Address:	3926 Washington St., Kensington	Meeting Date:	4/14/2021				
Resource:	Primary One Resource Kensington Historic District	Report Date:	4/7/2021				
Applicant:	Nancy Collins	Public Notice:	3/31/2021				
Review:	HAWP	Tax Credit:	No				
Case No.:	945073	Staff:	Dan Bruechert				
PROPOSAL:	Garage Demolition and Accessory Dwelling Unit Construction						

MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION STAFF REPORT

STAFF RECOMMENDATION

Staff recommends the HPC **approve with one condition** the HAWP:

1. The exterior cladding of the accessory structure needs to be paintable and millable, consistent with wood siding. Final authority to verify this condition has been met is delegated to Staff for review and approval.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE:	Primary One Resource within the Kensington Historic District
STYLE:	Queen Anne
DATE:	1898



Figure 1: 3926 Washington St. has a detached single bay garage.

PROPOSAL

The applicant proposes to demolish the non-historic detached garage and construct an accessory dwelling unit in the same location.

APPLICABLE GUIDELINES

Kensington Historic District Guidelines

When reviewing alterations and new construction within the Kensington Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the Approved & Adopted Amendment to the Master Plan for Historic Preservation: Kensington Historic District, Atlas #31/6 (Amendment), Vision of Kensington: A Long-Range Preservation Plan (Vision), Montgomery County Code Chapter 24A (Chapter 24A), and the Secretary of the Interior's Standards for Rehabilitation (Standards). The pertinent information in these documents is outlined below.

Approved & Adopted Amendment to the Master Plan for Historic Preservation: Kensington Historic District, Atlas #31/6

"In regard to the properties identified as secondary resources--that is visually contributing, but nonhistoric structures or vacant land within the Kensington District--the Ordinance requires the Preservation Commission to be lenient in its judgment of plans for contemporary structures or for plans involving new construction unless such plans would seriously impair the historic or architectural value of surrounding resources or impair the character of the district."

Vision of Kensington: A Long-Range Preservation Plan

The HPC formally adopted the planning study, *Vision of Kensington: A Long-Range Preservation Plan*, and is directed by the Executive Regulations, which were approved by the County Council, to use this plan when considering changes and alterations to the Kensington Historic District. The goal of this preservation plan "was to establish a sound database of information from, which to produce a document that would serve the HPC, M-NCPPC, their staff and the community in wrestling with the protection of historic districts amidst the pressures of life in the 21st century." (page 1). The plan provides a specific physical description of the district as it is; an analysis of character-defining features of the district; a discussion of the challenges facing the district; and a discussion of proposed strategies for maintaining the character of the district while allowing for appropriate growth and change.

Montgomery County Code; Chapter 24A-8

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
 - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
 - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the

historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

Secretary of the Interior's Standards for Rehabilitation:

The Secretary of the Interior defines rehabilitation as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values." The *Standards* are as follows:

- 2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

STAFF DISCUSSION

The subject property is a two-story Queen Anne house constructed in 1898. Sometime after 1933, a single-bay front gable garage was constructed on the site.

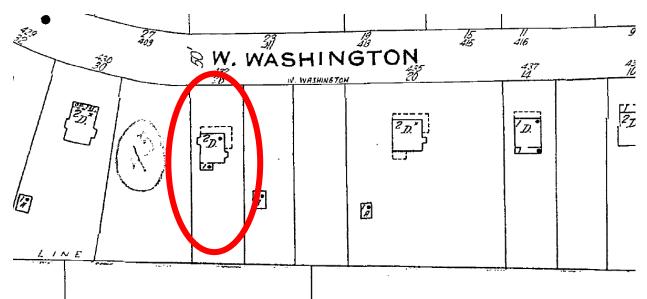


Figure 2: 1933 Sanborn Map showing no garage in the location of the current accessory building.

The applicant proposes to demolish the existing accessory structure measuring 20' 4" \times 11' 4" (twenty feet, four inches by eleven feet, four inches) and construct a new accessory dwelling unit measuring 29' \times 16' (twenty-nine feet by sixteen feet) matching the house in materials and design in the same approximate location. The existing building is constructed to the rear of the historic house's rear wall plane, but only a couple of feet off of the property line. The new accessory building will be placed 12' (twelve feet) off of the property line but will match the distance behind the historic house. This location will place much of the accessory building behind the historic house and reduce its impact from the public right-of-way.

Staff finds that the existing garage is not a historic building, as shown on the map above, and does not contribute to the historic character of the surrounding district. The demolition of this structure is

appropriate under 24A-8(b)(1) and Staff recommends the HPC approve the demo.

The proposed accessory building will be a single-story, front gable, wood-framed accessory dwelling unit. The structure will match the siding, shingles, and two-over-two window configuration of the historic house. The front elevation has a small hipped roof front porch supported by turned posts that match the historic front porch.

Staff finds the size of the proposed building is generally consistent with the historic and appropriate for the house and surrounding district. The additional width of the proposed structure will be behind the house to a degree that it will not be evident from the right-of-way. The total depth of the new building is nearly 9' (nine feet) deeper than the existing structure, however, 5' (five feet) of that is the front porch, which will not have a significant impact on the apparent mass.

Staff additionally finds that most of the proposed materials are compatible with the historic house and surrounding district, per 24A-8(b)(2). Staff does not, however, find the proposed exterior cladding to be compatible. The building plans state that the siding will match the house, which is vinyl siding. The vinyl siding does not maintain the appearance consistent with wood. As this is new construction and an accessory building, Staff finds that a material that is paintable and millable that has an appearance consistent with wood is appropriate for the exterior of the structure under 24A-8(b)(2) and 24A-8(d). Staff recommends the HPC include a condition for approval that the exterior cladding of the structure needs to be paintable and millable (i.e. wood, fiber cement siding, etc.) with final review and approval authority delegated to Staff. The proposed windows are Andersen 400 Series vinyl-clad wood windows. While wood or aluminum-clad wood windows are preferred, Staff finds that this window is appropriate for a new accessory structure with limited visibility from the right-of-way under 24A-8(d). While many of the architectural details match the historic house, Staff finds the scale and design of the proposal will not be confused for a historic building as required by Standard 9.

STAFF RECOMMENDATION:

Staff recommends that the Commission approves with one condition:

1. The exterior cladding of the accessory structure needs to be paintable and millable, consistent with wood siding. Final authority to verify this condition has been met is delegated to Staff for review and approval;

the HAWP application under the Criteria for Issuance in Chapter 24A-8(b)(1), (2), and (d), and the *Vision of Kensington*, and the *Kensington Historic District Designation*, having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the Secretary of the Interior's Standards for Rehabilitation #2, 9, and 10

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will <u>contact the staff person</u> assigned to this application at 301-563-3400 or <u>dan.bruechert@montgomeryplanning.org</u> to schedule a follow-up site visit.

		For Staff only: HAWP# 945073
Steomery Cor		
HISTORIC	PLICATION FOR C AREA WORK F PRESERVATION COMMISS 301.563.3400	PERMIT
Name:	E-mail:	
Address:	City:	Zip:
Daytime Phone:	Tax Acco	unt No.:
AGENT/CONTACT (if applicable):		
Name:	E-mail:	
Address:	City:	Zip:
Daytime Phone:	Contracto	or Registration No.:
LOCATION OF BUILDING/PREMISE	: MIHP # of Historic Property	
Is the Property Located within an His		t Name ual Site Name
Is there an Historic Preservation/Lan map of the easement, and documen	d Trust/Environmental Easer	ment on the Property? If YES, include a
Are other Planning and/or Hearing E (Conditional Use, Variance, Record P supplemental information.	•• /	Required as part of this Application? mation on these reviews as
Building Number:	Street:	
Town/City:	Nearest Cross Street: _	
Lot: Block:	Subdivision: Pa	arcel:
TYPE OF WORK PROPOSED: See the for proposed work are submitted	-	
be accepted for review. Check all	hat apply:	Shed/Garage/Accessory Structure
New Construction	Deck/Porch	Solar
Addition	Fence	Tree removal/planting
Demolition	Hardscape/Landscape	Window/Door
Grading/Excavation	Roof	Other:
		oplication, that the application is correct
		viewed and approved by all necessary
agencies and hereby acknowledge a	and accept this to be a condit	tion for the issuance of this permit.

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Description of Work Proposed: Please give an overview of the work to be undertaken:

Work Item 1:	
Description of Current Condition:	Proposed Work:
Work Item 2:	
Description of Current Condition:	Proposed Work:

Work Item 3:		
Description of Current Condition:	Proposed Work:	

HISTORIC AREA WORK PERMIT CHECKLIST OF APPLICATION REQUIREMENTS

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Exc avation/Land scaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*

	FOR STAFF ONLY:
ACOMERT COL	HAWP# DATE ASSIGNED
APPLICATIO HISTORIC AREA W	
HISTORIC PRESERVATION 301.563.340	COMMISSION
APPLICANT:	
Name: Nancy Collins	F-mail: nellyrose22@me.com
	_{E-mail:} <u>nellyrose22@me.com</u> _{City:} <u>Kensington</u> _{Zip:} 20895
Address: 3926 Washington Street	City: Zip: Zip:
Daytime Phone: 301-456-6029	Tax Account No.: 01024967
AGENT/CONTACT (if applicable):	
_{Name:} Jodi Longo	E-mail:
Address: 3932 Washington Street	E-mail: <u>jlongo@renovationstudio.biz</u> City: <u>Kensington</u> _{Zip:} 20895
Daytime Phone: 240-374-2525	Contractor Registration No.: 92710
LOCATION OF BUILDING/PREMISE: MIHP # of Histor	
LOCATION OF BUILDING/PREMISE: MIHP # of Histor	
Is the Property Located within an Historic District?	Kensington Historic District Yes/District Name No/Individual Site Name
Is there an Historic Preservation/Land Trust/Environme	
map of the easement, and documentation from the Ea	sement Holder supporting this application.
Are other Planning and/or Hearing Examiner Approvals	
(Conditional Use, Variance, Record Plat, etc.?) If YES, in supplemental information.	clude information on these reviews as
	shington Street
Town/City: Kensington Nearest Cross	ss Street: Connecticut Avenue
Lot: <u>48</u> Block: <u>13</u> Subdivision:	00150000
Lot: <u>48</u> Block: <u>13</u> Subdivision:	Parcel:
TYPE OF WORK PROPOSED: See the checklist on P	
for proposed work are submitted with this application be accepted for review. Check all that apply:	Ation. Incomplete Applications will not Image: Shed/Garage/Accessory Structure
New Construction Deck/Porch	Solar
Addition Fence	Tree removal/planting
Demolition Hardscape/Lands Grading/Excavation Roof	scape Window/Door Other:
I hereby certify that I have the authority to make the for	
and accurate and that the construction will comply wit agencies and hereby acknowledge and accept this to l	
Jodi Longo JOC NOO	
Signature of owner or authorized agent	/ Date ′
	Q

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Single family Bungalow style home built in 1898 with a large wraparound front porch. This 1,973 square foot home sits on a 9,239 square foot lot. House has detached garage at the end of existing driveway on the left side of the house. Materials used on this house are aluminum or vinyl siding on the exterior and asphalt shingles on the roof.

Description of Work Proposed: Please give an overview of the work to be undertaken:

Remove existing detached garage and construct a 447 square foot Accessory Dwelling Unit. Materials that will be used on the exterior of this new ADU will match finishes used on the existing house as best as possible.

Work Item 1: Existing Garage	
Description of Current Condition: Single car detached garage at the end of existing driveway. Materials used on garage are aluminum or vinyl siding on the exterior and asphalt shingles on the roof.	Proposed Work: Remove existing detached garage and construct a 447 square foot Accessory Dwelling Unit. Materials that will be used on the exterior of this new ADU will match finishes used on the existing house as best as possible.
Work Item 2:	
Description of Current Condition:	Proposed Work:

Work Item 3:								
Description of Current Condition:	Proposed Work:							

HAWP APPLICATION: MAI [Owner, Owner's Agent, Adjac	LING ADDRESSES FOR NOTIFING cent and Confronting Property Owners]
Owner's mailing address Nancy Collins 3926 Washington Street Kensington, MD 20895	Owner's Agent's mailing address Jodi Longo 3932 Washington Street Kensington, MD 20895
Adjacent and confronting	Property Owners mailing addresses
Stephen Strachan 3924 Washington Street Kensington, MD 20895	
Richard Strachan 3925 Washington Street Kensington, MD 20895	
Mark Shank 3909 Cleveland Street Kensington, MD 20895	









MS. JULIE FLIEGER **3926 WASHINGTON STREET** KENSINGTON, MD 20895

OUND NOW OAD	WIND SPEED (mph)	SEISMIC DESIGN CATEGORY	Weathering	BJECT TO DAN Frost line depth	Termite	Decay	WINTER DESIGN TEMP	ICE SHIEL UNDER- LAYMENT REQUIREI	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP	15) All mortar shall be type "S
0	115	В	Severe	30	Moderate to Heavy	Slight to Moderate	13	Yes	7-2-79	300	55	16) Stone and masonry veneer
dwel	lling coo	de & al	I MONTGO	conform DMERY CO								17) Backfilling against basemen framing is in place and top o overturning.
Z) [eping ro	om load	30 p. 40 p.s								18) Maximum allowable lateral
	– Roo – Dec	f load . k load		30 p.s 60 p.s 50 p.s	s.f. s.f.							19) All reinforcing steel to be Unless otherwise noted. Provid reinforcing steel shop drawings
,	Soil bea ssure	ring to	be 2000	p.s.f. m	inimum	. Desig	n for (60 p.s.1	. latera	l soil		20) Steel post cap plates to a Bolts shall be A.S.T.M. A 307 a
4) [Design v	vind loa	d 115 m	nph.								21) Steel columns in basemen specified otherwise. structural
5) E	Bottom	of all c	oncrete f	footings	to be 3	0" mir	iimum	below f	inished	grade.		connections to be A.I.S.C. stan
6) F	oundati	on walls	s shall co	omply to	I.R.C. S	Sec. R-	-401.	thru 40	4.			22) All structural wood framing
7) F	Foundati	on drair	nage sha	ll comply	to I.R.	C. Sec	. R-40)5.				accordance with the "National published by The National Fore
8) F	Foundati	on wate	erproofing	shall co	omply to	I.R.C.	Sec.	R-406.				the following grades or better: CLASSIFICATION
9) A	Attached	Garage	es shall d	comply to	b I.R.C.	Sec. R	R-309.					POSTS #1 D.F.
10)	Concret	e floors	s shall co	omply to	I.R.C. S	Sec. R-	-506.					HEADERS, BEAMS, ROOF HIF
spéc p.s.i conc	cificatior i. air er	ns. Pro trained	ches, ga concrete	p.c.f. ar rages, sl . Found p.s.i. air	abs and ation w	d steps alls, ex	expos terior	ed to v walls a	weather, nd othe	to be r vertica		RAFTERS, JOISTS AND STUE
conf bear	forming ring loco	to A.S.1 ations o	F.M. C 90 n c.m.u.	ment an D—70 for wall cell	hollow	units.	At wo	bod pos	st and v	wood be	am	Gang-Lam Beams (Fv =
	two co											23) All headers to be 2 - 2"
				ave stand "vertical			e DUR-	-O-WAL	L bed j	oint		24) Provide double jack studs 5'-11", and triple jack studs
	All bric T.M. C		used in	exterior	shall cc	nform	to A.S	.T.M. C	62 or			25) Splices of the bottom and staggered a minimum of 4'-0
				INI	DEX							
000)	COVE	R SHEE	T								
A10	0	FOUN	DATION	, FIRST	FLOO	R & 1	ROOF	PLAN	S			
A20	-			IT, REA		EFT 1	ELEVA	TIONS				
<u>A30</u>				<u>B & (</u>								
A40				NG DET		ומינוים						
S10 S110				<u>ng pla</u> Jlation		IHEKN	IAL E	NVELC	PE			
				, PANEI		VSIS						
EC1		RESC										
	10											
		1										

JOBSITE LOCATION: 3926 WASHINGTON STREET KENSINGTON, MD 20895 DATE: 02-08-2021

GENERAL NOTES

type "S" conforming to A.S.T.M. C 270

ry veneer shall conform to I.R.C. Sec. R-703.8.

basement walls shall not be performed until first floor nd top of reinforced c.m.u. walls are braced against

lateral pressure on basement walls 60 p.s.f.

el to be grade 60 and conform to A.S.T.M. Spec. A 615. Provide corner bars at all wall corners. Submit drawings for approval.

ates to conform to A.S.T.M., Spec. A 36, Fy = 36,000 p.s.i. A 307 or better.

basement to be adjustable 3"I.D. S40 columns unless tructural steel shall meet A.S.T.M.982 standards. All S.C. standard.

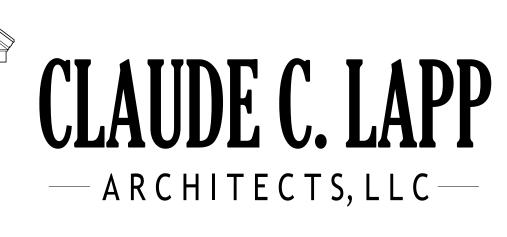
I framing, including roof and floor sheathing, to be in National Design Specifications for Wood Construction", onal Forest Products Association. Framing lumber shall be of better:

	SIZE	BENDING "Fb"	MODULUS OF ELASTICITY "E"
		1200	1600000
S, ROOF HIPS #1 S.P.	2X4 2X6 2X8 2X10 2X12	1850 1650 1500 1300 1250	1700000 1700000 1700000 1700000 1700000
5 AND STUDS #2 H.F.	2X4 2X6 2X8 2X10 2X12	1000 1000 1000 1000 1000	1500000 1500000 1500000 1500000 1500000
ns (Fv = 285 PSI)	all	2800	2000000

2 - 2" x 12" unless specified otherwise.

ck studs at each end of headers and beams, 4'-0" to studs for 6'-0" or longer, unless noted otherwise.

ttom and top portion of a double top plate must be



26) All roof, floor and girder trusses to be designed by truss manufacturer carry required loads and to be installed according to manufacturer's specifica

27) Contractor to provide architect with shop drawings for all roof and floor trusses. Shop drawings to be provided to architect for approval prior to orde trusses.

28) Provide solid blocking under all jack studs not bearing directly on joists T.J.I.'s.

29) In those cases where floor trusses are not centered directly over the stu splices of the top plate shall occur only over the studs.

30) Where installation of plumbing, heating or other pipes necessitates cutting top plates, a metal tie not less than eighteen gauge, forty-five thousandths (0.045)" thickness and 1 1/2" wide shall be fastened to the plate across an each side of the opening with not less than 16d nails.

31) Double beams, double hip and valley rafters shall be nailed securely toge to ensure that the two members act conjointly in resisting the applied load.

32) Unless specified otherwise provide the following lintel over masonry openir

BRICK &	3'-0"	3 1/2" X 3 1/2" X 1/4"
STONE:	5'-0"	3 1/2" X 4" X 1/4"
UP TO	8'-0"	3 1/2" X 5" X 5/16"
4"	9'-0"	3 1/2" X 6" X 5/16"
STONE: UP TO 6"	3'-0" 5'-0" 8'-0" 9'-0"	6" X 4" X 5/16" 6" X 6" X 5/16" 6" X 6" X 3/8" 6" X 8" X 7/16"

33) All untreated lumber to be minimum of 8" above finished grade. All lumber in contact with concr c.m.u. to be pressure treated.

34) All prefab fireplaces to be U.L. rated and installed according to manufacturers specifications.

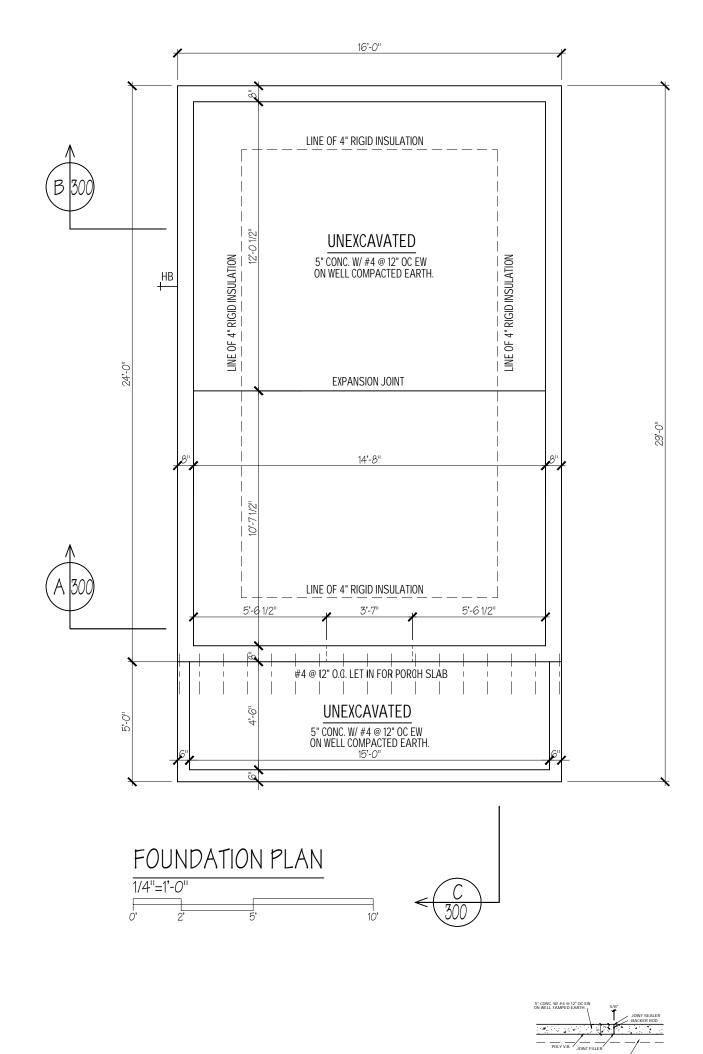
35) Chimney and fireplace construction to be in accordance with I.R.C. Chapter 10 and fig. R-1001.1.

11820 PARKLAWN DRIVE, SUITE 100 ROCKVILLE, MD 20852 TEL. 301-881-6856 WWW.CCLARCHITECTS.COM INFO@CCLARCHITECTS.COM

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE 7603-R, EXPIRATION DATE 04-26-2019, 04-26-2021

to ations.	36) Fireplace hearth to project 20" from front of facing and 12" to side of opening.	
ering	37) Firestopping shall be provided according to I.R.C. Sec. R — 602.8. The integrity of all firestopping shall be maintained.	
	38) Draftstopping shall be provided according to I.R.C. Sec. R - 302.12.	
or	39) Provide radon mitigation according to I.R.C. — Appendix F.	
uds,	40) Provide interconnected smoke detectors, carbon monoxide dectectors & automatic sprinkler systems to protect all floors, bedrooms, and basements according to I.R.C. Sec. $R-313$ & $R-314$.	
g of nd to	41) Stairways shall comply with I.R.C. Sec. $R-311$. Minimum headroom to be 6'-8" clear at all points. Minimum tread to be 10". Maximum riser to be 7 3/4".	
	42) Handrails & guardrails shall comply to I.R.C. Sec. R-311 & 312.	
ether	43) All exits shall comply to I.R.C. Sec. R-311.	
ings:	44) Sleeping room windows shall comply with I.R.C. Sec. R-310 Maximum sill height 44" above finished floor.	
	45) All Glazing shall comply to I.R.C. Sec. R-308.	
	46) All Ceiling heights shall comply to I.R.C. Sec. R-305.	
	47) All exterior wall coverings shall comply to I.R.C. Sec. R-703.	
	48) All gas piping shall conform to N.F.P.A. 54 or 2011 IFGC.	
	49) Electrical wiring must conform to the latest 2014 National Electrical Code and County Requirements.	
rete or	50) Steel joists to be accordance with S.J.I specifications. Provide angle bridging top and bottom per S.J.I Submit shop drawings for approval.	
	51) Steel deck shall conform to S.J.I. specifications.	
	Note: Builder shall provide roof framing plans signed and sealed by truss manufacturer and shop drawings for floor joists at framing inspection.	
	Note: Trusses shall be braced per. manufacturers recommendations.	
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EXPANSION JOINT DETAIL 3/4*-T-0*

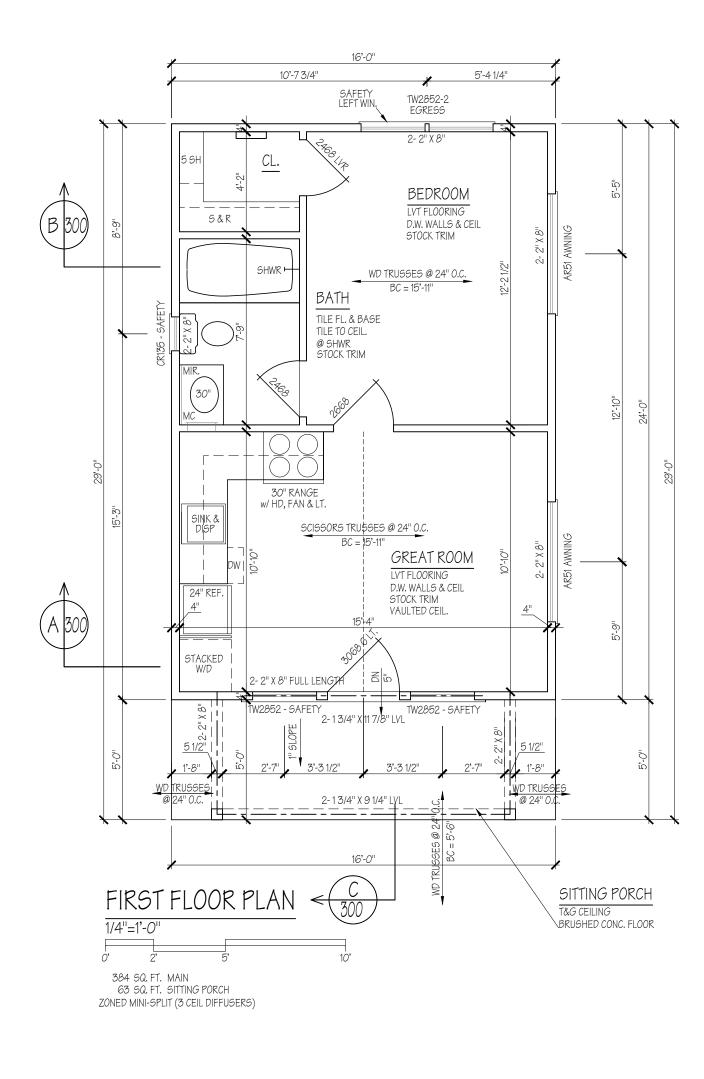
3. ALL WINDOWS ARE ANDERSEN 400 SERIES WINDOWS UNLESS NOTED OTHERWISE.

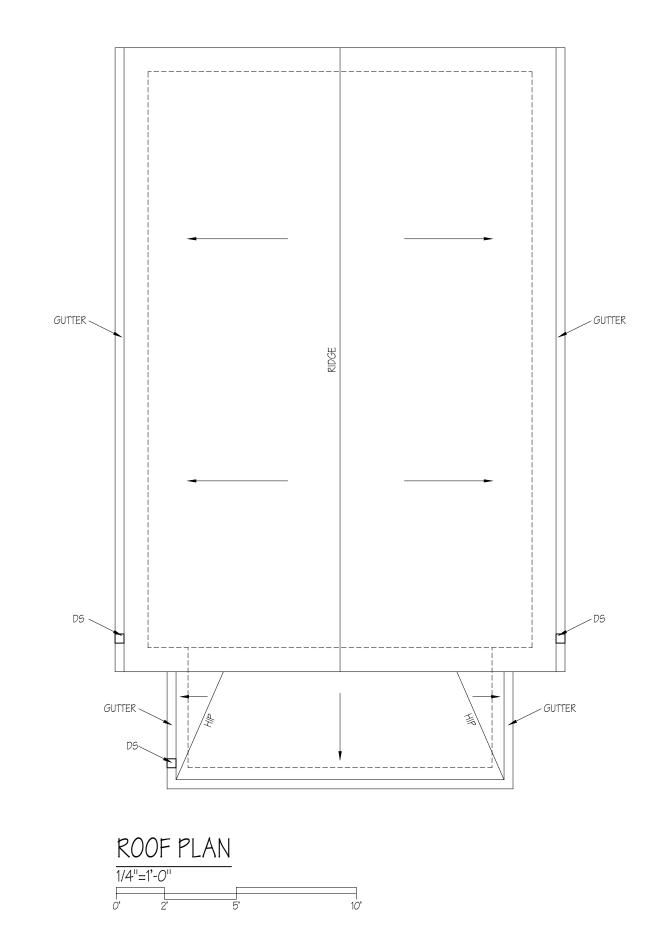
2. TRUSS MANUFACTURER AND ROOF MANUFACTURER TO CHECK AND VERIFY FRAMING & STRUCTURE

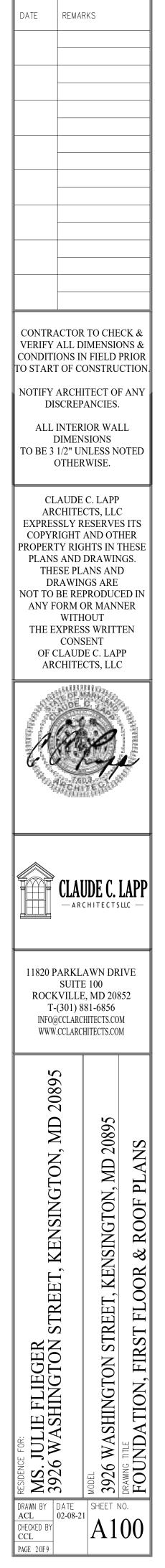
1. SEE BEAM CALCULATIONS FOR BEAM FASTENING

NOTES -----

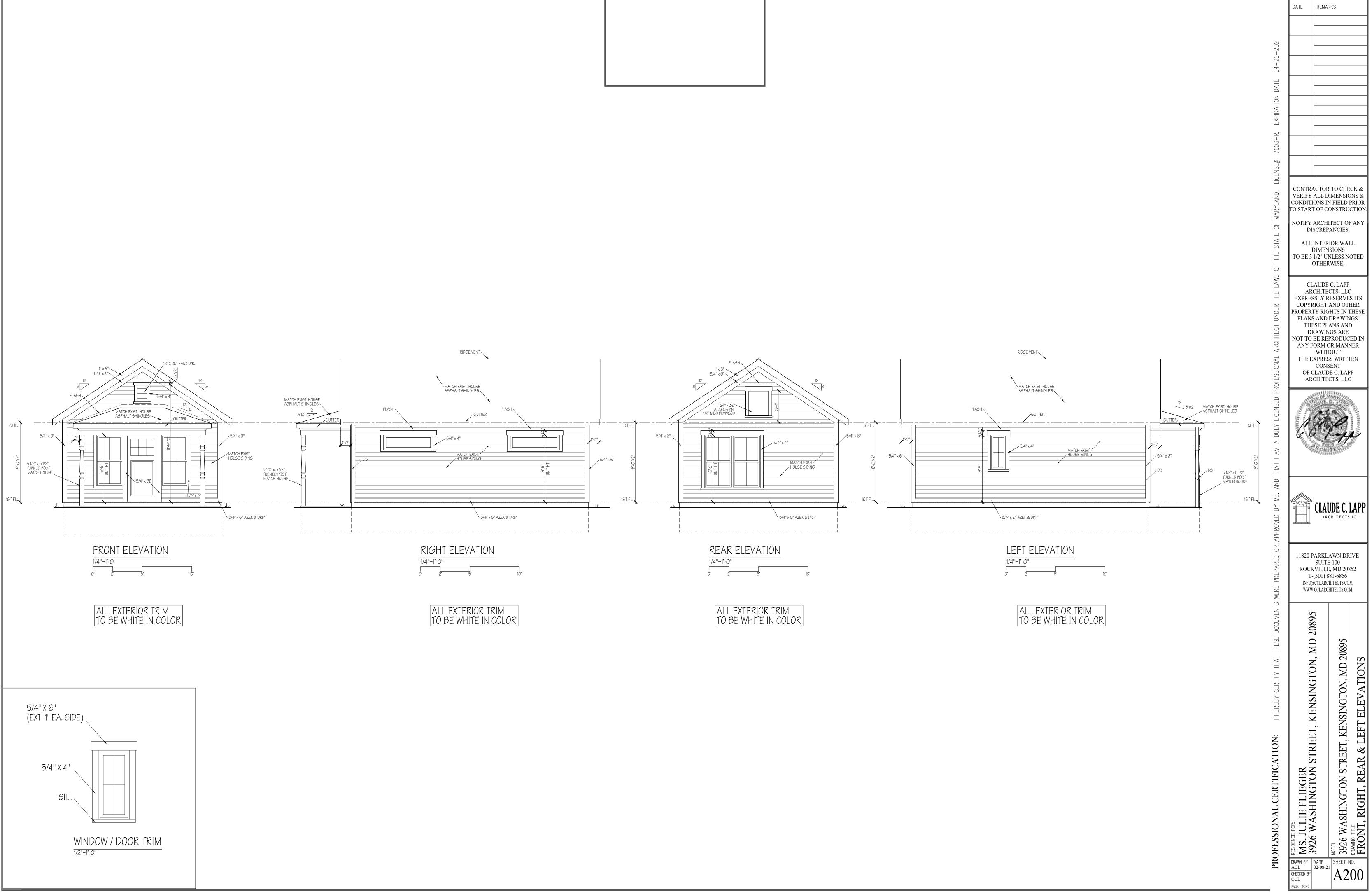




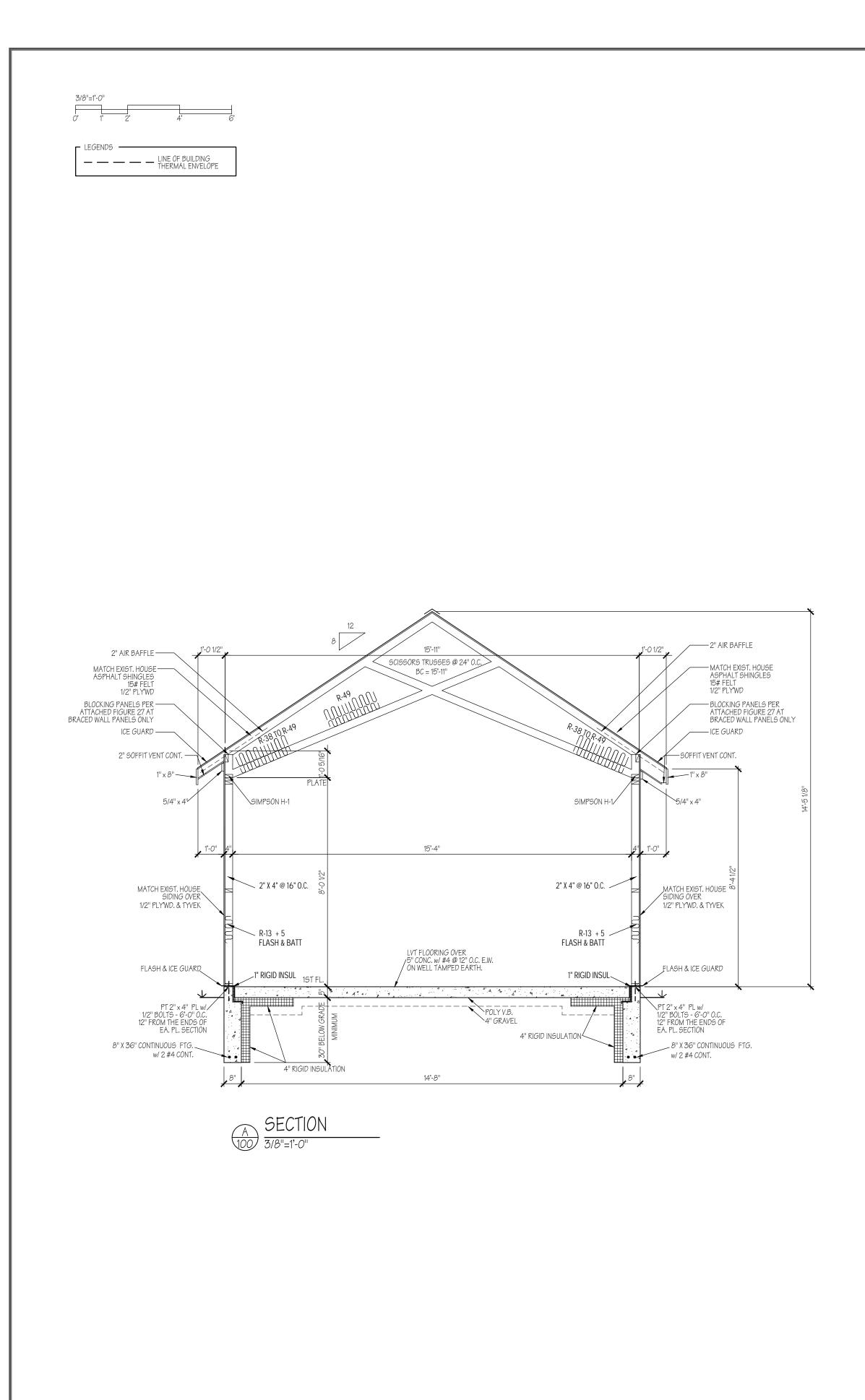




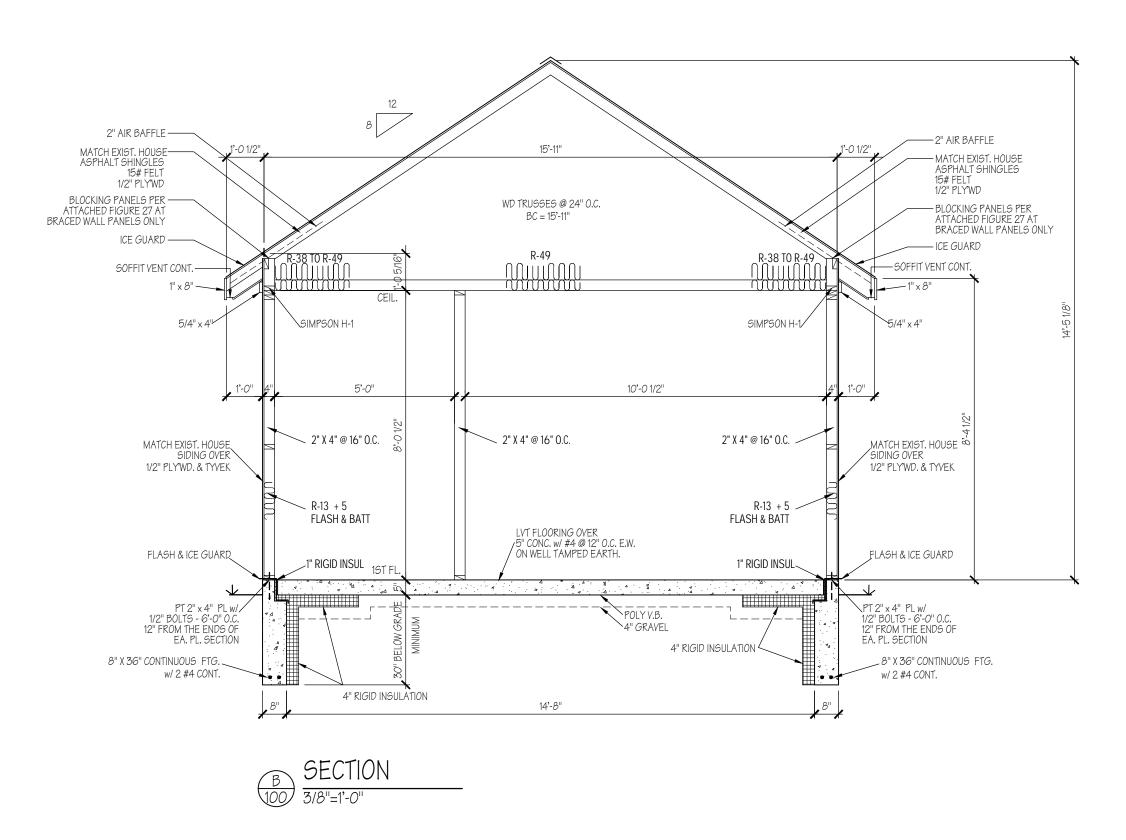


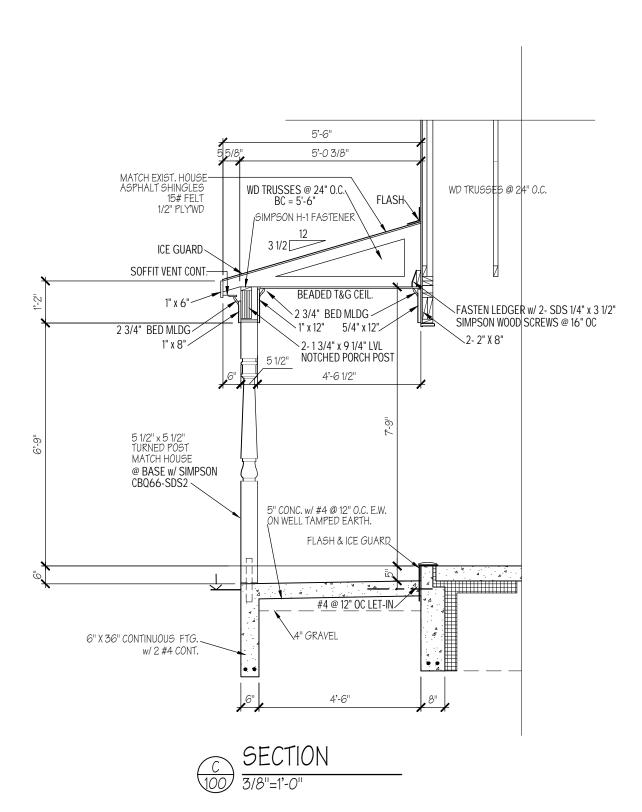


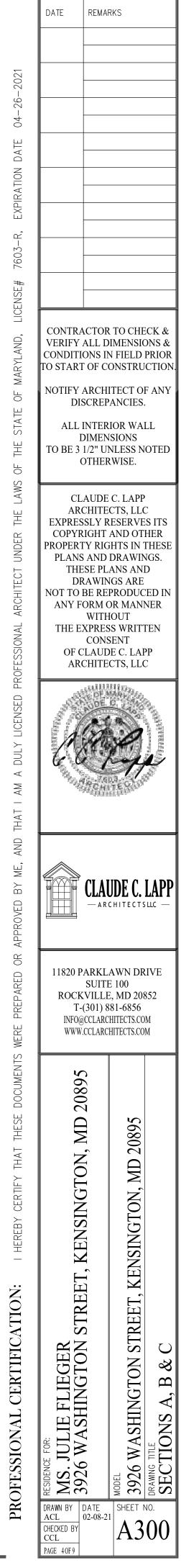












BRACING METHODS

The type, material and configuration of sheathing methods vary. There are two types of bracing: intermittent (FIGURE 8) and continuous-sheathing (FIGURE 9).

Intermittent braced-wall-panels are placed at required locations only. The nonsheathed area between them is infilled with other material such as insulating foam. In continuous-sheathing the entire face of the wall is sheathed, including areas above and below openings.

In our region, continuous-sheathing is the predominant sheathing type for the exterior, while intermittent is most common for the interior.

TABLE 3 below lists the most common bracing methods and a description of each.

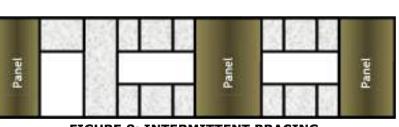


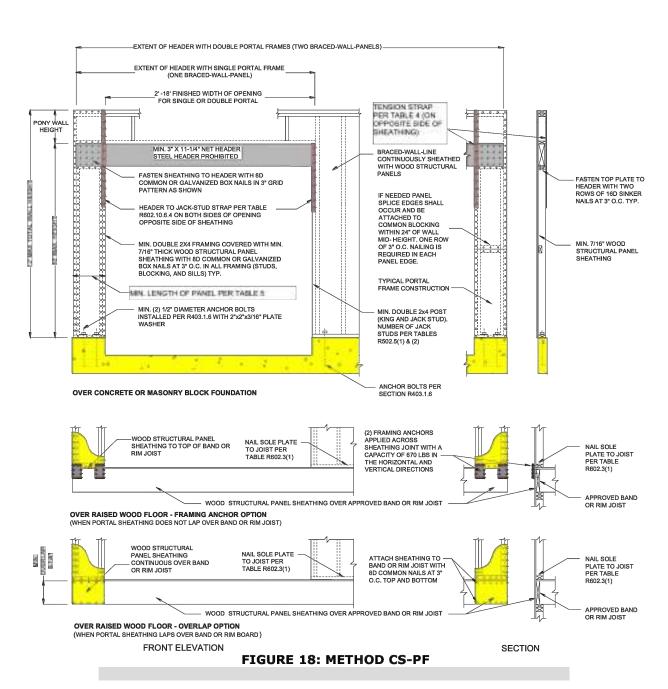
FIGURE 8: INTERMITTENT BRACING



FIGURE 9: CONTINUOUS-SHEATING TABLE 3: BRACING METHODS

Methods, Materials	Minimum Thickness	Connection Criteria	Figure
	Intermittent	Methods	
LIB Let-in-bracing	1x4 wood or metal straps, 45° to 60° angles	Wood: 2-8d common nails [2½" long x 0.113" dia.] at each stud Metal: per manufacturer	
WSP Wood structural panel (OSB or plywood)	50 °	8d common nails [2 ½" long x 0.113" dia.] @ 6" edges, @ 12" field	
SFB Structural fiberboard sheathing	½" (maximum 16" stud spacing)	Galv. roofing nails (1½" long x 0.113" dla.) @3" edges, @ 6" field or Bd common nails (2 ½" long x 0.113" dla.) @ 6" edges, @ 12" field	
GB Gypsum board	1⁄2"	Nails: 13 gage x 1 ¹¹ long, ¹⁹ / ₆₄ head or D.091 dia., 1 ¹⁴ long, annular-ringed or 5d cooler nails, 0.086 dia., 1 ¹⁴ long © 7" Screws: Type W or S © 7"	
PFH Portal frame with hold-downs	567	See Page 7 for portal frames.	
PFG Portal frame at garage	⁷ / ₁₆ "	See Page 7 for portal frames.	
	Continuous-Sheathing	Methods	
CS-WSP Continuous wood structural panel	567	Bd common nails (2 ½" long x 0.113" dia.) 6" edges, @ 12" field	
CS-G Continuous wood structural panel at garage door opening	(applies to one wall of one-story garages only)	8d common nails (2 ½" long x 0.113" dia.) @ 6" edges, @ 12" field	
CS-SFB Continuous structural fiberboard	½" (maximum 16" stud spacing)	Galv. roofing nails (1½" long x 0.113" dia.) @3" edges, @ 6" field 8d common nails (2 ½" long x 0.113" dia.) @ 6" edges, @ 12" field	
CS-PF Continuous-sheathing portal frame	⁷ / ₁₆ "	See Page 7 for portal frames.	

Wind Bracing



BRACED-WALL-PANELS REQUIREMENTS

considered braced-wall-panels, they LIB, you may eliminate the interior must meet the minimum requirements finish material if you multiply the noted herein.

INTERIOR FINISH MATERIAL With the exception of Methods GB, <u>JOINTS</u> PFH, PFG and CS-PF, the interior side of a braced-wall-panel must be finished with $\frac{1}{2}$ -inch gypsum board or single sheet of OSB, plywood, an equivalent material such as

paneling.

Wind Bracing

For braced segments of walls to be For all methods except Method bracing determined in TABLE 1 by a factor of 1.40.

> A braced-wall-panel is not required to be constructed with a fiberboard or gypsum board. Vertical

and horizontal joints are permitted.

Joints must be fastened using edge nailing requirements. Vertical joints must occur at a stud.

Except for portal frames, horizontal joints must have 2x blocking and may occur anywhere along the height of the braced-wallpanel.

Horizontal blocking is not required when the amount of actual bracing provided in the braced-wall-line is at least double that required by TABLE 1

MIXING METHODS

Mixing different bracing methods If you are mixing intermittent in the same braced-wall-line is permitted provided the method which portion of a braced-wall-line with per TABLE 1 governs the braced-wall- the exterior portion, the corners each braced-wall-line. line design.

CONTINUOUS-SHEATHING CORNERS

The corners at each end of a braced-wall-line with continuoussheathing must be strengthened using the options described below.

The first option is to have a braced-wall-panel at each end and a return-panel on the intersecting braced-wall-line as shown in FIGURE

10. The minimum size of a return panel is 24 inches for wood structural panels and 32 inches for structural fiberboard.

A return panel may be omitted if the end-braced-wall-panel is 48 inches minimum as shown in FIGURE 12 or you install an 800 pound hold-down at the end-panel, as shown in FIGURE 11. If your end-braced-wall-panel is

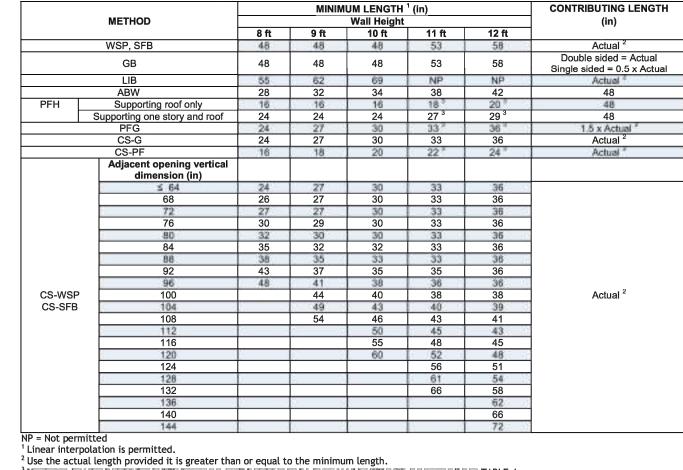
offset from the corner, then you must install an 800 pound hold-down at the edge of the braced-wall-panel as shown in FIGURE 13.

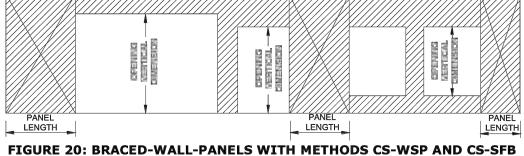
PORTAL FRAMES

wall-panel, portal frames are easy, braced-wall-panels are constructed opening to a jack stud. narrow options that can be constructed with common building materials. The code provides three different portal frames. Methods PFH and PFG are intermittent methods, and Method CS-PF is a continuoussheathing method.

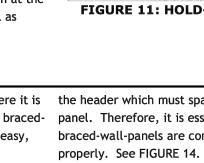
Portal frames are tested assemblies equivalent to a standard bracedwall-panel. Their strength is derived from the stiffness created by the connection of the wood sheathing to

Wind Bracing

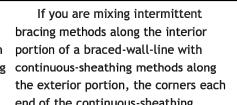


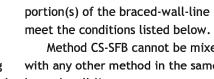


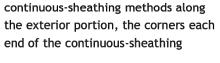
12

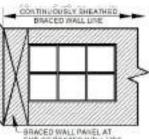




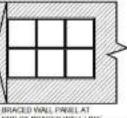




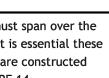












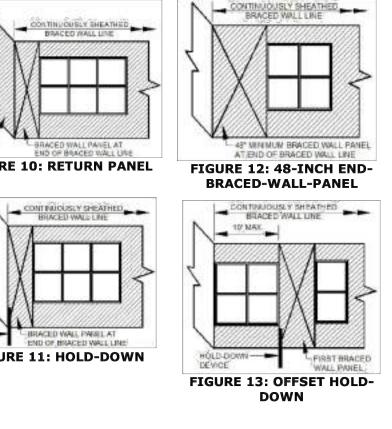
Extend header to king stud



FIGURE 14: PORTAL FRAME HEADER Portal frames can be constructed

as a single portal or double portal. A

portion(s) of the braced-wall-line must meet the conditions listed below. Method CS-SFB cannot be mixed generates the highest required bracing continuous-sheathing methods along with any other method in the same



For those applications where it is the header which must span over the single portal includes the braced-walldifficult to place a full-length braced- panel. Therefore, it is essential these panel and header spanning over the

> Single A double portal includes a braced-

wall-panel at each side of the opening with a shared continuous header spanning over each panel.

TABLE 5: MINIMUM LENGTH OF BRACED WALL PANELS

Maximum header height for is 10"; however, wall height may be increased to 12" with a pony wall per TABLE 4.

used together to frame numerous openings, such as garage doors or windows in sunrooms, and still comply openings, PFG panels can be with wall bracing requirements. See FIGURE 15.

METHOD PFH Method PFH is an intermittent portal frame with hold-downs per

Double

Single and double portals can be

FIGURE 16. PFH panels must be

METHOD PFC Method PFG is an intermittent portal frame with anchor bolts per

FIGURE 17. Permitted only at garage

constructed atop a concrete or

foundation with cast-in-place hold-

constructed atop a concrete

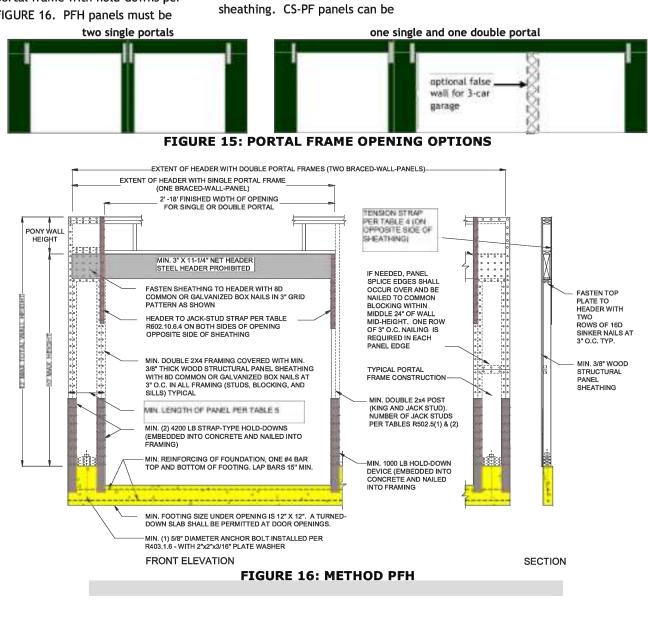
masonry foundation.

downs.

METHOD CS-PF Method CS-PF, per FIGURE 18, is a portal frame used with continuous-

constructed atop concrete or masonry foundations or a raised wood floor as shown in FIGURE 18. A maximum of four Method CS-PF panels can be constructed in each braced-wall-line.

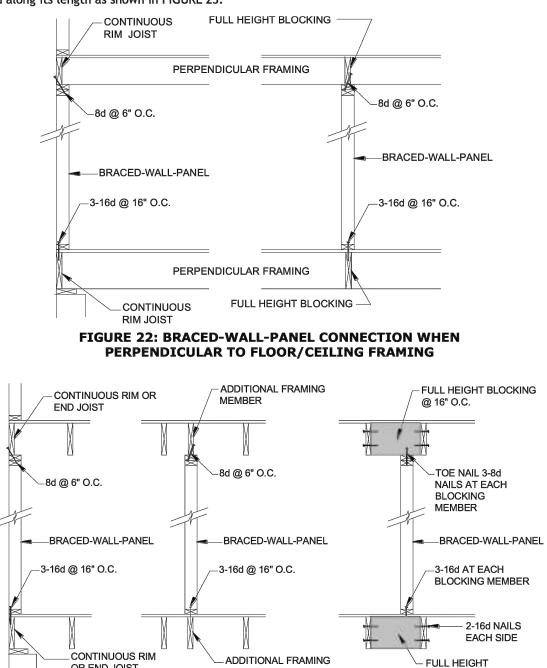
PORTAL FRAME PONY WALLS Portal frames are permitted to be constructed up to 10 feet tall with an optional pony wall atop up to 2 feet tall. The inclusion of a pony wall does have limitations and requires specific material strengths as listed in TABLE 4.



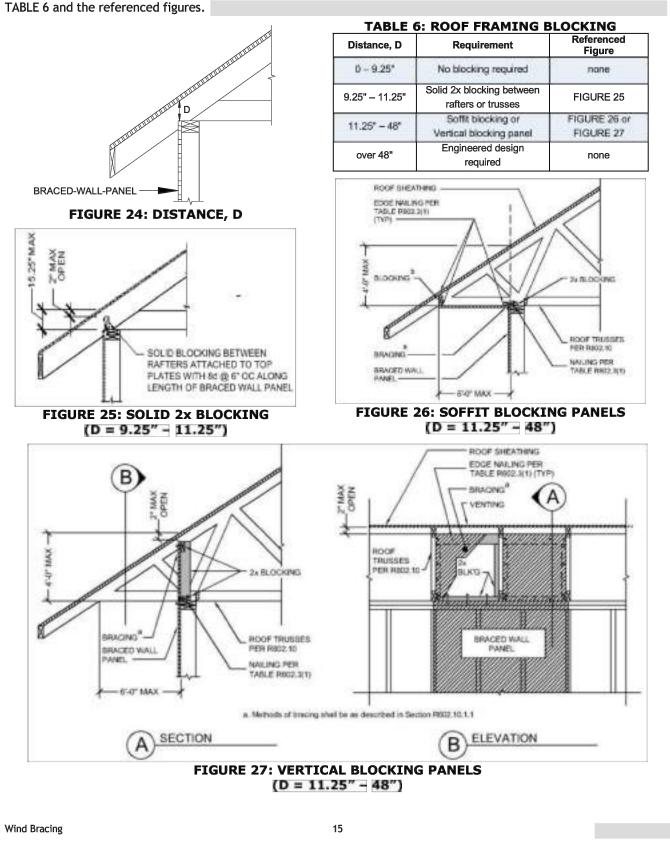
Wind Bracing

FLOOR/CEILING CONNECTION

Where framing is perpendicular to a braced-wall-panel, a rim joist or blocking must be provided along its length as shown in FIGURE 22. Where framing is parallel to a braced-wall-panel, a rim joist, framing member or blocking must be provided along its length as shown in FIGURE 23.









OR END JOIST

14

MEMBER

FIGURE 23: BRACED-WALL-PANEL CONNECTION WHEN

PARALLEL TO FLOOR/CEILING FRAMING

BLOCKING @ 16" O.C.

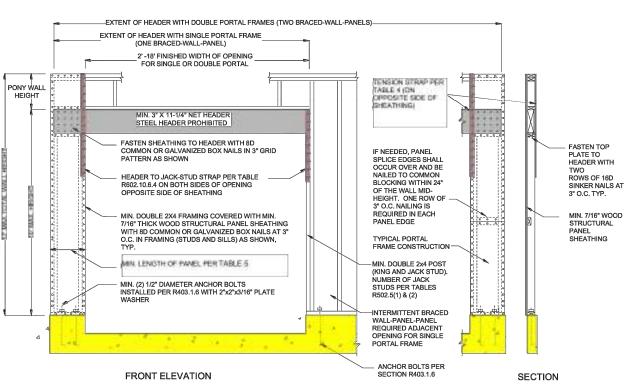




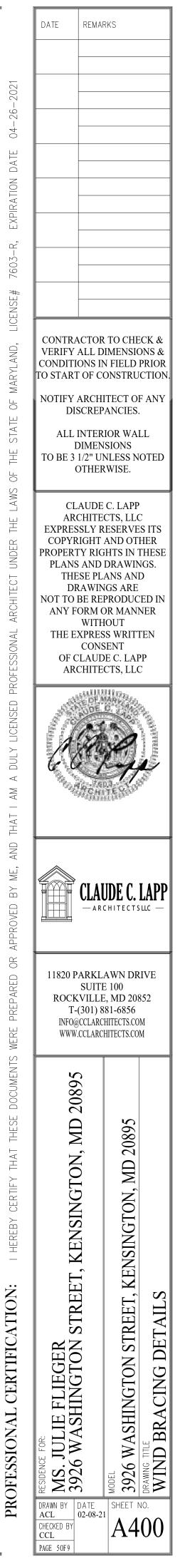
	TABLE 4: PC	ORTAL FRAME R	EQUIREMENTS	
NIMUM WALL STUD FRAMING IOMINAL SIZE AND GRADE	MAXIMUM PONY WALL HEIGHT (ft)	MAXIMUM TOTAL WALL HEIGHT (ft)	MAXIMUM OPENING WIDTH (ft)	TENSION STRAP CAPACITY REQUIRED (lbs) ¹
	0	10	18	1000
			9	1000
	1	10	16	1000
			18	1200
			9	1000
	2	10	16	2025
2x4 No. 2 Grade			18	2400
			9	1200
	2	12	16	3200
			18	3850
	4	12	9	2350
			16	design required
			9	1000
	2	12	16	2050
2x6 Stud Grade			18	2450
			9	1500
	4	12	16	3150
			18	3675

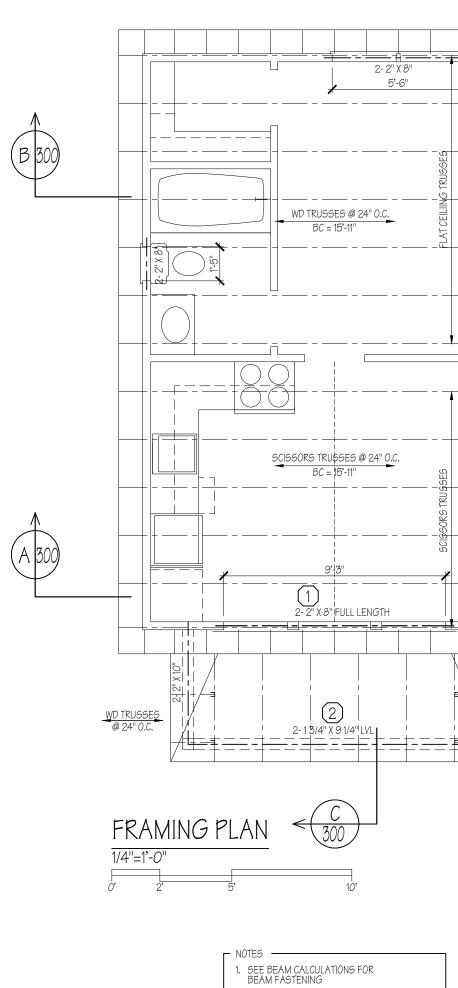
Strap shall be installed in accordance with manufacturer's recommendations,

Wind Bracing

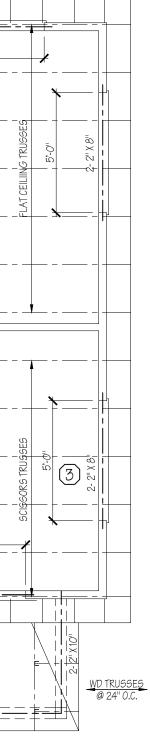
ROOF CONNECTION

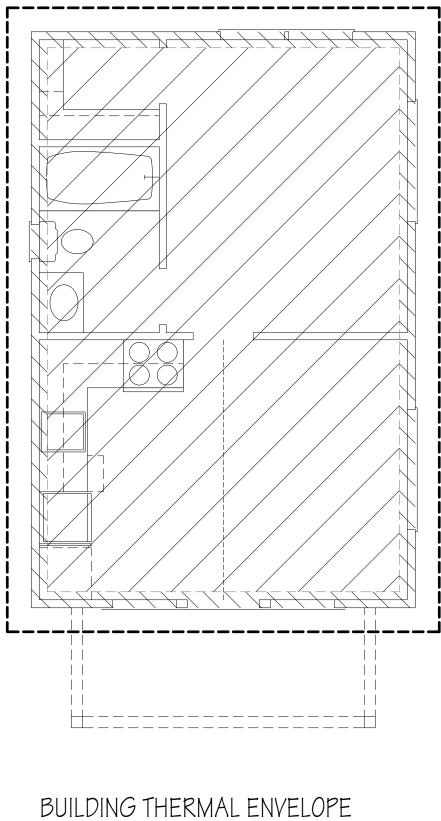
At the roof eave, blocking between the rafter or truss framing is required at braced-wall-panel locations when dimension D, as shown in FIGURE 24, is greater than 9.25 inches. The blocking must be constructed in accordance with



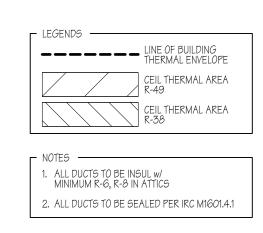


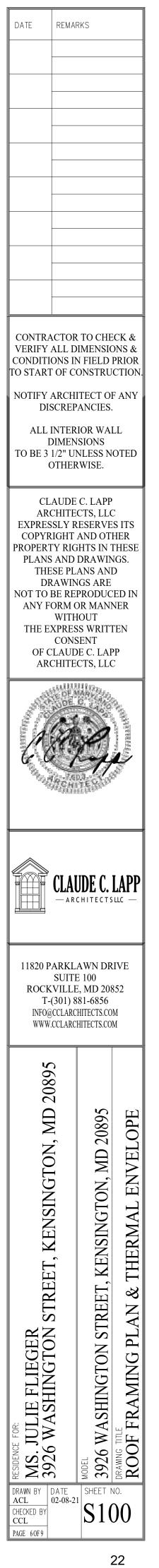
2. TRUSS MANUFACTURER AND ROOF MANUFACTURER TO CHECK AND VERIFY FRAMING & STRUCTURE





1/4"=1'-0" 0' 2'





04 닏 DA 9 ST ΗE 6 NS \square PROFESSIONAL CERTIFICATION:

	ve Suite 100 Rockville 11-2020 BlueLinx Cor		52			s Lapp 881-6856				2/8/2021 Versior	10:28 AM n: 21.0.0.2
Project: MemberID: Usage: Max Deflection:	3926 Washington 1 - over front door BEAM LL = L/480 TL = L/	Street, Ke	ensington, MD 2	0895							
3 1/2* 565ps				96	" (9° 2 1/	2" Clear)					9 1/2 565p
LOADS			Design Loads : F	loor: Liv	/e=40.0 ps						
# Shape	Live+De @Start		Live Ld(L) @Start @End		Span#	Locatio Starts	n* Enc	le	Additional Info		
1 Uniform (plf)	150.0	@LIIU	120.0	100%		0'	9' 6	-	roof		
Uniform (plf)	4.4		120.0	10070	0	0'	9' 6		Self Weight		
	red from left end whe	n span# is	0, otherwise, fro	m left en	nd of the s	pecified sp	an.		--		
SUPPORTS (II	bs)	_									
· ·	<i>i</i> 1	2									
Max Reaction	733	733									
Max 100%	570	570									
Min Reaction	163	163									
Min 100%	570	570									
DL Reaction	163	163	Deerderte	aning at	aaa haloo	a					
Min Bearing	1.50"	1.50" 425*	[Based on be								
Brg Stress (psi)	425*	420	[*Based on m		ng suess						
DESIGN	Actual	Span	Location		Group	Allow	LDF	Ratio			
V(lbs)	618	1	0' 1 3/4"		21	1958	100%	0.32			
M(ft-lbs)	1742	1	4'9"		21	2300	100%	0.76			
LtRn(lbs)	733	0	0'		21	4466	10070	0.16			
RtRn(lbs)	733	õ	9' 6"		21	4466		0.16			
LLDefl(")	0.16	1	4' 9"		21	0.24		L/691			
TI Dofl(")	0.10	1	/' Q"		21	0.24		1/537			

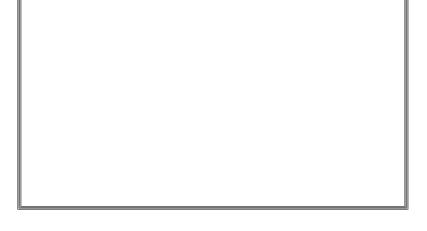
USE: SPRUCE-PINE-FIR No.1/No.2 2x8 2 Plies

NOTES

1. Designed in accordance with National Design Specifications for Wood Construction. This analysis of dimension lumber is for comparison purposes only, and is not warranted by BlueLinx.

Analysis valid for dry-use only (less than 19% moisture content).
 Loads have been input by the user and have not been verified by BlueLinx Engineered Lumber Technical Services.

4. Bearing length (Min Bearing) based on allowable stress of support material (Bearing Stress); support material capacity shall be verified (by others). 5. When required by the building code, a registered design professional or building official should verify the input loads and product application. 6. This product has been sized for residential use. A concentrated load check, per the building code, must be performed for commercial uses. 7. Load Combinations: 10= D, 20= D + 100%, 30= D + 115%, 40= D + 125%, 50= D + 160%, 60= D + 0.75(100%+115%), 70= D + 0.75(100%+125%), 80= D + 0.75(100%+115%+160%), 90= D + 0.75(100%+125%+160%), 100= 0.6D + 160%, 110= D + Commercial (100%), 120= D + 0.75(100%+160%) 8. Group = Load Combination Number + Load Pattern number. (For simple span, Load pattern = 1 for LL, 0 for DL).



CLAUDE C LAPP 11820 Parklawn Dri Doma Sizer™ © 20	2	Chris Lapp 301-881-6856						2/8/2021 10:33 AN Version: 21.0.0.2			
Project: MemberID: Usage: Max Deflection:		ront porcl	h	nsington, MD 208	395						
5 1/2" 565psi				123	(11'9)	1/2° Cles	II .				555psl
LOADS				Design Loads : Flo	oor: Live	=40.0 ps					
		Live+De				- "	Location				
# Shape	To:	@Start	@End	@Start @End		Span#	Starts	Ends		Additional Info	
1 Uniform (plf)		175.0 8.54		140.0	100%	0 0	0' 0'	12' 3' 12' 3'		roof Self Weight	
Uniform (plf) If "Applied To" is bla	ank all plice		ned to be l	villeupo hobeo		U	0	12 3		Sell weight	
*Dimensions measu					left end	of the sr	ecified sn	an			
			1 3parim 13		IGIT GITU		conicu spi	an.			
SUPPORTS (I	os)	1	2								
Max Reaction		1124	_ 1124								
Max 100%		858	858								
Min Reaction		267	267								
Min 100%		858	858								
DL Reaction		267	267								
Min Bearing		1.50"	1.50"	[Based on bea	rina stre	ss below	1				
Brg Stress (psi)		565	565	[I				
ord offeaa (pari											
		Actual	Span	Location	C	Group	Allow	LDF	Ratio		
		Actual				21	6152	100%	0.15		
DESIGN		941	1	12' 0 1/4"							
DESIGN V(lbs)				12' 0 1/4" 6' 1 1/2"		21	13320	100%	0.26		
DESIGN V(lbs) M(ft-lbs)		941 3443	1		2			100%	0.26 0.10		
DESIGN V(lbs) M(ft-lbs) LtRn(lbs)		941	1 1	6' 1 1/2"	2	21	13320 10876 10876	100%			
DISOLUSS (ps) DESIGN V(lbs) M(ft-lbs) LtRn(lbs) RtRn(lbs) LLDefl(")		941 3443 1124	1 1 0	6' 1 1/2" 0'	22	21 21	10876	100%	0.10		

onCENTER® LVL by BlueLinx

Connect plies together with 2 rows of 0.131" x 3 1/2" nails @ 12" o.c. (one row 2" from top, one row 2" from bottom).

NOTES

Designed in accordance with National Design Specifications for Wood Construction and applicable approvals or research reports.
 Provide full depth lateral support at all bearing locations. Allowable positive moment is calculated based on top edge with continuous lateral support.

Analysis valid for dry-use only (less than 16% moisture content).
 Analysis valid for dry-use only (less than 16% moisture content).
 Loads have been input by the user and have not been verified by BlueLinx Engineered Lumber Technical Services.
 Bearing length (Min Bearing) based on allowable stress of support material (Bearing Stress); support material capacity shall be verified (by others).
 When required by the building code, a registered design professional or building official should verify the input loads and product application.
 This membres have have been allowable and a constructed based of body and product application.

7. This member has been sized for residential use. A concentrated load check, per the building code, must be performed for commercial uses.

8. Company, product or brand names referenced are trademarks or registered trademarks of their respective owners. 9. Load Combinations: 10= D, 20= D + 100%, 30= D + 115%, 40= D + 125%, 50= D + 160%, 60= D + 0.75(100%+115%), 70= D + 0.75(100%+125%), 80= D +

0.75(100%+115%+160%), 90= D + 0.75(100%+125%+160%), 100= 0.6D + 160%, 110= D + Commercial (100%), 120= D + 0.75(100%+160%) 10. Group = Load Combination Number + Load Pattern number. (For simple span, Load pattern = 1 for LL, 0 for DL).

CLAUDE C LAPP 11820 Parklawn Drive Suite 100 Rockville MD 20852 Doma Sizer™ © 2011-2020 BlueLinx Corporation 3926 Washington Street, Kensington, MD 20895 Project: MemberID: **3 - over great room window** BEAM Usage: Max Deflection: LL = L/480 TL = L/360

3 1/2"

565psl							56Spsi			
		5	6°				- energian			
LOADS		Project	Design Loads : Fl	loor: Liv	e=40.0 ps	sf, Dead=1	0.0 psf			
	Live+De	ad Ld(T)	Live Ld(L)			Locatio	n*			
# Shape	@Start	@End	@Start @End	LDF	Span#	Starts	End	5	Additional Info	
1 Uniform (plf)	450.0		360.0	100%	0	0'	5' 6"		roof	
Uniform (plf)	4.4				0	0'	5' 6"		Self Weight	
*Dimensions measured from	left end wher	n span# is	0, otherwise, fron	n left en	d of the s	pecified sp	an.			
SUPPORTS (lbs)										
	1	2								
Max Reaction	1250	1250								
Max 100%	990	990								
Min Reaction	260	260								
Min 100%	990	990								
DL Reaction	260	260								
Min Bearing	1.50"	1.50"	[Based on bea	aring str	ess below	/]				
Brg Stress (psi)	425*	425*	[*Based on me	ember b	rg stress]	-				
DESIGN										
	Actual	Span	Location		Group	Allow	LDF	Ratio		
V(lbs)	909	1	0' 1 3/4"		21	1958	100%	0.46		
M(ft-lbs)	1718	1	2' 9"		21	2300	100%	0.75		
LtRn(lbs)	1250	0	0'		21	4466		0.28		
RtRn(lbs)	1250	0	5' 6"		21	4466		0.28		
LLDefl(")	0.06	1	2' 9"		21	0.14		L/1188		
TLDefl(")	0.07	1	2' 9"		21	0.18		L/941		

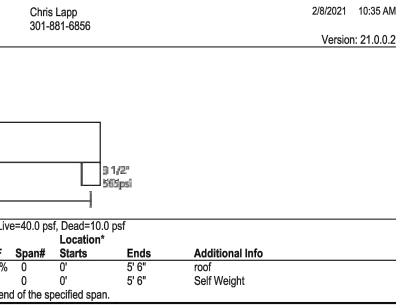
USE: SPRUCE-PINE-FIR No.1/No.2 2x8 2 Plies

NOTES

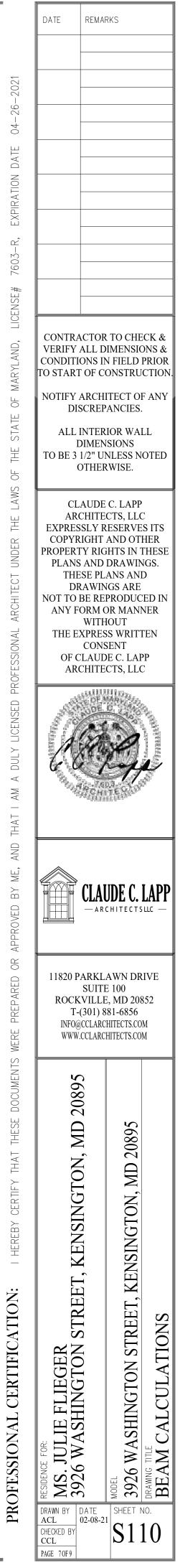
1. Designed in accordance with National Design Specifications for Wood (only, and is not warranted by BlueLinx.

Analysis valid for dry-use only (less than 19% moisture content).
 Loads have been input by the user and have not been verified by BlueLinx Engineered Lumber Technical Services.

 4. Bearing length (Min Bearing) based on allowable stress of support material (Bearing Stress); support material capacity shall be verified (by others).
 5. When required by the building code, a registered design professional or building official should verify the input loads and product application.
 6. This product has been sized for residential use. A concentrated load check, per the building code, must be performed for commercial uses. 7. Load Combinations: 10= D, 20= D + 100%, 30= D + 115%, 40= D + 125%, 50= D + 160%, 60= D + 0.75(100%+115%), 70= D + 0.75(100%+125%), 80= D + 0.75(100%+115%+160%), 90= D + 0.75(100%+125%+160%), 100= 0.6D + 160%, 110= D + Commercial (100%), 120= D + 0.75(100%+160%) 8. Group = Load Combination Number + Load Pattern number. (For simple span, Load pattern = 1 for LL, 0 for DL).

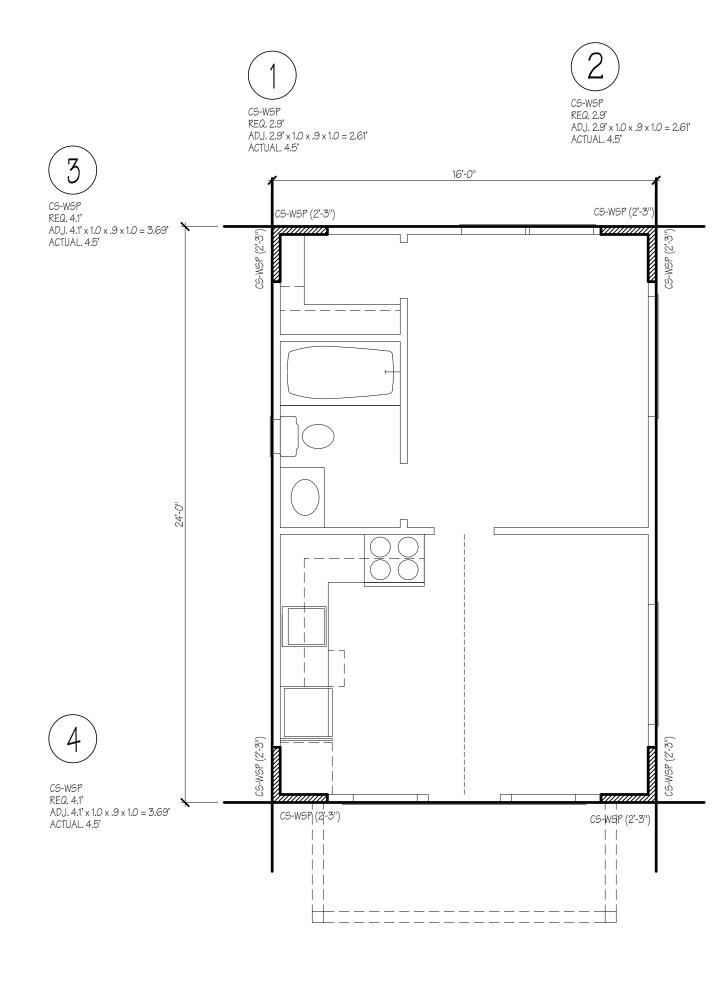


d Construction.	This analysis of dimension lumber is for comparison purposes	



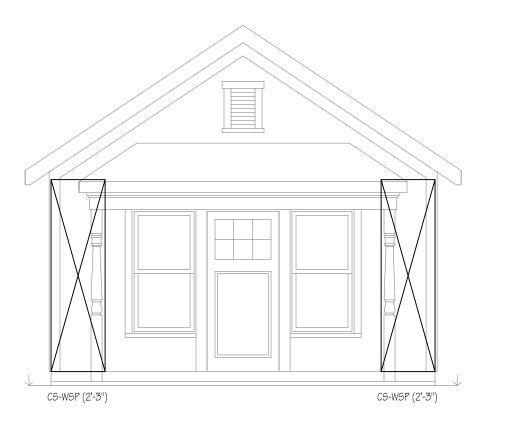
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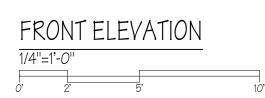
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WALL BRACING LEGENDS

WSP (X'-X") WOOD STRUCTURAL PANELS: LENGTH OF PANELS

CS-WSP (X'-X") WOOD STRUCTURAL PANELS: LENGTH OF PANELS

CS-PF (X'-X") CONTINUOUSLY SHEATHED PORTAL FRAME: LENGTH OF PANELS

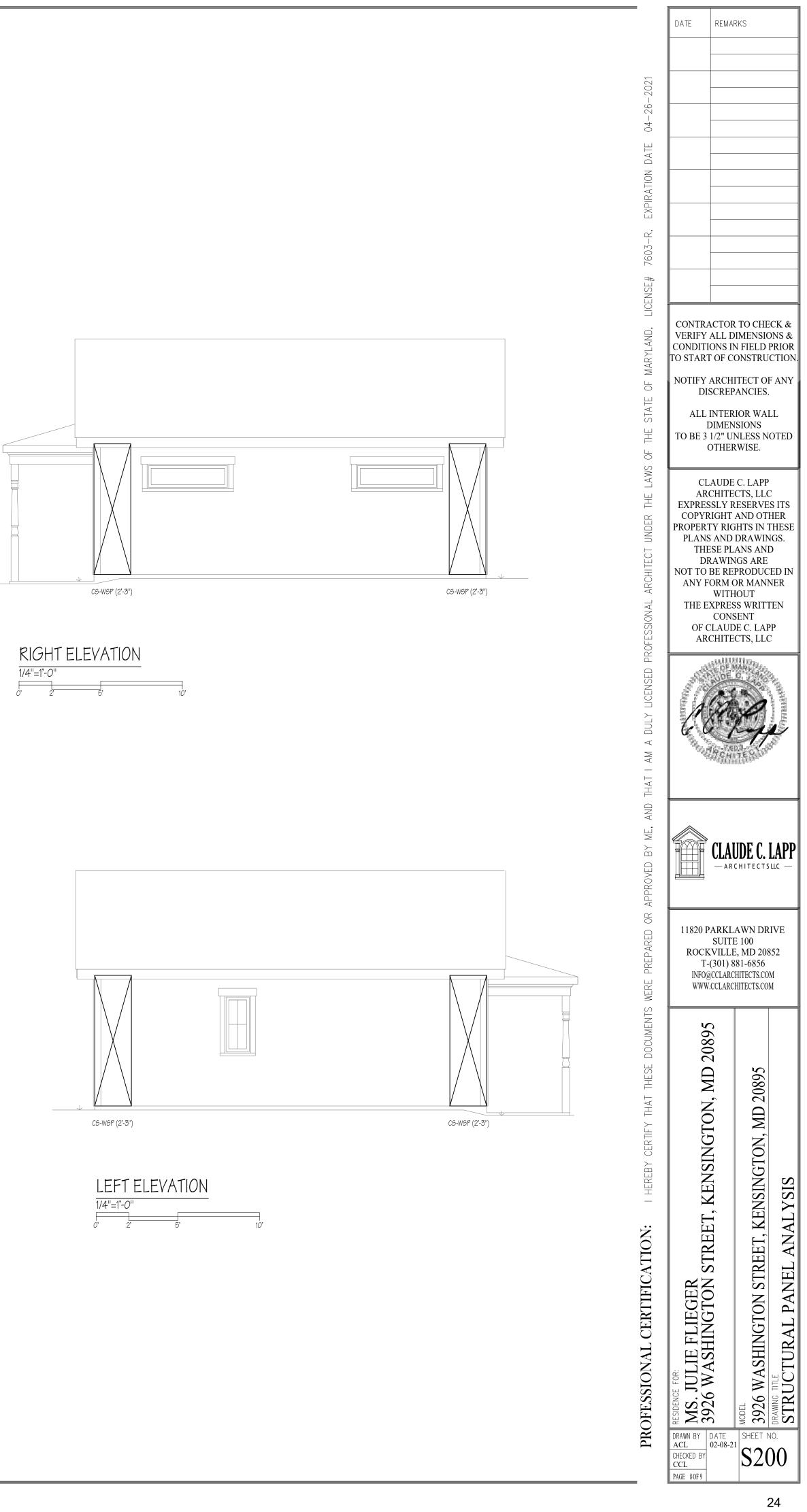
ALL WOOD STRUCTURAL PANELS TO BE 1/2" NOMINAL PLYWOOD OR OSB ATTACHED TO WOOD STUDS & ANAILS @ 6"/12" O.C. EDGE/FIELD

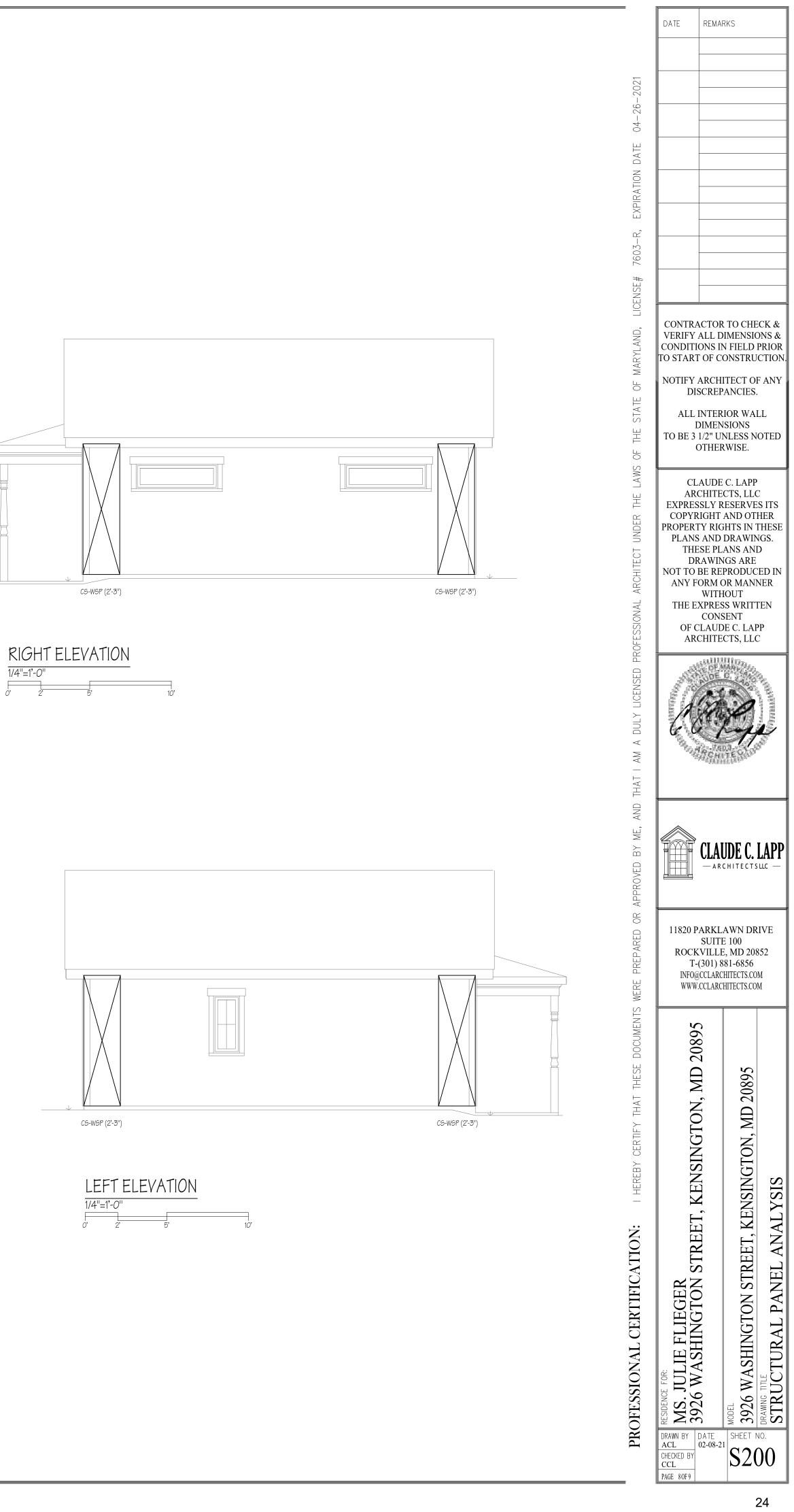
GB (X-X") GYPSUM BOARD SHEATHED INTERIOR WALLS: LENGTH OF PANELS

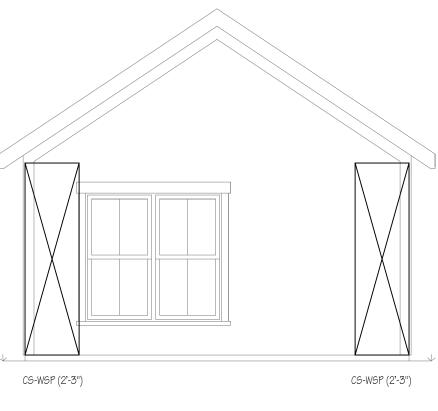
INTERIOR BRACED WALL LINES TO BE SHEATHED W/ 1/2" GYPSUM BOARD ATTACHED TO WOOD STUDS W/ 5d COOLER NAILS @ 4"/12" O.C. EDGE/FILED, WALLS TO BE SHEATHED BOTH SIDES UNLESS NOTED OTHERWISE

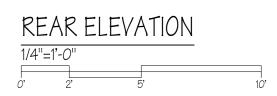
HOLD DOWN TO BE SIMPSON LSTA36 FLOOR-TO-FLOOR STRAPS W/ (12) 10d (0.148"x3") NAILS EACH END INTO WALL STUDS, NAILS NOT REQ. WITHIN FLOOR FRAMING SPACE

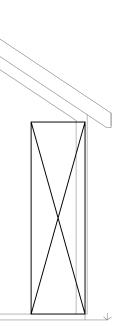
HOLD DOWN AT BOT. FLOOR TO BE SIMPSON HDU4-SDS2.5 W/ 5/8"Ø THREADED ROD INSTALLE W/ SIMPSON SET EPOXY W/ 10" EMBEDMENT INTO CONC. FOUNDATION

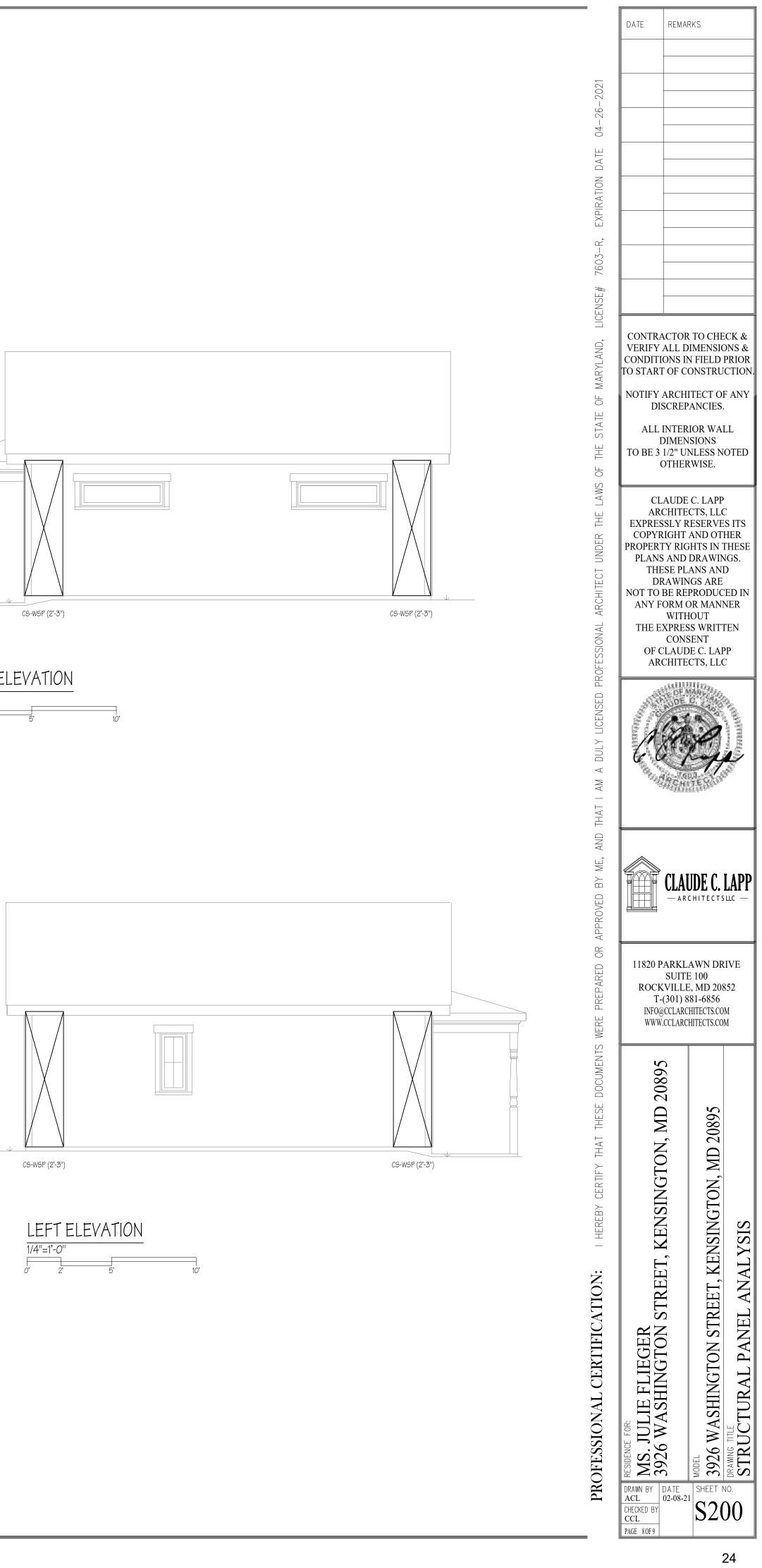












Gross Are	R-Value	Card. R-Value	U-Factor	-
33:	Contraction of the	Stating 1	0.026	9
8			0.030 0.062	2 5
2			0.400	8
2	8		0.300	8
12	8 18.0	0.0	0.062	7
1	5		0.300	4
19	2 18.0	0.0	0.062	11
1	6		0.300	5
19	2 18.0	0.0	0.062	12
		Report	date: 01/ Page :	26/21 1 of10
et co	espiles?	Cammun	ts. Assura	e local a
Com	plies			
	s Not Observable Applicable			
	plies	See the Enve table for valu		lies
□Not	Observable Applicable			
Com	plics			
Doe				
	Applicable			

1 High Impact (Tier 1) Medium Impact (Tier 2) Low Impact (Tier 3)

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Project Title: Guest Cottage Data filename:

Designer/Contractor: Claude Lapp Claude C. Lapp Architects, LLC 11820 Parklawn Drive #100 Rockville, Maryland 20852 301-881-6856 chris@cclarchitects.com

Generated by REScheck-Web Software

Compliance Certificate

Owner/Agent:

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Energy Code:2018 IECCLocation:Kensington (Montgomery), MarylandConstruction Type:Single-familyProject Type:New ConstructionOrientation:Bldg. faces 0 deg. from NorthConditioned Floor Area:384 ft2Glazing Area10%Climate Zone:4 (5093 HDD)Permit Date:Permit Number:

Assembly

Section # Invaluation Inspection Plane Verified Value Value Com

R-____ Wood Mass Steel

1 High Impact (Tier 1) Medium Impact (Tier 2) I Low Impact (Tier 3)

Project Guest Cottage

Construction Site: 3926 Washington Street Kensington, Maryland 20895

Envelope Assemblies

Ceiling 1: Flat Ceiling or Scissor Truss

Ceiling 2: Flat Ceiling or Scissor Truss

Door: Solid Door (under 50% glazing) Orientation: Front

Wall 1: Wood Frame, 16" o.c. Orientation: Front

Window: Wood Frame SHGC: 0.28 Orientation: Front

Wall 2: Wood Frame, 16" o.c. Orientation: Back

Window 1: Wood Frame SHGC: 0.28 Orientation: Back Wall 3: Wood Frame, 16" o.c. Orientation: Right side

Window 2: Wood Frame SHGC: 0.28 Orientation: Right side

Project Title: Guest Cottage Data filename:

DH11

402.1.1, 402.2.5, 402.2.6 [IN3]¹

All installed insulation is labeled or the installed R-values provided.

303.2 Wall insulation is installed per [IN4]¹ manufacturer's instructions.

Additional Comments/Assumptions:

Project Title: Guest Cottage Data filename:

 1.
 Wall insulation R-value. If this is a
 R-______

 5.
 mass wall with at least ½ of the
 □
 Wood

 6
 wall insulation on the wall
 □
 Mass

 exterior, the exterior insulation requirement applies (FR10).
 □
 Steel

Ass	embly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Vindow 3: Wood Frame SHGC: 0.28 Orientation: Left side		5			0.300	2
loor 1: Slab-On-Grade (Unheated) Insulation depth: 2.5'		80		21.6	0.469	38
loor: Slab-On-Grade (Unheated) Insulation depth: 2.0'		80		21.6	0.690	55
alculations submitted with the permit ES <i>check</i> Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RESche	ck Inspectio	n Checklist.	
EScheck Version : REScheck-Web and ame - Title	I to comply with the mandatory requirem	ents listed in t	he RES <i>che</i>	ck Inspectio	n Checklist.	
EScheck Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RESche		n Checklist.	
ES <i>check</i> Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RES <i>che</i>		n Checklist.	
EScheck Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RES <i>che</i>		n Checklist.	
EScheck Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RES <i>che</i>		n Checklist.	
EScheck Version : REScheck-Web and	t to comply with the mandatory requirem	ents listed in t	he RESche		n Checklist.	



REScheck Software Version : REScheck-Web Inspection Checklist Energy Code: 2018 IECC Requirements: 0.0% were addressed directly in the REScheck software Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided. 103.1. 103.2. [PR1]¹ Construction documental 403.7. (PR3]¹ Ighting and Usystems see Construction 103.2. 403.7. 404. 404. 405.7

Section 4	Pre-Inspection/Plan Resiew	Plans Verified Volue	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.	-		Complies Does Not Not Observable Not Applicable	
103.1, 103.2, 403.7 [PR3] ¹	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			Complies Does Not Not Observable Not Applicable	
302.1. 403.7 PR2] F	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	Complies Does Not Not Observable Not Applicable	

	1 High Impact (Tier	1) Medium	Impact (Tier 2)	Low Impact (Ti	er 3)
Project Tit Data filena	le: Guest Cottage ame:				Report date: 01/26/21 Page 3 of10
Section #	Final Inspection Provisions	Plane Verified Volum	Field Verified Value	Compiles?	Comments Wassingtions
403.6.1 (Fi25)*	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1.			□Complies □Does Not □Not Observable □Not Applicable	
403.2 (H28) ²	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback			Complies Does Not	

& Hey.30	First mapecies Provision	Walke	Value	Compress	Commencessarapeions
403.6.3 (Fi25)*	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1.			□Complies □Does Not □Not Observable □Not Applicable	
403.2 (HIZB) ²	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			□Complies □Does Not □Not Observable □Not Applicable	
403.5.1.1 (M28) ²	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermos- syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			Complies Does Not Not Observable Not Applicable	
403.5.1.7 (R29) ¹	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			□Complies □Does Not □Not Observable □Not Applicable	
403.5.2 (Pi38) ³	Demand recirculation water systems have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to <= $104^{\circ}F$.			□Complies □Does Not □Not Observable □Not Applicable	
400.5.4 (831) ⁶	Drain water heat recovery units tested in accordance with CSA 855.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water- side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			□Complies □Does Not □Not Observable □Not Applicable	
404.1 [FI6] ¹	90% or more of permanent fixtures have high efficacy lamps.			□Complies □Does Not □Not Observable □Not Applicable	
0 10331, 10331,	Fuel gas lighting systems have no continuous pilot light.			□Complies □Does Not □Not Observable □Not Applicable	
401.3 (6.0 p	Compliance certificate posted.			□Complies □Does Not □Not Observable □Not Applicable	
	1 High Impact (Tier 1	L) Medium Impi	act (Tier 2)	Low Impact (Tie	er 3)

a Reg.32	Faundation impection	Plane Verified Volum	Field Verified Value	Compiles7	Comments/Assumptions
402.1.2 [FO1] ¹	Slab edge insulation R-value.	R Unheated Heated	R Unheated Heated	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
402.1.2 [FO3] ¹	Slab edge insulation depth/length.	ft	ft	Complies Does Not Not Observable Not Applicable	See the Envelope Assemblies table for values.
103.2.1 (6011)	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			Complies Does Not Not Observable Not Applicable	
403.9 POL2 ⁶	Snow- and ice-melting system controls installed.			Complies Does Not Not Observable Not Applicable	

	1 High Impact (Tier 1)	Medium Impact (Tier 2)	Low Impact (Tier 3)	
Project Title: Guest Data filename:	Cottage		Report d	ate: 01/26/21 Page 4 of10

# Heg.30	Final Inspection Provisions	Place Vertiled Velue	Field Section Value	Compiles?	Commercia-Assumptions
1116 1973	Herwiterburger memories for mechanical and water heating systems have been provided.			Camplies	
ddition	al Comments/Assumptions:			Chot Applicable	

Project Title: Guest Cottage Data filename:

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A Reg.30	Framing Rough-In Impoction	Plate Vertfied Volum	Field Verified Value	Complies7	Comments/Assumptions
402.1.1, 402.3.4 [FR1] ¹	Door U-factor.	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2] ¹	Glazing U-factor (area-weighted average).	U	U	Complies Does Not Not Observable Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			Complies Does Not Not Observable Not Applicable	
402.4.1.1 [FR23] ¹	Air barrier and thermal barrier installed per manufacturer's instructions.			Complies Does Not Not Observable	
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			Complies Does Not Not Observable Not Applicable	
402.4.5 (FR36) ¹	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			Complies Does Not Not Observable Not Applicable	
403.3.1 [FR12] ¹	Supply and return ducts in attics insulated >= R-8 where duct is >= 3 inches in diameter and >= R-6 where <3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter.			Complies Does Not Not Observable Not Applicable	
403.3.2 [FR13] ¹	Ducts, air handlers and filter boxes are sealed with joints/seams compliant with International Mechanical Code or International Residential Code, as applicable.			Complies Does Not Not Observable Not Applicable	
400.3.5 (1835) ¹	Building cavities are not used as ducts or plenums.			Complies Does Not Not Observable	
403.3.6(3. 2) (FR26)(*	Ducts partially or completely buried in ceiling insulation have an insulation R-value not less than R-8, the sum of the ceiling insulation R-value against and above the top of the duct, and against and below the bottom of the duct, is >= than R-19, excluding the R-value of the duct insulation.			Complies Does Not Not Observable Not Applicable	



Project Title: Guest Cottage Data filename:

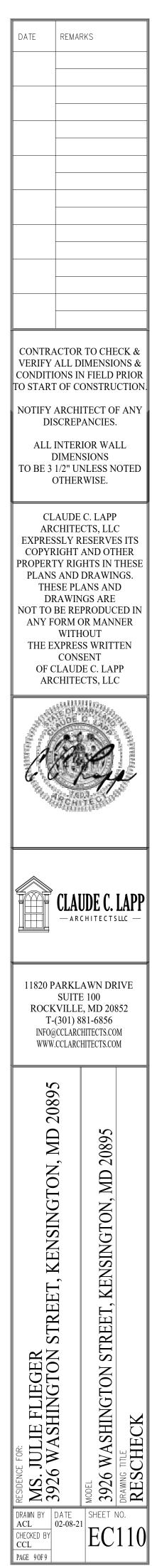
h Hen.32	Framiny Hough-In Impection	Plane Vertilied Volum	Field Verified Value	Compiles7	Comments/Assumptions
403.3.3 (Pazat) 0	Ducts declared to be within the conditioned space are either 1) completely within the continuous air barrier and within the building thermal envelope, 2) buried within ceiling insulation in accordance with Section R403.3.6 and the air handler is located completely within the continuous air barrier and within the building thermal envelope and the duct leakage is <= 1.5 cfm / 100 square feet of conditioned floor area served by the duct system, or 3) the ceiling insulation R-value installed against and above the insulated duct >= to the proposed ceiling insulation R-value, less the R-value installed near the insulation on the			Complies Comples Not Not Applicable	
463.4 (FR 37) ²	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R- 3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
403.4.1 [FR24] ¹	Protection of insulation on HVAC piping.			Complies Does Not Not Observable	
M 1442911	Hot water pipes are insulated to ≥R-3.	R	R	Complies Does Not Not Observable	
169781. 40216	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			Complies Does Not Not Observable Not Applicable	

1 High Impact (Tier 1) Medium Impact (Tier 2) Low Impact (Tier 3)

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1 High Impact (Tier 1) Medium Impact (Tier 2) Iow Impact (Tier 3) Report date: 01/26/21 Page 5 of 10



PROFESSIONAL CERTIFICATION:

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