



	INSPECTION REQUESTS:	PROJECT ALERTS:	REQUIRED CONSTRUCTION INSPECTIONS:	
DEVELOPMENT SERVICES GROUP	online:	Construction of the project shall be from <i>approved plans only</i> . No deviation from the approved project plans is allowed without prior approval from the City of Mercer Island. Approved plans must be kept on site and maintained in good condition.	It is the applicant's responsibility to contact DSG to schedule ALL inspections appropriate for the project. Request inspections online at www.MyBuildingPermit.com or by calling the Inspection Hotline at (206) 275-7730. Allow at least 24 hours (48 hours for Reinforcing steel)	test test
9611 SE 36TH STREET MERCER ISLAND, WA 98040	MyBuildingPermit.com	Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including:	in advance of desired inspection. Be specific as to type of inspection.	
PHONE: 206.275.7605 www.mercergov.org	voicemail:	• Site Considerations• ROW restrictions• Additional Fire Code Requirements• Hours of Work• Drainage Requirements• Planning Requirements	Inspector shall initial and date appropriate inspection <i>only</i> if approved. Note: <i>Items marked with an "*" require a separate permit.</i> It is the applicants responsibility to apply for and obtain all City of Mercer Island permits.	
MIEPIan	(206) 275-7730	 Construction Vehicle Parking Restrictions Acess Road Requirements Water Service Requirements Tree Requirements 	INSPECTIONS: (Listed in order of typical sequencing) Inspector Date Approved	
NOTE ALL DECODES AND DRAWINGS ARE SUBJECT TO DURUS DISS		Refer to "Preconstruction Meeting Checklist" provided at the preconstruction meeting for development related requirements.	O Pre-construction Meeting to Review Conditions of Permit Approval. * Tree protection	R
CONTACT INFORMATION:	LOSURE AS REQUIRED BY RCW 42.56	Erosion control measures must be as shown on approved project drawings. All erosion control is to be in place and inspected	B Erosion control	
Applicant is to complete the following information.		Prior to the start of any site work. A City of Mercer Island Business License is required for all subcontractors. Call (206) 275-7783 for more information.	P * Sewer disconnect and cap. If applicable, separate side-sewer permit required * Right-of-way use or work / easement, material delivery, etc. If applicable,	
Applicant Contact information prior to permit issuance: Applicar	nt Contact information <i>post</i> permit issuance:	TREE PROTECTION REQUIREMENTS:	separate ROW permit required Land clearing, grading and demolition	
Name: Name:		Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and must remain in place throughout the project	Temporary power	AN ve be
Address: Address	:	No trees shall be cut without a City of Mercer Island tree permit.	(property line); Geotechnical Engineer / Special Inspector	d.
Phone: Phone:		 Replacement trees must be a minimum of six feet tall at installation. They must be planted and approved prior to final inspection. For this project, trees are authorized to be removed and replaced with trees. 	reports of inspections (pile and shoring installation, etc.)	ction
Email:		This project appears to be within a protected eagle nest area. Contact Federal Fish and Wildlife at (360) 534-9304 or visit their website at http://www.fws.gov/pacific/eagle	(building height and setbacks); Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)	app
		FIRE PROTECTION REQUIREMENTS:	Foundation walls / concrete columns	OF red i
REQUIRED SPECIAL INSPECTIONS / STRUCTURAL OB	SERVATIONS:	Separate Permits are required for ALL fire protection systems. For more information, see http://www.mercergov.org/Page.asp?NavID=2614	Execution damproofing	equi
The owner is responsible for hiring an approved private Special Inspector for th	ne checked inspections noted below. All Special	Fire Sprinkler Monitored Household NFPA 13D Fire Alarm per NFPA 72	Storm drainage, including (but not limited to): Connections to storm Area drains 	oAT all r
Inspectors (except Geotechnical) must be WABO certified.When Special Inspection or Structural Observation is required, the report shall be	e submitted to the City Building Inspector prior to the City	Plus Monitored Sprinkler NEPA 13B Water Flow Alarm	main in ROW • Conveyance piping / cleanouts • Detention systems • Storm drain in ROW	after
Inspection. Note: Inspection by the City Inspector is required in addition to the spector. Do not cover or concert any work prior to the City inspection	Special Inspection or Structural Observation indicated	Image: NFPA 13 Image: Other:	Infiltration systems Control structures / manholes	RT sued
selow. Do not cover of concear any work prior to the City inspection.		Approved Fire Code Alternatives: FCA1 FCA3	Catch basins including Oil-water separator tees Retaining wall drainage	CE Iss
STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR): Engineer of Record: Company:	Phone:		Water Service	
General Conformance to Construction Documents	:		Water as-built drawings	
SOILS / GEOTECHNICAL:		WATER SUPPLY REQUIREMENTS:	* Side sewer installation, including (but not limited to): Connections to side Back-flow valves 	
Special Inspector: Company:	Phone:Phone:	Fire sprinkler design calculations must be provided prior to determining water supply system requirements. Water Supply system upgrade required	sewer main • Grinder pump systems • Connections to existing • Sewer manholes	
Shoring installation and monitoring Verify	v fill material and compaction	City Installation.	side sewer	
Observe and monitor excavation Rocket Verification of soil bearing Pile pl	ery installation lacement (auger cast/driven pile)	Applicant Installation. Required Service Line Size: Required Supply Line Size: Required Meter Size:	Driveway / Access road Underslab electrical / mechanical / plumbing	
Other: Other	:	(water main to meter) (water main to house)	Underslab insulation / vapor barrier / reinforcing	
REINFORCED CONCRETE: Special Inspector: Company:	Phone:	Pressure reducing valve required if pressure exceeds 80 psi.	S Image: Solution of the second s	
<u>Concrete strength</u> Retair	ning wall construction	A Reduced pressure backflow assembly (RPBA) required for all lots with waterfront or non-city water supply (private wells or lake irrigation).	Inter for lateral wood inspection. Nailing-Exterior wall and Shearwall. If applicable, provide Special	
Reinforcing steel and concrete placement Prestr Shotcrete placement Other	ressed / Precast construction	Additional water supply requirements:	 Inspection letter for lateral wood inspection. Rough hydronic installation 	
Other: Other	· ·		Rough fire alarm (wiring inspection)	
STRUCTURAL STEEL: (AISC 360, Chapter N)	Dhava	Image: Stress of the infiltration system required. Image: Stress of the lake. Image: Stress of the infiltration system required. Image: Stress of the lake. Image: Stress of the infiltration system required. Image: Stress of the lake. Image: Stress of the infiltration system required. Image: Stress of the lake. Image: Stress of the infiltration system required. Image: Stress of the lake. Image: Stress of the infiltration system required. Image: Stress of the lake.	Image: Sough fire alarm (wining inspection) Image: Sough	
Special Inspector: Company: Company: Mome	ent Frame construction	S As-built Utility drawings required. Connection to public storm drainage conveyance system req'd.	Solution Image: Solution of the sector of the s	
Structural steel erection, field welds and bolting	· · · · · · · · · · · · · · · · · · ·	B SIDE SEWER REQUIREMENTS:	O * Rough fire sprinkler / hydrostatic and flow (bucket) test U U U U U U	
	·	Side sewer requires a backflow preventer when connecting to the lake line or when the elevation of the lowest plumbing fixture is	Image: Comparing and grazing. In applicable, provide special inspection letter for Internal wood inspection, welding epoxy anchors, etc.	
Special Inspector: Company:	Phone:	lower than the elevation of the upstream manhole rim or when side sewer is shared with one or more properties. Video tape of existing sewer required (see standard details)	Masonry construction (fireplace / walls / veneer / etc.) Image: Insulation installation	
Mortar strength Masonry unit strength Wall r	unit masonry installation	 New connection. Connect to existing. Disconnect permit required. Reconnect permit required. 	Stucco (paper and lath)	
Other: Other		Note: When side sewer is to be connected to the lake line you will need to schedule three (3) days in advance with the City of	Cade Alternative CA1:	
	<u>. </u>	APPROVED CODE ALTERNATIVES:	Code Alternative CA1:	
WOOD: Special Inspector /		Code alternatives must be Inspected. Refer to the Inspection Checklist	Impact Fees Paid (If applicable)	
Engineer of Record: Company:	Phone:	□ CA1: □ CA2:	Final Inspection: Tree Restoration	
Other: Other			• Sprinkler • Fuel Tank Installation	
OTHER SPECIAL INSPECTIONS:			Access Road Fire Extinguishing System Fire Code Alternatives (see below) Fire Alarm System	
Special Inspector: Company:	Phone:Phone:	Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation	FCA1: FCA3: FCA2: FCA4:	
Expansion anchor installations Infiltra	ation System	Inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City reserves the right to request an impervious area survey at any time prior to issuance of Certificate of Occupancy.	Final Inspection: Water supply protection, including (but not limited to)	
Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Description post installed anchors Image: Descrinted anchors Image: Descriptio	:	Surveyor:Phone:	Waterfront property Well water on property	н н <u>х</u>
Alternative construction materials: Other		Building height survey	• Fire / lawn sprinkler • Boiler Final Inspection: Site and utility: includes landscape, utilities and ROW. Site	
The Applicant is required to select all deferred submittals / shop drawings for s	submittal to the City for review and approval prior to item	Impervious surface survey	restoration complete and as-built drawings ready for submittal.	<u>22</u> 22
fabrication / construction.		MAXIMUM 40 PERCENT ALTERATION INSPECTION: MICC 19.01.050(D)(1)(b)(i)	applicable, provide closeout (summary) letters from Engineer, Special	
Image: Connector plate wood trusses Image: Post t Image: Connector plate wood trusses	or cladding	A Building inspection prior to demolition is required for all legally nonconforming single family dwelling to ensure no more than 40 percent of the dwelling's exterior walls are structurally altered. Contact the Building Inspector at (206) 275-7730.	90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO)	
 Premanufactured structures (stairs, etc.) Precast concrete elements Other 	ow wall / curtain wall construction	Civil / Drainage LUP / Setback requirements	Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.	
Other: Other	:	GEOTECHNICAL INFORMATION: Land clearing, grading, filling and foundation work within geologic hazard areas is NOT PERMITTED between October 1 and April 1		AN
ENERGY CODE COMPLIANCE INFORMATION:	tively incorporate or include the Decidential Frenzy Code	without an approved Seasonal Development Limitation Waiver.	Approved Start Date End Date	
Prescriptive Compliance (RECPC) Form into the drawing set.	tively, incorporate of include the Residential Energy Code	Geotechnical Report provided. All construction must comply with the recommendations of the Geotechnical Report. A copy of report and other geotechnical information must be kept on site at all times.	ADDITIONAL REQUIRED CITY INSPECTIONS:	
Sheet:		Geotechnical Engineer	Call the appropriate contact to arrange the inspection. Required Inspection(s): Contact: Phone: Scheduling:	
Building envelope: WSEC Table 402.1.1	eakage Testing. IRC Section R402.4.1.2 WA Amendments	SEASONAL DEVELOPMENT LIMITATION RESTRICTION:		
(include U-factors, insulation and moisture control) Image: P Image: Whole house ventilation: IRC section M1507 WA Amended Image: P Image: Whole house ventilation Image: P Image: Whole house ventilation Image: P Image: P Image: P <td< td=""><td>rovide air leakage test report verifying air leakage rate oes not to exceed 5 air changes per hour.</td><td> Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1. Waiver approved. Grading and excavation permitted subject to all conditions noted in Seasonal Development </td><td></td><td>AW R</td></td<>	rovide air leakage test report verifying air leakage rate oes not to exceed 5 air changes per hour.	 Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1. Waiver approved. Grading and excavation permitted subject to all conditions noted in Seasonal Development 		AW R
(include ventilation option and duct sizing if applicable)	Leakage Testing. WSEC R403.2.2	Limitation Waiver Permit.		
(include specific, written requirements)	h-in Test. wsec R403.2.2.3	Permit number Approved by Date	IMPACT FEES: PLAN REVIEW APPROVALS:	VED VED
(if incorporated within drawing set)			Impact fees apply and are due <i>prior</i> to Final Inspection or on	THI
nttp://www.mercergov.org/files/2012ResidentialEnergyCalcForm.pdf			, whichever occurs first.	APP ON Prove
FILE NAME: DSG CVR 2016 24x36.PDF		F	Date Building Planning Engineering Tree Fire REVISED: JULY 2019	۲ ۲



AVERAGE BUILDING ELEVATION					
PRC	POSED RE	BIDENCE			
WALL	WALL SEGMENT	MIDPT, ELEV.	WALL SEGMENT × ELEV.		
А	13.0'	12 T.Ø'	3589		
В	8.5'	126.0'	1076.7		
С	9.Ø'	126.0'	3949		
D	23.5'	126.0'	2333.5		
E	29.5'	120.0'	43Ø8		
F	14.0'	120.0' 8138.53			
G	3.5'	120.0'			
H	31.5'	121.0/ 4389.17			
	42.5'	126.0'	752Ø.1		
TOTAL	TOTAL 175 21623.5				
AVERAGE BUILDING ELEVATION = 21623.5/175' = 123.56'					
MAXIMUM BUILDING HEIGHT = 123.56' + 30.0' = 153.56'					
PROPOSED BUILDING HEIGHT = 151.95'					

BASEMENT FLOOR AREA CALCULATION					
WALL	LENGTH	COVERAGE	RESULT		
A	9 <i>.</i> Ø8	100%	9.08%		
W	1	100%	1%		
N	12 '	100%	12%		
U	19.33'	6.3	1.22%		
Ш	19.5'	18.6%	3.63%		
TOTAL	60.91'		26.93%		

PORTION OF EXCLUDED BASEMENT FLOOR AREA: 619 (ACTUAL SQ, FT. W/ GARAGE) X (26.93/60.91) = 273.7 SQ. FT. AREA OF BASEMENT EXCLUDED = 619-273.7 = 336 GQ. FT.

GROSS FLOOR AREA		
LOWER FLOOR W/ GARAGE MAIN FLOOR W/ GARAGE UPPER FLOOR TOTAL BAGEMENT EXCLUDED	619 1635 1360 3614	SQ. FT. SQ. FT. SQ. FT. SQ. FT.
TOTAL	3278	5Q. FT. SQ. FT.
LOT AREA SQUARE FOOTAGE ALLOWED (40%)	8,345 3338	SQ. FT. SQ. FT.

IMPERVIOUS SURFACE					
PROPOSED HOME COVERED DECK FRONT PORCH WALKS AND DRIVE	W/ O.H. 1860 SQ. FT. 210 SQ. FT. 79 SQ. FT. 743 SQ. FT.				
TOTAL	2,892 SQ. FT. (34.7%)				
LOT AREA	8,345 SQ. FT.				
ALLOWABLE	3,338 SQ. FT. (40%)				



EXISTING TREES	SPECIES	DIAMETER	RETAINED	
$\langle 1 \rangle$	CHERRY	6"	NO	R.O.W.
2	CHERRY	12 "	YES	
3	EVRGN	14"	NO	
$\langle 4 \rangle$	DEC.	3"(2) 7"	YES	R.O.W.
5	DEC.	ד"	NO	



REINFORCED SILT FENCE



LOT COVER,
MAIN STRUCTURE F DRIVEWAYS COVERED DECK
LOT AREA
PROPOSED LOT C
SQUARE FOOTAGE



HOM. 317 WA, P.O. BOX (ER ISLAND, **IGN** IS C C T \bigcirc SIDENCE \bigcirc ∞ \cap \triangleleft \exists Ň Ш n L $\neg \triangleleft \triangleleft \triangleleft$ ١<u></u> S LIU \mathbb{Q} i— Ш $\underset{\scriptstyle |||}{\cong}$ THE £ \sim \triangleleft

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MICC 19.02.020(F)(3)(d) requires noxious weeds to be removed during new development proposals. Please add a note to the

"Development proposals for a new single-family home shall remove Japanese knotweed (Polygonum cuspidatum) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(F)(3)(a). New landscaping associated with new single-family home shall not incorporate any weeds identified on the King County Noxious Weed list, as amended. Provided, that removal shall not be required if the removal will result in increased slope instability or risk of

Pursuant to MICC 19.02.050(D) any "...rockeries, retaining walls, fences, or any combination thereof, are limited to a maximum height of 42 inches within that portion of any required yard which lies within 20 fee of any improved street." Please indicate the

If the height exceeds the 42-inch height limitation you can apply for a fence height deviation pursuant to MICC 19.02.050(F).

Fence height deviation required for 4' retaining walls.



JOB NO: 21006

REVISED: 9/8/22

DRWN. BY: TH

SHEET NO.

6/13/22

DATE:

GENERAL NOTES

CODE

ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE I.B.C. / I.R.C. BUILDING CODE REQUIREMENTS AND ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.

BUILDING

TYPE V-B SITE CLASS: D OCCUPANCY GROUP: R3

WIND EXPOSURE: B

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD, PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL DISCREPANCIES OR CONFUSIONS TO THE DESIGNER AT THE TIME THEY ARE NOTED.

FOUNDATION

UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1500 PSF. EXTERIOR FOOTINGS SHALL BEAR 1'-6" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACKFILL TO BE THOROUGHLY COMPACTED PER SPECIFICATIONS, PROVIDE (2) #4 (MIN.) CONTINUOUS BOTTOM OF ALL WALLS AND FOOTINGS.

CONCRETE

CLASS AND USE	PSI f'c	MINIMUM SLUMP	SACKS/C.Y.
A - FOOTINGS AND FOUNDATIONS	2500	3 - 4	5-1/2
B - SLABS ON GRADE	2500	3 - 4	5-1/2

NOTE: 3000 PSI CONCRETE IS FOR WEATHERING PURPOSES ONLY. NO SPECIAL INSPECTION REQUIRED

1. AIR-ENTRAINING AGENT (5% TO 1%) TO BE USED IN ALL CONCRETE FLATWORK EXPOSED TO WEATHER

2. POZZOLITH 300 GERIEG (4 OZ. PER 100* OF CEMENT) TO BE USED IN ALL CONCRETE.

3. MIX MAY BE DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 1905 OF THE IBC.

4. WATER - CEMENT RATIO PER IBC TABLE 1904.2.2 \$ 1904.3

REINFORCING STEEL

AGTM AGI5 GRADE 40, REINFORCING STEEL DETAILS SHALL BE PREPARED BY AN EXPERIENCED DETAILER APPROVED BY THE DEGIGNER AND CONFORM TO STANDARD PRACTICE OUTLINED IN ACI REPORT 315. NOTE: GRADE 40 FOR *4 BARS AND SMALLER, GRADE 60 FOR *5 BARS AND LARGER.

CONCRETE COVER OF REINFORCING

- CONCRETE POURED AGAINST EARTH
- FORMED CONCRETE WITH EARTH BACKFILL.
- 1-1/2" BEAMS AND COLUMNS (STIRRUPS, TIES) WALLS EXPOSED TO WEATHER, SLABS ON MOISTURE BARRIER
- WALLS, INSIDE FACE.

LAP COLUMN VERTICALS, CLASS "A" CONCRETE AND MASONRY COLUMN AND WALL VERTICALS 40 DIAMETERS (2' MIN.) LAP ALL OTHER REINFORCING 30 DIAMETERS (2' MIN.). SPLICES AT TENSION REGIONS SHALL NOT BE PERMITTED.

FRAMING

ALL FRAMING TO COMPLY WITH 2018 IBC. NAIL SIZES AND SPACING TO CONFORM TO IRC TABLE 602.3(1)

ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED. EXTERIOR HANGERS TO BE SIMPSON ZMAX OR EQUAL (G185).

STRUCTUAL DESIGN IS BASED ON THE FOLLOWING ALLOWABLE STRESSES (UNITES IN PSI):

WOOD

FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 16, FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS: (2X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, F6 = 850 PSI
(3X AND 4X MEMBERG)	DOUGLAS FIR NO. 1 MINIMUM BASE VALUE, F6 = 1000 PSI
BEAMS: (4x MEMBERS)	HEM-FIR NO. 2
(INCL. 6X AND LARGER)	DOUGLAS FIR NO. 1 MINIMUM BASE VALUE, F6 = 1350 PSI
POSTS: (4X MEMBERS)	DOUGLAS FIR NO. 2 MINIMUM BASE VALUE, Fc = 1300 PSI
(6X AND LARGER)	DOUGLAS FIR NO, 2 MINIMUM BASE VALUE, Fc = 925 PSI
STUDS, PLATES & MISC. FRAMING:	HEM-FIR STANDARD GRADE
EXTERIOR TOP PLATES:	DOUG-FIR STUD GRADE
DECKING: (2×6 TO 4×8)	HEM-FIR COMMERCIAL DEX MINIMUM BASE VALUE, F6 = 1350 PSI
LOADING:	
ROOF: 15 PSF DEAD	LOAD + 25 PSF LIVE LOAD = 40 PSF
FLOOR: 10 PSF DEAD	LOAD + 40 PSF LIVE LOAD = 50 PSF
CEILING: 5 PSF DEAD	LOAD + 5 PSF LIVE LOAD = 10 PSF

10 PSF DEAD LOAD + 60 PSF LIVE LOAD = 10 PSF DECK: INTERIOR PARTITION: 10 PSF EXTERIOR PARTITION: 10 PSF

BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH FLAT CUT WASHERS. WOOD BEARING ON OR INSTALLED WITHIN I" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2" THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS. BETWEEN SUPPORTS PROVIDE BLOCKING OR APPRIVED BRIDGING AT 8'-0" O.C. FOR FLOOR JOISTS, 10'-0" FOR ROOF JOISTS, TYPICAL SILL BOLTS TO BE 5/8" DIAMETER AT 4'-0" O.C. EMBED 10". ALL METAIL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE "STRONG TIE CONNECTORS" AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL.

WOOD TRUSSES

SHALL BE FACTORY FABRICATED TRUSSES. DESIGN AND FABRICATION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE. ENGINEERING DESIGN AND SHOP DRAWINGS BEARING THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON AND SHOWING ALL DETAILS OF CONSTRUCTION INCLUDING BRACING.

TRUSSES SHALL BE DESIGNED FOR THE UNIFORM LOADING AS FOLLOWS: TOP CORD 33 PSF OF TRIBUTARY AREA

BOTTOM CORD 10 PSF OF TRIBUTARY AREA

FABRICATOR SHALL BE APPROVED BY THE DESIGNER.

DRAFTSTOPPING (IRC 302.12)

CONCEALED SPACES AT UPPER FLOOR OPEN TRUSS FRAMING SHALL BE DIVIDED IN APPROXIMATE EQUAL SPACES NOT TO EXCEED 1,000 S.F. AND SHALL CONSIST OF 1/2" GYPSUM BOARD OR 3/8" WOOD STRUCTURAL PANELS. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO FRAMING MEMBERS. THE INTEGRITY OF THE DRAFTSOPS SHALL BE MAINTAINED.

STRUCTURAL GLUE-LAMINATED TIMBER

GLUE LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND AITC STANDARDS. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb=2400 PSI. FV=165 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb=2400 PSI, FV=165 PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 2,000' RADIUS, UNLESS SHOWN OTHERWISE ON PLANS. GLULAM COLUMNS SHALL BE DOUGLAS FIR COMBINATION NO. 5, FC=2400 PSI, E=2,000,000 PSI.

PLYWOOD / OSB

AND Ø.131" DIAMETER P-NAILS MAY BE USED IN LIEU OF 80 NAILS.

ROOF DIAPHRAGM: 1/2" PLYWOOD (PANEL INDEX = 24/16, WITH 8d NAILS AT 6" O.C. AT SUPPORTED PANEL AND AT 12" O.C. AT FIELD (TYPICAL UNLESS NOTED OTHERWISE).

FLOOR DIAPHRAGM: 3/4" PLYWOOD (PANEL INDEX = 24/16) WITH 10d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND AT 12" O.C. AT FIELD (TYPICAL UNLESS NOTED OTHERWISE ON PLAN). OPTIONAL TO USE Ø.148 DIAMETER P-NAILS IN LIEU OF 10D NAILS

STRUCTURAL STEEL

LABORATORY DATA OF PULL-OUT AND SHEAR STRENGTH.

FIREPLACES

MASONRY FIREPLACES AND CHIMNEYS ARE TO BE CONSTRUCTED TO CONFORM TO ALL APPLICABLE PORTIONS OF THE IBC SECTION 2111 AND IRC SECTION R1003. FLUE LINER MINIMUM 5/8" FIRE CLAY (OR EQUIV.) PER IBC SECTION RIØØ3.12 AND TABLE RIØØ3.14. FLUE AREA PER IBC TABLE RIØØ1.1. CHIMNEYS SHALL SUPPORT ONLY THEIR OWN WEIGHT UNLESS SPECIFICALLY DESIGNED TO SUPPORT ADDITIONAL LOADS

ALL FIREPLACES ARE TO BE PROVIDED WITH TIGHTLY-FITTING FLUE DAMPERS, OPERATED WITH A READILY-ACCESSIBLE MANUAL OR APPROVED AUTOMATIC CONTROL AND AN OUTSIDE SOURCE OF COMBUSTION AIR, MINIMUM DUCT SIZE OF 6 SQUARE INCHES IN AREA, PROVIDED WITH READILY-OPERABLE DAMPER LOCATED IN FRONT PART OF FIREBOX.

PREFABRICATED FIREPLACES, CHIMNEYS AND RELATED COMPONENTS TO BEAR U.L., HAVE WASHINGTON STATE CERTIFICATION SEAL OF APPROVAL AND BE INSTALLED PER ANY CONDITIONS OF APPROVAL. DIRECT VENT UNITS ARE REQUIRED WHEN GAS OPERATED

DOORS AND WINDOWS

ALL GLAZING TO BE DOUBLE GLAZING WITH MAXIMUM "U" VALUE OF Ø.28. ALL SKYLIGHTS TO BE DOUBLE GLAZING, MAXIMUM "U" VALUE OF 0.50. FACTORY BUILT WINDOWS TO BE CONSTRUCTED TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER LINEAL FOOT OF OPERABLE SASH PERIMETER AS TESTED BY STANDARD AGTM E 283.73, SITE BUILT AND MILLWORK SHOP BUILT WOODEN SASH ARE EXEMPT FROM INFILTRATION CRITERIA ABOVE, BUT MUST BE MADE TIGHTLY FITTING AND WEATHER-STRIPPED OR CAULKED. SLIDING GLASS DOORS TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER INFILTRATION OF 1.0 CFM PER SQUARE FOOT OF DOOR AREA.

CAULK OR WEATHER-STRIP WINDOWS, DOORS AND PENETRATIONS GLAZING IN DOORS, AND GLAZING IN HAZARDOUS LOCATIONS DESCRIBED IN IRC SECTION R308, TO BE SAFETY GLAZING

(I.R.C. R3Ø8) GLAZING

INSULATION UNLESS OTHERWISE NOTED, INSULATION TO BE AS FOLLOWS:

LOCATION

CEILING & ROOFS

EXTERIOR WALLS WALLS BETWEEN HOUSE & GARAGE

FLOORS OVER UNHEATED SPACE SLAB PERIMETER: (2)

ELECTRIC WATER HEATERS (3)

GAS WATER HEATERS (4)

DUCTS IN UNHEATED SPACES

FOOTNOTES:

(1) R-38 IN SINGLE RAFTER, JOIST VAULTED CEILINGS

SEE BASIC FOUNTATION DETAILS.

(3) MUST BE INTEGRATED WITH UNIT. UNIT MUST DISLAY VERIFICATION.

SMOKE ALARMS (I.R.C. R314) ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NEPA 72. SMOKE ALARMS SHALL BE 110V INTERCONNECTED WITH BATTERY BACK-UP AND SHALL BE LOCATED IN:

A. EACH SLEEPING ROOM b. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS C. ON EACH ADDITIONAL STORY OF THE DWELLING

EFFECTIVE JAN. 1, 2011: SINGLE STATION CARBON MONOXIDE ALARMS COMPLYING WITH UL 2034 SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND MANUFACTURERS INSTRUCTIONS AND BE INSTALLED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS AND EACH FLOOR LEVEL. HEAT ALARMS (I.R.C. R314)

R314.2.3 New attached garages. A heat detector or heat alarm rated for the ambient outdoor temperatures and humidity shall be installed in new garages that are attached to or located under new and existing dwellings. Heat detectors and heat alarms shall be installed in a central location and in accordance with the manufacturer's instructions.

R314.4.1 Heat detection interconnection. Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.

TO PS 1. USE THICKNESS AND NAILING AS SHOWN ON THE DRAWINGS. ALL PLYWOOD SHALL BE C-D INTERIOR GRADE WITH EXTERIOR GLUE. EXCEPT AS OTHERWISE SHOWN OR NOTED, PROVIDE 8d AT 6" O.C. ON CENTER AT SUPPORTED PANEL EDGES AND 8d AT 12" ON CENTER ON OTHER SUPPORTING MEMBERS FOR WALLS, ROOF AND FLOORS. NOTE: EQUIVALENT RATED ORIENTED STRAND BOARD (0.5.B.) MAY BE USED IN LIEW OF PLYWOOD CALLED OUT.

STRUCTURAL GRADE ASTM A36, Fy = 36,000 PSI. PIPE COLUMNS ASTM A53, GRADE B, Fy = 35,000 PSI. STRUCTURAL TUBING COLUMNŠ ASTM A500, GRADE B, Fy = 46,000 PSI. ALL STEEL EXCEPT STEEL EMBEDDED IN CONCRETE SHALL BE GIVEN ONE SHOP COAT OF APPROVED PAINT. WELDS TO BE 3/16" MINIMUM CONTINUOUS FILLET BY WABO CERTIFIED WELDERS. FIELD CONNECTIONS NOT SHOUN SHALL BE BOLTED FRAMED BEAM CONNECTIONS PER AISC. ALL BOLTS TO BE A325. DURING ERECTION, STRUCTURAL STEEL SHALL BE SECURED FROM COLLAPSING WITH TEMPORARY BRACING, WHERE EXPANSION ANCHORS ARE SPECIFIED. THE

CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER A SAMPLE OF THE ANCHOR TO BE USED WITH

GLAZING INSTALLED IN HAZARDOUS LOCATIONS AS DEFINED IN SECTION R308.4 SHALL BE PROVIDED WITH A MANUFACTURER'S DESIGNATION SPECIFYING WHO APPLIED THE DESIGNATION, THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES. THE DESIGNATION SHALL BE VISIBLE IN THE FINAL INSTALLATION AND CANNOT BE REMOVED FROM THE WINDOW WITHOUT BEING DESTROYED.

MINIMUM	MAXIMUM
INSULATION ADDED	ASSEMBLY "U" VALUE
R-49, R-38 (ADV.)	<i>.</i> Ø3
R-21	.05
R-2 1	.Ø5
R-38	<i>.</i> Ø3
R-10	
PER ASHRAE 90A-80	
PER ASHRAE 90A-80	
PER WSEC TABLE 4-16	

(2) APPLIED TO PERIMETER OF SLAB FROM TOP OF SLAB DOWNWARD HORIZONTALLY MINIMUM 24"

(4) UNLESS UNIT CONFORMS TO ASHRAE 30A-80 AND IS LABELED TO SIGNIFY CONFORMANCE

INFILTRATION CONTROL

(W.S.E.C. SECTION 402.4)

- 1) EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS + OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOOR AND ROOFS: AND ALL OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED AND GASKETED OR WEATHERSHTRIPPED TO LIMIT AIR LEAKAGE. OTHER EXTERIOR JOINTS AND SEAMS SHALL BE SIMILARLY TREATED, OR TAPED, OR COVERED WITH MOISTURE VAPOR PERMEABLE HOUSEWRAP
- 2) ALL EXTERIOR DOORS OR DOORS SERVING AS ACCESS TO AN ENCLOSED UNHEATED AREA SHALL BE WEATHERSTRIPPED TO LIMIT LEAKAGE AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION.
- EACH SHEET SHALL BEAR THE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, ALL GRADING SHALL CONFORM 3) RECESSED LIGHTING FIXTURES: WHEN INSTALLED IN CONTACT WITH THE BUILDING ENVELOPE SHALL BE
 - a. TYPE IC RATED AND CERTIFIED UNDER AGTM E283 TO HAVE NO MORE THAN 2.0 CFM AIR MOVEMENT
 - b. THE LIGHTING FIXTURE SHALL BE TESTED AT 15 PASCALS OR 1.51 LBS/SF PRESSURE DIFFERENCE AND LABELED SHOWING COMPLIANCE C. SHALL BE INSTALLED WITH A GASKET OR CAULK AT THE CEILING TO PREVENT AIR LEAKAGE
 - 4) BUILDING AIR LEAKAGE TESTING REQUIRED PER W.S.E.C 402.4.1.2 AND SHALL OCCUR ANYTIME AFTER ROUGH IN AND AFTER INSTALLATION OF PENETRATIONS OF THE BUILDING ENVELOPE. ACCEPTABLE AIR LEAKAGE TO BE LESS THAN 0.00030 SLA WITH A BLOWER DOOR AT A PRESS OF 50 PASCALS (0.2 INCH W.G.).

DUCTWORK

A - DUCT SYSTEMS SHALL BE OF METAL AS SET FORTH IN TABLE MIGØ1.1.1(2) OR FACTORY-MADE AIR DUCTS COMPLYING WITH MIGOL2, AND 160121 I.R.C. B - JOINTS AND SEAMS SHALL BE SUBSTANTIALLY AIRTIGHT (MIGØI,4,1 L.R.C.)

- C INSTALLATION OF DUCTS SHALL COMPLY WITH SECTION MIGØI.4 I.R.C.
-) DUCT INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M1601.3 I.R.C.
- E BUILDING CAVITIES MAY NOT BE USED AS DUCTS (WAC MIGØ1.1.1) F - INSTALLATION OF DUCTS IN EXTERIOR WALLS, FLOORS OR CEILINGS SHALL NOT DISPLACE
- REQUIRED ENVELOPE INSULATION
- SEAMS AND JOINTS: (MIGØI.4.1 I.R.C.)
- DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH RS-33 USING THE MAXIMUM DUCT LEAKAGE RATES. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION MIGOLS OF THE IRC OR 603.9 IMC. DUCT TIGHTNESS TESTING SHALL BE CONDUCTED TO VERIFY THAT DUCT ARE SEALED AND A SIGNED AFFIDAVIT DOCUMENTING THE TEST RESULTS SHALL BE PROVIDED TO THE JURISDICTION. DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER POST-CONSTRUCTION TESTING OR ROUGH-IN TESTING
 - 2018 WASHINGTON STATE ENERGY CODE

TABLE R402.1.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENTA

CLIMATE ZONE 5 AND MARINE 4				
Fenestration U-Factorb0.30				
Skylightb U-Factor	0.50			
Ceiling R-Valuee	49			
Wood Frame Wallg,h R-Value	21 int			
Floor R-Value 30				
Below-Gradec,h Wall R-value	10/15/21 int + 5TB			
Slabd,f R-Value & Depth 10, 2 ft				

For SI: 1 foot = 304.8 mm, ci = continuous insulation, int = intermediate framing.

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights.
- c. "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
- d. R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1. e. For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
- f. R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.
- g. For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
- h. Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78 percent of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

R402.1.2 R-value computation. Insulation R-value shall be determined as specified in Section R303.1.4. Insulation material used in layers, such as framing cavity insulation or continuous insulation, shall be summed to compute the corresponding component R-value. The manufacturer's settled Rvalue shall be used for blown insulation. Computed R-values shall not include an R-value for other building materials or air films. Where insulated siding is used for the purpose of complying with the continuous insulation requirements of Table R402.1.1, the manufacturer's labeled R-value for insulated siding shall be reduced by R-0.6.

R402.1.3 U-factor alternative. An assembly with a U-factor equal to or less than that specified in Table R402.1.3 shall be permitted as an alternative to the R-value in Table R402.1.1. U-factors shall be determined as specified in Section R402.1.5.

CERTIFICATE (WSEC R401.3)

A permanent certificate shall be completed by the builder or registered design professional and posted on a wall in the space where the furnace is located, a utility room, or an approved location inside the building. When located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, below-grade wall, and/or floor) and ducts outside conditioned spaces + U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leakage testing done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

LIGHTING (WSEC R404)

LIGHTING EQUIPMENT (MANDATORY). A MINIMUM IF 90% OF LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS IN ACCORDANCE WITH 2018 WEEC SECTION R404.1

INTERMITTENT WHOLE HOUSE VENTILATING SYSTEM USING EXHAUST FANS

2018 INTERNATIONAL REGIDENTIAL CODE (IRC MI507.3) CHAPTER 51-52 W.A.C. - EFFECTIVE FEB. 1, 2021 ACCORDING TO WA STATE AMENDENTS VIA WAC 51-51

INTERMITTENT WHOLE HOUSE VENTILATION SYSTEMS SHALL OPERATE INTERMITTENTLY AND CONTINUOUSLY. THE SYSTEM SHALL HAVE A AUTOMATIC 24-HOUR CLOCK TIMER SET TO OPERATE PER FRACTIONAL OPERATION TIME IN MI501.3.2. CONTROLS SHALL BE CAPABLE OF OPERATING THE VENTILATION SYSTEM WITHOUT ENERGIZING OTHER ENERGY CONSUMING APPLIANCES. A LABEL SHALL BE AFFIXED TO THE CONTROLS THAT READS "WHOLE HOUSE VENTILATION (SEE OPERATING INSTRUCTIONS)". OUTDOOR AIR WILL BE DRAWN FROM AIR INLETS INSTALLED IN WINDOWS.

WHOLE HOUSE VENTILATION FANS:

a. FAN AIRFLOW RATING AND DUCT SYSTEM SHALL BE DESIGNED AND INSTALLED TO DELIVER AT LEAST THE OUTDOOR AIRFLOW PER TABLE, ADJUSTED PER THE EXCEPTION b. EXHAUST FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE. C. DOORS WILL BE UNDERCUT BY 1/2" PER THE WASHINGTON STATE ADMENDMENTS RISO1.3.4.4

FAN NOISE: (IRC MI5Ø7.3.4.2)

a. WHOLE HOUSE FANS LOCATED 4 FEET OR LESS FROM THE INTERIOR GRILLE SHALL HAVE A SONE RATING OF 1.0 OR LESS MEASURED AT Ø.10 INCHES WATER GAUGE.

6. MANUFACTURER'S FAN NOISE RATINGS SHALL BE DETERMINED ACCORDING TO HVI 915 C. REMOTELY MOUNTED FANS SHALL BE ACOUSTICALLY ISOLATED FROM THE STRUCTURAL ELEMENTS OF THE BUILDING AND FROM ATTACHED DUCT WORK USING INSULATED FLEXIBLE DUCT OR OTHER APPROVED MATERIAL

EXHAUST DUCTS (IRC 1506.1) a. SHALL TERMINATE OUTSIDE THE BUILDING.

6. SHALL BE EQUIPPED WITH BACK-DRAFT DAMPERS

C. ALL EXHAUST DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED TO A MINIMUM OF R-4.5 d. EXHAUST OUTLETS SHALL COMPLY WITH SECTION 501.2

OUTDOOR AIR (IRC MI5Ø7.3.4.4)

EXHAUST FAN ONLY VENTILATION SYSTEMS SHALL PROVIDE OUTDOOR AIR THROUGH AIR INLETS INSTALLED IN WINDOWS. INLETS SHALL BE \pm CONTROLLABLE WITH SECURE OPENINGS, SHALL BE DESIGNED TO NOT COMPROMISE THE THERMAL PROPERTIES OF THE BUILDING ENVELOPE, ACCESSIBLE TO OCCUPANTS AND SCREENED. INLETS SHALL PROVIDE NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA OF OPENING FOR EACH 10CFM OF OUTDOOR AIR REQUIRED IN TABLE 1507.3.3. EACH OCCUPIABLE SPACE SHALL HAVE A MINIMUM OF ONE AIR INLET THAT HAS A MINIMUM OF 4 SQUARE INCHES OF NET FREE AREA.

SOURCE-SPECIFIC VENTILATION (IRC MI507):

SOURCE SPECIFIC EXHAUST VENTILATION IS REQUIRED IN EACH KITCHEN, BATHROOM, WATER CLOSET, LAUNDRY ROOM, INDOOR SWIMMING POOL, SPA, AND OTHER ROOMS WHERE EXCESS WATER VAPOR OR COOKING ODOR IS PRODUCED. THE MINIMUM SOURCE SPECIFIC VENTILATION EFFECTIVE EXHAUST CAPACITY SHALL NOT BE LESS THAN LEVELS SPECIFIED IN TABLE 1507.4

TABLE 1503.3.(1)

VENTILATION RATES FOR ALL GROUP R PRIVATE DWELLINGS (CONTINUOUSLY OPERATING SYSTEM):

UHOLE HOUSE VENTILATION PER SECTION MI505.4

INTERMITTENTLY OPERATION VENTILATION SYSTEM PER IRC SECTION MI50.1.2 REF TO TABLE MI505.4 (1) FOR MINIMUM OUTDOOR AIRFLOW RATES - CFM RUN TIME: ON ONCE EVERY THREE HOURS, FOR ONE HOUR PER TABLE MI5Ø1.3.2 OPERATION: TIME CLOCK TO OPEN DAMPER LOCATED IN FRESH AIR INTAKE DUCT BETWEEN THE OUTSIDE CAP AND THE RETURN AIR DUCT AT FURNACE, AND TIME CLOCK ALSO STARTS HE FURNACE FAN TO DISTRIBUTE FRESH AIR THROUGH THE HEAT DUCT SYSTEM THAT WAS BROUGHT IN THROUGHT THE AIR INTAKE DUCT. THE AIR VOLUME BROUGHT IN WILL BE FLOW TEGTED AND ADJUSTED TO MATCH THE AMOUNT REQUIRED BY CALCULATIONS. (PRIOR TO THE FINAL INSPECTION)

FLOOR	BEDROOMS				
AREA	Ø-1	2	з	4	5 OR MORE
LESS THAN 500	3Ø CFM	30 CFM	35 CFM	45 CFM	50 CFM
501-1 <i>,000</i>	30 CFM	35 CFM	40 CFM	50 CFM	55 CFM
1,001-1,500	30 CFM	40 CFM	45 CFM	55 CFM	60 CFM
1,501-2,000	35 CFM	45 CFM	50 CFM	60 CFM	65 CFM
2,001-2,500	40 CFM	50 CFM	55 CFM	65 CFM	70 CFM
2,501-3,000	45 CFM	55 CFM	60 CFM	70 CFM	75 CFM
3,001-3,500	50 CFM	60 CFM	65 CFM	75 CFM	80 CFM
3,501-4,000	55 CFM	65 CFM	70 CFM	80 CFM	85 CFM
4,001-4,500	60 CFM	70 CFM	75 CFM	85 CFM	90 CFM
4,501-5,000	65 CFM	75 CFM	80 CFM	90 CFM	95 CFM

FRACTIONAL OPERATION TIME (f) OF 24-HR TIMER TO BE SET BY MECHANICAL CONTRACTOR, BASED ON

- 4-HOUR CYCLE, 150CFM (116 cfm @ 0.25in WC) FAN ____, ASHREA 62.2-2010 AND TABLE MI507.3.3(2) THE ON TIME SHALL BE± - CONTINUOUS FAN RATE 60: f= .52 AND WILL RUN 125 MINUTES PER 4-HR CYCLE
 - CONTINUOUS FAN RATE 15± f=.65 AND WILL RUN 156 MINUTES PER 4-HR CYCLE CONTINUOUS FAN RATE 90± f=.18 AND WILL RUN 181 MINUTES PER 4-HR CYCLE - CONTINUOUS FAN RATE 105: f= 91 AND WILL RUN 218 MINUTES PER 4-HR CYCLE

EXHAUST FAN REQUIREMENTS (SECTION 303.3.2 V.I.A.Q.)

- a, BATHROOMS, LAUNDRIES, WATER CLOSETS OR SIMILAR ROOMS SHALL HAVE A MINIMUM FAN FLOW RATING NOT LESS THAN 50 cfm @ 0.25 WATER GAUGE. 6. KITCHENS SHALL HAVE A MINIMUM FAN FLOW RATING NOT LESS THAN 100 cfm @ 0.25 WATER
- GAUGE. HOWEVER, WHERE A RANGE HOOD OR DOWN DRAFT EXHAUST FAN IS USED THE MINIMUM FAN FLOW RATING SHALL NOT BE LESS THAN 100 cfm @ 0.10 WATER GAUGE.
- C. EXHAUST FANS CANNOT TERMINATE WITHING 3 FT. FROM ANY OPERABLE OPENING PER IRC RI506.3 SOURCE SPECIFIC VENTILATION DUCTS

a. MUST TERMINATE OUTSIDE THE BUILDING

- b. EXHAUST DUCTS SHALL BE EQUIPPED WITH BACK-DRAFT DAMPERS
- C. VENTILATION DUCTS IN UNCONDITIONED SPACE WILL REQUIRE R-8 INSULATION PER WSEC R403.3.1 d. TERMINAL ELEMENTS MUST BE SCREENED AND SIZED TO BE GREATER THAN OR EQUAL TO THE NET FREE AREA OF THE DUCT



3105 TITH PL. SE	MERCER ISLAND, W,
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JOB NO: 21006 DATE: 6/13/22 DRWN. BY: TH REVISED:





2018 IRC R302.6: Dwelling/garage separation required: The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. Ceilings and beams will be covered by 5/8" Type X gypsum run perpendicular to the floor joists (see 2018 IRC Table R702.3.5 footnote e)

Openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8-inches (35mm) in thickness, solid or honeycomb core steel doors not less than 1-3/8 inches (35mm) thick, or 20-minute fire-rated doors, equipped with a self-closing device.

R314.4.1 Heat detection interconnection. Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.

4 IS"x24" MIN. CRAWL SPACE ACCESS WEATHERSTRIP & INSULATE TO LEVEL EQUAL TO SUROUNDING SURFACES.

NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5 SHEET NO.

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WHOLE HOUSE VENTILATION PER SECTION MI505.4

INTERMITTENTLY OPERATION VENTILATION SYSTEM PER IRC SECTION MI50.1.2 REF TO TABLE MI5005.4 (1) FOR MINIMUM OUTDOOR AIRFLOW RATES - CFM RUN TIME: ON ONCE EVERY THREE HOURS, FOR ONE HOUR PER TABLE MI5/07.3.2 OPERATION: TIME CLOCK TO OPEN DAMPER LOCATED IN FRESH AIR INTAKE DUCT BETWEEN THE OUTSIDE CAP AND THE RETURN AIR DUCT AT FURNACE, AND TIME CLOCK ALSO STARTS THE FURNACE FAN TO DISTRIBUTE FRESH AIR THROUGH THE HEAT DUCT SYSTEM THAT WAS BROUGHT IN THROUGHT THE AIR INTAKE DUCT. THE AIR VOLUME BROUGHT IN WILL BE FLOW TESTED AND ADJUSTED TO MATCH THE AMOUNT REQUIRED BY CALCULATIONS. (PRIOR TO THE FINAL INSPECTION)

BEDROOMS

FLOOR

AREA	Ø-1	2	3	4	5 OR MORE
LESS THAN 500	3Ø CFM	3Ø CFM	35 CFM	45 CFM	50 CFM
501-1,000	3Ø CFM	35 CFM	40 CFM	5Ø CFM	55 CFM
1,001-1,500	3Ø CFM	40 CFM	45 CFM	55 CFM	60 CFM
1,501-2,000	35 CFM	45 CFM	50 CFM	60 CFM	65 CFM
2,001-2,500	40 CFM	50 CFM	55 CFM	65 CFM	70 CFM
2,501-3,000	45 CFM	55 CFM	60 CFM	70 CFM	75 CFM
3,001-3,500	50 CFM	60 CFM	65 CFM	75 CFM	80 CFM
3,501-4,000	55 CFM	65 CFM	7Ø CFM	80 CFM	85 CFM
4,001-4,500	60 CFM	70 CFM	75 CFM	85 CFM	90 CFM
4501-5,000	65 CFM	75 CFM	80 CFM	90 CFM	95 CFM

CLIMATE ZONES 5 AND MARINE 4 GLAZING U-FACTOR: VERTICAL U=.28, OVERHEAD U=.50 DOOR U-FACTOR: U=.28 INSULATION: CEILING: R-49, R-38 (ADV), VAULTED CEILING: R-38 ABOVE GRADE WALLS: R-21, BELOW GRADE WALLS: R-21 FLOOR OVER VENTED CRAWL SPACE: R-38 SLAB ON GRADE: R-10

ENERGY CODE COMPLIANCE

3.5a Air-source, centrally ducted heat pump with minimum HSPF of 11.0. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency.

unit and shall meet the following standards:

Dishwasher – Energy Star rated Refrigerator (if provided) – Energy Star rated

Washing machine – Energy Star rated

Dryer – Energy Star rated, ventless dryer with a minimum CEF rating of

MECHANICAL VENTILATION REQUIRED VENTILATION PER TABLE MI507.3.3 (1) <u>90 CFM</u>

INTERMITTENT RUN TIME FACTOR 2 = <u>180 CFM</u> PROVIDE WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED AIR SYSTEM MI507.3.5

2018 IRC R302.6: Dwelling/garage separation required: The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. Ceilings and beams will be covered by 5/8" Type X gypsum run perpendicular to the floor joists (see 2018 IRC Table RT02.3.5 footnote e) DIRECT VENT FIREPLACE 2 INSTALL PER MANUFACTURERS SPECIFICATIONS CONC. FIBERBOARD @ TUB & SHOWER 3 SURROUND TO 6' ABOVE DRAIN NOTE: PER MI503.6, EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE \setminus EQUAL TO THE EXHAUST RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST SYSTEM

A MINIMUM OF 75% OF ALL LIGHT FIXTURES WILL BE HIGH EFFICACY. (WSEC R404.1)

5 Openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8-inches (35mm) in thickness, solid or honeycomb core steel doors not less than 1-3/8 inches (35mm) thick, or 20-minute fire-rated doors, equipped with a self-closing device.

R314.4.1 Heat detection interconnection. Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is (6) installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.

NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5

SQUARE FOOT,	AGE S	UMMARY	
LOWER FLOOR	257	SQ. FT.	
MAIN FLOOR	1332	SQ. FT.	
UPPER FLOOR	13Ø5	SQ. FT.	
TOTAL	2894	SQ. FT.	
LOWER GARAGE	3Ø7	SQ. FT.	
GARAGE	255	SQ. FT.	
COVERED DECK	210	SQ. FT.	
UPPER DECKS	184	SQ, FT,	

ES 40 **MES** 66 317 WA, H DH .O. BOX (ISLAND, ARLIE GN ER P CH IS FRC \geq \bigcirc SIDENCE \bigotimes^{\otimes} \mathcal{O} \triangleleft Э $\hat{0}$ NΩ () $\overline{\mathbf{N}}$ S L L L i μ \rightarrow () ∐∐ Z Ш Ň M 工 \triangleleft \mathbf{H} $m \geq$ JOB NO: 21006 DATE: 6/13/22 DRWN. BY: TH REVISED: 9/30/22

STAIR LIGHTING ALL STAIRWAYS SHALL BE PROVIDED WITH LIGHT SOURCES. LIGHT ACTIVATION CONTROLS SHALL BE ACCESSIBLE AT THE TOP AND BOTTOM OF INTERIOR STAIRWAYS AND WITHIN DWELLING UNIT FOR EXTRIOR STAIRS IRC SECTIONS R303.7 & R311.7.9

1	22"x30" ATTIC ACCESS. WEATHERSTRIP & INSULATE OVER TO EQUAL CEILING INSULATION, PROVIDE WOOD SURROUND TO PREVENT LOOSE INSULATION SPILLAGE TO LIVING SPACE. (IBC SEC. R807.1)
2	CONC. FIBERBOARD @ TUB & SHOWER SURROUND TO 6' ABOVE DRAIN

- 3 DIRECT VENT FIREPLACE INSTALL PER MANUFACTURERS SPECIFICATIONS
- 4 GUARDS ARE NOT OF GLASS BALUSTER CONSTRUCTION. IF GUARDS TO BE OF GLASS BALUSTER CONSTRUCTION, PROVIDE DETAILS OF CONSTRUCTION. GLASS INFILL IS PERMITTED.

NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5

SCALE: 1/4" = 1' - Ø"

	ach dw	elling unit in a residential building shall compl	y with sufficient o	ptions fro	om Table I	R406.2 (fue
nı Cr	ormaliz redits.	zation credits) and Table 406.3 (energy credits To claim this credit, the building permit drawi) to achieve the fo ngs shall specify th	llowing n e option	selected a	number of and the
m Of	f opera	m tested building air leakage, and show the qu tion.	alifying ventilatio	n system	and its co	ontrol seque
1	I. Smal Dwo	I Dwelling Unit: 3 credits elling units less than 1,500 sf in conditioned fle	oor area with less	than 300	sf of fene	estration are
	Add 2.)Medi	ditions to existing building that are greater tha ium Dwelling Unit: 6 credits	n 500 sf of heated	d floor are	ea but less	s than 1,500
2	All of Al	dwelling units that are not included in #1 or #3 Dwelling Unit: 7 credits				
	Dwo Dwo 1 Addi	elling units exceeding 5,000 sf of conditioned f	loor area			
	All	other additions shall meet 1-3 above				
		Summary of T	able R406.2		1	
H	leating Options	Fuel Normalization Descriptions	Credits - selec heating opt	t ONE ion	L	Jser Notes
	1	Combustion heating minimum NAECAb	0.0			
	2	Heat pumpc Electric resistance heat only - furnace or zonal	-1.0	•		
	4	DHP with zonal electric resistance per option 3.4	0.5			
F	5 Enerav		Credits - selec	t ONE		
C	Options	Energy Credit Option Descriptions	energy option fro category d	om each		
	1.1	Efficient Building Envelope	0.5			
	1.3	Efficient Building Envelope	0.5	۲		
	1.4	Efficient Building Envelope	1.0			
	1.6	Efficient Building Envelope	3.0			
	1.7 2 1	Efficient Building Envelope	0.5			
	∠.1 2.2	Air Leakage Control and Efficient Ventilation	1.0			
	2.3	Air Leakage Control and Efficient Ventilation	1.5			
	2.4 3.1a	Air Leakage Control and Efficient Ventilation High Efficiency HVAC	2.0			
	3.2	High Efficiency HVAC	1.0			
	3.3a 3.4	High Efficiency HVAC High Efficiency HVAC	1.5 1.5			
	3.5	High Efficiency HVAC	1.5			
	3.6a	High Efficiency HVAC	2.0			
	4.1	High Efficiency HVAC Distribution System	0.5	0		
	5.1d	Efficient Water Heating	0.5			
	5.2	Efficient Water Heating	0.5	A		
	5.4	Efficient Water Heating	1.5	W		
	5.5	Efficient Water Heating	2.0			
	D.0	Efficient water neating	10			
	6.1e	Renewable Electric Energy (3 credits max)	1.0			
	6.1e 7.1	Renewable Electric Energy (3 credits max) Appliance Package	1.0 0.5			
a. b. c.	6.1e 7.1 . An alte whic . Equipn . Equipn	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2)	2.5 1.0 0.5 s 6.0 N/sf (equivalent) of	heated flc	oor area or	500 W,
a. b. c. d. e.	6.1e 7.1 An alte whic Equipn Equipn You ca with . 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) ment listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. edit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and	2.3 1.0 0.5 s 6.0 N/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions	heated flc bry 5. Opt i o 3 credits	oor area or ion 5.1 ma max.	500 W, y be combir
a. b. c. d. e.	6.1e 7.1 An alte whic Equipn Equipn You ca with . 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) hent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. edit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and Energy Credits (201	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 0.0	heated flc bry 5. Opt i c 3 credits	oor area or ion 5.1 ma max.	500 W, y be combir
a. b. c. d. e.	6.1e 7.1 An alte whic Equipn Equipn You ca with . 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) hent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. Energy Credits (201 TABLE 2018 ENE	1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 COOE 406.3 RGY CREDITS	heated flo bry 5. Opt i b 3 credits c c c c c c c c c c c c c	oor area or ion 5.1 ma max.	500 W, y be combir
a. b. c. d. e.	6.1e 7.1 An alte whic Equipn Equipn You ca with 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. edit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE	1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 406.3 RGY CREDITS	heated flo	oor area or ion 5.1 ma max. CRE	500 W, y be combir
a. b. c. d. e.	6.1e 7.1 An alte whic Equipn Equipn You ca with 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) hent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. edit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE	2.3 1.0 0.5 s 6.0 N/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 406.3 RGY CREDITS	heated flo ory 5. Opti o 3 credits	oor area or ion 5.1 ma max. CRE II Other	500 W, y be combir DIT(S) Group R-2
a. b. c. d. e. OPTION 1. EFFICII	6.1e 7.1 An alte whic Equipn You ca with 1.0 cre See t	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. edit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS Figs from Itoms 1.1 through 1.7 may be selected if	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 0 406.3 RGY CREDITS	heated flo	oor area or ion 5.1 ma max. CRE II Other	500 W, y be combir DIT(S) Group R-2
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a. b. c. d. e. OPTION 1. EFFICII Only o Comp [1-(1.3	6.1e 7.1 An alte whic Equipm You ca with 1.0 cre See t See t Come opt oliance (Propos Pres modi Verti Floor Slab Below or Com by 59	Renewable Electric Energy (3 credits max) Appliance Package Total Credit rotal Credit not select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dit for each 1,200 kWh of electrical generation pro the complete Table R406.2 for all requirements and DESCRIPTION Implement listed in Table CODE OPTIONS Lion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to the compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Total	1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 000 0 406.3 RGY CREDITS n this category. using Section R402 the following al conductive UA	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 mative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipn You ca with 1.0 cre See t ENT BI one opt bliance (Propos Pres modi Verti Floor Slab Belov or Com by 59	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 M hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dit for each 1,200 kWh of electrical generation pro- the complete Table R406.2 for all requirements and Energy Credits (201 Energy Credits (201 ULDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated used UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 "R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tota %.	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions & COOO & A06.3 RGY CREDITS n this category. using Section R402 h al conductive UA	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 ENT BI one opt pliance (Propos Pres modi Verti Floor Slab Belov or Comp by 59	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 M hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dit for each 1,200 kWh of electrical generation pro- the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated us ted UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 "R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tota %.	1.0 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 8 0.0 9 0.0 406.3 RGY CREDITS n this category. using Section R402 h al conductive UA	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-: rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 ENT BU one opt oliance (Propos Pres modi Verti Floor Slab Belov or Comp by 59	Renewable Electric Energy (3 credits max) Appliance Package Total Credit ernative heating source sized at a maximum of 0.5 M hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dit for each 1,200 kWh of electrical generation pro- the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION ULDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated used UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tota %.	1.0 1.0 0.5 s 6.0 V/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 8 0.0 8 0.0 9 0.0 10 0.5 9 0.0 10 0.5 10 0.5 10 0.0 11 0.0 12 0.0 13 0.0 14 0.0 15 0.0 16 0.0 17 0.0 18 0.0 19 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-: rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 For Bu one opt oliance (Propos Below or Comp Below or Slab Below or Slab Below or Slab Below or Slab Below or Slab	Renewable Electric Energy (3 credits max) Appliance Package Total Credit Total Credit total Credit anaximum of 0.5 M hever is bigger, may be installed in the dwelling unit hever is bigger, may be installed in the dwelling unit hever is bigger, may be installed in the dwelling unit hever is bigger, may be installed in the dwelling unit hever is bigger, may be installed in the dwelling unit her tisted in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dif for each 1,200 kWh of electrical generation prothe complete Table R406.2 for all requirements and Energy Credits (2001 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to be ad UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 <	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 8 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 ENT BI one opt bliance (Propos Pres modi Verti Floor Slab Below or Comp Reduc Pasca or For R- Reduc	Renewable Electric Energy (3 credits max) Appliance Package Total Credit Total Credit rnative heating source sized at a maximum of 0.5 V hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dif for each 1,200 kWh of electrical generation prothe complete Table R406.2 for all requirements and DESCRIPTION TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to a ted UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tota%. Pliance based on Section R402.4.1.2: the tested air	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 8 0.0 8 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 11 0.0 12 0.0 13 0.0 14 0.0 15 0.0 16 0.0 17 0.0 18 0.0 10 0.0 <	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 ENT BU one opt bliance (Propose Pres modi Verti Floor Slab Below or Comp Reduc Pasca or For Re Reduc	Renewable Electric Energy (3 credits max) Appliance Package Total Credit rnative heating source sized at a maximum of 0.5 M hever is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) nnot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dit for each 1,200 kWh of electrical generation pro- the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated u- sed UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tota %.	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0.0 8 0.0 8 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 <	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 Fou ca with 1.0 cre See 1 Fou ca with 1.0 cre See 1 Comp Pres modi Verti Floor Slab Below Or Below Or Below Dr Below Or Below Or Below Dr Dr Below Dr Dr Below Dr Dr Below Dr Dr Dr Below Dr Dr Dr Dr Dr Dr Dr Dr Dr Dr	Renewable Electric Energy (3 credits max) Appliance Package Total Credit Total Credit Interactive heating source sized at a maximum of 0.5 Merer is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent listed in Table C403.3.2(1) or C403.3.2(2) mot select more than one option from any catego options 5.2 through 5.6. See Table 406.3. did for each 1,200 kWh of electrical generation prothe complete Table R406.2 for all requirements and DESCRIPTION Credits (20) TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to be du/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab with reacted air leakage to 2.0 air changes per hour ils pliance based on Section R402.1.4: Reduce the Tot %. pliance based on Section R402.4.1.2:	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in categor vided annually, up to option descriptions 8 0 8 0 9 0 406.3 RGY CREDITS al conductive UA al conductive UA al conductive UA assimum at 50 00.865	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 ENT BI one opt bliance (Propos Pres modi Verti Floor Slab Below or Comp Below or Comp by 59 Comp Co	Renewable Electric Energy (3 credits max) Appliance Package Total Creditt Total Credit and section Ray be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) nent select more than one option from any catego options 5.2 through 5.6. See Table 406.3. dif for each 1,200 kWh of electrical generation prot the complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS tion from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to ed UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tot %. visc the tested air leakage to 2.0 air changes per hour lis cocupancies, optional compliance based on Section 4 ational Mechanical Code shall be met with a heat recovery efficiency of alify to claim this credit, the building permit drawings	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 0 8 0 9 0 406.3 RGY CREDITS al conductive UA n this category. using Section R402 al conductive UA maximum at 50 covery ventilation 0.65. shall specify the	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A
a. b. c. d. e. OPTION 1. EFFICII Only of Comp [1-(1.3	6.1e 7.1 7.1 An alte whic Equipm Fou ca with 1.0 cre See 1 Fou ca with 1.0 cre See 1 Fou ca with 1.0 cre See 1 Comp Pres modi Verti Floor Slab Below Or Comp Reduce Presca	Renewable Electric Energy (3 credits max) Appliance Package Total Credit Total Credit trative heating source sized at a maximum of 0.5 Meter is bigger, may be installed in the dwelling unit nent listed in Table C403.3.2(4) or C403.3.2(5) mot select more than one option from any categor options 5.2 through 5.6. See Table 406.3. dif for each 1,200 kWh of electrical generation protthe complete Table R406.2 for all requirements and Energy Credits (201 TABLE 2018 ENE DESCRIPTION UILDING ENVELOPE OPTIONS ton from Items 1.1 through 1.7 may be selected i with the conductive UA targets is demonstrated to red UA/Target UA)] > the required %UA reduction criptive compliance is based on Table R402.1.1 with fications: cal fenestration U = 0.28 "R-38 on grade R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab w grade slab R-10 perimeter and under entire slab pliance based on Section R402.1.4: Reduce the Tot %. ************************************	2.3 1.0 0.5 s 6.0 W/sf (equivalent) of ry EXCEPT in category vided annually, up to option descriptions 8 0 8 0 9 0 406.3 RGY CREDITS al conductive UA n this category. using Section R402 al conductive UA maximum at 50 covery ventilation 0.65. shall specify the ed building air m.	heated flo	oor area or ion 5.1 ma max. CRE Il Other al UA alte 0.5	500 W, y be combin DIT(S) Group R-2 rnative, whe N/A

		TA 2018 -	BLE 406.3 ENERGY CREDITS			Window, Skylight and Door So	hedule	Contact Information	
				CRE	EDIT(S)				
PTION		DESCRIPTI	ON	All Other	Group R-2				
	4. HIGH EFFICIENC	CY HVAC DISTRIBUT	ION SYSTEM OPTIONS					Width Hei	ght
4.1	All supply and return d deeply buried in ceiling i For mechanical equipme maximum of 10 linear fe connections to the equip	ucts located in an insulation in accord ent located outside et of return duct ar	unconditioned attic shall be dance with Section R403.3.7. the conditioned space, a nd 5 linear feet of supply duct side the deeply buried insulation	0.5	0.5	Exempt Swinging Door (24 sq. ft. Exempt Glazed Fenestration (15 Vertical Fenestration (Window	Ref. U-fact max.) sq. ft. max.)	cor Qt. Feet Inch Fee	t ^{Inch} Area U
	All metallic ducts located transverse and longitudi they cannot contain spli	d outside the cond nal joints sealed w ces.	itioned space must have both ith mastic. If flex ducts are use	ed,		Component Description ENTRY TRANS.	Ref. U-fact	Width Heig or Qt. Feet ^{Inch} Fee	ght _{it Inch} Area U 6.0
	Duct leakage shall be lin floor area. Air handler(s) shall be lo	nited to 3 cfm per o	100 square feet of conditioned onditioned onditioned space.			DEN POWDER RM GREAT ROOM	0.28 0.28 0.28	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	24.0 8.0 96.0 2
						DINING	0.28		40.0 1
EFFICIE	NT WATER HEATING C	PTIONS				KITCHEN	0.28	1 8 7 1 8 7	56.0 1 56.0 1
5.3	Water heating system shall Energy Star rated gas or pr 0.91 or	include one of the folk opane water heater wi	owing: ith a minimum UEF of	1.0	1.0	PANTRY LAUNDRY BEDROOM 3	0.28 0.28 0.28	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6.0 8.0 24.0
	Solar water heating suppler Solar water heating will pro 2000 kWh based on the Sol	nenting a minimum sta vide a rated minimum ar Rating and Certifica	andard water heater. savings of 85 therms or ation Corporation (SRCC)			LEISURE BEDROOM 4 MASTER SUITE	0.28 0.28 0.28	1 6 4 1 6 4 1 8 4	24.0 24.0 32.0
	or					MASTER BATH	0.28		16.0
	requirements of Option 3.3.	und source neat pump	o meeting the			MASTER BATH MASTER BATH	0.28	1 4 3 1 2 3	6 6.0
	To qualify to claim this cred option being selected and s	it, the building permit hall specify the water at efficiency and for so	drawings shall specify the heater equipment type lar water beating			BEDROOM 2 BEDROOM 2	0.28	1 6 4	24.0
	systems, the calculation of t	the minimum energy sa	avings.			HALL BATH	0.28		8.0
									0.0
							Sum of 1		
							Vertical Fenestra	tion Area Weighted $U = UA/A$	Area
						Overhead Glazing (Skylights) Component		Width Heig	ght
						Description	Ref. U-fact	or Qt. Feet Inch Fee	t ^{Inch} Area L
							Sum c Overhead Gla	of Overhead Glazing Area and zing Area Weighted U = UA/A	VA 0.0
						Total Sum of Fenestrat	tion Area and LIA (fo	r heating system sizing calc	ulations) 484 0 13
	20 Prescriptive Ei Single These requirements ap	18 Washington Sta nergy Code Complia Family – New & Ad ply to all IRC buildi	te Energy Code – Residential ance for All Climate Zones in Wa Iditions (effective February 1, 20 ng types, including detached on	shington 121) e- and two-family		Simple Heating System This heating system sizing calcu Manuals J and S. This tool will ca Please complete the green drop- some values will be calculated fo at energycode@energy.wsu.edu Project Information	Size: Washington State lator is based on the Prescriptive Re- lculate heating loads only. ACCA pro- downs and boxes that are applicable r you. If you do not see the selection or (360) 956-2042 for assistance.	equirements of the 2018 Washington Sta ocedures for sizing cooling systems sho e to your project. As you make selections you need in the drop-down options, plea	te Energy Code (WSEC) and ACC uld be used to determine cooling l in the drop-downs for each section use contact the WSU Energy Prog
	dwelling Project Informatio	s and multiple sing	le-family dwellings (townhouse	s).		LIU RESIDENCE		ON 6*	
	r toject mormativ			nauon		Heating System	Type: All Other Systems	Heat Pump	
Instruc incorp additio	ctions: This single-family p orate the minimum value onal credits are checked a	project will use the r s listed. Based on th s chosen by the per	requirements of the Prescriptive ne size of the structure, the appromit applicant.	Path below and opriate number of	and	To see detailed instruction Design Tempera Instruction Area of Building	ons for each section, place your cur ture Mercer Island	sor on the word "Instructions" Design Temperature Dif ΔT = Indoor (70 degrees) - Ou	ference (ΔT) 45 Itdoor Design Temp
Fenest	rized Representative	Component, Table R	2406.2 - Fuel Normalization Credi	its and 406.3 - Energ	y Credits.	Conditioned Flo Instructions Average Ceiling Instructions	or Area Conditioned Floor Area (sq ft) Height Average Ceiling Height (ft)	2,894 Conditi 8.5 24,59	oned Volume 9
		All Climate Zor	nes (Table R402.1.1)			Glazing and Doc Instructions	U-0.28	U-Factor X Area 0.280 484	a = UA 135.52
Fenest	ration U-Factor b	R-Value a n/a		U-Factor a		Skylights Instructionଞ୍ଚ	•	U-Factor X Area	a = UA
Skyligh	nt U-Factor b	n/a		0.50 n/a		Insulation Attic		II-Factor X Aroc	 a = UΔ
		49j	•	0.026			R-49	0-racior X Area ■ 0.026 1,445	5 37.57
vvood Floor		21 ir 38		0.056 0.026		Single Rafter or Instructions	Joist Vaulted Ceilings Select R-Value	U-Factor X Area	a UA
Below Slab d,	Grade Wall c,h f R-Value & Depth	10/15/21 10, 2	int + TB ft	0.042 n/a		Above Grade Wa	NIS (see Figure 1)	U-Factor X Area	a UA
R- a th	values are minimums. U-fact an the label or design thickn	ors and SHGC are ma ess of the insulation,	ximums. When insulation is installe the compressed R-value of the insul	d in a cavity that is less ation from Appendix		Floors	R-21 Intermediate	U-Factor X Area	्रायम.छठ aUA
Ta b The	able A101.4 shall not be less to fenestration U-factor colum	than the R-value spec in excludes skylights.	ified in the table.				R-38	0.025 <u>696</u>	17.40
"1 th	0/15/21 +5TB" means R-10 c e interior of the wall, or R-2	continuous insulation 1 cavity insulation plu	on the exterior of the wall, or R-15 s a thermal break between the slab	continuous insulation and the basement wa	on Il at	Below Grade Wa Instructions	R-21 Interior	U-Factor X Area	35 .62
c th	e interior of the basement w	/all. "10/15/21 +5TB" /all plus R-5 continuo	shall be permitted to be met with R us insulation on the interior or exter	-13 cavity insulation of the wall. "5TB"	n	Slab Below Grad Instructions	le (see Figure 1) R-10 Fully insulated	F-Factor X Leng 0.303 106	th UA 32.12
d R-1	eans R-5 thermal break betw 0 continuous insulation is rea	veen floor slab and bas	sement wall.)2,2,9.1.		Slab on Grade (s	ee Fiaure 1)	F-Factor X Leng	th UA
e Fo	or single rafter- or joist-vaulte	ed ceilings, the insulation means the insulation well	tion may be reduced to R-38 if the fi	ull insulation depth			Select R-Value	No selection	
f sla	7.5 continuous insulation ins ab insulation when applied to eet the requirements for the	talled over an existing existing slabs compler ermal barriers protecti	g slab is deemed to be equivalent to ying with Section R503.1.1. If foam ng foam plastics.	the required perimete plastic is used, it shall	er	Location of Duct Instructions	Conditioned Space	■ Duct Leakage	Coefficient 1.00 403 15
g Fo	r log structures developed in mate zone 5 of ICC 400	r compliance with Sta	ndard ICC 400, log walls shall meet	the requirements for				Envelope Heat Load	403.15 18,142 Btu / Hour
h fra	t. (intermediate framing) dei aming 16 inches on center, 7 sulation.	notes framing and ins 8% of the wall cavity	ulation as described in Section A103 insulated and headers insulated wit	3.2.2 including standard h a minimum of R-10	1	Figure 1.		Sum of UA x ∆T Air Leakage Heat Load Volume x 0.6 x ∆T x 0.018 Building Design Heat Load Air leakage + envelope heat loss Building and Duct Heat Load	11,955 Btu / Hour 30,097 Btu / Hour
								Duruing and Duct Heat Load Ducts in unconditioned space: sum Ducts in conditioned space: sum Maximum Heat Equipment Out Building and duct heat loss x 1.40 Building and duct heat loss x 1.25	SU, U97 Btt / Hour n of building heat loss x 1.10 of building heat loss x 1 put 42,136 Btu / Hour for forced air fumace for heat pump

AREA

49	SEMENT FLOOR AREA CALCULATION								
_	LENGTH	COVERAGE	REGULT						
	9.08	100%	9.Ø8%	,					
	1'	100%	1%						
	12 '	100%	12%						
	19.33'	6.3	1.22%						
	19.5'	18.6%	3.63%						
L	60.91'		26,935	%					
	TION OF EXCLUDED BASEMENT FLOOR AREA: ACTUAL SQ,, FT. W/ GARAGE) \times (26.93/60.91) = 273.7 SQ. FT. A OF BASEMENT EXCLUDED = 619-273.7 = 336 SQ. FT.								
Г									
	GROSS FLC	POR AREA							
	LOWER FLOOR W MAIN FLOOR W/ (UPPER FLOOR	/ GARAGE GARAGE	619 1635 1360	SQ. FT. SQ. FT. SQ. FT.					
	TOTAL		3614	SQ. FT.					
	BASEMENT EXCL	JDED	336	<u>SQ. FT.</u>					
	TOTAL		3278	SQ. FT.					
	LOT AREA		8,345	SQ. FT.					
	SQUARE FOOTAG	E ALLOWED (4	0%) 3338	SQ. FT.					
_									

inspection performed. Regular maintenance, including water-proofing of the wood used in your outdoor project is also a good practice.

- 4. Due to many variables involved with outdoor construction, Simpson Strong-Tie cannot provide estimates on service life of connectors, anchors or fasteners.
- 6. All installation notes and guidelines within the current Wood Construction Connectors catalog shall apply for the connectors, anchors, and fasteners shown.
- larger than the bolt diameter per 2005 NDS Section 11.1.2.
- 10.Unless noted otherwise, all references to standard cut washers refer to Type A plain washers (W) conforming to the dimensions shown in ASME B18.22.1 for the appropriate rod sizes.

* 8" CONC. STEM WALL W/ #4 @ 16" O.C., HORIZ. AND VERT. (TYP.)

-NOTE: SHOP DRAWINGS FOR PRE-ENGINEERED FLOORS OR TRUSSES MUST BE ONSITE AT TIME OF FRAMING INSPECTION, AND HAVE AN ORIGINAL WASHINGTON SEAL AND SIGNATURE OF THE DESIGNER. PROCEEDING WITH FRAMING WITHOUT APPROVED DETAILS AND PLAN IS DONE SO AT THE CONTRACTORS/APPLICANTS RISK

I) FLOOR JOISTS PER FRAMING PLANS, REFER TO MFG. LAYOUT FOR ALL FRAMING DETAILS AND BLOCKING. REVIEW MFG. LAYOUT PRIOR TO FRAMING. OR ALL FLR JSTS AND RFTRS TO BE #2 HEM-FIR. DOUBLE UNDER BEARING PARTITIONS. PROVIDE SOLID BLOCKING OVER BEARING MEMBERS.) ALL EXT. DR & WNDW HDRS. TO BE 4x8 DF#2 (UNO)) ALL PRE-MANUFACTURED TRUSSES TO BE IDENTIFIED BY MFG'S STAMP. 4) FACTORY BLT FRPLC & CHIMNEY TO BE UL LABELED INSTALL PER MNFTRS SPECS O/SIDE CMBSTN AIR REQ'D (MIN 6 SQ IN) DUCTED TO F/BOX W/ OPERABLE O/SIDE DAMPER, TIGHTLY FITT'G FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN. 6) H.W.T. TO BE LABELED PER AGHRAE STD. NO. 90A-80, AND MEET THE REQMNTS, PER NATIONAL APPLIANCE ENERGY CONSERVATION ACT. 1) FURN AND H.W. TANK' PILOTS, BURNERS, HEATING ELEMENTS, AND SWITCHES

TO BE A MIN. OF 18" ABOVE FINISHED FLOOR.) ALL SKYLITES TO COMPLY WITH I.R.C. SECTION R308.6 3) ALL SIDELITES, SLIDING GLASS DOORS AND TUB/SHOWER ENCLOSURES TO COMPLY WITH I.R.C. SECTION R308

10) HEAT REGISTERS TO BE PER LEGEND + LOCATE APPROXIMATELY AS SHOWN, 6" IN FROM EXTERIOR WALLS, 3" IN FROM INTERIOR WALLS. 1) VENT DRYER, OVEN/RANGE & EXHAUST FANS TO O/SIDE. DRYER EXH DUCTS HALL NOT EXCEED A TOTAL COMB HORIZ AND VERT LNGTH OF 14'-O", INCL 2 90d. ELBOWS. DEDUCT 2'-0" FOR EA. 90d. ELBOW EXCEDING 2. ALL EXHAUST DUCTS INSLT'D (MIN. OF R-4)

) ALL NAILING TO COMPLY WITH 2018 I.B.C., COLUMN, POST & BEAM CONNECTIONS TO COMPLY WITH 2018 I.B.C.) TUB/SHOWER SURROUND WALLS TO HAVE WATER RSTNT GYP BRD AND

A SMOOTH HARD SURFACE TO A MINIMUM HEIGHT OF 70" ABOVE DRAIN INLET) PROVIDE SMK DETCTR AND CO ALARMS IN COMPLIANCE WITH I.R.C. R314 LL SMK DETCTRS W/BAT BACKUP.SMK DETCTRS WILL SOUND AN AUDIBLE ALARM IN ALL SLEEPING ROOMS.

15) DWELLING TO COMPLY W/ WA. ST ENERGY CODE, 2018 EDITION 16) SEAL, CAULK, GASKET, OR WEATHERSTRIP TO LIMIT AIR LEAKAGE: T EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPNG'S BTWN WALL AND ROOF AND WALL PANELS, OPNG'S AT UTILITY PENETRATIONS THROUGH WALLS, FLRS, AND ROOFS, ALL OTHER OPNG'S IN BLD'G ENVELOPE. ALL EXTERIOR DOORS OR ACCESS HATCHES TO ENCLOSED UNHEATED AREAS MUST BE WEATHERSTRIPPED. 18) MINIMUM SOIL BEARING PRESSURE = 1500 PSF.

9) FOOTINGS TO BE PLACED ON FIRM, UNDISTURBED NATIVE SOIL. 20) DWELLING TO COMPLY WITH I.R.C. 2018 EDITION) FIRE STOPS SHALL BE PRVD'D TO CUT OFF ALL CONCL'D DRAFT OPN'GS FROM VERT TO HRZNTL SPACES, INCL'G THE STAIR, TUB, SHWR, FRPLACE, ETC. 2) OSB ROOF SHEATHING W/COMP ROOFING AND PLYWD AT ALL OVERHANGS. SEE DETAIL SHT FOR ALL ADDITIONAL NOTES. 23) EXHAUGT FANG CANNOT TERMINATE WITHIN 3' FROM AN OPERABLE OR UNOPERABLE OPENING PER THE IRC RI506.3

GENERAL NOTES:

690 UNDER-FLOOR AREA = 2,3 SQ. FT. NET FREE REQ'D. 300 2.3 NET FREE x 144 = 331 GQ. IN./GQ. FT. NET FREE REQ'D. PROVIDE 1 SQ. FT. PER 300 SQ. FT. OF UNDER FLOOR AREA. COVER VENTS WITH 1/4" CORROSION RESISTANT WIRE MESH. LOCATE VENTS AS CLOSE TO CORNERS AS PRACTICAL. EFFICIENT VENT AREA = 72.5 SQ. IN. SQ. IN. NET FREE 331 # ∨ENTS --- * 5 72.5 VENT AREA REQ'D. CRAWL VENTILATION CALCULATION

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E: STRUCTURAL FILL REQURED FOR

5. XXX DENOTES SHEARWALL CALLOUT PER SHEARWALL TABLE.

6. ALL HEADERS TO HAVE (1) 2x BEARING STUD AND (1) 2x KING STUD AT EACH END UNLESS

FLOOR FRAMING NOTES:

BEARING LOCATIONS.

NOTED OTHERWISE.

Joists shall be laterally supported at the ends by full-depth solid blocking not less than 2 inches nominal in thicknesst or by attachment to a full-depth header, band or rim joist, or to an adjoining stud to provide lateral support to prevent rotation. Additionally, in Seismic Design Categories DØ, DI, and D2, lateral restraint shall be provided at each intermediate support. See IRC Sections 106.1.1 and 502.7.

		W
SW TYPE	SW SHEATHING APA-RATED	NAIL SIZE & SPACING @ PANEL EDGES
SW-6	[1. 2. 12] 15/32" CD-EXT	$\begin{array}{c c} & [4, 5, 6] \\ 0.131'' \phi \times 2^{1/2}'' \\ 0.6'' 0.02 \end{array}$
SW-4	15/32" CD-EXT	$0.131" \phi \times 2^{1/2}" \\ 0 4" 0C$
SW-3	15/32"CD-EXT	0.131"ø x 2 ¹ / ₂ " @ 3"OC, STAGGERED
SW-2	15/32"CD-EXT	0.131"ø x 2 ¹ / ₂ " @ 2"OC, STAGGERED
2SW-4	15/32"CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " @ 4"OC, STAGGERED
2SW-3	15/32"CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " @ 3"OC, STAGGERED
2SW-2	15/32" CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " © 2"OC, STAGGERED

NOTES: 1. INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY 2. WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON OPPOSITE SIDES ARE NOT LOCATED ON THE SAME

- SIUDS.
 BLOCKING IS REQUIRED AT ALL PANEL EDGES.
 PROVIDE SHEAR WALL SHEATHING AND NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLDOWN REQUIREMENTS PER PLANS.
 SHEAR WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, THE ADDRE AND DECIMALL ODENINGS.
- ETC. ABOVE AND BELOW ALL OPENINGS).
 SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. ADDITIONAL INFORMATION PER
- HOLDOWN SCHEDULE & DETAILS. 7. INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING
- with 0.148"ø x $2^{1}/_{2}$ " nails at 12"oc where studs are spaced at 16"oc and 0.148"ø x $2^{1}/_{2}$ " NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.
- 8. BASED ON 0.131"% x 1 $\frac{1}{2}$ " NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131 " $\% \times 2^{1/2}$ " NAILS WHERE INSTALLED OVER SHEATHING.
- 9. FRAMING CLIPS: SIMPSON "A35" OR "LTP5" OR APPROVED EQUIVALENT.

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SHEET NO.

SHEAR LOAD ATTACHMENT TO TOP PLATE BELOW SHEAR NAILING TO WOOD FRAMING BELOW ANCHOR BOLT TO CONCRETE FOUNDATION CAPACITY (PLF SILL PL AT FOUNDATION воттом 🖻 AT FRAMING 0.148"ø x 3¹/₄" @ 6"OC CLIP @ 18"0C ⁵/₈"ø @ 48"0C P.T. 2x 260 2x ⁵∕8"ø @ 32"0C P.T. 2x CLIP @ 14"0C 0.148"ø x 3¹/₄" @ 4"OC 380 ⁵/₈"ø @ 48"0C Р.Т. Зх ⁵/₈"ø @ 24"0C P.T. 2x 0.148"ø x 3¹/₄" @ 4"OC CLIP @ 12"0C 490 & CLIP @ 18"OC ⁵/₈"ø @ 32"0C P.T. 3x 0.148"ø x 3¹/₄" @ 4"OC| ⁵/₈"ø @ 16"OC P.T. 3x CLIP @ 8"OC 640 Зx & CLIP @ 16"OC $0.148^{\circ} \times 3^{1}/_{4}^{\circ} \otimes 4^{\circ}OC$ Р.Т. Зх CLIP @ 6"OC ⁵/8"ø @ 24"OC 760 Зx & CLIP @ 12"OC CLIP @ 8"0C 0.148"ø x 3¹/₄" @ 4"OC ⁵/₈"ø @ 16"OC Р.Т. Зх 980 Зx BOTH SIDES, STAGGERED & CLIP @ 8"OC
 CLIP @ 6"OC
 0.148"ø x 3¹/₄" @ 4"OC

 BOTH SIDES, STAGGERED
 & CLIP @ 5"OC
 ⁵/₈"ø @ 12"0C P.T. 3x 1280 3x

- 10. ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 3"x3"x0.229"(MIN). THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED $\frac{13}{16}$ "x1 $\frac{3}{4}$ " washer to extend to within $\frac{1}{2}$ " of the edge of the sill plate on the side(s) with
- PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE SHEATHING. WHERE SHEAR WALLS ARE SHEATHED ON BOTH SIDES OF 2x6 WALL FRAMING, USE 4.5"x4.5"x0.229"(MIN) PLATE WASHERS. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE.
- 4.5 X4.5 X0.229 (MIN) PLATE WASHERS. EMBED ANCHOR BULIS / MINIMUM INTO THE CONCRETE. 1. PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NALLS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL NOTES.
- WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM SHEATHING, CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.
- FOR ALLERNALE NALLING REQUIREMENTS.
 13. AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2X STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING. 14. CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.
 15. NAIL STUDS TO 3x BOTTOM/SILL PLATES WITH EITHER (2) 0.148"Øx4" END NAILS OR
- (4) 0.131"Øx2¹/₂" TOENAILS.

- OOD-FRAMED SHEAR WALL SCHEDULE FOR HEM-FIR/DOUG-FIR STUD FRAMING BOTTOM PLATE & EDGE MEMBER REQUIREMENTS SILL PLATE REQUIREMENTS RIM JOIST OR BLOCKING
- 1. ALL BEAMS AND HEADERS TO BE 4x8 HF#2 UNLESS NOTED OTHERWISE. 2. PROVIDE SOLID PRESSURE BLOCKING AT ALL POINT LOADS FROM ABOVE. 3. PROVIDE SOLID BLOCKING OR BRIDGING AT MID-SPAN OF ALL FLOOR JOISTS WITH SPANS OVER 10'-0" OR PER JOIST SPECIFICATIONS PER JOIST MANUFACTURER. 4. PROVIDE BLOCKING OR OTHER APPROVED MEANS OF LATERAL SUPPORT AT ALL JOIST

		VV	FOR HEM	-FIR/DOUG-FIR STUD FRAMI	L SCHEDUL	E		
SW	SW SHEATHING	NAU SIZE &	RIM JOIST OR BLOCKING	BOTTOM PLATE & E REQUIREME	EDGE MEMBER ENTS [3, 7, 13]	SILL PLATE REQU	IREMENTS	SHFAR LOAD
TYPE	APA-RATED [1. 2. 12]	SPACING @ PANEL EDGES [4, 5, 6]	ATTACHMENT TO TOP PLATE BELOW [8, 9]	SHEAR NAILING TO WOOD FRAMING BELOW	BOTTOM PL AT FRAMING	ANCHOR BOLT TO CONCRETE FOUNDATION [10]	SILL PL AT FOUNDATION [11]	CAPACITY (PLF)
SW-6	15/32" CD-EXT	0.131"ø x 2 ¹ / ₂ " @ 6"0C	CLIP @ 18"OC	0.148"ø x 3 ¹ / ₄ " @ 6"0C	2x	⁵ / ₈ "ø @ 48"0C	P.T. 2x	260
SW 4	15/32" OD EVI	0.131 "ø x $2^{1/2}$ "		0.140"4 71/" @ 4"00	[15]	⁵ ∕8"ø @ 32"OC	P.T. 2x	790
5w-4	13/32 CD-EXT	@ 4"0C		$0.148 \ \text{w} \times 5 \ \text{/}_4 \ \text{w} 4 \ \text{UC}$	ZX	⁵ ∕ ₈ "ø ⊚ 48"0C	P.T. 3x [15]	300
CW 7	15/32" OD EVI	0.131 "ø x $2^{1/2}$ "		0.148 "ø x $3^{1}/_{4}$ " @ 4"0C	[15]	⁵ ∕ ₈ "ø ⊚ 24"0C	P.T. 2x	400
5w-5	13/32 CD-EXT	@ 3"OC, STAGGERED		& CLIP @ 18"OC	JX	⁵ / ₈ "ø @ 32"0C	P.T. 3x [15]	490
SW-2	15/32" CD-EXT	0.131"ø x 2 ¹ / ₂ " @ 2"OC, STAGGERED	CLIP @ 8"OC	0.148"ø x 3 ¹ / ₄ " @ 4"OC & CLIP @ 16"OC	[15] 3x	⁵ ∕ ₈ "ø ⊚ 16"OC	[15] P.T. 3x	640
2SW-4	15/32"CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " © 4"OC, STAGGERED	CLIP @ 6"OC	0.148"ø x 3 ¹ / ₄ " @ 4"OC & CLIP @ 12"OC	[15] 3x	⁵ ∕8"ø ⊚ 24"0C	[15] P.T. 3x	760
2SW-3	15/32" CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " © 3"OC, STAGGERED	CLIP @ 8"OC BOTH SIDES, STAGGERED	0.148"ø x 3 ¹ / ₄ " @ 4"OC & CLIP @ 8"OC	[15] 3x	⁵ ∕ ₈ "ø ⊚ 16"OC	[15] P.T. 3x	980
2SW-2	15/32" CD-EXT BOTH SIDE	0.131"ø x 2 ¹ / ₂ " © 2"OC, STAGGERED	CLIP @ 6"OC BOTH SIDES, STAGGERED	0.148"ø x 3 ¹ / ₄ " @ 4"OC & CLIP @ 5"OC	[15] 3x	⁵ / ₈ "ø @ 12"0C	[15] P.T. 3x	1280

WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUDS.

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SIUDS.
 BLOCKING IS REQUIRED AT ALL PANEL EDGES.
 PROVIDE SHEAR WALL SHEATHING AND NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLDOWN REQUIREMENTS PER PLANS.
 SHEAR WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, THE ADDRE AND DELOW ALL OPENINGS.

NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.

8. BASED ON 0.131" $\emptyset \times 1\frac{1}{2}$ " NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131" $\emptyset \times 2\frac{1}{2}$ " NAILS WHERE INSTALLED OVER SHEATHING. 9. FRAMING CLIPS: SIMPSON "A35" OR "LTP5" OR APPROVED EQUIVALENT.

SHEAR WALLS DESIGNATED AS PERFORAILD SHEAR WALLS REQUIRE SHEATHING, SHEAK WALL NAILING, ETC. ABOVE AND BELOW ALL OPENINGS).
 SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. ADDITIONAL INFORMATION PER HOLDOWN SCHEDULE & DETAILS.
 INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 0.148" x 2¹/₂" NAILS AT 12"OC WHERE STUDS ARE SPACED AT 16"OC AND 0.148" x 2¹/₂"

- $3^{*}x3^{*}x0.229^{"}(MIN)$. The hole in the plate washer may be diagonally slotted $1^{*}y_{16}^{*}x1^{3}y_{4}^{*}$ provided a standard cut washer is placed between the plate washer and nut. Plate washer to extend to within $\frac{1}{2}$ " of the edge of the sill plate on the side(s) with WASHER DEATEND EATEND TO WITHIN 72 OF THE EDGE OF THE SILE ON THE SILE STATE STAT
- WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM SHEATHING, CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.
 AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2X STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING.
- CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.
 NAIL STUDS TO 3% BOTTOM/SILL PLATES WITH EITHER (2) 0.148"Øx4" END NAILS OR (4) 0.131"Øx2¹/₂" TOENAILS.

JOB NO: 21006 6/13/22 DATE: DRWN. BY: TH REVISED: 9/30/22

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NOTE: COL TO BE (2) 2×6 HF#2 TYP. (U.N.O.) HDR TO BE 4×8 HF#2 TYP. (U.N.O.)

SCALE: 1/4" = 1' - Ø"

 \sim NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

- 2. ALL TRUSSES TO BE PRE ENGINEERED AND ARE TO CARRY THE STAMP OF THE TRUSS MANUFACTURER AND SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS, DESIGN DETAILS AND SPECIFICATIONS BY TRUSS MANUFACTURER TO BE ON SITE FOR FRAMING INSPECTION, PROVIDE TRUSS PACKAGE TO ENGINEER FOR SHOP DRAWING REVIEW PRIOR TO
- THE BUILDING DEPARTMENT. 4. SEE ENGINEERING NOTES FOR SHEATHING REQUIREMENTS
- 5. riangle denotes shearwall callout per shearwall table.
- 6. \boxtimes DENOTES SOLID 2x STUD BEARING BELOW END OF HEADER OR GIRDER. 7. ALL HEADERS TO HAVE (2) 2X POSTS UNLESS NOTED OTHERWISE
- 8. PROVIDE SOLID BEARING STUDS AT ALL BEARING LOCATIONS INCLUDING GIRDER TRUSSES
- AND BEAMS. 9. 4×6 POSTS MAY BE SUBSTITUTED FOR (2) 2×6 POSTS FOR ROOF FRAMING PLAN ONLY. 2-PLY BUILT UP POST SHALL BE FASTENED TOGETHER W/ 16d NAILS @ 8" O.C.

- OVERFRAMING SPANS 1. 2×8 HF#2 RAFTERS @24" O.C. - 10'-11" MAXIMUM UNBRACED SPAN 2x10 HF#2 RIDGE BEAM - 8'-0" MAXIMUM UNBRACED SPAN 2x10 HF#2 FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES
- 2, 2x6 HF#2 RAFTERS @24" O.C. 8'-3" MAXIMUM UNBRACED SPAN 2x8 HF#2 RIDGE BEAM - 7'-0" MAXIMUM UNBRACED SPAN 2x8 HF#2 FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES 3. 2×4 HF#2 RAFTERS @24" O.C. - 8'-0" MAXIMUM UNBRACED SPAN
- 2x6 HF#2 RIDGE BEAM 5'-6" MAXIMUM UNBRACED SPAN 2x6 HF#2 FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES

- ROOF FRAMING NOTES:
- 1. ALL BEAMS AND HEADERS TO BE 4x8 DF#2 UNLESS NOTED OTHERWISE.
- CONSTRUCTION. 3. NO TRUGG SHALL BE FIELD MODIFIED WITHOUT PRIOR CONSENT OF THE TRUGG ENGINEER AND

	DESIGN HOMES	P.O. BOX 317	MERCER ISLAND, WA, 98040
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STRUCTURAL NOTES

GENERAL REQUIREMENTS & DESIGN CRITERIA

<u>BUILDING CODE & REFERENCE STANDARDS</u>: THE "INTERNATIONAL BUILDING CODE", 2018 EDITION, GOVERNS THE DESIGN AND CONSTRUCTION OF THIS PROJECT. REFERENCE TO A SPECIFIC SECTION IN THE CODE DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE ENTIRE MATERIALS REFERENCE STANDARDS NOTED BELOW. THE LATEST EDITION OF THE MATERIALS REFERENCE STANDARDS SHALL BE USED.

ARCHITECTURAL DRAWINGS: REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION INCLUDING. BUT NOT LIMITED TO: DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, CURBS, DRAINS, DEPRESSIONS, RAILINGS, WATERPROOFING, FINISHES AND OTHER NONSTRUCTURAL ITEMS.

STRUCTURAL RESPONSIBILITIES: THE PE IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED STATE.

CONTRACTOR RESPONSIBILITIES: THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA AND WSHA. THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY.

DISCREPANCIES: IN CASE OF DISCREPANCIES BETWEEN THESE GENERAL NOTES, THE CONTRACT DRAWINGS AND SPECIFICATIONS, AND/OR REFERENCE STANDARDS, THE ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR CONSTRUCTION. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL UNDERGROUND UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO EXCAVATION OR DRILLING.

WIND DESIGN: BASIC WIND SPEED (3-SECOND GUST), V = 85 MPH(ASD); WIND IMPORTANCE FACTOR, IW = 1.0; OCCUPANCY CATEGORY = II; EXPOSURE CATEGORY = B;

SEISMIC DESIGN: SEISMIC IMPORTANCE FACTOR IE = 1.0; OCCUPANCY CATEGORY = II; SS = 1.412G; S1 = 0.491G; SITE CLASS = D; SDS = 1.13G; SD1 = 0.491G; SEISMIC DESIGN CATEGORY = D; BASIC SEISMIC FORCE RESISTING SYSTEM = A-13 (BEARING WALL SYSTEMS) LIGHT-FRAMED WALLS WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE; CS = 0.122; R = 6.5; ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE PER ASCE 7, SEC 12.8.

GROUND SNOW LOAD, PG = 20 PSF; FLAT ROOF SNOW LOAD, PF = 25 PSF (DRIFT LOADS <u>snow load:</u> CONSIDERED PER ASCE 7 WHERE APPLICABLE); SNOW EXPOSURE FACTOR, CE = 1.0; SNOW IMPORTANCE FACTOR, IS = 1.0; THERMAL FACTOR, CT = 1.0.

<i>(</i>)		
ROOF (LIVE)	20	Ρ:
ROOF (SNOW)	25	P\$
RESIDENTIAL FLOOR	40	Ρ.
RESIDENTIAL DECK	60	ΡS

DESIGN-BY-OTHERS (DEFERRED SUBMITTALS) LOADS: ALL PRE-ENGINEERED/FABRICATED/MANUFACTURED OR OTHER PRODUCTS DESIGNED BY OTHERS SHALL BE DESIGNED FOR THE TRIBUTARY DEAD AND LIVE LOADS PLUS WIND, EARTHQUAKE, AND COMPONENT AND CLADDING LOADS WHEN APPLICABLE. DESIGN SHALL CONFORM TO THE PROJECT DRAWINGS AND SPECIFICATIONS, REFERENCE STANDARDS, AND GOVERNING CODE.

ROOF DEAD LOAD	15 PSF
TOP CHORD DEAD LOAD	8 PSF
BOTTOM CHORD DEAD LOAD	7 PSF
TRUSS UPLIFT LOAD (GROSS)	10 PSF

DEFERRED SUBMITTALS: ITEMS DESIGNED BY OTHERS SHALL INCLUDE CALCULATIONS, SHOP DRAWINGS AND PRODUCT DATA. DESIGN SHALL BE PREPARED BY THE SSE AND SUBMITTED TO THE ARCHITECT AND SER FOR REVIEW PRIOR TO SUBMISSION TO THE JURISDICTION FOR APPROVAL. THE SSE SHALL SUBMIT TO THE ENGINEER FOR REVIEW CALCULATIONS AND SHOP DRAWINGS THAT ARE STAMPED AND SIGNED BY THE SSE. REVIEW OF THE SSE'S SHOP DRAWINGS IS FOR GENERAL COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN. ALL NECESSARY BRACING, TIES, ANCHORAGE, AND PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS OR THE SSE'S DESIGN DRAWINGS AND CALCULATIONS.

INSPECTIONS: ALL CONSTRUCTION IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL IN ACCORDANCE WITH IBC SEC 109. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH THE BUILDING OFFICIAL. SUBMIT COPIES OF ALL INSPECTION REPORTS TO THE ENGINEER FOR REVIEW.

PREFABRICATED CONSTRUCTION: ALL PREFABRICATED CONSTRUCTION SHALL CONFORM TO IBC SEC 1703.6.

GEOTECHNICAL INSPECTION: THE GEOTECHNICAL ENGINEER OR BUILDING OFFICIAL SHALL INSPECT ALL PREPARED SOIL BEARING SURFACES PRIOR TO PLACEMENT OF CONCRETE AND REINFORCING STEEL AND PROVIDE A LETTER TO THE OWNER STATING THAT SOILS ARE ADEQUATE TO SUPPORT THE "ALLOWABLE FOUNDATION PRESSURE" SHOWN BELOW. SOIL VALUES SHALL BE FIELD VERIFIED BY THE BUILDING OFFICIAL OR THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.

DESIGN SOIL VALUES:

LIVE LOADS:

ALLOWABLE BEARING PRESSURE (ASSUMED) PASSIVE LATERAL PRESSURE (ASSUMED) ACTIVE LATERAL PRESSURE (UNRESTRAINED) AT-REST LATERAL PRESSURE (RESTRAINED) 50 PSF/FT COEFFICIENT OF SLIDING FRICTION

ROOF

1500 PSF 150 PSF/FT 35 PSF/FT 0.25

SLABS-ON-GRADE & FOUNDATIONS: ALL FOUNDATIONS SHALL BEAR ON STRUCTURAL COMPACTED FILL OR COMPETENT NATIVE SOIL PER THE GEOTECHNICAL REPORT. ALL SLABS-ON-GRADE SHALL BE FOUNDED ON APPROPRIATE SUB-GRADE PREPARATION AS NOTED IN THE GEOTECHNICAL REPORT. EXTERIOR PERIMETER FOOTINGS SHALL BEAR NOT LESS THAN 18 INCHES BELOW FINISH GRADE, OR BY THE GEOTECHNICAL ENGINEER AND THE BUILDING OFFICIAL. INTERIOR FOOTINGS SHALL BEAR NOT LESS THAN 12 INCHES BELOW FINISH FLOOR.

COMPACTION: UNLESS OTHERWISE SPECIFIED BY A GEOTECHNICAL ENGINEER, FOOTINGS SHALL BE PLACED ON COMPACTED MATERIAL AND SHALL BE WELL-GRADED GRANULAR MATERIAL WITH NO MORE THAN 5% PASSING A #2 SIEVE. FILLS PLACED SHALL BE IN MAXIMUM 8" LIFTS AND ALL BEARING SOILS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT USING THE MODIFIED PROCTOR TEST.

CAST-IN-PLACE CONCRETE & REINFORCEMENT

REFERENCE STANDARDS: CONFORM TO:

(1) ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY".

(2) IBC CHAPTER 19. (3) ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE", SEC 3 "REINFORCEMENT AND REINFORCEMENT SUPPORTS."

FIELD REFERENCE: THE CONTRACTOR SHALL KEEP A COPY OF ACI FIELD REFERENCE MANUAL, SP-15, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301) WITH SELECTED ACI AND ASTM REFERENCES."

CONCRETE MIXTURES: CONFORM TO ACI 318 CHAPTER 5 "CONCRETE QUALITY, MIXING, AND PLACING."

MATERIALS: CONFORM TO ACI 318 CHAPTER 3 "MATERIALS" FOR REQUIREMENTS FOR CEMENTITIOUS MATERIALS, AGGREGATES, MIXING WATER AND ADMIXTURES.

REINFORCING BARS DEFORMED WELDED WIRE FABRIC BAR SUPPORTS tie wire

ASTM A615, GRADE 60, DEFORMED BARS. ASTM A497 CRSI MSP-2, CHAPTER 3 "BAR SUPPORTS." 16.5 GAGE OR HEAVIER, BLACK ANNEALED.

MIX DESIGNS: PROVIDE A 5-SACK MINIMUM, 28-DAY COMPRESSIVE STRENGTH F'C = 2,500 PSI CONCRETE MIX WITH MAXIMUM 3/4" AGGREGATE AND 0.50 W/C RATIO FOR ALL ISOLATED POST AND CONTINUOUS WALL FOOTINGS, SLABS-ON-GRADE, AND BASEMENT WALLS EXTENDING NO MORE THAN 8" ABOVE FINISH GRADE ELEVATION. FOR BASEMENT WALLS EXTENDING MORE THAN 8" ABOVE FINISH GRADE AND ALL SITE WALLS, PROVIDE A 5-1/2 SACK MINIMUM F'C = 3,000 PSI CONCRETE MIX WITH MAXIMUM 3/4" AGGREGATE AND 0.50 W/C RATIO.

M<u>IX DESIGN NOTES</u>:

(1) W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS.

(2) CEMENTITIOUS CONTENT: THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM TO ACI 301 SEC 4.2.2.8.B. MAXIMUM AMOUNT OF FLY ASH SHALL BE 20% OF TOTAL CEMENTITIOUS CONTENT UNLESS REVIEWED AND APPROVED OTHERWISE BY SER.

- PLACEMENT.

FORMWORK: CONFORM TO ACI 301 SEC 2 "FORMWORK AND FORM ACCESSORIES." REMOVAL OF FORMS SHALL CONFORM TO SEC 2.3.2 EXCEPT STRENGTH INDICATED IN SEC 2.3.2.5 SHALL BE 0.75 F'C.

MEASURING, MIXING, AND DELIVERY: CONFORM TO ACI 301 SEC 4.3.

HANDLING, PLACING, CONSTRUCTING AND CURING: CONFORM TO ACI 301 SEC 5.

REBAR FABRICATION & PLACING: CONFORM TO ACI 301, SEC 3.2.2 "FABRICATION", AND ACI SP-66 "ACI DETAILING MANUAL." CONFORM TO ACI 301, SEC 3.3.2 "PLACEMENT." PLACING TOLERANCES SHALL CONFORM TO SEC 3.3.2.1 "TOLERANCES."

SPLICES: CONFORM TO ACI 301, SEC 3.3.2.7. REFER TO PLANS FOR TYPICAL SPLICES.

FIELD BENDING: CONFORM TO ACI 301 SEC 3.3.2.8. "FIELD BENDING OR STRAIGHTENING." BAR SIZES #3 THROUGH #5 MAY BE FIELD BENT COLD THE FIRST TIME. OTHER BARS REQUIRE PREHEATING. DO NOT TWIST BARS.

CORNERS BARS: PROVIDE MATCHING-SIZED "L" CORNER BARS FOR ALL HORIZONTAL WALL AND FOOTING BARS WITH THE APPROPRIATE SPLICE LENGTH, UNO.

CONCRETE CAST AGAINST EARTH BARS IN SLABS AND WALLS

CONSTRUCTION JOINTS: CONFORM TO ACI 301 SEC 2.2.2.5, 5.1.2.3A, 5.2.2.1, AND 5.3.2.6. CONSTRUCTION JOINTS SHALL BE LOCATED AND DETAILED AS ON THE CONSTRUCTION DRAWINGS. USE OF AN ACCEPTABLE ADHESIVE, SURFACE RETARDER, PORTLAND CEMENT GROUT, OR ROUGHENING THE SURFACE IS NOT REQUIRED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS. WHERE SHEAR BOND IS REQUIRED, ROUGHEN SURFACES TO 1/4" AMPLITUDE.

WOOD FRAMING

REFERENCE STANDARDS: CONFORM TO: (1) IBC CHAPTER 23 "WOOD", (2) NDS AND NDS SUPPLEMENT - "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", (3) ANSI/TPI 1 "NATIONAL DESIGN STANDARD FOR METAL-PLATE-CONNECTED WOOD TRUSS CONSTRUCTION",

DEFERRED SUBMITTALS: SUBMIT PRODUCT DATA AND PROOF OF ICC APPROVAL FOR FRAMING MEMBERS AND FASTENERS THAT HAVE BEEN DESIGNED BY OTHERS. SUBMIT CALCULATIONS PREPARED BY THE SSE IN THE STATE OF WASHINGTON FOR ALL MEMBERS AND CONNECTIONS DESIGNED BY OTHERS ALONG WITH SHOP DRAWINGS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS AND WEB STIFFENERS SHALL BE DETAILED AND FURNISHED BY THE SUPPLIER. TEMPORARY AND PERMANENT BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DEFLECTION LIMITS SHALL BE AS NOTED UNDER DESIGN LOADS SECTION.

IDENTIFICATION: ALL SAWN LUMBER AND PRE-MANUFACTURED WOOD PRODUCTS SHALL BE IDENTIFIED BY THE GRADE MARK OR A CERTIFICATE OF INSPECTION ISSUED BY THE CERTIFYING AGENCY.

MATERIALS: - <u>SAWN LUMBER</u>: CONFORM TO GRADING RULES OF WWPA, WCLIB OR NLGA. FINGER JOINTED STUDS ACCEPTABLE AT INTERIOR WALLS ONLY.

MEMBER USE STUDS & POSTS RAFTERS BEAMS BEAMS

POSTS & TIMBERS RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS. MEMBER USE BEAMS

- METAL PLATE CONNECTE WOOD STRUCTURAL SHEA VENEER PLYWOOD. ORIEN

> LOCATION ROOF FLOOR WALLS WALLS(ALT)

NAILS AND STAPLES: CONFORM TO IBC SEC 2303.6 "NAILS AND STAPLES." UNLESS NOTED ON PLANS, NAIL PER IBC TABLE 2304.9.1. UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. NAIL SIZES SPECIFIED ON THE DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS: <u>size</u>

8d 10d (8d & 10d ALTERNA 12d (16d SINKER) 16d

NAILING REQUIREMENTS: PROVIDE MINIMUM NAILING IN ACCORDANCE WITH IBC TABLE 2304.9.1 "FASTENING SCHEDULE" EXCEPT AS NOTED ON THE DRAWINGS. NAILING FOR ROOF/FLOOR DIAPHRAGMS/SHEAR WALLS SHALL BE PER DRAWINGS. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING.

STANDARD LIGHT-FRAME CONSTRUCTION: UNLESS NOTED ON THE PLANS, CONSTRUCTION SHALL CONFORM TO IBC SEC 2308 "CONVENTIONAL LIGHT-FRAME CONSTRUCTION" AND IBC SEC 2304 "GENERAL CONSTRUCTION REQUIREMENTS."

(1) WALL FRAMING: UNLESS OTHERWISE NOTED, ALL INTERIOR WALLS SHALL BE 2X4 @ 16"OC AND ALL EXTERIOR WALLS SHALL BE 2X6 @ 16"OC. PROVIDE (2)BUNDLED STUDS MIN AT WALL ENDS AND EACH SIDE OF ALL OPENINGS. UNO, ALL SOLID SAWN LUMBER HEADERS SHALL BE SUPPORTED BY A MINIMUM OF (1)TRIM AND (1)KING STUD AND ALL GLULAM OR ENGINEERED WOOD HEADERS BY (2)TRIM AND (2)KING STUDS. AT FRAMED WALLS, UNO, ALL SOLID SAWN LUMBER BEAMS SHALL BE SUPPORTED ON A MINIMUM OF (2) BUNDLED 2X STUDS AND ALL GLULAM OR ENGINEERED WOOD BEAMS ON A MINIMUM OF (3) BUNDLED 2X STUDS. STITCH-NAIL BUNDLED STUDS WITH (2)10D @ 12"OC. UNO, ALL INTERIOR AND EXTERIOR HEADERS SHALL BE 4X6. PROVIDE SOLID BLOCKING THRU FLOORS TO SUPPORTS BELOW FOR BEARING WALLS AND POSTS. UNO, ATTACH BOTTOM PLATES OF STUD WALLS TO WOOD FRAMING BELOW WITH 16D @ 12"OC OR TO CONCRETE WITH 5/8"-DIA. ANCHOR BOLTS X 7" EMBEDMENT AT 48"OC. REFER TO SHEAR WALL SCHEDULE FOR SPECIFIC SHEATHING, STUD, AND NAILING REQUIREMENTS AT SHEAR WALLS. UNO, PROVIDE GYPSUM SHEATHING ON INTERIOR SURFACES AND PLYWOOD SHEATHING ON EXTERIOR SURFACES.

(3) AIR CONTENT: CONFORM TO ACI 301 SEC 4.2.2.4. HORIZONTAL EXTERIOR SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. USE "MODERATE EXPOSURE". VERTICAL EXTERIOR SURFACES REQUIRE "MODERATE EXPOSURE". TOLERANCE IS +/- 1-1/2%. AIR CONTENT SHALL BE MEASURED AT POINT OF

(4) SLUMP: CONFORM TO ACI 301 SEC 4.2.2.2. SLUMP SHALL BE DETERMINED AT POINT OF PLACEMENT. (5) NON-CHLORIDE ACCELERATOR: NON-CHLORIDE ACCELERATING ADMIXTURE MAY BE USED IN CONCRETE SLABS PLACED AT AMBIENT TEMPERATURES BELOW 50F AT THE CONTRACTOR'S OPTION.

CONCRETE COVER: CONFORM TO THE FOLLOWING COVER REQUIREMENTS FROM ACI 301, TABLE 3.3.2.3:

CONCRETE EXPOSED TO EARTH OR WEATHER (#5 & SMALLER) 1-1/2" 3/4"

WALLS UNLI.		
SIZE	SPECIES	GRADE
2x, 4x	HEM-FIR	NO. 2
2x4 - 2x10	HEM-FIR	NO. 2
4x8 - 4x12	HEM-FIR	NO. 2
6x8 - 6x12	HEM-FIR	NO. 2
6x, 8x	DOUG-FIR	NO. 2

GLUED LAMINATED TIMBER: CONFORM TO AITC 117 "STANDARD SPECIFICATIONS FOR STRUCTURAL GLUE-LAMINATED TIMBER OF SOFTWOOD SPECIES, MANUFACTURING AND DESIGN" AND ANSI/AITC A190.1 "STRUCTURAL GLUED LAMINATED TIMBER." CAMBER ALL GLUED LAMINATED MEMBERS BEAMS TO 2000'

SIZES	SPECIES	STRESS CLASS	USES	
ALL	DF/DF	24F-1.8E	SIMPLE SPANS	
ALL	DF/DF	24F-1.8E [(-FB)=(+	FB)] CANTILEVER SPA	NS
WOOD ROOF	TRUSSES: CON	FORM TO IBC SEC 2303	3.4 "TRUSSES."	
THING (PLYWO	<u>od)</u> : wood ap	A-RATED STRUCTURAL	SHEATHING INCLUDES: A	\LL
TED STRAND E	BOÁRD, WAFERE	BOARD, PARTICLEBOARD,	T1—11 SIDING, AND	
	OFD MATERIAL	CONFORM TO PRODUCT		

COMPOSITES OF VENEER AND WOOD BASED MATERIAL. CONFORM TO PRODUCT STANDARDS PS-1 AND PS-2 OF THE U.S. DEPT. OF COMMERCE AND THE AMERICAN PLYWOOD ASSOCIATION (APA). MINIMUM APA RATING

THICKNESS	SPAN RATING	PLYWOOD GRADE	EXPOSURE
15/32"	32/16	C-D	1
23/32"T&G	24 OC	STURD-I-FLOOR	1
15/32"	32/16	C-D	1
7/16" OSB	24/16	C-D	1

- JOIST HANGERS AND CONNECTORS: SHALL BE "STRONG TIE" BY SIMPSON COMPANY OR USP EQUIVALENT AS SPECIFIED IN THEIR LATEST CATALOGS. ALTERNATE CONNECTORS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD CAPACITIES AND ARE REVIEWED AND APPROVED BY THE SER PRIOR TO ORDERING. CONNECTORS SHALL BE

INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE 1/2 OF THE NAILS OR BOLTS IN EACH MEMBER. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE ALL NAILS SHALL BE FULL LENGTH COMMON. NAIL STRAPS TO WOOD FRAMING AS LATE AS POSSIBLE IN THE FRAMING PROCESS TO ALLOW THE WOOD TO SHRINK AND THE BUILDING TO SETTLE.

	LENGTH	DIAMETER
	2-1/2"	0.131"
	3"	0.148"
TIVE) PASLODE TETRAGRIP NAILS	2-3/8"	0.113"
	3-1/4"	0.148"
	3-1/2"	0.162"

- <u>LAG BOLTS/BOLTS</u>: CONFORM TO ASTM A307.

(2) <u>ROOF/FLOOR FRAMING</u>: UNLESS OTHERWISE NOTED, PROVIDE DOUBLE JOISTS/RAFTERS UNDER ALL PARALLEL BEARING PARTITIONS AND SOLID BLOCKING AT ALL BEARING POINTS. PROVIDE DOUBLE JOISTS AROUND ALL ROOF/FLOOR OPENINGS. UNO, MULTI-JOISTS/RAFTERS SHALL BE STITCH-NAILED TOGETHER WITH (2)10D @ 12"OC. PROVIDE ROOF SHEATHING EDGE CLIPS CENTERED BETWEEN FRAMING AT UNBLOCKED PLYWOOD EDGES. ALL FLOOR SHEATHING SHALL HAVE TONGUE AND GROOVE JOINTS OR BE SUPPORTED BY SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ROOF/FLOOR SHEATHING. ROOF/FLOOR SHEATHING SHALL BE LAID FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS.

MOISTURE CONTENT: WOOD MATERIAL USED FOR THIS PROJECT SHALL HAVE MAXIMUM MOISTURE CONTENT OF 19% EXCEPT FOR THE PRESSURE-TREATED WOOD SILL PLATE.

PRESERVATIVE TREATMENT: WOOD MATERIALS ARE REQUIRED TO BE "TREATED WOOD" UNDER CERTAIN CONDITIONS IN ACCORDANCE WITH IBC SEC 2304.11 "PROTECTION AGAINST DECAY AND TERMITES". CONFORM TO THE APPROPRIATE STANDARDS OF THE AMERICAN WOOD-PRESERVERS ASSOCIATION (AWPA) FOR SAWN LUMBER, GLUED LAMINATED TIMBER, ROUND POLES, WOOD PILES AND MARINE PILES. FOLLOW AMERICAN LUMBER STANDARDS COMMITTEE (ALSC) QUALITY ASSURANCE PROCEDURES. PRODUCTS SHALL BEAR THE APPROPRIATE MARK.

METAL CONNECTORS/PT WOOD: CK ENGINEERING LLC RECOMMENDS THAT ALL METAL HARDWARE AND FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER BE STAINLESS STEEL TYPE 316L. AT THE OWNER'S RISK AND DISCRETION, HOT-DIPPED GALVANIZED METAL HARDWARE AND FASTENERS MAY BE INVESTIGATED FOR USE IN LIEU OF STAINLESS STEEL PROVIDED THAT THE FINISH HAS A MINIMUM ZINC CONTENT OF AT LEAST 1.85 OZ/SF AND ITS USE IS COORDINATED BY THE CONTRACTOR AND WOOD SUPPLIER FOR THE EXPECTED ENVIRONMENT AND MOISTURE EXPOSURE FOR APPROPRIATE USE BASED ON THE METHOD OF PRESERVATIVE TREATMENT OF THE WOOD.

		We	OOD-FRAMED	SHEAR WALL	SCHEDUL	E		
SW	SW SHFATHING	NAIL SIZE &	RIM JOIST OR BLOCKING	BOTTOM PLATE & E REQUIREM	EDGE MEMBER ENTS [3, 7, 13]	SILL PLATE REQU	REMENTS	. SHEAR LOAD
TYPE	APA-RATED [1, 2, 12]	SPACING @ PANEL EDGES [4, 5, 6]	ATTACHMENT TO TOP PLATE BELOW [8, 9]	SHEAR NAILING TO WOOD FRAMING BELOW	BOTTOM PL AT FRAMING	ANCHOR BOLT TO CONCRETE FOUNDATION [10]	SILL PL AT FOUNDATION [11]	CAPACITY (PLF)
SW-6	15/32"CD-EXT	0.131"ø × 2 ¹ / ₂ " @ 6"OC	CLIP @ 18"0C	0.148 "ø x $3^{1}/_{4}$ " @ 6"OC	2x	⁵ / ₈ "ø @ 48"0C	P.T. 2x	260
SW-4	15/32"CD-EXT	0.131 % x $2^{1}/2$	CLIP @ 14"OC	0.148"ø x 3 ¹ / ₄ " @ 4"0C	2x	⁵ / ₈ "ø @ 32"0C	P.T. 2x	- 380
	,	@ 4"OC			[15]	⁵ / ₈ "ø @ 48"0C	P.T. 3x [15]	
SW 3	15/32" CD_FYT	0.131"ø x 2 ¹ / ₂ "		0.148 "ø x 3 $^{1}/_{4}$ " @ 4"0C	ζ.,	⁵ / ₈ "ø @ 24"0C	P.T. 2x	400
5₩-5	13/32 CD LAT	@ 3"OC, STAGGERED	CLIP @ 12 OC	& CLIP @ 18"0C	[15]	⁵ / ₈ "ø @ 32"0C	P.T. 3x [15]	490
CW 0	1E /70" OD EVT	0.131 "ø x 2 ¹ / ₂ "		0.148 "ø x $3^{1/4}$ " @ 4"00	7	⁵ / ₈ "ø @ 16"OC	P.T. 2x	C 4 0
5₩-2	15/52 CD-EXI	@ 2"OC, STAGGERED		& CLIP @ 16"0C	کx [15]	⁵ / ₈ "ø @ 24"0C	P.T. 3x [15]	640

1. INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY 10. ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 2. WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING 3"x3"x0.229"(MIN). THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED $\frac{13}{16}$ "x1 $\frac{3}{4}$ " SHALL BE STAGGERED SO THAT JOINTS ON OPPOSITE SIDES ARE NOT LOCATED ON THE SAME PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE WASHER TO EXTEND TO WITHIN $\frac{1}{2}$ " OF THE EDGE OF THE SILL PLATE ON THE SIDE(S) WITH 3. BLOCKING IS REQUIRED AT ALL PANEL EDGES. SHEATHING. WHERE SHEAR WALLS ARE SHEATHED ON BOTH SIDES OF 2x6 WALL FRAMING, USE 4. PROVIDE SHEAR WALL SHEATHING AND NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON 4.5"x4.5"x0.229"(MIN) PLATE WASHERS. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE. THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS 11. PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE DESIGNATED ON PLANS. HOLDOWN REQUIREMENTS PER PLANS. HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES 5. SHEAR WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING ETC. ABOVE AND BELOW ALL OPENINGS). MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL NOTES. 6. SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE 12. WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM SHEATHING, CONTACT THE ENGINEER OF RECORD REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. ADDITIONAL INFORMATION PER HOLDOWN SCHEDULE & DETAILS. FOR ALTERNATE NAILING REQUIREMENTS. 7. INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING 13. AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2X STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH with 0.148" $\sigma \times 2^{1}/2$ " nails at 12" oc where studs are spaced at 16" oc and 0.148" $\sigma \times 2^{1}/2$ " 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING.

NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.

8. BASED ON 0.131"% x 1¹/₂" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131 " $\% \times 2^{1/2}$ " NAILS WHERE INSTALLED OVER SHEATHING. 9. FRAMING CLIPS: SIMPSON "A35" OR "LTP5" OR APPROVED EQUIVALENT.

WOOD-FRAMED SHEAR WALL SCHEDULE

SCALE: N.T.S.

MODEL		FASTENERS	END STUD	CAPACI	ry (LBS)
# (1)		TASTENENO		DOUG-FIR	HEM-FIR
CS14	FLR-TO-FLR STRAP (E.L.=19")	(30) 10d COMMON	2x STUD	2,490	2,490
MST48	FLR-TO-FLR STRAP (CNTR'D ON C.S.)	(32) 16d COMMON	(2) 2x STUDS	3,960	3,425
MST72	FLR-TO-FLR STRAP (CNTR'D ON C.S.)	(62) 16d COMMON	(2) 2x STUDS	6,730	6,475
LSTHD8/RJ	CAST-IN-PLACE	(16) 16d SINKERS	(2) 2x STUDS ⁷	1,975	1,975
STHD10/RJ	CAST-IN-PLACE	(18) 16d SINKERS	(2) 2x STUDS ⁷	2,640	2,640
STHD14/RJ	CAST-IN-PLACE	(22) 16d SINKERS	(2) 2x STUDS ⁷	3,695	3,695
HDU8	SSTB28	(20) ¹ / ₄ "øx2 ¹ /2" SDS WOOD SCREWS	(3) 2x STUDS	7,870	5,665
HDU11	SB1x30	(30) ¹ / ₄ "øx2 ¹ / ₂ " SDS WOOD SCREWS	6x6 DF#2 MIN.	9,335	

- 1. HOLDOWNS SPECIFIED ARE AS MANUFACTURED BY SIMPSON ANCHOR TIE DOWN CO., INC; ACCEPTABLE EQUIVALENT PRODUCT SUBSTITUTIONS ARE AVAILABLE FROM OTHER MANUFACTURERS WITH SER APPROVAL.
- 2. LOCATE ALL HOLDOWNS AT ENDS OF ALL SHEAR WALLS & FASTEN TO BUNDLED END STUDS. 3. BUNDLED END STUDS SHOULD BE STITCH-NAILED TOGETHER USING MINIMUM (2) 16d @ 10"OC, UNO.
- 4. LOCATE "HDU#", "LSTHD#" & "STHD#" HOLDOWNS AT CONCRETE FOUNDATION LEVEL. (DETAIL B & C) LOCATE "CS#", "MST", "MSTC#" & "CMST#" STRAPS AT FLOOR-TO-FLOOR CONNECTIONS. (DETAIL A)
- 5. ALL HOLDOWN ANCHOR BOLTS SHALL BE MIN 5" FROM CONCRETE WALL ENDS.
- 6. USE "SSTB" FOR 2x SILL PLATES & "SSTBL" FOR 3x SILL PLATES. 7. ADDITIONAL END STUD REQUIRED TO MEET MINIMUM $1\frac{1}{2}$ " EDGE DISTANCE FROM CONCRETE CORNER TO "STHD" STRAP.
- USE "RJ" STYLE WITH "STHD" WHERE RIM JOIST IS PRESENT.
- 8. INSTALL ALL HOLDOWN HARDWARE PER MANUFACTURER'S INSTRUCTIONS & RECOMMENDATIONS.

HOLDOWN SCHEDULE

SCALE: N.T.S.

14. CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED. 15. NAIL STUDS TO 3x BOTTOM/SILL PLATES WITH EITHER (2) 0.148"Øx4" END NAILS OR

(4) 0.131" \emptyset x2 $^{\prime}/_{2}$ " TOENAILS.

8

12

SCALE: N.T.S.

SPLICE LENGTH T/WALL BAR LENGTH **/** ^{THK} **/** ^{±12}" 28" #4 #5 36" BACKFILLING _____ WALL/FLR FRAMING ABOVE NOT SHOWN FOR CLARITY T/GRADE _ WALL VERTICAL REINF (CONT W/ BEND OR FTG DOWEL TO MATCH) PER SCHEDULE -WALL HORIZONTAL REINF ----➡ T/FINISH_GRADE , PER SCHEDULE INSTALL CONCRETE SLAB 5" CLR PRIOR BACKFILLING TYP #4 x ^{24″} @ 16"0C ── - PROVIDE FREE-DRAINING MATERIAL MIN 12" THICK SCHI. T/SLAB ¥ ₩ FTG TOP TRANSV REINF PER SCHED - CONT FTG DRAINAGE PER FTG TOP LONGIT HEEL CIVIL – DRAIN TO DAYLIGHT REINF PER SCHED 🔨 OR STORM SYSTEM - DOWEL TO MATCH VERT REINF FTG BOTT LONGIT REINF

		RET	AINING W	/ALL/I	F00T	ING	SCHEDU	JLE				RET
		WALL					FOOTIN	G				WALL
SIZE	1	REINFOF	RCEMENT		SIZE		RE	INFORCEM	IENT	SIZ	E	REINFO
HT (MAX)	THK	VERTICAL	HORIZONTAL	TOE	HEEL	DEPTH	TOP/TRANSV	TOP/LONGIT	BOTTOM/LONGIT	HT (MAX) THK	VERTICAL
4'-0"	8"	#4 @ 12"OC	#4 @ 12"OC	1'-0"	1'-3"	10"	#4 @ 10"OC	(3) #4	(2) #4	4'-0"	8"	#4 @ 12"00
6'-0"	8"	#4 @ 10"OC	#4 @ 12"OC	2'-0"	1'-6"	10"	#4 @ 10"OC	(4) #4	(3) #4	6'-0"	8"	#4 @ 8"OC
8'-0"	8"	#5 @ 12"OC	#4 @ 12"OC	3'-3"	1'-9"	14"	#5 @ 10"OC	(5) #5	(3) #5	8'-0"	8"	#5 @ 12"00
9'-0"	10"	#5 @ 8"OC	#4 @ 10"OC	4'-3"	2'-0"	14"	#5 @ 10"OC	(7) #5	(5) #5	L		1

SCALE: N.T.S.

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BASEMENT RETAINING WALL SCHEDULE

SCALE: N.T.S.

PER SCHEDULE -

SCALE: $\frac{3}{4}$ = 1'-0"

EINFORCEMENT HORIZONTAL 12"OC #4 @ 12"OC @ 8°OC | #4 @ 12°OC

TALL CRAWLL SPACE RETAINING WALL SCHEDULE

- W - D - Z	
WV W W W CURB	
FOUND MON IN CASE TACK/LEAD, DOWN 0.8' ≥	
CURB	
CB (TYPE 1) RIM=128.57' IE 12"PVC(NE.)=126.62'	
IE 8 CONC(SW.)=126.32 IE 12"CONC(W.)=126.42'	
TYPE 1) :127.61' 'CONCONE)=126.11'	
L OF WATER)	
INLET	
0200	
PER	
ATION OF RECORDS	
SEE C2 FOR DRAINAGE SITE PLAN	

	Revisions:	
ign, PLLC		TESC/ Demo/ CSWPPP
		Scale: 1" = 10'

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP T5.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING: 1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE. 2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL 3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS: A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION. B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220. THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW: 1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION. 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS

4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED

Hard Surface Data				
Lot Size	8345 sf			
New Roof	1939 sf			
New Driveway/ Walkway	496 sf			
New Patio	222 sf			
Total Proposed Hard Surface	2657 sf			
Proposed Vegetation	5688 sf			

SEE C1 FOR TESC/ DEMO CSWPPP

Revisions:

Drainage Site Plan Scale: 1" = 10'