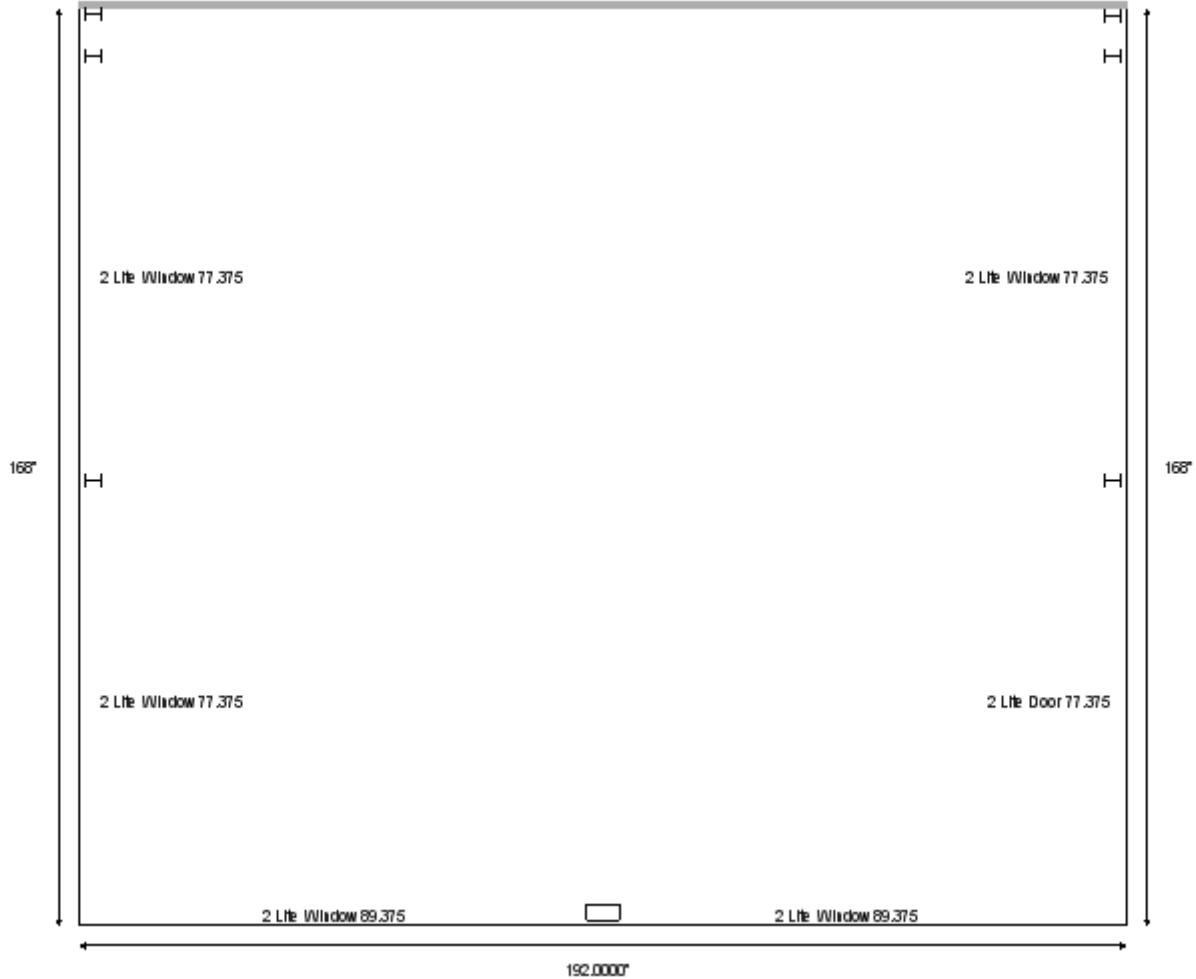


Hollins - 2543  
174 Walker Grove Ln.  
Lillington, NC 27546



ORDER NO: 3926  
ITEM: 1  
DATE: 11/29/22

## Floor Plan



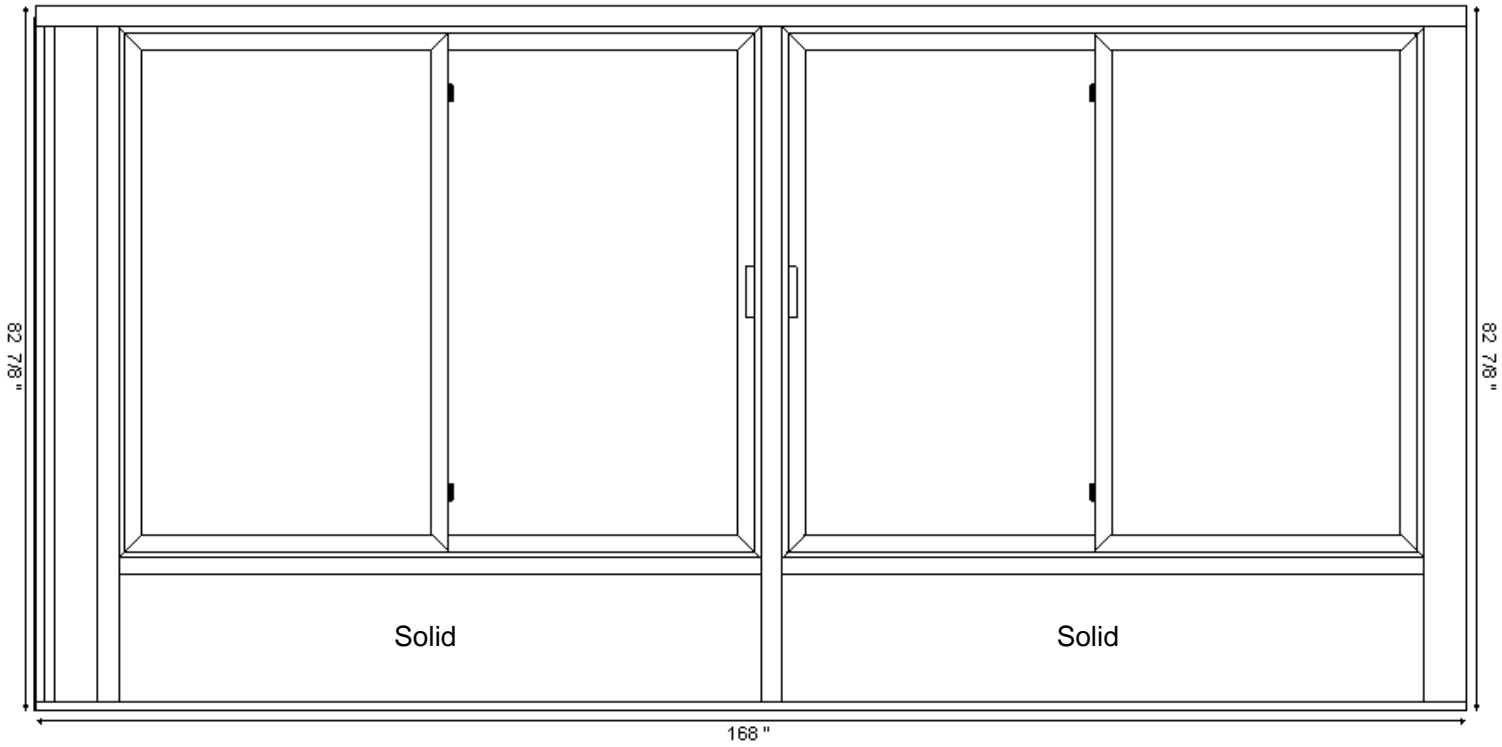
### Dimensions

Attachment Height: 118 "  
B Wall Height: 82.875 "  
B Wall Width: 192 "  
A Wall Width: 168 "  
C Wall Width: 168 "  
Roof Overhang: 10 "

Hollins - 2543  
174 Walker Grove Ln.  
Lillington, NC 27546

ORDER NO: 3926  
ITEM: 1  
DATE: 11/29/22

## A Wall



### Dimensions

Attachment Height: 118 "  
B Wall Height: 82.875 "  
A Wall Width: 168 "  
Roof Overhang: 10 "

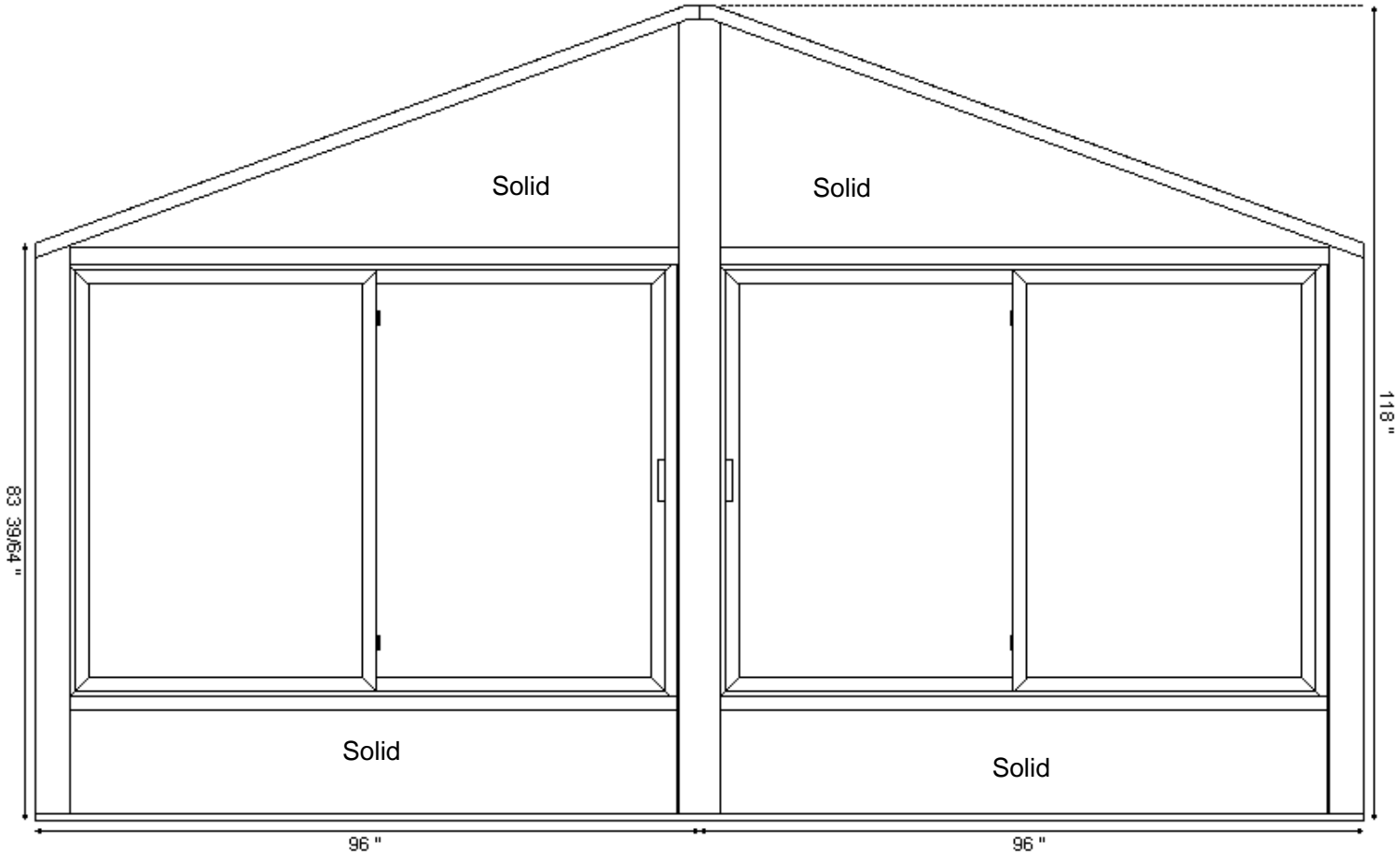
### Layout

1" (Fascia) + 0.5" (THERMAL H) + 6.75" (Foam) + 0.5" (THERMAL H) + 77.375" (2 Lite Window) + 0.5" (THERMAL H) + 77.375" (2 Lite Window) + 4" (Corner Post)

Hollins - 2543  
174 Walker Grove Ln.  
Lillington, NC 27546

ORDER NO: 3926  
ITEM: 1  
DATE: 11/29/22

## B Wall



### Dimensions

Attachment Height: 118 "  
B Wall Height: 82.875 "  
B Wall Width: 192 "  
Roof Overhang: 10 "

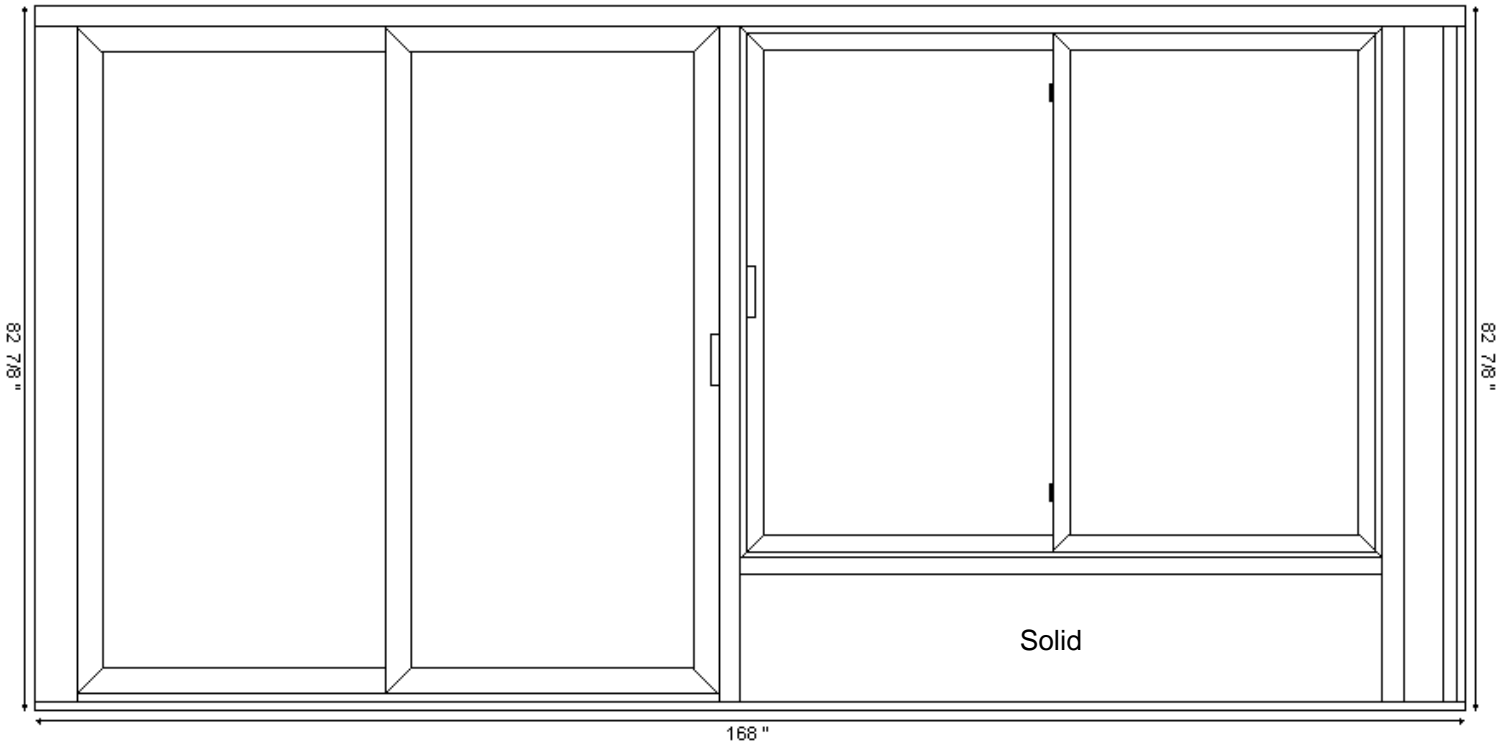
### Layout

4" (Corner Post) + 89.375" (2 Lite Window) + 4" (Gable Post) + 0.625" (Remainder - No Fill) +  
89.375" (2 Lite Window) + 4" (Corner Post) + 0.625" (Remainder - No Fill)

Hollins - 2543  
174 Walker Grove Ln.  
Lillington, NC 27546

ORDER NO: 3926  
ITEM: 1  
DATE: 11/29/22

## C Wall



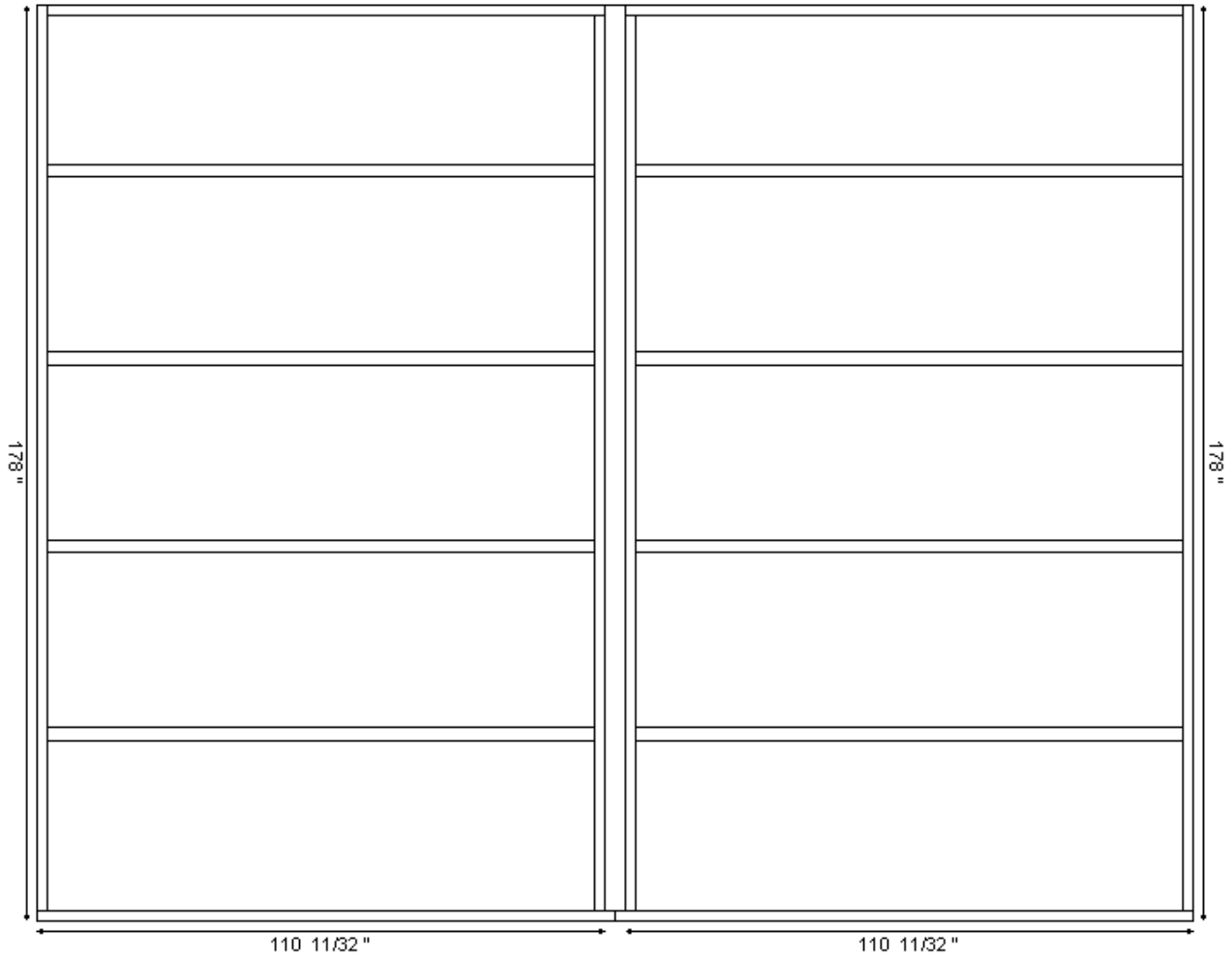
### Dimensions

Attachment Height: 118 "  
B Wall Height: 82.875 "  
C Wall Width: 168 "  
Roof Overhang: 10 "

### Layout

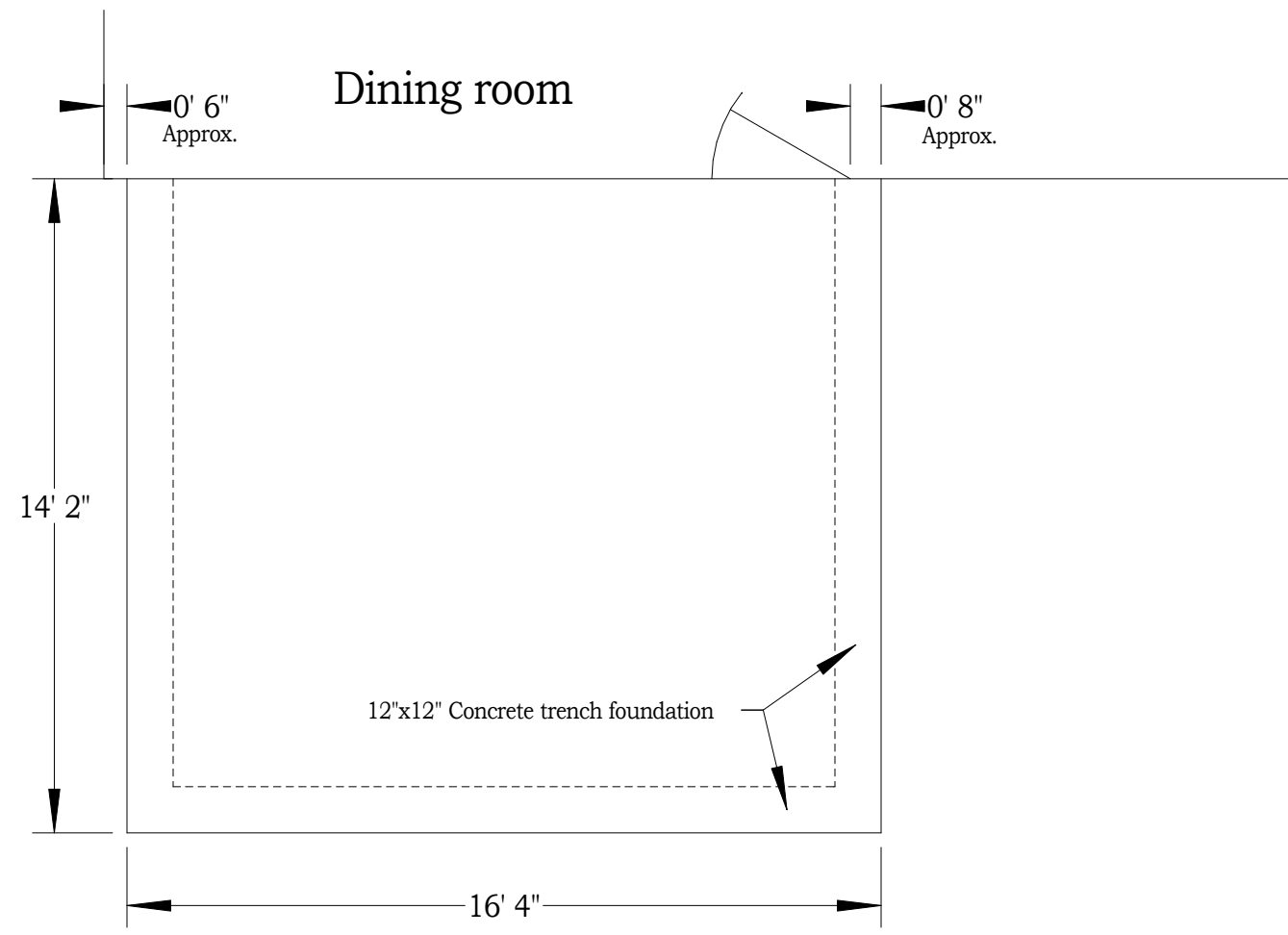
4" (Corner Post) + 77.375" (2 Lite Door) + 0.5" (THERMAL H) + 77.375" (2 Lite Window) + 0.5" (THERMAL H) + 6.75" (Foam) + 0.5" (THERMAL H) + 1" (Fascia)

# Roof

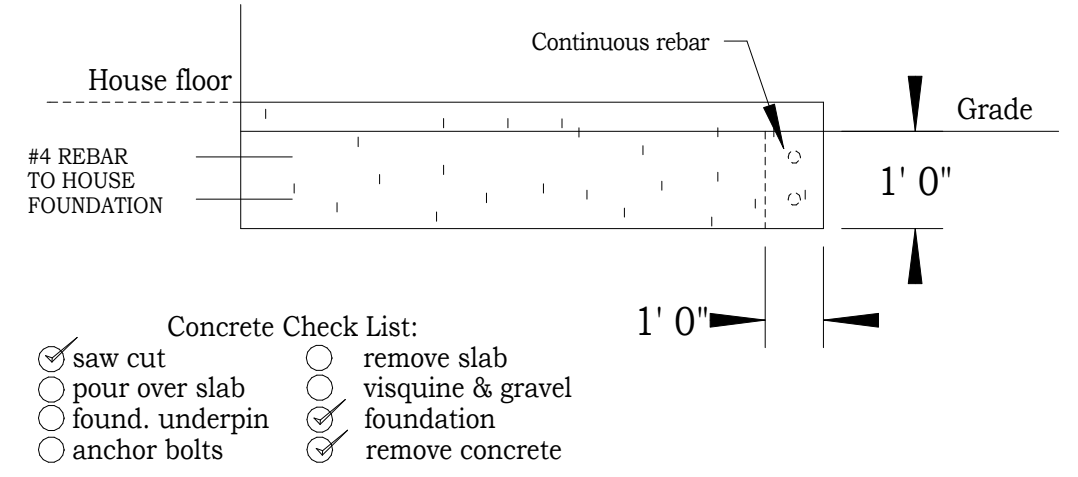


## Dimensions

Attachment Height: 118 "  
B Wall Height: 82.875 "  
B Wall Width: 192 "  
A Wall Width: 168 "  
C Wall Width: 168 "  
Roof Overhang: 10 "

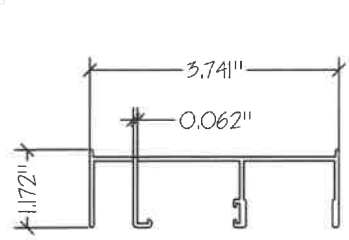


Concrete outside of footprint of room to remain

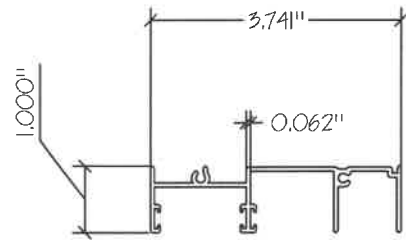


Concrete to be poured larger than sunroom to allow 3.25" MIN from outer bolt to edge of concrete

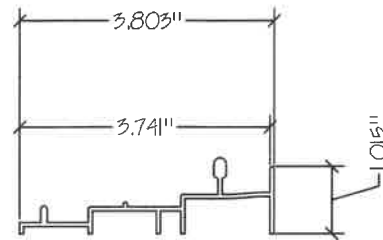
<u>CODES</u>	CHAMPION Modular aluminum construction. Seasonal, unheated, non-habitable space. Framing to be white aluminum. Exterior panel to be white. Interior panel to be white.	CHAMPION PATIO ROOMS 4018 Patriot Dr. Suite 120 Durham, NC 27703 919-460-6632	RESIDENCE Maureen Hollins 174 Walker Grove Ln. Lillington, NC 27546	<u>SCALE : 1/4" = 1'</u>	<u>NOTES</u>
2018 N.C. Residential Code		<u>PATIO ROOM MANAGER</u> JOSH DELPIERRE	<u>CUSTOMER ID NO.</u> 7000002543	<u>DATE</u> 01/10/22	No egress issues per section R-310 of the 2018 NC Residential Code
				<u>SHEET NO.</u> 1 of 1	



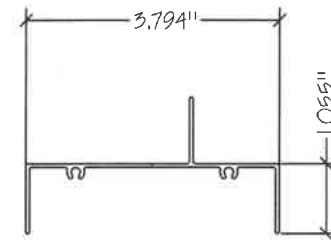
① WINDOW/DOOR FRAME HEAD



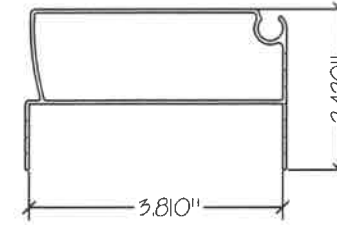
② WINDOW/DOOR FRAME JAMB



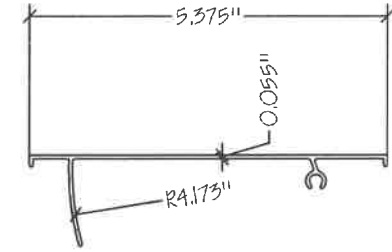
③ WINDOW/DOOR FRAME SILL



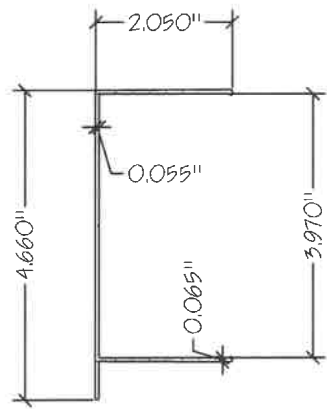
④ TRANSOM FRAME



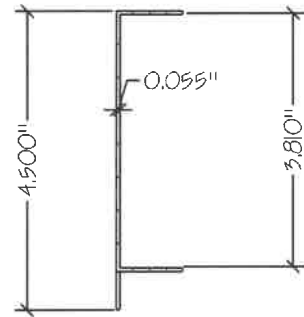
⑤ HEADER BASE



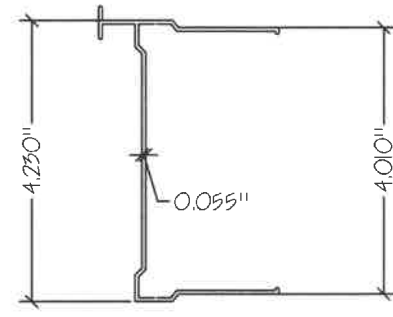
⑥ HEADER ARM



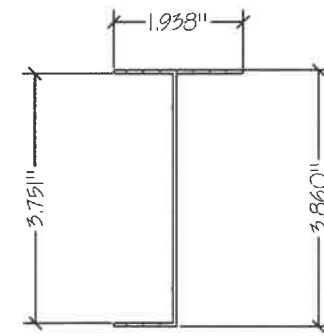
⑦ 4" EXPANDER



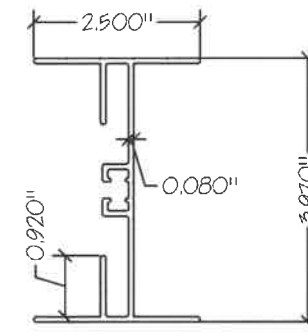
⑧ 4" F-CHANNEL



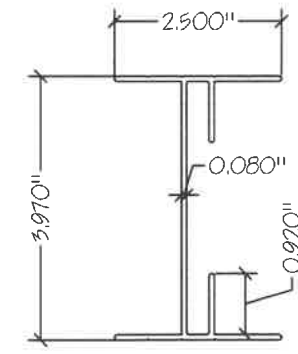
⑨ 4" HANGER BASE



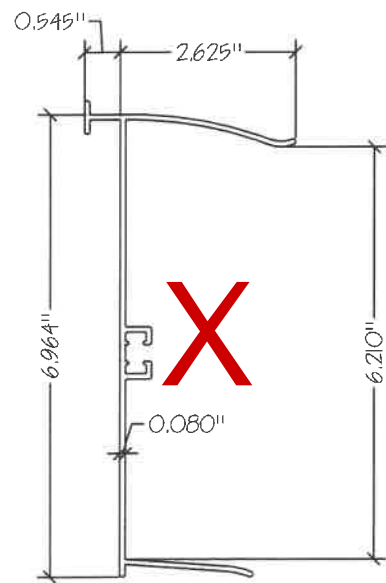
⑩ 4" SILL EXTRUSION



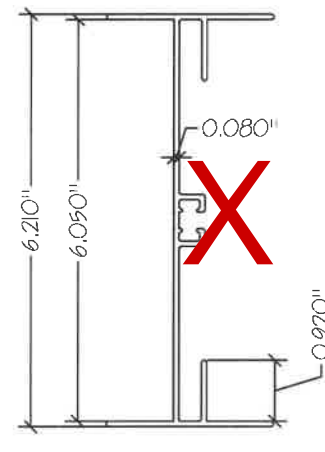
⑪ 4" I-SECTION THERM



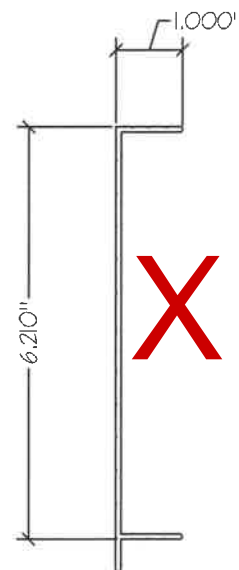
⑫ 4" NON-THERM I-SECTION



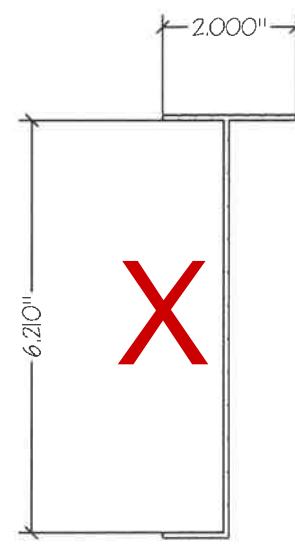
⑬ 6" HANGER BASE



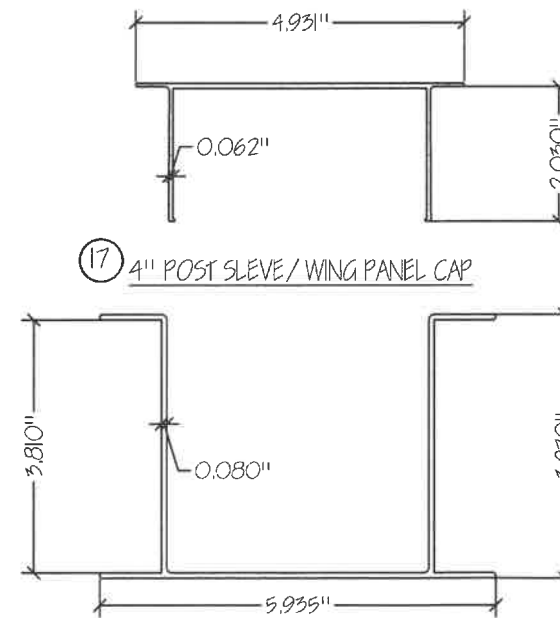
⑭ 6" I-BEAM



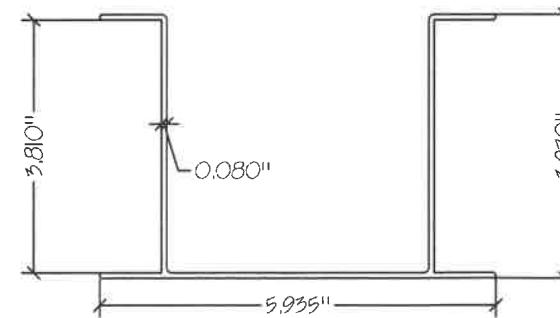
⑮ 6" F-CHANNEL



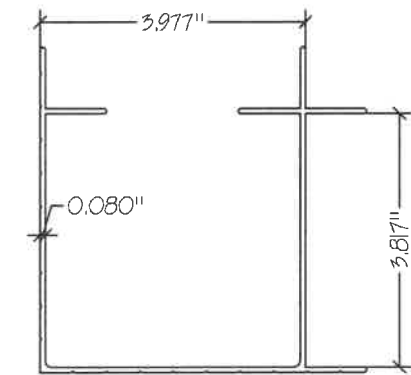
⑯ 6" SILL



⑰ 4" POST SLEVE/WING PANEL CAP



⑱ 4" POST SLEVE



⑳ CORNER POST

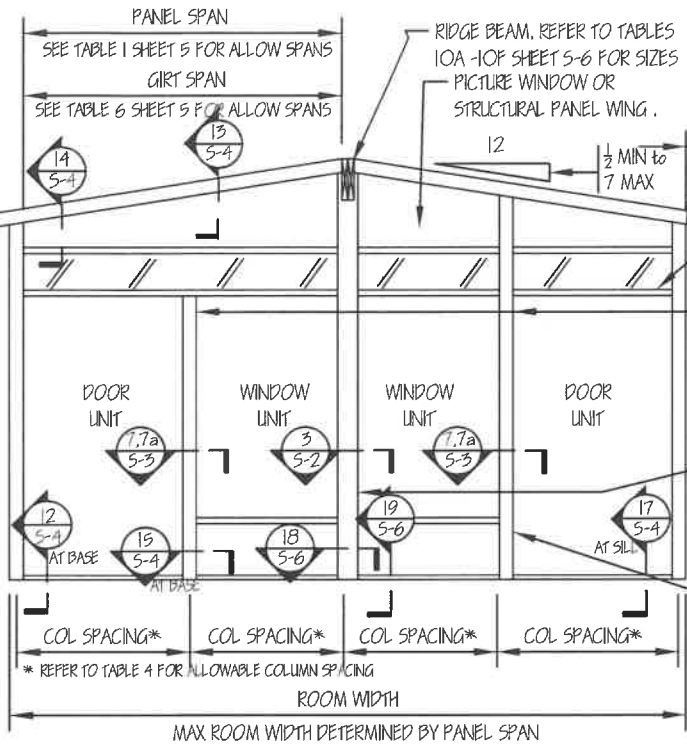
**CHAMPION ENCLOSURE SUPPLIERS**  
 12111 CHAMPION WAY, CINCINNATI, OH 45241  
 PH: (513) 782-3900 FAX: (513) 782-3903

**CHAMPION WINDOWS AND PATIO ROOMS**  
 4" Wall System with Gable Style Roof  
**PARTS AND COMPONENTS**

DATE: 2/13/19
SCALE: NTS
Drawn by: MJG
REV:      DATE:
SHEET: 1 OF 6

**NORTH CAROLINA PROFESSIONAL SEAL**  
 026759  
 ENGINEER  
 MARTIN J. SESS  
 4/5/2022

NOTE: ALTERNATE COMBINATION OF DOORS, WINDOWS, TRANSOMS AND KNEE WALLS ARE PERMITTED PROVIDED THE SPECIFIED HEIGHT AND SPACING LIMITATIONS ARE ADHERED TO.



CORNER COLUMN PER 20, DESIGNED FOR COMBINATION OF MAXIMUM POSSIBLE AXIAL LOAD (DETERMINED BY HEADER CAPACITY) AND WIND ZONE 4 (PER TABLE A SHEET 5)

LOAD BEARING HEADER REFER TO TABLE 3 FOR ALLOWABLE SPANS

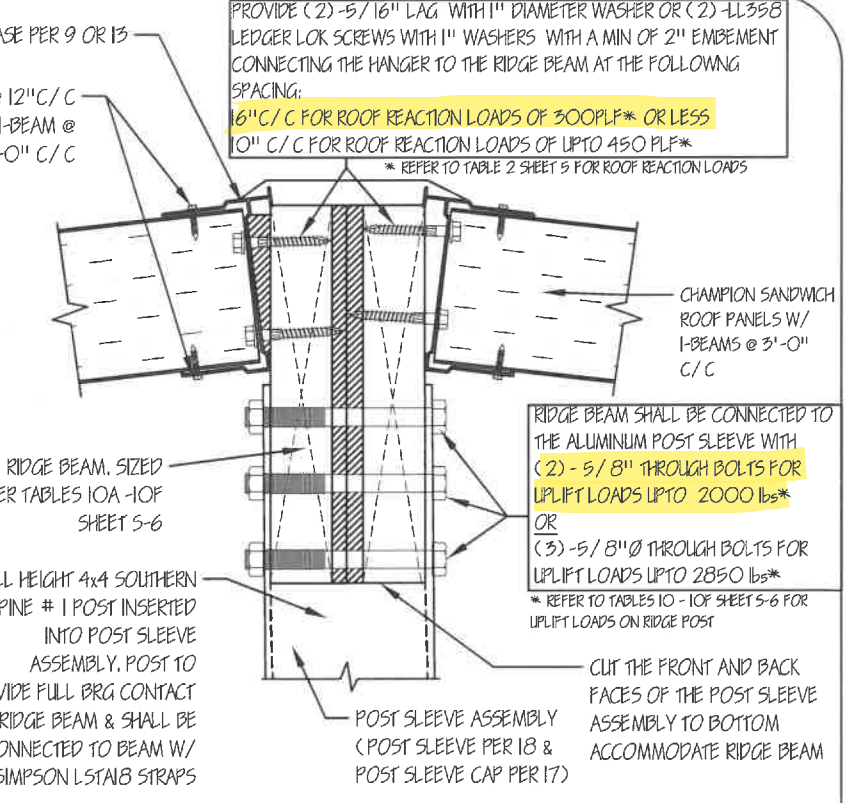
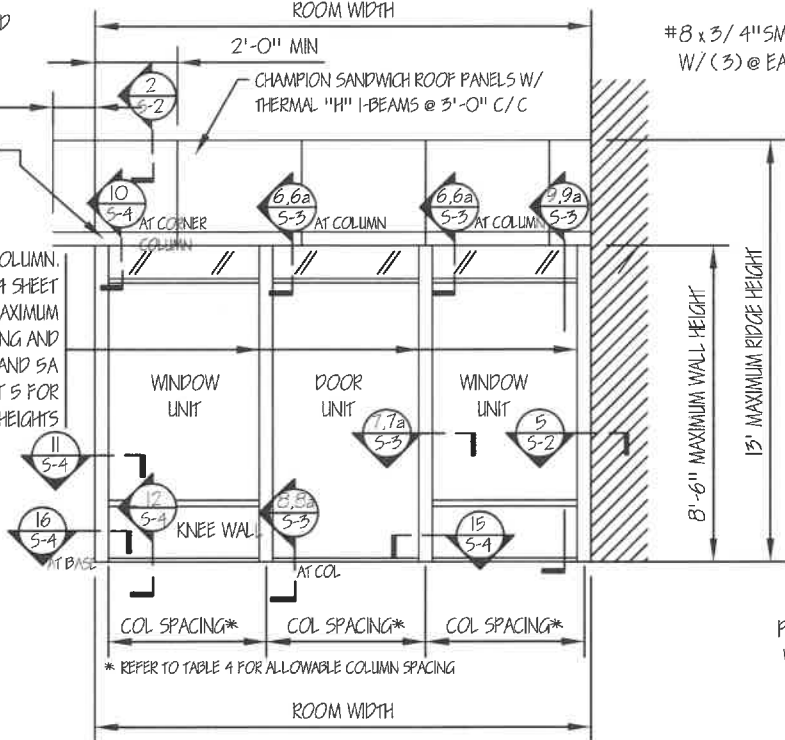
GIRT PER 12 FOR STRUCTURAL WING WALL PANEL AND PER 12 & 4 FOR GLASS SEE TABLE 6 SHEET 5 FOR ALLOWABLE GIRT SPANS

NON-LOAD BEARING COLUMN PER 12 & 2 OR 17, 18 & 2, REFER TO TABLE 4 SHEET 5 FOR MAXIMUM SPACING BETWEEN COLUMNS

LOAD BEARING COLUMN, REFER TO TABLE 4 SHEET 5 FOR MAXIMUM COLUMN SPACING AND TABLES 5 AND 5A SHEET 5 FOR ALLOWABLE HEIGHTS

GABLE RIDGE POST PER 17 & 18 WITH 4X4 WOOD POST INSERT. REFER TO TABLES 11 & 12 SHEET 5 FOR ALLOWABLE POST HEIGHT

FULL HEIGHT COLUMN PER 12 & 2 OR 17 & 18, FOR ROOMS WITH STRUCTURAL PANEL WINGS A FULL HEIGHT COLUMN IS REQUIRED WHERE ALLOWABLE GIRT SPANS ARE LESS THAN THE HALF THE ROOM WIDTH. SEE TABLE 6 SHEET 5 FOR ALLOWABLE GIRT SPANS. FOR GLASS OR NON-STRUCTURAL PANEL WINGS FULL HEIGHT COLUMNS MUST BE PROVIDED AT A MINIMUM OF 8' C/C. REFER TO TABLES 7 - 9 FOR ALLOWABLE COLUMN HEIGHTS.

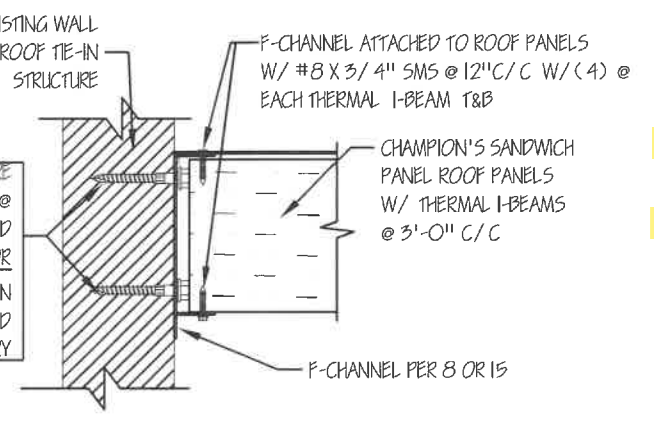


WIND ZONE*	MAX ROOM PROJECTION (FT)
1	1.1 X ROOM WIDTH
2	1.0 X ROOM WIDTH
3	0.9 X ROOM WIDTH
4	0.8 X ROOM WIDTH

\* REFER TO TABLE A SHEET 5 FOR WIND ZONE DESIGNATION

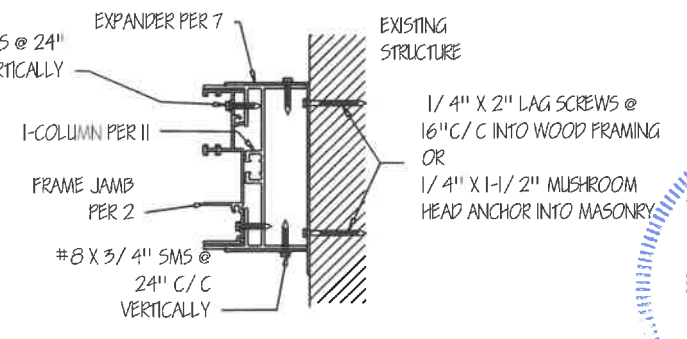
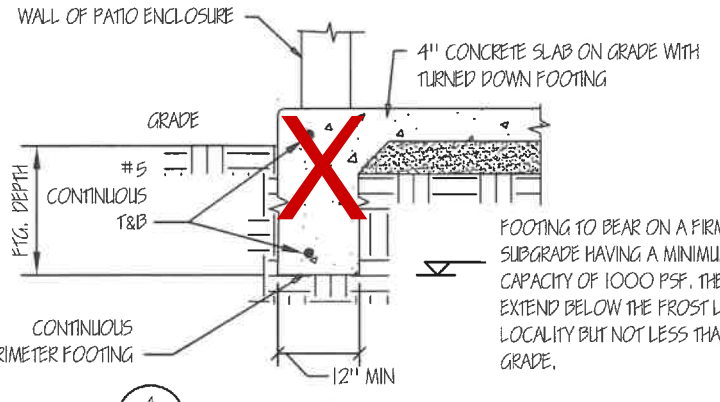
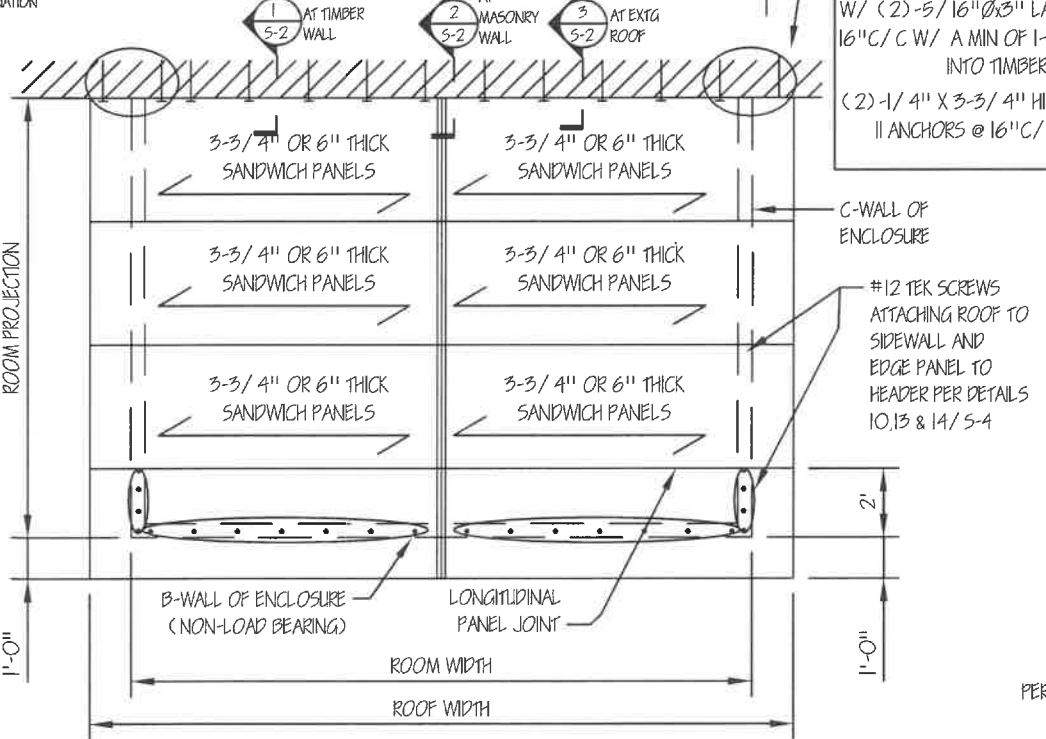
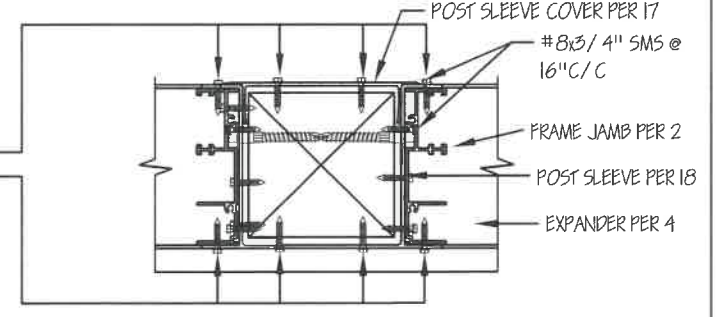
2 SETS OF LL358 LEDGER LOK SCREWS OR 5/16" X 3" LAG SCREWS WITH 1" WASHER @ 16" C/C CONNECTING EACH END OF THE ROOF DIAPHRAGM TO A TIMBER FRAMED STRUCTURE OR

2 SETS OF (2) -1/4" X 3-3/4" HILTI KWIK-CON II+ ANCHORS @ 12" C/C CONNECTING THE END OF THE ROOF DIAPHRAGM TO A MASONRY STRUCTURE.



(4) -#8 X 3/4" SMS EA SIDE CONNECTING BASE TO POST SLEEVE TO EXPANDER FOR UPLIFT LOADS UP TO 1900 LBS\* OR (6) -#8 X 3/4" SMS EA SIDE CONNECTING BASE TO POST SLEEVE FOR UPLIFT LOADS UP TO 2850 LBS\*

\* REFER TO TABLES 10 - 10F SHEETS 5-6 FOR UPLIFT LOADS ON RIDGE POST



**CHAMPION ENCLOSURE SUPPLIERS**  
 12111 CHAMPION WAY, CINCINNATI, OH 45241  
 PH: (513) 782-3900 FAX: (513) 782-3900

**CHAMPION WINDOWS AND PATIO ROOM**  
 4" Wall System with Gable Style Roof

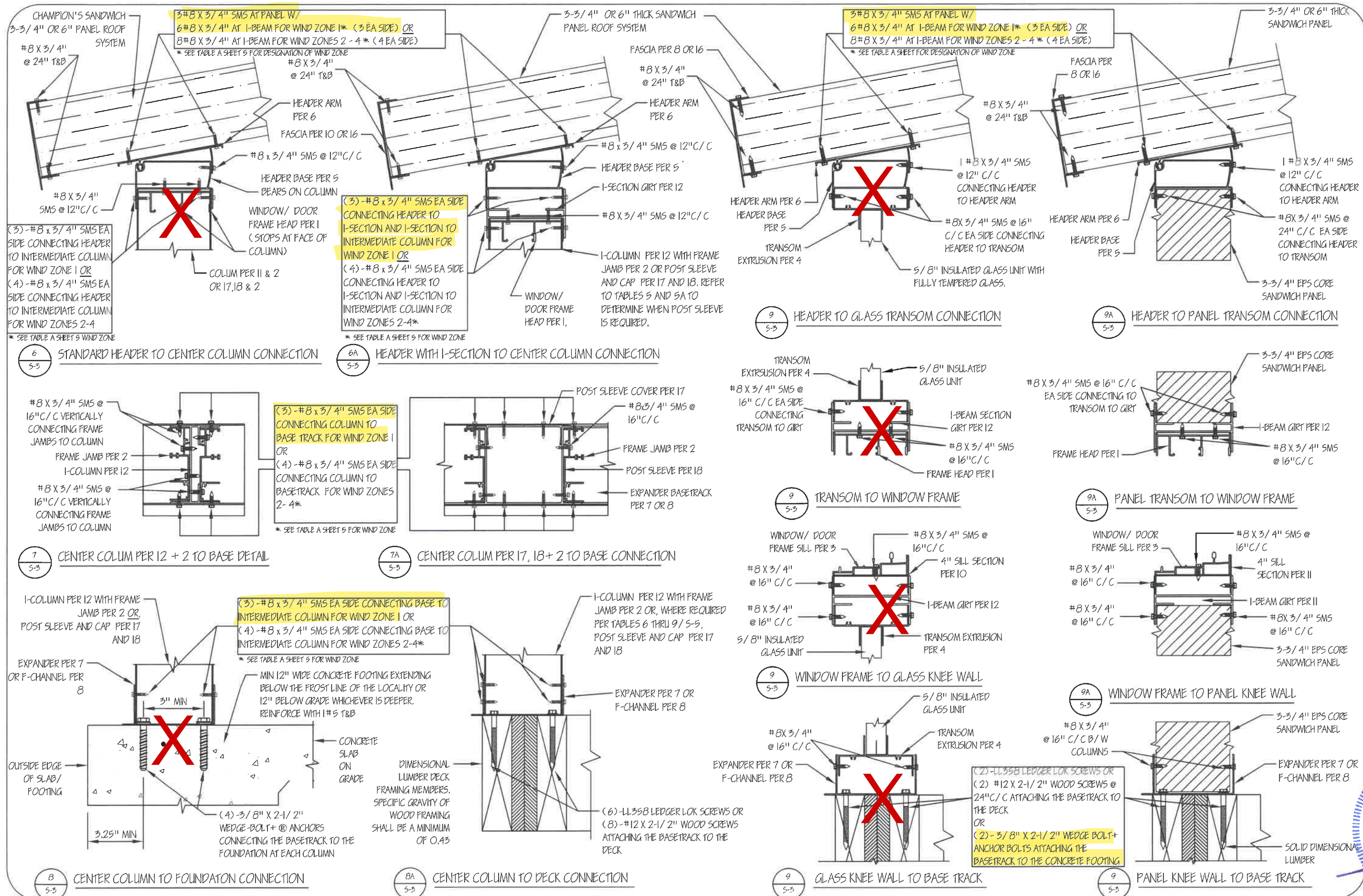
**ELEVATION AND SECTION DETAILS**

DATE: 2/13/19  
 SCALE: NTS  
 Drawn by: MJG  
 REV:      DATE:

SHEET: 2 OF 6

SEAL  
 026739  
 J. GOS'S  
 4/5/2022



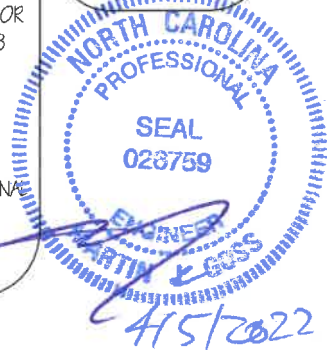


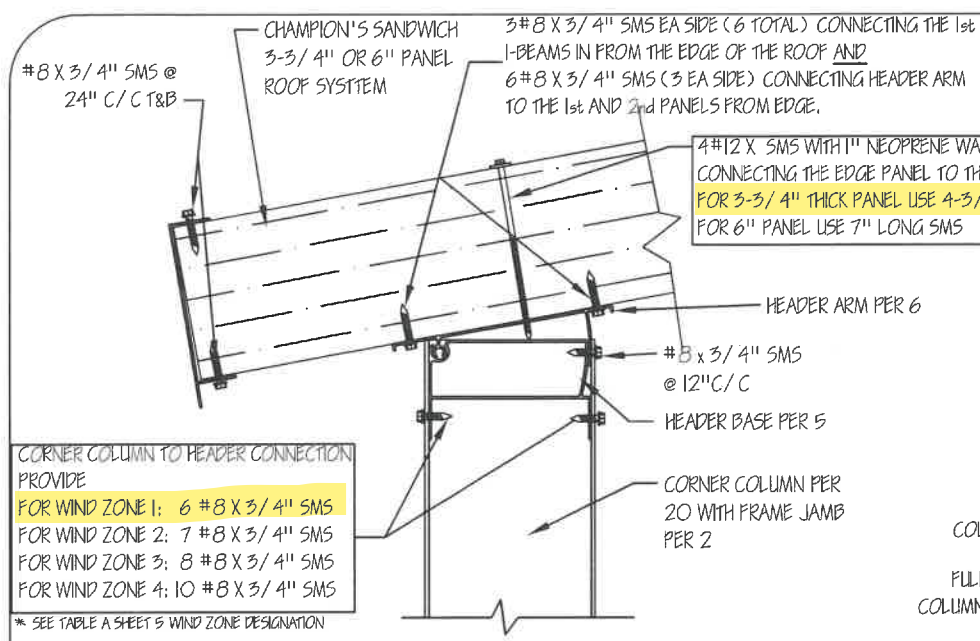
**CHAMPION ENCLOSURE SUPPLIERS**  
 12111 CHAMPION WAY, CINCINNATI, OH 45241  
 PH: (513) 782-3900 FAX: (513) 782-3903

**SECTION DETAILS**  
 CHAMPION WINDOWS AND PATIO ROOM  
 4" Wall System with Gable Style Roof

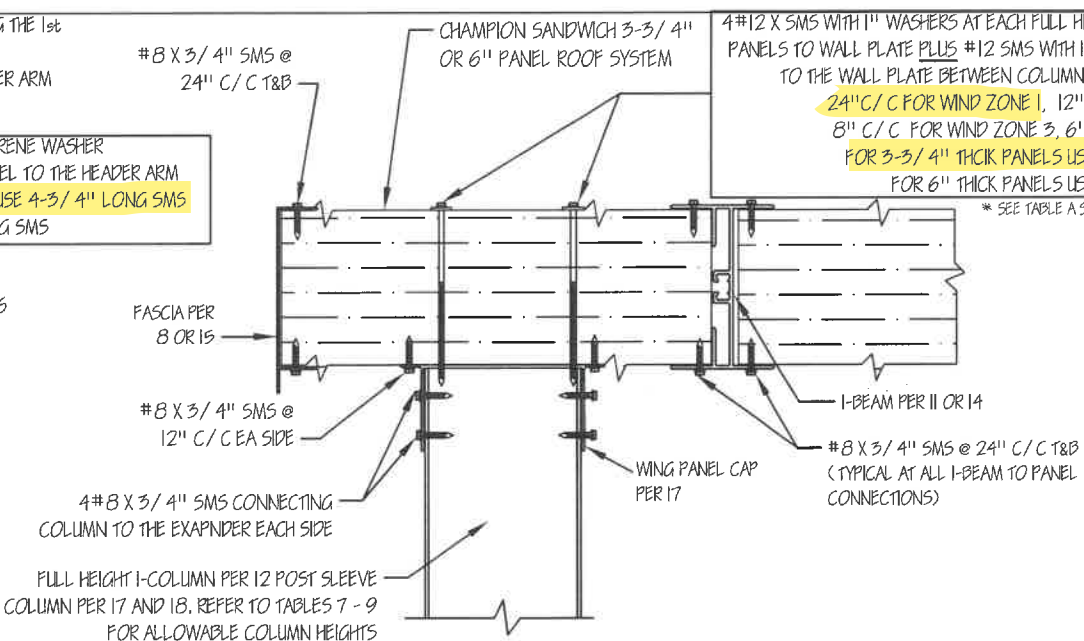
DATE: 2/13/19  
 SCALE: NTS  
 Drawn by: MJG  
 REV: DATE:

SHEET: 3 OF 6

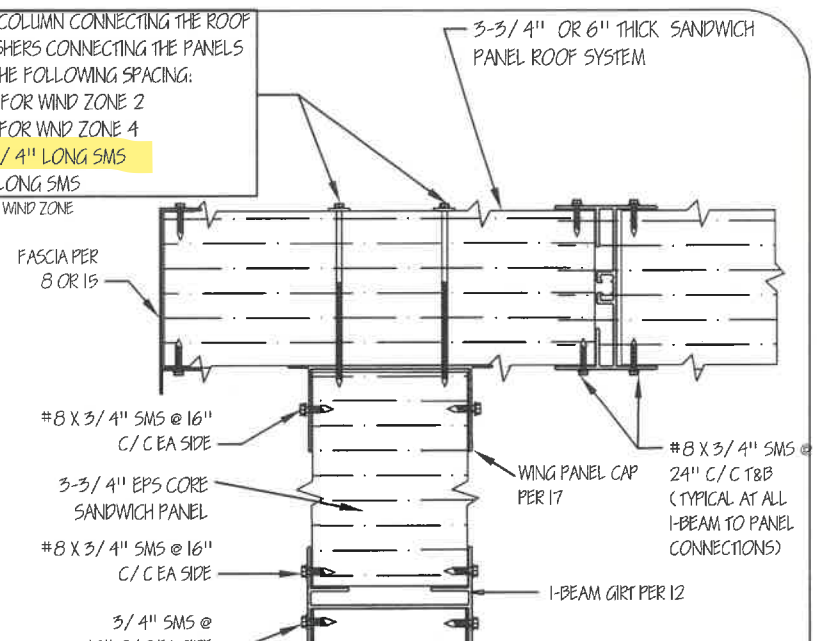




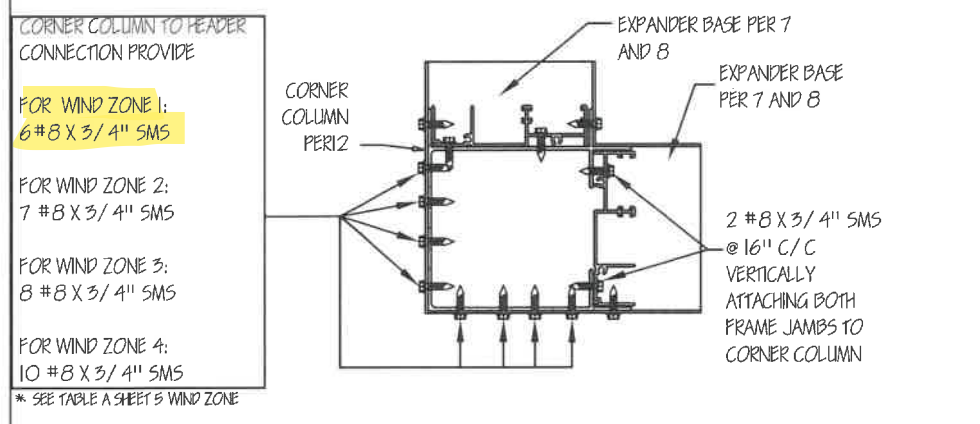
10  
5-4 CORNER COLUMN TO ROOF CONNECTION



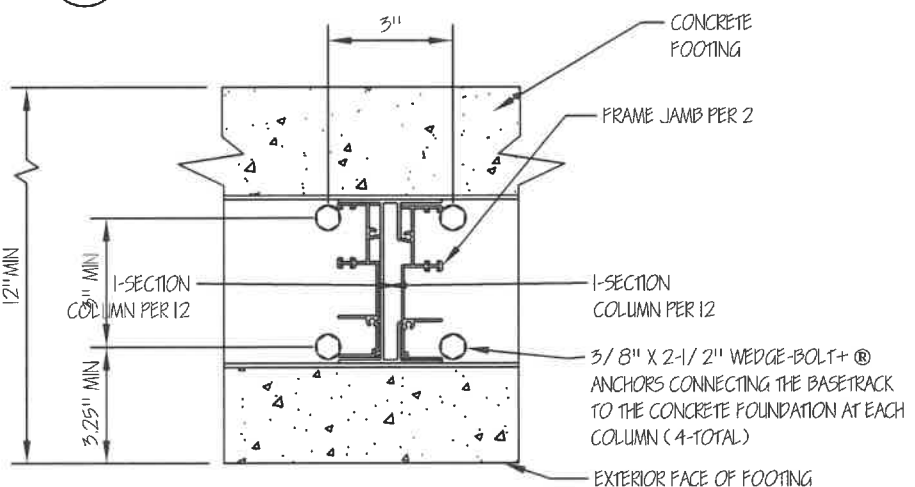
13  
5-4 NON AXIAL BEARING COLUMN TO ROOF CONNECTION



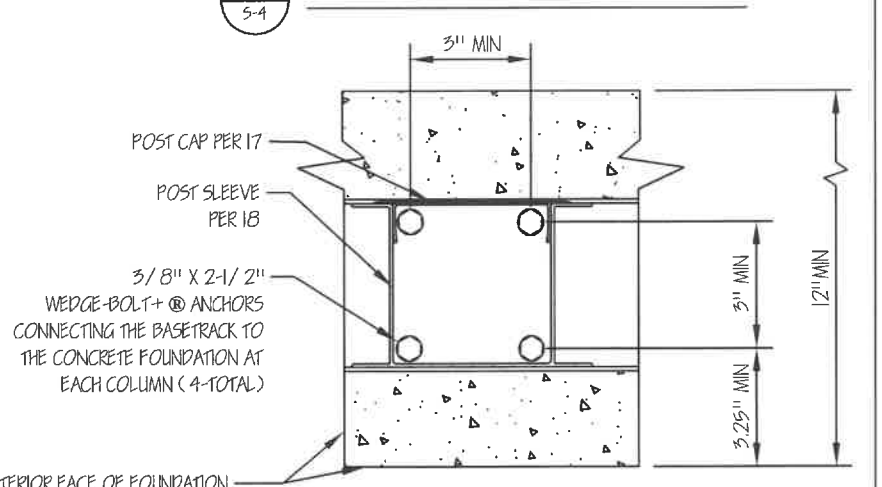
14  
5-4 ROOF TO NON BEARING WALL CONNECTION



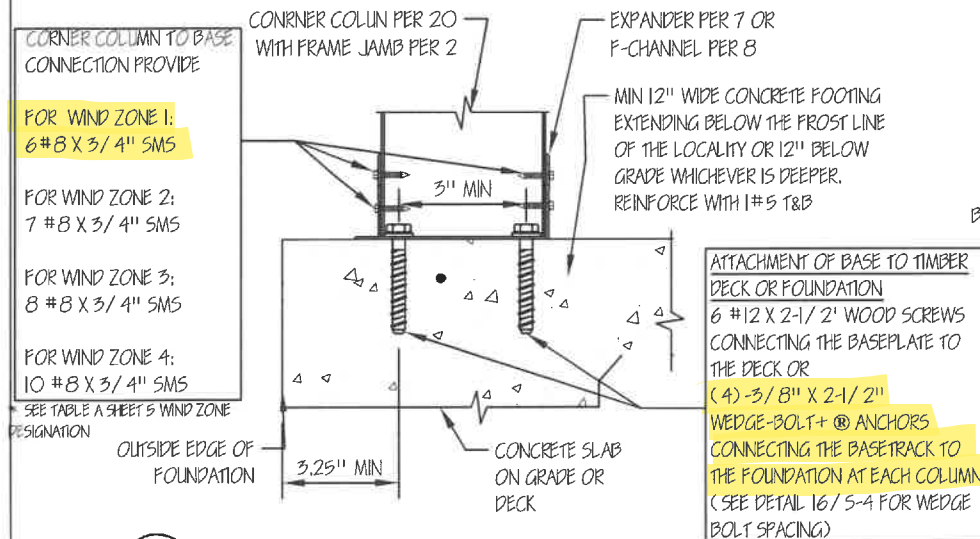
11  
5-4 CORNER COLUMN TO BASE CONNECTION



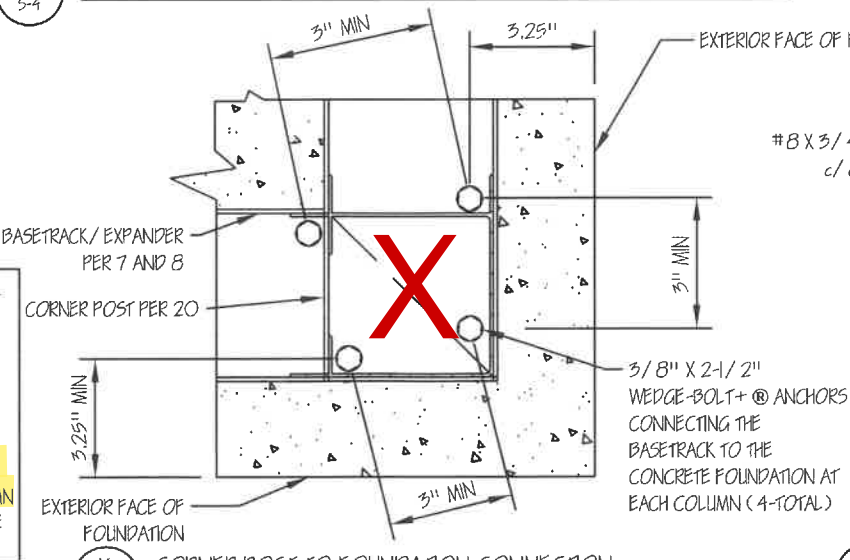
15  
5-4 CONNECTION OF CENTER COLUMN PER 12 & 2 TO BASE/FOUNDATION



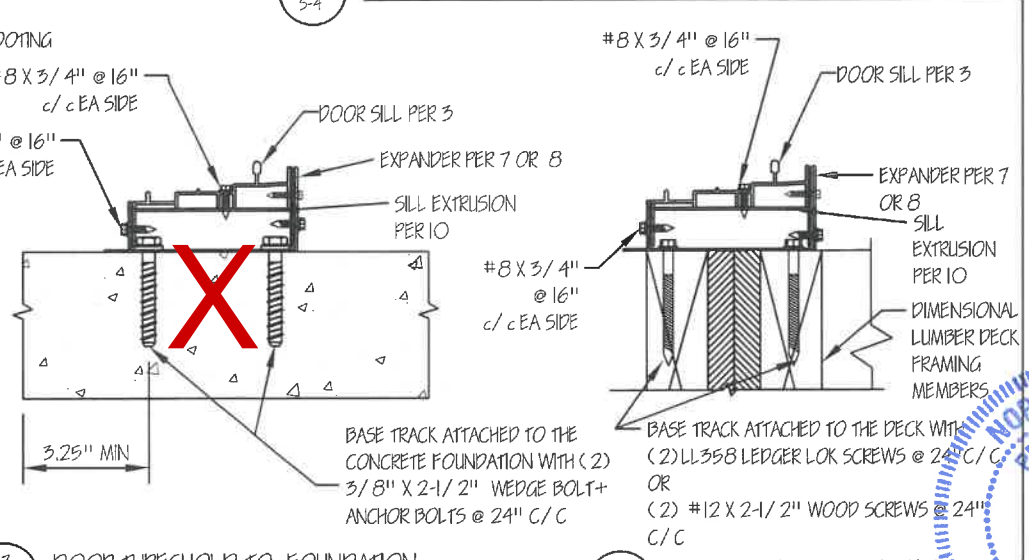
15A  
5-4 CONNECTION OF CENTER COLUMN PER 17 & 18 TO FOUNDATION



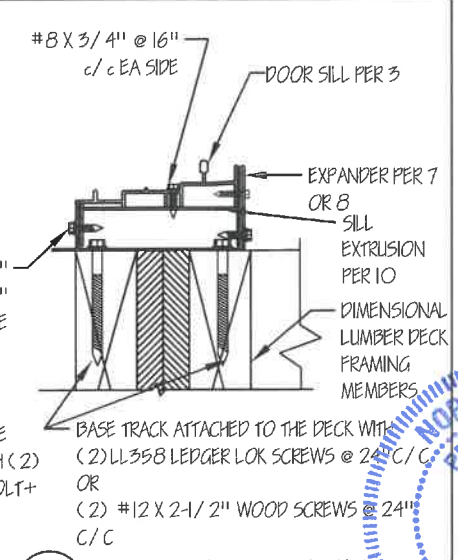
12  
5-4 CORNER COLUMN TO FOUNDATION CONNECTION



16  
5-4 CORNER POST TO FOUNDATION CONNECTION



17  
5-4 DOOR THRESHOLD TO FOUNDATION



17A  
5-4 DOOR THRESHOLD TO DECK

**CES**  
**CHAMPION ENCLOSURE SUPPLIERS**  
 12111 CHAMPION WAY, CINCINNATI, OH 45241  
 PH: (513) 782-3900 FAX: (513) 782-3903

**SECTION DETAILS**  
 CHAMPION WINDOWS AND PATIO ROOM  
 4" Wall System with Gable Style Roof

DATE: 2/13/19  
 SCALE: NTS  
 Drawn by: MJG  
 REV:      DATE:

SHEET: 4 OF 6  
 NORTH CAROLINA PROFESSIONAL SEAL  
 026759  
 J. G. G...  
 5/2022

STRENGTH DESIGN WIND SPEED	115 MPH RISK CAT II	130 MPH RISK CAT II	140 MPH RISK CAT II	150 MPH RISK CAT II
ALLOWABLE STRESS WIND SPEED	90 MPH	100 MPH	110 MPH	120 MPH
EXP B	WIND ZONE 1	WIND ZONE 2	WIND ZONE 3	WIND ZONE 4
EXP C	WIND ZONE 2	WIND ZONE 3	WIND ZONE 4	SPECIAL DESIGN REQUIRED
EXP D	WIND ZONE 3	WIND ZONE 4	SPECIAL DESIGN REQUIRED	SPECIAL DESIGN REQUIRED

- EXPOSURE CATEGORIES ARE AS DEFINED IN THE IRC, IBC AND ASCE-7
- TABLE APPLIES TO PATIO ROOMS WITH MEAN ROOF HEIGHTS UP TO 30' IN EXPOSURE B AND UP TO 15' IN EXPOSURES C AND D. FOR ROOMS IN EXPOSURE CATEGORIES C AND D WITH MEAN ROOF HEIGHTS BETWEEN 15' AND 30' THE NEXT HIGHEST WIND ZONE DESIGNATION SHALL BE SELECTED OR A SITE SPECIFIC DESIGN WILL BE UTILIZED.
- SITE SPECIFIC DETERMINATION OF WIND PRESSURES IS REQUIRED FOR SITES ON ISOLATED HILLS, RIDGES OR ESCARPMENTS THAT ARE ABRUPT CHANGES FROM THE GENERAL TOPOGRAPHY OF THE AREA.

PANEL SPAN (FT)	ROOF LIVE/ SNOW LOAD (PSF)										WIND ZONE *			
	20	25	30	35	40	45	50	55	60	70	1	2	3	4
6	92	112	132	140	172	192	212	232	252	292	-98	-121	-145	-175
8	115	140	165	190	215	240	265	290	315	365	-109	-136	-163	-193
10	138	168	198	228	258	288	318	348	378	438	-120	-148	-179	-214
12	161	196	231	266	301	336	371	406	441	511	-132	-163	-197	-234
14	184	224	264	304	344	384	424	464	504		-143	-176	-213	-254
16	207	252	297	342	387	432					-155	-192	-232	-276
18	230	280	330	380							-166	-206	-250	-296
20	253	308									-178	-220	-266	-318

- TABLE 1 INCLUDES THE DEAD LOAD OF THE STANDARD ROOF PANEL. FOR OSB ROOF PANELS WITH ASPHALT SHINGLES, THE INPUT ROOF LOAD FOR THIS CHART SHALL EQUAL THE DESIGN SNOW/ ROOF LIVE LOAD + 5PSF.
- NEGATIVE VALUES INDICATE UPLIFT LOADS

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	8.5'	8.5'	8.5'	8.0'
68"	8.5'	8.5'	8.0'	8.0'
78"	8.5'	8.0'	7.5'	---
84"	8.5'	7.5'	---	---
96"	8.0'	---	---	---

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	10' 0"	9' 6"	8' 10"	8' 5"
68"	9' 8"	9' 0"	8' 7"	8' 2"
78"	9' 5"	8' 8"	8' 2"	---
84"	9' 0"	8' 5"	---	---
96"	8' 8"	---	---	---

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	8.5'	8.5'	8.5'	8.5'
68"	8.5'	8.5'	8.5'	8.5'
78"	8.5'	8.5'	8.5'	---
84"	8.5'	8.5'	---	---
96"	8.5'	---	---	---

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	15' 0"	12' 2"	11' 2"	10' 5"
68"	12' 7"	11' 6"	10' 8"	10' 0"
78"	11' 10"	10' 10"	10' 2"	---
84"	11' 5"	10' 7"	---	---
96"	10' 10"	---	---	---

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

PANEL THICKNESS (IN)	LIVE LOAD (PSF)	ROOF SNOW LOAD (PSF)									
		20	25	30	35	40	45	50	55	60	70
3-3/4"	17'-4"	16'-8"	15'-5"	14'-5"	13'-7"	12'-10"	12'-2"	11'-6"	11'-0"	10'-7"	9'-10"
6"	20'	20'	19'-2"	17'-7"	16'-4"	15'-4"	14'-6"	13'-9"	13'-2"	12'-8"	11'-8"

ROOF DEFLECTION CRITERIA = L/120

- THE ALLOWABLE SPANS ARE BASED ON UNIFORM SNOW LOADING CONDITIONS.
- FOR OSB ROOF PANELS WITH ASPHALT SHINGLES, THE INPUT ROOF LOAD FOR THIS CHART SHALL EQUAL THE DESIGN SNOW/ ROOF LIVE LOAD + 5PSF.

APPLIED LOAD* (PLF)	70	100	125	150	175	200	250	300	350	400	500
	STANDARD HEADER	96"	78"	72"	64"	60"	56"	48"	N/A	N/A	N/A
HEADER WITH I-BEAM	96"	96"	96"	95"	88"	78"	72"	66"	60"	56"	48"

\* APPLIED LOAD IS THE LARGER OF THE APPLIED ROOF LOAD FROM SNOW LOADING OR FROM WIND LOADING DETERMINED FROM TABLE 2 SHEET 5

WIND ZONE	1	2	3	4
ALLOWABLE COLUMN SPACING	96"	84"	78"	68"

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

WIND ZONE	1	2	3	4
MAX GIRT SPAN (FT)	15' 6"	12' 5"	11' 2"	10' 3"

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	15' 0"	12' 0"	12' 0"	11' 2"
68"	15' 0"	12' 4"	11' 4"	10' 7"
78"	12' 9"	11' 7"	10' 9"	---
84"	12' 4"	11' 3"	---	---
96"	11' 8"	---	---	---

\* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

GENERAL NOTES AND SPECIFICATIONS

- THE STRUCTURAL DESIGN FOR CHAMPION PATIO ROOMS HAS BEEN PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF 2009, 2012, 2015 AND 2018 EDITIONS OF THE IRC CODES, 2019 RESIDENTIAL CODE OF OHIO, 2015 NEW YORK STATE RESIDENTIAL CODE, 2018 SOUTH CAROLINA RESIDENTIAL CODE, 2018 NORTH CAROLINA BUILDING CODE, 2018 KENTUCKY RESIDENTIAL CODE, 9th ED OF THE MASSACHUSETTS RESIDENTIAL CODE, 2019 RHODE ISLAND SBC-2 ONE AND TWO FAMILY DWELLING CODE, DENVER 2019 IRC, 2016 DENVER BUILDING CODE, 2020 GEORGIA AMENDMENTS AND UTILIZING THE FOLLOWING REFERENCED STANDARDS; 2009 AND 2010 EDITIONS OF ASCE 7, 2005 AND 2010 ALUMINUM DESIGN MANUAL, 2005, 2012 AND 2018 NDS FOR WOOD AND AAMA/ NPEA/ NSA 2100 FOR SUNROOMS.
- THESE PLANS COVER THE DESIGN OF THE PATIO ROOM AND ITS CONNECTION TO THE EXISTING STRUCTURE. THE STRUCTURAL ADEQUACY OF THE EXISTING STRUCTURE TO SUPPORT THE TRANSFERRED LOADS IS BEYOND THE SCOPE OF THIS PACKAGE AND SHOULD BE VERIFIED BY OTHERS.
- THE SNOW LOAD TABLES PRESENTED IN THIS PACKAGE ARE FOR UNIFORM ROOF SNOW LOADS. CONSIDERATION SHALL BE GIVEN TO SITE SPECIFIC CONDITIONS SUCH AS SLIDING, DRIFTING OR UNBALANCED SNOW LOADS.
- BASIC WIND SPEEDS ARE 3-SECOND GUST AT 33 FT ABOVE THE GROUND IN EXPOSURE C.
- SEISMIC DESIGN FOR ROOMS CONSTRUCTED IN SEISMIC DESIGN CATEGORIES D2 WITH UNIFORM ROOF SNOW LOADS UP TO 30PSF HAS BEEN CONSIDERED IN THIS PACKAGE. A SITE SPECIFIC SEISMIC EVALUATION IS REQUIRED FOR ENCLOSURES IN SDC D OR HIGHER WITH DESIGN ROOF SNOW LOADS IN EXCESS OF 30 PSF.
- THE PATIO ROOM PROJECTION SHALL BE A MAXIMUM OF 1.1 TIMES THE PATIO ROOM WIDTH.
- CHAMPION PATIO ENCLOSURES CAN BE CONSTRUCTED ON TIMBER FRAMED DECKS PROVIDED THE DECK AND ITS FOOTINGS HAVE BEEN ENGINEERED TO SAFELY CARRY THE ENCLOSURE'S AND THE DECK'S DESIGN LOADS.
- THE DOOR AND WINDOW UNITS USED IN THE CHAMPION PATIO ROOM SYSTEM, SUPPLIED BY ENCLOSURE SUPPLIERS LLC, ARE GLAZED WITH FULLY TEMPERED INSULATED GLASS CONFORMING TO THE REQUIREMENTS OF ANSI Z97.1 AND CPSC 16 CFR 1201 CATEGORY II. IN WIND BORNE DEBRIS REGIONS GLAZED OPENINGS SHALL BE PROTECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING CODE.
- THIS ENCLOSURE MEETS THE REQUIREMENTS OF A CATEGORY II SUNROOM AS DEFINED IN AAMA/ NPEA/ NSA 2100.

MATERIALS

SOILS

- ALL FOOTINGS SHALL BEAR ON LEVEL (WITHIN 1:12) UNDISTURBED SOIL OR APPROVED ENGINEERING FILL WITH AN ALLOWABLE SOIL BEARING CAPACITY OF 1000 PSF. FOOTINGS SHALL EXTEND BELOW THE FROST LINE OF THE LOCALITY BUT NOT LESS THAN 12" BELOW GRADE.

CONCRETE

- ALL CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS AND WHERE EXPOSED TO THE EXTERIOR ENVIRONMENT SHALL HAVE AN ENTRAINED AIR CONTENT OF BETWEEN 5.0% TO 7.0%.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 60 KSI DEFORMED BARS AND ASTM A185 MESH.

STRUCTURAL ALUMINUM

- ALL EXTRUSIONS SHALL BE AL 6063-T6 ALUMINUM PROVIDED BY ENCLOSURE SUPPLIERS LLC.
- ROOF PANELS SHALL BE 3-3/4" OR 6" THICK STANDARD OR OSB SANDWICH PANELS MANUFACTURED BY ENCLOSURE SUPPLIERS LLC.  
STANDARD ROOF PANEL SKINS CONSISTS OF 0.024" THICK ALUMINUM SHEETING (3105 H374). OSB ROOF PANELS SKINS CONSISTS OF A 0.024" ALUMINUM SHEETING AND 1/8" OSB COMBINED TOP SKINS AND A 0.024" ALUMINUM SHEETING BOTTOM SKIN. THE CORE FOR ALL PANELS SHALL BE ASTM C578 TYPE II EXPANDED POLYSTYRENE. THE PANELS SHALL BE A MAXIMUM OF THREE FEET (3') WIDE AND SHALL BE SLOTTED BETWEEN AL 6063-T6 I-BEAMS. THE ALLOWABLE PANEL SPAN CHART IN THIS PACKAGE APPLIES TO BOTH THE STANDARD AND OSB ROOF PANELS.

MECHANICAL FASTENERS

- SHEET METAL SCREWS (SMS) SHALL BE STAINLESS STEEL WITH TYPE AB SCREW THREADS.
- LAG SCREWS SHALL BE GALVANIZED STEEL "FULL BODIED" SCREWS WITH A MINIMUM BENDING YIELD STRENGTH OF 60,000 PSI FOR 3/8" DIAMETER AND 40,000 PSI FOR 3/4" AND LARGER DIAMETER. LAG SCREWS SHALL HAVE A MINIMUM EMBEDMENT DEPTH OF 8 X LAG SCREW DIAMETER
- WOOD SCREWS SHALL HAVE A MINIMUM BENDING YIELD STRENGTH OF 80,000 PSI
- LL358 LEDGER LOK® SCREWS BY FASTENMASTER AND SHALL HAVE A MINIMUM BENDING STRENGTH OF 183,000 PSI AND SHALL HAVE A MINIMUM EMBEDMENT OF 2" INTO THE MAIN WOOD SUPPORTING MEMBER.
- ANCHOR BOLTS INTO CONCRETE SHALL BE 3/8" Ø X 2-1/2" WEDGE-BOLT+ ANCHORS BY POWERS FASTENERS.
- PIN ANCHORS SHALL BE ZAMAC NAIL IN ANCHORS MANUFACTURED BY POWERS FASTENERS, BREWSTERS, OR EQUIVALENT
- FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL OR SHALL BE HOT DIPPED GALVANIZED PER ASTM A553. HOT DIPPED CONNECTOR PRODUCTS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE ASTM-A653 COATING DESIGNATION G-185.

**CES**  
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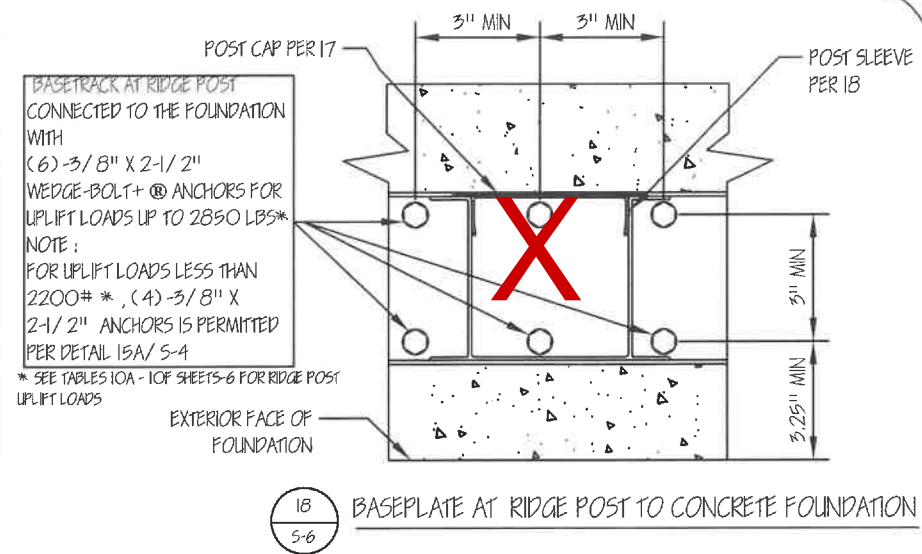
**CHAMPION WINDOWS AND PATIO ROOM**  
**4" Wall System with Gable Style Roof**  
**DESIGN TABLES AND NOTES**

DATE: 7/18/19  
 SCALE: NTS  
 Drawn by: MJG  
 REV: DATE:  
 2019 RCO 7/19/19  
 2019 SC 8/8/19  
 DENVER CO 11/6/19  
 SHEET: 5 OF 6

**SEAL**  
**026759**  
**ENGINEER**  
**MARTIN J. BOSS**  
 7/15/2022

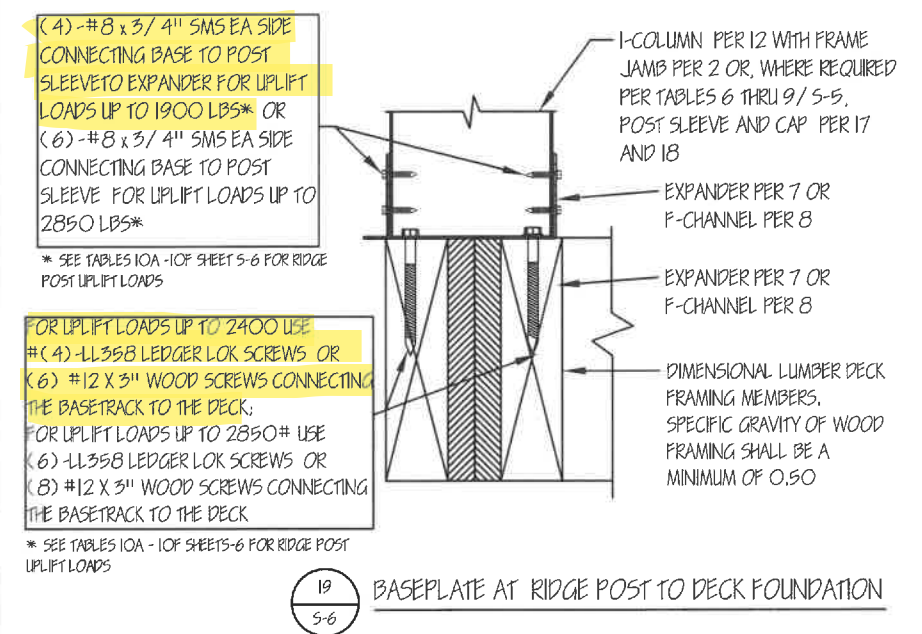
ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	2-2X8 966#	2-2X8 1176#	2-2X8 1386#	2-2X10 1596#	2-2X10 1806#	2-2X12 2226#	2-2X12 2646#	10" LVL 3066#	-1105	-1365	-1651	-1965
16	2-2X8 1104#	2-2X8 1344#	2-2X10 1584#	2-2X10 1824#	2-2X10 2064#	2-2X12 2544#	2-2X12 3024#	10" LVL 3504#	-1189	-1498	-1777	-2114
18	2-2X8 1242#	2-2X10 1512#	2-2X10 1782#	2-2X10 2052#	2-2X12 2322#	2-2X12 2862#	2-2X12 3402#	10" LVL 3942#	-1280	-1581	-1913	-2276
20	2-2X8 1380#	2-2X10 1680#	2-2X10 1980#	2-2X12 2280#	2-2X12 2580#	2-2X12 3180#	2-2X12 3780#	10" LVL 4380#	-1375	-1698	-2054	-2445
24	2-2X10 1656#	2-2X10 2016#	2-2X12 2376#	2-2X12 2736#	10" LVL 3096#	10" LVL 3816#	10" LVL 4536#	---	-1560	-1925	-2330	---
28	2-2X10 1932#	2-2X12 2352#	2-2X12 2772#	10" LVL 3192#	10" LVL 3612#	10" LVL 4452#	---	---	-1738	-2146	-2596	---
30	2-2X12 2070#	2-2X12 2520#	10" LVL 2970#	10" LVL 3420#	10" LVL 3870#	---	---	---	-1825	-2253	---	---

ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	2-2X8 1127#	2-2X10 1372#	2-2X10 1617#	2-2X12 1862#	2-2X12 2107#	10" LVL 2597#	10" LVL 3087#	10" LVL 3577#	-1202	-1484	-1796	-2137
16	2-2X10 1288#	2-2X10 1568#	2-2X12 1848#	2-2X12 2128#	2-2X12 2408#	10" LVL 2768#	10" LVL 3258#	10" LVL 3748#	-1305	-1611	-1949	-2320
18	2-2X10 1449#	2-2X12 1764#	2-2X12 2079#	2-2X12 2394#	10" LVL 2709#	10" LVL 3259#	10" LVL 3769#	10" LVL 4279#	-1409	-1739	-2104	-2504
20	2-2X10 1610#	2-2X12 1960#	2-2X12 2310#	2-2X12 2660#	10" LVL 3010#	10" LVL 3710#	12" LVL 4410#	12" LVL 5110#	-1510	-1865	-2256	---
24	2-2X12 1932#	2-2X12 2352#	2-2X12 2772#	10" LVL 3192#	10" LVL 3612#	10" LVL 4452#	12" LVL 5292#	---	-1708	-2109	-2551	---
28	2-2X12 2254#	10" LVL 2744#	10" LVL 3234#	10" LVL 3724#	10" LVL 4214#	10" LVL 5194#	---	---	-1898	-2343	---	---
30	10" LVL 2415#	10" LVL 2940#	10" LVL 3465#	10" LVL 3990#	12" LVL 4515#	---	---	---	-2006	-2477	---	---



ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	2-2X10 1288#	2-2X12 1568#	2-2X12 1848#	10" LVL 2128#	10" LVL 2408#	10" LVL 2928#	10" LVL 3448#	10" LVL 4088#	-1309	-1616	-1955	---
16	2-2X12 1472#	2-2X12 1792#	10" LVL 2112#	10" LVL 2432#	10" LVL 2752#	10" LVL 3392#	10" LVL 4032#	10" LVL 4672#	-1422	-1755	-2124	-2527
18	2-2X12 1656#	10" LVL 2016#	10" LVL 2376#	10" LVL 2736#	10" LVL 3096#	10" LVL 3816#	10" LVL 4536#	10" LVL 5256#	-1532	-1892	-2289	---
20	2-2X12 1840#	10" LVL 2240#	10" LVL 2640#	10" LVL 3040#	10" LVL 3440#	10" LVL 4240#	10" LVL 5040#	---	-1640	-2025	-2450	---
24	10" LVL 2208#	10" LVL 2688#	10" LVL 3168#	10" LVL 3648#	10" LVL 4128#	10" LVL 5088#	---	---	-1850	-2283	---	---
28	10" LVL 2576#	10" LVL 3136#	10" LVL 3696#	10" LVL 4256#	10" LVL 4816#	---	---	---	-2090	-2581	---	---
30	10" LVL 2760#	10" LVL 3360#	10" LVL 3960#	10" LVL 4560#	10" LVL 5160#	---	---	---	-2217	---	---	---

ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	2-2X12 1449#	10" LVL 1764#	10" LVL 2079#	10" LVL 2394#	10" LVL 2709#	10" LVL 3259#	10" LVL 3769#	10" LVL 4279#	-1415	---	---	---
16	2-2X12 1656#	10" LVL 2016#	10" LVL 2376#	10" LVL 2736#	10" LVL 3096#	10" LVL 3816#	10" LVL 4536#	10" LVL 5256#	-1535	-1894	-2292	---
18	10" LVL 1863#	10" LVL 2268#	10" LVL 2673#	10" LVL 3078#	10" LVL 3483#	10" LVL 4293#	10" LVL 5103#	---	-1651	-2039	-2467	---
20	10" LVL 2070#	10" LVL 2520#	10" LVL 2970#	10" LVL 3420#	10" LVL 3870#	10" LVL 4770#	---	---	-1765	-2179	---	---
24	10" LVL 2484#	10" LVL 3024#	10" LVL 3564#	10" LVL 4104#	10" LVL 4644#	---	---	---	-2012	-2484	---	---
28	10" LVL 2898#	10" LVL 3528#	10" LVL 4158#	10" LVL 4788#	10" LVL 5418#	---	---	---	-2289	---	---	---
30	10" LVL 3105#	10" LVL 3780#	10" LVL 4455#	10" LVL 5130#	10" LVL 5805#	---	---	---	-2428	---	---	---



ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	---	---	---	---	---	---	---	---	---	---	---	---
16	10" LVL 1840#	12" LVL 2240#	12" LVL 2640#	12" LVL 3040#	14" LVL 3440#	14" LVL 4240#	14" LVL 5040#	14" LVL 5840#	-1643	---	---	---
18	12" LVL 2070#	12" LVL 2520#	12" LVL 2970#	14" LVL 3420#	14" LVL 3870#	14" LVL 4770#	---	---	-1766	-2180	---	---
20	12" LVL 2300#	12" LVL 2800#	12" LVL 3300#	14" LVL 3800#	14" LVL 4300#	14" LVL 5300#	---	---	-1885	-2327	---	---
24	12" LVL 2760#	14" LVL 3360#	14" LVL 3960#	14" LVL 4560#	14" LVL 5160#	---	---	---	-2186	-2699	---	---
28	12" LVL 3220#	14" LVL 3920#	14" LVL 4620#	14" LVL 5320#	---	---	---	---	-2488	---	---	---
30	12" LVL 3450#	14" LVL 4200#	14" LVL 4950#	14" LVL 5700#	---	---	---	---	---	---	---	---

ROOM WIDTH (FT)	ROOF LIVE/ SNOW LOAD (PSF)								WIND ZONE*			
	20	25	30	35	40	50	60	70	1	2	3	4
14	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
18	12" LVL 2277#	14" LVL 2772#	14" LVL 3267#	14" LVL 3762#	14" LVL 4257#	---	---	---	-1876	---	---	---
20	12" LVL 2530#	14" LVL 3080#	14" LVL 3630#	14" LVL 4180#	14" LVL 4730#	---	---	---	-2035	-2513	---	---
24	14" LVL 3036#	14" LVL 3696#	14" LVL 4356#	14" LVL 5016#	---	---	---	---	-2361	---	---	---
28	14" LVL 3542#	14" LVL 4322#	14" LVL 5082#	---	---	---	---	---	-2687	---	---	---
30	14" LVL 3795#	14" LVL 4620#	---	---	---	---	---	---	---	---	---	---

COLUMN SPACING (INCHES)	WIND ZONE*			
	1	2	3	4
60"	13'	13'	12'	11' 2"
68"	13'	12' 4"	11' 5"	10' 8"
78"	12' 9"	11' 8"	10' 9"	---
84"	12' 4"	11' 3"	---	---
96"	11' 8"	---	---	---

POST HEIGHT (FT)	WOOD SPECIES	
	DF#2	SP#2/ HEM FIR#2/ SPF#2
9	5791	4741
9.5	5215	4284
10	4739	3888
10.5	4325	3543
11	3959	3240
11.5	3637	2975
12	3352	2710
13	2876	2346

- NOTES ON TABLES 6A-6F
- UPPER ENTRY IN EACH CELL REPRESENTS RIDGE BEAM SIZE.
  - LOWER VALUE IN EACH CELL REPRESENTS GRAVITY LOAD ON RIDGE BEAM SUPPORTS.
  - NEGATIVE VALUES REPRESENTS UPLIFT LOAD ON RIDGE BEAM SUPPORTS
  - 2-2X8, 2-2X10 & 2-2X12 SHALL BE SOUTHERN PINE NO. 1 GRADE DIMENSIONAL LUMBER

- NOTES ON TABLES 6A-6F (CONT'D)
- LVLs SHALL BE 2 PIECES OF 1.75"X1.9E MICROLAM BY I LEVEL TRUS JOIST.
  - 10" AND 12" LVL REPRESENTS AN ACTUAL LVL DEPTH OF 9.25" AND 11.25" RESPECTIVELY.
  - 14" LVL REFERS TO 14" ACTUAL DEPTH OF LVL.

- NOTES ON TABLES 6A-6F (CONT'D)
- TABLES INCLUDE THE DEAD LOAD OF THE STANDARD ROOF PANEL. FOR OSB ROOF PANELS WITH ASPHALT SHINGLES, THE INPUT ROOF LOAD FOR THESE CHARTS SHALL EQUAL THE DESIGN SNOW/ ROOF LIVE LOAD + 5PSF.
  - TOTAL LOAD DEFLECTION = L/240

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**CHAMPION WINDOWS AND PATIO ROOM**  
 4" Wall System with Gable Style Roof

**TABLES AND SECTION DETAILS**

DATE: 2/13/19  
 SCALE: NTS  
 Drawn by: MJG  
 REV: DATE:  
 SHEET: 6 OF 6



4/15/2022