2/26/2020

NORTH CAROLINA PROFESSIONAL SEAL 026759 ENGINEER MARTIN J. GOSS

SHEET: 1 OF 5

REV:	DATE:

Drawn by: MJG

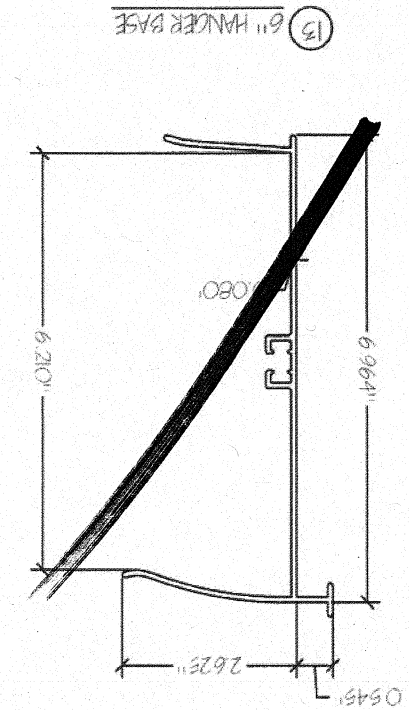
SCALE: NTS

DATE: 2/13/19

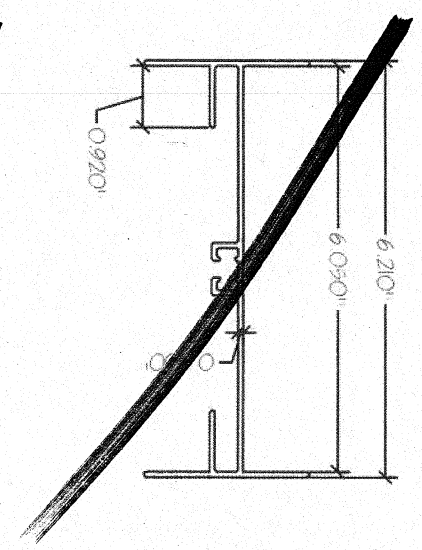
CHAMPION WINDOWS AND PATIO ROOMS
4" Wall System with Studio Style Roof

SECTION DETAILS

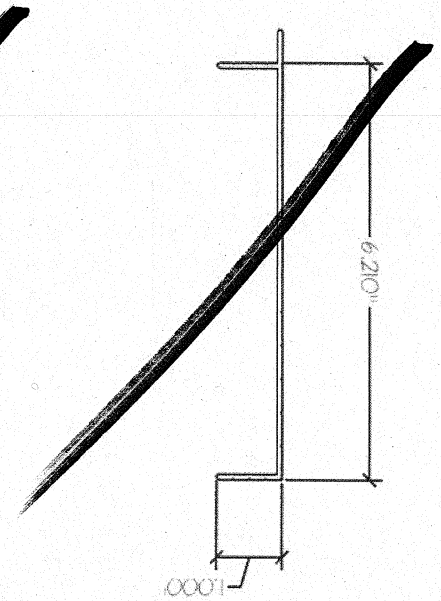
CES
CHAMPION ENCLOSURE SUPPLIERS
12111 CHAMPION WAY, CINCINNATI, OH 45241
PH: (513) 782-3900 FAX: (513) 782-3903



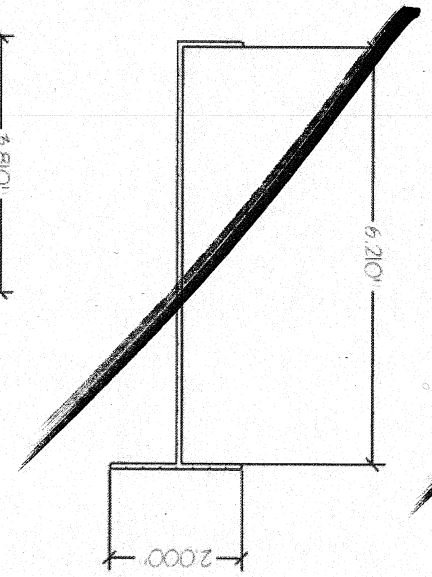
(7) 4" EXPANDER



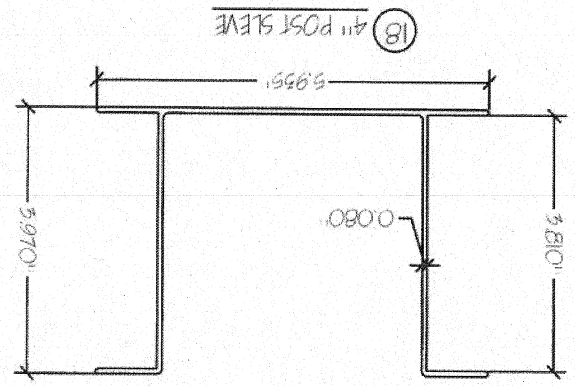
(8) 4" F-CHANNEL



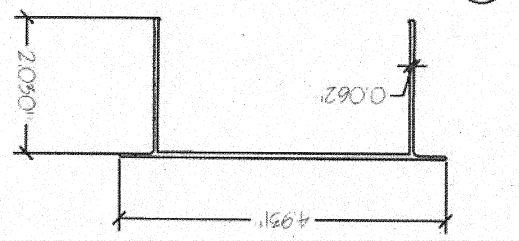
(9) 4" HANGER BASE



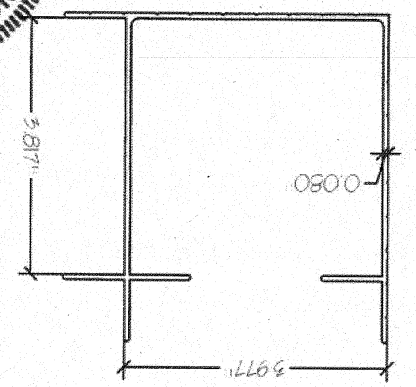
(10) 4" SILL EXTRUSION



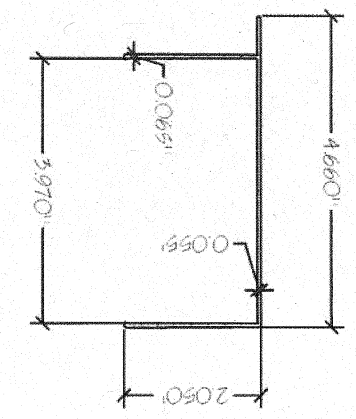
(18) 4" POST SLEEVE



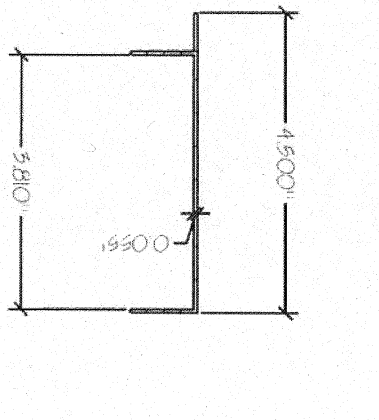
(17) 4" POST SLEEVE / WING PANEL CAP



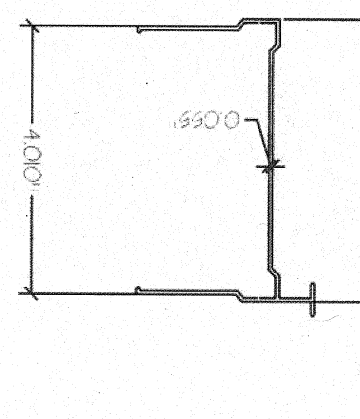
(20) CORNER POST



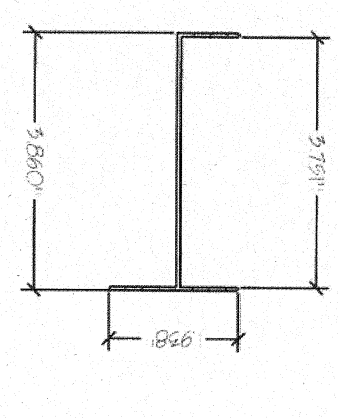
(1) WINDOW / DOOR FRAME HEAD



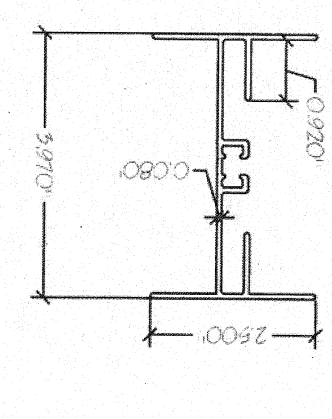
(2) WINDOW / DOOR FRAME JAMB



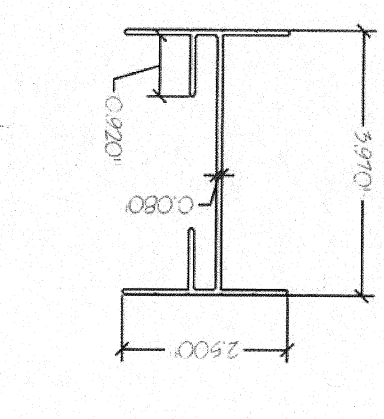
(3) WINDOW / DOOR FRAME SILL



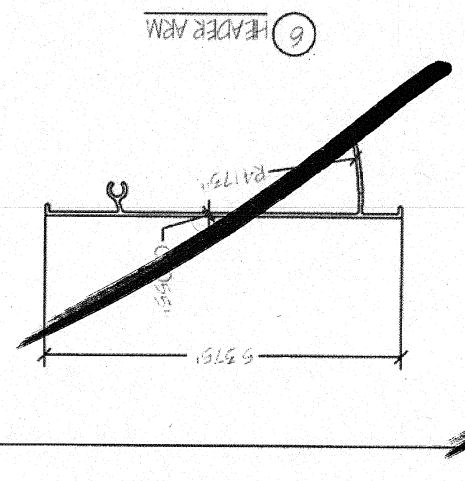
(4) TRANSOM FRAME



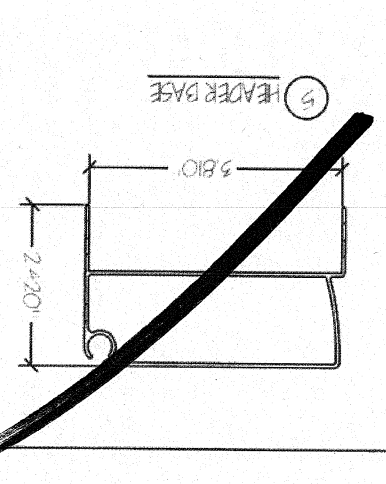
(11) 4" I-SECTION THERM



(12) 4" NON-THERM I-SECTION



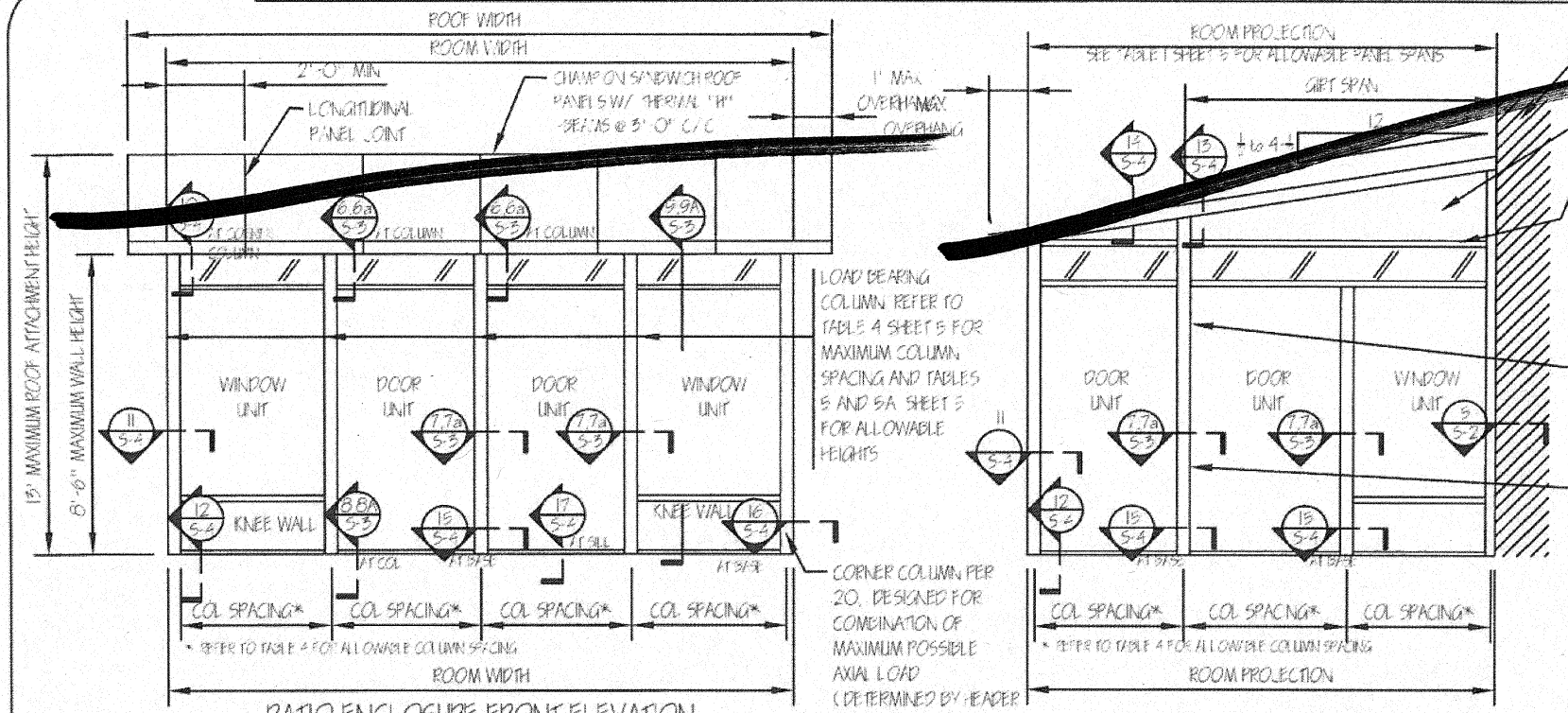
(6) HEADER ARM



(5) HEADER BASE

"WALLS ONLY" BUILT ON EXISTING CONCRETE & UNDER EXISTING HEADERS/ROOF

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



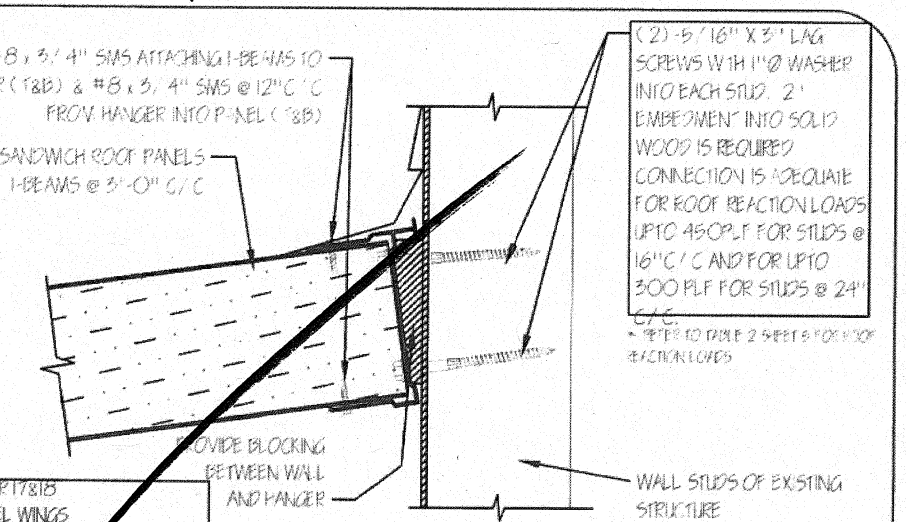
PATIO ENCLOSURE FRONT ELEVATION

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

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)

PATIO ENCLOSURE SIDE ELEVATION

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 ROOM PROJECTION. SEE TABLE 6 SHEET 5 FOR ALLOWABLE GIRT SPANS
FOR GLASS OR NON-STRUCTURAL PANEL WINGS
A FULL HEIGHT COLUMN MUST BE PROVIDED AT A MINIMUM OF 8' C/C.
SEE TABLES 7 - 9 FOR ALLOWABLE NON LOAD BEARING COLUMN HEIGHTS



5-2 ROOF CONNECTION TO TIMBER FRAMED WALL

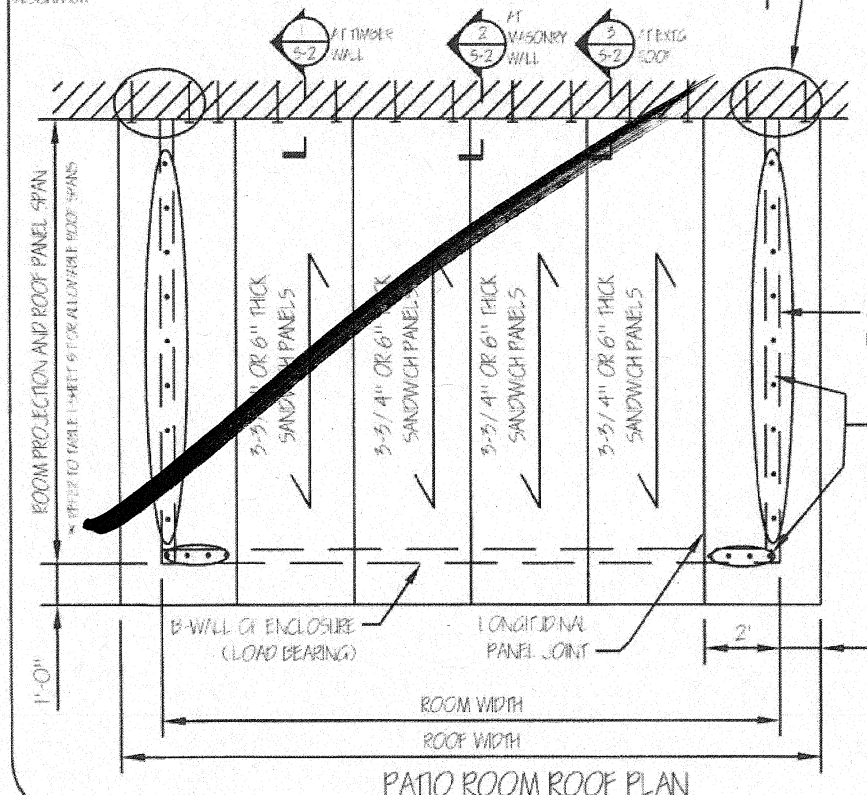
WIND ZONE*	MAX ROOM PROJECTION (PJ)
1	1.1 X ROOM WIDTH
2	1.0 X ROOM WIDTH
3	0.9 X ROOM WIDTH
4	0.8 X ROOM WIDTH

* REFER TO TABLE A SHEET 5 FOR WIND ZONE DESIGNATION

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

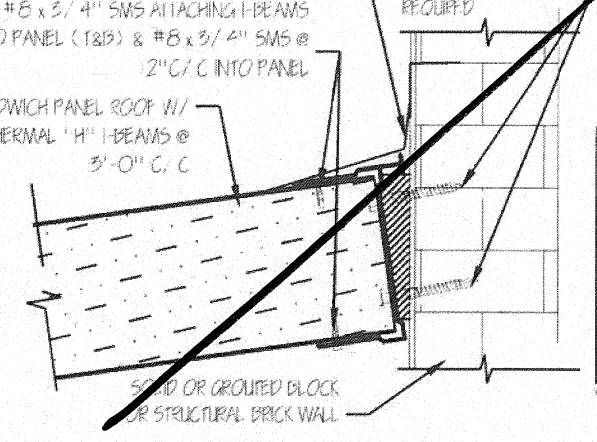
OR

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



PATIO ROOM ROOF PLAN

(3) -#8 x 3/4" SMS ATTACHING I-BEAMS TO PANEL (T&B) & #8 x 3/4" SMS @ 12"C/C INTO PANEL



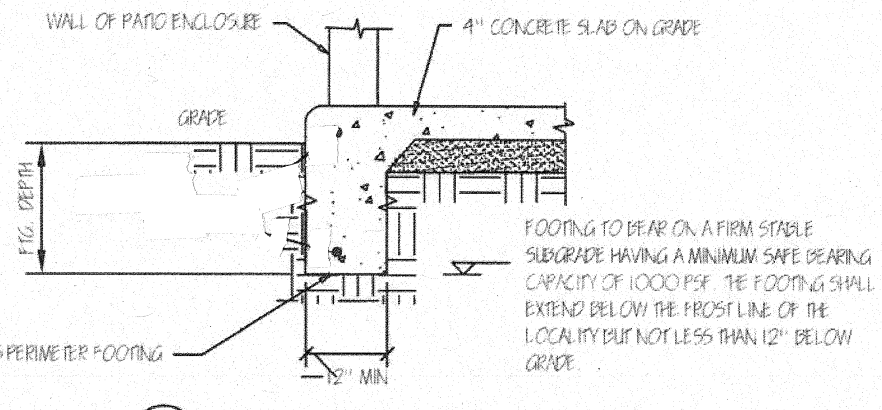
(2) -1/4" X 3-3/4" HILTI KWIK-CON II ANCHORS @ 12" C/C FOR ROOF REACTION LOADS UPTO 400 PLF*
* REFER TO TABLE 2 SHEET 5 FOR ROOF REACTION LOADS

LL358 LEDGER LOK SCREWS WITH 1" WASHER OR 5/16" X 3" LAG SCREWS WITH 1" WASHER CONNECTING HANGER TO 2X BLOCKING WITH SPACING PER FOLLOWING TABLE

	ROOF REACTION*						
	100	150	200	250	300	350	450
REQ'D SPACING (IN)	16"	16"	12"	10"	8"	7"	5"

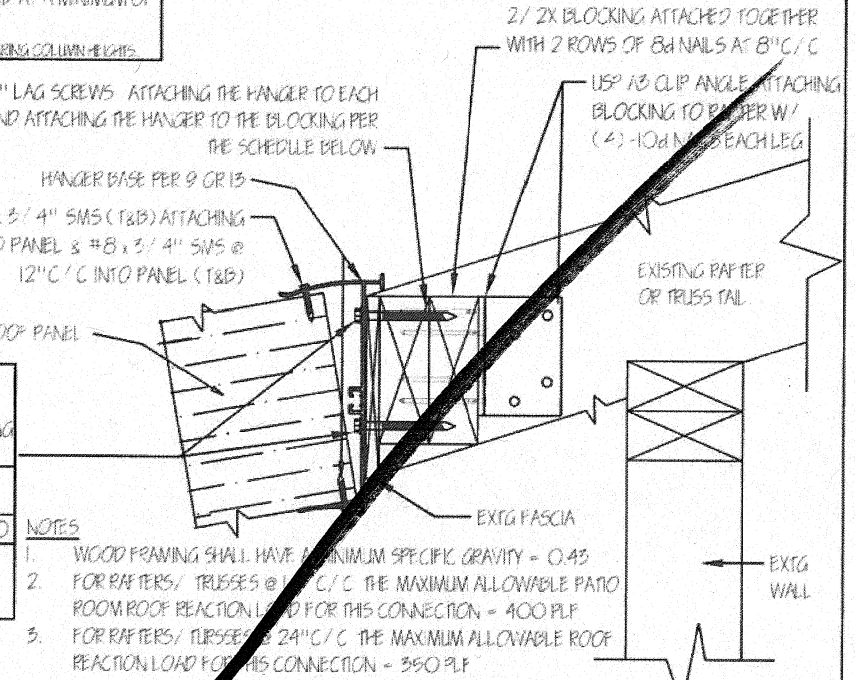
* ROOF REACTION FROM TABLE 2 SHEET 5

2 5-2 ROOF TO MASONRY WALL CONNECTION DETAIL



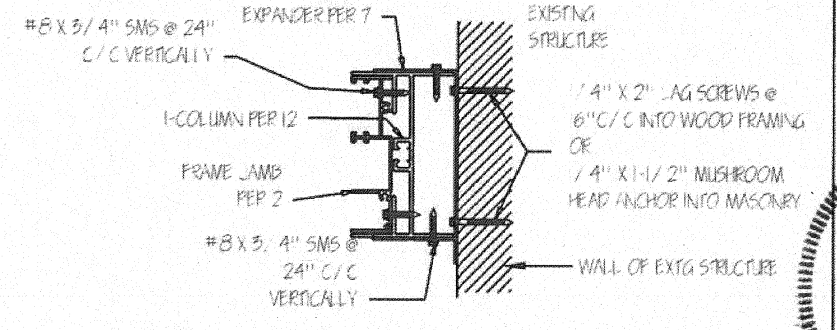
4 5-2 TURNED DOWN FOOTING DETAIL

5/16" X 3" LAG SCREWS ATTACHING THE HANGER TO EACH RAFTER TAIL AND ATTACHING THE HANGER TO THE BLOCKING PER THE SCHEDULE BELOW



NOTES
1. WOOD FRAMING SHALL HAVE A MINIMUM SPECIFIC GRAVITY = 0.43
2. FOR RAFTERS/ TRUSSES @ 16" C/C THE MAXIMUM ALLOWABLE PATIO ROOM ROOF REACTION LOAD FOR THIS CONNECTION = 400 PLF
3. FOR RAFTERS/ TURSSES @ 24" C/C THE MAXIMUM ALLOWABLE ROOF REACTION LOAD FOR THIS CONNECTION = 350 PLF
4. A STRUCTURAL ANALYSIS OF THE EXTG ROOF FRAMING MEMBERS ABILITY TO CARRY THE NEW LOADS IS BEYOND THE SCOPE OF THIS PACKAGE AND SHOULD BE PERFORMED BY OTHERS

3 5-2 PATIO ROOM ROOF TO EXTG ROOF DETAIL



5 5-2 SIDEWALL TO EXTG STRUCTURE CONNECTION DETAIL

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

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

ELEVATION AND SECTION DETAILS

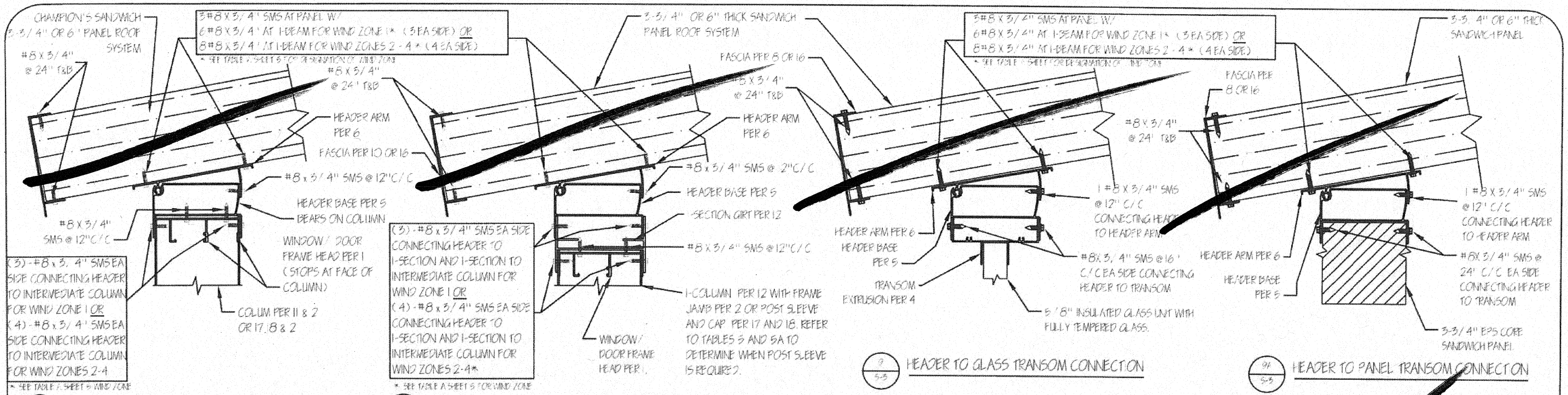
DATE: 2/13/19
SCALE: NTS
Drawn by: MJG

REV:	DATE:

SHEET: 2 OF 5

NORTH CAROLINA PROFESSIONAL SEAL 023759 ENGINEER MARTIN J. GOSS

"WALLS ONLY" BUILT ON EXISTING CONCRETE & UNDER EXISTING HEADERS/ ROOF

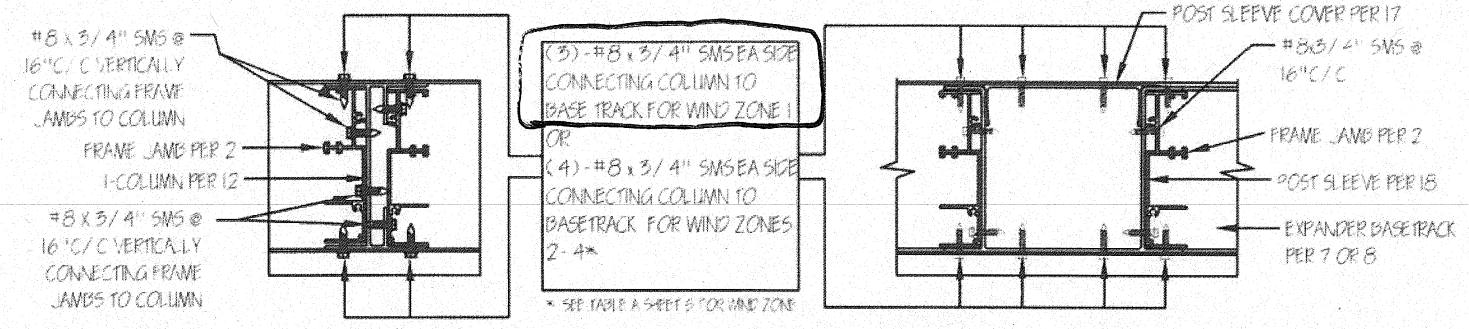


6 5-5 STANDARD HEADER TO CENTER COLUMN CONNECTION

6A 5-5 HEADER WITH I-SECTION TO CENTER COLUMN CONNECTION

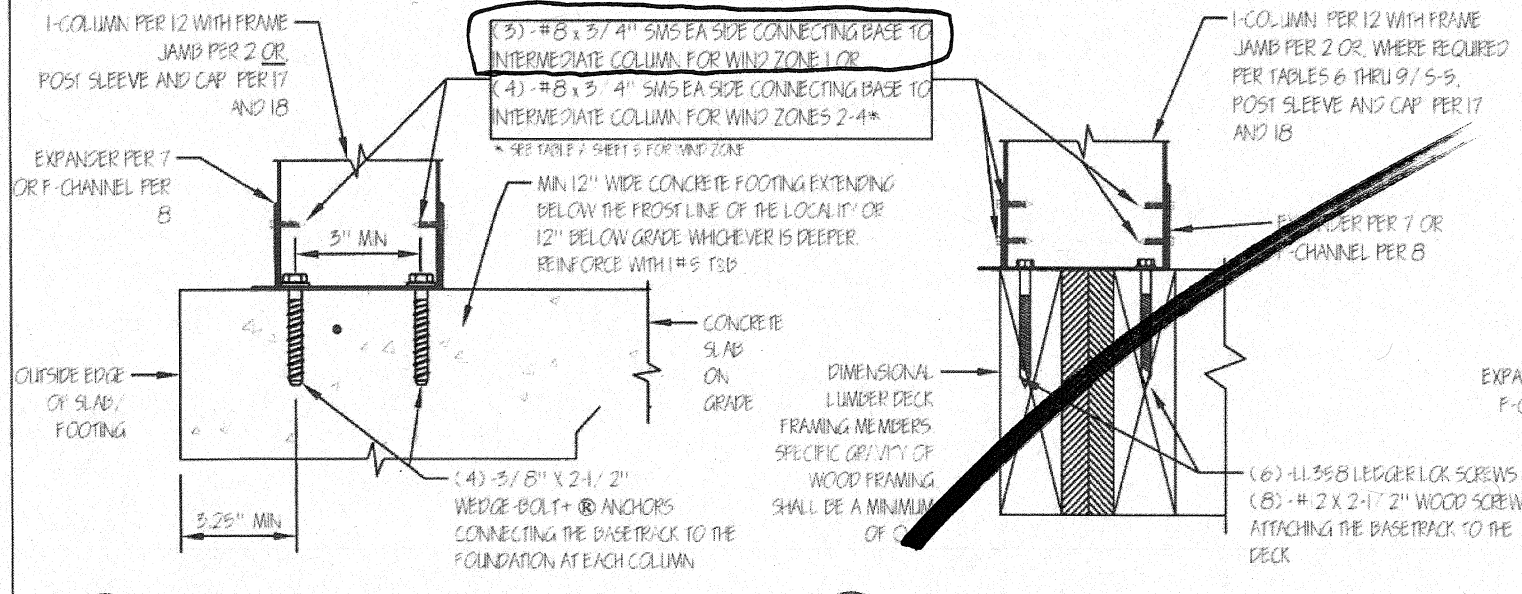
9 5-5 HEADER TO GLASS TRANSOM CONNECTION

9A 5-5 HEADER TO PANEL TRANSOM CONNECTION



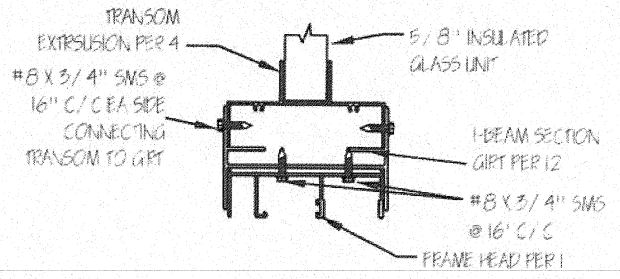
7 5-5 CENTER COLUM PER 12 + 2 TO BASE DETAIL

7A 5-5 CENTER COLUM PER 7, 18 + 2 TO BASE CONNECTION

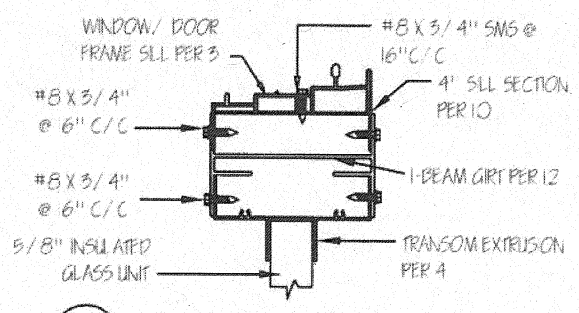


8 5-5 CENTER COLUMN TO FOUNDATON CONNECTION

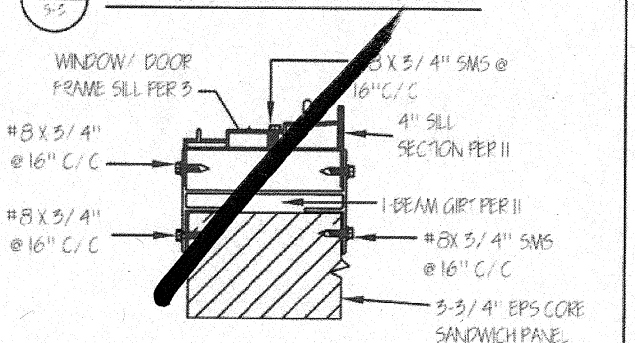
8A 5-5 CENTER COLUMN TO DECK CONNECTION



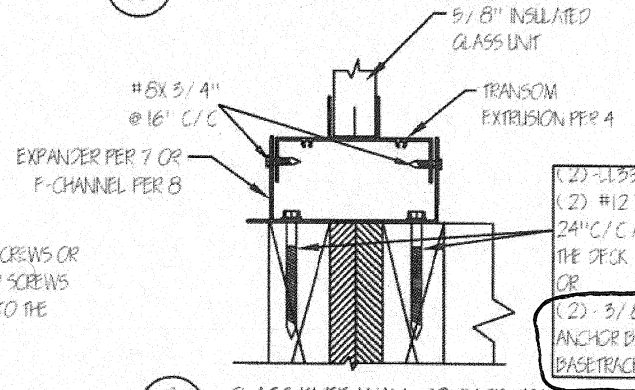
9 5-5 TRANSOM TO WINDOW FRAME



9A 5-5 PANEL TRANSOM TO WINDOW FRAME

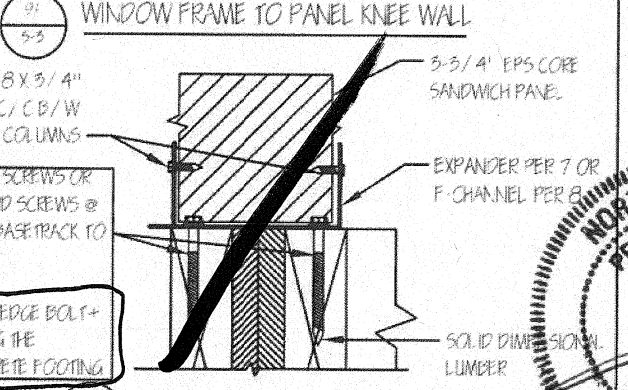


9 5-5 WINDOW FRAME TO GLASS KNEE WALL



9 5-5 GLASS KNEE WALL TO BASE TRACK

9A 5-5 WINDOW FRAME TO PANEL KNEE WALL



9 5-5 PANEL KNEE WALL TO BASE TRACK

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

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

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

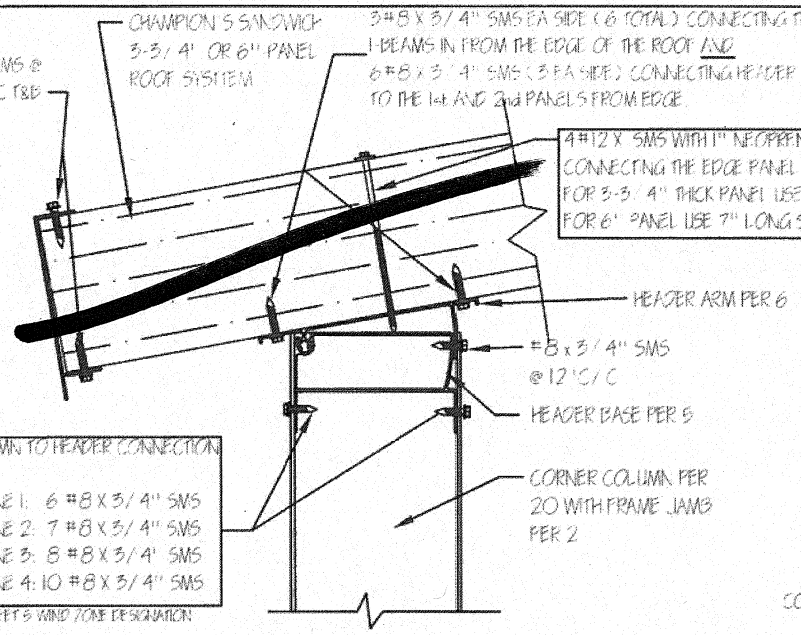
REV:	DATE:

SHEET: 3 OF 5

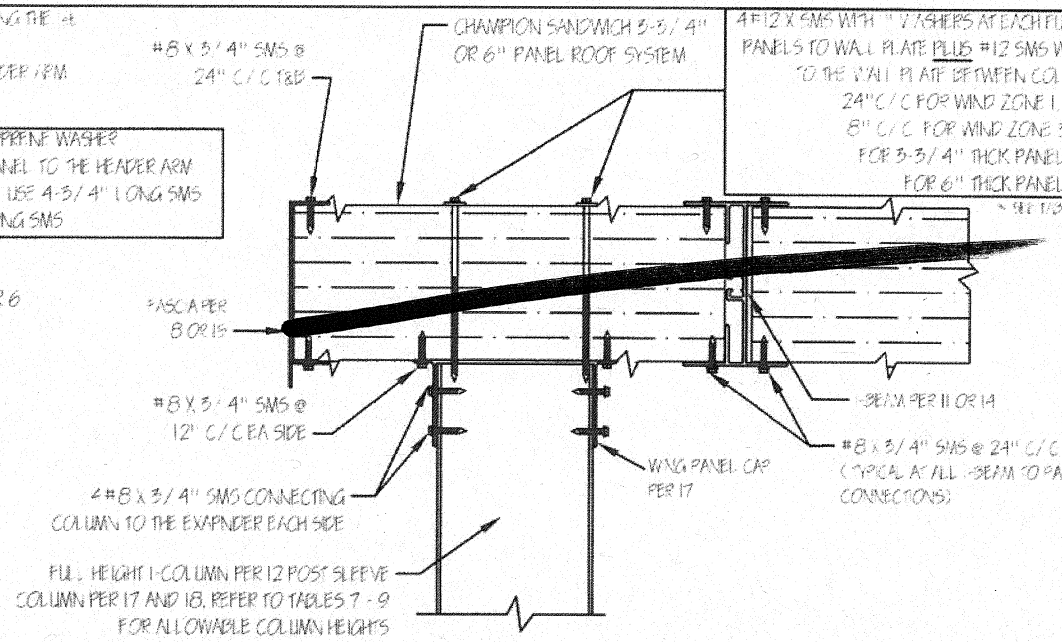
NORTH CAROLINA PROFESSIONAL SEAL 026759 ENGINEER MARTIN J. GOSS

2/26/2020

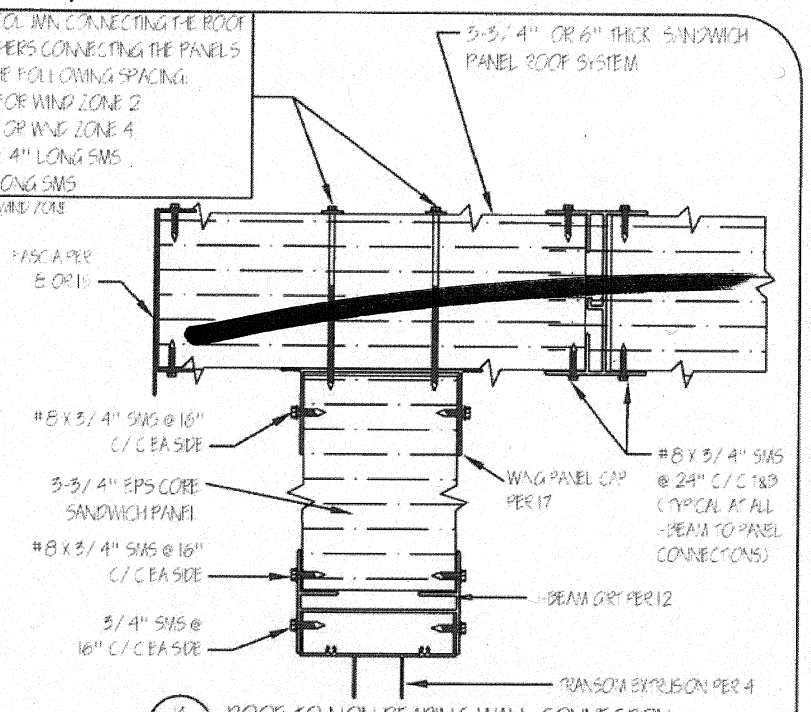
"WALLS ONLY" BUILT ON EXISTING CONCRETE & UNDER EXISTING HEADERS/ROOF



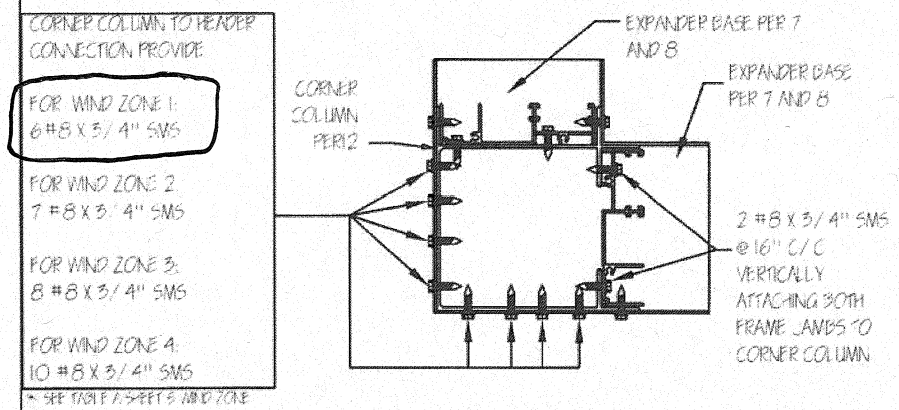
12 / 5-4 CORNER COLUMN TO ROOF CONNECTION



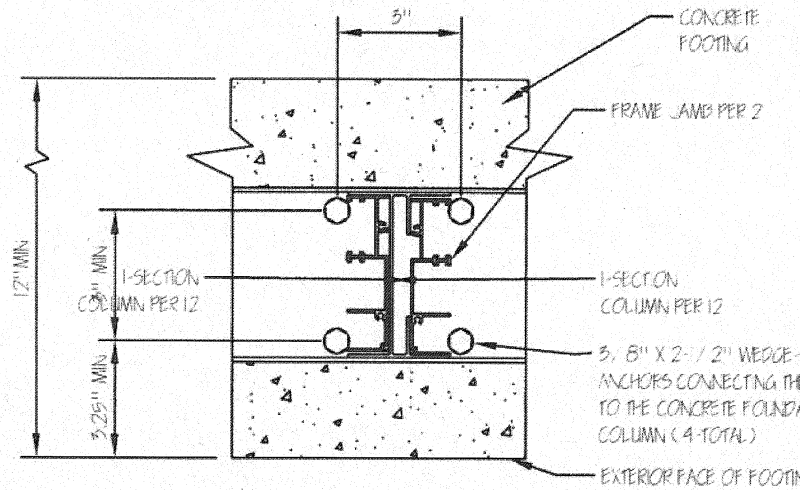
15 / 5-4 NON AXIAL BEARING COLUMN TO ROOF CONNECTION



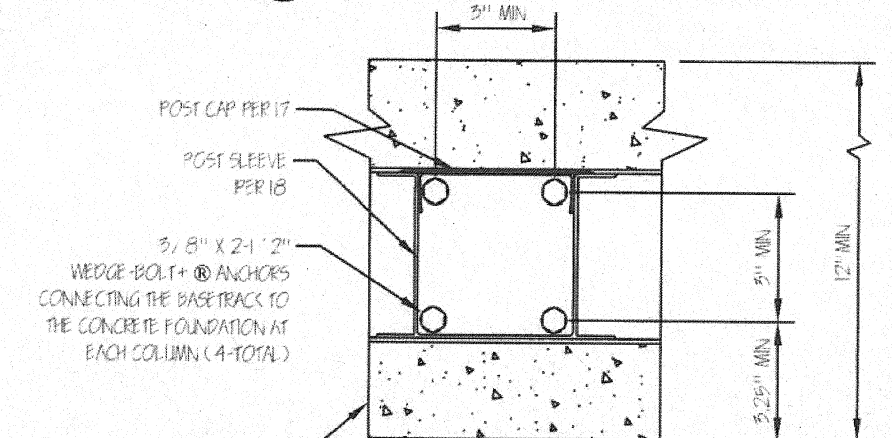
14 / 5-4 ROOF TO NON BEARING WALL CONNECTION



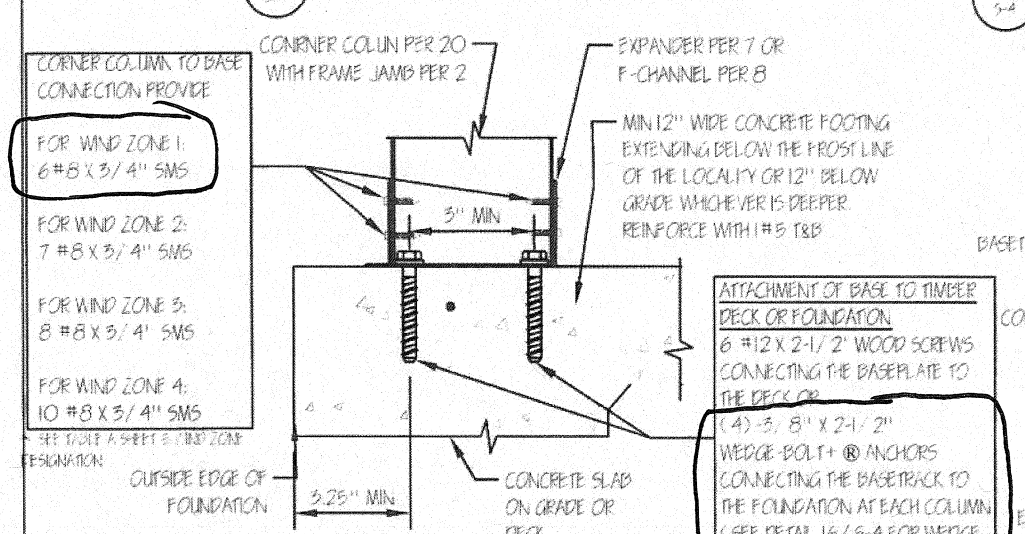
5-4 CORNER COLUMN TO BASE CONNECTION



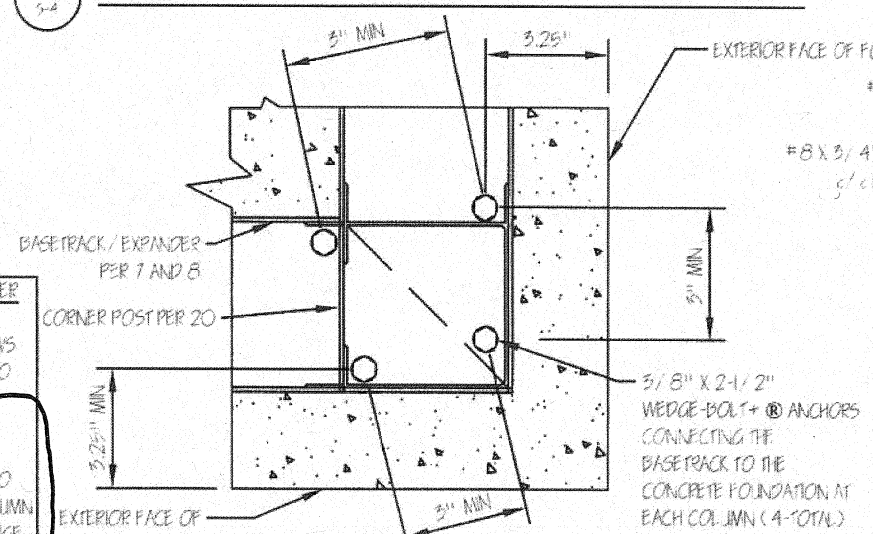
15 / 5-4 CONNECTION OF CENTER COLUMN PER 12 & 2 TO BASE/FOUNDATION



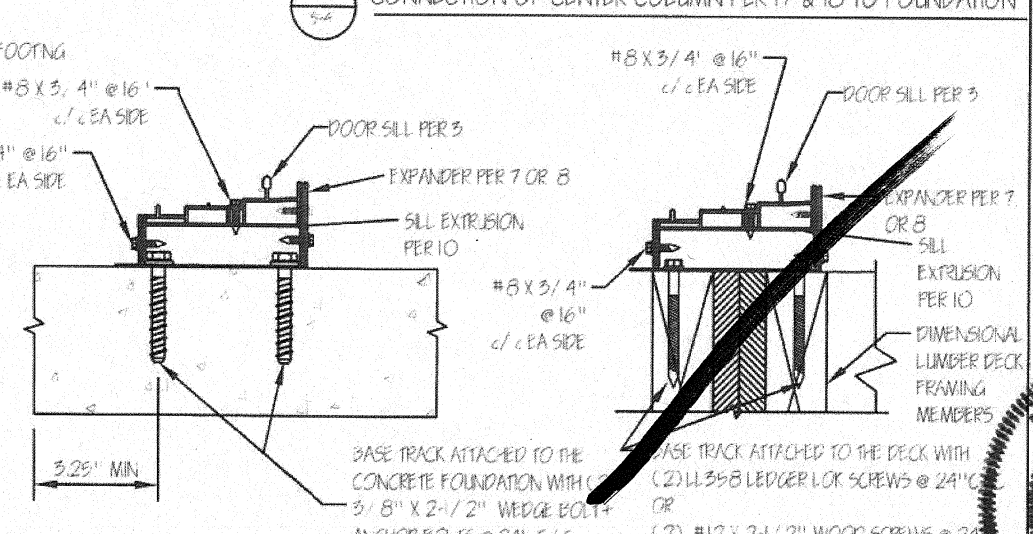
15A / 5-4 CONNECTION OF CENTER COLUMN PER 17 & 18 TO FOUNDATION



2 / 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

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

SECTION DETAILS

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

REV:	DATE:

SHEET: 4 OF 5

NORTH CAROLINA PROFESSIONAL SEAL 026759 ENGINEER MARTIN J. GOSS

2/26/2020

"WALLS ONLY" BUILT ON EXISTING CONCRETE & UNDER EXISTING HEADERS / ROOF

TABLE A: WIND ZONE DESIGNATION BASED ON DESIGN WIND SPEED AND EXPOSURE

STRENGTH DESIGN WIND SPEED	115 MPH RISK CAT I	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

1. EXPOSURE CATEGORIES ARE AS DEFINED IN THE IRC, IBC AND ASCE-7
2. 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 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.
3. 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.

TABLE 1: ALLOWABLE SANDWICH ROOF PANEL SPANS (FT-IN)

PANEL THICKNESS (IN)	LIVE LOAD (PSF)	ROOF SNOW LOAD (PSF)								
	20	20	25	30	35	40	45	50	55	60	70
3.3"	17'-4"	6'-8"	14'-5"	13'-7"	12'-10"	12'-2"	11'-6"	11'-0"	10'-7"	9'-10"
6"		20'	19'-2"	17'-7"	16'-4"	15'-4"	14'-6"	13'-9"	13'-2"	12'-8"	11'-8"

FOR SPAN SELECTION CRITERIA = L / 120

1. THE ALLOWABLE SPANS ARE BASED ON UNIFORM SNOW LOADING CONDITIONS.
2. FOR OSB ROOF PANELS WITH ASPHALT SHINGLES, THE INPUT ROOF LOAD FOR THIS CHART SHALL EQUAL THE DESIGN SNOW + ROOF LIVE LOAD = 55PSF.

TABLE 2: APPLIED ROOF LOADS (PLF) ON WINDOW AND DOOR HEADER

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	12	143	173
8	115	140	165	190	215	240	265	290	315	365	109	136	163	195
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 3: ALLOWABLE SPANS FOR HEADERS OVER DOOR AND WINDOW OPENINGS

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

* APPLIED LOAD = 1/2 THE LENGTH OF THE APPLIED ROOF LOAD FROM SHEET LOADING OR FROM WIND LOADING AS DERIVED FROM TABLE 2 SHEET 5

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

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

* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

1. TABLE 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 = 55PSF.
2. NEW STRUCTURE WALLS SUPPORTING ROOF LOADS.

* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

TABLE 5: ALLOWABLE HEIGHT OF LOAD BEARING I-COLUMN PER 12 AND 2

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

TABLE 5A: ALLOWABLE HEIGHT OF LOAD BEARING POST SLEEVE COLUMN PER 17 AND 18

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

TABLE 6: ALLOWABLE SPANS (FT) FOR GIRTS ON WALLS [illegible] STRUCTURAL SANDWICH WING PANEL

WIND ZONE	1	2	3	4
MAX GIRT SPAN (FT)	13'-6"	12'-3"	11'-2"	10'-3"

* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

TABLE 7: ALLOWABLE HEIGHT OF NON-LOAD BEARING COLUMN I-COLUMN PER 12 AND 2 SEPARATING TWO DOORS

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

* SEE TABLE A SHEET 5 FOR DESIGNATION OF WIND ZONE

TABLE 8: ALLOWABLE HEIGHT OF NON-LOAD BEARING COLUMN I-COLUMN PER 12 AND 2 ADJOINING AT LEAST ONE WINDOW

COLUMN SPACING (INCHES)	WIND ZONE			
	1	2	3	4
60"	13'-0"	12'-2"	11'-2"	10'-5"
68"	[illegible]	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

TABLE 9: ALLOWABLE HEIGHT OF NON-LOAD BEARING POST SLEEVE COLUMN [illegible] AND 18

COLUMN SPACING (INCHES)	WIND ZONE *			
	1	2	3	4
60"	13'-6"	13'-0"	12'-0"	11'-2"
68"	[illegible]'-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

1. 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, 2018 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 2015 IRC, 2016 DENVER BUILDING CODE AND UTILIZING THE FOLLOWING REFERENCED STANDARDS: 2005 AND 2010 EDITIONS OF ASCE 7, 2005 AND 2010 ALUMINUM DESIGN MANUAL, 2005, 2012 AND 2015 NDS FOR WOOD AND AAMA/NPEA/NSA 2100 FOR SUNROOMS.
2. THESE PLANS COVER THE DESIGN OF THE PATIO ROOM AND IT'S 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.
3. 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.
4. BASIC WIND SPEEDS ARE 3-SECOND GUST AT 33 FT ABOVE THE GROUND IN EXPOSURE C.
5. 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.
6. THE PATIO ROOM PROJECTION SHALL BE A MAXIMUM OF 1½ TIMES THE PATIO ROOM WIDTH.
7. 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.
8. 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 201 CATEGORY II. IN WIND BORNE DEBRIS REGIONS GLAZED OPENINGS SHALL BE PROTECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING CODE.
9. THIS ENCLOSURE MEETS THE REQUIREMENTS OF A CATEGORY II SUNROOM AS DEFINED IN AAMA/NPEA/NSA 2100.

MATERIALS

SOILS

1. ALL FOOTINGS SHALL BEAR ON LEVEL (WITHIN ± 2) 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

1. ALL CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
2. 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%.
3. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 60 KSI DEFORMED BARS AND ASTM A185 MESH.

STRUCTURAL ALUMINUM

1. ALL EXTRUSIONS SHALL BE AL 6063-T6 ALUMINUM PROVIDED BY ENCLOSURE SUPPLIERS LLC.
2. ROOF PANELS SHALL BE 3-3/8", 4" OR 6" THICK STANDARD OR OSB SANDWICH PANELS MANUFACTURED BY ENCLOSURE SUPPLIERS LLC.
   - STANDARD ROOF PANEL SKINS CONSISTS OF 0.024" THICK ALUMINUM SHEETHING (3105 H574).
   - OSB ROOF PANELS SKINS CONSISTS OF A 0.024" ALUMINUM SHEETHING AND ⅞" OSB COMBINED TOP SKINS AND A 0.024" ALUMINUM SHEETHING 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

1. SHEET METAL SCREWS (SMS) SHALL BE STAINLESS STEEL WITH TYPE AB SCREW THREADS.
2. LAG SCREWS SHALL BE GALVANIZED STEEL "FULL BODIED" SCREWS WITH A MINIMUM BENDING YIELD STRENGTH OF 60,000 PSI FOR ⅜" DIAMETER AND 40,000 PSI FOR ½" AND LARGER DIAMETER. LAG SCREWS SHALL HAVE A MINIMUM EMBEDMENT DEPTH OF 8 X LAG SCREW DIAMETER.
3. WOOD SCREWS SHALL HAVE A MINIMUM BENDING YIELD STRENGTH OF 80,000 PSI.
4. LL358 LEDGER LOK® SCREWS BY FASTENMASTER AND SHALL HAVE A MINIMUM BENDING STRENGTH OF 185,000 PSI AND SHALL HAVE A MINIMUM EMBEDMENT OF 2" INTO THE MAIN WOOD SUPPORTING MEMBER.
5. ANCHOR BOLTS INTO CONCRETE SHALL BE ½" Ø X 2-1/2" WEDGE-BOLT+ ANCHORS BY POWERS FASTENERS.
6. PIN ANCHORS SHALL BE ZAMAC NAILIN ANCHORS MANUFACTURED BY POWERS FASTENERS, BREWSTERS, NY OR EQUIVALENT.
7. FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL OR SHALL BE HOT DIPPED GALVANIZED PER ASTM A153. 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 Studio Style Roof

DESIGN TABLES AND NOTES

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

REV:	DATE:
2019 RCO	7/19/19
2015 SC	8/8/19
DENVER CO	11/6/19

SHEET: 5 OF 5

NORTH CAROLINA PROFESSIONAL SEAL 026759 ENGINEER MARTIN J. GOSS

2/26/2020