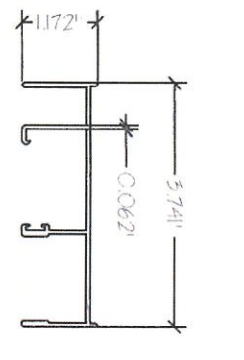


- Concrete Check List:
- saw cut
  - pour over slab
  - found. underpin
  - anchor bolts
  - remove slab
  - visquine & gravel
  - foundation
  - remove brick steps

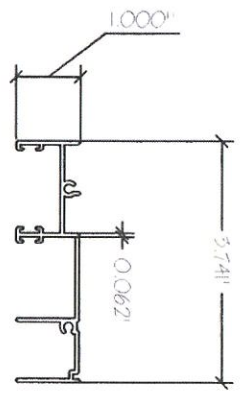
Concrete trench and slab to be a monolithic pour

Concrete to be poured larger than sunroom to allow  
2" ledge around perimeter per the engineering spec sheets

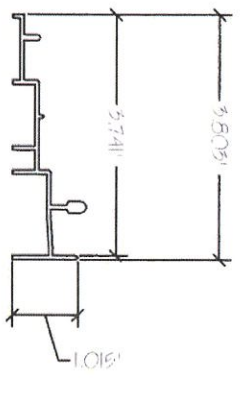
<p><b>CODES</b></p> <p>2018 N.C. Residential Code</p>	<p><b>CHAMPION</b> Modular aluminum construction. Seasonal, unheated, non-habitable space. Framing to be white aluminum. Exterior panel to be white. Interior panel to be white.</p>	<p><b>CHAMPION PATIO ROOMS</b> 4018 Patriot Dr. Suite 120 Durham, NC 27703 919-460-6632</p>	<p><b>RESIDENCE</b> Sally Wilson 614 Old Stage Rd. Coats, NC 27521 919-820-8528</p>	<p><b>PATIO ROOM MANAGER</b> JOSH DELPIERRE</p>	<p><b>CUSTOMER ID NO.</b> 7000001293</p>	<p><b>SCALE : 1/4" = 1'</b></p>	<p><b>DATE</b> 01/14/2022</p>	<p><b>SHEET NO.</b> 1 of 1</p>	<p><b>NOTES</b></p> <p>No egress issues per section R-310 of the 2018 NC Residential Code</p>



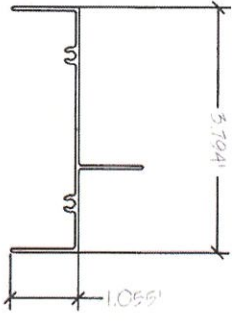
1 WINDOW / DOOR FRAME HEAD



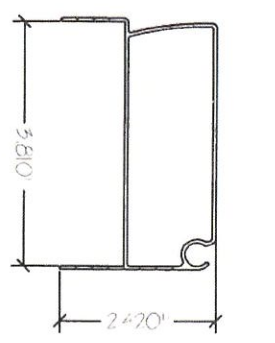
2 WINDOW / DOOR FRAME JAMB



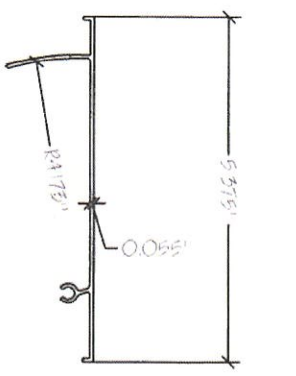
3 WINDOW / DOOR FRAME SILL



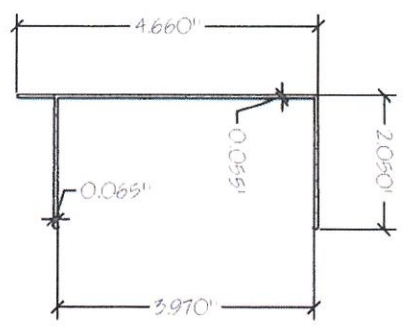
4 RANSOM FRAME



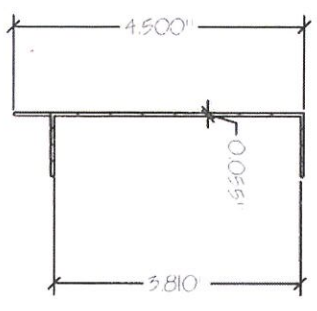
5 HEADER BASE



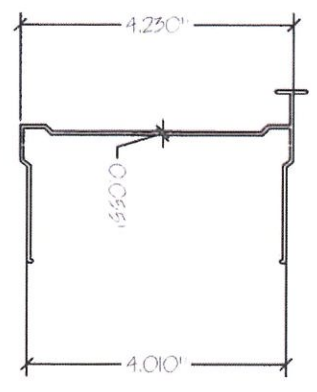
6 HEADER ARM



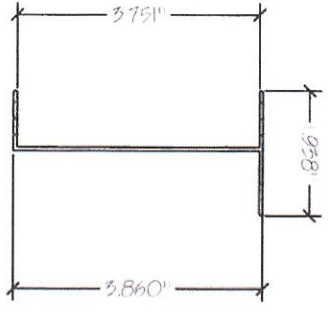
7 4" EXPANDER



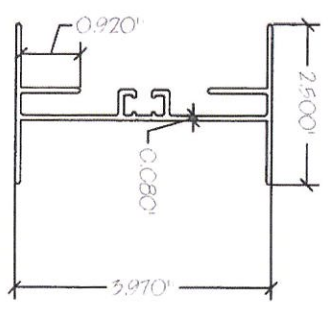
8 4" F-CHANNEL



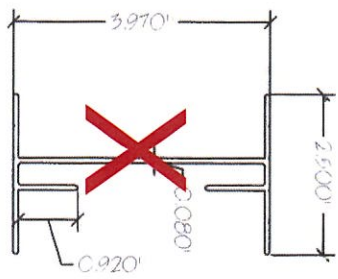
9 4" HANGER BASE



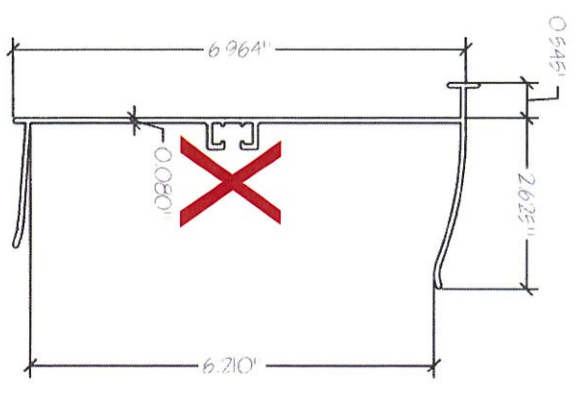
10 4" SILL EXTENSION



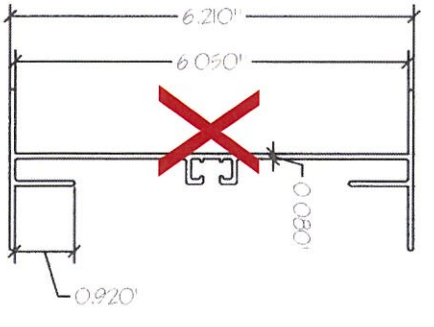
11 4" I-SECTION TRIM



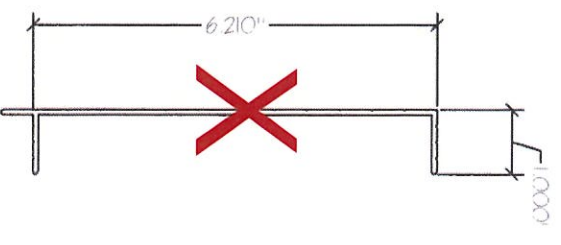
12 4" NON-THERM I-SECTION



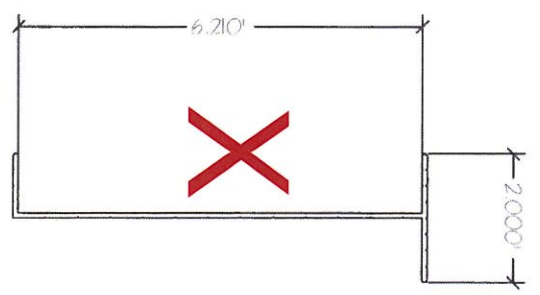
13 6" HANGER BASE



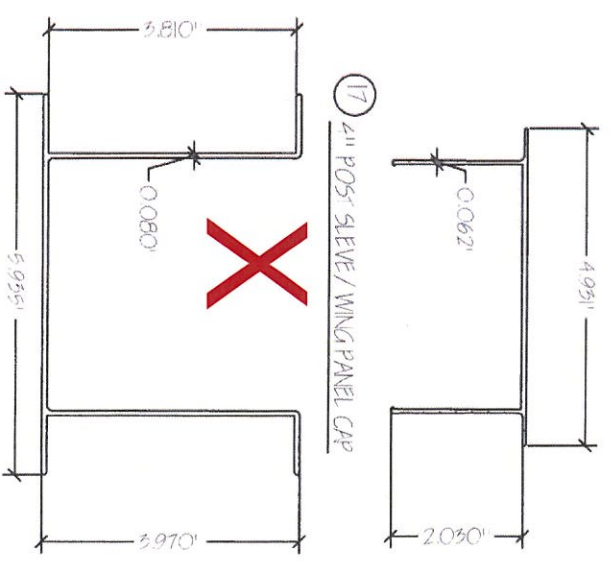
14 6" I-BEAM



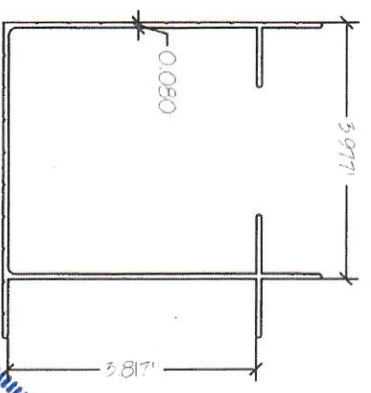
15 6" F-CHANNEL



16 6" SILL



17 4" POST SLEEVE / WING PANEL CAP



20 CORNER POST

CHAMPION WINDOWS AND PATIO ROOMS  
4" Wall System with Studio Style Roof

SECTION DETAILS

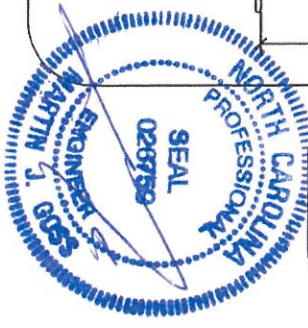
**CES**

CHAMPION ENCLOSURE SUPPLIERS

12111 CHAMPION WAY, CINCINNATI, OH 45241

PH: (513) 782-3900 FAX: (513) 782-3903

DATE: 2/13/19
SCALE: NTS
Drawn by: MJG
REV.:
DATE:
SHEET: 1 OF 5

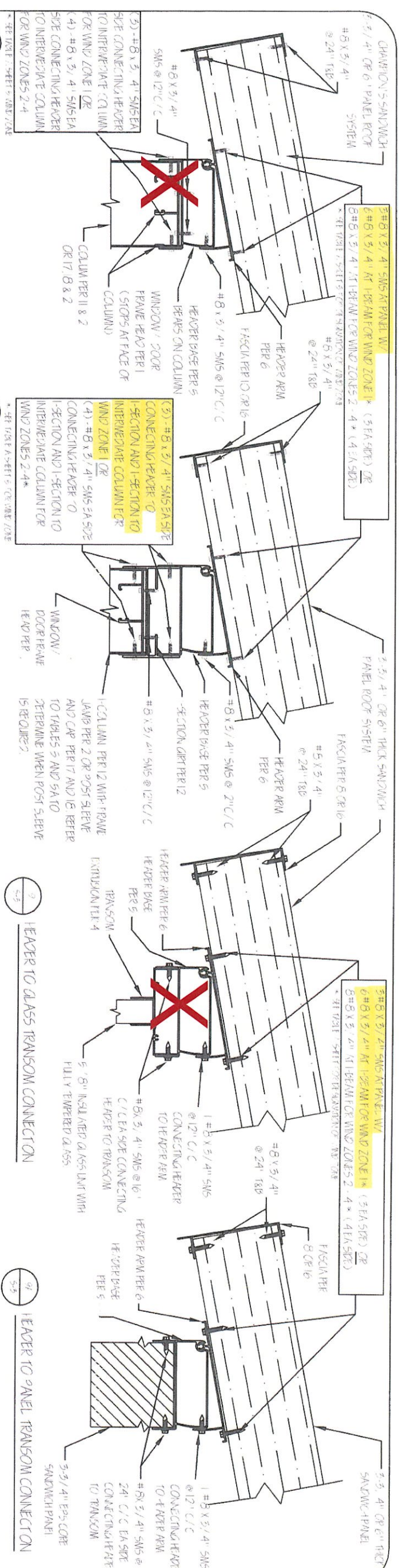


2/26/2019







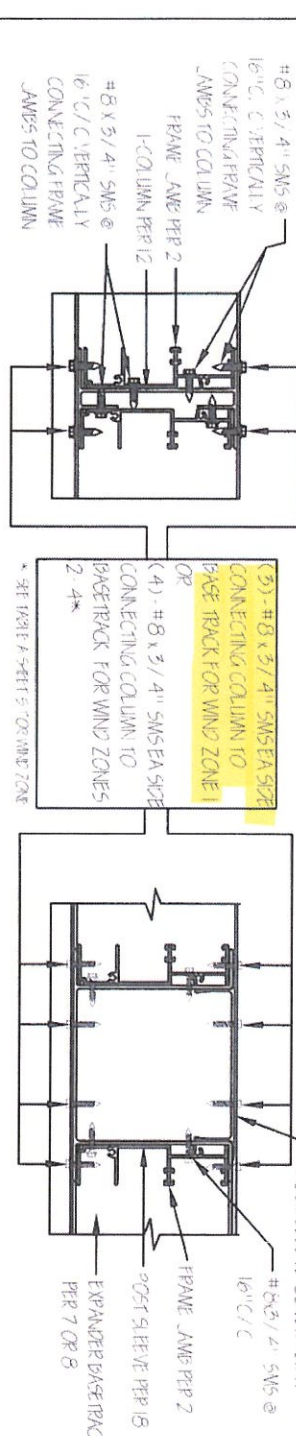


2 STANDARD HEADER TO CENTER COLUMN CONNECTION

3 HEADER WITH I-SECTION TO CENTER COLUMN CONNECTION

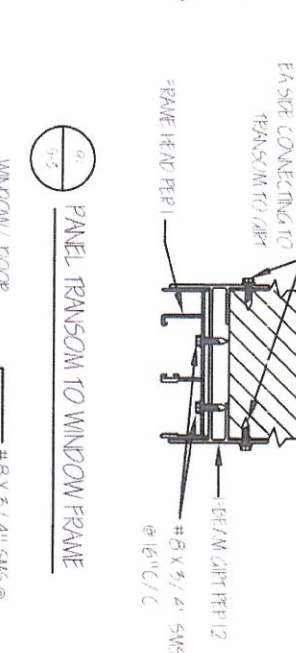
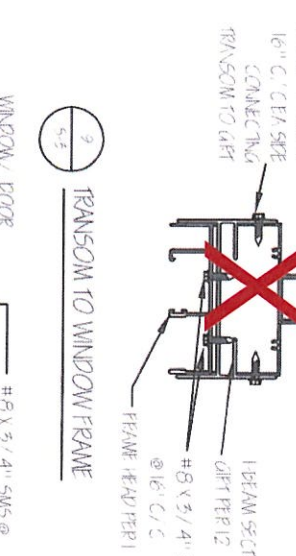
4 HEADER TO GLASS TRANSOM CONNECTION

5 HEADER TO PANEL TRANSOM CONNECTION



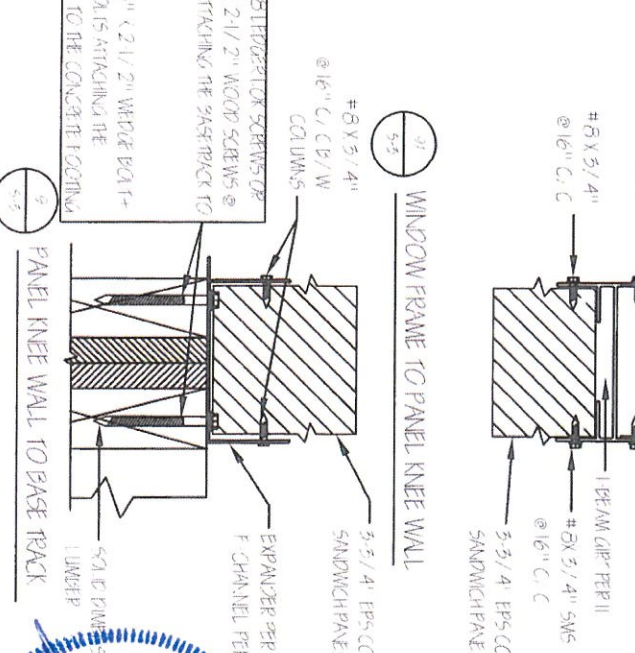
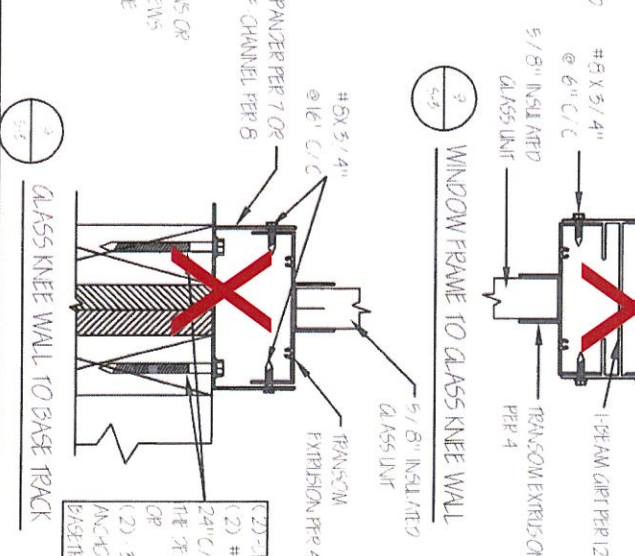
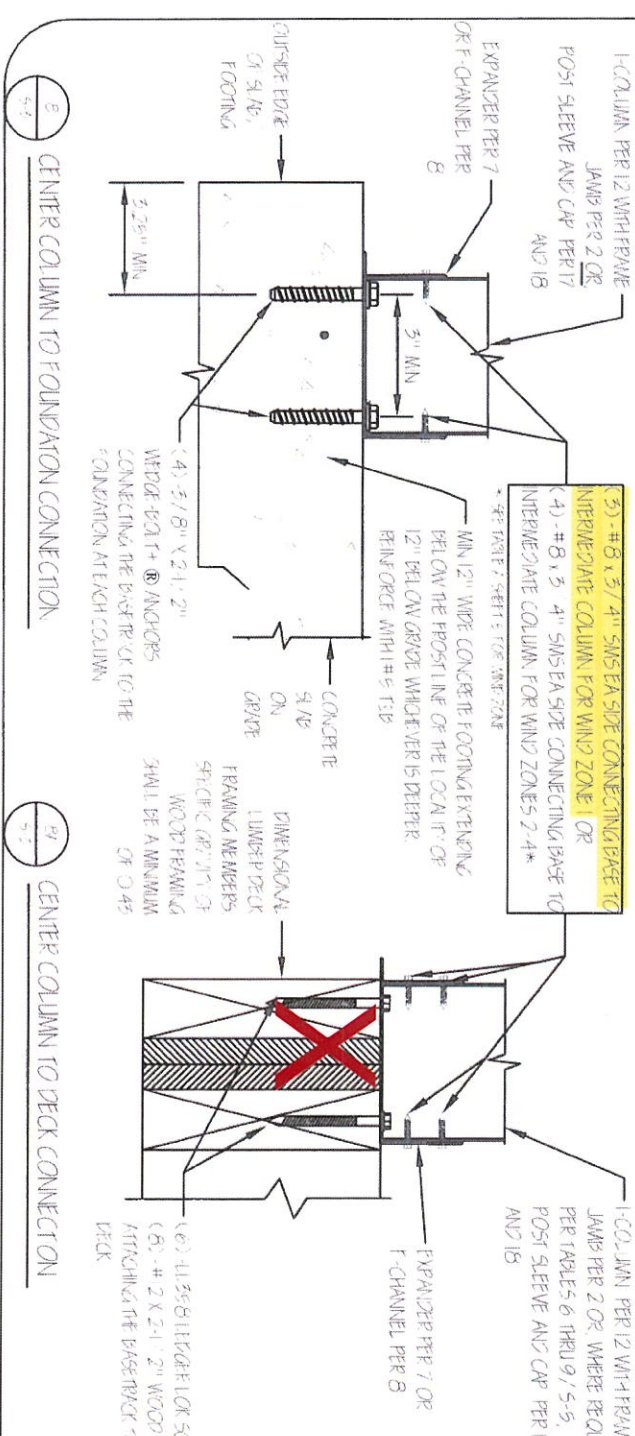
6 CENTER COLUMN PER 12 + 2 TO BASE DETAIL

7 CENTER COLUMN PER 7, 8 + 2 TO BASE CONNECTION



8 WINDOW FRAME TO GLASS KNEE WALL

9 WINDOW FRAME TO PANEL KNEE WALL



10 WINDOW FRAME TO GLASS KNEE WALL

11 WINDOW FRAME TO PANEL KNEE WALL

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

DATE: 2/13/19  
SCALE: NTS  
Drawn by: MJG  
REV: DATE:  
SHEET: 3 OF 5



SEAL  
028780  
02/27/19  
NORTH CAROLINA  
PROFESSIONAL  
ENGINEER

PH: (513) 782-3900 FAX: (513) 782-3903

1754/2020

SECTION DETAILS

CHAMPION ENCLOSURE SUPPLIERS  
12111 CHAMPION WAY, CINCINNATI, OH 45241

PH: (513) 782-3900 FAX: (513) 782-3903







WIND SPEED	115 MPH	130 MPH	140 MPH	150 MPH
WIND SHEET	PER CAT I	PER CAT II	PER CAT II	PER CAT II
ALL OTHER SPEEDS	90 MPH	100 MPH	110 MPH	120 MPH
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	WIND ZONE 5
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 PARTITIONS WITH MEAN ROOF HEIGHTS UP TO 50' IN EXPOSURE B AND UP TO 15' IN EXPOSURES C AND D. FOR ROOMS IN EXPOSURE CATEGORIES C AND D WITH MEAN ROOF HEIGHTS WITH MEAN ROOF HEIGHTS BETWEEN 15' AND 50' THE NEXT HIGHER 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 ADJACENT TO CHANGES FROM THE GENERAL TOPOGRAPHY OF THE AREA.

PANEL SPAN (FT)	ROOF LIVE SNOW LOAD (psf)				WIND ZONE *			
	1	2	3	4	1	2	3	4
20	25	30	35	40	50	55	60	70
30	35	40	45	50	60	65	70	80
40	40	45	50	55	65	70	75	85
50	45	50	55	60	70	75	80	90
60	50	55	60	65	75	80	85	95
70	55	60	65	70	80	85	90	100
80	60	65	70	75	85	90	95	105
90	65	70	75	80	90	95	100	110
100	70	75	80	85	95	100	105	115
110	75	80	85	90	100	105	110	120
120	80	85	90	95	105	110	115	125
130	85	90	95	100	110	115	120	130
140	90	95	100	105	115	120	125	135
150	95	100	105	110	120	125	130	140
160	100	105	110	115	125	130	135	145
170	105	110	115	120	130	135	140	150
180	110	115	120	125	135	140	145	155
190	115	120	125	130	140	145	150	160
200	120	125	130	135	145	150	155	165

TABLE 1: BUILDERS TO BE CONSULTED FOR THE SIZING OF THE STUDY ROOF PANELS SHALL BE CONSULTED FOR THE LOADS AND FOR THE ALLOWABLE HEIGHTS OF THE STUDY ROOF PANELS. SEE THE DESIGN TABLES FOR THE ALLOWABLE HEIGHTS OF THE STUDY ROOF PANELS.

PANEL HEIGHT (IN)	ROOF SNOW LOAD (psf)									
	20	25	30	35	40	45	50	55	60	70
17'-4"	6'-8"	6'-5"	6'-2"	5'-10"	5'-7"	5'-4"	5'-1"	4'-10"	4'-7"	4'-4"
17'-0"	6'-4"	6'-1"	5'-8"	5'-5"	5'-2"	4'-10"	4'-7"	4'-4"	4'-1"	3'-10"
16'-6"	6'-0"	5'-7"	5'-4"	5'-1"	4'-10"	4'-7"	4'-4"	4'-1"	3'-10"	3'-7"
16'-2"	5'-6"	5'-3"	5'-0"	4'-7"	4'-4"	4'-1"	3'-10"	3'-7"	3'-4"	3'-1"
15'-8"	5'-2"	4'-9"	4'-6"	4'-3"	4'-0"	3'-7"	3'-4"	3'-1"	2'-10"	2'-7"
15'-4"	4'-8"	4'-5"	4'-2"	3'-9"	3'-6"	3'-3"	3'-0"	2'-7"	2'-4"	2'-1"
15'-0"	4'-4"	4'-1"	3'-8"	3'-5"	3'-2"	2'-9"	2'-6"	2'-3"	2'-0"	1'-7"
14'-6"	4'-0"	3'-7"	3'-4"	3'-1"	2'-8"	2'-5"	2'-2"	1'-9"	1'-6"	1'-3"
14'-2"	3'-6"	3'-3"	3'-0"	2'-7"	2'-4"	2'-1"	1'-8"	1'-5"	1'-2"	1'-0"
13'-8"	3'-2"	2'-9"	2'-6"	2'-3"	2'-0"	1'-7"	1'-4"	1'-1"	10"	7"
13'-4"	2'-8"	2'-5"	2'-2"	1'-9"	1'-6"	1'-3"	1'-0"	7"	4"	1"
13'-0"	2'-4"	2'-1"	1'-8"	1'-5"	1'-2"	9"	6"	3"	0"	0"

- ROOF SECTION OTHER THAN 1:120.
- IF ALLOWABLE SPANS ARE BASED ON UNIFORM SNOW LOADING CONDITIONS.
- FOR OTHER ROOF PANELS WITH ASYMMETRIC SPANS, THE INCH ROOF LOAD FOR THIS CASE SHALL EQUAL THE DESIGN SNOW ROOF LOAD - 5 psf.

TABLE 3: ALLOWABLE SPANS FOR HEADERS OVER DOOR AND WINDOW OPENINGS

APPLICABLE WIND ZONE	70	100	125	150	175	200	250	300	350	400	500
STANDARD HEADERS	96"	78"	72"	64"	60"	56"	48"	N/A	N/A	N/A	N/A
HEADERS WITH 2x6 STUDS	96"	96"	96"	96"	95"	88"	72"	65"	60"	56"	48"

TABLE 4: ALLOWABLE COLUMN SPACING BASED ON DOOR/WINDOW UNIT CAPACITY

WIND ZONE	1	2	3	4
ALLOWABLE COLUMN SPACING	96"	84"	78"	69"

TABLE 5: ALLOWABLE HEIGHT OF LOW BEARING I-COLUMN PER I2 AND 2

WIND ZONE *	1	2	3	4
60"	85	85	85	80
68"	85	85	83	80
78"	85	80	75	...
84"	85	75	...	...
96"	80	...	...	...

TABLE 6: ALLOWABLE SPANS (FT) FOR DECKS ON WALLS WITH STRUCTURAL SANDWICH WALL PANELS

WIND ZONE	1	2	3	4
MAX DECK SPAN (FT)	15'-6"	2'-3"	1'-2"	10'-3"

TABLE 7: ALLOWABLE HEIGHT OF NON-LOAD BEARING COLUMN I-COLUMN PER I2 AND 2 SEPARATING TWO DOORS

WIND ZONE *	1	2	3	4
60"	10'-0"	8'-10"	8'-9"	...
68"	9'-8"	7'-11"	8'-2"	...
78"	9'-3"	8'-0"	8'-2"	...
84"	9'-0"	8'-5"	...	...
96"	8'-6"	...	...	...

**GENERAL NOTES AND SPECIFICATIONS**

- THE STRUCTURAL DESIGN FOR CHAMPION PATIO ROOMS HAS BEEN PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF 2009 IBC AND 2016 IBC. ALL REVISIONS OF THE IBC CODES 2009 IBC SECTIONAL CODE OF OHIO 2016 NEW YORK STATE SECTIONAL CODE 2016 SOUTH CAROLINA SECTIONAL CODE 2016 NORTH CAROLINA BUILDING CODE 2016 ENCLAVE SECTIONAL CODE 9410 OF THE MASSACHUSETTS SECTIONAL CODE 2016 HODGE ISLAND SECTIONAL CODE AND TWO FAMILY HOME LIVING CODE DRIVER ZONE IBC 2016 DRIVE BUILDING CODE AND THE FOLLOWING REFERENCED STANDARDS: 2005 AND 2010 EDITIONS OF ASCE 7, 2005 AND 2010 ALUMINUM DESIGN MANUAL, 2005 AND 2016 IBCS FOR WOOD AND ALUMINUM, NSA 2100 FOR SANDWICH PANELS.
- IF PLANS COVER THE DESIGN OF THE PATIO ROOM AND ITS CONNECTION TO THE EXISTING STRUCTURE THE STRUCTURAL DESIGN OF THE EXISTING STRUCTURE TO SUPPORT THE TRANSMITTED LOADS IS SEVERAL FEET FROM THE SCOPE OF THIS PACKAGE AND SHALL BE VERIFIED BY OTHERS.
- THE SNOW LOAD VALUES PRESENTED IN THIS PACKAGE ARE FOR UNIFORM ROOF SNOW LOADS. CONSIDERATION SHALL BE GIVEN TO SITE SPECIFIC CONDITIONS SUCH AS SLIDING, DRIFTING OR UNIFORM WIND SNOW LOADS.
- BASIC WIND SPEEDS ARE 5 FEET ABOVE THE GROUND IN EXPOSURE C.
- SEISMIC DESIGN FOR ROOMS CONSTRUCTED IN SEISMIC DESIGN CATEGORIES E2 WITH UNIFORM ROOF SNOW LOADS UP TO 30 PSF HAS BEEN CONSIDERED IN THIS PACKAGE. A SITE SPECIFIC SEISMIC EVALUATION IS REQUIRED FOR ENCLOSURES IN SECT D OR HIGHER WITH DESIGN ROOF SNOW LOADS EXCESSIVE OF 30 PSF.
- THE PATIO ROOM PARTITION SHALL BE A MAXIMUM OF 10 FEET IN HEIGHT FROM THE FLOOR TO THE CEILING AND ITS FOOTINGS HAVE BEEN ENGINEERED TO SUPPORT THE ENCLOSURES AND THE DESIGN SNOW LOADS. THE DOOR AND WINDOW UNITS USED IN THE CHAMPION PATIO ROOM SYSTEM SHALL BE ENGINEERED TO SUPPORT THE AREAS WITH FULLY TIMBERED INSULATED GLASS CURTAINING TO THE REQUIREMENTS OF ANSI 2987 AND OR 6 OR 20 CATEGORY II. IN WIND BORNE DEBRIS REGIONS (AFTER OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING CODE).
- THIS ENCLOSURE MEETS THE REQUIREMENTS OF A CATEGORY II SNOWROOM AS DEFINED IN FEMA, NEHA, NSA 2100.

- CONCRETE**
- ALL CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF AC 308. SPECIFIC CONDITIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
  - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS AND WHERE EXPOSED TO THE EXTERIOR ENVIRONMENT SHALL HAVE AN ENHANCED AIR CONTENT OF BETWEEN 5.0% TO 7.0%.
  - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A635 60 KSI DEFORMED BARS AND ASTM A635 MESH.
- STRUCTURAL ALUMINUM**
- ALL EXTENSIONS SHALL BE AL 6063-T6 ALUMINUM PROVIDED BY ENCLOSED SUPPLIERS, I.L.C.
  - ROOF PANELS SHALL BE 3'-3", 4' OR 6' THICK SANDWICH OR OSB SANDWICH PANELS MANUFACTURED BY ENCLOSED SUPPLIERS, I.L.C.
  - SANDWICH ROOF PANEL SKINS CONSIST OF 0.024" THICK ALUMINUM SHEETING (3.05-137-2) OSB ROOF PANEL SKINS CONSIST OF A 0.024" ALUMINUM SHEETING AND OSB COMBINED OF SKINS AND A 0.024" ALUMINUM SHEETING BOARD SKIN.
  - THE CORE FOR ALL PANELS SHALL BE ASTM C578 FIBER REINFORCED POLYSTYRENE.
  - THE PANELS SHALL BE A MAXIMUM OF THREE FEET (3') WIDE AND SHALL BE SUPPORTED BETWEEN AL 6063-T6 BEAMS.
  - THE ALLOWABLE PANEL SPAN CHART IN THIS PACKAGE APPLIES TO BOTH THE SANDWICH AND OSB ROOF PANELS.

- MECHANICAL FASTENERS**
- STEEL NUTS AND SCREWS (SWS) SHALL BE STAINLESS STEEL WITH THE AS SCREW THREADS.
  - LAG SCREWS SHALL BE GALVANIZED STEEL. FULL BODIED SCREWS WITH A MINIMUM BRINELL HARDNESS OF 60,000 PSI FOR 1/2" DIAMETER AND 40,000 PSI FOR 3/8" AND LARGER DIAMETER LAG SCREWS SHALL HAVE A MINIMUM WEIGHT PER FOOT OF 8 LBS PER FOOT.
  - WOOD SCREWS SHALL HAVE A MINIMUM BRINELL HARDNESS OF 60,000 PSI.
  - 1 1/2" BOLT END OF SCREWS BY FASTENERS SHALL HAVE A MINIMUM BRINELL HARDNESS OF 65,000 PSI AND SHALL HAVE A MINIMUM DIAMETER OF 2". IN THE MAINWOOD SUPPORTING MEMBER AND/OR BOLTS AND CONCRETE SHALL BE 2" X 2" VERTICAL BOLTS AND BOLTS BY POWER FASTENERS AND ANCHORS SHALL BE ZINC PLATED IN CONTACT WITH POLYESTER FASTENERS. FASTENERS IN CONTACT WITH POLYESTER SHALL BE STAINLESS STEEL OR SHALL BE HOT DIP GALVANIZED PER ASTM A593 FOR CONTACT WITH POLYESTER IN CONTACT WITH POLYESTER TREATED LUMBER SHALL BE ASTM A635 CORROSIVE RESISTANT GALVANIZED.



DATE:	2/13/19
SCALE:	AS NOTED
Drawn by:	MJG
REV:	DATE:
2019 RLO	7/19/19
2015 SC	8/7/19
DRIVER CO	11/6/19
SHEET: 5 OF 5	

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

**DESIGN TABLES AND NOTES**

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