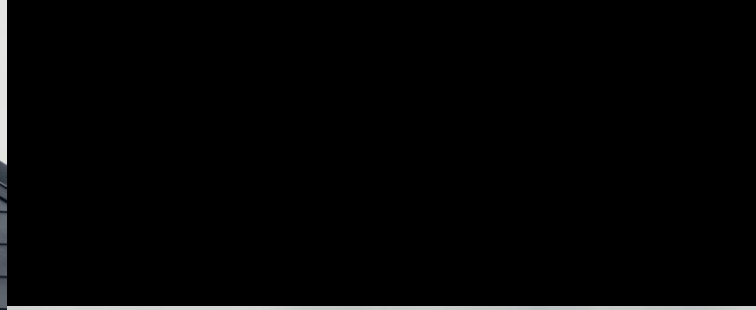




THRIVE

INSIDE



## Vision Statement:

Artisans Group Architecture and Planning is an award winning, women owned design studio, committed to high performance, net zero resilient buildings and communities. As planners, designers and architects, we advocate for healthy, equitable, transformational spaces, and soulful sustainability at every scale of project. Driven by good building science, we put things on the planet with great care, leveraging decades of experience into lasting relationships, and hundreds of realized dreams.

**Roussa Cassel  
& Tessa Bradley**  
Principal Architects/Owners





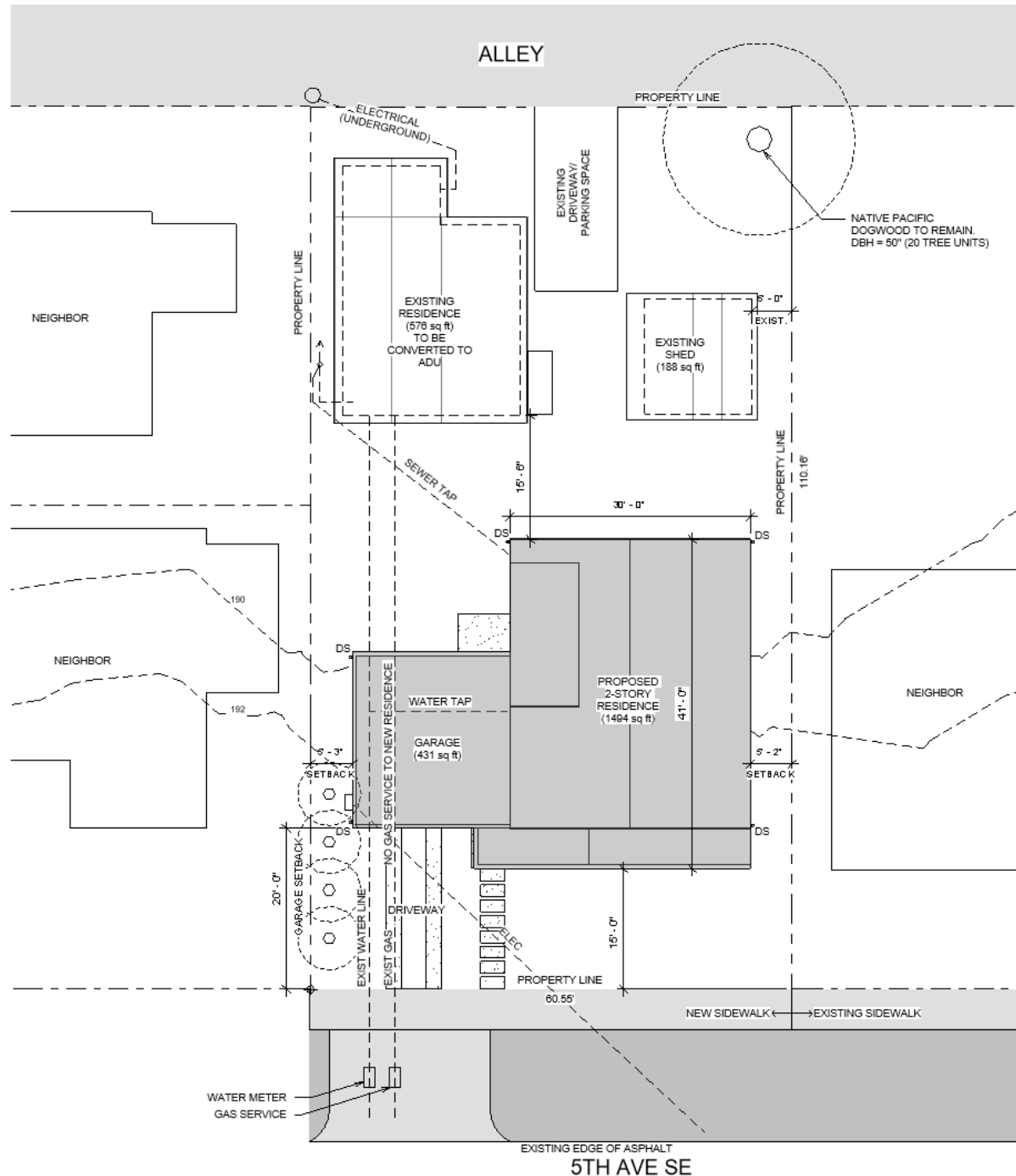
# PREFAB, PRESCRIPTIVE AND PASSIVE

AN EXERCISE IN BUILDING YOUR OWN HOUSE

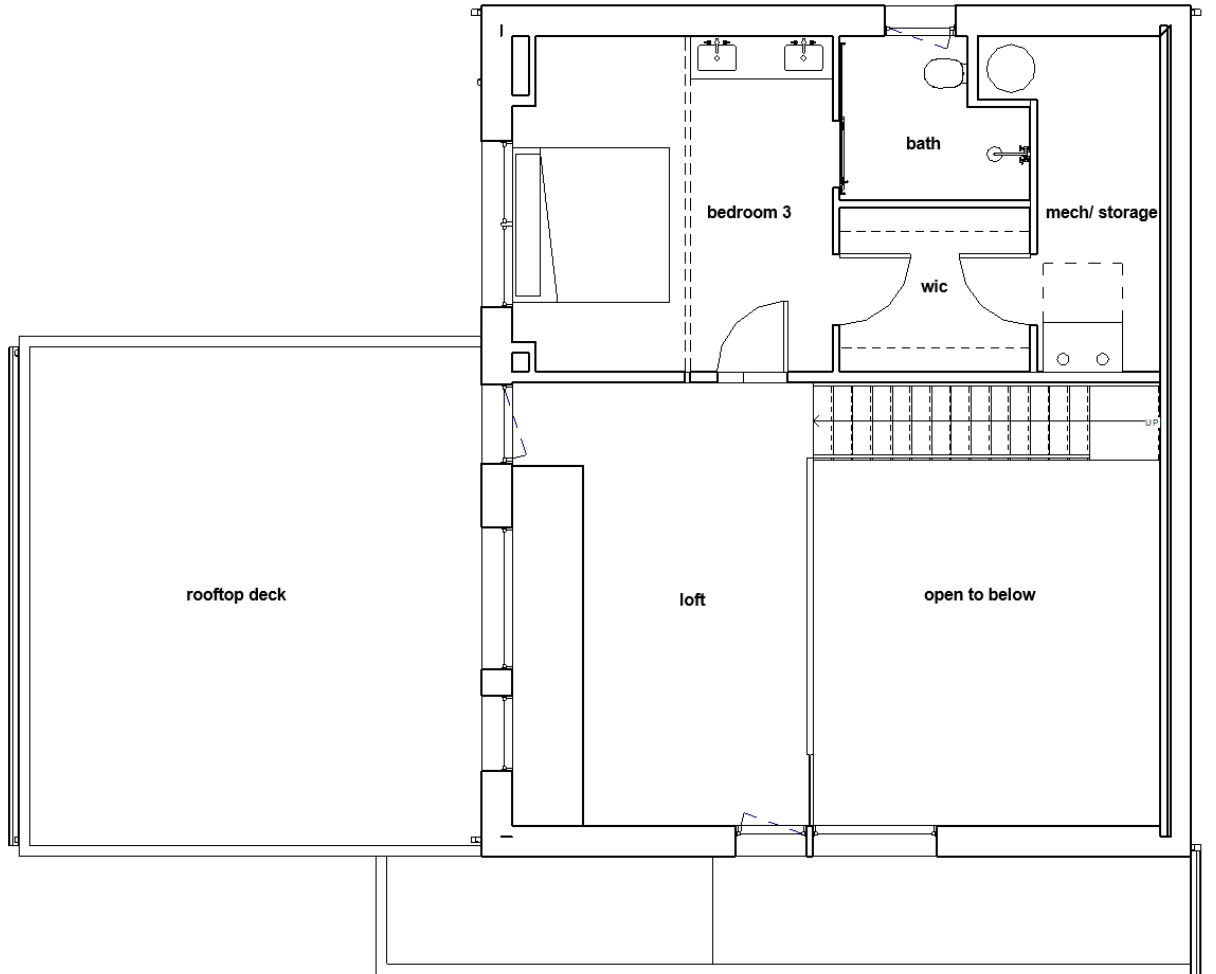
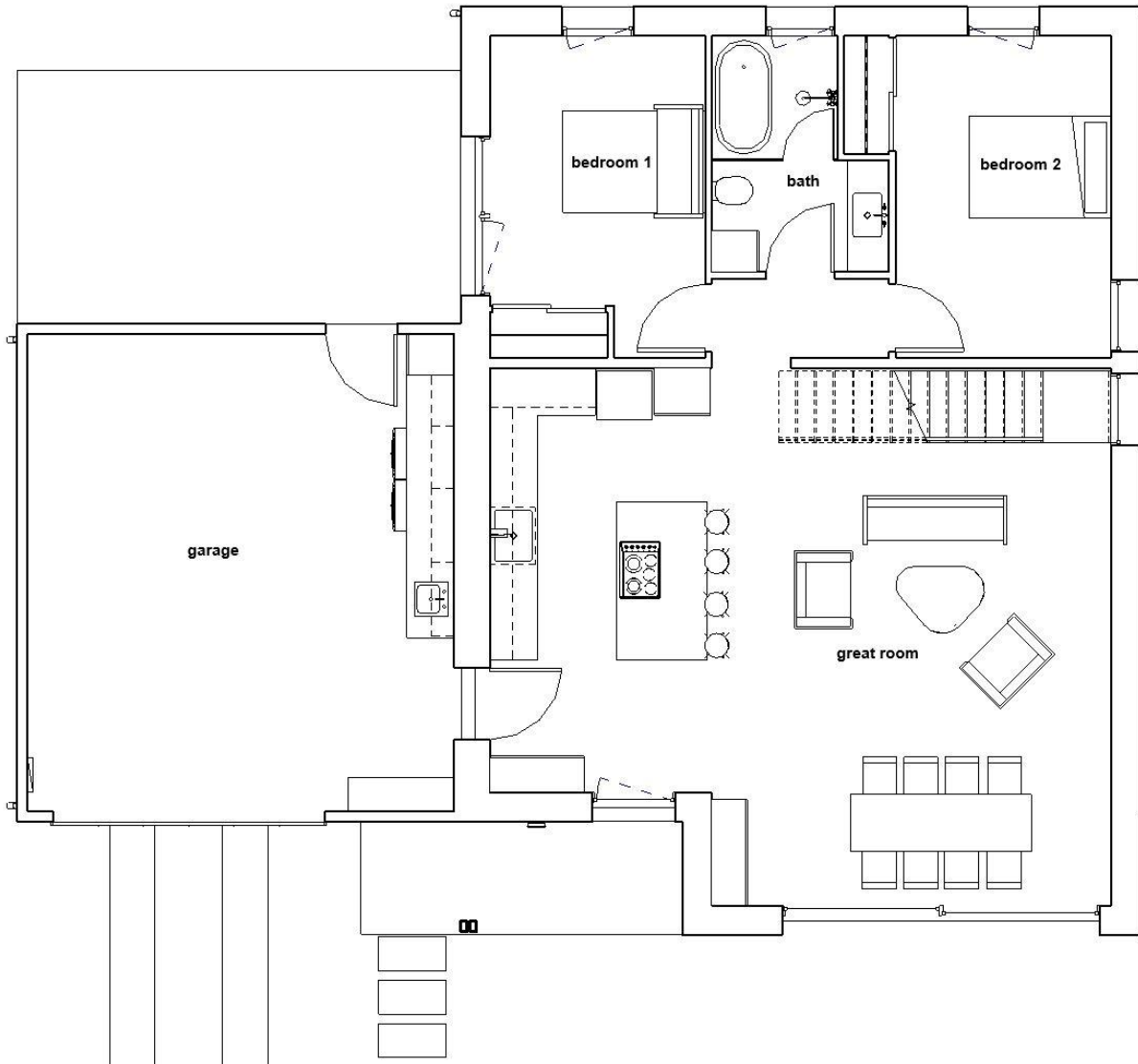




Design Process

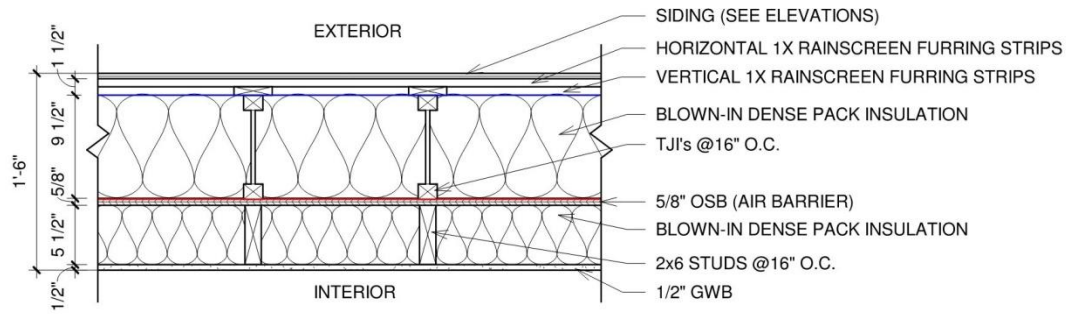


Site Plan



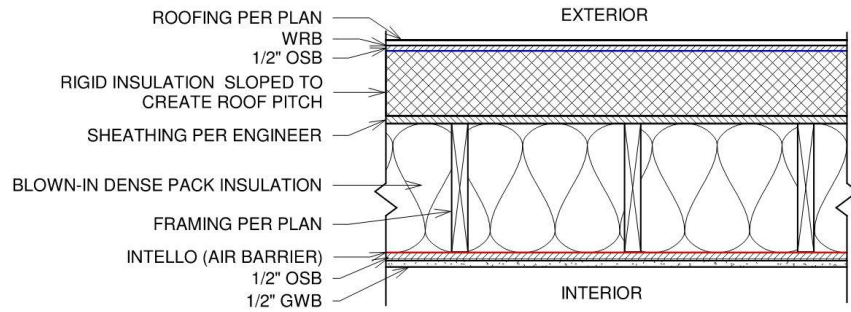
Floor Plans





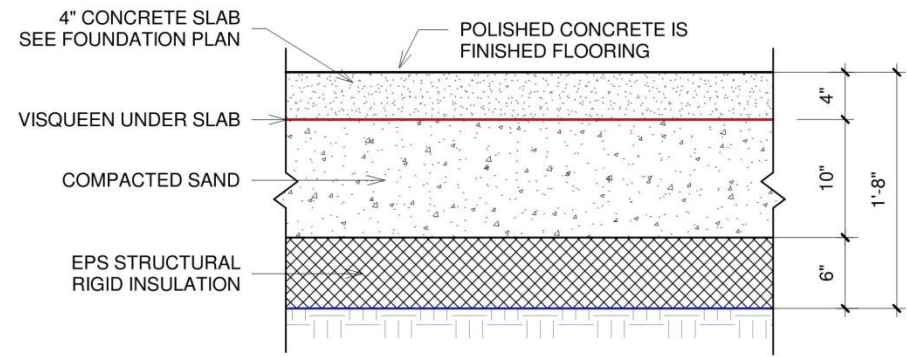
1 Typical Wall (W1)  
1" = 1'-0"

≥0.2	Required Ratio	Calculated Ratio
YES	0.20	1.64
≥34	Required R-value	Calculated R-value
YES	34	46



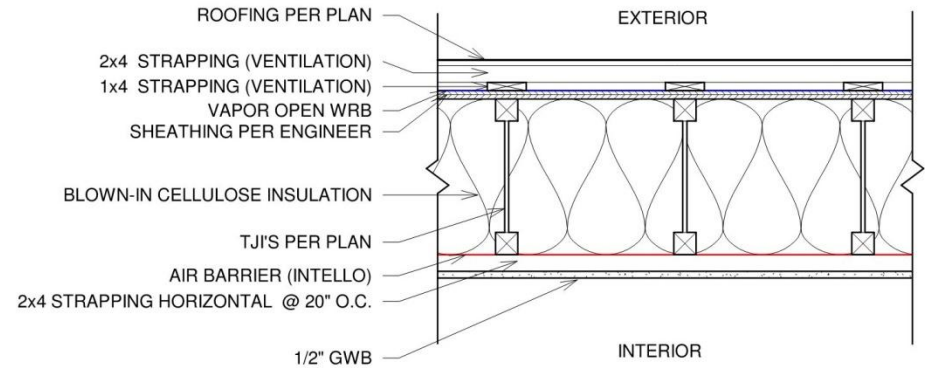
5 Typical Unvented Roof (R2)  
1" = 1'-0"

NR	Required Ratio	Calculated Ratio
NR	NR	-
≥64	Required R-value	Calculated R-value
YES	64	65



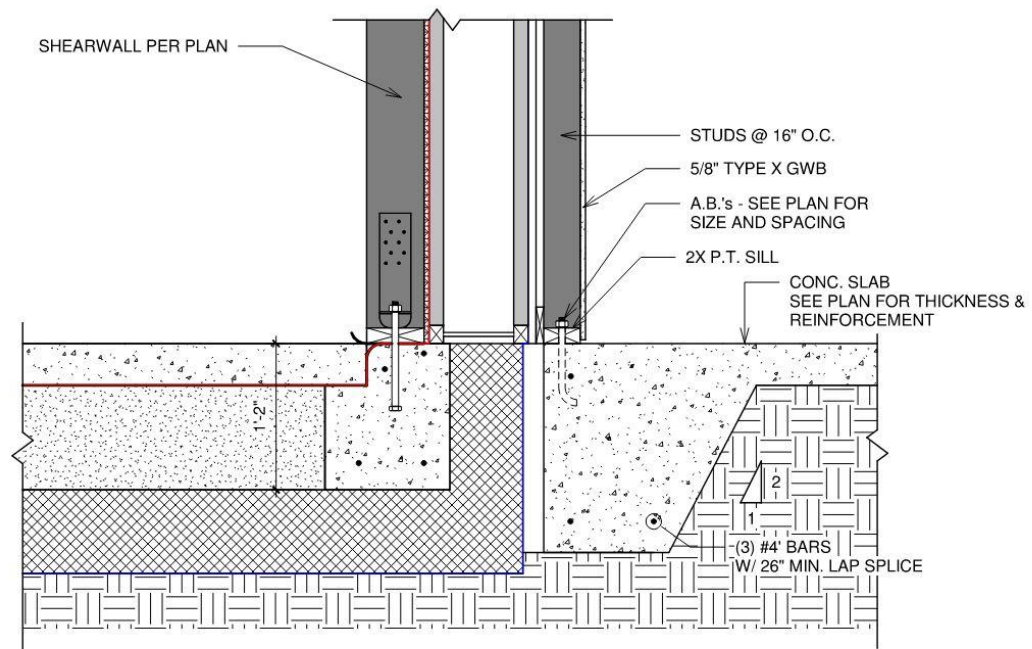
3 Typical Floor (F1)  
1" = 1'-0"

≥18	Required R-value	Calculated R-value
NO	18	16
23		

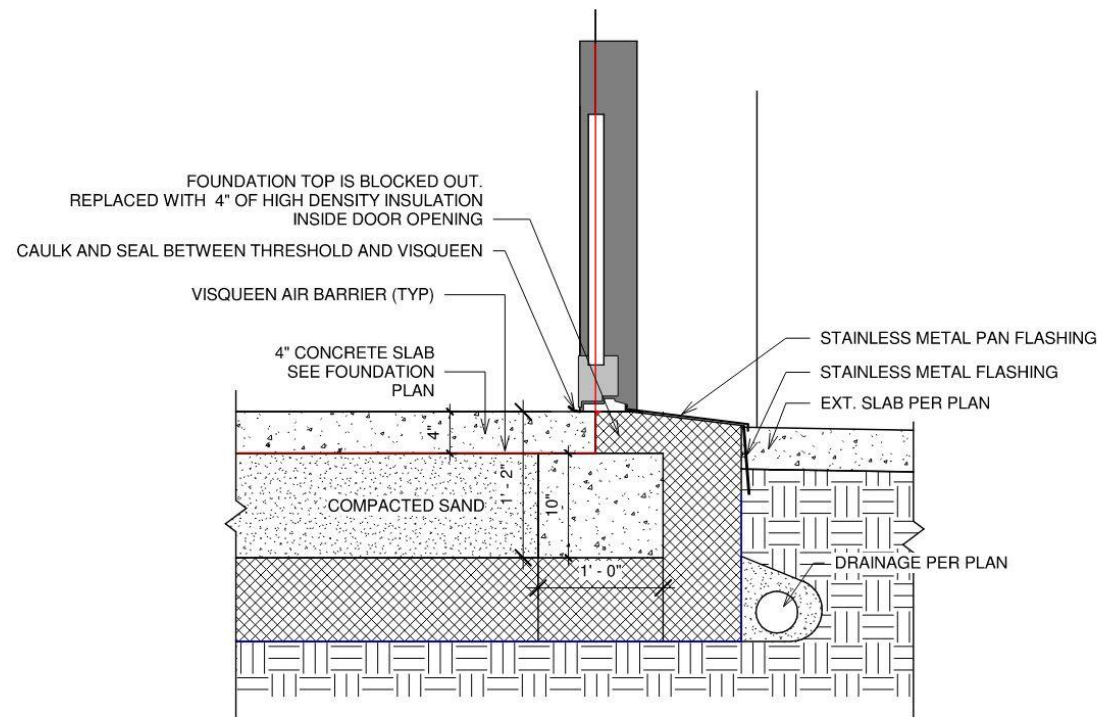


4 Typical Roof (R1)  
1" = 1'-0"

NR	Required Ratio	Calculated Ratio
NR	NR	-
≥64	Required R-value	Calculated R-value
NO	64	58



① Foundation- Double Wall  
1" = 1'-0"



② Doorway Threshold  
1" = 1'-0"

## Foundation Details



Sweat Equity





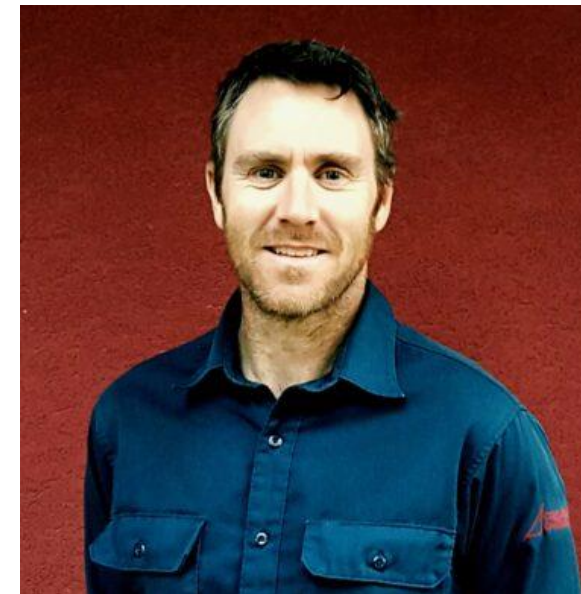
Rane Wardwell  
CFO/ Co-Owner/ Head of Production



# COLLECTIVE CARPENTRY

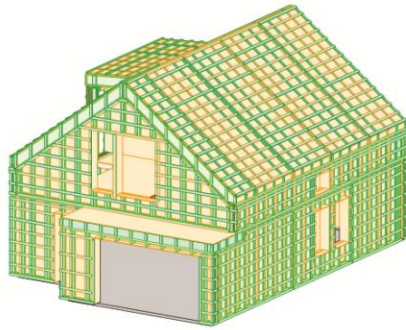
High performance building  
+ Off-site construction

Jan Pratshe  
CEO/ Co-Owner/ Head of Design

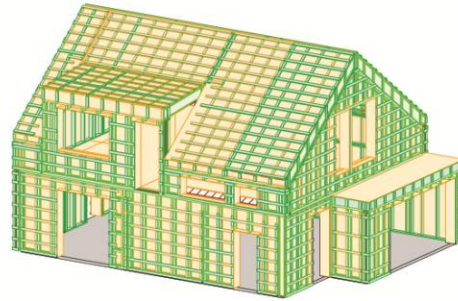


Collective Carpentry is an Canadian 8 person PH prefab company, offering full services and Installation, located in Southeast British Columbia.





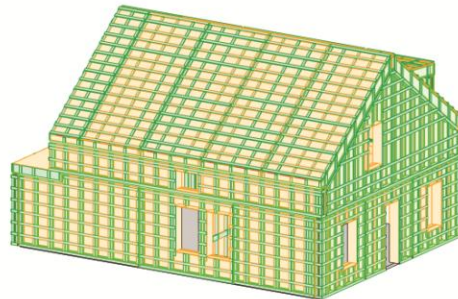
View: Standard Axo 2'  
Scale:



View: Standard Axo 2'  
Scale:



View: Standard Axo 3'  
Scale:



View: Standard Axo 4'  
Scale:

**Ext. Wall Framing:**

2x6 D. Fir Structural Select (SS) @ 24" OC  
 or SPF #2 or better (as per A101)  
 3-1/4" common nails, full round head  
 1/2" CDX Plywood, taped ABVB  
 2-3/8" common nails, full round head  
 @ 6" OC at edges &  
 @ 12" OC in field.  
 or as per SW schedule  
 9 1/2" TJI 230 or sim. I-Joist  
 Mento Plus WRB  
 1x4 Vertical Strapping @ 24" OC  
 (1x4 Horizontal Strapping @ 24" OC)  
 3" Pamfast screws @ 24" OC

**Int. shear walls : SW1**

2x6 D.Fir SS @ 24" OC  
 or SPF #2 or better (as per A101)  
 2 1/2" common nails, full round head  
 1/2" CDX Plywood  
 @ 6" OC at edges & field

**Floor Framing: 2nd Level Floor**

2x6 SPF #2 or better joists @16" OC  
 3/4" T&G plywood  
 1-3/4" #8 PAMfast subfloor screws & glue  
 @ 6" OC at edges &  
 @ 12" OC in field.  
 4x8 D. Fir beams, S4S, @ 18" OC

**Insulated Roof Framing:**

2x4 SPF cross strapping @16" OC  
 1x4 SPF strapping on I joists - in line  
 Proclima Adhero SA WRB  
 1/2" CDX plywood @ outside face  
 16" LPI 20+ or sim. I-Joists @ 24" OC  
 2-3/8" common nails, full round head  
 @ 6" OC at edges &  
 @ 12" OC in field  
 Intello Plus Air & Vapour Barrier (ABVB)  
 2x4 cross strapping @ 24" OC

**Wall Panel Connections:**

Horizontal: (wall to floor, wall to roof)  
 Structural Screws: Partially Threaded,  
 6x160mm @ 24" OC xtop plate to Roof joist  
 6x120mm @ 24" OC xbottom plate to Floor joist

Vertical: (wall to wall)  
 SPF 2x4, nailed with  
 3-1/4" common nails @ 6" OC

Corner: (wall to wall)  
 3-1/4" common nails @ 12" OC, or where required  
 by post thickness:  
 Structural Screws: Partially Threaded,  
 Countersunk Head, 6mm x 160mm @ 16" OC

**Floor Panel Connections:**

Sheathing overlaps 1/2 width of I-Joist (1 1/4")  
 Subfloor glue at panel joints  
 Screwed with 1-3/4" #8 PAMfast subfloor screws @ 6" OC

**Roof Panel Connections :**

Sheathing overlaps 1/2 width of I-Joist (1 1/4")  
 @ outside face (Plywood and WRB)  
 Nailed with 2-3/8" common nails @ 6" OC

**Shear wall schedule, see dwgs. for add. info.**

**SHEAR WALL SCHEDULE**

	sheathing nailed with 8d's at 6" on center all edges. (Capacity= 218 pF)
	sheathing nailed with 8d's at 4" on center all edges with 3X or 4X studs at adjoining panel edges. (Capacity= 319 pF)
	sheathing nailed with 8d's at 2" on center all edges with 3X or 4X studs at adjoining panel edges. (Capacity= 538 pF)

Project name: Cassel - Canfield  
 Architect: The Artisans Group, Inc.  
 Engineer: MC2  
 Contractor: Constructing LLC.

File Name: Cassel  
 Issue Date: 02.11.2021  
 Scale: 1:1 Page: 1 of 18

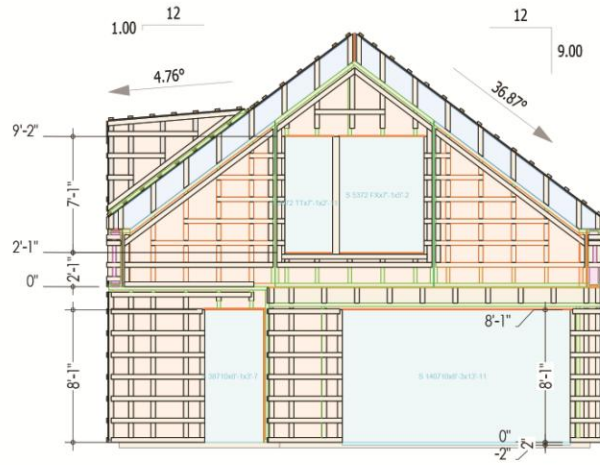
Engineer's Stamp: \_\_\_\_\_  
 Comments: \_\_\_\_\_

Revisions: 08.08.2021  
 Revisions: 25.10.2021  
 Revisions: 31.10.2021

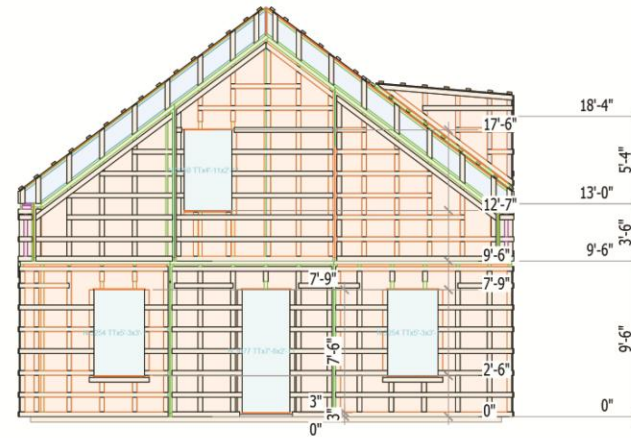
z 0.1 Axo

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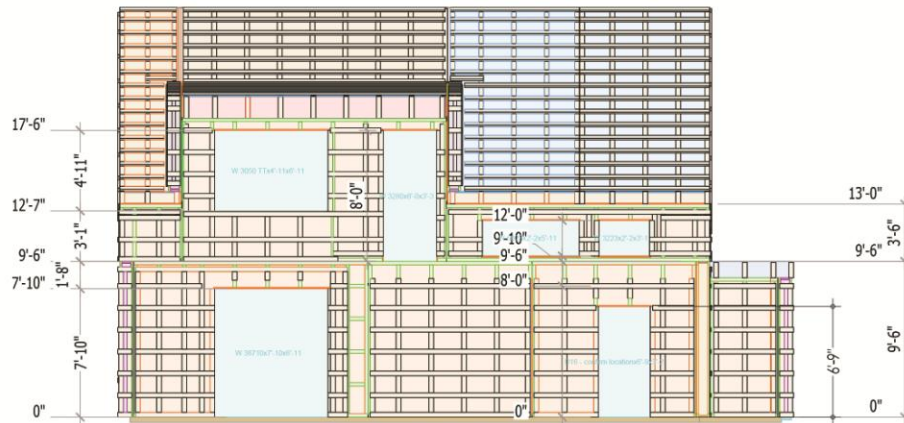




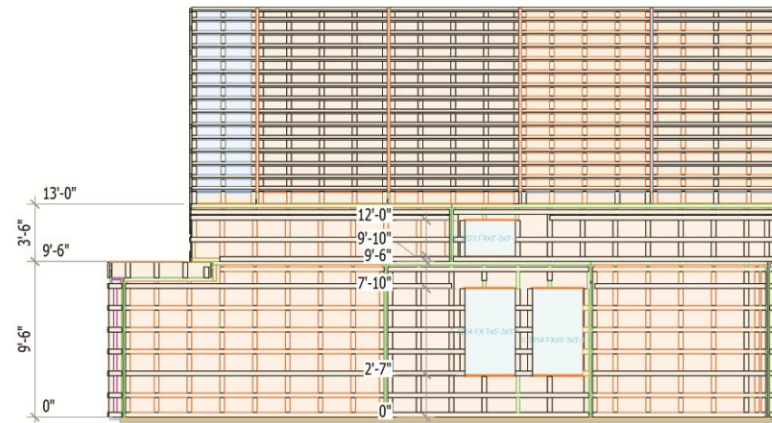
Section: South Elevation  
Scale:



Section: North Elevation  
Scale:



Section: West Elevation  
Scale:



Section: East Elevation  
Scale:

Project name: Cassel - Canfield  
Architect: The Artisans Group, Inc.  
Engineer: MC2  
Contractor: Constructing LLC.

File Name: Cassel  
Issue Date: 02.11.2021  
Scale: 1:1 Page: 5 of 18

Engineer's Stamp: Comments:

Revisions: 08.08.2021  
Revisions: 25.10.2021  
Revisions: 31.10.2021

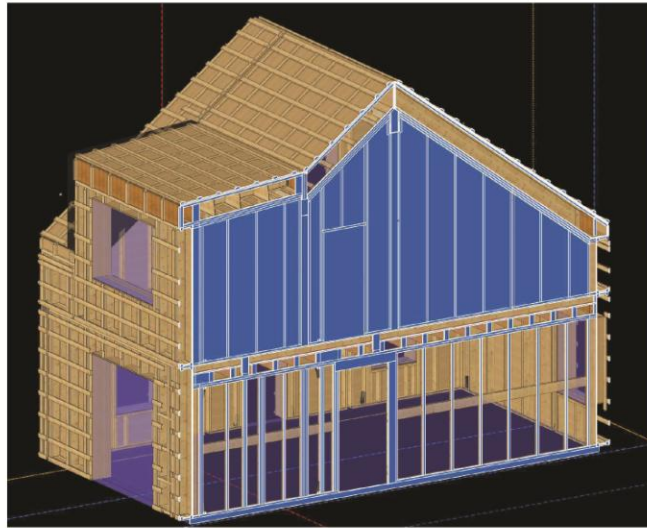
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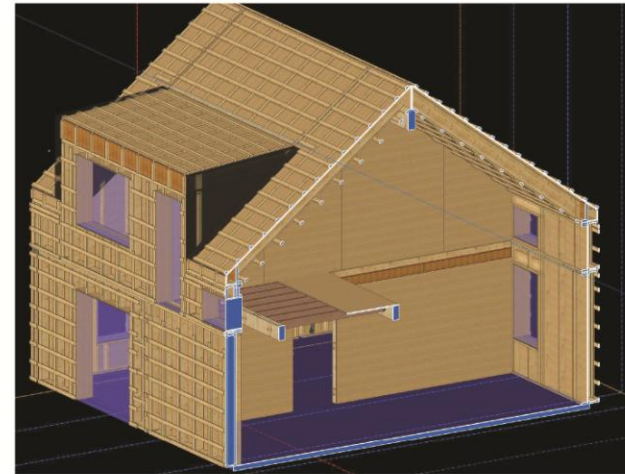
Section 1



Interior Walls



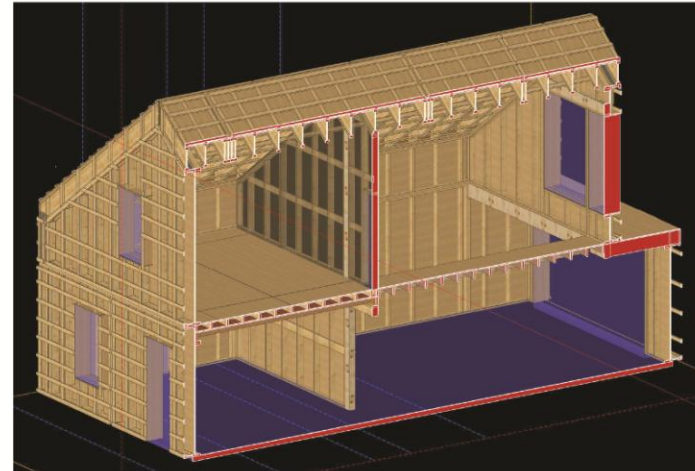
Section 4



Section 2



Section 3



Section 5



Project name: Cassel - Canfield  
 Architect: The Artisans Group, Inc.  
 Engineer: MC2  
 Contractor: Constructing LLC.

File Name: Cassel  
 Issue Date:  
 Scale: 1:1 Page: 6 OF 18

Engineer's Stamp:

Comments:

Revisions: 08.08.2021  
 Revisions: 25.10.2021  
 Revisions: 31.10.2021

Section sections

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DESIGN BY  
**artisansgroup**  
.com  
ARCHITECTS • PLANNING



5-day Install









## **LOCATION + NEIGHBORHOOD FABRIC**

Locating the project in a neighborhood with existing infrastructure, transportation and services enhances livability, leads to more resource-efficient development of land, saves energy, and increases the vitality of the community.

**- Phius CORE Prescriptive 2021 Checklist - V2.6 - 07/2022**



**\*To view all content in this checklist, make sure to 'enable macros'\***

NR = 'No Requirement'

Required input cells.	Requirement met.	Calculated.	Threshold
Required dropdown menu inputs.	Requirement not met.	Calculated from another sheet.	

Input 'X' for verification in columns R-U.  
 Submittal column [U] is for confirmation of document location/file name.

Instructions: Use the [+] icon on the far left of the screen to expand and view built in compliance calculators.

**0 Project Information**

Phius Project Number:	1516	Project Name:	Dogwood House	Date:	10/2/2022
-----------------------	------	---------------	---------------	-------	-----------

**0.3 Climate Information**

State / Province:	WASHINGTON	City:	OLYMPIA AIRPORT	Climate Zone:	4C
-------------------	------------	-------	-----------------	---------------	----

**0.4 Project Location**

City:	Olympia	Street Address:	1710 5th Ave SE	Zip Code:	98501
-------	---------	-----------------	-----------------	-----------	-------

**0.5 Project Team**

Submitter/CPHC Name:	Emily Nelson	Phius ID:	109119
Builder Name:	Roussa Cassel and Dave Canfield	Phius ID:	10203 & 2707
Rater Name:	Cybil Tribie	Phius ID:	112775

**0.6 Project Specifics**

Project Type:	Single Family Detached - New Construction	Interior Conditioned Floor Area (iCFA) [ft2]:	1,394	Number of Stories:	2
		Exterior Enclosure Area [ft2]:	4,798	Number of Bedrooms:	3

**1 General**

**1.1 Scope**

1.1.1	The proposed building is a single-family detached or attached residence <sup>1</sup> (one dwelling unit <sup>2</sup> where the occupants are primarily permanent in nature.)				
1.1.2	The iCFA (minus excluded floor levels) divided by the number of bedrooms < 900 [ft2]. Excluded Floor Levels are floor levels without egress windows/doors.				
1.1.2.1	Area of Excluded Floor Levels [ft2]	iCFA/Bedroom	< 900 [ft2]:		
	0	465	YES		
1.1.3	No fossil fuel combustion equipment is to be installed.				
1.1.4	No jetted tubs or indoor pools are planned.				
1.1.5	No natural draft fireplaces are to be installed.				

**1.2 Co-Requisites<sup>3</sup>**

1.2.1	ENERGY STAR Certified Homes				
1.2.2	DOE Zero Energy Ready Homes				
1.2.3	EPA Indoor airPLUS				

**2 Air-Tightness**

**3 Compactness**

**4 Solar Protection**

**4.1 Glazed Fenestration Solar Heat Gain Coefficient<sup>7</sup> (SHGC)**

4.1.1	Does not exceed the calculated maximum requirement. <sup>8</sup>	NR			
-------	--	----	--	--	--

**4.2 Glazed Fenestration Area**

4.2.1	The overall window-to-wall (WWR) area ratio <sup>9</sup> is ≤ 18%.				
-------	--	--	--	--	--

4.2.1.1	Orientation (within 90°)	North	East	South	West	Total	Calculated WWR	≤ 18%
	Window Area [ft2]	66	37	196	126	426	19%	NO
	Above-grade Wall Area [ft2]	524	510	408	418	1,860		

4.2.2	The skylight-to-roof (SRR) area ratio <sup>10</sup> is ≤ 3%.				
-------	--	--	--	--	--

4.2.2.1	Roof Area [ft2]	Skylight Area [ft2]	Calculated SRR	≤ 3%
	1,415	0	0%	YES



## System Overview

System Size	7.92 kW
System Cost	\$24,396
Est. Year 1 Production	6,362 kWh

**99%**

of your energy will be generated from solar.

### Components (Your installation uses the latest in solar technology)



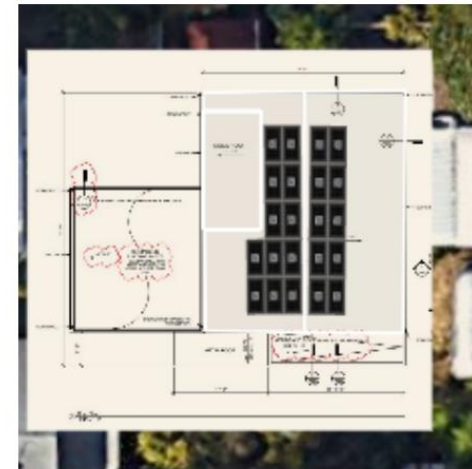
#### Solar Panels:

Qcells Q.PEAK DUO BLK-G10+ 360



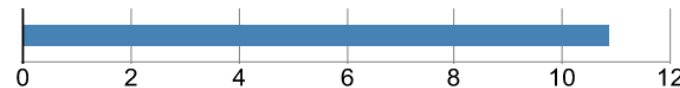
#### Inverters:

Enphase Energy Inc. IQ8A-72-2-US



### Site energy

total: 21,025.27 kBtu/yr  
 specific: 10.87 kBtu/ft<sup>2</sup>yr  
 total: 6,162.51 kWh/yr  
 specific: 3.19 kWh/ft<sup>2</sup>



Solar Sizing









In addition to many Custom Passive House prefab's coming off our boards, we are in Land Use for a new Prefab PH office and 6 apartments above, called *THE ROOKERY*

ARTISANS GROUP





ARTISANS GROUP  
ARCHITECTURE + PLANNING

