pump, air-to-air Select Options Option 1.3 Option 3.5 Option 4.2	Energy Credits 0.5 0.0 1.5 1.0 0.0	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC. Fuel Normalization Credits 1.0 Brief Des U 0.28 Windows / R-3 Heat Pump: Air Source Ducts/distribution syst	6.0 7% 46.5 Energy Credits 5.0 Scription of Selected Opt 18 floors or R-10 Fully insu	ions*
Table R4           System No.           2           2           Table R4           Option No.           1           2           3           4           5.1           5.2-5.6	Adde.2 Fuel Normalization Credits         Full Description         For an initial heating system using a heat pump that meets federal star listed in Table C403.3.2(1)C or C403.3.2(2) OR Air to water heat pum configured to provide both heating and cooling and are rated in accord 550/590. Heat pump with electric resistance or fossil-fuel supplementary compliance with WSEC 403.1.2 "Heat Pump Supplementary Heat". Pa Pumps (PTAC-HP) requires an HSPF tested value (See SBC Interpref 2020).         406.3 Energy Credits         Category         Efficient Building Envelope         Air Leakage Control and Efficient Ventilation         High Efficiency HVAC         High Efficiency HVAC Distribution System         Efficient Water Heating         Efficient Water Heating	Target Credits 06.2 are ≥ those require ndards for the equipment p units that are ance with AHRI al heat requires ackaged Terminal Heat tation dated December	6.0 d in Section R406.2, th Select System Heat Pump, air-to-air Select Options Option 1.3 Option 3.5 Option 4.2	m Type or air to water Energy Credits 0.5 0.0 1.5 1.0 0.0 2.0	Proposed Credits JA Percent Reduction Difference eets the 2015 WSEC. Fuel Normalization Credits 1.0 Brief Des U 0.28 Windows / R-3 Heat Pump: Air Source Ducts/distribution syst	6.0 7% 46.5 Energy Credits 5.0 Scription of Selected Opt 18 floors or R-10 Fully insu	ions*

Plan	Component		Floor					UA	
ID	Description	Ref.	U				Area		
	R38 vented Joist 16oc (Option 1a-1c)	10-3	0.025				641	16	
					Sum	of Area and UA	641	16	
<b></b>									
Plan	Grade (less than 2 feet below grade)	I	Slab						
ID	Component Description	Ref.	Slab				Slab Perim	FP	
	• •	10-2	<b>г</b> 0.540				51ab Perim 62	33	
	R10 2' vertical (Code Target)	10-2	0.540				62		
		I			Sum of B	erimeter and FP	62	33	
					ounorre	ennieter and m	02		
Below 6	irade Walls and Slabs								
Plan	Component		Wall	Wall	Wall	Slab		Slab	
ID	Description	Ref.	U	Area	UA	F	Slab Perim	UA	
	R10 Perimeter 7' depth w/TB, R10 Full Underslab (Option 1a-1c)	Baylon & Kei	0.055	648	35.6	0.293	112	33	
	Sum	of Area, Leng	th and UA	648	35.6		112	33	

Floor (over crawl or exterior)

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). For this test only, the volume of the home shall be the conditioned floor area in ft2 (m2) multiplied by 8.5 feet (2.6 m). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. Once visual inspection has confirmed sealing (see Table R402.4.1.1), operable windows and doors manufactured by small business shall be permitted to be sealed off at the frame prior to the test. Exception: For dwelling units that are accessed directly from the outdoors, other than detached one family dwellings and townhouses, an air leakage rate not exceeding 0.4 cfm per square foot of the dwelling unit enclosure area shall be an allowable alternative. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals) in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827. For the purpose of this test only, enclosure area to be calculated as the perimeter of the dwelling unit, measured to the outside face of the exterior walls, and the centerline of party walls, times 8.5 feet, plus the ceiling and floor area. Doors and windows of adjacent dwelling units (including top and bottom units) shall be open to the outside during the test. This exception is not permitted for dwelling units that are accessed from corridors or other enclosed common areas.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.

2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.

3. Interior doors, if installed at the time of the test, shall be open, access hatches to conditioned crawl spaces and conditioned attics shall be open.

4. Exterior or interior terminations for continuous ventilation systems and heat recovery ventilators shall be sealed.

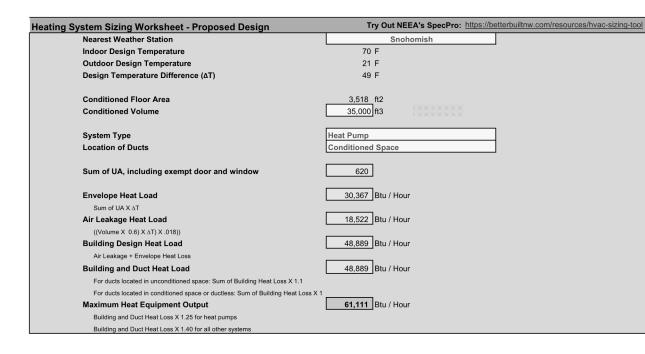
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.

6. Supply and return registers, if installed at the time of the test, shall be fully open.

CFM

100%

RMAL	ENVELOPE DETAILS - Proposed Design			0.540		_						
	Condition	ed Floor Area, Propos Cla	ed Design		sq. ft Iling Unit							
		Gia	sincation	Neulum Dwei								
												1
	r Doors											-
Plan ID	Component Description	Ref.	Door U	Qt.	Feet	dth Inch	Height Feet	<sup>1</sup> Area	<u> </u>	JA		
Exempt		Kei.		હા.	Teet		1661	Area	0	0.0		
	Code Target, U=0.30	-	0.30	2	8	0	8	0 1	28	38.4		
	Code Target, U=0.30	-	0.30	2	3		6		40	12.0		
	Code Target, U=0.30	-	0.30	1	3		8		24 0	7.2		
					1				0	0.0		
									0	0.0		
									0	0.0		
							of Area and		92	57.6		
					Exterior	Doors A	Area Weighte	d U		0.300		
												-
	ad Glazing											-
Plan D	Component	Ref.	Glazing U	Qt.	Wi Feet	dth Inch	Height Feet			JA		
ID	Description	Ret.	0	હ્યા.	reet		reet	Area	0	,A		
									0			
									0			
									0			
						Sum	of Area and	UA	0	0		
				0	verhead (		rea Weighte					
/ortical	Glazing Schodulo							Rows to She	<b>2W</b> 12			1
/ertical Plan	Glazing Schedule Component		Glazing		Wi	dth	Height	Rows to Sh	<b>200</b> 12			-
		Ref.	Glazing U	Qt.	Wi Feet	dth Inch	Height Feet			JA		
Plan	Component Description		U -		Feet		Feet Inc	Area	U	-	· · · · · · · · · ·	
Plan ID	Component Description Option 1a: U=0.28	Table 406.2	U - 0.28	3	<b>Feet</b> 2.0	Inch 8	Feet         Inc           4.00	<sup>•</sup> Area • -	.0	- 10.08		
Plan ID	Component Description Option 1a: U=0.28 Option 1a: U=0.28	Table 406.2 Table 406.2	U - 0.28 0.28	3 2	<b>Feet</b> 2.0 5	Inch 8	Feet         Inc           4.00         4	<sup>2</sup> Area 	.0 40	- 10.08 11.20		
Plan ID	Component Description Option 1a: U=0.28	Table 406.2	U - 0.28	3	<b>Feet</b> 2.0	Inch 8 0 0	Feet         Inc           4.00	<sup>0</sup> Area <sup>6</sup> 36 <sup>0</sup> 2	.0	- 10.08		
Plan ID	Component Description Option 1a: U=0.28 Option 1a: U=0.28 Option 1a: U=0.28	Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2	U 	3 2 8	Feet           2.0           5           6           2           7	Inch 8 0 0 0 0 0 0	Feet         Inc           4.00	Area	U .0 40 40 54 35	- 10.08 11.20 67.20 17.92 9.80		
Plan ID	Component Description	Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2	U - 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	3 2 8 4 3 1	Feet           2.0           5           6           2           7           5	Inch 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00	Area 	.0 40 40 64 35 9	- 10.08 11.20 67.20 17.92 9.80 2.57		
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2	U - 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	3 2 8 4 3 1 5	Feet           2.0           5           6           2           7           5           3	Inch 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc.           4.00         -           4         -           5         -           8         -           1         -           8         -	Area           -           6           0           0           0           20           0           8           0           11           0	U .0 40 40 54 9 20	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60		
Plan ID	Component Description	Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2	U - 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	3 2 8 4 3 1	Feet           2.0           5           6           2           7           5	Inch 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00	Area           -           6           0           0           0           20           0           0           11           0           12	.0 40 40 64 35 9	- 10.08 11.20 67.20 17.92 9.80 2.57		
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2 Table 406.2	U - 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	3 2 8 4 3 1 5 1	Feet           2.0           5           6           2           7           5           3           8	Inch 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         4           5         8           1         1           8         5           5         5	Area	U .0 40 54 9 20 40	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20		
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U 	3 2 8 4 3 1 5 1 3 2 1	Feet           2.0           55           66           22           77           55           33           88           4           66           8	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00	Area Area Area Area Area Area Area Area	U .0 40 40 53 5 5 9 9 20 40 58 88 22 24	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48		
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U 	3 2 8 4 3 1 5 1 3 2	Feet           2.0           5           6           2           7           5           3           8           4           6	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -	Area	U .0 40 40 34 35 9 9 20 40 58 88 24 24 16	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56		34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U 	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area	U .0 40 40 34 35 9 9 20 40 58 88 24 24 16	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b>		
Plan ID	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U 	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -	Area	U .0 40 40 34 35 9 9 20 40 58 88 24 24 16	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56		34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U 	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area	U .0 40 40 34 35 9 9 20 40 58 88 24 24 16	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b>		34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U - 0.28	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area	U .0 40 40 34 35 9 9 20 40 58 88 24 24 16	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b>		34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area Area Area Area Area Area Area Area	U 0.0 40 40 55 9 9 20 40 40 58 88 220 40 40 58 88 227 3.7 7	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b>		34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.         34.         34.         34.         34.         34.         34.         34.           34.
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U - 0.28	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area	U 0 0 0 0 0 0 0 0 0 0 0 0 0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area Area Area Area Area Area Area Area	U 0 0 0 0 0 0 0 0 0 0 0 0 0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area Area Area Area Area Area Area Area	U 0 0 0 0 0 0 0 0 0 0 0 0 0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	U 0 0 10 10 10 10 10 10 10 10	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>JA</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           5           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4         -           5         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           2         -           0 f Area and         -	Area Area Area Area Area Area Area Area	U 0 0 10 10 10 10 10 10 10 10	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28           Ited Ceilings           Component Description           R38 batt Vault vented 2x14 24oc	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	U 0 0 10 10 10 10 10 10 10 10	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>JA</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	U 0 0 10 10 10 10 10 10 10 10	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>JA</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2         Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	UU .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>JA</b> <b>55.5</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28	Table 406.2 Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	UU .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>JA</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28           Option 1a: U=0.29           Component           Description	Table 406.2         Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	UU .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>////////////////////////////////////</b>		
Plan ID Exempt	Component Description           Option 1a: U=0.28           Option 1a: U=0.29           Component           Description	Table 406.2         Table 406.2	U	3 2 8 4 3 1 5 1 3 2 1 3 3	Feet           2.0           5           6           2           7           55           3           8           4           6           8           4           6           8           4	Inch  8  0  0  0  0  0  0  0  0  0  0  0  0	Feet         Inc           4.00         -           4.00         -           4.00         -           4.00         -           8         -           1         -           8         -           5         -           5         -           2         -           2         -           of Area and Area Weighte	Area Area Area Area Area Area Area Area	UU .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	- 10.08 11.20 67.20 17.92 9.80 2.57 33.60 11.20 18.90 6.72 4.48 7.56 <b>201.2</b> <b>0.280</b> <b>////////////////////////////////////</b>		



The following Washington State Energy Code information is required:

a. Post Energy Code Compliance Certificate within 3 ft. of electrical panel (these are available

- at <u>www.energy.wsu.edu/code</u>)
- b. Provide door blower test affidavit by final building inspection
- c. Provide (1) programmable thermostat
- d. Provide duct sealing affidavit by final inspection e. A minimum of 75% of all interior lighting shall be high efficiency
- f. All required insulation and glazing values
- g. Building framing cavities shall not be used for ducts or plenums. Installation of ducts in exterior walls, floors, or ceilings shall not displace required envelope insulation.

MA NW HOMEFINDERS INC 5003 OCEAN AVE, EVERETT, BUILDER: I PROJECT: DATE: 5/4/2022 EHD JOB: 2552 SHEET:

Ш

S

ER

S

AN

Р

Ŕ

ШÌ

Ω

C

S

Ш

Σ

0

Ľ

ш

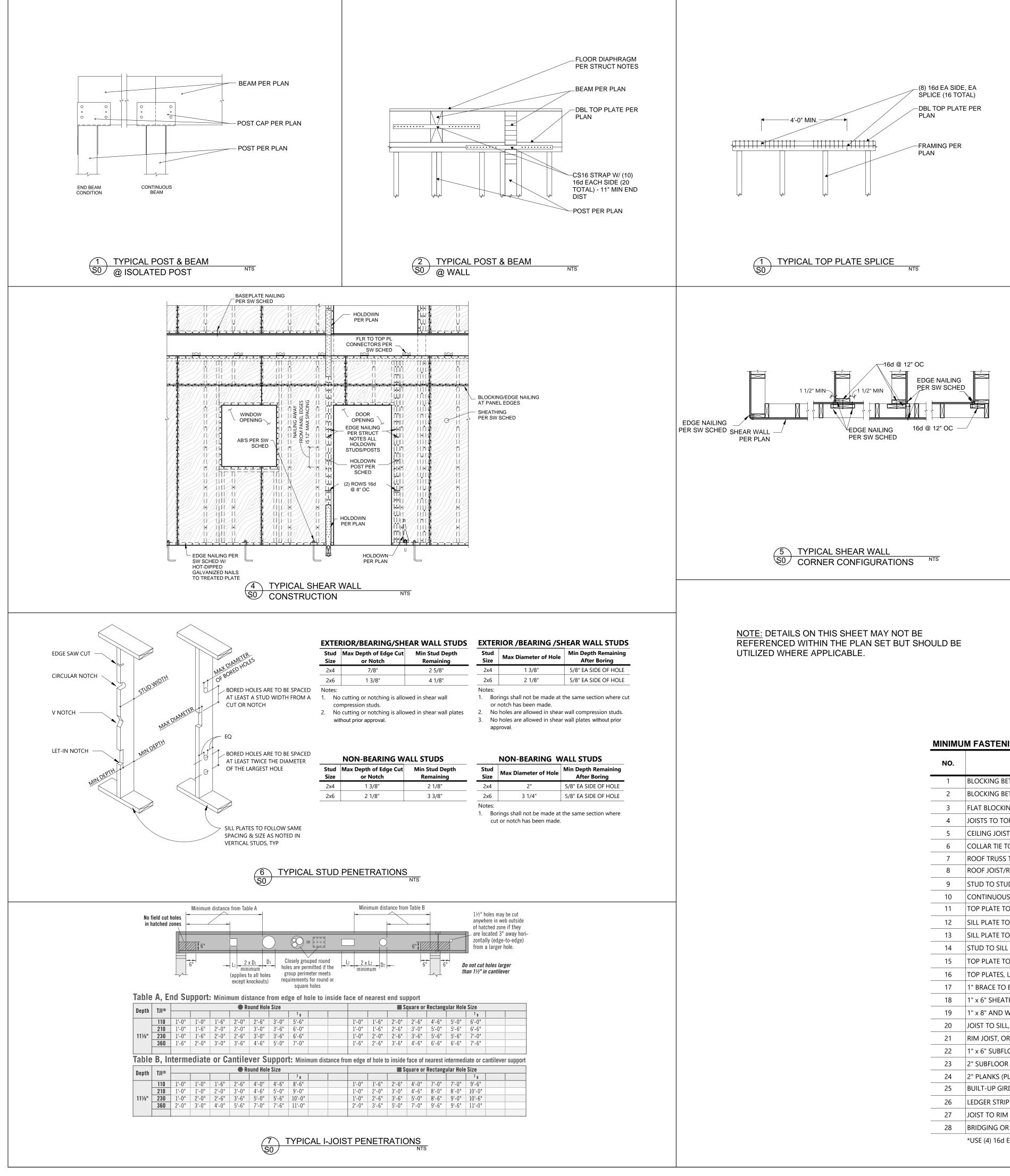
Σ 

С С

nS.

aldpla

em



# **GENERAL STRUCTURAL NOTES**

GENERAL ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, OR OTHER GOVERNING CODE, AS REQUIRED BY LOCAL JURISDICTION.

# **DESIGN PARAMATERS**

WIND: NOMINAL WIND SPEED – 85 MPH ULTIMATE WIND SPEED – 110 MPH WIND EXPOSURE, B	RISK CATEGORY IMPORTANCE, I = $K_{ZT} = 1.00$
SEISIMIC:	
EQUIVALENT LATERAL FORCE PROCE	DURE
IMPORTANCE, $Ie = 1.0$	S <sub>s</sub> = 1.375
SITE CLASS, D	$S_1 = 0.488$
SEISMIC DESIGN CAT., D	$S_{DS} = 0.92$
SEIS. FORCE RES. SYS, A.15.	$S_{D1} = NA$
DESIGN BASE SHEAR = 15660 lbs	$C_{s} = 0.14$
RISK CATEGORY II	R = 6.5

LIVE LOADS: ROOF 15 PSF DL, 25 PSF LL (SNOW) FLOOR 10 PSF DL, 40 PSF LL DECKS 10 PSF DL, 60 PSF LL

**INSPECTIONS** NO SPECIAL INSPECTIONS ARE REQUIRED. VERIFY INSPECTIONS REQUIRED WITH AUTHORITY HAVING JURISDICTION.

**SOILS** REPORT NOT PROVIDED.

**FOUNDATIONS** EXTEND FOOTING TO UNDISTURBED SOIL OF 2000 PSF BEARING CAPACITY. BOTTOM OF EXTERIOR FOOTING SHALL BE 1'-6" MINIMUM BELOW OUTSIDE FINISHED GRADE.

COMPACTED FILL SHOULD CONSIST OF PREDOMINATELY WELL-GRADED, GRANULAR SOIL, FREE OF ORGANIC MATERIAL AND DEBRIS. FILL SHOULD BE PLACED IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED BY ASTM D-1557 TEST PROCEDURES.

**CONCRETE** f'<sub>c</sub> = 2500 PSI MINIMUM 5<sup>1</sup>/<sub>2</sub> SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND A MAXIMUM OF 6.0 GALLONS OF WATER PER 94 LB SACK OF CEMENT. MAXIMUM SLUMP IS 4". SEGREGATION OF MATERIALS TO BE PREVENTED.

**REINFORCING STEEL** #5 BARS AND LARGER SHALL BE GRADE 60 DEFORMED BARS, AND #3 AND #4 BARS SHALL BE GRADE 40, IN ACCORDANCE WITH ASTM A-615. LAP SPLICES 32 BAR DIAMETERS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND SHALL BE 6X6 – W1.4 X W1.4. LAP ONE FULL MESH AT SPLICES.

TIMBER FRAMING SHALL MEET	THE FOLLOWING MIN
BEAMS AND POSTS	(4x_ AND GREA
JOISTS / STUDS (2x_):	HF#2 / STUD
GLUE LAMINATED BEAMS (GLB)	24F-V4 (24F-V8
PARALLAM BEAMS (PSL)	2.0E UNO

2x\_ TIMBER SHALL BE KILN DRIED. GRADES SHALL CONFORM TO "WWPA GRADING RULES FOR WESTERN LUMBER", LATEST EDITION. ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE T.P.I. AND THE IBC. ALL CONNECTIONS PER IBC TABLE 2304.10.1 (SEE BELOW).

NOTE ALL BEAMS/HEADERS TO BE SUPPORTED BY MINIMUM DBL 2x POSTS AT EACH END, UNO

**ROOF DIAPHRAGM** INSTALL MINIMUM 1/2" CDX PLYWOOD (32/16) OR 7/16" OSB SHEATHING. NAIL ALL SUPPORTED EDGES AND BOUNDARIES WITH 8d AT 6" O.C, AND INTERIOR SUPPORTS WITH 8d AT 12" O.C.; BLOCKING NOT REQUIRED.

FLOOR DIAPHRAGM INSTALL MINIMUM 23/32" T&G STURD-I-FLOOR (24oc) SHEATHING. GLUE AND NAIL ALL SUPPORTED EDGES AND BOUNDARIES WITH 10d AT 6" O.C.; AND INTERIOR SUPPORTS WITH 10d AT 12" O.C., BLOCKING NOT REQUIRED.

MISCELLANEOUS THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT JOB SITE. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED. DO NOT SCALE DRAWINGS. PRE-FABRICATED ELEMENTS TO BE HANDLED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- DEFERRED SUBMITTALS - ROOF TRUSS DESIGN
- mmm

# MINIMUM FASTENING SCHEDULE (UNO) (PER 2018 IBC TABLE 2304.10.1

NO.	CONNECTION					
1	BLOCKING BETWEEN JOIST/RAFTER OR TRUSSES TO TOP PLATE OR OTHER FRAMING ABOVE					
2	BLOCKING BETWEEN JOIST/RAFTER OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TR					
3	FLAT BLOCKING TO TRUSS AND WEB FILLER					
4	JOISTS TO TOP PLATE OR GIRDER					
5	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)					
6	COLLAR TIE TO JOIST/RAFTER					
7	ROOF TRUSS TO TOP PLATE					
8	ROOF JOIST/RAFTER TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2" RIDGE BEAM					
9	STUD TO STUD (NOT AT SHEAR WALLS)					
10	CONTINUOUS HEADER TO STUD					
11	TOP PLATE TO TOP PLATE, AT END JOINTS					
12	SILL PLATE TO JOIST, RIM JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)					
13	SILL PLATE TO JOIST, RIM JOIST OR BLOCKING AT BRACED WALL PANELS					
14	STUD TO SILL PLATE					
15	TOP PLATE TO STUD					
16	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS					
17	1" BRACE TO EACH STUD AND PLATE					
18	1" x 6" SHEATHING OR LESS TO EACH BEARING					
19	1" x 8" AND WIDER SHEATHING TO EACH BEARING					
20	JOIST TO SILL, TOP PLATE OR GIRDER					
21	RIM JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW					
22	1" x 6" SUBFLOOR OR LESS TO EACH JOIST					
23	2" SUBFLOOR TO JOIST OR GIRDER					
24	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)					
25	BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS					
26	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS					
27	JOIST TO RIM JOIST					
28	BRIDGING OR BLOCKING TO JOIST					
	*USE (4) 16d END NAIL STUDS TO TOP AND SILL PLATES AT 2x10 STUDS					

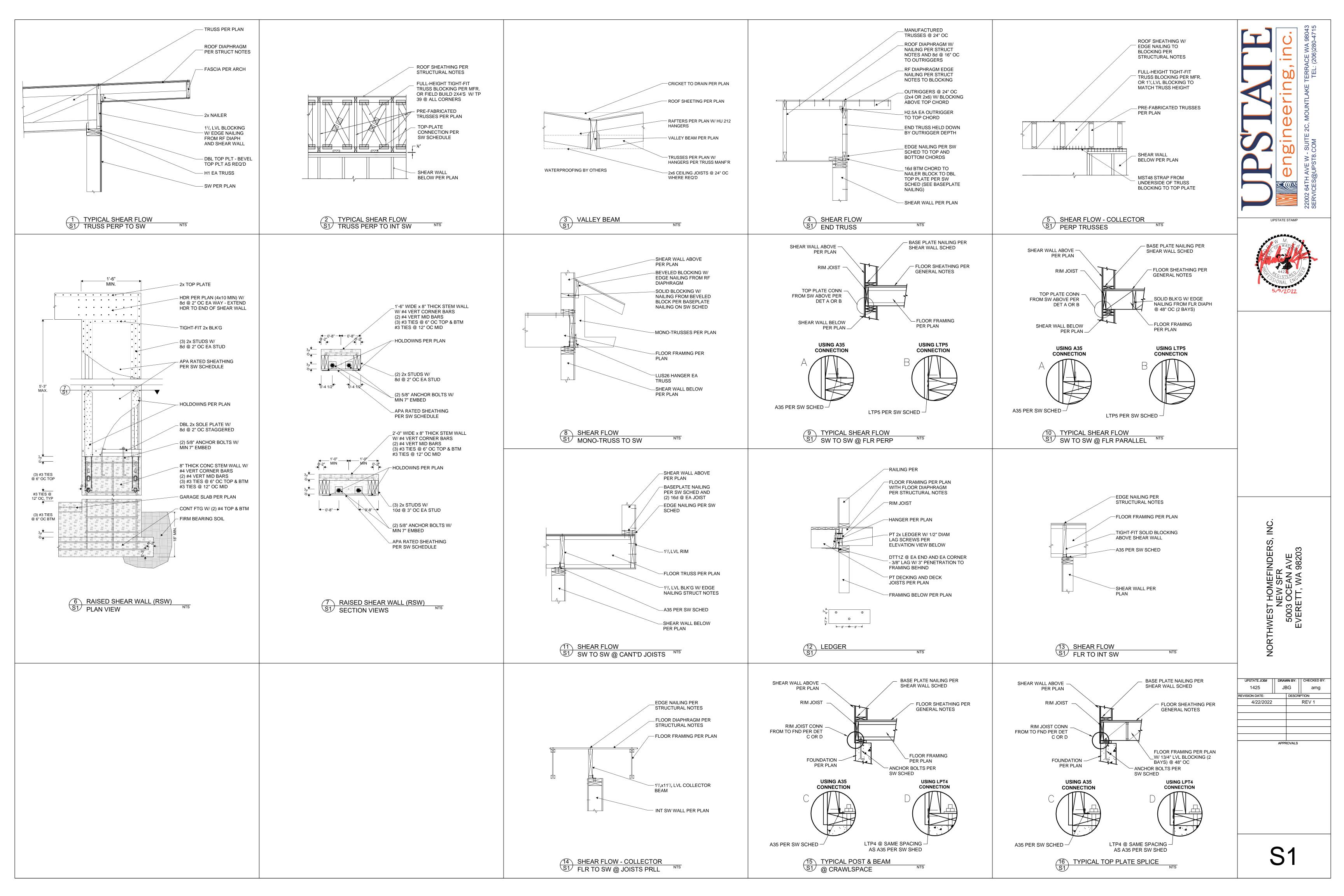
= 1.0

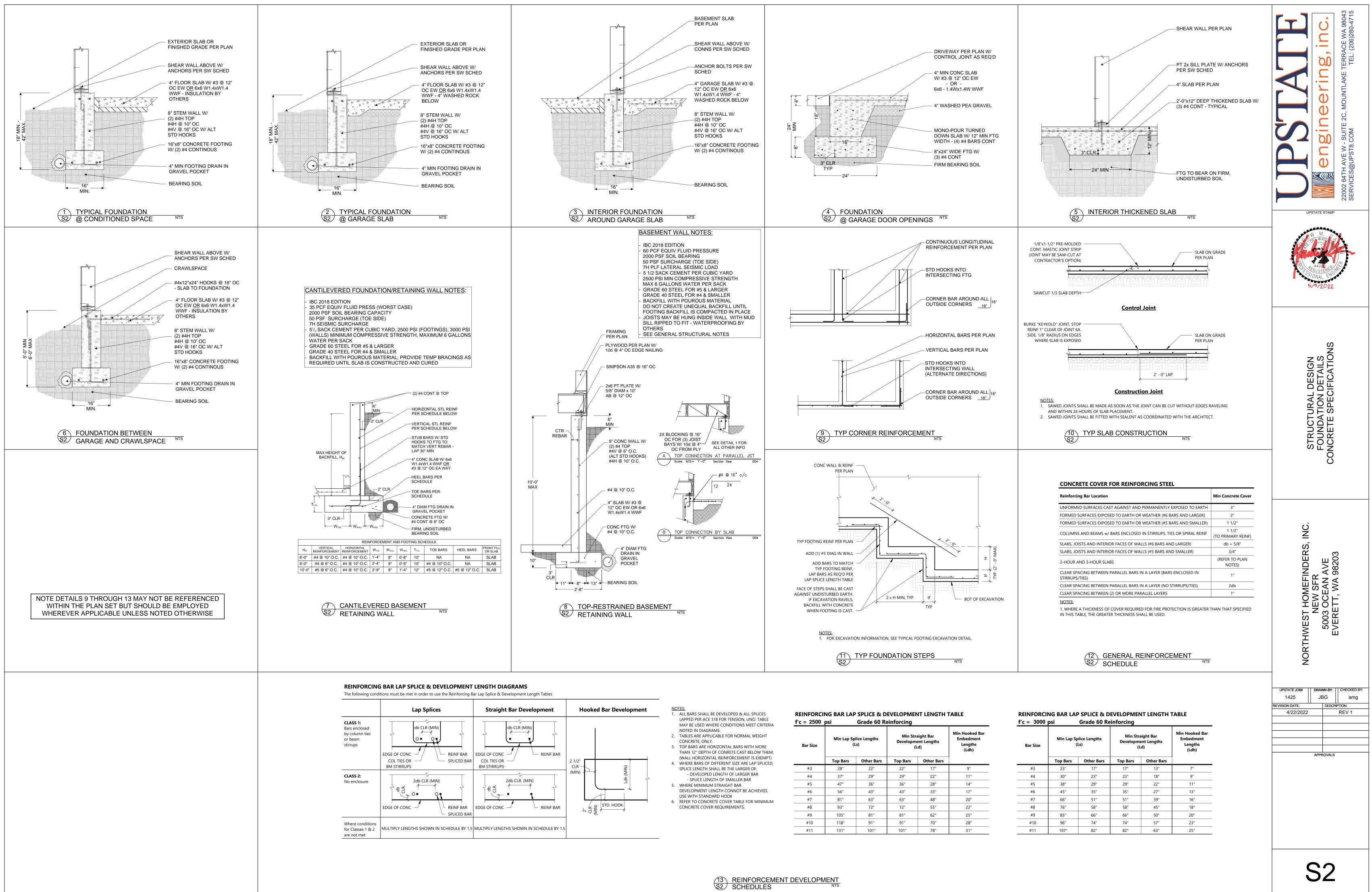
**INIMUM STANDARDS:** EATER):DF-L#2

V8 AT CANTILEVERS)

	NAILING, LOCATION (UNO)
	(3) 8d, TOENAIL EACH END
JSS	(2) 8d, TOENAIL EACH END
	16d FACE NAIL
	(3) 8d, TOENAIL
	(3) 16d
	(3) 10d
	(3) 10d, TOENAIL
	(2) 16d, END NAIL
	16d @ 24" O.C., FACE NAIL
	(4) 8d, TOENAIL
	(8) 16d, EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
	16d @ 16" O.C., FACE NAIL
	(3) 16d @ 16" O.C., FACE NAIL
	(4) 8d, TOENAIL OR (2) 16d, END NAIL*
	(2) 16d, END NAIL
	(2) 16d, FACE NAIL
	(2) 8d, FACE NAIL
	(2) 8d, FACE NAIL
	(3) 8d, FACE NAIL
	(3) 8d, TOENAIL
	8d @ 6" O.C., TOENAIL
	(2) 8d, FACE NAIL
	(2) 16d, BLIND AND FACE NAIL
	(2) 16d, EACH BEARING, FACE NAIL
	20d @ 32" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES AND (2) 20d AT ENDS OF EACH SPLICE
	(3) 16d, EACH JOIST OR RAFTER, FACE NAIL
	(3) 16d, END NAIL
	(2) 8d, EACH END, TOENAIL

Construction
UPSTATE STAMP
STRUCTURAL DESIGN TYPICAL DETAILS MINIMUM CONNECTIONS STRUCTURAL NOTES
NORTHWEST HOMEFINDERS, INC. NEW SFR 5003 OCEAN AVE EVERETT, WA 98203
UPSTATE JOB# DRAWN BY: CHECKED BY: 1425 JBG amg REVISION DATE: DESCRIPTION: 4/22/2022 REV 1 





Bar Size		lice Lengths Ls)	Min Straight Bar Development Lengths (Ld)		
	Top Bars	Other Bars	Top Bars	Other Bars	
#3	28"	22"	22"	17"	
#4	37"	29"	29"	22"	
#5	47"	36"	36"	28"	
#6	56"	43"	43"	33"	
#7	81"	63"	63"	48"	
#8	93"	72"	72"	55"	
#9	105"	81"	81"	62"	
#10	118"	91"	91"	70"	
#11	131"	101"	101"	78"	

Bar Size		(Ls)		Development Lengths (Ld)		Lengths (Ldh)
_	Т	op Bars	Other Bars	Top Bars	Other Bars	
#3		23"	17"	17"	13"	7"
#4		30"	23"	23"	18"	9"
#5		38"	29"	29"	22"	11"
#6		45"	35"	35"	27"	13"
#7		66"	51"	51"	39"	16"
#8		76"	58"	58"	45"	18"
#9		85"	66"	66"	50"	20"
#10		96"	74"	74"	57"	23"
#11		107"	82"	82"	63"	25"