

ZONING BOARD OF APPEALS Tuesday, March 26, 2024 at 9:00 a.m. Caledonia Village Hall – 5043 Chester Lane

- 1. Meeting called to order
- 2. Roll Call

3. Approval of Minutes

A. January 30, 2024, Meeting Minutes

4. Public Hearing

A. Case No. 24-002, 555 Sara Lane. Jude Tindall, Applicant. Requesting a variance from Section 16-6-6(b), which requires a principal structure to have a rear yard setback of 30 feet in the R-4, Single-Family Residential District. The applicant is requesting a variance to allow for a rear yard setback of 14 feet for a proposed 18' x 16' sunroom addition to the existing single-family home located at 555 Sara Lane. (Parcel ID No. 104-04-23-28-094-000)

More information at Caledonia ZoningHub: https://s.zoninghub.com/LNU3ZCCJ6I

5. Board Meeting

- A. Deliberate the request of Case No. 24-002, Jude Tindall
- B. Decision on Case No. 24-002, Jude Tindall
- C. Other business as authorized by law.

6. Adjournment

Dated March 4, 2024

This location is handicap accessible. If you have other special needs, please contact the Village of Caledonia, 5043 Chester Lane, Racine, Wisconsin 53402, (262)835-4451.

VILLAGE OF CALEDONIA ZONING BOARD OF APPEALS

Village Hall, 5043 Chester Lane, Racine, WI 53402 Tuesday, January 30, 2024, at 9:00 a.m.

1. Meeting called to order

Chairperson Kuemmel called the meeting to order at 9:00 a.m.

2. Roll Call: Board Members in attendance: Joan Rennert, Richard Mielke, Jacob Lovdahl, Rosanne Kuemmel, John Barnes.

Staff Present: Development Director Peter Wagner, Todd Roehl Planner/Zoning Administrator

3A. Approval of Minutes

Motion by Rennert to accept the minutes of the November 28, 2023. Seconded by Barnes. Motion carried. Mielke and Kuemmel abstained due to their absence from the meeting.

4A. Public Hearing. Kuemmel read the variance request and the meeting process.

Public Hearing

Rob Konecko Finishing Touch Auto Body Inc. 5306 Douglas Avenue Racine, WI 53402 Request a variance from the following Municipal Code Section 16-6-12(b): Basic Regulations states that the minimum street yard setback for a commercial building is 40 feet in the B-3, Highway Business District. The applicant is requesting a variance to allow for a street yard setback of 20 feet for a proposed building addition.

Kuemmel opened the Public Hearing portion of the meeting at 9:04 a.m.

Todd Roehl swore in appellant Rob Konecko, 5306 Douglas Avenue, Racine, WI 53402.

Mr. Koneko explained the request for a variance. He explained the need to expand operations on the site and that this addition was planned years ago, and the building setback requirement was twenty-five feet from the front lot line back then. Back then, he couldn't afford to construct the expansion. The addition would beautify Douglas Avenue and update the look of the building. By allowing this addition, it would allow full access to the property, as a driveway leading into the building would be constructed to access their property. Currently, the property can only access right in and right out from Douglas Avenue. Allowing the variance would reduce/eliminate traffic access problems to the site.

Kuemmel asked three times if anyone wanted to speak in favor of the variance.

In Favor: None

Kuemmel asked three times if anyone wanted to speak in opposition of the variance.

Against: Martha Hutsick, 4502 Harvest Lane. Martha stated she wasn't actually opposed to the request but rather had questions she wanted to share with the Board. Why would anyone want to build so close to a state highway? Is the applicant complying with the conditional use with the property. There is lots of stuff stored outside, would the applicant move it and hide it from the roadway?

Kuemmel asked if the Zoning Administrator wanted to provide any testimony. The Zoning Administrator stated no. Kuemmel asked if the applicant wanted to provide additional testimony. The applicant stated no. Kuemmel asked the Board if they had any questions for staff or for the applicant regarding the case. The Board asked the applicant if he was aware of any other buildings in the area that had a similar setback as is being requested. The applicant asked what distance the Board was thinking pertained to this request. Discussion ensued regarding building setbacks in the area. Staff presented an aerial map showing the area around the parcel and provided street yard setback measurements of buildings along Douglas Avenue. The Board asked the applicant if there are any other difficulties that would pertain to this request. The applicant responded that access to the site is difficult and were denied a direct access point onto Douglas in 1996. As a result, U-turns have to be done to get access to the site if northbound on Douglas. The Board asked the applicant if there were alternatives for the expansion that didn't require the variance. The applicant responded by saying he doesn't have any alternatives. The Board asked the applicant about the difference in grade on the north side of the building. The applicant stated that the grade would have to be changed to modify the addition and that the area around the addition would have to be regraded to accommodate the addition. The Board asked about the proposed driveway and how traffic would use it. The applicant stated that would be how people could access the property. The Board expressed concerns regarding future expansion of the highway and the reduced setback. The Board asked if the applicant could build the addition on the south side of the building. The applicant stated it could not be added on the south side of the building. The Board asked the applicant if there is any other way to build the addition and comply with code. The applicant stated no. The Board asked staff to show a map showing where the zoning districts are in the area.

Kuemmel reviewed the appeals process to the applicant and then closed the public hearing at 9:33a.m.

5. **Board Meeting**

5A. Deliberate the request of Case No. 24-001, Rob Kenecko

Kuemmel reviewed the request with the Board and opened the floor for Board discussion. A Board member stated that she did not see or hear testimony that applied to the criteria that are used in determining whether a variance should be granted, and asked other Board members if they heard or read testimony that would create the basis for granting a variance. The Board discussed how other buildings along Douglas Avenue with setbacks less than forty feet can be considered a factor to grant a variance. The Board discussed if there were other factors such as grade changes between parcels create a hardship or unique circumstance.

The Board went through the findings of fact criteria:

Preservation of Intent: The variance is not consistent with the purpose and intent of the regulations for the district in which the development is located.

Exceptional Circumstances: The grade changes on the north side of the building is unique. The applicant cannot expand north, south, or west sides of the existing building.

Economic Hardship and Self-Imposed Hardship Not Grounds for Variance: Does not apply.

Preservation of Property Rights: The variance is not necessary for the preservation and enjoyment of substantial property rights possessed by other properties in the same zoning district and same vicinity.

Absence of Detriment: The variance does not pose a substantial detriment to adjacent but is contrary to the purpose and spirit of this ordinance and the public interest.

5B. Decision on Case No. 24-001, Rob Kenecko

Mielke made a motion to deny the requested variance for Case No. 24-001 for a reduced street yard setback.

Seconded by Rennert.

Roll Call

Barnes – Abstain Mielke – Yes Rennert – Yes Lovdahl – Abstain Kuemmel - Abstain

The vote is 2-0 to deny the variance request. The motion carries.

5C. Other Business as Authorized by Law

None

6A. Adjournment

Motion by Barnes to adjourn.

Seconded by Lovdahl.

All but Rennert voted aye to adjourn.

Motion carried.

The meeting adjourned at 10:00 a.m.

Respectfully submitted, Peter Wagner Development Director Village of Caledonia



Meeting Date: March 26, 2024

Item No. 4A

Proposal:	Variance Request							
Description:	Requesting a variance from Section 16-6-6(b), which requires a principal structure to have a rear yard setback of 30 feet in the R-4, Single-Family Residential District. The applicant is requesting a variance to allow for a rear yard setback of 14 feet for a proposed 18' x 16' sunroom addition attached to the existing single-family home located at 555 Sara Lane.							
Applicant(s):	Jude Tindall							
Address(es):	555 Sara Lane							
Suggested Motion:	Staff does not make a recommendation on variance requests.							
Owner(s):	Brian & Patti Ramczyk							
Tax Key(s):	104-04-23-28-094-000							
Lot Size(s):	± 0.231 acres							
Current Zoning District(s):	R-4, Single-Family Residential District							
Overlay District(s):	N/A							
Wetlands:	☐ Yes ☐ No Floodplain: ☐ Yes ☐ No							
Comprehensive Plan:	Low Density Residential							

Background: The applicant is requesting a variance from Section 16-6-6(b) which states the minimum rear yard setback for a principal structure is 30 feet in the R-4, Single-Family Residential District. The existing principal structure, built in 1990, is legal non-conforming with a rear yard setback for the principal structure of 27 feet. The parcel is a corner lot with street yards to the north (current setback of the principal structure is 25.61 feet, required setback is 30 feet) and west (current setback of the principal structure is 38 feet, required setback is 30 feet). The side yard is to the east of the principal structure and has a setback of 18.95 feet (required side yard setback is 10 feet).

The applicant is requesting a variance to allow for a rear yard setback of 14 feet to construct a 18' x 16' sunroom addition to the south elevation of the existing single-family home. The property to the south is

Meeting Date: March 26, 2024 Item No.: 4A

vacant and primarily wetlands. The rear yard setback for the principal structure of all five properties to the east on Sara Lane meet or exceed the 30-foot rear yard setback requirement.

The applicant has submitted a narrative explaining the need for the variance. Village staff does not provide recommendations regarding the request as staff has denied the proposed 18' x 16' sunroom addition to the existing single-family home as it does not comply with zoning code setbacks.

The Zoning Board of Appeals is only allowed to grant a variance if the applicant provides evidence that they meet all three tests below. The reasons why each variance standard is or is not met must be incorporated as part of the Board's deliberation.

- 1. Complying with ordinance standards will result in unnecessary hardship. An unnecessary hardship exists when ordinance standards that are strictly applied would unreasonably prevent a permitted use of a property or render conformity with such standards unnecessarily burdensome. Circumstances of an applicant, such as a growing family or desire for a larger garage are not legitimate factors in deciding variances. A personal inconvenience (or preference) is not sufficient to meet the unnecessary hardship standard.
- 2. The hardship is due to unique conditions of the property. The hardship must be due to unique property limitations such as steep slopes or wetlands that prevent compliance with the ordinance, and that are not shared by nearby properties. Further, the entire property must be considered, if a code-compliant location(s) exists, a hardship due to unique property limitations does not exist.
- **The variance will not harm the public interest (ordinance purposes).** A variance may not be granted which results in harm to the public interests. The public interests are listed in the statement of intent section of the ordinance.

If the Board agrees that the applicant met criteria for granting a variance, the Board can make a motion to grant a variance allowing the applicant a rear yard setback of 14 feet for a proposed 18' x 16' sunroom addition attached to the existing single-family home located at 555 Sara Lane, Parcel ID No. 104-04-23-28-094-000. Please include the findings of fact found by the Board with the motion.

Prepared by:

Todd Roehl

Planner/Zoning Administrator

Respectfully submitted:

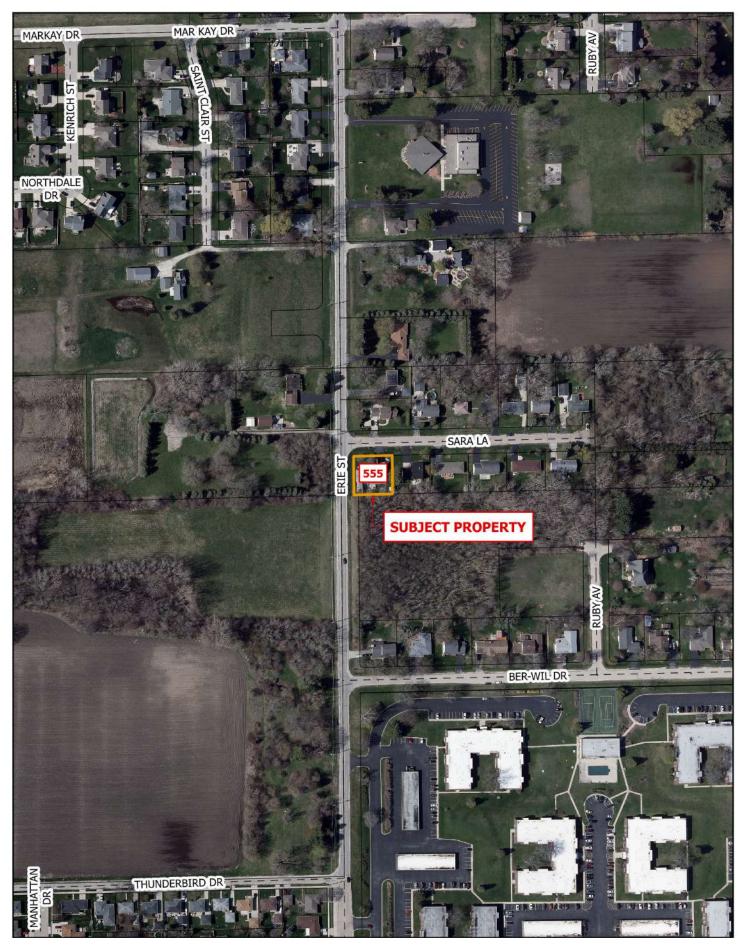
Peter Wagner, AICP Development Director



555 SARA LN

0 125 250 500 US Feet





555 Sara Lane Hardship Argument for a Variance: Zoned R-4 Request for variance to allow for a 16 ft set back south from the dwelling; 14 ft north setback from rear yard lot line.

- 1) The home, zoned R-4, is already non-conforming as it has a 28' rear setback. Also, this lot does not meet the minimum area requirements of 14,520sf as it is 10,040sf. The homeowner has no space to put an addition on the back of their house to enjoy their beautiful views of their backyard. The house is a corner lot and does have more than a 30' setback on the side setback to the west on Erie Street. The house across the street (550 Sara Lane) is non-conforming as well. It does not meet the 30' rear setback and has another home behind it. The lot behind 555 Sara Lane has wetlands on it and is not buildable, so the sunroom addition will not be approaching a future home. If the variance is granted the house would still be under the 40% floor area maximum (19%) for properties zoned R-4.
- 2) If the variance is not approved the homeowner cannot build an addition to enjoy their backyard and could only build to the west facing Erie Street which is a busy road.
- 3) Building to the west (towards Erie Street) does not allow the homeowner to enjoy privacy as many cars drive by daily.
- 4) With this lot being a corner lot and to maintain distance from Erie Street the home was set to give plenty of distance for future expansion of the road. By doing so there is not any other direction to put an addition on the house.
- 5) Granting this variance would not be contrary to public interest because the addition will not be approaching any current or future neighbors more than it already has. The lot does not approach the neighbor to the east, there isn't a neighbor to the west, and the lot adjacent to the rear is a non-buildable area due to wetlands, so the addition wouldn't approach any future home to the south. As stated before, even with the approval for the variance of an 18'x16' addition the home will still be drastically under the 40% floor area maximum for properties zoned R-4 at 19%.
- 6) Due to the non-conforming nature of the current home on the property and the fact that it is a corner lot, not approving this variance wouldn't allow the homeowner to add on to their home for more space while keeping the home within the zoning restrictions for size based on the

The room will be a very attractive addition to the neighborhood. We also have submitted pictures of previous work done by the contractor as an example of the quality work that will be produced.

We and our directly affected neighbors believe that this sunroom will be a value added addition to our neighborhood. We have submitted a letter from that neighbor outlining their support for this variance approval.

Thank you for considering our request for a variance.

Home Interactive Map Highlights Administration Tools

Zoning Code Portal | Interactive Map New



Dimensional Standards for District

Collapse

Building Standards



area.

Floor area, maximum: The sum total of the floor area on all floors of the principal and all accessory buildings shall not exceed forty (40) percent of the lot



Accessory building height, maximum: 17 feet, or a height twice the distance from the nearest lot line for parcels 5 acres or greater.



Building height, maximum: 35 feet

Lot Standards



Lot area, minimum: 14,520 square feet for sewered lots: 5 acres for unsewered lots



Lot width, minimum: 90 feet

Setback Standards



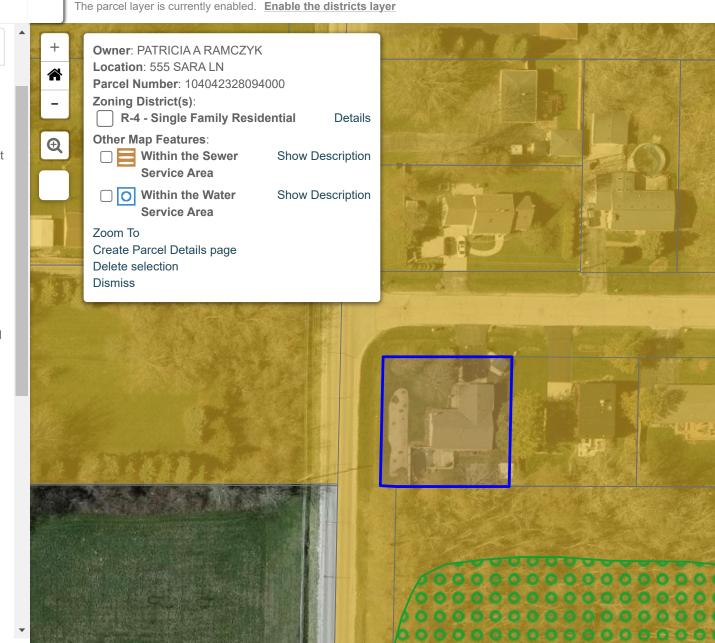
Street setback, minimum: 30 feet



Side setback, minimum: 10 feet



Rear setback, minimum: 30 feet



Village of Caledonia

Racine, Wi

Subject: Regard Brian & Patti Ramczyk's request for a variance to construct a sunroom

February 27, 2024

To Whom it May Concern,

We have no objection to Brian and Patti Ramczyk's request to build a sunroom and agree to allowing them a variance to do so.

Sincerely,

Bob & Peg Tiedeman

545 Sara Lane

Racine, WI 53402

PLAT OF SURVEY

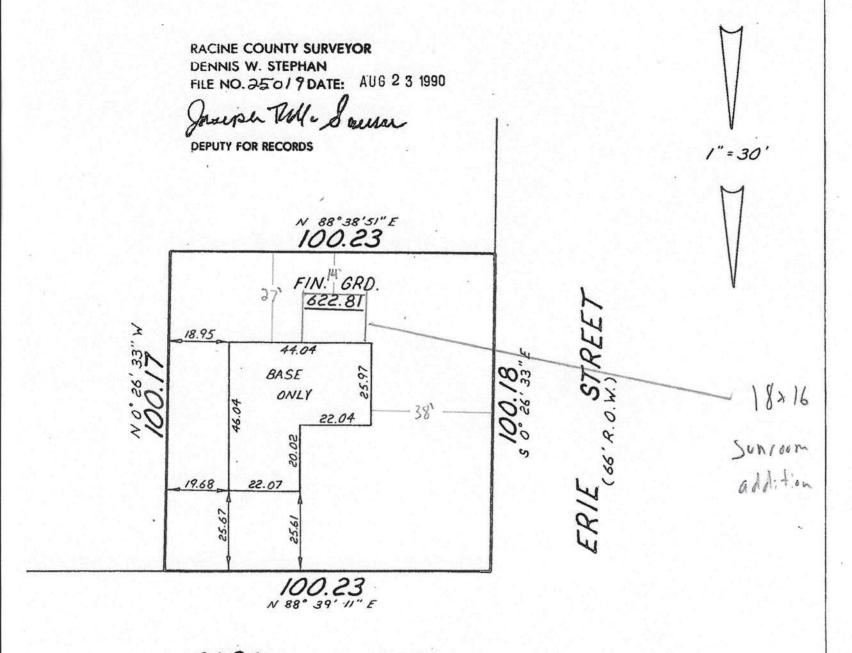
LOCATION:

Sara Lane, Caledonia, Wisconsin

LEGAL DESCRIPTION: That part of the NW 1/4 of the NW 1/4 of the SE 1/4 of Section 28, Town 4 North, Range 23 East, in the Town of Caledonia, Racine County, Wisconsin, which is bounded and described as follows: Commencing at the Southwest corner of the NW 1/4 of the NW 1/4 of the SE 1/4 of Section 28 aforesaid; thence North 00° 26' 33" West along the center line of Erie Street 330.82 feet to the point of beginning of the land to be described; running thence North 88° 38' 51" East 133.23 feet to a point; thence North 00° 26' 33" West 100.17 feet to a point in the South line of Sara Lane (as now laid out); thence South 88° 39' 11" West along the South line of Sara Lane 133.23 feet to a point on the center line of Erie Street; thence South 00° 26' 33" East 100.18 feet to the point of beginning. Excepting the West 33.00 feet heretofore taken for street purposes.

June 19, 1990

Survey No. 77037



METROPOLITAN SURVEY SERVICE, INC.

REGISTERED LAND SURVEYORS

9415 W. FOREST HOME AVE., SUITE 107 HALES CORNERS, WI 53130 529-5380

004-04-23-28-094-000

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION OF ALL VISIBLE STRUCTURES AND DIMENSIONS OF ALL PRINCIPAL BUILDINGS THEREON, BOUNDARY FENCES, APPARENT EASEMENTS AND ROADWAYS AND VISIBLE ENCROACHMENTS, IF ANY.

THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT OWNERS OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE THE TITLE THERETO WITHIN ONE (1) YEAR FROM DATE HEREO.

SIGNED_

Gerald E. Casey
Registered Land Surveyor S-1329



LIVINGSPACE SUNROOMS

PROJECT INFORMATION:

3

CUSTOMER

DEALER SOUTH EAST WISCONSIN SUNROOM

GLASS TYPE LOW-E2 **BUILDING COLOR**

CATHEDRAL ROOM STYLE

ROOF SYSTEM 8" ECO-GREEN PANELS

RIDGE BEAM (2) 1-1/2" x 11-1/4" LVL RIDGE BEAM

DECK MATERIALS SUMMARIZATION:

FLOOR SYSTEM 8" ECO-GREEN PANELS FLOOR BEAMS (2) 2x10 DROP BEAMS

COLUMNS

SEE SHEET-1 FOR DETAILS PILE DESIGN LOAD

DESIGN CRITERIA

DEAD LOADS

WEIGHT OF ROOF 8 PSF 5 PSF WEIGHT OF WALLS WEIGHT OF FLOOR 10 PSF

SNOW LOADS

BASIC GROUND SNOW LOAD (Pg) 35 PSF **29 PSF ROOF SNOW LOAD** SNOW EXPOSURE FACTOR 1.0 THERMAL FACTOR 1.2 SNOW LOAD IMPORTANCE FACTOR 1.0

LIVE LOADS

ROOF 20 PSF FLOOR 40 PSF

WIND LOADS

BASIC WIND SPEED 105 MPH GUST EFFECT FACTOR (G) 0.85 WIND IMPORTANCE FACTOR 1.0 WIND EXPOSURE

SOILS AND FOUNDATIONS

ALLOWABLE FOUNDATION PRESSURE 2000 PSF FROST DEPTH 48 IN.

DEFLECTION LIMITS

ROOF MEMBERS L/240 **EXTERIOR WALLS** L/120

TABLE OF CONTENTS

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
CL	CODE COMPLIANCE
1	PLAN VIEWS
2	ELEVATIONS
3	BUILDING SECTION / CONNECTION DETAILS
4	SECTIONS AND DETAILS
5	SECTIONS AND DETAILS
6	SECTIONS AND DETAILS
7	DECK CONNECTION DETAILS
8	ROOF / BEAM DATA
9	CANTILEVERED DIAPHRAGM
10	PROFILE DETAILS



consultants, inc.



RAMCZYK RESIDENCE 555 SARA LANE RACINE, WI 53402

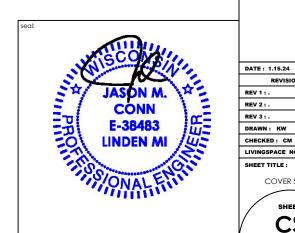
REVISION

LIVINGSPACE NO: #26122 SHEET TITLE :

COVER SHEET

SHEET CS





THE CONTENTS OF THE EVALUATION HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2015 IRC WITH SPECIAL CONSIDERATIONS FOR THE WISCONSIN UNIFORM DWELLING CODE

Code Compliance Specification Sheet

This is a summary of the compliance and performance of the LivingSpace Sunroom system as evaluated against the building code requirements for a sunroom addition as per the 2015 IECC.

In accordance with the ASHRAE 90.1 2010 Prescriptive Provisions (For Residential or Commercial Buildings)

SUNROOM: A one-story structure attached to a dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.

SECTION R402 BUILDING THERMAL ENVELOPE

TARLE R402 1 2

1ABLE R402.1.2			
Component	Thermally Isolated requirement	Non-Thermally Isolated requirement	LivingSpace Performance
Window U Value	N/A (1) 0.45 (2-8)	N/A (1) 0.40 (2) 0.35 (3-4) 0.32 (5-8)	0.28
Window SHGC	N/A	0.25 (1-3) 0.40 (4) N/A (5-8)	0.21 *
Roof R Value	19 (1-4) 24 (5-8)	30 (1) ** 38 (2-3) 49 (4-8)	24 - 6" EG ^ 34 - 8" EG ^ 43 - 10" EG ^ 52 - 12" EG ^
Wall R Value	13	13 (1-2) 20 or 13+5 (3-5) 20+5 or 13+10 (6-8)	13 - 3" Fill ^ 17 - 4" EG ^ 26 - 6" EG ^
Floor R Value	13 (1-2) 19 (3-8)	13 (1-2) 19 (3-4) 30 (5-6) 38 (7-8)	26 - 6" EG ^ 34 - 8" EG ^ 43 - 10" EG ^ 52 - 12" EG ^
Roof Glazing U Value	0.75 (1) 0.70 (2-8)	0.75 (1) 0.65 (2) 0.55 (3-8)	0.30 Celsius 0.25 Celsius Plus 0.28 Polycarbonate

(1-8) is reference to Climate Zones as per **Section R301**

AAMA/NPEA/NSA 2100-12 Specifications for sunrooms.

All LivingSpace sunroom systems meet or exceed 2100-12

4.1.4 Category IV (thermally isolated) or 4.1.5 Category V (non-thermally isolated) performance specifications.





RAMCZYK RESIDENCE 555 SARA LANE RACINE, WI 53402



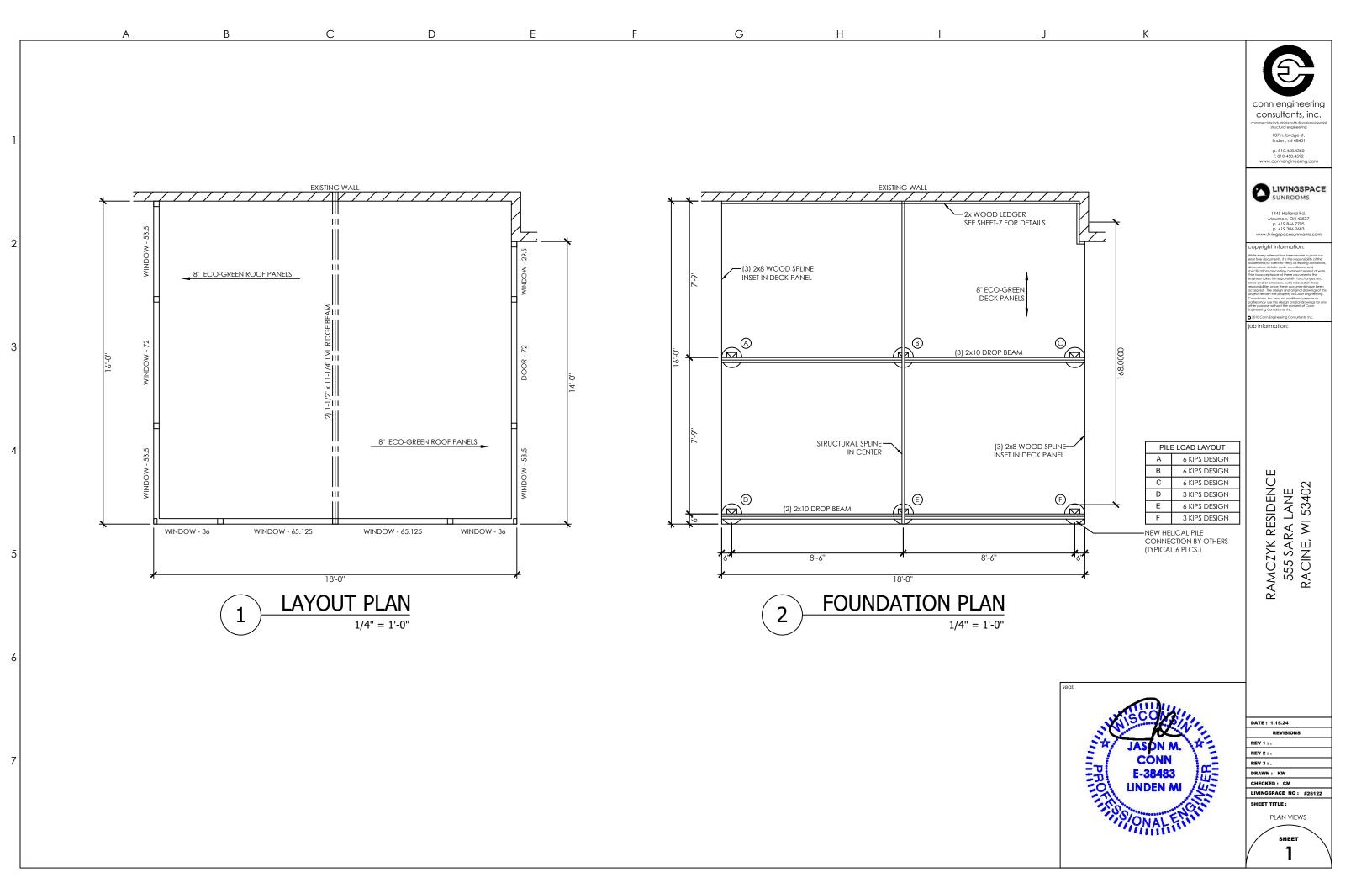
DATE: 1.15.24 REVISION REV 1:. REV 2 : . REV 3:. DRAWN: KW CHECKED: CM LIVINGSPACE NO: #26122

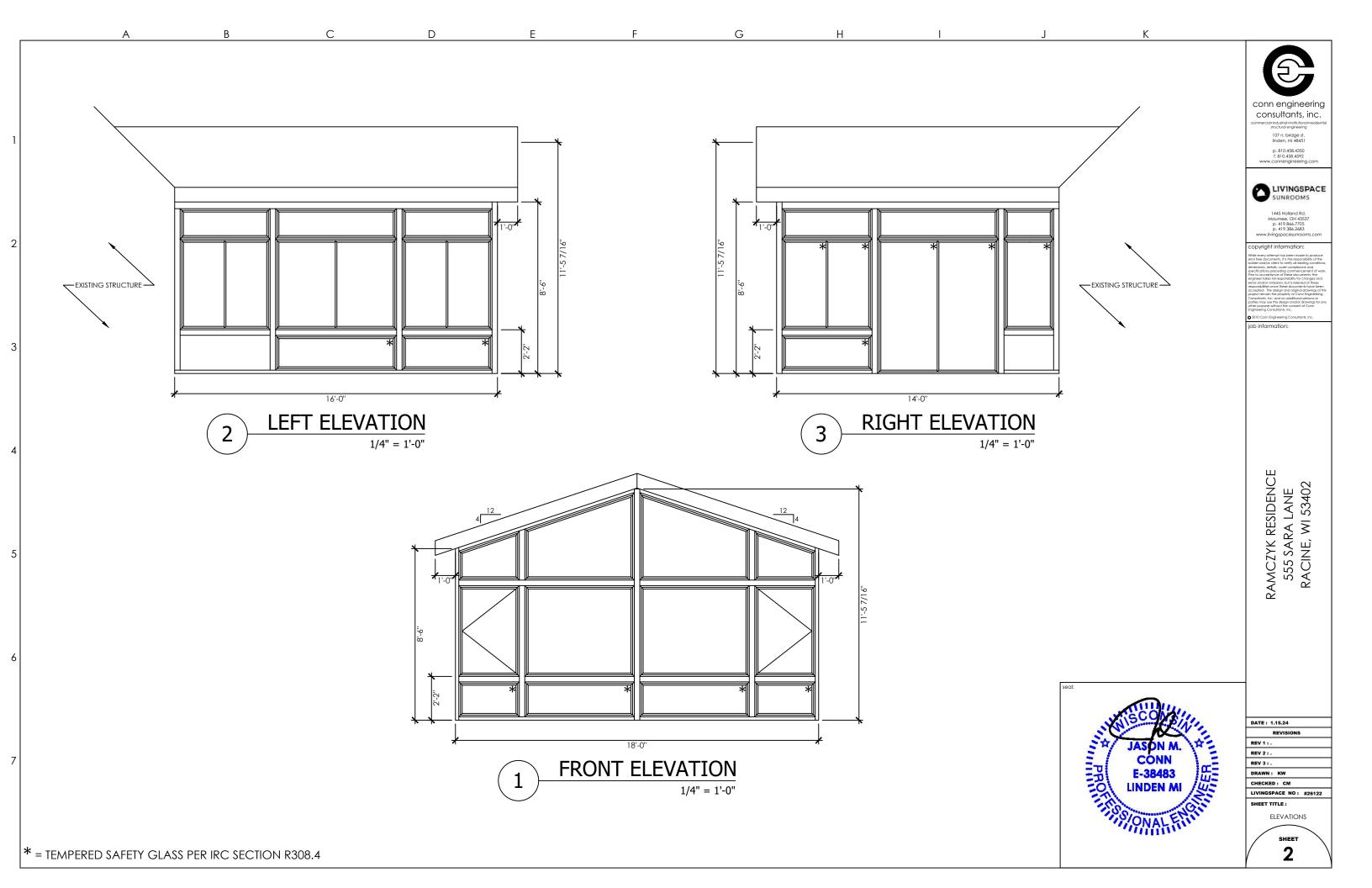
CL

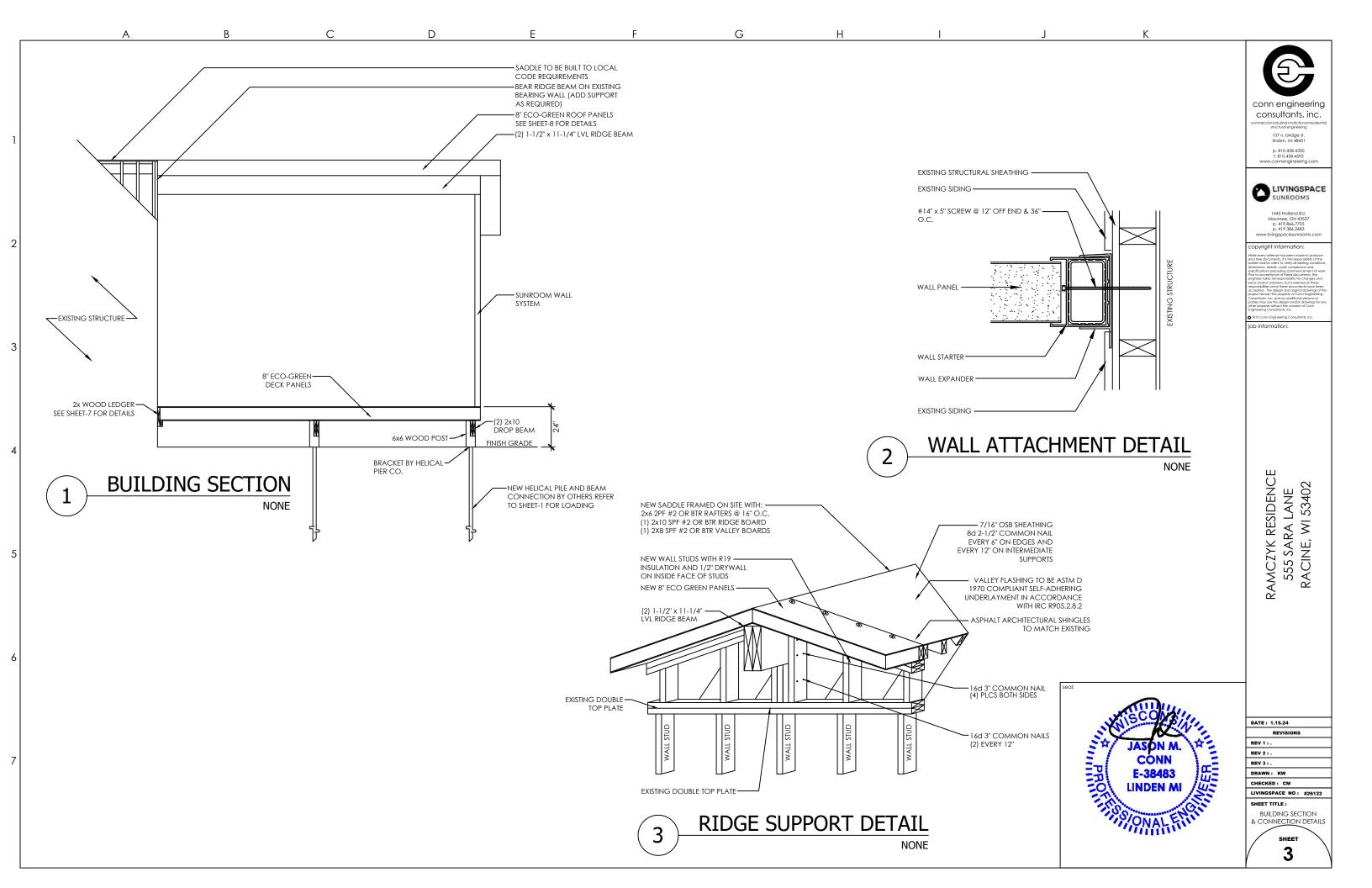
^{*} Section R402.3.2 allows for an area-weighted average to satisfy the SHGC requirements.

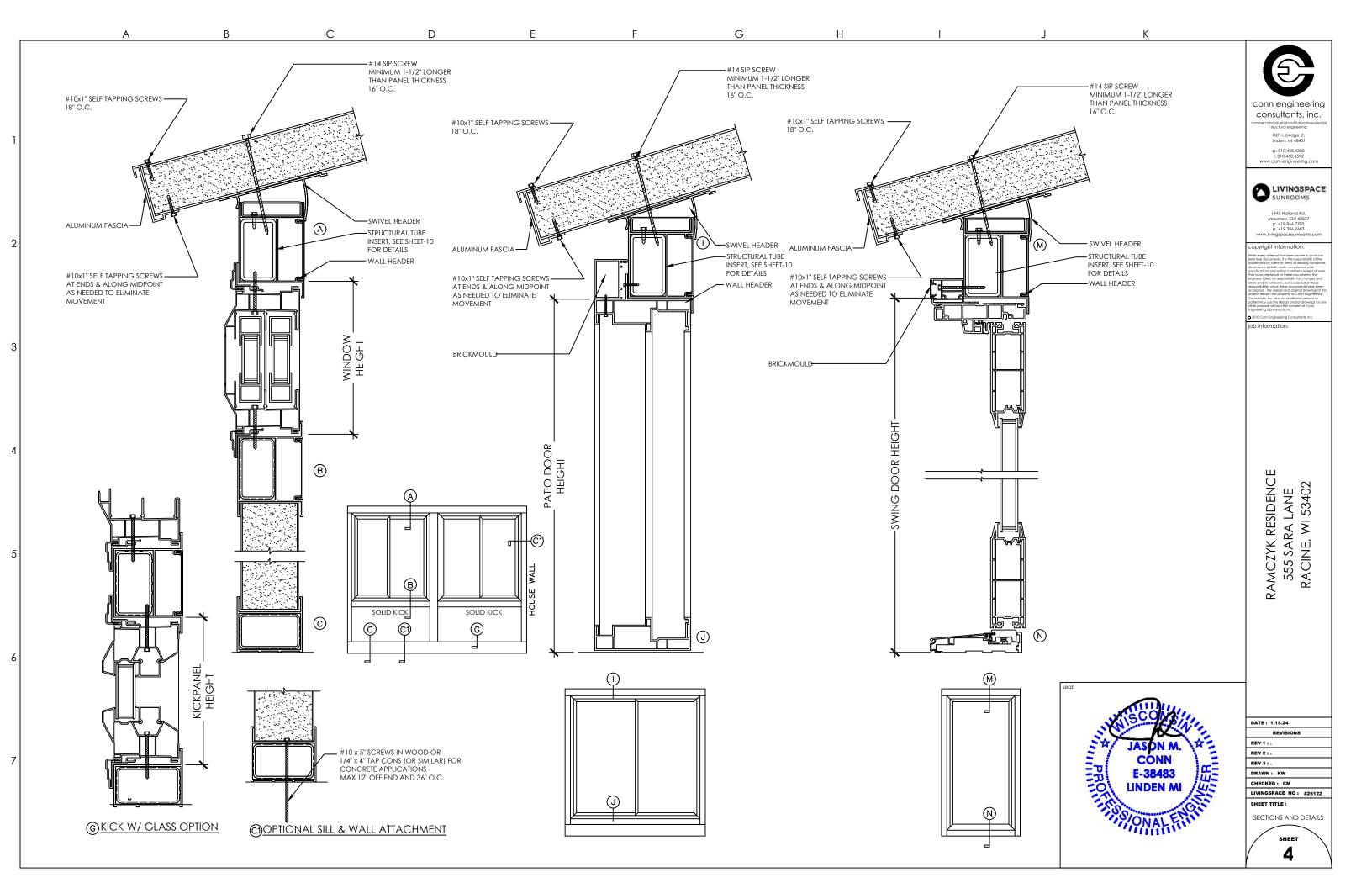
^{**} Section R402.2.2 allows for R-30 for all zones for rooms of less than 500 sq. ft.

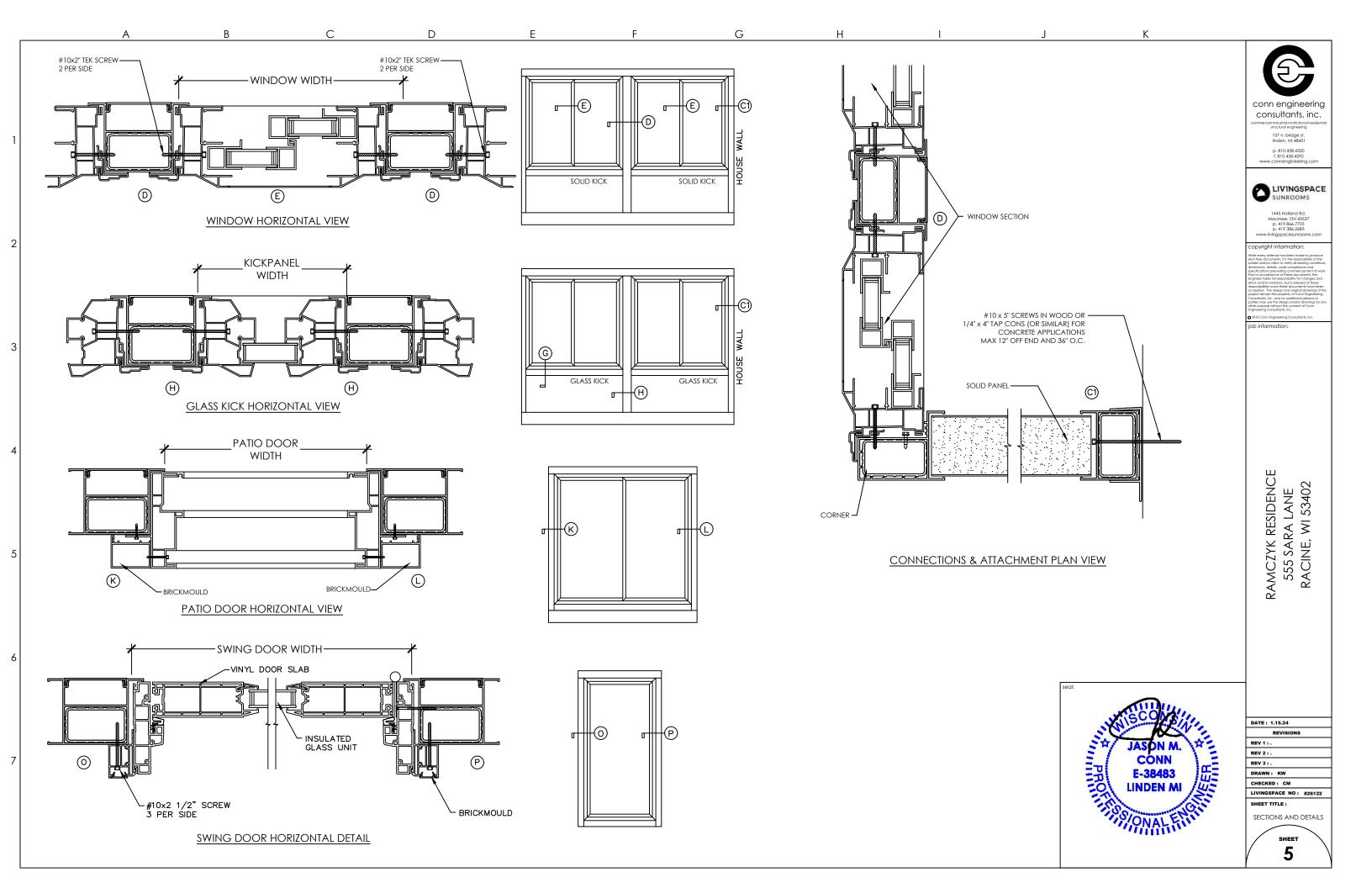
[^] increase R values by 15% when Neopor foam is used

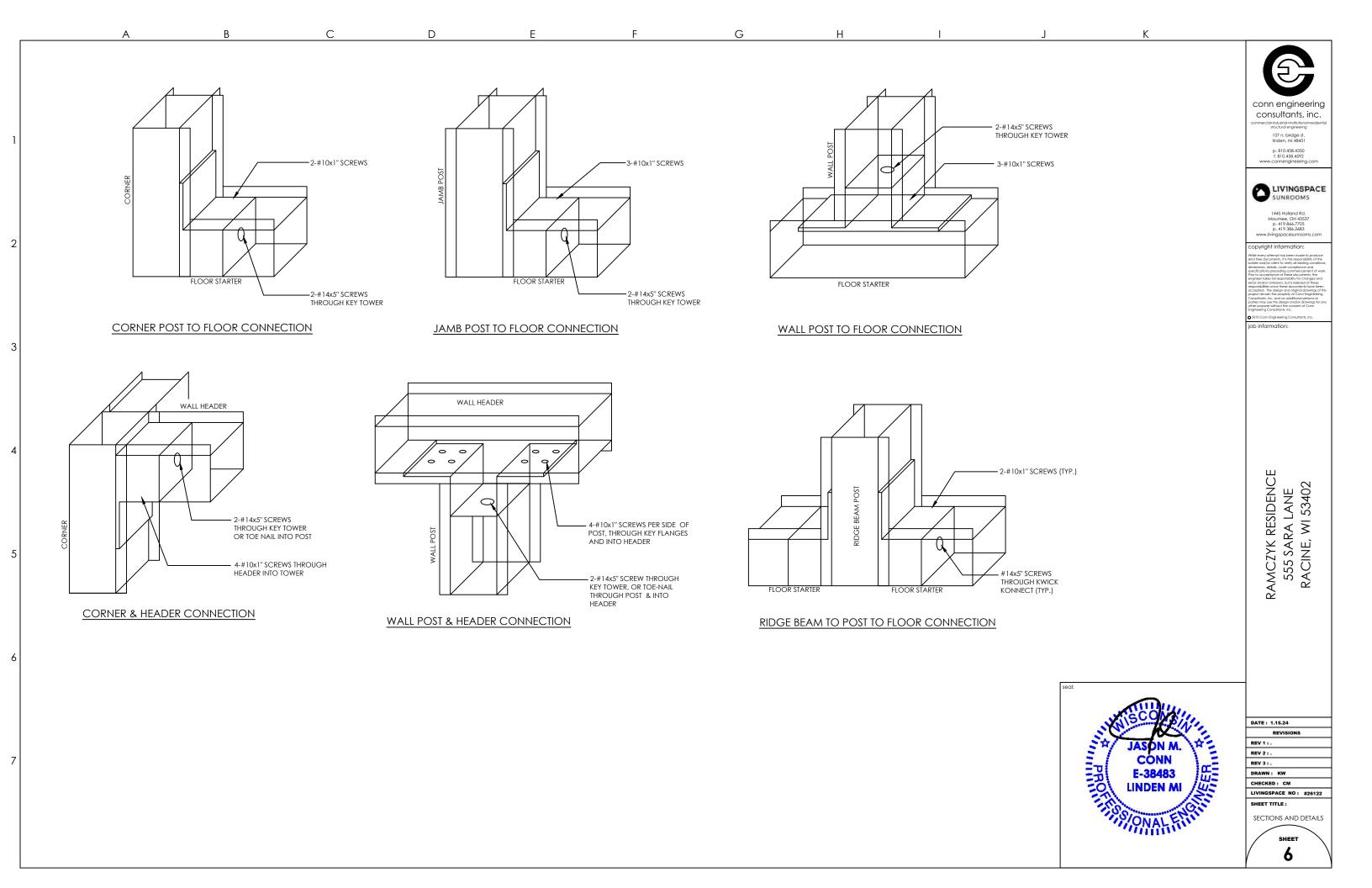


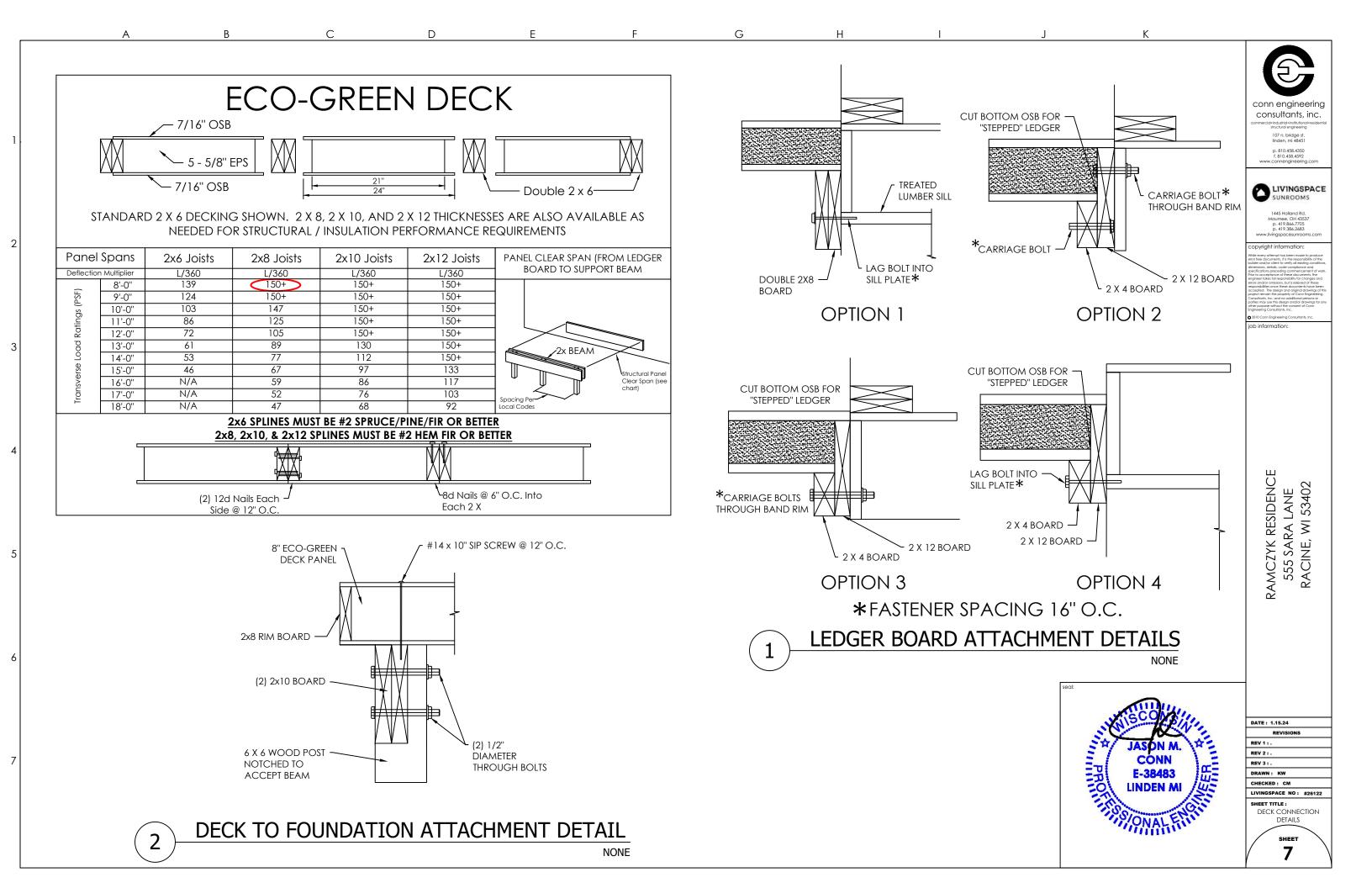












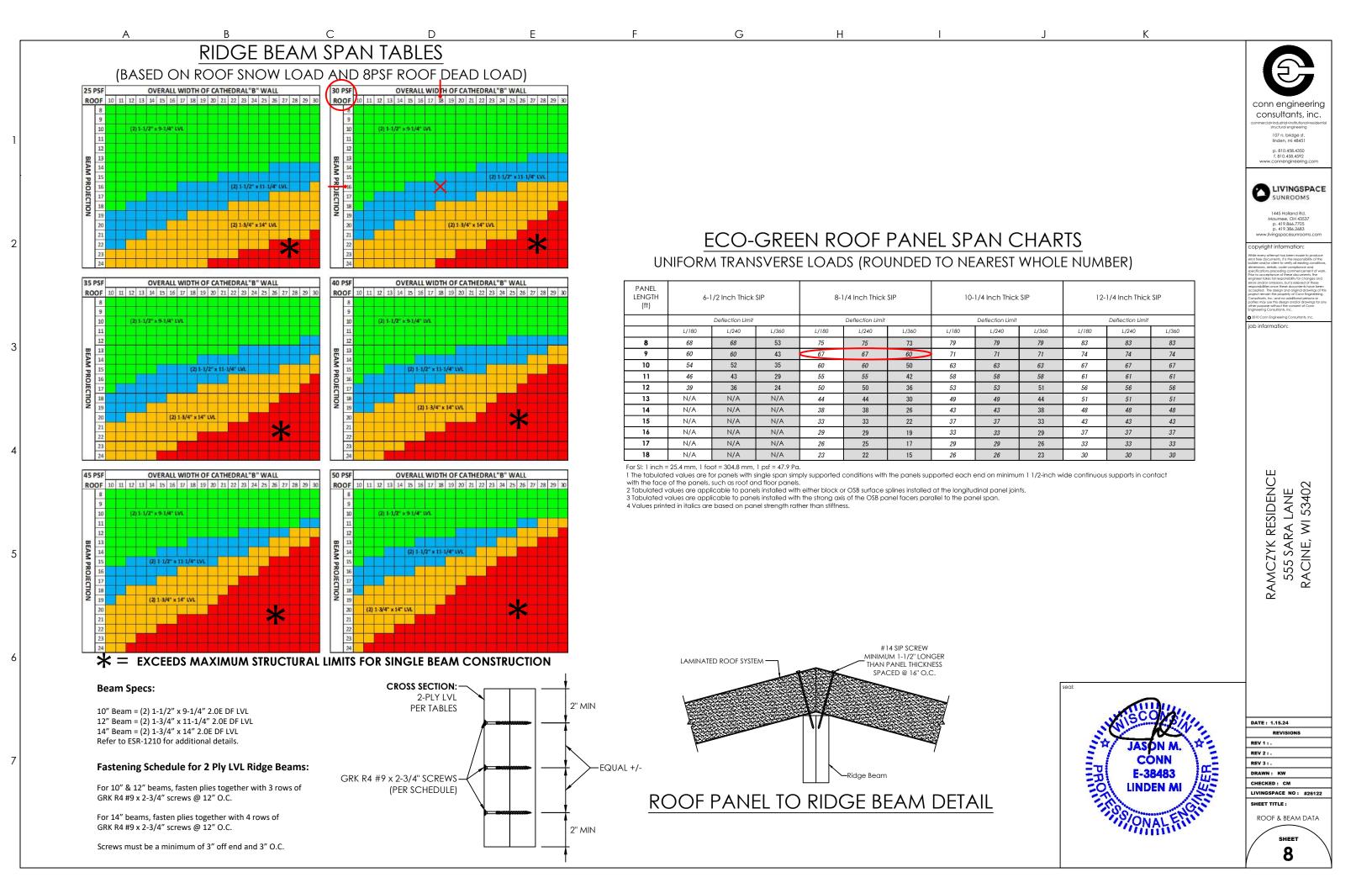


TABLE 2—ALLOWABLE IN-PLANE SHEAR STRENGTH (POUNDS PER FOOT) FOR HORIZONTAL DIAPHRAGMS SUBJECTED TO WIND OR SEISMIC LOADING

MINIMUM	-	Shear	Apparent			
SIP CORE THICKNESS (in.)	Surface Spline ¹ (Figure 1a)	Support Element (Figure 1b)	Boundary Spline ² (Figure 1c)	Strength (plf)	Stiffness, G _a (kips/in.)	
	0.131-in. x 2- ¹ / ₂ -in. nails, 6-in. O.C.	10-in. length, 0.190- in. shank diameter, 0.255-in. thread O.D., 2.750-in. thread length, 0.625-in. head diameter SIP screw, 6-in. O.C.	0.131-in. x 2- ¹ / ₂ -in. nails, 6-in. O.C.	265	13	
73/8	0.131-in. x 2-1/2-in. nails, 4-in. O.C. 10-in. length, 0.190-in. shank diameter, 0.255-in. thread O.D., 2.750-in. thread length, 0.625-in. head diameter SIP screw, 4-in. O.C.		0.131-in. x 2- ¹ / ₂ -in. nails, 4-in. O.C.	330	21	
	0.131-in. x 2- ¹ / ₂ -in. nails, 2-in. O.C. staggered ³ / ₈ -in. (Figure 1c)	10-in. length, 0.190- in. shank diameter, 0.255-in. thread O.D., 2.750-in. thread length, 0.625-in. head diameter SIP screw, 3-in. O.C.	0.131-in. x 2-1/2-in. nails, 2-in. O.C. staggered 3/8-in. (Figure 1c)	575	34	

For SI: 1 inch = 25.4 mm; 1 foot = 304.8 mm; 1 Kip = 453.6 kg; 1 plf = 14.6 kN/m; 1 psf = 47.9 Pa;

Surface or block spline only at interior panel-to-panel joints. Specified fasteners are required on both sides of panel joint through the top surface only,

as shown in Figure 1a.
Boundary spline shall be solid sawn lumber 1-1/2-in. wide minimum and have a specific gravity of 0.42 or greater. Specified fasteners are required through both facings as shown in Figures 1b and 1c.

THE DEPTH OF THE EPS FOAM CORE DOES NOT AFFECT THE CAPACITY OF THE HORIZONTAL DIAPHRAGM. THE DIAPHRAGM SHEAR IS BASED ON THE CAPACITY OF THE OUT LAYER OF OSB THAT IS CONSISTENT WITH ALL EPS FOAM CORE DEPTHS.

FLOOR DIAPHRAGM:

G

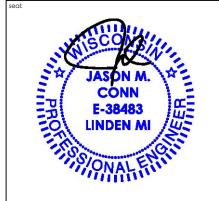
Table 4.2C Nominal Unit Shear Capacities for Wood-Frame Diaphragms

Unblocked Wood Structural Panel Diaphragms^{1,2,3,4,5}

	Common	Minimum Fastener Penetration	Minimum Nominal	Minimum Nominal Width of Nailed Face		s in. Nail S an
Sheathing Grade	Nail Size	in Framing (in.)	Panel Thickness (in.)	at Supported Edges and Boundries (in.)	V ₈ (plf)	Case 1 (kips
	6d	1-1/4	5/16	2 3	330 370	9.0 7.0
Structural I	8d	1-3/8	3/8	2 3	480 530	8.5 7.5
	10d	1-1/2	15/32	2 3	570 640	14 12
		1.14	5/16	2 3	300 340	9.0 7.0
	6d	1-1/4	3/8	2 3	330 370	7.5 6.0
			3/8	2	430 480	9.0 7.5
Sheathing and Single-Floor	8d	1-3/8	7/16	3 2 3	460 510	8.5 7.0
			15/32	2 3	480 530	7.5 6.5
			15/32	2 3	510 580	15 12
	10d	1-1/2	19/32	2 3	570 640	13 10

\neg	A SEISMIC							B WIND			
th ce	6	6 in. Nail Spacing at diaphragm boundries and supported panel edges						6 in. Nail Spacing at diaphragm boundries and supported panel edges			
d	Case 1			Case 2,3,4,5,6				Case 1	Case 2,3,4,5,6		
	V ₈ G _a (plf) (kips/in.)			V ₈ G _a (plf) (kips/in.)				V _w (plf)	V _w (plf)		
+	330 370	OSB 9.0 7.0	PLY 7.0 6.0	250 280	OSB 6.0 4.5	PLY 4.5 4.0		460 520	350 390		
	480 530	8.5 7.5	7.0 6.0	360 400	6.0 5.0	4.5 4.0]	670 740	505 560		
	570 640	14 12	10 9.0	430 480	9.5 8.0	7.0 6.0		800 895	600 670		
	300 340	9.0 7.0	6.5 5.5	220 250	6.0 5.0	4.0 3.5		420 475	310 350		
	330 370	7.5 6.0	5.5 4.5	250 280	5.0 4.0	4.0 3.0		460 520	350 390		
	430 480	9.0 7.5	6.5 5.5	320 360	6.0 5.0	4.5 3.5		600 670	450 505		
	460 510	8.5 7.0	6.0 5.5	340 380	5.5 4.5	4.0 3.5		645 715	475 530		
	480 530	7.5 6.5	5.5 5.0	360 400	5.0 4.0	4.0 3.5		670 740	505 560		
	510 580	15 12	9.0 8.0	380 430	10 8.0	6.0 5.5		715 810	530 600		
	570 640	13 10	8.5 7.5	430 480	8.5 7.0	5.5 5.0		800 895	600 670		

THE MAIN WIND FORCE RESISTING SYSTEM OF THE SUNROOM IS COMPROSED OF A CANTILEVERED ROOF DIAPHRAGM AND FLOOR DIAPHRAGM. THESE ELEMENTS HAVE BEEN DESIGNED TO TRANSFER LOAD INTO THE MAIN WIND FORCE RESISTING SYSTEM OF THE EXISTING HOUSE. THE EXISTING SHEAR WALLS OF THE HOME ARE TO CONSIST OF 15/32" OSB STRUCTURAL SHEATHED WOOD WALLS. BASED ON OUR ANALYSIS, THE 15/32" OSB SHEAR WALLS ARE CAPABLE OF SUPPORTING THE APPLIED LOADS EXERTED BY THE NEW SUNROOM ADDITION.





conn engineering consultants, inc.

> 107 n. bridge st. linden, mi 48451 p. 810.458.4350 f. 810.458.4592 www.connengineering



1445 Holland Rd. Maumee, OH 43537 p. 419.866.7705 p. 419.386.2683

RAMCZYK RESIDENCE 555 SARA LANE RACINE, WI 53402

DATE: 1.15.24 REVISIONS REV 1:. REV 2:. REV 3:. DRAWN: KW CHECKED: CM

LIVINGSPACE NO: #26122 SHEET TITLE :

CANTILEVERED DIAPHRAGMS SHEET 9

