



Design Review Board Meeting
Tuesday, July 23, 2024 - 5:00 PM
AGENDA

1. Call to Order
2. Roll Call
3. Public Comment
4. Action on Minutes
 - a. June 25, 2024
5. Application # 7-1-5 Certificate of Appropriateness; 161 Lakeview Dr. - Covered front porch
 - a. Application
6. Application # 7-2-5 Certificate of Appropriateness; 169 Stone Hedge Row Dr. - Sun Room
 - a. Application
7. Application # 7-2-10 Certificate of Appropriateness; 300 Hanebrink Ave - Pavilion
 - a. Application
8. Application # 7-8-15 Certificate of Appropriateness; 82 Meadow Lane
 - a. Application
9. Other Business
10. Adjourn



Design Review Board
Tuesday, June 25, 2024 - 5:30 PM
MINUTES

1. Call to Order/Roll Call

Present - Chair Heather Green, Andrew Hale, Franz Stein, Craig Bohning
Absent - Candice Evans

Staff present - Sean Staneart - City Manager, Teresa Monroe - Clerk of Council

Public present - Misty Reed, +1

2. Approval of Minutes

a. June 11, 2024

ACTION: Andrew Hale moved to approve; Heather Green seconded and all were in favor.

AYES: Heather Green, Franz Stein, Andrew Hale, Craig Bohning

NOES: None

ABSTAIN: None

Passed 4 - 0

3. Public Comment

No comments

4. Application #5-30-5 Certificate of Appropriateness; Sign - 23 S. Oregon St.

a. Application

Applicant Misty Reed was present, she said she opened The Yarnologist on South Oregon Street. She said when they took possession, the landlord said the sign came with it and to send the design to her for approval, which she did, she did not realize she had to do more. The sign is already installed, she provided pictures of what it looked like before installing the graphic and what it currently looks like, they made no structural changes to the monument. She is requesting approval of the sign at this time. Sign material, lighting and dimensions reviewed by the board.

ACTION: Craig Bohning moved to approve; Andrew Hale seconded and the vote was as follows:

AYES: Craig Bohning, Andrew Hale, Heather Green, Franz Stein

NOES: None

ABSTAIN: None

Passed 4 - 0

5. Other Business

1. Sean Staneart said at last city council, there was a submittal to change the demolition

process, he displayed Ordinance 16-2024 for board members to review. Discussions on wording and definition of structure as well as criteria for approval or denial. Minor edits to wording noted.

6. Adjourn

ACTION: Heather Green moved to adjourn; Andrew Hale seconded and all were in favor.

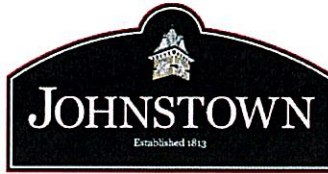
AYES: Heather Green, Franz Stein, Andrew Hale, Craig Bohning

NOES: None

ABSTAIN: None

Passed 4 - 0

The meeting ended at 6:28 pm.



CERTIFICATE OF APPROPRIATENESS: CHAPTER #1187

Application Number: 7-1-5 Date: 6/26/2024

FEES:

Base Fee: \$ 100

Total Fee Amount: \$ 100 Paid: Check # _____ Cash: \$ _____

(PLEASE PRINT)

1. Applicant: Don Lightle Phone: (614) 374-2252
2. Property Address: 161 Lakeview Dr City: Johnstown State: OH Zip: 43031
3. Applicant's E-mail: dowlightle1960@gmail.com
4. Business Owner's Name: Don Lightle Phone: (614) 374-2252
5. Contractor's Name: " " Phone: (") " - "
6. Principal Business Activity: Site Supervisor, Building Porch for Deb Robinson
7. Existing Use of Property: Home of Deb Robinson
8. Square Footage of Proposed Building or Business: 920 sq. ft.
9. Zoning District: NA Number of Off-Street Parking Spaces: NA
10. Estimated Cost of Improvements: \$ 5,000.00

IN ADDITION, THE FOLLOWING ITEMS MUST ACCOMPANY THIS APPLICATION:

- (Conditional) Eight full sets (11x17) of to scale plans and dimensioned drawings showing the property, with all elevations and the location of existing and proposed buildings and alterations are required. Attach any requested, supplemental or necessary documentation. (Required only if asked for by the Zoning Inspector.)

Application for Certificate of Zoning Compliance. Certificates of Zoning Compliance shall be applied for by the applicant giving written notice to the Zoning Inspector that the exterior erection or structural alteration of such building shall have been completed in conformance with the provisions of this Ordinance.

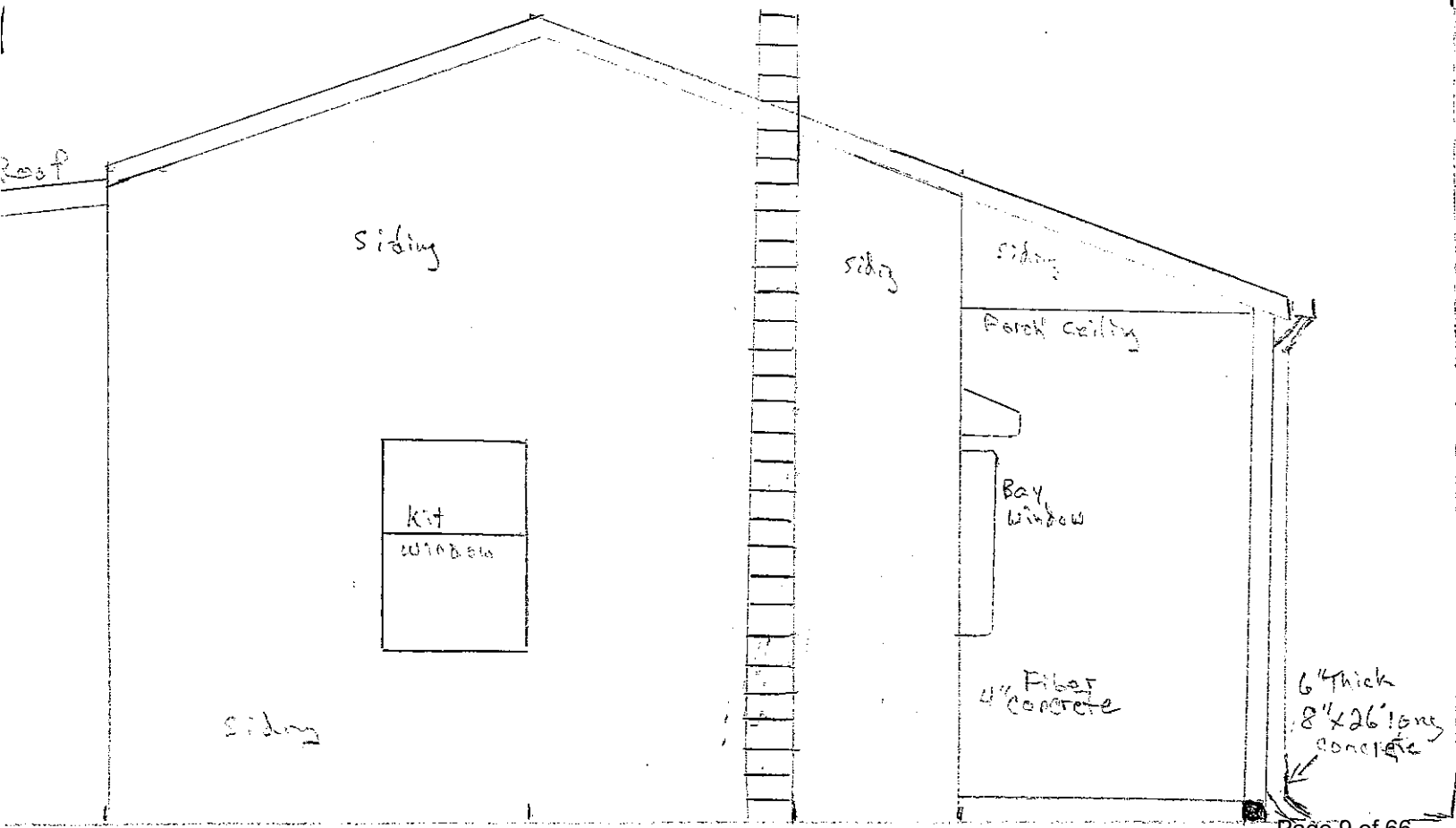
Deb Robinson 161 Lakeview Dr

would like To build a front Porch on the Front of the house. we Plan to Remove the shrubs and Topsoil have good gravel Base 4" of Fiber Concrete just below the floor level of house with Expansion between outside edge be 6" thick 8" wide will start at the drive way go 26' center of The 2 bedroom windows we will use 4x4 Post 2x8 beam 2x6 Rafters and ceiling joist which will be covered Exterior bead board, the Roof we will Put new shingles on the whole house they are 20yrs old and we want whole thing to match, also have new gutters installed

Deb has always wanted a front Porch on her house so Please help me in making this possible Thank you Don Little

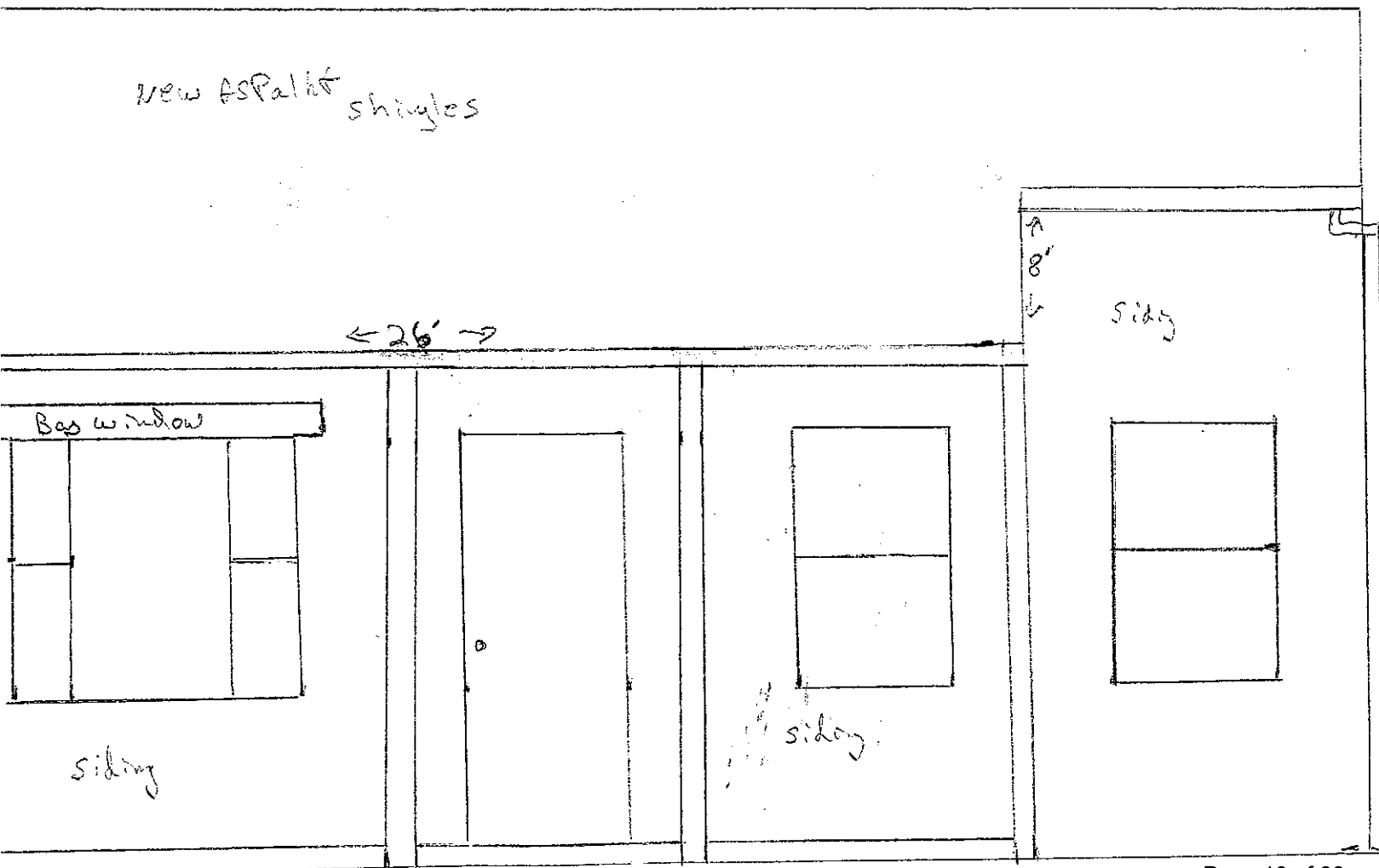






8' out from Facia 26' long
Roof line to Plain old same as the house
Whole house be shingled to match.

New ASPalht shingles



TREIS Roof over Deck

20%
Sloped
over
shed
Area

20' Rubber Roof

10'

4/12

New Asphalt Shingles

← 30' →

4/12

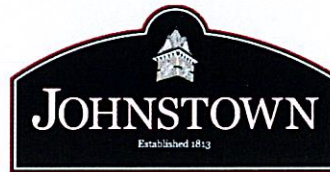
Chimney
16' x 6"

Porch ← 26' →

Slop to Run the same as the house

8' →
← 8'

8' →
← 8'



JUL - 2 2024

PAID

CERTIFICATE OF APPROPRIATENESS: CHAPTER #1187

Application Number: 7-2-5 Date: 7 / 2 / 2024

FEES:

Base Fee: \$ 300

Total Fee Amount: \$ 300 Paid: Check # 9248 Cash: \$

(PLEASE PRINT)

1. Applicant: Max Sargent Phone: (614) 626-8306
2. Property Address: 169 Stone Hedge Row Dr. City: Johnstown State: Ohio Zip: 43031
3. Applicant's E-mail: Sunspacecentralohio@yahoo.com
4. Business Owner's Name: Max Sargent Phone: (614) 626-8306
5. Contractor's Name: Sunspace Central Ohio Phone: (614) 626-8306
6. Principal Business Activity: Swimroom Company
7. Existing Use of Property: 3- Season Unheated
8. Square Footage of Proposed Building or Business: 12x15 sq. ft.
9. Zoning District: City of Johnstown Number of Off-Street Parking Spaces: 2 Car Garage + 4 Cars In Driveway
10. Estimated Cost of Improvements: \$ 45,810.00

IN ADDITION, THE FOLLOWING ITEMS MUST ACCOMPANY THIS APPLICATION:

- PLEASE READ CITY ORDINANCE #1187 PRIOR TO SUBMITTING APPLICATION
- (Conditional) One (1) full set (8.5 x11) of to scale plans and dimensioned drawings showing the property, with all elevations and the location of existing and proposed

buildings and alterations are required. Attach any requested, supplemental or necessary documentation. **(Required only if asked for by the Zoning Inspector.)**

Some of the requests below may not apply to your application.

- (1) A dimensioned site plan showing existing conditions including all structures, pavement, curb-cut locations, natural features such as tree masses and riparian corridors, and rights-of-way.
- (2) A dimensioned site plan showing the proposed site change including structures, pavement, revised curb-cut locations and landscaping.
- (3) Illustration of all existing building elevations to scale.
- (4) Illustrations of all proposed building elevations to scale.
- (5) Samples of proposed building materials.
- (6) Color samples for proposed roof, siding, etc.
- (7) Illustrations of all existing site signage including wall and ground.
- (8) Illustrations of proposed signage to scale.
- (9) A dimensioned site plan showing location of existing ground mounted signs.
- (10) A dimensioned site plan showing the proposed location of ground mounted signs.
- (11) Samples of proposed sign materials.
- (12) Color samples of proposed sign(s).
- (13) Proposed lighting plan for sign(s).
- (14) The applicant shall post one sign per public street frontage of the subject property within fifteen (15) feet of the curb indicating the subject, date, and time for a public hearing. The sign(s) shall be posted at least ten (10) days prior to the scheduled hearing. The sign(s) should be purchased at the Johnstown City Offices and will measure no less than two (2) feet by three (3) feet.

List of Materials that will be used on the project:

- | | |
|--------------------|---------------------------|
| 1. <u>lumber</u> | 2. <u>Roofs are Metal</u> |
| 3. <u>Shingles</u> | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

List of Contiguous Neighbors and Addresses:

- | | | | |
|---|--|--------------------|--------------------------|
| 1. <u>Rick & Shelly McClelland</u>
Neighbor's Name | <u>73 Pepperwood Pl</u>
Neighbor's Address | <u>OH</u>
State | <u>43031</u>
Zip Code |
| 2. <u>Wade & Whitney Weathermont</u>
Neighbor's Name | <u>92 Greenstick Way</u>
Neighbor's Address | <u>OH</u>
State | <u>43031</u>
Zip Code |
| 3. <u>Sharon & Shelly Robbins</u>
Neighbor's Name | <u>147 Sassafras Pl</u>
Neighbor's Address | <u>OH</u>
State | <u>43031</u>
Zip Code |
| 4. <u>Mike & Carol Brown</u>
Neighbor's Name | <u>165 Sassafras Pl</u>
Neighbor's Address | <u>OH</u>
State | <u>43031</u>
Zip Code |

The undersigned is applying for a Certificate of Appropriateness Permit for the following use: said permit is to be issued based on the information contained within this application. The applicant hereby certifies that all information and attachments to this application are true & correct and agrees to follow all applicable laws.

Applicant's Signature: x Ray Sargent Date: 06/27/2024

OFFICE USE ONLY:

Date Received in Office: 6 / 27 / 24 By: Sashbrook

Date of Planning and Zoning Commission Meeting: 7/23/2024

Date Permit Approved or Denied by Planning Commission: ____/____/____

Conditions Necessary for Approval: _____

City Manager Signature: x _____

JOHNSTOWN, OHIO

JUN. 27 2024



Going on Existing
 Deck area 7 Same
 SIZE 169 Stone Hedge Row Dr



April 29, 2024

- Street Number Only
- Sales - 2024
- Sales - 2023



Owner Name & Acres
 Centerline Labels

- Interstate/US/State Route

- County Road
- Township Road
- Other Road Type

- Driveway
- Interstates

- Municipal Corporations

LICKING COUNTY TAX MAP

Licking County Auditor GIS

Michael L. Smith, Auditor
Roy Van Atta, Treasurer

2nd half taxes are due July 17, 2024

Sketch

- BOR
- Card
- CAUV
- Documents
- Land
- Map
- Parcel
- Pictometry
- Sketch
- Street View
- Structures
- Taxes
- Transfers
- Values

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- Taxes
- Other

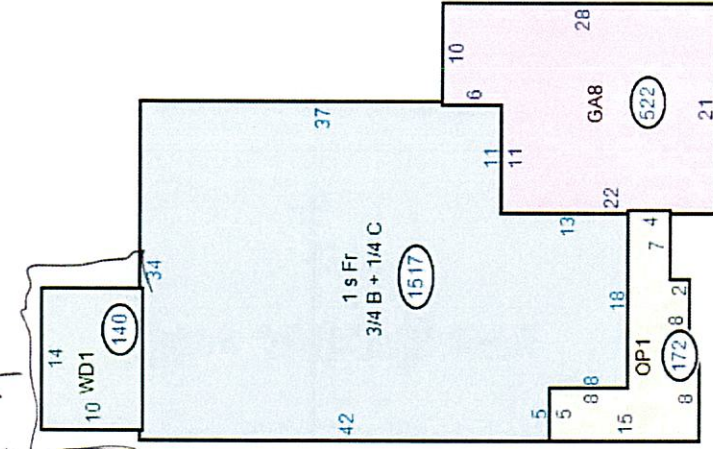
KEY

Single Family	1,517
GA8	522
OP1	172
WD1	140

*Mouse over row to isolate

Going on
Existing
Deck
Same
Size

1 of 1



FIND YOUR PARCEL

Owner

Tracile Search Only?



053-172440-00 043
HARTSOUGH BRENT P &
JAMIE
169 STONE HEDGE ROW
DR
JOHNSTOWN, OH 43031

Acres: 0.37
LOT 401 LEAFY DELL SEC 1
AMENITIES

Land: \$96,200
Improv: \$198,200
Total: \$294,400

Transfer Date: 10/22/2018
Amount: \$242,000
Conveyance: 3454
Valid Sale: Yes

Homestead: No
Owner Occ: Yes

Foreclosure: No
Certified Delq: No

For questions or suggestions regarding OnTrac, contact the Licking County Auditor's Office by clicking here. By accessing or using this web site, you agree to be bound by these Terms and Conditions. Using a low screen resolution? Try our Mobile Version.

PLAT MAP ADDENDUM

Page 40-9-16

Requester/Client: Brent Hartsough

Property Address: 169 Stone Hedge Row Dr

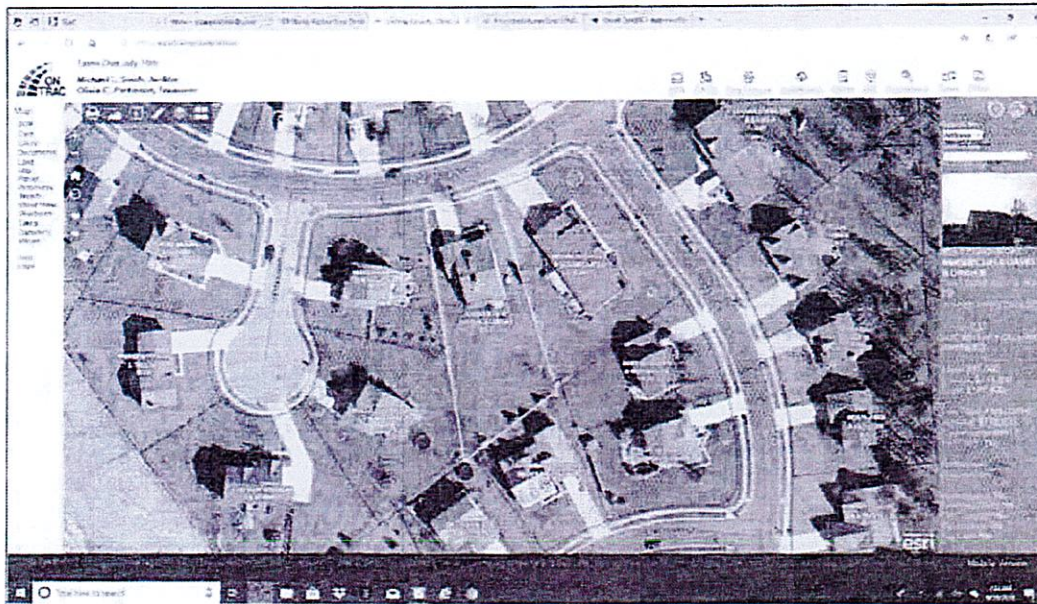
City: Johnstown

County: Licking

State: OH

Zip Code: 43031

Lender: Huntington National Bank



Parcel 2nd half taxes are due July 17, 2024

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Parcel: [053-172440-00.043 \(Direct Link\)](#)
Owner: HARTSOUGH BRENT P & JAMIE
Parcel Address: 169 STONE HEDGE ROW DR
JOHNSTOWN, OH 43031

Legal Desc: LOT 40 LEAFY DELL SEC
1 AMENDED

Acres: 0.3670

Tax District: 053 MONROE T-JOHTN V-JOHTN-
MNR LSD
Township: MONROE
Municipality: JOHNSTOWN
School District: JOHNSTOWN MONROE LSD
Neighborhood: 07202 Johnstown - Leafy Dell
Parent Parcel:

Owner Mailing HARTSOUGH BRENT P
Address: & JAMIE
169 STONE HEDGE
ROW DR
JOHNSTOWN OH
43031

Mailing Address: CORELOGIC TAX
SERVICES
ESCROW REPORTING
3001 HACKBERRY RD
IRVING TX 75063

Class Group: Residential
Class: 510 Single family
platted lot
TIF:

Utilities: 6 - All

Foreclosure: No
Certified Delinq: No
Escrow Account:
Bankruptcy: No
Tax Lien: No
Block Transfers: No

FIND YOUR PARCEL

Owner

House Searching



053-172440-00.043
HARTSOUGH BRENT P &
JAMIE
169 STONE HEDGE ROW
DR
JOHNSTOWN, OH 43031

Acres: 0.37
LOT 40 LEAFY DELL SEC 1
AMENDED

Land: \$99,200
Improv: \$198,200
Total: \$297,400

Transfer Date: 10/27/2018
Amount: \$242,000
Conveyance: 3654
Valid Sale: Yes

Homestead: No
Owner Occ: Yes

Foreclosure: No
Certified Delq: No
On Contract: No
Bankruptcy: No

Structures 2nd half taxes are due July 17, 2024

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*Click on a row in the grid to view further details about a structure.

#	Type	Description	Market Value	Market Value	Market Value	Year Built	Stories	Rooms	Bathrooms
	Dwelling	Single Family	1 517			2002	1/2	6.0	3.0
	Enhancement	Wd1	140			1900	1/2		0.0
	Enhancement	Op1	172			1900	1/2		0.0
	Enhancement	Ga8	522			1900	1/2		0.0

A change in data does not necessarily constitute a change in value.

FIND YOUR PARCEL

Owner

[Mobile Searching?](#)



053-172440-00 043
HARTSOUGH BRENT P &
JAMIE
169 STONE HEDGE ROW
DR
JOHNSTOWN, OH 43031

Acres: 0.37
LOT 40 LEAFY DELL SEC 1
AMENDED

Land: \$95,200
Improv: \$198,200
Total: \$293,400

Transfer Date: 10/22/2018
Amount: \$242,000
Conveyance: 3454
Valid Sale: Yes

Homestead: No
Owner Occ: Yes

Foreclosure: No
Certified Delq: No
On Contract: No
Bankruptcy: No

LEAFY DELL HOMEOWNERS' ASSOCIATION

c/o SBS Management
4872 Cemetery Road
Hilliard, OH 43026
(614) 527-7909 | fax (614) 527-0877
Dan@sbs.management

May 27, 2024

Jamie & Brent Hartsough
169 Stone Hedge Row Dr.
Johnstown Ohio 43031

Re: 3 Seasons Room Exterior improvement

Dear Jamie & Brent Hartsough:

Upon review of your request for approval of exterior improvements and comparing your plans to build a three seasons room at the rear of your house, to the Covenants and Deed Restrictions of Leafy Dell Homeowners' Association; the Board of Directors finds no issues directly related to this construction that are not in compliance of the Association guidelines.

Therefore, the Association gladly approves your additions as presented on your application as and your improvements have been properly permitted and built within any local governmental zoning requirements (if any) and any setback requirements.

Your approved project must be completed within a timely manner after start of construction. This written Board approvals is good for one-year from the date of this letter. If your project is not completed by the end of one year from the date of letter, you must reapply for approval. An owner may be required to remove all or part of an improvement for maintenance of a common area. You could be responsible for the costs of removal of your improvement. You will be responsible for all costs associated with the modification/improvement, including, without limitation, all insurance, installation, maintenance, and future repair costs. You will be responsible for all damages to Association property caused by the work of your improvement, including but not limited to, damages to landscaping or lawn areas.

The Association also sends its appreciation to you for submitting the proper forms and request to assure your improvements are within the guidelines of the Association.

Sincerely,

Susan Kwadrat
Managing Agent, Leafy Dell Homeowners' Association

Borrower/Client Brent Hartsough

Property Address 169 Stone Hedge Row Dr

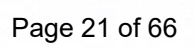
City Johnstown

County Licking

State OK:

Zip Code 43031

Lender Huntington National Bank



SUNSPACE SPECIFICATION SHEET

Customer: Sunspace of Central Ohio

Tag Name: hartsough

Page 1 of 2

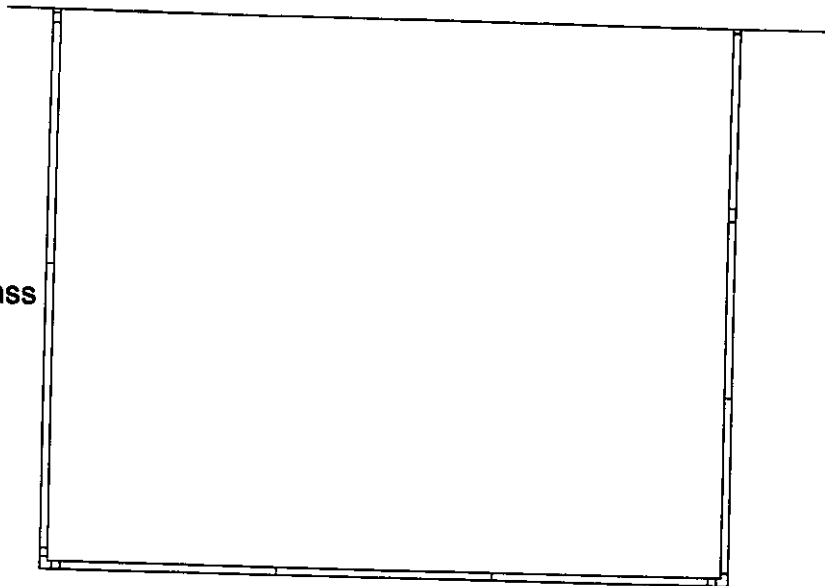
Order Date: Apr 22, 2024

Room Specifications

12' 0" Projection x 15' 0" Width

Room Style: Studio
Wall Type: Model 300
Backwall Height: 112" Incl. Roof
Frontwall Height: 94" Incl. Roof
Framing Colour: White
Ext. Panel Skin: White Alum. Stucco
Int. Panel Skin: White Alum. Stucco
Kneewall: 23-3/4" Tempered Glass
Transom Style: Solid Panel
Cut Pitch: Yes

Room Layout



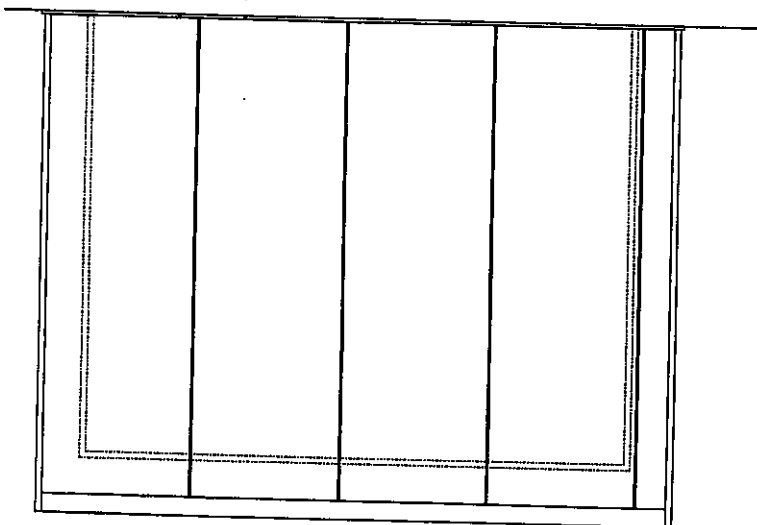
Floor Specifications

12' 0" Projection x 15' 0" Width

Thickness: 4-1/2"
Ledger: 3"
Sides: 1-1/2"
Front: 1-1/2"
Joint: 0-3/4"

Floor Has Metal Vapour Barrier

Roof Layout



Roof Specifications

13' Projection x 17' Width

Roof Type: Pressure Cap OSB/OSB
4" x 48" O.C. x 1 lb
Roof Pitch: 1.5 / 12 (7.13°)
Int. Panel Color: White
Ext. Panel Color: White
Gutter Color: White
Downspout Kits: 1
Downspout Color: White

Windows and Doors

Window Type: H.R. XX Glass
Window Color: White
Glass Tint: Clear
Screen Type: Tuff Screen
Left Wall: 6' Patio Door - Clear

Sun-Shades

5% Openness

Fabric Color: Sable/Ash Pearl
Valance Color: White
Units Required: 8

SUNSPACE SPECIFICATION SHEET

Customer: Sunspace of Central Ohio
Tag Name: hartsough

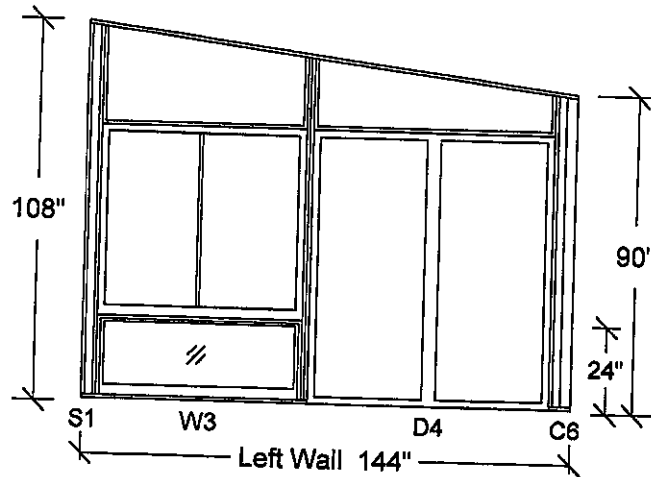
Page 2 of 2

Order Date: Apr 22, 2024

Wall Specifications

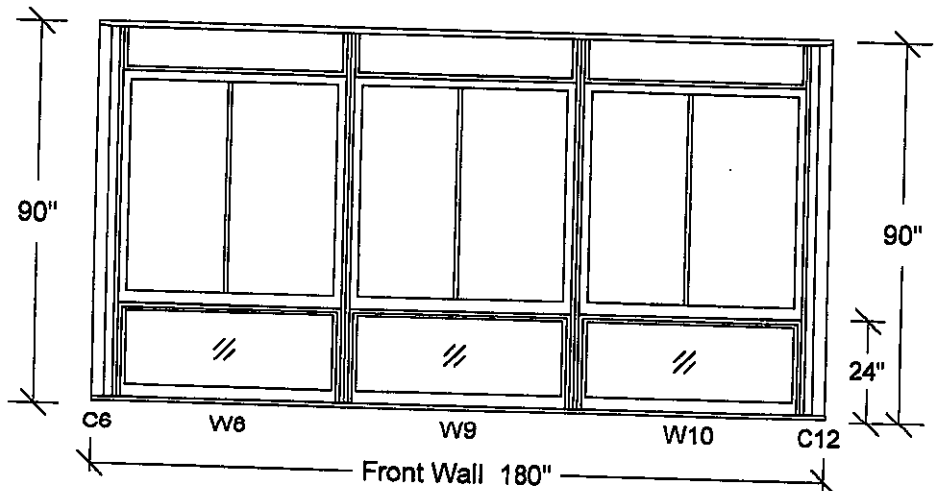
Left Wall

- S1 Starter
- F2 2-3/8" Solid Wall
- W3 60" x 55" H.R. XX Glass
- D4 6 Foot Patio Door
- F5 2-1/4" Solid Wall
- C6 90° Corner



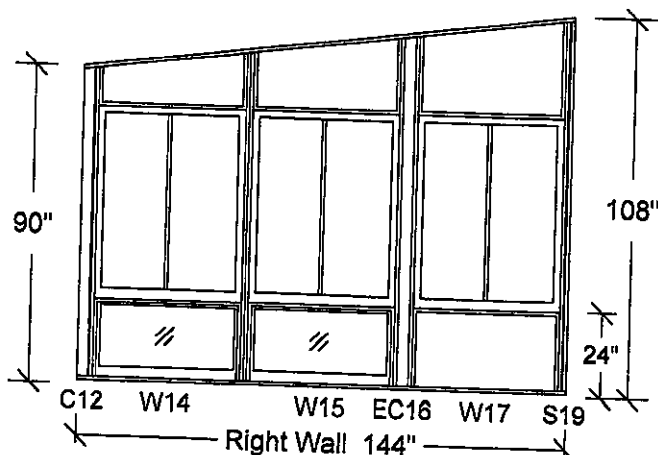
Front Wall

- C6 90° Corner
- F7 2-1/8" Solid Wall
- W8 54-1/2" x 55" H.R. XX Glass
- W9 54-1/2" x 55" H.R. XX Glass
- W10 54-1/2" x 55" H.R. XX Glass
- F11 2-1/8" Solid Wall
- C12 90° Corner



Right Wall

- C12 90° Corner
- F13 0-3/8" Solid Wall
- W14 43-1/4" x 55" H.R. XX Glass
- W15 43-1/4" x 55" H.R. XX Glass
- EC16 Electrical Chase
- W17 43-1/4" x 55" H.R. XX Glass
- F18 0-3/8" Solid Wall
- S19 Starter





Michael L. Smith

Auditor, Licking County, Ohio

HARTSOUGH BRENT P & JAMIE

169 STONE HEDGE ROW DR

Tax District: 053 - MONROE T-JOHTN V-JOHTN-MNR LSD
 School District: JOHNSTOWN MONROE LSD
 Neighborhood: 07202 Johnstown - Leafy Dell
 Classification: 510 Single family platted lot
 Acreage:
 Property Desc: LOT 40 LEAFY DELL SEC 1 AMENDED

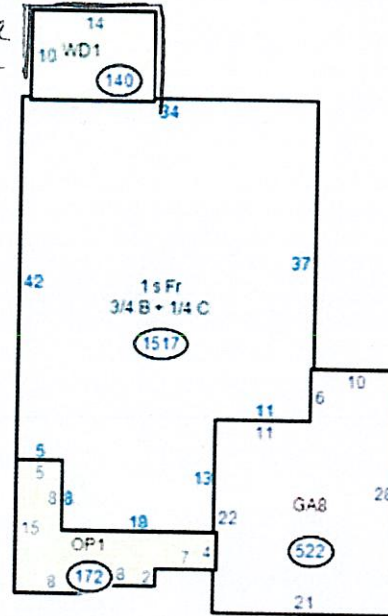
Parcel #: 053-172440-00.043

Rt #: 053-165.35-020.000

1 of 1



Going on
 Existing
 Deck A
 Same
 Size



ATTRIBUTES

Story Height: 1
 Exterior Wall: Frame
 Heating: Central Warm Air
 Cooling: Central
 Basement: Pt Bsm/Pt Crawl
 Attic:
 Total Rooms: 6.0
 Bedrooms: 3.0
 Family Rooms:
 Dining Rooms: 0.0
 Full Baths: 2.0
 Half Baths: 0.0
 Other Fixtures: 2.0
 Year Built: 2002
 Finished Living Area: 1,517
 Fireplace Openings: 1.0
 Fireplace Stacks: 0.0
 Basement Garage(s): 0
 Basement Finished: No

AREA

First Floor: 1,517
 Upper Floor: 0
 Attic: 0
 Half Story: 0
 Crawl: 379
 Basement: 1,138

VALUES

(by tax year)		Land	Improvement	Total
2023	Market	95,200	198,200	293,400
	CAUV	0	0	0
2022	Market	71,400	138,400	209,800
	CAUV	0	0	0
2021	Market	71,400	138,400	209,800
	CAUV	0	0	0

SALES HISTORY

Pcl #	Instrument Type	Sale Price	Conv #	V	LO	Previous Owner
10/22/2018	1 JS - JOINT SURVIVORSHIP	242000.00	3454	Y	N	BIRCKBICHLER DAVID R & LINDA B
11/27/2002	1 JS - JOINT SURVIVORSHIP	176500.00	04412	N	N	REGENT HOMES LLC
11/27/2001	3 WD - WARRANTY	84200.00	03906	N	N	SHAFFER LARRY F TRUSTEE
11/13/1998	58 EX - EXEMPT CONVEYANCE	0.00	99999	N	Y	CHAMBERS INVESTMENT CO

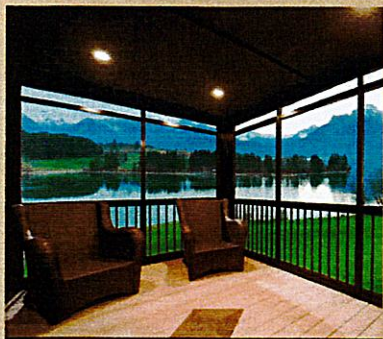
IMPROVEMENTS

Description	Yr Built	SqFt	Value
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TAXES

	Prior	1st Half	2nd Half	Total
Taxes/Reductions	0.00	2159.63	2159.63	4319.26
Pen/Int/Adj	0.00	0.00	0.00	0.00
Recoupment	0.00	0.00	0.00	0.00
Specials	0.00	0.00	0.00	0.00
Gross Due	0.00	2159.63	2159.63	4319.26
Payments	0.00	2159.63	0.00	2159.63
Net Due	0.00	0.00	2159.63	2159.63

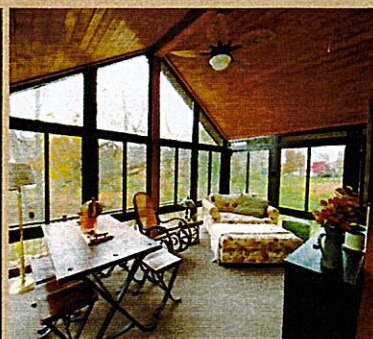
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M100 - Screen Room



M200 - WeatherMaster® Sunroom



M300 - 3 Season Sunroom

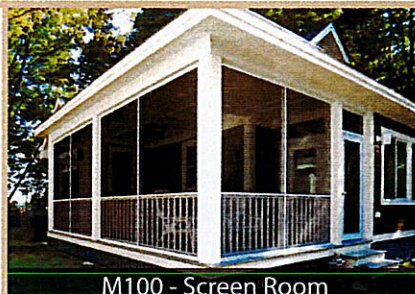


M400 - Insulated Sunroom

Sunspace Sunrooms are modular units that are custom designed for your home and can be installed directly onto an existing patio, deck, and even under a previously constructed roof! Choose from a variety of Total Room Packages to design and customize a new outdoor living space for you and your family to enjoy for years to come.

Why Choose a Sunspace Sunroom?

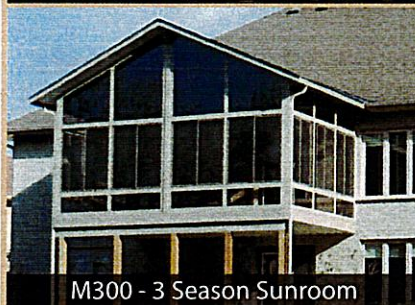
- Add style, functionality & value to your home
- Block harmful UV rays, wind, rain & insects
- Studio or Gable Roof systems constructed of high density foam core & extruded aluminum
- Perfect for under existing roof applications
- Available in a variety of standard & designer colors
- Full fiberglass mesh screens
- All stainless steel hardware, no moveable breaking plastic parts
- Thermal walls have commercial grade thermal breaks reducing condensation and heat loss



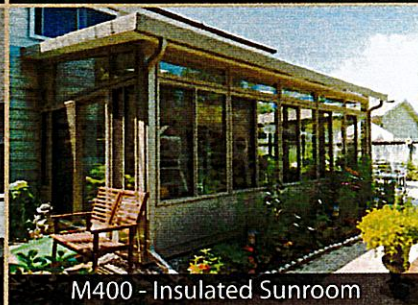
M100 - Screen Room



M200 - WeatherMaster® Sunroom

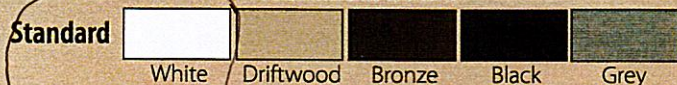


M300 - 3 Season Sunroom

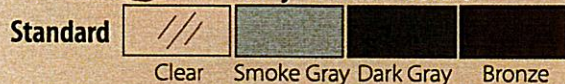


M400 - Insulated Sunroom

Available Colors Aluminum Colors



Vinyl Window Colors



Keep Your Sunroom Insulated With ThermaDeck!



Available in 4-1/2" thick R17. 6-1/2" thick R26. 8-1/4" thick R35. Panels consist of Engineered Oriented Strand Board sheets that sandwich the insulating core into a solid product. This eliminates costly foundation work and costly installation labour. Having a finished surface, your Therma-Deck is ready to receive the finished flooring, such as, carpet, tile, laminates or hardwood. Due to the natural strength of Therma-Deck, it is also used as a roofing product. Allowing for shingles on the exterior and a variety of interior ceiling. As your dealer for more information on Therma-Deck products and applications.

SUNSPACE

Central Ohio

COME SEE
OUR NEW SHOWROOM

614-626-8306
sunspacecentralohio.com





EPS FOAM CORE ROOF PANEL PREPARED FOR SUNSPACE MODULAR ENCLOSURES INC.

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

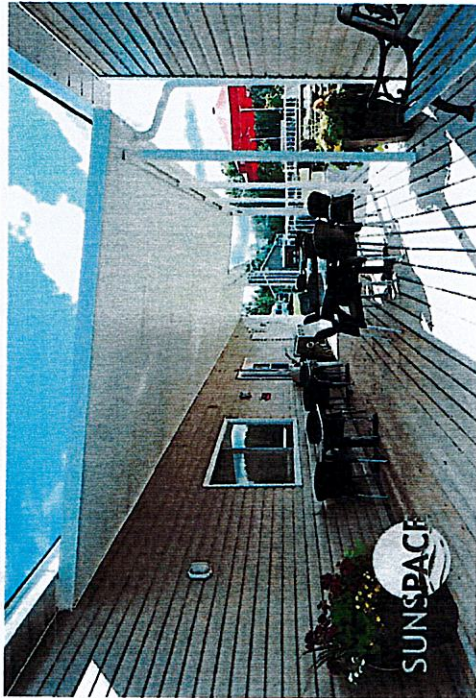
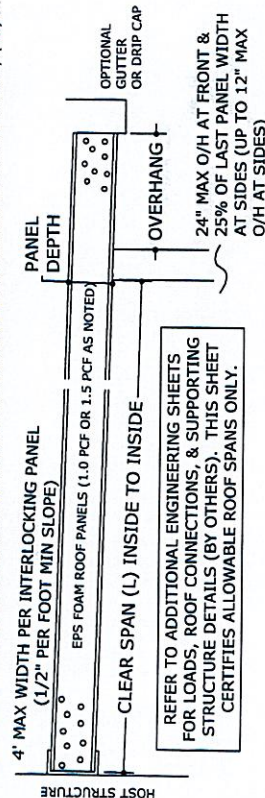


TABLE USE INSTRUCTIONS:

1. THE SPANS LISTED HEREIN ARE APPLICABLE FOR NON-HABITABLE STRUCTURES ONLY.
2. DETERMINE THE SITE SPECIFIC REQUIRED DESIGN LOAD PER SEPARATE ENGINEERING, CERTIFIED BY A DESIGN PROFESSIONAL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND ANY GOVERNING CODE, MUNICIPALITY, AND BUILDING CODES IN EFFECT FOR THE PROJECT LOCATION.
3. THE PROJECT REQUIREMENTS AND DESIGN CONDITIONS DETERMINED. SELECT A SUITABLE ROOFING PANEL WITH AN ALLOWABLE SPAN GREATER THAN OR EQUAL TO THE REQUIRED SPAN.
4. COMPONENT FRONT CONNECTION TO SUPPORTING BEAM AND BACK CONNECTION TO HOST STRUCTURE TO BE DETERMINED SEPARATELY ON A SITE SPECIFIC BASIS BY A DESIGN PROFESSIONAL.

SPAN TABLE NOTES:

1. PANEL DEAD LOADS SHALL BE DETERMINED BY PRODUCT TESTING LISTED IN GENERAL NOTES.
2. PANEL DEAD LOADS SHALL BE DETERMINED BY PRODUCT TESTING LISTED IN GENERAL NOTES.
3. POSITIVE AND NEGATIVE DESIGN PRESSURE SHALL BE DETERMINED SEPARATELY PER ASCE 7 BASED ON SITE SPECIFIC APPLICATION.
4. APPLICABLE TABLES HEREIN. THE LIMITING POSITIVE OR NEGATIVE PRESSURE SPAN VALUE SHALL BE USED FOR INSTALLATION.
5. WIND AND ANY OTHER LOADS SHALL BE DETERMINED BY PRODUCT TESTING LISTED IN GENERAL NOTES.
6. TABLE CONSIDERS ASD DESIGN PRESSURES. TO CONVERT SEPARATELY CALCULATED ULTIMATE PRESSURES TO DESIGN PRESSURES, $P(ULT) \times 0.6 = P(ASD)$.



1 EPS FOAM ROOF PANEL SPAN DETAIL
1 NOT TO SCALE
VIEW

PREPARED BY



- ### SHEET INDEX
1. COVER
 2. OSB - OSB PANELS
 3. ALUM - ALUM PANELS
 4. OSB - ALUM PANELS
 5. ALUM - ALUM PANELS



VISIT E.C.A.L.C.I.O./SUNSPACE
FOR ENGINEER CERTIFIED ORIGINALS
& MORE INFORMATION ABOUT THIS DOCUMENT
OR SCAN THIS QR CODE
VISIT E.C.A.L.C.I.O./SUNSPACE
FOR ADDITIONAL PLANS, REPORTS & RESOURCES



THIS DOCUMENT CAN ONLY BE USED FOR
ONE PERMIT SUBMITTED BY: May 23, 2024

VALID ONLY FOR: 2P CODE: 43031
VALID ONLY FOR: SUNSPACE OF CENTRAL
OHIO LLC

PT 66438 CA 05706
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SUNSPACE OF CENTRAL OHIO LLC
154154-00107

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DESIGN PROFESSIONAL'S SITE SPECIFIC EVALUATION
& CERTIFICATION FOR PERMIT. NO CERTIFICATES
OFFERED FOR USE WITHOUT A SITE SPECIFIC PLAN
UNDER SEPARATE CERTIFICATION

DESIGN NOTES

POSITIVE AND NEGATIVE DESIGN LOAD COMBINATIONS CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY A DESIGN PROFESSIONAL ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 2021/2015/2018/2021 IBC/IRC GOVERNING BUILDING CODES, 8TH EDITION FLORIDA BUILDING CODE (2023), AS WELL AS CURRENT VERSIONS OF THE MN, NJ, NY, OH, SC, & VA BUILDING CODES AS APPLICABLE. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-22 OR 7-16 OR ASCE 7-10 BASED.

* THIS DOCUMENT DOES NOT CERTIFY PRODUCT FOR USE AS A HABITABLE STRUCTURE.

AAMA 2100 SUNKHOOD CLASSIFICATION II, III, OR IV ONLY.

THIS SUBMITTAL IS FOR STRUCTURAL PURPOSES ONLY. THIS PRODUCT SHALL BE CONSTRUCTED USING PARKS MANUFACTURED BY "SUNSPACE MODULAR ENCLOSURES". ALL NON-STRUCTURAL ELECTRICAL / MECHANICAL UNITS AND COMPONENTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. ANY INFORMATION NOT REFERENCED HEREIN SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS FOR THIS PRODUCT.

SEE GENERAL NOTES ON PAGE 2

GENERAL NOTES

1. THIS IS A NON-SITE SPECIFIC PERFORMANCE EVALUATION. IT IS TO BE USED ALONG WITH A DESIGN PROFESSIONAL'S SITE SPECIFIC EVALUATION & CERTIFICATION FOR PERMIT. NO CERTIFICATION IS OFFERED FOR USE WITHOUT A SITE SPECIFIC PLAN UNDER SEPARATE CERTIFICATION.
2. ALL DESIGN REQUIREMENTS SHALL BE IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY.
3. THE ARCHITECT/ENGINEER OF RECORD OR PERMITTING CONTRACTOR FOR THE PROJECT SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO EXISTING STRUCTURE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL EXISTING FOUNDATIONS, FLOORS, AND WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTECTION IS REQUIRED, IT SHALL BE PLACED AT THE HOST STRUCTURE, NOT ON THE SUNKHOOD.
5. UNITS SHALL BE LABELED IN ACCORDANCE WITH THE FLORIDA BUILDING COMMISSION AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS.
6. BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS.
7. ANCHORAGE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
8. ALL FASTENERS TO BE #12 OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION 3.3.1 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
9. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL EXISTING FOUNDATIONS, FLOORS, AND WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTECTION IS REQUIRED, IT SHALL BE PLACED AT THE HOST STRUCTURE, NOT ON THE SUNKHOOD.
11. WIND DURATION FACTOR $Cd = 1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
12. CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIPILAR MATERIALS TO PREVENT ELECTROLYSIS.
13. ALL ALUMINUM SHALL BE 6063-T5 ALLOY AND THE AREA UNLESS NOTED OTHERWISE.
14. ALL CONCRETE TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS.
15. ANY WOOD USED IN A PRIMARY CONNECTION SHALL BE SYP#2 OR BETTER.
16. CONTRACTOR SHALL AFFIXED HERE TO VALIDATE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, ALL INDEMNITIES & SAVES HARMLESS THIS ENGINEER FOR ALL COSTS OF LITIGATION, ATTORNEY'S FEES, AND APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
17. THIS ENGINEER HAS NOT VISITED THIS SITE. INFORMATION CONTAINED HEREIN IS BASED ON CONTRACTOR SUPPLIED INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL EXISTING FOUNDATIONS, FLOORS, AND WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTECTION IS REQUIRED, IT SHALL BE PLACED AT THE HOST STRUCTURE, NOT ON THE SUNKHOOD.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL EXISTING FOUNDATIONS, FLOORS, AND WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTECTION IS REQUIRED, IT SHALL BE PLACED AT THE HOST STRUCTURE, NOT ON THE SUNKHOOD.
19. SAFEGUARDS MUST BE OBSERVED FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
20. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
21. ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

ENGINEERING EXPRESS
POSTAL ADDRESS:
2234 NORTH FEDERAL HWY # 7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

SUNSPACE MODULAR ENCLOSURES, INC.
300 TORONTO STREET
NEWCASTLE-ONTARIO CANADA
TEL: (905) 987 - 2316
FOAM CORE ROOF & FLOOR PANEL SPANS
TESTS PER ICC-ES ACO-4-08
ACCEPTANCE CRITERIA FOR SANDWICH PANELS

DATE	DRWN	CHKD	DATE	DRWN	CHKD
6/17/20	FLB	CCB	6/17/20	FLB	CCB
3/30/23	FLB	CCB	3/30/23	FLB	CCB
11/14/23	CCB	MJD	11/14/23	CCB	MJD

23-66706
SCALE: 1/8" = 1'-0"

1

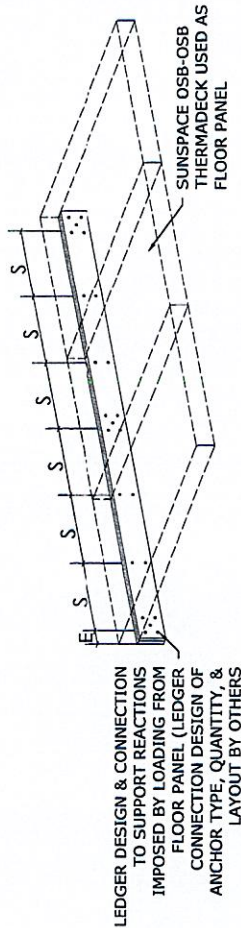
THIS DOCUMENT CAN ONLY BE USED FOR
ONE PERMIT SUBMITTED BY: May 23, 2024
VALID ONLY FOR ZIP CODE: 43031
VALID ONLY FOR: SUNSPACE OF CENTRAL

OSB - OSB FOAM PANELS MAY BE UTILIZED AS ROOF OR FLOOR PANELS AS REQUIRED. BUILDING CODES & SPECIFICATIONS FOR DEFLECTION & LOADING REQUIREMENTS APPLICABLE TO FLOORING ELEMENTS SHALL DIFFER FROM ROOF ELEMENT REQUIREMENTS. REFER YOUR PROJECT SPECIFICATIONS OR CONSULT WITH YOUR ENGINEER FOR MORE INFORMATION.

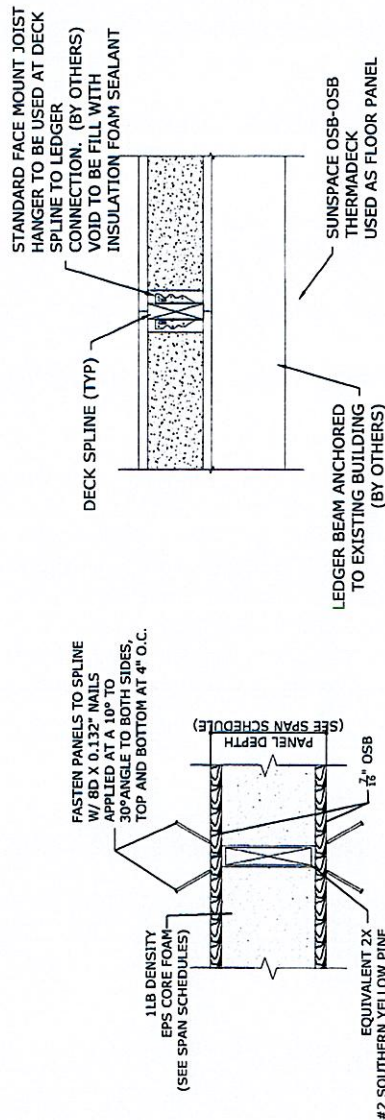
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PE66438 CA 05705
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Deflection Limit:	Total ASD Gravity Loading	Allowable Panel Span	Allowable Panel Span
$\Delta = L/180$	10 PSF	14 ft, 6 in	19 ft, 4 in
	15 PSF	12 ft, 8 in	16 ft, 11 in
	20 PSF	11 ft, 6 in	15 ft, 11 in
	25 PSF	10 ft, 8 in	14 ft, 3 in
	30 PSF	10 ft, 0 in	13 ft, 5 in
	35 PSF	9 ft, 6 in	12 ft, 9 in
	40 PSF	9 ft, 1 in	12 ft, 2 in
	45 PSF	8 ft, 9 in	11 ft, 8 in
	50 PSF	8 ft, 6 in	11 ft, 3 in
	55 PSF	8 ft, 2 in	10 ft, 11 in
	60 PSF	7 ft, 11 in	10 ft, 7 in
	65 PSF	7 ft, 9 in	10 ft, 4 in
	70 PSF	7 ft, 7 in	10 ft, 1 in
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$\Delta = L/180$	60 PSF	8 ft, 11 in	11 ft, 8 in
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	80 PSF	10 ft, 5 in	10 ft, 3 in
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	25 PSF	12 ft, 5 in	12 ft, 8 in
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	15 PSF	12 ft, 7 in	12 ft, 10 in
	20 PSF	12 ft, 6 in	12 ft, 9 in
	25 PSF	12 ft, 5 in	12 ft, 8 in
	30 PSF	12 ft, 4 in	12 ft, 7 in



TYPICAL PANEL ASSEMBLY (USED AS FLOOR PANELS)		SECTIONS
1		N.T.S.
2		



PANEL INTERLOCK DETAIL		SECTIONS
2	N.T.S.	

3

TYPICAL FLOOR PANEL ASSEMBLY

SECTIONS

2 N.T.S.

SUNDANCE MODULAR ENCLOSURES, INC.	
300 TORONTO STREET NEWCASTLE-ONTARIO CANADA TEL: (905) 987 - 2316	
FROM CORE MOOR & FLOOR PANELS TESTS PER ICC-ES ACQ-A-48	
ACCEPTANCE CERTIFICATE FOR SANDWICH PANELS	

23-66700

SCALE: INITS UNLESS NOTED

DATE: 11/11/22

REMARKS:
 TEST ISSUE (20-2055)
 KEM FLB 6/17/20
 CCB FLB 11/11/22
 FLOOR CONNECTION
 CCB FLB 3/06/23
 MLD CCB 11/14/23

DRAWN CHECKED

CONTRACTING EXHIBIT

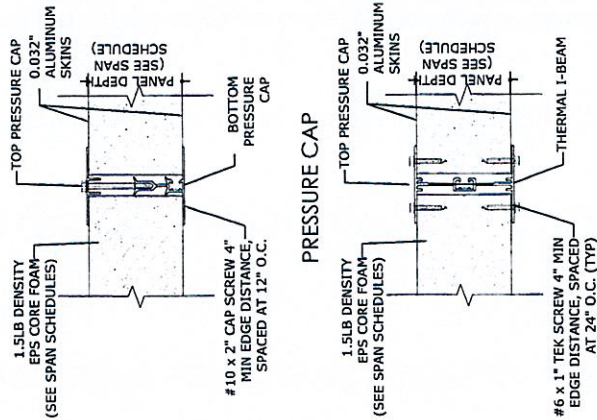
2

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FOAM CORE PANELS - ALUMINUM TOP / ALUMINUM BOT

PANEL SIZE:	24" WIDTH, 4"	48" WIDTH, 4"	24" WIDTH, 6"	48" WIDTH, 6"	24" WIDTH, 6"	48" WIDTH, 6"
	THICKNESS PANEL	THICKNESS PANEL	THICKNESS PANEL	THICKNESS PANEL	THICKNESS PANEL	THICKNESS PANEL
TOP LAYER:	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM
FOAM CORE:	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM
BOTTOM LAYER:	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM	0.032" ALUMINUM
CONNECTION SUPPORT:	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL

Deflection Limit:	Allowable Panel Span					
	Span	Span	Span	Span	Span	Span
$\Delta = L/60$	Total ASD Gravity Loading	15 ft, 8 in	13 ft, 5 in	12 ft, 3 in	12 ft, 0 in	19 ft, 0 in
	10 PSF	13 ft, 8 in	11 ft, 8 in	10 ft, 8 in	10 ft, 0 in	16 ft, 7 in
	15 PSF	12 ft, 5 in	10 ft, 8 in	9 ft, 9 in	9 ft, 0 in	15 ft, 1 in
	20 PSF	11 ft, 6 in	10 ft, 3 in	9 ft, 0 in	8 ft, 0 in	14 ft, 0 in
	25 PSF	10 ft, 10 in	9 ft, 10 in	8 ft, 6 in	7 ft, 6 in	13 ft, 2 in
	30 PSF	10 ft, 4 in	8 ft, 10 in	8 ft, 1 in	7 ft, 6 in	12 ft, 6 in
	35 PSF	9 ft, 10 in	8 ft, 5 in	7 ft, 8 in	7 ft, 6 in	11 ft, 11 in
	40 PSF	9 ft, 6 in	8 ft, 3 in	7 ft, 5 in	7 ft, 6 in	11 ft, 6 in
	45 PSF	8 ft, 2 in	7 ft, 11 in	6 ft, 11 in	6 ft, 11 in	10 ft, 1 in
	50 PSF	8 ft, 10 in	7 ft, 7 in	6 ft, 11 in	6 ft, 11 in	10 ft, 6 in
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	80 PSF	7 ft, 8 in	6 ft, 3 in	5 ft, 8 in	6 ft, 11 in	8 ft, 6 in
$\Delta = L/120$	10 PSF	12 ft, 2 in	10 ft, 8 in	9 ft, 9 in	9 ft, 1 in	15 ft, 1 in
	15 PSF	10 ft, 10 in	9 ft, 3 in	8 ft, 6 in	8 ft, 6 in	13 ft, 2 in
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	45 PSF	7 ft, 6 in	6 ft, 5 in	5 ft, 10 in	8 ft, 6 in	8 ft, 1 in
	50 PSF	7 ft, 3 in	6 ft, 2 in	5 ft, 8 in	8 ft, 6 in	8 ft, 6 in
	55 PSF	7 ft, 0 in	6 ft, 0 in	5 ft, 6 in	8 ft, 6 in	8 ft, 3 in
	60 PSF	6 ft, 10 in	5 ft, 10 in	5 ft, 4 in	8 ft, 6 in	8 ft, 1 in
	65 PSF	6 ft, 8 in	5 ft, 8 in	5 ft, 2 in	8 ft, 6 in	7 ft, 10 in
	70 PSF	6 ft, 6 in	5 ft, 6 in	5 ft, 0 in	8 ft, 6 in	7 ft, 6 in
	75 PSF	6 ft, 4 in	5 ft, 4 in	4 ft, 11 in	8 ft, 6 in	7 ft, 1 in
	80 PSF	6 ft, 2 in	5 ft, 2 in	4 ft, 10 in	8 ft, 6 in	6 ft, 11 in
$\Delta = L/240$	10 PSF	9 ft, 10 in	8 ft, 5 in	7 ft, 8 in	7 ft, 6 in	11 ft, 11 in
	15 PSF	8 ft, 7 in	7 ft, 4 in	6 ft, 9 in	7 ft, 6 in	10 ft, 5 in
	20 PSF	7 ft, 10 in	6 ft, 8 in	6 ft, 1 in	7 ft, 6 in	9 ft, 6 in
	25 PSF	7 ft, 3 in	6 ft, 2 in	5 ft, 8 in	7 ft, 6 in	8 ft, 9 in
	30 PSF	6 ft, 10 in	5 ft, 10 in	5 ft, 4 in	7 ft, 6 in	8 ft, 3 in
	35 PSF	6 ft, 6 in	5 ft, 6 in	5 ft, 2 in	7 ft, 6 in	7 ft, 10 in
	40 PSF	6 ft, 2 in	5 ft, 2 in	4 ft, 10 in	7 ft, 6 in	7 ft, 6 in
	45 PSF	5 ft, 11 in	4 ft, 11 in	4 ft, 8 in	7 ft, 6 in	7 ft, 3 in
	50 PSF	5 ft, 9 in	4 ft, 11 in	4 ft, 6 in	7 ft, 6 in	7 ft, 0 in
	55 PSF	5 ft, 7 in	4 ft, 9 in	4 ft, 4 in	7 ft, 6 in	6 ft, 9 in
	60 PSF	5 ft, 5 in	4 ft, 7 in	4 ft, 2 in	7 ft, 6 in	6 ft, 7 in
	65 PSF	5 ft, 3 in	4 ft, 5 in	4 ft, 0 in	7 ft, 6 in	6 ft, 5 in
	70 PSF	5 ft, 2 in	4 ft, 4 in	3 ft, 11 in	7 ft, 6 in	6 ft, 3 in
	75 PSF	5 ft, 0 in	4 ft, 3 in	3 ft, 10 in	7 ft, 6 in	6 ft, 1 in
	80 PSF	4 ft, 11 in	4 ft, 10 in	3 ft, 9 in	7 ft, 6 in	5 ft, 11 in



THERMAL I-BEAM

1 PANEL INTERLOCK OPTIONS

3 N.T.S.



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SUNDANCE MODULAR ENCLOSURES, INC.
300 TORONTO STREET
NEWCASTLE-ONTARIO CANADA
TEL: (905) 987-2316
TESTS PER ICC-ES ACO-408
FOAM CORE ROOF & FLOOR PANEL SPANS
ACCEPTANCE CRITERIA FOR SANDWICH PANELS

DATE	CHKD	DRAWN
6/17/20	FLB	AEW
11/17/22	FLB	FLB
3/06/23	FLB	FLB
11/14/23	FLB	FLB

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	PANEL SIZE:	24" WIDTH, 4" THICKNESS PANEL	24" WIDTH, 4" THICKNESS PANEL	48" WIDTH, 4" THICKNESS PANEL	24" WIDTH, 6" THICKNESS PANEL	48" WIDTH, 6" THICKNESS PANEL	48" WIDTH, 6" THICKNESS PANEL
SUNSPACE FOAM CORE	TOP LAYER:	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"	7/16" OSB, 24/16 GRADE 2 PLY, & 0.032"
ROOF PANEL	FOAM CORE:	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM	1.5 LB EPS FOAM
	BOTTOM LAYER:	0.032" ALUMINUM SKIN	0.032" ALUMINUM SKIN	0.032" ALUMINUM SKIN	0.032" ALUMINUM SKIN	0.032" ALUMINUM SKIN	0.032" ALUMINUM SKIN
	CONNECTION SUPPORT:	WITH PRESSURE CAP PANEL	WITH BEAM PANEL	WITH BEAM PANEL	WITH PRESSURE CAP PANEL	WITH PRESSURE CAP PANEL	WITH BEAM PANEL



N.T.S.

Deflection Limit:	Total ASD Gravity Loading	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span	Allowable Panel Span
$\Delta = L/60$	10PSF	13 ft, 9 in	14 ft, 9 in	14 ft, 6 in	14 ft, 3 in	19 ft, 3 in	19 ft, 0 in	19 ft, 3 in	19 ft, 1 in			
	15PSF	12 ft, 0 in	12 ft, 10 in	12 ft, 8 in	12 ft, 6 in	16 ft, 10 in	16 ft, 7 in	16 ft, 10 in	16 ft, 8 in			
	20PSF	10 ft, 13 in	11 ft, 8 in	11 ft, 6 in	11 ft, 4 in	15 ft, 3 in	15 ft, 1 in	15 ft, 3 in	15 ft, 1 in			
	25PSF	10 ft, 10 in	10 ft, 10 in	10 ft, 8 in	10 ft, 6 in	14 ft, 2 in	14 ft, 2 in	14 ft, 2 in	14 ft, 0 in			
	30PSF	9 ft, 6 in	10 ft, 2 in	10 ft, 0 in	9 ft, 11 in	13 ft, 4 in	13 ft, 2 in	13 ft, 4 in	13 ft, 2 in			
	35PSF	9 ft, 1 in	9 ft, 8 in	9 ft, 6 in	9 ft, 5 in	12 ft, 8 in	12 ft, 6 in	12 ft, 8 in	12 ft, 6 in			
	40PSF	8 ft, 8 in	9 ft, 3 in	9 ft, 1 in	9 ft, 0 in	12 ft, 1 in	11 ft, 11 in	12 ft, 1 in	12 ft, 0 in			
	45PSF	8 ft, 4 in	8 ft, 11 in	8 ft, 9 in	8 ft, 8 in	11 ft, 8 in	11 ft, 6 in	11 ft, 8 in	11 ft, 6 in			
	50PSF	8 ft, 0 in	8 ft, 7 in	8 ft, 5 in	8 ft, 5 in	11 ft, 3 in	11 ft, 1 in	11 ft, 3 in	11 ft, 2 in			
	55PSF	7 ft, 9 in	8 ft, 4 in	8 ft, 2 in	8 ft, 1 in	10 ft, 11 in	10 ft, 9 in	10 ft, 11 in	10 ft, 9 in			
	60PSF	7 ft, 7 in	8 ft, 1 in	7 ft, 11 in	7 ft, 10 in	10 ft, 7 in	10 ft, 5 in	10 ft, 7 in	10 ft, 6 in			
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	75PSF	7 ft, 0 in	7 ft, 6 in	7 ft, 4 in	7 ft, 3 in	9 ft, 10 in	9 ft, 8 in	9 ft, 10 in	9 ft, 8 in			
	80PSF	6 ft, 10 in	7 ft, 4 in	7 ft, 3 in	7 ft, 1 in	9 ft, 7 in	9 ft, 6 in	9 ft, 7 in	9 ft, 6 in			
	$\Delta = L/120$	10PSF	10 ft, 13 in	11 ft, 8 in	11 ft, 6 in	11 ft, 4 in	15 ft, 3 in	15 ft, 1 in	15 ft, 3 in	15 ft, 1 in		
15PSF		9 ft, 6 in	10 ft, 2 in	10 ft, 0 in	9 ft, 11 in	13 ft, 4 in	13 ft, 2 in	13 ft, 4 in	13 ft, 2 in			
20PSF		8 ft, 8 in	9 ft, 3 in	9 ft, 1 in	9 ft, 0 in	12 ft, 1 in	11 ft, 11 in	12 ft, 1 in	12 ft, 0 in			
25PSF		8 ft, 0 in	8 ft, 7 in	8 ft, 5 in	8 ft, 4 in	11 ft, 3 in	11 ft, 1 in	11 ft, 3 in	11 ft, 2 in			
30PSF		7 ft, 7 in	8 ft, 1 in	7 ft, 11 in	7 ft, 10 in	10 ft, 7 in	10 ft, 5 in	10 ft, 7 in	10 ft, 6 in			
35PSF		7 ft, 2 in	7 ft, 8 in	7 ft, 7 in	7 ft, 5 in	10 ft, 0 in	9 ft, 11 in	10 ft, 0 in	9 ft, 11 in			
40PSF		6 ft, 10 in	7 ft, 4 in	7 ft, 3 in	7 ft, 1 in	9 ft, 7 in	9 ft, 6 in	9 ft, 7 in	9 ft, 6 in			
45PSF		6 ft, 7 in	7 ft, 1 in	6 ft, 11 in	6 ft, 10 in	9 ft, 3 in	9 ft, 2 in	9 ft, 3 in	9 ft, 2 in			
50PSF		6 ft, 4 in	6 ft, 10 in	6 ft, 8 in	6 ft, 7 in	8 ft, 11 in	8 ft, 9 in	8 ft, 11 in	8 ft, 10 in			
55PSF		6 ft, 2 in	6 ft, 7 in	6 ft, 6 in	6 ft, 5 in	8 ft, 8 in	8 ft, 6 in	8 ft, 8 in	8 ft, 7 in			
60PSF		6 ft, 0 in	6 ft, 5 in	6 ft, 4 in	6 ft, 3 in	8 ft, 5 in	8 ft, 3 in	8 ft, 5 in	8 ft, 4 in			
65PSF		5 ft, 10 in	6 ft, 3 in	6 ft, 2 in	6 ft, 1 in	8 ft, 2 in	8 ft, 0 in	8 ft, 2 in	8 ft, 1 in			
70PSF		5 ft, 8 in	6 ft, 1 in	6 ft, 0 in	5 ft, 11 in	8 ft, 0 in	7 ft, 10 in	8 ft, 0 in	7 ft, 11 in			
75PSF		5 ft, 7 in	5 ft, 11 in	5 ft, 10 in	5 ft, 9 in	7 ft, 9 in	7 ft, 8 in	7 ft, 9 in	7 ft, 8 in			
80PSF		5 ft, 5 in	5 ft, 10 in	5 ft, 9 in	5 ft, 8 in	7 ft, 7 in	7 ft, 6 in	7 ft, 7 in	7 ft, 6 in			
$\Delta = L/240$		10PSF	8 ft, 8 in	9 ft, 3 in	9 ft, 1 in	9 ft, 0 in	12 ft, 1 in	11 ft, 11 in	12 ft, 1 in	12 ft, 0 in		
	15PSF	7 ft, 7 in	8 ft, 1 in	7 ft, 11 in	7 ft, 10 in	10 ft, 7 in	10 ft, 5 in	10 ft, 7 in	10 ft, 6 in			
	20PSF	6 ft, 10 in	7 ft, 4 in	7 ft, 3 in	7 ft, 1 in	9 ft, 7 in	9 ft, 6 in	9 ft, 7 in	9 ft, 6 in			
	25PSF	6 ft, 4 in	6 ft, 10 in	6 ft, 8 in	6 ft, 7 in	8 ft, 11 in	8 ft, 9 in	8 ft, 11 in	8 ft, 10 in			
	30PSF	6 ft, 0 in	6 ft, 5 in	6 ft, 4 in	6 ft, 3 in	8 ft, 5 in	8 ft, 3 in	8 ft, 5 in	8 ft, 4 in			
	35PSF	5 ft, 8 in	6 ft, 1 in	6 ft, 0 in	5 ft, 11 in	8 ft, 0 in	7 ft, 10 in	8 ft, 0 in	7 ft, 11 in			
	40PSF	5 ft, 5 in	5 ft, 10 in	5 ft, 9 in	5 ft, 8 in	7 ft, 7 in	7 ft, 6 in	7 ft, 7 in	7 ft, 6 in			
	45PSF	5 ft, 4 in	5 ft, 9 in	5 ft, 8 in	5 ft, 7 in	7 ft, 6 in	7 ft, 5 in	7 ft, 6 in	7 ft, 5 in			
	50PSF	5 ft, 1 in	5 ft, 5 in	5 ft, 3 in	5 ft, 3 in	7 ft, 1 in	7 ft, 0 in	7 ft, 1 in	7 ft, 0 in			
	55PSF	4 ft, 11 in	5 ft, 3 in	5 ft, 2 in	5 ft, 1 in	6 ft, 10 in	6 ft, 9 in	6 ft, 10 in	6 ft, 9 in			
	60PSF	4 ft, 9 in	5 ft, 1 in	5 ft, 0 in	4 ft, 11 in	6 ft, 8 in	6 ft, 7 in	6 ft, 8 in	6 ft, 7 in			
	65PSF	4 ft, 6 in	4 ft, 7 in	4 ft, 6 in	4 ft, 5 in	6 ft, 4 in	6 ft, 3 in	6 ft, 4 in	6 ft, 3 in			
	70PSF	4 ft, 6 in	4 ft, 10 in	4 ft, 9 in	4 ft, 8 in	6 ft, 4 in	6 ft, 3 in	6 ft, 4 in	6 ft, 3 in			
	75PSF	4 ft, 5 in	4 ft, 9 in	4 ft, 8 in	4 ft, 7 in	6 ft, 2 in	6 ft, 1 in	6 ft, 2 in	6 ft, 1 in			
	80PSF	4 ft, 4 in	4 ft, 7 in	4 ft, 6 in	4 ft, 6 in	6 ft, 0 in	5 ft, 11 in	6 ft, 0 in	6 ft, 0 in			

Page 29 of 66

PE66438 CA-05706

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300 TORONTO STREET
NEWCASTLE-ONTARIO CANADA
TEL: (905) 987 - 2316
FOAM CORE ROOF & FLOOR PANEL SPANS
TESTS PER ICC-ES ACQ-4-08
ACCEPTANCE CRITERIA FOR SANDWICH PANELS

INT ISSUE (20-2655)	ADM	6/17/20
ADDITIONAL TESTING	CCB	3/16/22
FLOOR CONNECTION	CCB	3/16/22
2023 FBC	MLD	11/14/23

23-66706

SCALE: NTS UNLESS NOTED OF

5

ACRYLIC PANEL SPANS & T-BAR CONNECTIONS

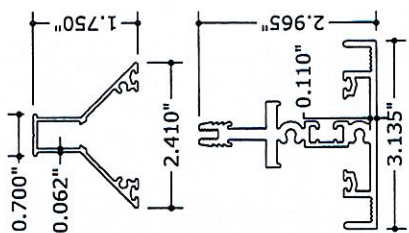
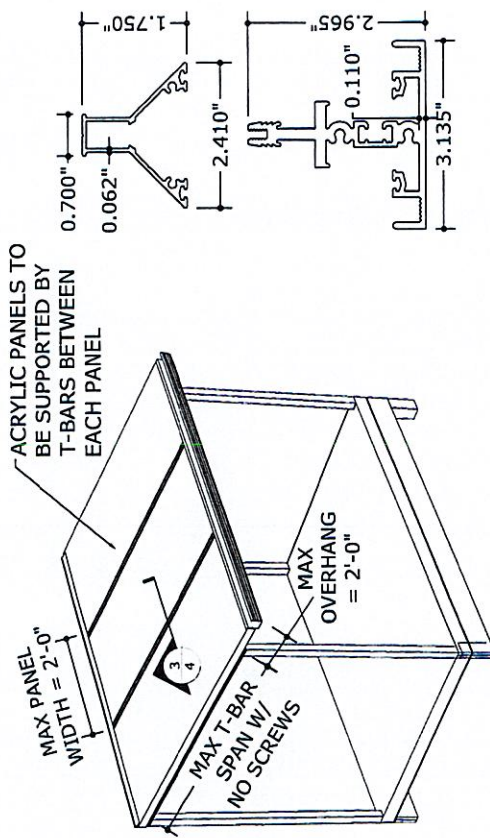
TABLE 7.1 - ACRYLIC PANEL WIDTH

TOTAL LOAD (PSF)	MAX ALLOWABLE ACRYLIC PANEL WIDTH
UP TO 80 PSF	2' - 0"

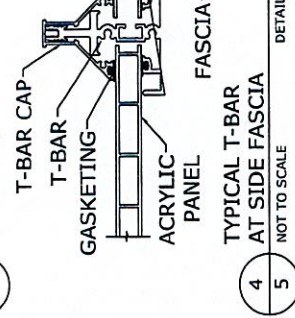
TABLE 7.2 - ACRYLIC PANEL WITH T-BAR MAX SPANS

ALLOWABLE DEFLECTION	TOTAL LOAD (PSF)	MAX T-BAR SPANS (WITH NO SCREWS)
$\Delta = L/60$	20	16' - 0"
	30	14' - 0"
	40	12' - 9"
	50	11' - 9"
	60	11' - 3"
	70	10' - 6"
	80	10' - 0"
	20	12' - 9"
$\Delta = L/120$	30	11' - 3"
	40	10' - 0"
	50	9' - 3"
	60	8' - 9"
	70	8' - 3"
	80	8' - 0"
	20	11' - 3"
	30	9' - 9"
$\Delta = L/180$	40	8' - 9"
	50	8' - 3"
	60	7' - 9"
	70	7' - 3"
	80	7' - 1"
	20	11' - 3"
	30	9' - 9"
	40	8' - 9"

MAX ALLOWABLE OVERHANG = 2'-0" IN ALL CASES

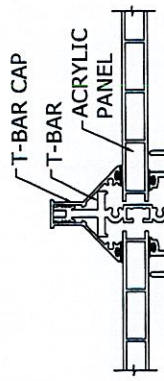


2 T-BAR AND T-BAR CAP
5 6063-T6 ALUM
NOT TO SCALE



4 TYPICAL T-BAR
5 AT SIDE FASCIA
NOT TO SCALE

1 ACRYLIC PANELS
5 NOT TO SCALE
VIEW



3 T-BAR CONNECTION
5 NOT TO SCALE
DETAIL



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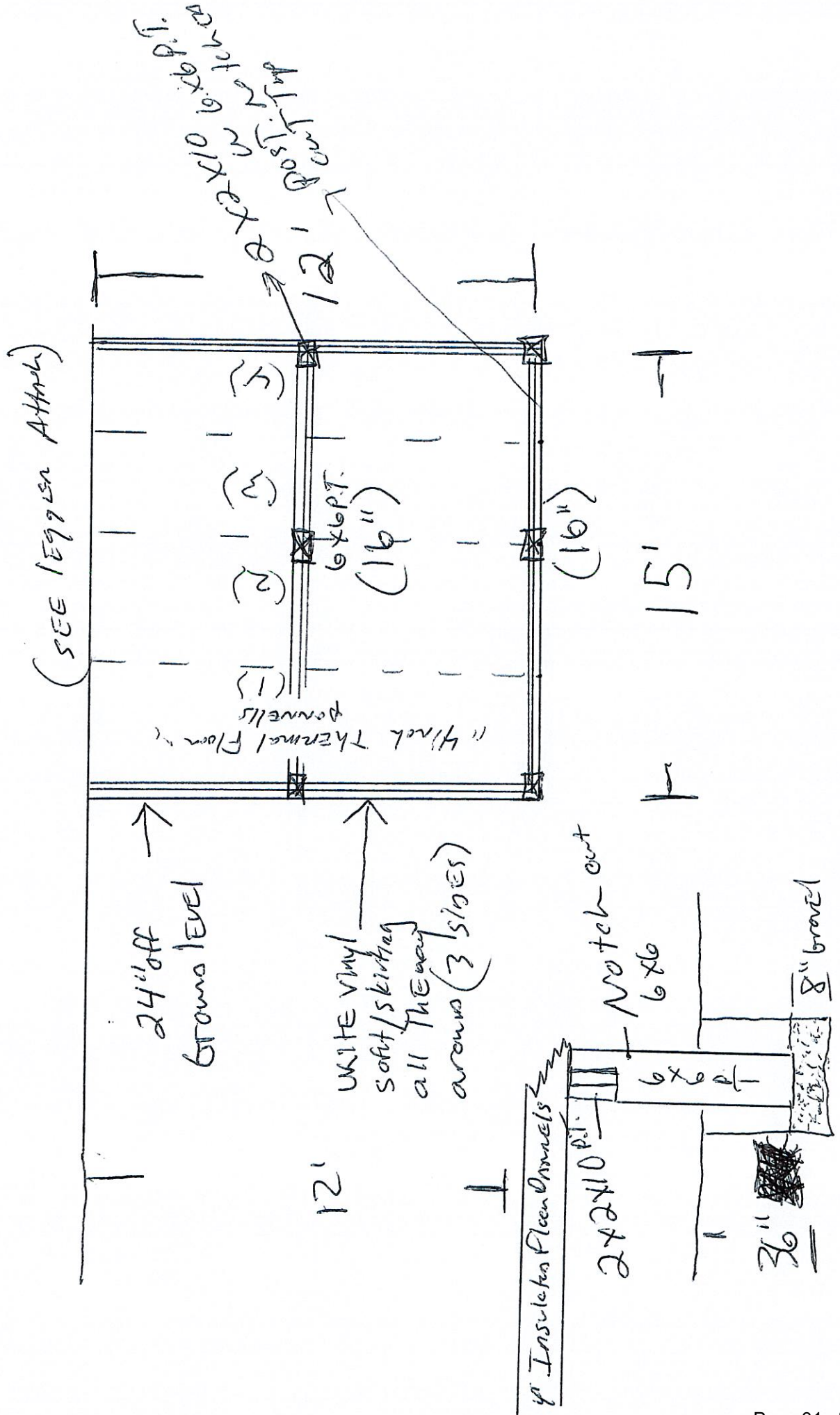
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TEL: (905) 987-2316
FOAM CORE ROOF & FLOOR PANEL SPANS
TESTS PER ICC-ES ACQ-08
ACCEPTANCE CRITERIA FOR SANDWICH PANELS

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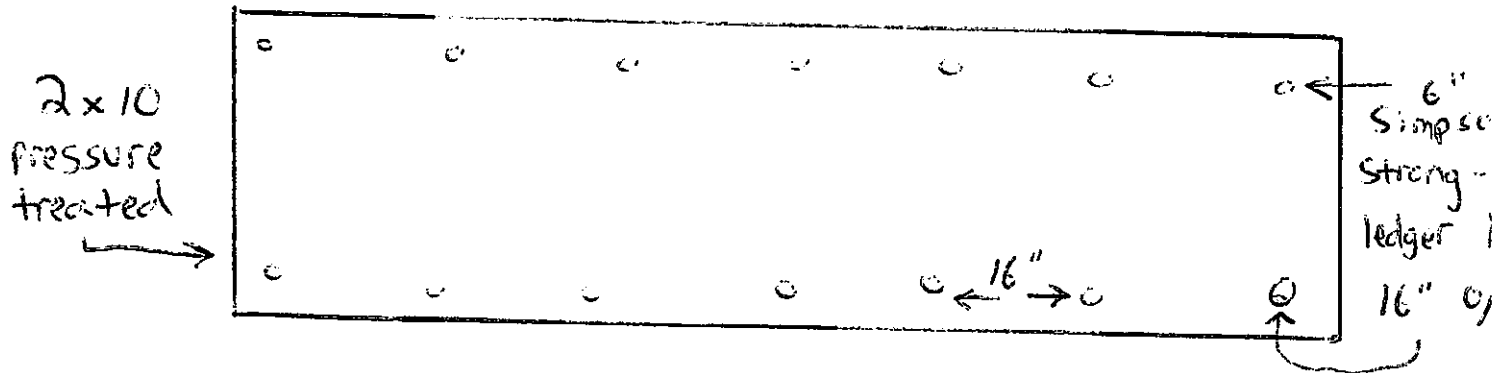
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CHECKED: JLM
DATE: 05/17/23
PROJECT: 23-66706
SHEET: 5 OF 5

House

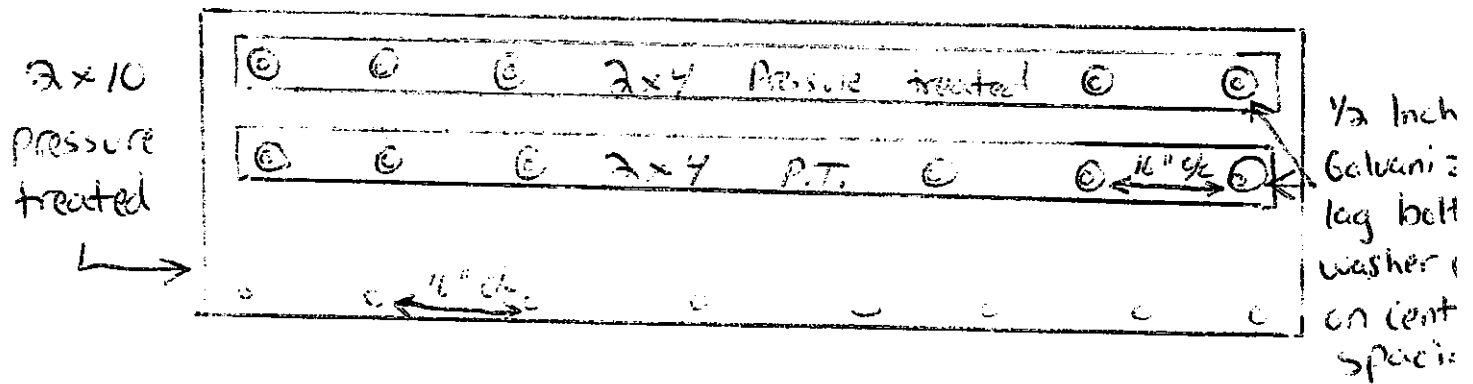


Ledger Board Detail:

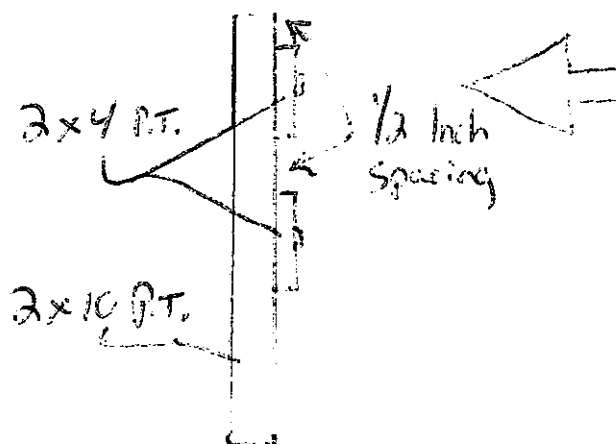
Front View:



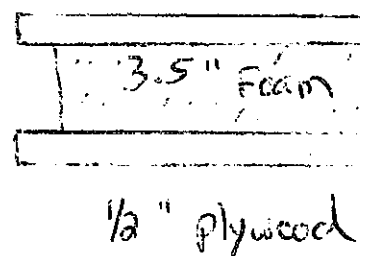
Front View:



Side View:



Sunspace Floor Panel Units



SUNSPACE HOST ATTACHED, MONOSLOPE SUNROOM

WITH EPS FOAM ROOF PANELS & SOLID OR SCREENED WALLS

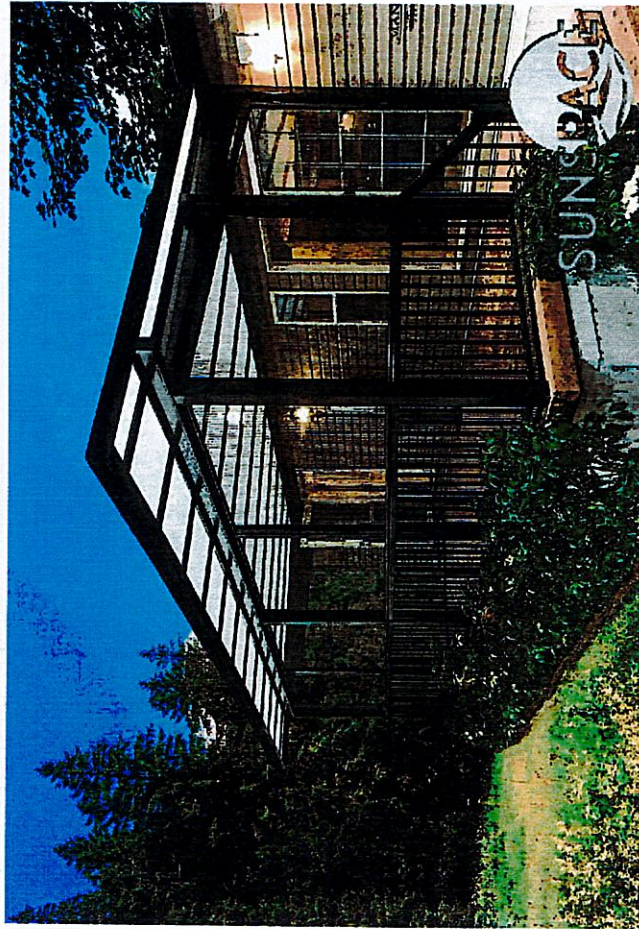
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VARIOUS CONFIGURATIONS VALID UNDER THE FOLLOWING RANGES OF SITE-SPECIFIC DESIGN CRITERIA:

DESIGN LOADING: LOCAL DESIGN CONDITIONS NOT TO EXCEED THE FOLLOWING:

ULT WIND SPEED: 160 MPH; **EXPOSURE CATEGORY:** C; **GROUND SNOW LOAD:** UP TO 60 PSF
REFER DESIGN TABLES HEREIN FOR SYSTEM REQUIREMENTS UNDER VARIOUS DESIGN CONDITIONS



INDEX

SHEET # | DESCRIPTION

1. COVER & DESIGN CRITERIA
2. ENGINEER'S NOTES
3. SYSTEM VIEWS - ALLOWABLE SIZES AND DIMENSIONS
4. ALLOWABLE DESIGN TABLE
5. TYPICAL CONNECTION DETAILS
6. TYPICAL CONNECTION DETAILS
7. ANCHORAGE TO HOST
8. SYSTEM COMPONENTS

PREPARED
BY



THIS DOCUMENT CAN ONLY BE USED FOR
ONE PERMIT SUBMITTED BY: May 23, 2024

VALID ONLY FOR: SUNSPACE OF CENTRAL
OHIO LLC

PT66438 CA 05706

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SIGNATURE OR IT IS IMPOSSIBLE TO VERIFY VOT
LOCAL POLICE, TOLLENTINE, REPORT HANDBOOK IN USE

DESIGNED FOR

LOADING UP TO:

ULT WIND SPEED:

160 MPH; EXP CAT: C;

GROUND SNOW

LOAD: UP TO 60 PSF

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THIS SUBMITTAL IS FOR STRUCTURAL PURPOSES ONLY. THIS PRODUCT SHALL BE CONSTRUCTED USING
PARTS MANUFACTURED BY "SUNSPACE". ALL NON-STRUCTURAL ELECTRICAL / MECHANICAL UNITS AND
ACCESSORIES ARE TO BE INSTALLED AFTER THE STRUCTURE IS COMPLETE. INFORMATION NOT
REFERENCED HEREIN SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS FOR THIS PRODUCT.

PROJECT PARTS TAKEOFF & SCHEDULE PROVIDED BY THE MANUFACTURER MAY NOT MATCH THE INFORMATION
PACKAGED HEREIN. MATERIAL TAKEOFF & COORDINATION SHALL NOT BE THE RESPONSIBILITY OF THE SIGNING
ENGINEER. THE SIGNING ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE, THE
AND ANY REQUIRED CONNECTION ANCHORS USED FOR INSTALLATION MATCH THE INFORMATION SHOWN HEREIN
BEFORE INSTALLATION BEGINS. REFER THE PROJECT INFORMATION BLOCK PROVIDED ABOVE FOR A QUICK
REFERENCE OF PROJECT STYLE & MATERIAL REQUIREMENTS.

SCOPE OF WORK:

DESIGN & INSTALLATION OF: A NEW, HOST ATTACHED, RESIDENTIAL, SUNSPACE SUNROOM WITH FOAM PANEL
ROOF AND SOLID OR SCREENED WALLS AS DETAIL HEREIN
EXCLUSIONS:
THE DESIGN OF ANY EXISTING HOST STRUCTURE, MECHANICAL ELEMENTS, EGRESS, WATERPROOFING ELECTRICAL,
PLUMBING, FAN, OR ANY ACCESSORY ATTACHMENTS ARE NOT INCLUDED WITH THIS DESIGN OR
CERTIFICATION UNLESS

PROJECT INFORMATION:

PERGOLA STYLE: SUNSPACE MONOSLOPE ROOF SUNROOM
ROOF TYPE: FOAM PANEL, ALUMINUM SKIN ROOF. REFER ADDITIONAL ENGINEERING FOR PANEL TYPE, BRAND, AND
STRUCTURE SUPPORT: HOST-ATTACHED
BASE CONNECTION: BASE TRACK WITH 1/4" Ø SCREW ANCHORS TO CONCRETE SLAB OR 1/4" LAG SCREWS TO
WOOD DECK AS DETAIL HEREIN
HOST WALL CONNECTION: 1/4" Ø TAPCON OR SCREW ANCHOR TO GROUTED CMU WALL OR 1/2" Ø WOOD LAG
SCREWS TO WOOD FRAMED WALL OR PASCIA

DESIGN CRITERIA:

INTERNATIONAL BUILDING CODE & RESIDENTIAL CODE (2018 & 2021)
CURRENT STATE BUILDING CODES (REFERENCED STATE CODES PER NOTES ON FOLLOWING SHEET)
ASCE 7-16 / 7-22 LOAD COMBINATIONS

1. DEAD LOADING
1.1. ROOF DEAD LOAD..... 3 PSF
2. LIVE LOADING
2.1. ROOF LIVE LOAD..... 20 PSF
3. WIND LOADING INPUTS
3.1. METHODOLOGY..... OPEN STRUCTURE
3.2. ULTIMATE WIND SPEED..... UP TO 160 MPH (SEE DESIGN TABLES)
(ASD = SQRT(0.6)*VH)
3.3. WIND EXPOSURE CATEGORY..... II
3.4. WIND RISK CATEGORY..... II
3.5. DIRECTIONALITY/OTHER FACTORS..... Kd=0.85, G=0.85, Kz=0.85, Kzt=1.0 (FLAT TERRAIN)
3.6. MEAN ROOF HEIGHT..... UP TO 9 FT
3.7. SYSTEM MOUNTING HEIGHT..... 0 FT (AT GRADE)
4. SNOW
4.1. GROUND SNOW LOAD..... UP TO 60 PSF (SEE DESIGN TABLES)
4.2. SNOW EXPOSURE FACTOR..... 1.0
4.3. SNOW LOAD IMPORTANCE FACTOR..... 1.0
4.4. SNOW FACTOR..... 1.0
4.5. SNOW DRIFT..... PER CODE
4.6. PER CODE
5. SEISMIC LOADS (NOT TO CONTROL)
5.1. RISK CATEGORY..... II
5.2. SITE CLASSIFICATION..... UP TO C
5.3. SEISMIC DESIGN CATEGORY (SDC)..... UP TO C
5.4. SEISMIC LOADING DOES NOT CONTROL DESIGN
6. RESULTANT MAIN WIND FORCE RESISTING SYSTEM ASD DESIGN LOAD COMBINATIONS

1. COVER & DESIGN CRITERIA

2. ENGINEER'S NOTES

3. SYSTEM VIEWS - ALLOWABLE SIZES AND DIMENSIONS

4. ALLOWABLE DESIGN TABLE

5. TYPICAL CONNECTION DETAILS

6. TYPICAL CONNECTION DETAILS

7. ANCHORAGE TO HOST

8. SYSTEM COMPONENTS

SUNSPACE MODULAR ENCLOSURES, INC
300 TORONTO STREET
NEWCASTLE-ONTARIO CANADA
(905) 987 - 2316
STUDIO SUNROOM ENCLOSURE
GENERAL PERFORMANCE EVALUATION
FBC 7TH (2020) & IBC (2021) EDITIONS, IBC (2018 & 2021)
ENGINEERINGEXPRESS.COM
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BOCA RATON, FL 33431
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REMARKS
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FBC 7TH (2020) & IBC (2021) EDITIONS, IBC (2018 & 2021)
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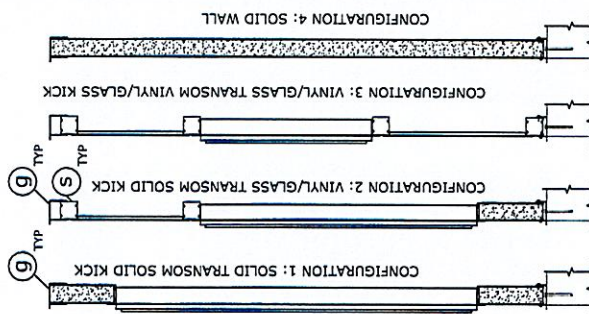
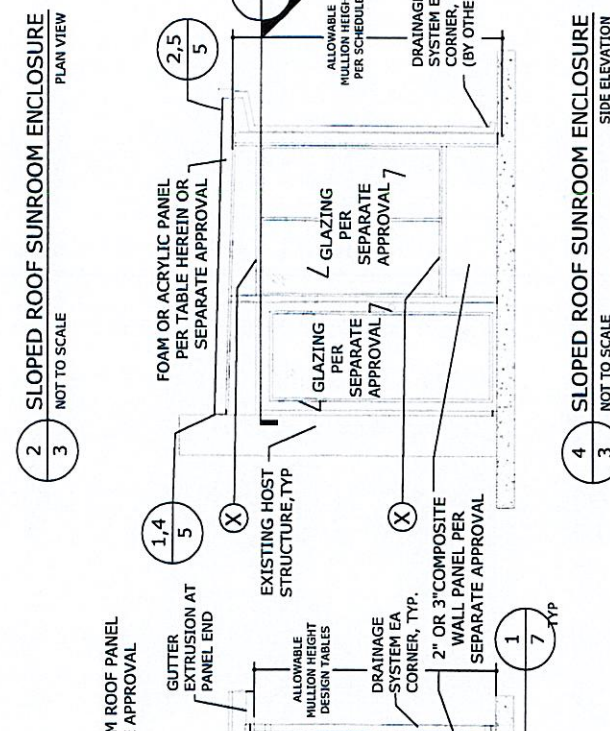
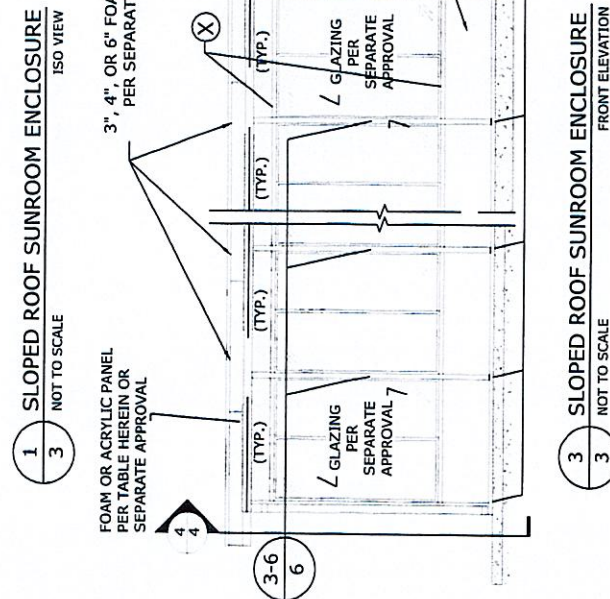
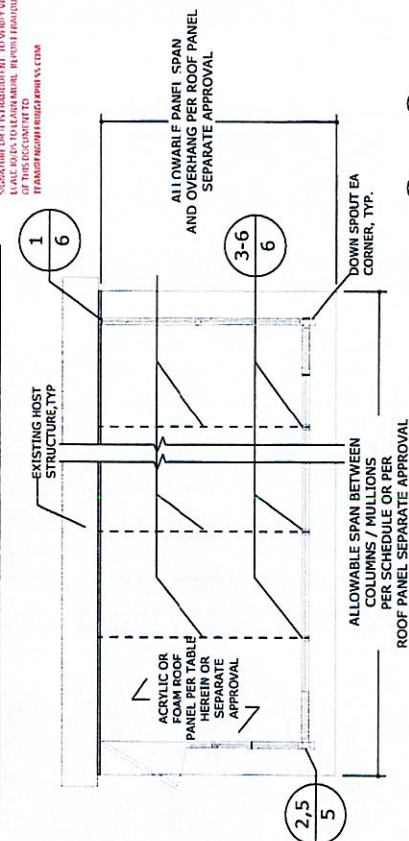
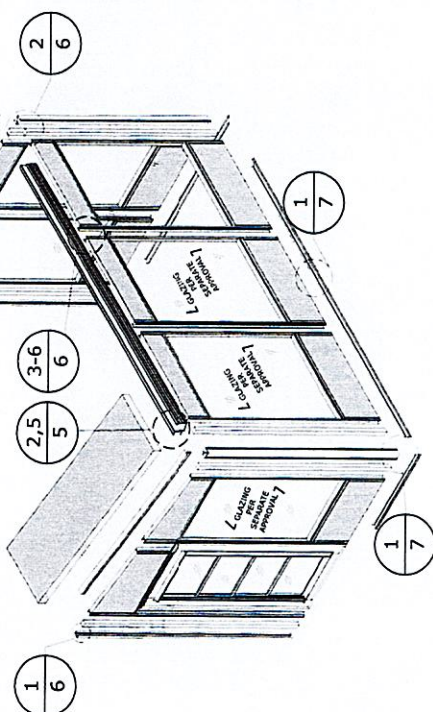
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ROOF PANEL SELECTION NOTE:
SUNSPACE ALUMINUM - ALUMINUM SKINNED PANELS, OSB-ALUMINUM SKINNED PANELS, OR ACRYLIC PANELS SHALL BE ACCEPTABLE WITH ADDITIONAL CERTIFIED ALLOWABLE PANEL SPAN ENGINEERING. REFER DESIGN TABLES HEREIN FOR REQUIRED DESIGN PRESSURES FOR INSTALLATION IN VARIOUS WIND / SNOW CONDITIONS



3 SLOPED ROOF SUNROOM ENCLOSURE
3 NOT TO SCALE FRONT ELEVATION

4	SLOPED ROOF SUNROOM ENCLOSURE
3	NOT TO SCALE
	SIDE ELEVATION

5 SIDE WALL CONFIGURATION OPTIONS

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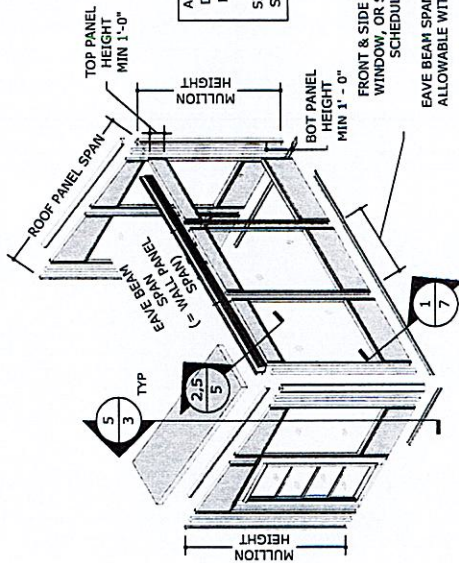
11/28/23	CLV	CB AEM	12/01/21	INT ISSUE (20-28909)	FBC 2023 (23-6671)
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ALLOWABLE DESIGN TABLES

DESIGN TABLE NOTES

1. THE MAXIMUM ALLOWABLE DESIGN CONDITIONS HAVE BEEN DETAILED FOR EACH MULLION. INSTALLED MEMBERS SHALL NOT EXCEED THE SITE CONDITIONS LISTED OR THE ALLOWABLE HEIGHT PER THE DETAILED PANEL SPACING.
- 1.1. 6'-0" SPANS & CORRESPONDING MULLION HEIGHTS TO BE APPLICABLE ONLY FOR NON-STRUCTURAL SLIDING DOOR ASSEMBLY AND INSTALLATION.
2. SYSTEM ELEMENTS DESIGNED BY OTHERS (SUCH AS ROOF PANELS, WALL PANELS, WINDOWS, AND DOORS) SHALL BE RATED (PER SEPARATE, CERTIFIED ENGINEERING) FOR THE "CALCULATED DESIGN LOADS" LISTED FOR THE APPLICABLE DESIGN PRESSURES.
- 2.1. ALTERNATE CALCULATED DESIGN PRESSURES SHALL BE ACCEPTABLE AS SUBSTITUTE WITH SEPARATE, CERTIFIED ENGINEERING.
3. HOST STRUCTURE WALL ELEMENT SHALL BE DESIGNED & CERTIFIED TO RESIST RESULTANT MAXIMUM SHEAR LOADING AS DETAILED.
4. ANCHORS SHALL BE SELECTED PER THE EXISTING HOST STRUCTURE WALL CONDITION & SHALL BE INSTALLED TO STRUCTURAL WALL / ROOF MEMBERS OR ADDED STRUCTURAL BLOCKING.
5. ANCHORS SHALL MAINTAIN 2.5" EMBEDMENT INTO STRUCTURAL COVERINGS OR STUCCO AND SHALL



1 MONOSLOPE SUNROOM ENCLOSURE
150 VIEW
4 NOT TO SCALE

2"x2" MULLIONS FOR USE IN TYPICAL WIND & SNOW CONDITIONS

MAX ROOF PROJECTION	WALL CONDITION	MAX WIND CONDITIONS	MAX GROUND SNOW LOAD	CALCULATED DESIGN LOADS	ALLOWABLE MULLION HEIGHT (@ PANEL SPACING)	RESULTANT MAXIMUM SHEAR LOADING AT HOST WALL	ANCHORS TO WOOD HOST	ANCHORS TO HOLLOW OR GROUTED CMU BLOCK
16'-0"	SCREEN WALLS	115 MPH / EXP C	UP TO 25 PSF	35 PSF GRAVITY 15.6 PSF LATERAL	8'-0"	280 PLF	(2) #14 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 50 PSF	60 PSF GRAVITY 15.6 PSF LATERAL	9'-0"	480 PLF	(2) 1/2" DIA LAG SCREWS @ 12" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 25 PSF	35 PSF GRAVITY 23 PSF LATERAL	7'-0"	280 PLF	(2) #14 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 40 PSF	50 PSF GRAVITY 23 PSF LATERAL	8'-6"	400 PLF	(2) 1/2" DIA LAG SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.

3"x3" MULLIONS FOR USE IN HIGH-SNOW CONDITIONS

MAX ROOF PROJECTION	WALL CONDITION	MAX WIND CONDITIONS	MAX GROUND SNOW LOAD	CALCULATED DESIGN LOADS	ALLOWABLE MULLION HEIGHT	RESULTANT MAXIMUM SHEAR LOADING AT HOST WALL	REQUIRED ANCHORS TO WOOD HOST	ANCHORS TO HOLLOW OR GROUTED CMU BLOCK
16'-0"	SCREEN WALLS	115 MPH / EXP C	UP TO 40 PSF	50 PSF GRAVITY 15.6 PSF LATERAL	10'-10"	400 PLF	(2) 1/2" DIA LAG SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 60 PSF	60 PSF GRAVITY 15.6 PSF LATERAL	12'-0"	600 PLF	(2) 1/2" DIA LAG SCREWS @ 8" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 40 PSF @ 4FT (UP TO 25 PSF @ 6FT)*	50 (35)* PSF GRAVITY 23 PSF LATERAL	9'-6"	280 PLF	(2) 1/2" DIA LAG SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	115 MPH / EXP C	UP TO 60 PSF	50 PSF GRAVITY 23 PSF LATERAL	11'-3"	600 PLF	(2) 1/2" DIA LAG SCREWS @ 8" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.

3"x3" MULLIONS FOR USE IN HIGH-WIND CONDITIONS

MAX ROOF PROJECTION	WALL CONDITION	MAX WIND CONDITIONS	MAX GROUND SNOW LOAD	CALCULATED DESIGN LOADS	ALLOWABLE MULLION HEIGHT	RESULTANT MAXIMUM SHEAR LOADING AT HOST WALL	REQUIRED ANCHORS TO WOOD HOST	ANCHORS TO HOLLOW OR GROUTED CMU BLOCK
16'-0"	SCREEN WALLS	160 MPH / EXP C	UP TO 15 PSF	30 PSF GRAVITY 30 PSF LATERAL	8'-8"	240 PLF	(2) #12 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
16'-0"	SOLID OR GLASS WALLS	160 MPH / EXP C	UP TO 25 PSF	40 PSF GRAVITY 33 PSF LATERAL	10'-3"	400 PLF	(2) #14 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
20'-0"	SOLID OR GLASS WALLS	160 MPH / EXP C	UP TO 15 PSF	30 PSF GRAVITY 30 PSF LATERAL	8'-5"	240 PLF	(2) #12 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.
20'-0"	SOLID OR GLASS WALLS	160 MPH / EXP C	UP TO 25 PSF	40 PSF GRAVITY 33 PSF LATERAL	10'-0"	400 PLF	(2) #14 WOOD SCREWS @ 16" O.C.	(1) 3/8" DIA TAPCON @ 16" O.C.

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DATE: 11/29/23
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APPROVED: CCB
PROJECT: 2023-02-2601
REVISIONS: 1/2/2023
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ROOF:

Diagram illustrating the roof assembly details, showing the connection between the host wall and the window frame.

Labels and Components:

- ANCHOR TO HOST PER DESIGN TABLES & SITE CONDITIONS
- EXISTING STUD WALL
- ALUMINUM FLASHING PER FIELD CONDITIONS
- NOTCH T-BAR FOR FLASHING
- DEGLAS 16/32
- ACRYLIC PANELS BETWEEN T-BARS
- GASKETING
- WOOD SHIM AS REQUIRED TO MAINTAIN MINIMUM PITCH
- WINDOW FRAME
- #8 x 1/2" TEK SCREW FASTENED TO HANGING RAIL ON EACH SIDE OF THE T-BAR CENTER UPRIGHT
- SCREWS EACH SIDE OF T-BAR CENTER UPRIGHT
- DEGLAS 16/32
- ACRYLIC PANELS BETWEEN T-BARS
- GASKETING
- #8 x 1/2" TEK SCREW @ 16" O.C. INSIDE AND OUTSIDE (TYP.)

1	ROOF TO EXISTING BLDG - STUDIO	VIEW	2	ROOF TO WALL PANEL AT EAVE	VIEW
5	NOT TO SCALE		5	NOT TO SCALE	

BEAM SPLICE CONNECTION	
3	5
	NOT TO SCALE
	VIEW

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ROOF:

3", 4", OR 6" FOAM ROOF PANEL
PER SEPARATE APPROVAL

1/4" PANEL LAG
SCREW WITH 1-1/2"
WASHER, AT 12" O.C.
MAX. TO EXTEND 2"
PAST PANEL INTO EAVE
BEAM ASSEMBLY. USE
(7) PER 4'-0" PANEL

WOOD SHIM AS
REQUIRED TO
MAINTAIN
MINIMUM PITCH

#8 x 1/2" TEK SCREW
@ 16" O.C. INSIDE
AND OUTSIDE (TYP.)

WALL PANEL,
WINDOW FRAME,
OR DOOR FRAME

ANCHORS TO HOST
PER DESIGN TABLE

4	ROOF TO EXISTING BLDG	VIEW
5	NOT TO SCALE	

5	ROOF TO WALL PANEL AT EAVE	VIEW
5	NOT TO SCALE	

3", 4", OR 6" FOAM ROOF PANEL
PER PANEL SCHEDULE
OR SEPARATE APPROVAL

1" x 1" TEK SCREW 4"
IN FROM RECEIVER
D GUTTER AND 24"
O.C. BETWEEN (x/4)

1" BEAM TYPICAL
SPACING 24" OR
48" (BETWEEN
EACH PANEL)

#10 x 2" CAP SCREW 4"
IN FROM RECEIVER AND
GUTTER AND 12" O.C.
BETWEEN

6	ROOF PANEL TO ROOF PANEL	VIEW
5	NOT TO SCALE	VIEW

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12/01/21	CBM	DEM	12/01/21
11/29/23	CBM	CBM	11/29/23

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ASSEMBLY & CONNECTIONS

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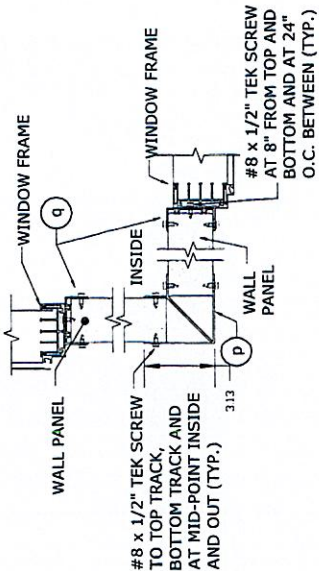
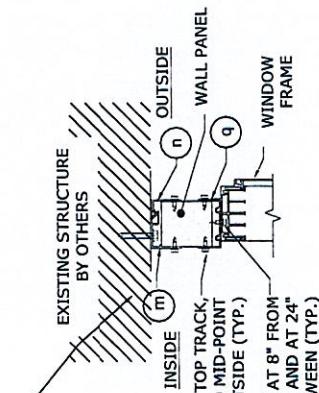
WALL CHANNEL CONCRETE ATTACHMENT
 [2] 1/4" Ø ITW STAINLESS STEEL TAPCON INTO WALL W/ 3" EMBEDMENT AND 3" EDGE DISTANCE, SPACED 16" O.C.

WALL CHANNEL GROUT-FILLED CMU ATTACHMENT:
 [2] 1/4" Ø S.S. HILTI KWIK-CON II+ INTO BLOCK FACE W/ 1-3/4" EMBEDMENT AND 3" MINIMUM EDGE DISTANCE, SPACED 16" O.C.

WALL CHANNEL WOOD ATTACHMENT:
 [2] 1/2" Ø S.S. WOOD LAG SCREWS INTO WALL W/ 3" THREAD ENGAGEMENT AND 3/4" MINIMUM EDGE DISTANCE, SPACED 16" O.C. MIN

#8 x 1/2" TEK SCREW TO TOP TRACK, BOTTOM TRACK AND MID-POINT INSIDE AND OUTSIDE (TYP.)

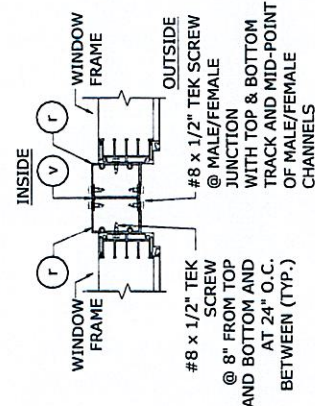
#8 x 1/2" TEK SCREW AT 8" FROM TOP AND BOTTOM AND AT 24" O.C. BETWEEN (TYP.)



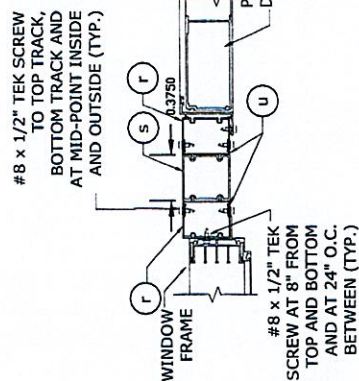
1 WALL PANEL TO HOST SIDE WALL
 6 NOT TO SCALE VIEW

2 CORNER COLUMN
 6 NOT TO SCALE VIEW

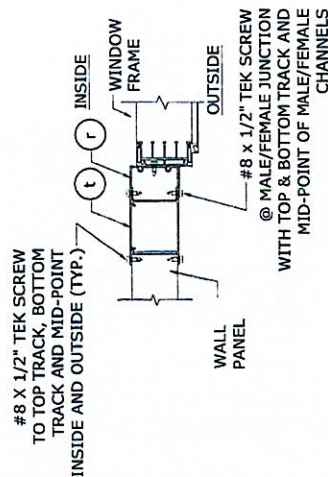
MULLION:



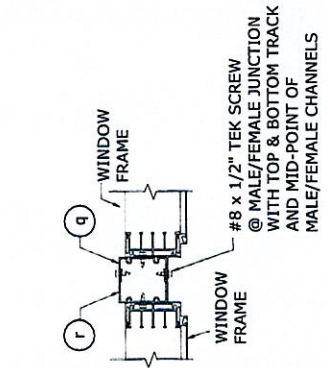
3 MULLION TO WINDOW
 6 NOT TO SCALE VIEW



4 MULLION TO WINDOW/DOOR
 6 NOT TO SCALE VIEW

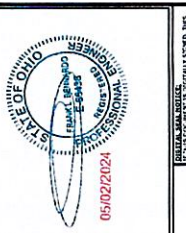


5 MULLION TO WALL/WINDOW
 6 NOT TO SCALE VIEW



6 MULLION TO WINDOW
 6 NOT TO SCALE VIEW

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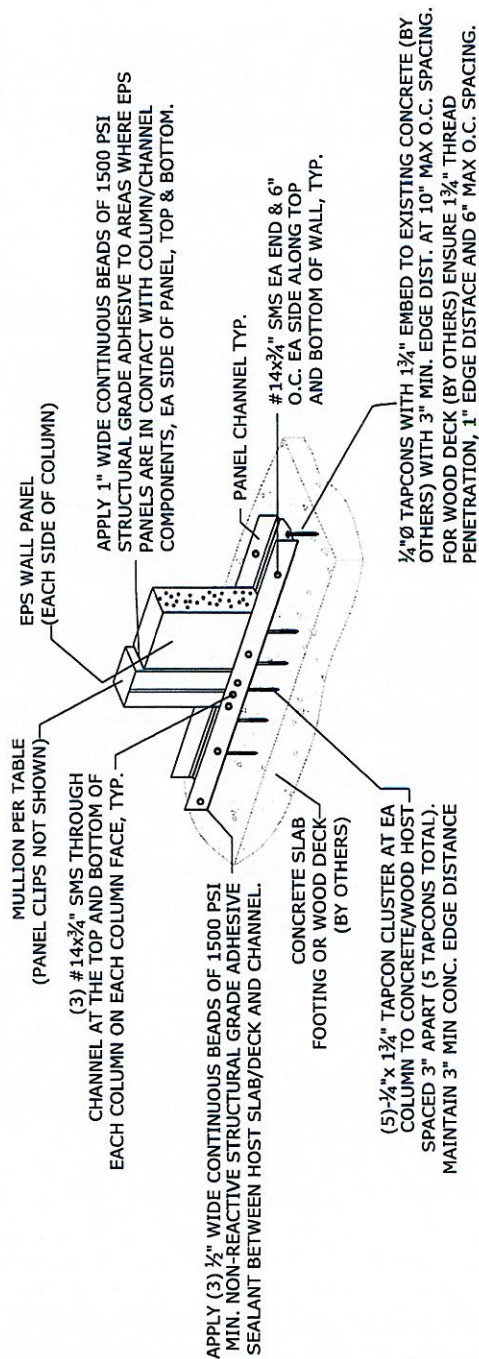
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1 PANEL WALL AND MULLION ANCHORAGE

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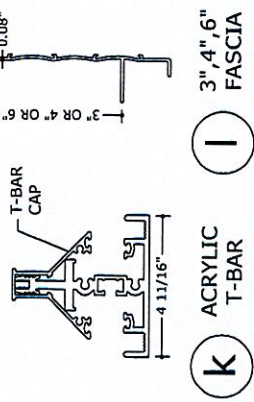
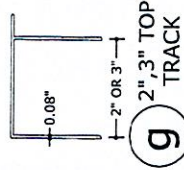
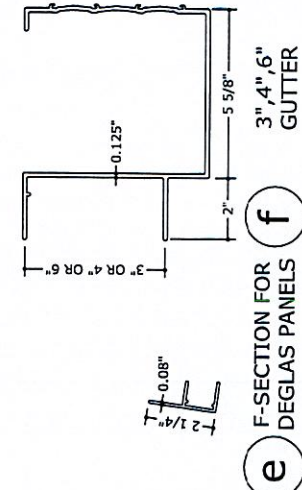
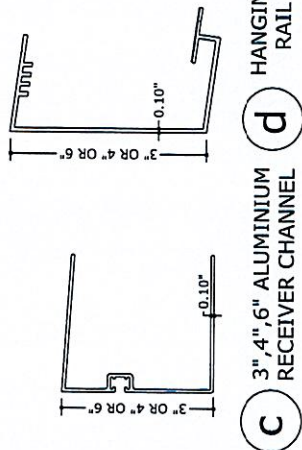
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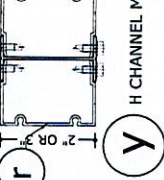
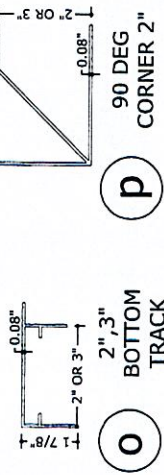
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ROOF _____
MEMBERS:



2" STARTER **m**

STARTER **n** **CAP**



q 2" 3" FEMALE CHANNEL

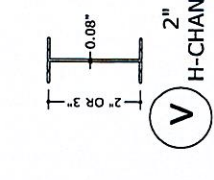
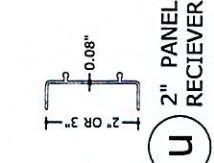
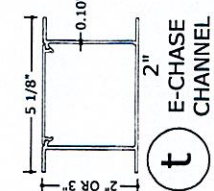
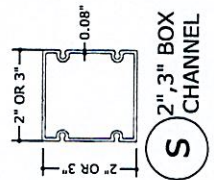
2" OR 3"

0.08"

r 2" 3" MALE CHANNEL

2" OR 3"

0.08"



W MALE/FEMALE MULLION

Dimensions: 2" OR 3" (width), 2" OR 3" (height).
 Callouts: **q** (top flange), **r** (bottom flange), **#8 x 1/2" TEK SCREW** (fastener).

X MULLION WITH INSERT

Dimensions: 2" OR 3" (width), 2 1/4" (height).
 Callouts: **q** (top flange), **r** (bottom flange), **0.125" MULLION INSERT TYP** (central insert).

Y H CHANNEL MULLION

Dimensions: 2" OR 3" (width), 2" OR 3" (height).
 Callouts: **r** (bottom flange), **v** (web), **(TYP.)** (typical).

Z E-CHANNEL COLUMN

Dimensions: 2" OR 3" (width), 2" OR 3" (height).
 Callouts: **r** (bottom flange), **v** (web), **(TYP.)** (typical).

[illegible]

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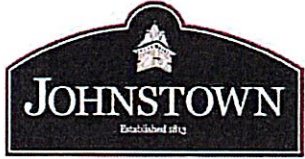
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23-66701

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8



CERTIFICATE OF APPROPRIATENESS: CHAPTER #1187

Application Number: 7-2-10 Date: 7/2/2024

FEES:

Base Fee: \$ 300

Total Fee Amount: \$ 300 Paid: Check # _____ Cash: \$ _____

(PLEASE PRINT)

1. Applicant: Cris Geiser Phone: (330) 600-2593
2. Property Address: 300 Hanebrink Ave City: Johnstown State: OH Zip: 43031
3. Applicant's E-mail: Cgeiser15@gmail.com
4. Business Owner's Name: CCE HOA Phone: () -
5. Contractor's Name: Schlabeck Builders Phone: (330) 600-2593
6. Principal Business Activity: HOA Club House and Pool
7. Existing Use of Property: HOA community area
8. Square Footage of Proposed Building or Business: 816 Pavilion sq. ft. 3216 total
2400 pad for Pickleball Ct
9. Zoning District: _____ Number of Off-Street Parking Spaces: 15
10. Estimated Cost of Improvements: \$ 300,000

IN ADDITION, THE FOLLOWING ITEMS MUST ACCOMPANY THIS APPLICATION:

- (Conditional) Eight full sets (11x17) of to scale plans and dimensioned drawings showing the property, with all elevations and the location of existing and proposed buildings and alterations are required. Attach any requested, supplemental or necessary documentation. **(Required only if asked for by the Zoning Inspector.)**

List of Materials that will be used on the project:

1. CONCRETE
2. _____
3. Pavement
4. _____
5. Stick frame materials
6. _____
7. _____
8. _____

List of Contiguous Neighbors and Addresses:

1. HoA Association

Neighbor's Name

300 Hanebrink Ave Johnstown OH 43031

Neighbor's Address

OH

43031

State

Zip Code
2.

Neighbor's Name

Neighbor's Address

State

Zip Code
3.

Neighbor's Name

Neighbor's Address

State

Zip Code
4.

Neighbor's Name

Neighbor's Address

State

Zip Code

The undersigned is applying for a Certificate of Appropriateness Permit for the following use: said permit is to be issued based on the information contained within this application. The applicant hereby certifies that all information and attachments to this application are true & correct and agrees to follow all applicable laws.

Applicant's Signature: x  Date: 6 / 25 / 24

OFFICE USE ONLY:

Date Received in Office: 7 / 2 / 2024 By: T. Wymer

Date of Planning and Zoning Commission Meeting: 7 / 23 / 24

Date Permit Approved or Denied by Planning Commission: / /

Conditions Necessary for Approval: _____

City Manager Signature: x _____



The Pavilion will be as close to this color as possible. I'll see if I can bring samples Tuesday evening.

CONCORD CROSSING EAST PAVILION

LICKING CO.

JOHNSTOWN, OH 43031

PAGE:

1/2

DRAWN BY: PAUL M.

SCALE: 1/8" = 1'-0"

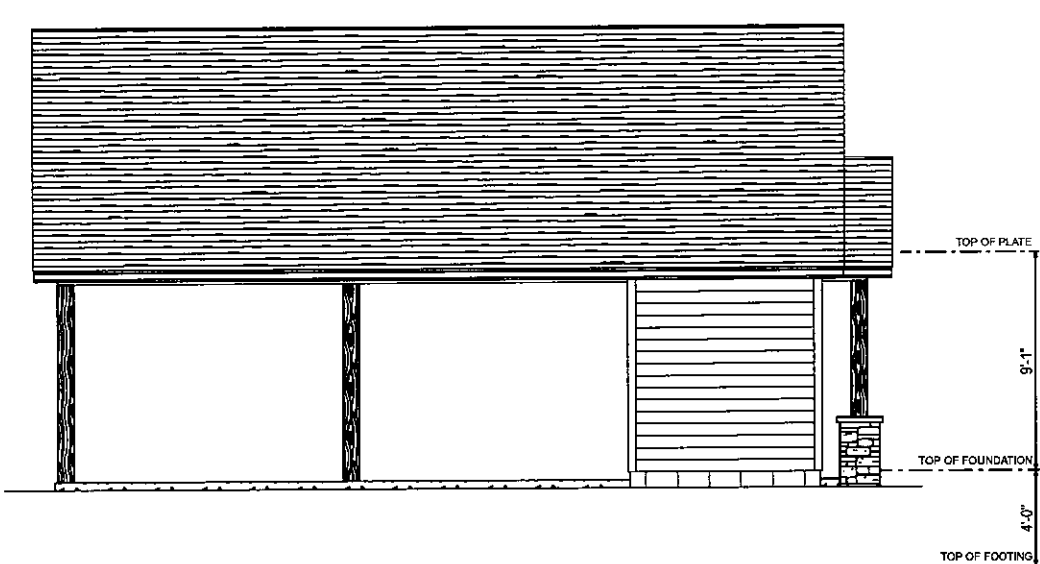
DATE: Wednesday, May 29, 2024

PLAN #:

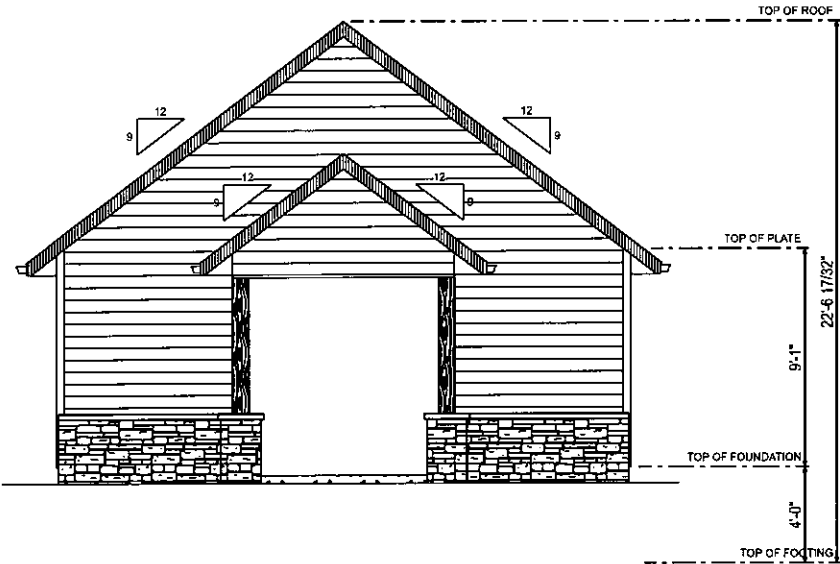
SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

SUPERVISOR:

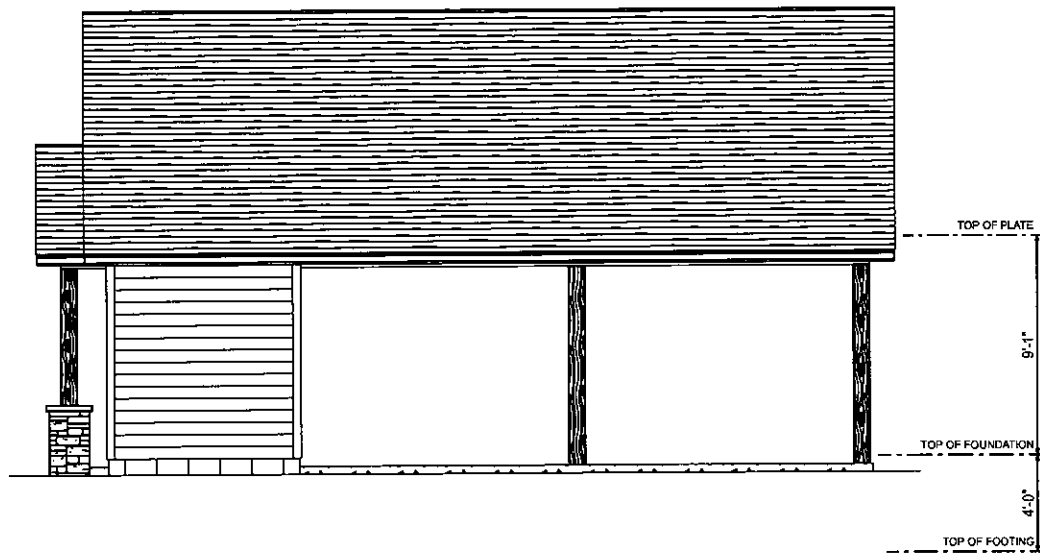
6678 ST RT 241
MILLERSBURG
OH 44654
330.674.9386



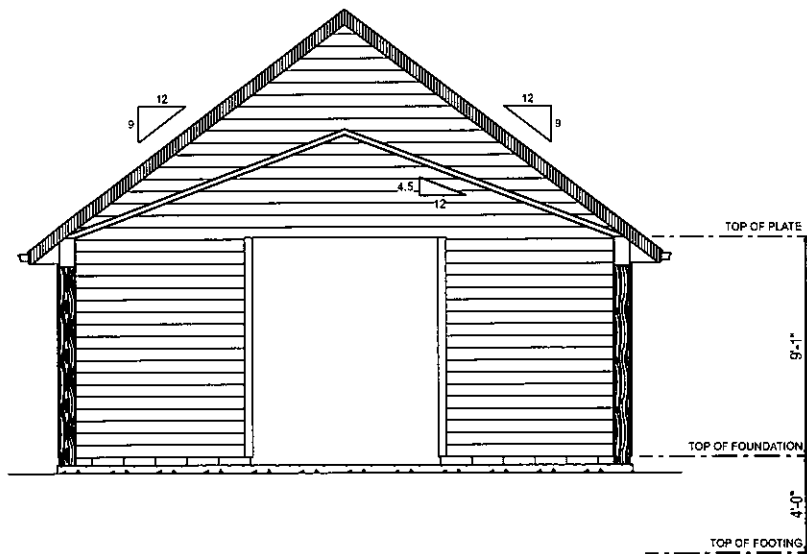
LEFT ELEVATION
SCALE: 1/8" = 1'-0"



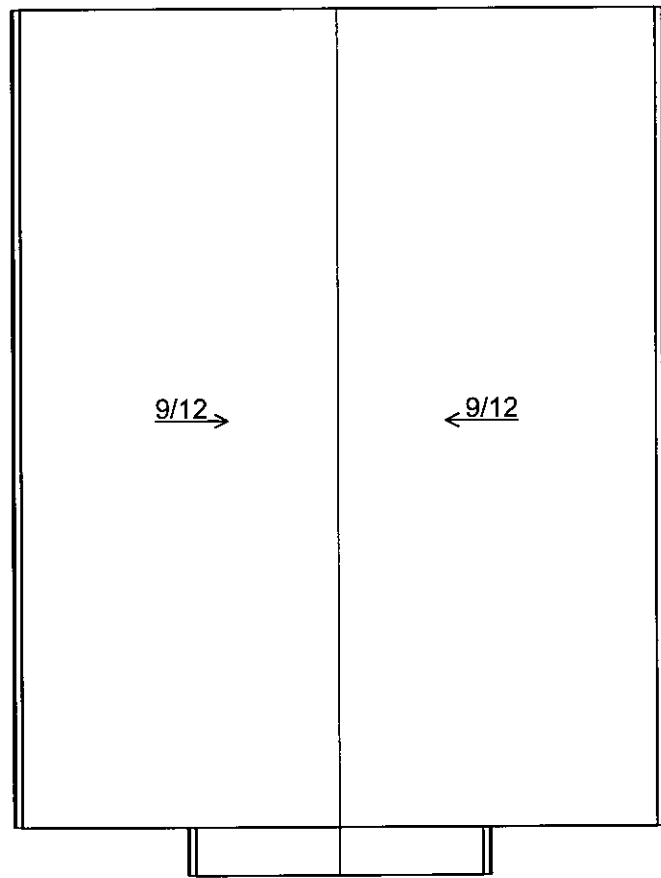
FRONT ELEVATION
SCALE: 1/8" = 1'-0"



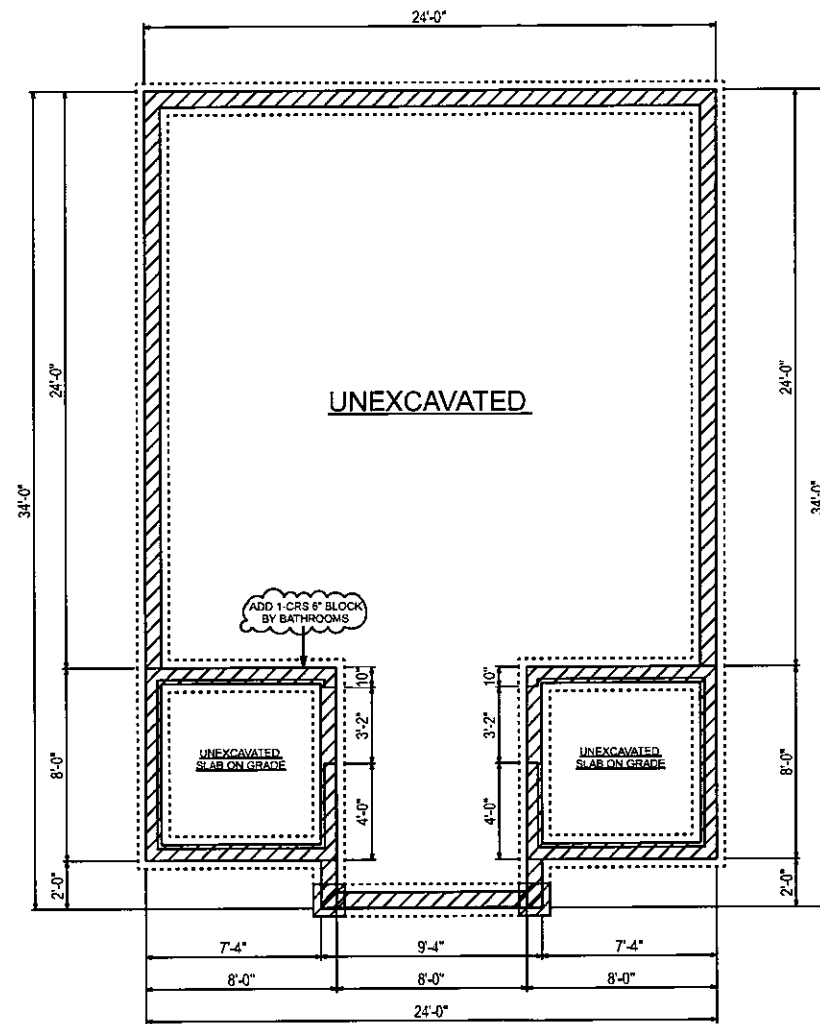
RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



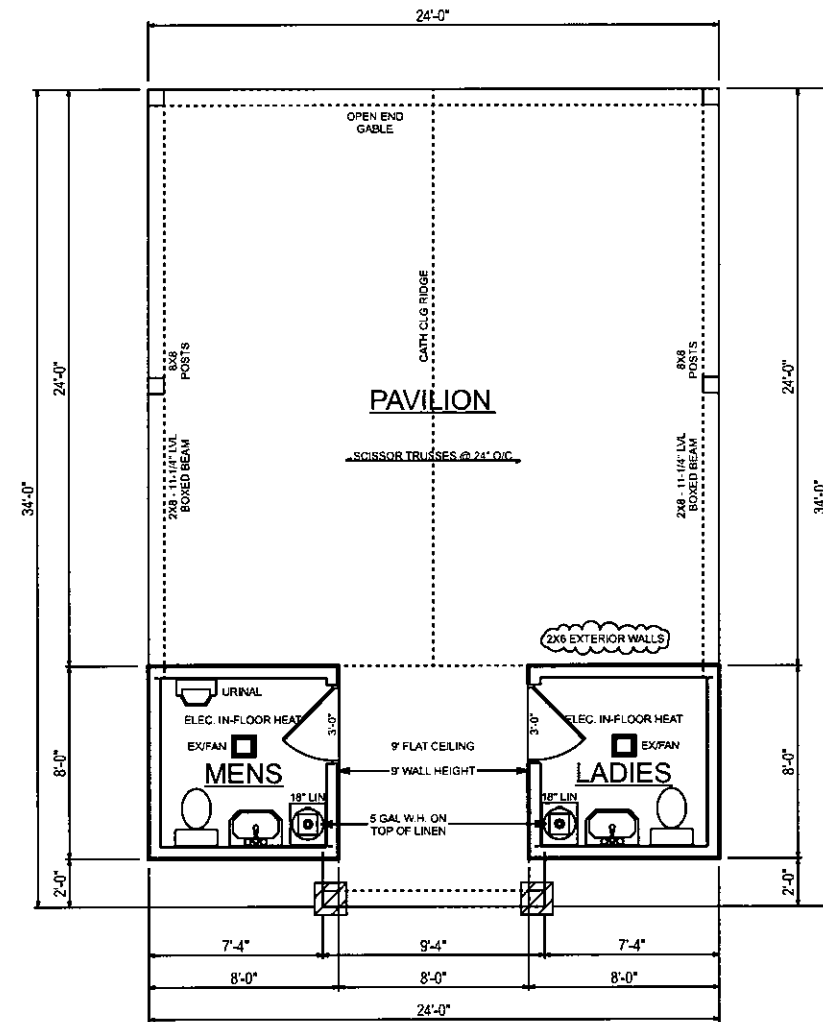
REAR ELEVATION
SCALE: 1/8" = 1'-0"



ROOF PLAN
SCALE: 1/8" = 1'-0"



FOUNDATION PLAN
SCALE: 1/8" = 1'-0"



FLOOR PLAN
SCALE: 1/8" = 1'-0"

CONCORD CROSSING EAST PAVILION

JOHNSTOWN, OH 43031

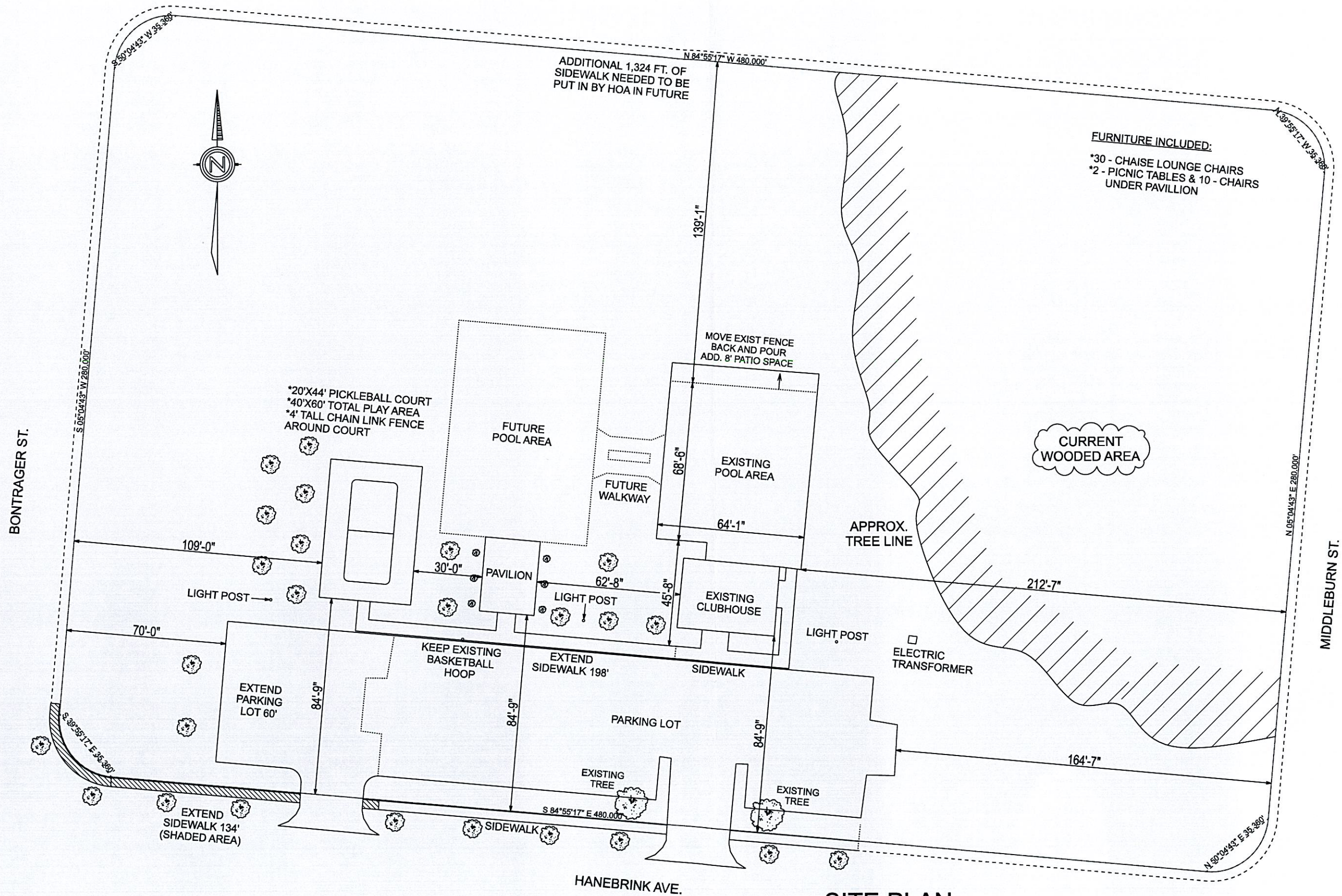
SUPERVISOR:

6678 ST RT 241
MILLERSBURG
OH 44654
330-674-9386



PAGE:
2/2

DRAWN BY: PAUL M.
SCALE: 1/8" = 1'-0"
DATE: Wednesday, May 29, 2024
PLAN #:



SITE PLAN
SCALE: 1" = 40'-0"

PAGE: 1/1	
DRAWN BY: PAUL M.	
SCALE: 1" = 40'-0"	
DATE: Wednesday, May 29, 2024	
PLAN #:	
CCE COMMON AREA IMPROVEMENTS	
JOHNSTOWN, OH 43031	
SUPERVISOR:	
6678 ST RT 241 MILLERSBURG OH 44654 330-674-9386	



JOHNSTOWN, OHIO
JUL 08 2024
PAID

CERTIFICATE OF APPROPRIATENESS: CHAPTER #1187

Application Number: 7-8-15 Date: 7 / 2 / 24

FEES:

Base Fee: \$ 300

Total Fee Amount: \$ 300.00 Paid: Check # 208572 Cash: \$ _____

(PLEASE PRINT)

1. Applicant: Jessica Tramte Phone: (330) 837-9567
2. Property Address: 82 meadow lane City: Johnston State: OH Zip: 43031
3. Applicant's E-mail: jessica.tramte@hilscher-clarke.com
4. Business Owner's Name: Adam Shiro Phone: () -
5. Contractor's Name: Hilscher-Clarke Electric Phone: (330) 837-9567
6. Principal Business Activity: _____
7. Existing Use of Property: Residential
8. Square Footage of Proposed Building or Business: _____ sq. ft.
9. Zoning District: _____ Number of Off-Street Parking Spaces: _____
10. Estimated Cost of Improvements: \$ 60,000.00

IN ADDITION, THE FOLLOWING ITEMS MUST ACCOMPANY THIS APPLICATION:

- PLEASE READ CITY ORDINANCE #1187 PRIOR TO SUBMITTING APPLICATION
- (Conditional) One (1) full set (8.5 x11) of to scale plans and dimensioned drawings showing the property, with all elevations and the location of existing and proposed buildings and alterations are required. Attach any requested, supplemental or necessary documentation. (Required only if asked for by the Zoning Inspector.)

Some of the requests below may not apply to your application.

- (1) A dimensioned site plan showing existing conditions including all structures, pavement, curb-cut locations, natural features such as tree masses and riparian corridors, and rights-of-way.
- (2) A dimensioned site plan showing the proposed site change including structures, pavement, revised curb-cut locations and landscaping.
- (3) Illustration of all existing building elevations to scale.
- (4) Illustrations of all proposed building elevations to scale.
- (5) Samples of proposed building materials.
- (6) Color samples for proposed roof, siding, etc.
- (7) Illustrations of all existing site signage including wall and ground.
- (8) Illustrations of proposed signage to scale.
- (9) A dimensioned site plan showing location of existing ground mounted signs.
- (10) A dimensioned site plan showing the proposed location of ground mounted signs.
- (11) Samples of proposed sign materials.
- (12) Color samples of proposed sign(s).
- (13) Proposed lighting plan for sign(s).
- (14) The applicant shall post one sign per public street frontage of the subject property within fifteen (15) feet of the curb indicating the subject, date, and time for a public hearing. The sign(s) shall be posted at least ten (10) days prior to the scheduled hearing. The sign(s) should be purchased at the Johnstown City Offices and will measure no less than two (2) feet by three (3) feet.

List of Materials that will be used on the project:

1. _____ 2. _____
3. _____ 4. _____
5. _____ 6. _____
7. _____ 8. _____

List of Contiguous Neighbors and Addresses:

- | | | | | |
|----|--------------------------|-----------------------------|----------------|-------------------|
| 1. | _____
Neighbor's Name | _____
Neighbor's Address | _____
State | _____
Zip Code |
| 2. | _____
Neighbor's Name | _____
Neighbor's Address | _____
State | _____
Zip Code |
| 3. | _____
Neighbor's Name | _____
Neighbor's Address | _____
State | _____
Zip Code |
| 4. | _____
Neighbor's Name | _____
Neighbor's Address | _____
State | _____
Zip Code |

*The undersigned is applying for a Certificate of Appropriateness Permit for the following use:
said permit is to be issued based on the information contained within this application. The*

applicant hereby certifies that all information and attachments to this application are true & correct and agrees to follow all applicable laws.

Applicant's Signature: x *Yessica Grante* Date: 7 / 2 / 24

OFFICE USE ONLY:

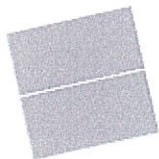
Date Received in Office: 7/8/2024 By: T. Wymer

Date of Planning and Zoning Commission Meeting: 7/23/24

Date Permit Approved or Denied by Planning Commission: ____/____/____

Conditions Necessary for Approval: _____

City Manager Signature: x _____



Summary

This design is locked an

SY

1

EL

1

M

EN

1



EQUIPM



EQUINOX SYSTEM
U Series 405
405W panels



MOUNTING
InvisiMount

EV ACCESS

3 PANELS

26

VIEW ESTIMATE

CITY OF JOHNSTOWN, LICKING COUNTY
Standard Receipt

Office Of CITY OF JOHNSTOWN 599 SOUTH MAIN STREET JOHNSTOWN, OH 43031	Received Of CHRISTOPHER COOPERRIDER	Receipt Receipt #: 805-2024 Batch #: 849-24 Post Date: 07/08/2024 Ticket #: Receipt: \$1,285.76
Purpose	REPAYMENT OF PAYROLL OVERPAY CHECK# 1225	

Fiscal Officer: David D Delande

Party Making Payment

Account Code	Account Description	Amount
1000-892-0000	Other - Miscellaneous Non-Operating	\$1,285.76

Enphase SPWR-A5 (IQ7HS) Microinverter

The high-powered smart grid-ready
Enphase SPWR-A5 Microinverter™ with
integrated MC4 connectors dramatically simplify
the installation process while achieving the highest
system efficiency.

The IQ Series Microinverters extend the reliability
standards set forth by previous generations and
undergo over a million hours of power-on testing,
enabling Enphase to provide an industry-leading
warranty of up to 25 years.



Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014 & 2017)

Efficient and Reliable

- Optimized for high powered 66-cell* modules
- Highest CEC efficiency of 97.0%
- More than a million hours of testing
- Class II double-insulated enclosure
- UL listed

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)

* The IQ7HS is required to support 66-cell modules.



To learn more about Enphase offerings, visit enphase.com



Enphase IQ7HS Microinverter

INPUT DATA (DC)		IQ7HS-66-M-US
Commonly used module pairings ¹	320 W - 460 W +	
Module compatibility	66-cell PV modules	
Maximum input DC voltage	59 V	
Peak power tracking voltage	38 V - 43 V	
Operating range	20 V - 59 V	
Min/Max start voltage	30 V / 59 V	
Max DC short circuit current (module Isc)	15 A	
Overvoltage class DC port	II	
DC port backfeed current	0 A	
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit	
OUTPUT DATA (AC)	@240 VAC	@208 VAC
Peak output power	384 VA	369 VA
Maximum continuous output power	384 VA	369 VA
Nominal (L-L) voltage/range ²	240 V / 211-264 V	208 V / 183-229 V
Maximum continuous output current	1.60 A (240V)	1.77 A (208V)
Nominal frequency	60 Hz	60 Hz
Extended frequency range	47 to 68 Hz	47 to 68 Hz
AC short circuit fault current over 3 cycles	4.82 A	4.82 A
Maximum units per 20 A (L-L) branch circuit ³	10	9
Overvoltage class AC port	III	III
AC port backfeed current	18 mA	18 mA
Power factor setting	1.0	1.0
Power factor (adjustable)	0.85 leading ...0.85 lagging	0.85 leading ...0.85 lagging
EFFICIENCY	@240 V	@208 V
CEC weighted efficiency	97.0 %	96.5 %
MECHANICAL DATA		
Ambient temperature range	-40°C to +60°C	
Relative humidity range	4% to 100% (condensing)	
Connector type	Staubli made MC4	
Dimensions (WxHxD)	212 mm x 175 mm x 30.2 mm (without bracket)	
Weight	1.08 kg (2.38 lbs)	
Cooling	Natural convection - No fans	
Approved for wet locations	Yes	
Pollution degree	PD3	
Enclosure	Class II, corrosion resistant polymeric enclosure	
Environmental category / UV exposure rating	NEMA type 6 / outdoor	
Altitude	2000m	
FEATURES		
Communication	Power Line Communication (PLC)	
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect means required by NEC 690 and C22.1-2018 Rule 64-220.	
Compliance	CA Rule 21 (UL 1741-SA), HECO v1.1 UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC-2014 and NEC-2017 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.	

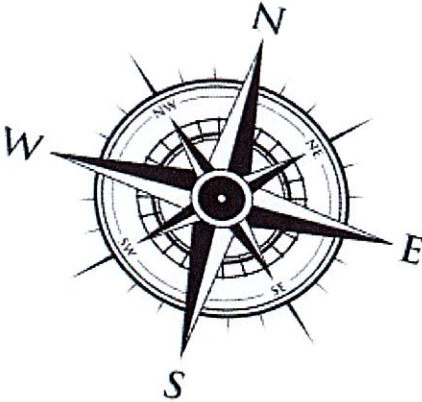
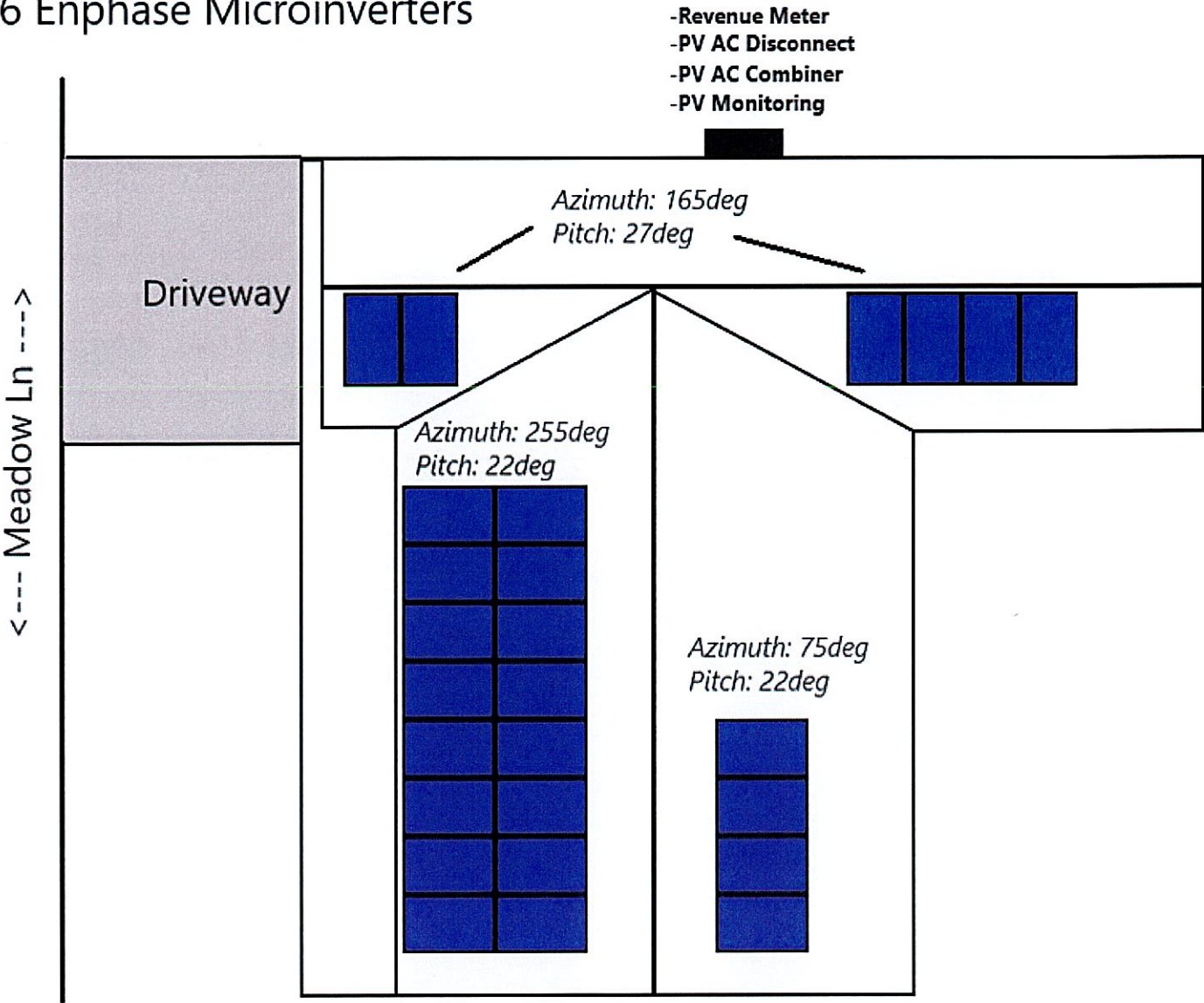
1. No enforced DC/AC ratio. See the compatibility calculator at <https://enphase.com/en-us/support/module-compatibility>.

2. Nominal voltage range can be extended beyond nominal if required by the utility.

3. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

To learn more about Enphase offerings, visit enphase.com

Aaron Shira
82 Meadow Ln
Johnstown, OH 43031
10.53kw PV System
26 405W PV Modules
26 Enphase Microinverters



PV Installation
Professional
Jonathan D'Antonio
PV-102415-012655

Aaron Shira

82 Meadow Ln

Johnstown, OH 43031

10.53kw PV System

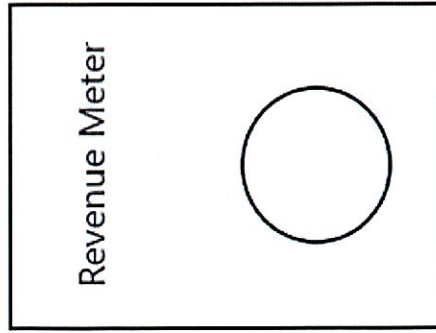
26 Waaree WMSD-405

PV Modules

26 Enphase IQ7HS

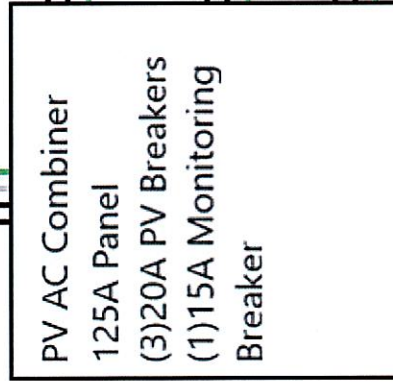
Microinverters

Sunpower
Monitoring



#10 THWN in
3/4" LNFC

#10 THWN w/#8 Ground in 3/4" EMT

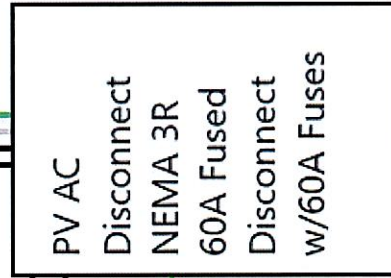


Circuit 1: 10 Waaree WMSD-405 (405w) PV Modules
w/Enphase IQ7HS Microinverters

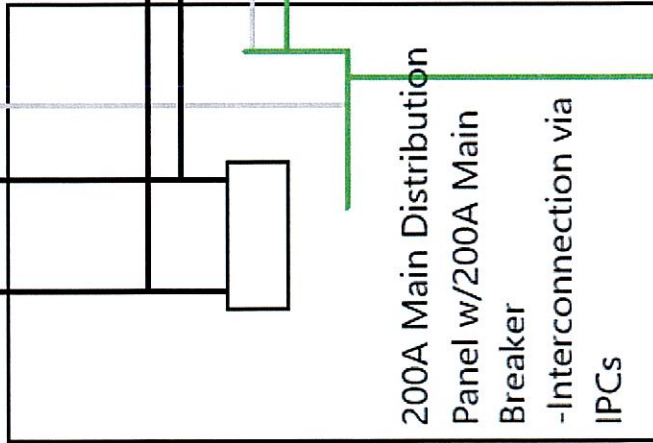
Circuit 2: 8 Waaree WMSD-405 (405w) PV Modules
w/Enphase IQ7HS Microinverters

Circuit 3: 8 Waaree WMSD-405 (405w) PV Modules
w/Enphase IQ7HS Microinverters

#6 THWN in 3/4" EMT



#6 THWN in 3/4" EMT



240 VAC

Operating Current:

Circuit 1 - 10 IQ7HS @ 1.6A = 16A

Circuit 2 - 8 IQ7HS @ 1.6A = 12.8A

Circuit 3 - 8 IQ7HS @ 1.6A = 12.8A

Total- 41.6A

Full-Load Amperage:

41.6A x 1.25 = 52A



PV Installation
Professional

Jonathan D'Antonio
PV-102415-012655



SunPower® InvisiMount™ | Residential Mounting System

Simple and Fast Installation

- Integrated module-to-rail grounding
- Pre-assembled mid and end clamps
- Levitating mid clamp for easy placement
- Mid clamp width facilitates even module spacing
- Simple, pre-drilled rail splice
- UL 2703 Listed integrated grounding

Flexible Design

- Addresses nearly all sloped residential roofs
- Design in landscape and portrait
- Rails enable easy obstacle management

Customer-Preferred Aesthetics

- #1 module and #1 mounting aesthetics
- Best-in-class system aesthetics
- Premium, low-profile design
- Black anodized components
- Hidden mid clamps and end clamps hardware, and capped, flush rails

Part of Superior System

- Built for use with SunPower DC and AC modules
- Best-in-class system reliability and aesthetics
- Combine with SunPower modules and monitoring app



Elegant Simplicity

SunPower® InvisiMount™ is a SunPower-designed rail-based mounting system. The InvisiMount system addresses residential sloped roofs and combines faster installation time, design flexibility, and superior aesthetics. The InvisiMount product was specifically envisioned and engineered to pair with SunPower modules. The resulting system-level approach will amplify the aesthetic and installation benefits for both homeowners and installers.

sunpower.com

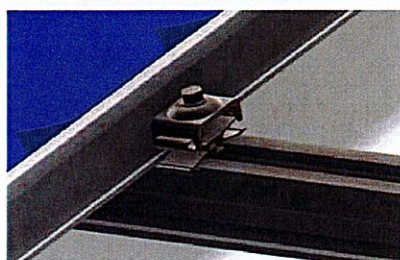


SUNPOWER®

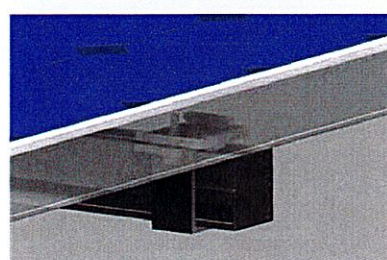
SunPower® InvisiMount™ | Residential Mounting System

InvisiMount Component Images

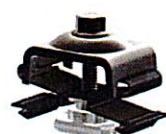
Module* / Mid Clamp and Rail



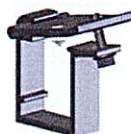
Module* / End Clamp and Rail



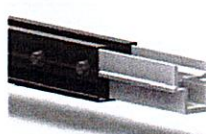
Mid Clamp



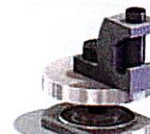
End Clamp



Rail & Rail Splice



Ground Lug Assembly



End Cap



InvisiMount Component Details

Component	Material	Weight
Mid Clamp	Black oxide stainless steel AISI 304	63 g (2.2 oz)
End Clamp	Black anodized aluminum alloy 6063-T6	110 g (3.88 oz)
Rail	Black anodized aluminum alloy 6005-T6	830 g/m (9 oz/ft)
Rail Splice	Aluminum alloy 6005-T5	830 g/m (9 oz/ft)
Ground Lug Assembly	304 stainless (A2-70 bolt; tin-plated copper lug)	106.5 g/m (3.75 oz)
End Cap	Black acetal (POM) copolymer	10.4 g (0.37 oz)

Roof Attachment Hardware Supported by InvisiMount System Design Tool

Application	
	• Composition Shingle Rafter Attachment • Composition Shingle Roof Decking Attachment • Curved and Flat Tile Roof Attachment • Universal Interface for Other Roof Attachments

InvisiMount Operating Conditions

Temperature	-40° C to 90° C (-40° F to 194° F)
Max. Load	2400 Pa uplift 5400 Pa downforce

InvisiMount Warranties And Certifications

Warranties	25-year product warranty 5-year finish warranty
Certifications	UL 2703 Listed Class A fire rating when distance between roof surface and bottom of SunPower module frame is ≤ 3.5"

Roof Attachment Hardware Warranties

Refer to roof attachment hardware manufacturer's documentation

*Module frame that is compatible with the InvisiMount system required for hardware interoperability

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sunpower.com
Document #509506 Rev B

SUNPOWER®

powered by

Q.ANTUM DUO Z

Q.PEAK DUO BLK ML-G10+ 385-405

ENDURING HIGH
PERFORMANCE



Quality
Controlled PV

www.tuv.com
ID 1111232615



BREAKING THE 20% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.9%.



THE MOST THOROUGH TESTING PROGRAMME IN THE INDUSTRY

Q CELLS is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



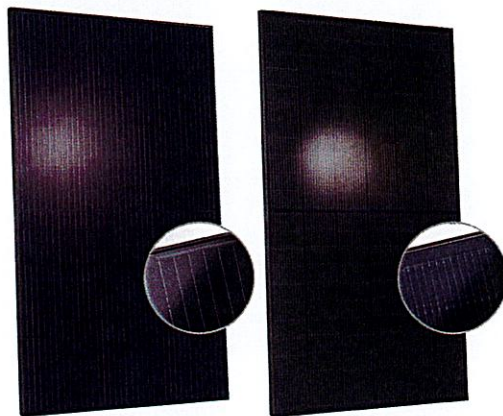
EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty².



6 BUSBAR
CELL TECHNOLOGY

12 BUSBAR
CELL TECHNOLOGY

THE IDEAL SOLUTION FOR:



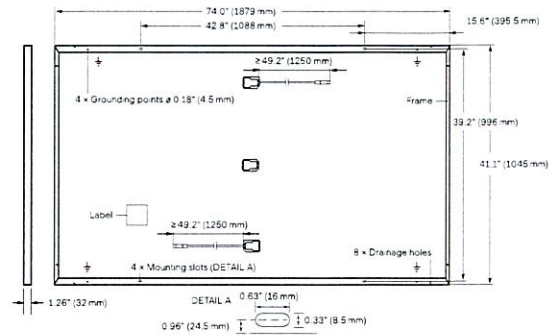
Rooftop arrays on
residential buildings

¹ APT test conditions according to IEC/TS 62804-1:2015, method A (-1500 V, 96h)

² See data sheet on rear for further information.

MECHANICAL SPECIFICATION

Format	74.0 in × 41.1 in × 1.26 in (including frame) (1879 mm × 1045 mm × 32 mm)
Weight	48.5 lbs (22.0 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 22 monocrystalline Q ANTUM solar half cells
Junction Box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 49.2 in (1250 mm), (-) ≥ 49.2 in (1250 mm)
Connector	Stäubli MC4; IP68



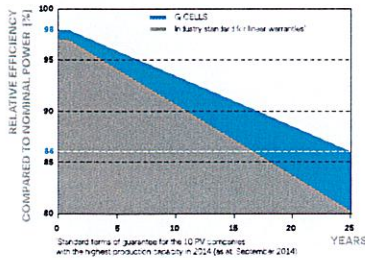
ELECTRICAL CHARACTERISTICS

POWER CLASS		385	390	395	400	405
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W / -0 W)						
Minimum	Power at MPP ¹	P _{MPP} [W]	385	390	395	400
	Short Circuit Current ¹	I _{SC} [A]	11.04	11.07	11.10	11.14
	Open Circuit Voltage ¹	V _{OC} [V]	45.19	45.23	45.27	45.30
	Current at MPP	I _{MPP} [A]	10.59	10.65	10.71	10.77
	Voltage at MPP	V _{MPP} [V]	36.36	36.62	36.88	37.13
	Efficiency ¹	η [%]	≥ 19.6	≥ 19.9	≥ 20.1	≥ 20.4
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ¹						
Minimum	Power at MPP	P _{MPP} [W]	288.8	292.6	296.3	300.1
	Short Circuit Current	I _{SC} [A]	8.90	8.92	8.95	8.97
	Open Circuit Voltage	V _{OC} [V]	42.62	42.65	42.69	42.72
	Current at MPP	I _{MPP} [A]	8.35	8.41	8.46	8.51
	Voltage at MPP	V _{MPP} [V]	34.59	34.81	35.03	35.25

¹Measurement tolerances P_{MPP} ± 3%; I_{SC}; V_{OC} ± 5% at STC: 1000 W/m², 25 ± 2°C, AM 1.5 according to IEC 60904-3 • 800 W/m², NMOT, spectrum AM 1.5

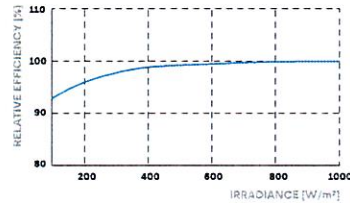
Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE



At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α	[% / K]	+0.04	Temperature Coefficient of V _{OC}	β	[% / K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[% / K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V _{sys}	[V]	1000 (IEC) / 1000 (UL)	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 61730	TYPE 2
Max. Design Load, Push / Pull ¹	[lbs/ft ²]	75 (3600 Pa) / 55 (2660 Pa)	Permitted Module Temperature on Continuous Duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Max. Test Load, Push / Pull ²	[lbs/ft ²]	113 (5400 Pa) / 84 (4000 Pa)		

¹See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 61730, CE-compliant,
Quality Controlled PV - TÜV Rheinland,
IEC 61215 2016, IEC 61730 2016,
U.S. Patent No. 9,893,215 (solar cells).



PACKAGING INFORMATION

Horizontal packaging	76.4 in 1940 mm	43.3 in 1100 mm	48.0 in 1220 mm	1656 lbs 751 kg	24 pallets	24 pallets	32 modules
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Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.

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Specifications subject to technical changes © Q CELLS Q-PEAK DUO R K ML-G10+ 385-405 DA, 2022-02 Rev01_NA

ARKA SERIES

WSMDi-395 to WSMDi-415

WAAREE®

One with the Sun



Highest reliability & enhanced crack tolerant 9BB module



Better performance under all climatic conditions



Split junction box



Reduced power losses up to 1/4 times



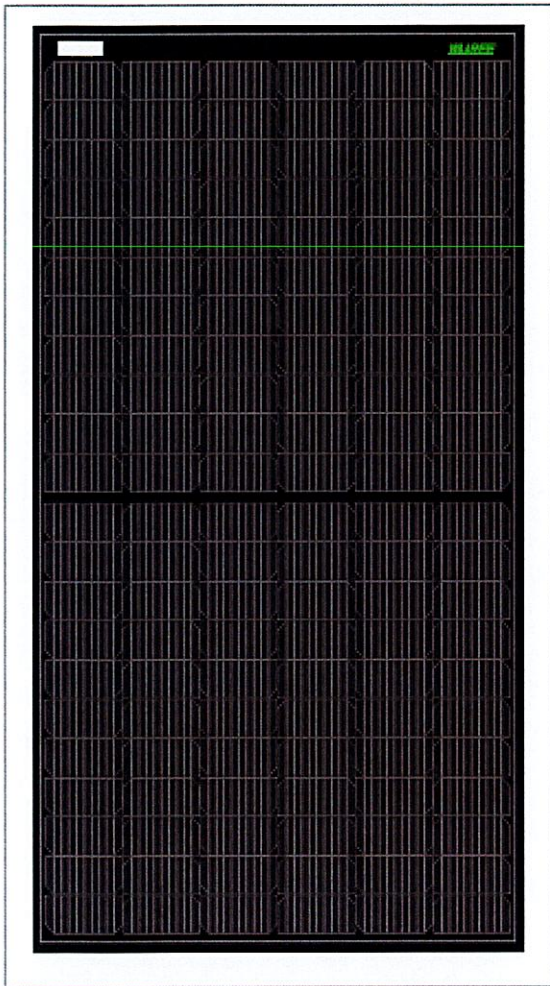
PID resistant with long term reliability



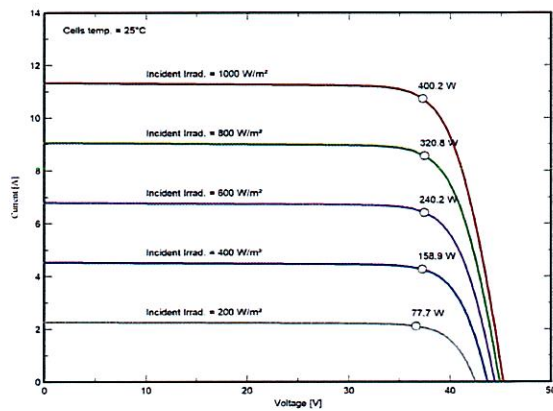
Sustain heavy wind & snow loads (2400 pa & 5400 pa)



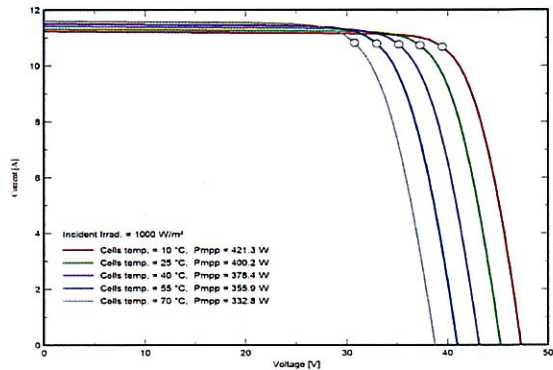
M6 Mono PERC cells



I-V VARIATION WITH IRRADIANCE



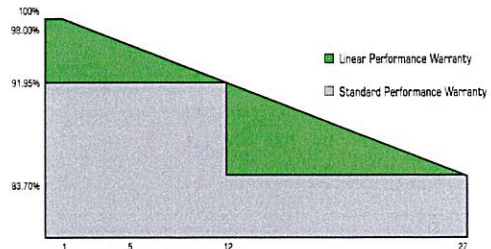
I-V VARIATION WITH TEMPERATURE



The Graphs are for reference purpose only. Please consult Waaree technical team for further clarifications.

INTERNATIONAL & NATIONAL CERTIFICATIONS ^

IEC 61215 | IEC 61730 | UL61730
IEC TS 62804-1



ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018
Independent assessment of factories by BLACK & VEATCH

www.waaree.com

ARKA SERIES

WSMDi-395 to WSMDi-415

WAAREE[®]

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ELECTRICAL CHARACTERISTICS

Models	Pmax (W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
WSMD-395	395	296.8	37.77	34.70	10.47	8.55	11.24	9.08	45.00	42.10	19.78
WSMD-400	400	300.6	38.00	34.90	10.54	8.62	11.32	9.14	45.22	42.30	20.03
WSMD-405	405	304.4	38.22	35.10	10.61	8.68	11.40	9.21	45.44	42.50	20.28
WSMD-410	410	308.2	38.44	35.30	10.68	8.74	11.48	9.27	45.66	42.70	20.53
WSMD-415	415	312.1	38.66	35.40	10.75	8.81	11.57	9.34	45.88	42.90	20.78

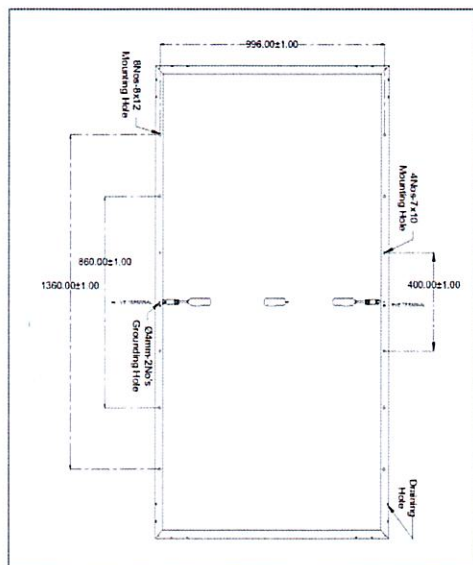
*Standard Test Conditions (STC) - 1000 W/m² irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m² irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty ± 3%.

System Voltage	1500 V	Series Fuse Rating	22 A
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MECHANICAL CHARACTERISTICS

Length x Width x Thickness (L x W x T)	1924 mm (L) x 1038 mm (W) x 35 mm (T)
Weight	22 kgs
Solar Cells per Module (Units) / Arrangement	132 cells / (11x6 11x6)
Solar Cell Type & Size	Mono PERC, 83 x 166 mm
Front Glass	3.2 mm Low Iron and Tempered glass with ARC coating
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree/ Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree / Type)	IP68 rated / Staubli MC4 Connector
Cable cross - section & Length	4 mm ² & 1200mm
Frame	Anodized Aluminium Alloy, Anodization thickness ≥ 15 micron
Fire rating	Type 2

DESIGN SPECIFICATIONS



THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.055
Temperature coefficient of Voltage (Voc), β (%/°C)	-0.285
Temperature coefficient of Power (Pm), γ (%/°C)	-0.365
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 5 GW. In addition, it is committed to provide top notch EPC services, project development, rooftop solutions, solar water pumps and also in an Independent Power Producer. Waaree has its presence in over 325+ locations nationally and 68 countries globally.

*If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Waaree sales and technical representatives.

12 Years Product Warranty • 27 Years Power Output Warranty

- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- Refer installation Manual instructions & Waaree warranty statement for terms & conditions.
- Waaree Reserves the right to change the specifications without prior notice.

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WEL/E&PD/395-415/132/MP/HC/CM2/01/27.07.2022

Aaron Shira
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