

20'-0" WIDE CARPORT STYLE BUILDINGS

DESIGN NOTES

- ALL CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH IBC 2018, OSHA, AISC 360, AISI 100, ASCE 7-16, AWS D1.3 CODES AND ALL APPLICABLE LOCAL REQUIREMENTS.
- ALL MATERIALS IDENTIFIED BY MANUFACTURER NAME MAY BE SUBSTITUTED WITH MATERIAL EQUAL OR EXCEEDING ORIGINAL.
- 3. ALL SHOP CONNECTIONS SHALL BE WELDED CONNECTIONS.
- 4. ALL STRUCTURAL FIELD CONNECTIONS SHALL BE #12-14 X 3/4" SDS (ESR-2196 OR EQ) WITHOUT WASHERS.
- 5. STEEL SHEATHING SHALL BE 29GA. CORRUGATED GALV. OR PAINTED STEEL MAIN RIB HT. 3/4" (FY=80KSI) OR EQ. CONNECTIONS SHALL BE #12-14 X 3/4" SDS (ESR-2196 OR EQ) WITH NEOPRENE WASHERS.
- 6. ALL STRUCTURAL LIGHT GAUGE TUBING AND CHANNELS SHALL BE GRADE 50 STEEL (FY = 50 KSI, FU = 65 KSI).
- 7. STRUCTURAL TUBE 2 $\frac{1}{2}$ " X 2 $\frac{1}{2}$ " 14GA. IS EQUIVALENT TO TS 2 $\frac{1}{4}$ " X 2 $\frac{1}{4}$ " 12GA AND EITHER ONE MAY BE USED IN LIEU OF THE OTHER
- 8. GYPSUM BOARD OR DRYWALL FINISH OR ANY BRITTLE BASE MATERIAL IS NOT ACCOUNTED FOR IN THE DESIGN CRITERIA.
- ALL DESIGN CRITERIA MUST BE INCREASED TO THE NEXT HIGHER INCREMENT BASED ON THE TABLES ON PAGE 4. NO INTERPOLATION IS ALLOWED.

DESIGN CRITERIA

PREVAILING CODE: FBC 2023 - 8TH EDITION

USE GROUP: U (CARPORTS, BARI RISK CATEGORY: I

1. ROOF DEAD LOAD (D) D = 4 PSF2. ROOF LIVE/SNOW LOAD (Lr)

Lr = 20 - 61 PSF (AS PER SNOW LOAD SEE TABLE 4)

S. SNOW LOAD (5) GROUND SNOW LOAD Pg = 20 - 90 PSF IMPORTANCE FACTOR IS = 0.8

THERMAL FACTOR Ct = 1.2 EXPOSURE FACTOR Ce = 1.0 ROOF SLOPE FACTOR C5 = 1.0

WIND LOAD (W)

BASIC WIND SPEED $V_{\text{ULT}} = 105 - 180 \text{ MPH}$ EXPOSURE C

5. SEISMIC LOAD (E)

DESIGN CATEGORY D

IMPORTANCE FACTOR Ie = 1.00

LOAD COMBINATIONS:

- I. D + (Lr OR S)
- 2. $D + (0.6W OR \pm 0.7E)$
- 3. D + 0.75 (0.6W OR ±0.7E) + 0.75 (Lr OR S)
- 4. 0.6D + (0.6W OR ±0.7E)

U (CARPORTS, BARNS) DRAWING INDEX

 COVER SHEET
 ---- 1

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 ----- 3-A, 3-B

SPACING SCHEDULES & ENCLOSURE NOTES -----PURLIN & GIRT SCHEDULES -----

SHEATHING OPTIONS -----SIDE WALL FRAMING
& OPENINGS ------

END WALL FRAMING

 & OPENINGS
 ----- 8-A, 8-B

 CORNER BRACING DETAILS
 ----- 9

 OPTIONAL LEAN-TO ADDITION
 10

±0.7E) FOUNDATION OPTIONS ----- 11-A TO 11-D

ENGINEERED BY:

A&A ENCINEEDIN

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6036 Renaissance Place, Toledo, OH 43623 Tel. 419-292-1983 ● Fax. 419-292-0955 www.aa-engineers.com

DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

MANUFACTURED BY:

COVER SHEET

SHEET NO.: 1 / 11

DRAWN BY: AW **DATE:** 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN, ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW, - DRAWINGS VALID UP TO I YEAR FROM DATE OF ISSUE.



DATE SIGNED: 02-27-2024

BUILDING INFORMATION CERTIFICATION VALIDITY CUSTOMER INFORMATION DESIGN LOADS NOTICE ☐ A-FRAME GROUND SNOW: WIDTH: FRAME TYPE: DATE OF PLANS 07-27-2024 ☐ REGULAR ADDRESS: □ FULL ROOF LIVE LOAD: LENGTH: **ENCLOSURE** ☐ PARTIAL CERTIFICATION ON THESE DRAWINGS IS TYPE: VALID FOR ONE YEAR FROM DATE OF ISSUE □ OPEN BASIC WIND SPEED: HEIGHT:

TABLE 21: MEMBER PROPERTIES

	TABLE 2.1: MEMBER PROPERTIES									
NO.	LABEL	PROPERTY	DETAIL NO.							
1	COLUMN POST	2.5" X 2.5" X 14GA TUBE	1							
2	ROOF BEAM	2.5" X 2.5" X 14GA TUBE	1							
3	BASE RAIL	2.5" X 2.5" X 14GA TUBE	1							
4	PEAK BRACE	2.5" X 2.5" 14GA CHANNEL	4							
5	KNEE BRACES	2.5" X 1.5" 14GA CHANNEL	4							
6	CONNECTOR SLEEVE	2.25" X 2.25" X 12GA TUBE	2							
7	BASE ANGLE	2" X 2" X 3" LG. 3/16" ANGLE	10							
8	PURLIN	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5							
9	GIRT	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5							
9A	OPT. END WALL GIRT	DPT. END WALL GIRT 2.5" X 1.5" 14GA CHANNEL								
10	SHEATHING	SHEATHING 29 GA CORRUGATED SHEET								
11	END WALL POST	ND WALL POST 2.5" X 2.5" X 14GA TUBE								
12	DOOR POST	2.5" X 2.5" X 14GA TUBE								
13	SINGLE HEADER	2.5" X 2.5" X 14GA TUBE	1							
14	DOUBLE HEADER	DBL. 2.5" X 2.5" X 14GA TUBE	1							
15	SERVICE DOOR / WINDOW FRAMING	2.5" X 2.5" X 14GA TUBE	1							
16	ANGLE BRACKET	2" X 2" X 2" LG. 14GA ANGLE	7							
17	STRAIGHT BRACKET	2" X 2" X 4" LG. 14GA PLATE	6							
18	PB SUPPORT	2.5" X 2.5" X 14GA TUBE	1							
19	DIAGONAL BRACE	2" X 2" X 14 GA TUBE	3							
20	GABLE BRACE	2" X 2" X 14 GA TUBE	3							
21	DB BRACKET	2.25" X 2.25" X 6" LG. 14GA ANGLE	9							
22	TRUSS SPACER	2.5" X 2.5" X 14GA TUBE	1							
23	ALL FASTENERS	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER								

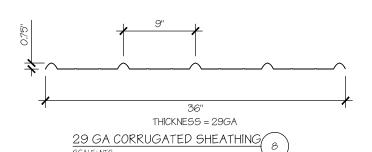
TABLE 2.2: SHEATHING FASTENER SCHEDULE

Ì	LOCATION	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
	SPACING	9" C/C	MIN. 1	4½" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER

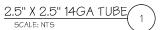
TABLE 2.3: GAUGE THICKNESS

GAUGE	29	18	14	12
THICKNESS (IN)	0.0135	0.049	0.083	0.109





THICKNESS = 14GA





THICKNESS = 12GA

2.25" X 2.25" 12GA TUBE,



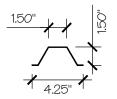
THICKNESS = 14GA

2" X 2" 14GA TUBE SCALE: NTS

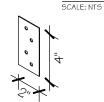


THICKNESS = 14GA

2.5" X 1.5" 14GA CHANNEL



THICKNESS = 14GA / 18GA 4.25" X 1.5" X 14GA / 18GA HAT CHANNEL



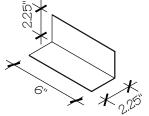
THICKNESS = 14GA

STRAIGHT BRACKET SCALE: NTS



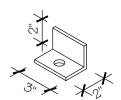
THICKNESS = 14GA ANGLE BRACKET

SCALE: NTS



THICKNESS = 14GA

DB BRACKET SCALE: NTS



THICKNESS = 3/16'

BASE ANGLE SCALE: NTS

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

SCHEDULES & MEMBER SECTIONS

2 / 11 SHEET NO .:

DRAWN BY: AW

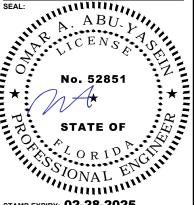
DATE: 1/26/22

CHECKED BY: OAA

DATE: 1/26/22

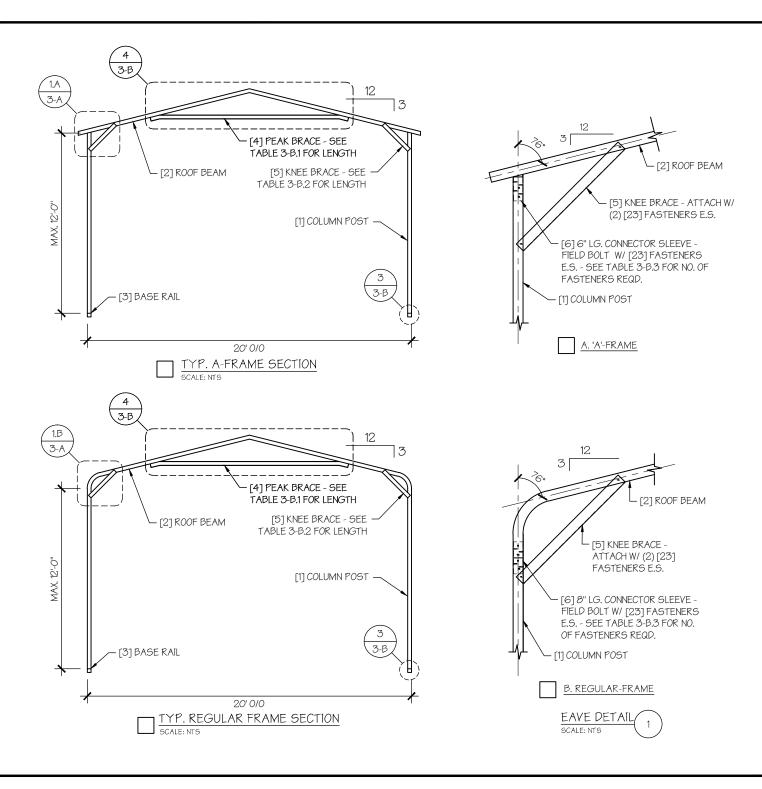
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STAMP EXPIRY: **02-28-2025** DATE SIGNED: 02-27-2024

^{*}SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.



MANUFACTURED BY: **MARTINEZ CARPORTS** ENGINEERED BY: A&A ENGINEERING CIVIL • STRUCTURAL 6036 Renaissance Place, Toledo, OH 43623 Tel. 419-292-1983 • Fax. 419-292-0955 www.aa-engineers.com DRAWING INFORMATION PROJECT: 20'-0" WIDE BUILDINGS LOCATION: STATE OF FLORIDA PROJECT NO.: 445-23-20**2**9 SHEET TITLE: FRAME SECTIONS & **DETAILS**

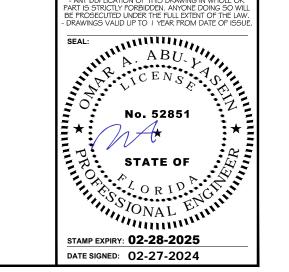
3-A / 11 SHEET NO .:

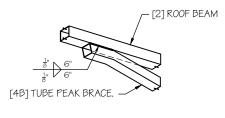
AW DRAWN BY:

DATE: 1/26/22 CHECKED BY: OAA DATE: 1/26/22

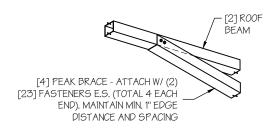
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B. PEAK BRACE CHANNEL

PEAK BRACE CONNECTION DETAILS, SCALE: NTS

TABLE 3-B.1: PEAK BRACE SCHEDULE

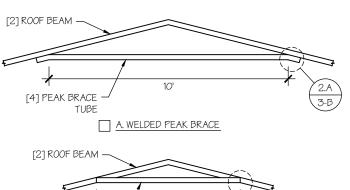
GROUND SNOW / ROOF	WIND SPEED			
LIVE LOAD (PSF)	□105 T0 130	□140 TO 180		
□ 30 / 20	6'	10'		
□ 35 / 25 TO 90 / 61	10'	10'		

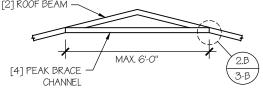
TABLE 3-B.2: KNEE BRACE SCHEDULE

EAVE HEIGHT	KNEE BRACE LENGTH
□UP TO 8'	24"
□ 9' TO 12'	36"

TABLE 3-B.3 FASTENER SCHEDULE

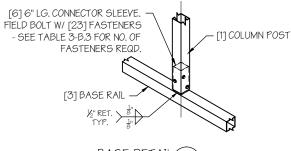
WIND SPEED (MPH)	NO. OF FASTENERS
□ 105 T0 125	4
□ 130 T0 155	6
□160 TO 180	8





B. CHANNEL PEAK BRACE

PEAK BRACE DETAILS



BASE DETAIL SCALE: NTS

NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING. MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.

MANUFACTURED BY:



ENGINEERED BY:



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

FRAME DETAILS

3-B / 11 SHEET NO .:

ΑW DRAWN BY:

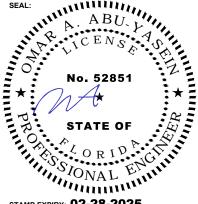
DATE: 1/26/22

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TABLE 4: FRAME SPACING CHART / SCHEDULE

	GROUND SNOW /			■ ENCLO							■ OPE	EN BUILDIN	NGS		
	ROOF LIVE			WIND	SPEED (N	MPH)					WIND	SPEED (N	MPH)		
	LOAD (PSF)	□105	□ 115	□13 0	□140	□ 155	□165	□180	□105	□ 115	□13 0	□140	□ 155	□165	□180
	30/20	60	60	54/60	54	42	36	36	60	54/60	48/60	42/54	36/42	36	36
<u></u>	□ 40 / 27	48/60	48/60	42/60	42/54	42	36	36	48	48	42/48	42/48	36/42	36	36
<u>F</u>	□50/34	40/48	40/48	40/48	40/48	40/42	36	36	40/42	40/42	40/42	40/42	36/42	36	36
HEIGHT TO 12'-0	□ 60 / 41	36/42	36/42	36/42	36/42	36/42	36	36	36	36	36	36	36	36	36
EAVE 10'-0"	□ 70 <i>l</i> 47	32/36	32/36	32/36	32/36	32/36	32/36	30	30	30	30	30	30	30	30
E.A.	□80/54	30	30	30	30	30	30	30	24	24	24	24	24	24	24
	□ 90 / 61	24	24	24	24	24	24	24	18	18	18	18	18	18	18
	30/20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42
≒	40/27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/54	48/54	42/54	42/54	36/48	36/48	36/42
HEIGHT TO 9'-O"	□50/34	40/48	40/48	40/48	40/48	40/48	40/48	40/42	40/42	40/42	40/42	40/42	36/42	36/42	36/42
単足	□ 60 / 41	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36	36	36	36	36	36	36
É Ó	□ 70 / 47	32/36	32/36	32/36	32/36	32/36	32/36	32/36	30	30	30	30	30	30	30
EAVE 7'-O"	□ <i>8</i> 0 / 54	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	□ 90 / 61	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	30/20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42
 ⊢ ==	40/27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/60	48/60	42/60	42/54	36/48	36/48	36/42
10HT 6-0	□50/34	40/48	40/48	40/48	40/48	40/48	40/48	40/42	40/48	40/48	40/48	40/48	36/48	36/48	36/42
HEIGHT TO 6'-O"	□ 60 / 41	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42
	□ 70 <i>l</i> 47	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36
EAVE UP 1	□ <i>8</i> 0 / 54	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	□ 90 / 61	24	24	24	24	24	24	24	24	24	24	24	24	24	24

NOTES:

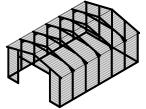
- FRAME SPACINGS ARE IN UNITS OF INCHES (IN).
- 2. WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
- 3. SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF), WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).
- 4. FOR VALUES THAT LIE BETWEEN TWO CELLS, THE HIGHER (MORE STRINGENT) VALUE HAS TO BE USED. INTERPOLATION BETWEEN CELLS IS NOT ALLOWED.

ENCLOSURE CLASSIFICATION:

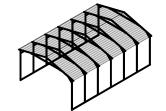
- 1. ENCLOSED BUILDING = ALL 4 WALLS FULLY ENCLOSED WITH DOORS/WINDOWS = USE ENCLOSED BUILDING SPACING CHART.
- 2. OPEN BUILDING = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
- 3. 3FT PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSED = USE OPEN BUILDING SPACING CHART.
- 4. PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
- 5. 3 SIDED ENCLOSED = ALL WALLS ARE ENCLOSED EXCEPT FOR 1 END-WALL = START WITH ENCLOSED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS & ROOF.
- FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOVE, REFER TO SHEET 5 FOR SPACING AND DESIGN REQUIREMENTS.

GENERAL NOTES:

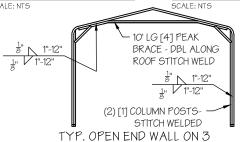
- 1. THE MAX. BUILDING LENGTH FOR ENCLOSED BUILDINGS IS 50'-O". THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
- 2. BUILDINGS WITH <u>PARTIALLY ENCLOSED END WALLS</u> NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE <u>PARTIALLY ENCLOSED END WALL</u>. (SEE FIGURE A ON SHEET 5).
- 3. ALL BUILDINGS WITH AN OPEN END WALL MUST HAVE A 10'-O" TUBE PEAK BRACE.







TYP. OPEN BUILDING



SIDE ENCLOSED BUILDING

SCALE: NTS

MANUFACTURED BY:



ENGINEERED BY:

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

SPACING SCHEDULES & ENCLOSURE NOTES

SHEET NO.: 4 / 11

DRAWN BY: AW

N DATE: 1/26/22

снескед ву: ОАА

date: 1/26/22

LEGAL INFORMATION

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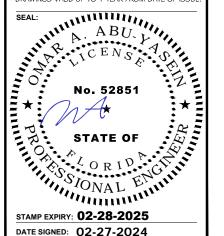


TABLE 5.1: PURLIN SPACING SCHEDULE

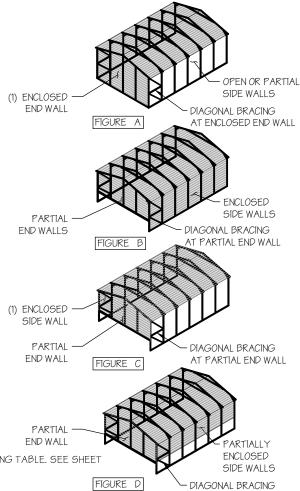
	GROUND		14GA	HAT	CHAI	NNEL	PURL	.IN		18GA	HAT	CHAI	NNEL	PURL	IN
	SNOW / ROOF LIVE		٧	VIND S	PEED	(MPF	1)			V	/IND S	PEED	(MPH	1)	
	LOAD (PSF)	105	115	130	140	155	165	_ 180	105	115	130	140	155	165	180
٠ <u>;</u> ;	30/20	54	48	42	36	30	24	24	36	30	24	18	18	12	12
ACING:	□ 40 <i>l</i> 27	42	42	42	36	30	24	24	30	30	24	18	18	12	12
Ş <u>.</u>	□ 50 / 34	40	40	40	36	30	24	24	24	24	24	18	18	12	12
5-0"	□ 60 / 41	36	36	36	36	30	24	24	18	18	18	18	18	12	12
\₹	□ 70 <i>l</i> 47	32	32	32	32	30	24	24	18	18	18	18	18	12	12
FRAME	□ <i>8</i> 0/54	30	30	30	30	30	24	24	18	18	18	18	18	12	12
Ψ	<u> </u>	24	24	24	24	24	24	24	12	12	12	12	12	12	12
<i>ii</i>	□ 30 / 20	54	48	42	42	36	30	30	48	36	30	24	18	18	12
SPACING:	□ 40 <i>l</i> 27	42	42	42	42	36	30	30	42	36	30	24	18	18	12
\ \ \ \ \ \ \ \	□ 50 / 34	40	40	40	40	36	30	30	30	30	30	24	18	18	12
: SP, 4'-6"	□ 60 / 41	36	36	36	36	36	30	30	30	30	30	24	18	18	12
FRAME	□ 70 <i>l</i> 47	32	32	32	32	32	30	30	24	24	24	24	18	18	12
₩ W	□ <i>8</i> 0/54	32	32	32	32	32	30	30	18	18	18	18	18	18	12
Ψ	<u> </u>	30	30	30	30	30	30	30	18	18	18	18	18	18	12
Ü.	30/20	54	48	42	42	36	36	30	54	48	36	30	24	24	18
N N	□ 40 <i>l</i> 27	42	42	42	42	36	36	30	42	42	36	30	24	24	18
SPACING: '-o"	□ 50 / 34	40	40	40	40	36	36	30	40	40	36	30	24	24	18
: SP 	□ 60 / 41	36	36	36	36	36	36	30	36	36	36	30	24	24	18
FRAME	□ 70 <i>l</i> 47	32	32	32	32	32	32	30	30	30	30	30	24	24	18
ÄΑ	□ <i>8</i> 0/54	32	32	32	32	32	32	30	24	24	24	24	24	24	18
ш_	<u> </u>	30	30	30	30	30	30	30	24	24	24	24	24	24	18
ii.	□ 30 / 20	54	48	42	42	36	36	30	54	48	42	42	36	30	30
SPACING:	□ 40 <i>l</i> 27	42	42	42	42	36	36	30	42	42	42	42	36	30	30
A F	□ 50 / 34	40	40	40	40	36	36	30	40	40	40	40	36	30	30
: SP, 3-6"	□ 60 / 41	36	36	36	36	36	36	30	36	36	36	36	36	30	30
ΞΞ	□ 70 <i>l</i> 47	32	32	32	32	32	32	30	32	32	32	32	32	30	30
FRAME	□ <i>80 </i> 54	32	32	32	32	32	32	30	32	32	32	32	32	30	30
ш	<u> </u>	30	30	30	30	30	30	30	30	30	30	30	30	30	30
<i>(ii.</i>	□ 30 / 20	54	48	42	42	36	36	30	54	48	42	42	36	36	30
'ACING: OWER	□ 40 <i>l</i> 27	42	42	42	42	36	36	30	42	42	42	42	36	36	30
$o \rightarrow$	□ 50 / 34	40	40	40	40	36	36	30	40	40	40	40	36	36	30
ESF OR I	□ 60 / 41	36	36	36	36	36	36	30	36	36	36	36	36	36	30
	□ 70 <i>l</i> 47	32	32	32	32	32	32	30	32	32	32	32	32	32	30
FRAMI 3-0"	□ <i>80 </i> 54	32	32	32	32	32	32	30	32	32	32	32	32	32	30
ш п	90 / 61	30	30	30	30	30	30	30	30	30	30	30	30	30	30

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FRAME	WIND SPEED (MPH)							
SPACING	105	115	130	140	155	165	180	
□5'-O"	60	48	36	30	24	24	18	
□4'-6"	60	60	48	42	36	30	24	
□ 4'-O"	60	60	54	54	42	36	30	
□3'-6"	60	60	54	54	48	42	42	
□2'-0' T0 3'-0"	60	60	54	54	48	42	42	

NOTES:

- GIRT SPACING UNITS ARE IN INCHES.
- THIS SCHEDULE IS TO BE USED FOR BOTH 14GA AND 18 GA PURLINS.
- 3. FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.



AT PARTIAL END WALL

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

PURLIN & GIRT SPACING SCHEDULES

5 / 11 SHEET NO .:

DRAWN BY: AW

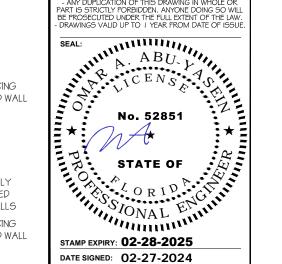
DATE: 1/26/22

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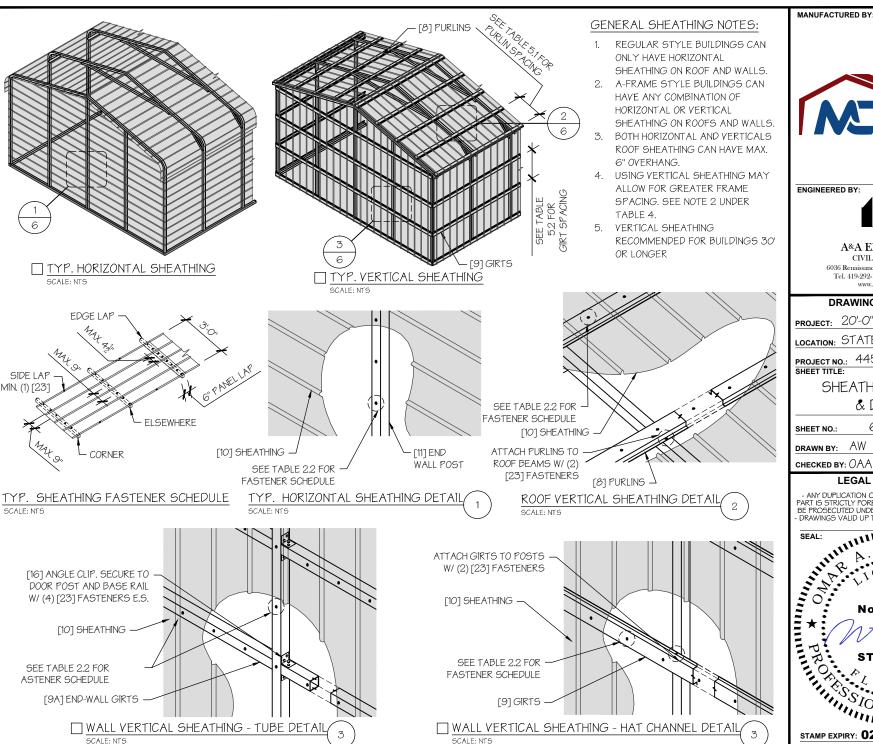


NOTES:

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

IRREGULAR BUILDING NOTES:

- FIGURES A. B. C & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- 2. FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 6" FROM OPEN BUILDING SPACING TABLE. SEE SHEET 4 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.
- IRREGULAR BUILDING & BUILDINGS W/ MORE THAN 2 SIDE OPENINGS MUST HAVE A 10' TUBE PEAK BRACE ON ALL FRAMES.



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEATHING OPTIONS & DETAILS

6 / 11

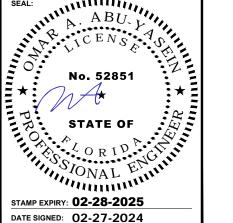
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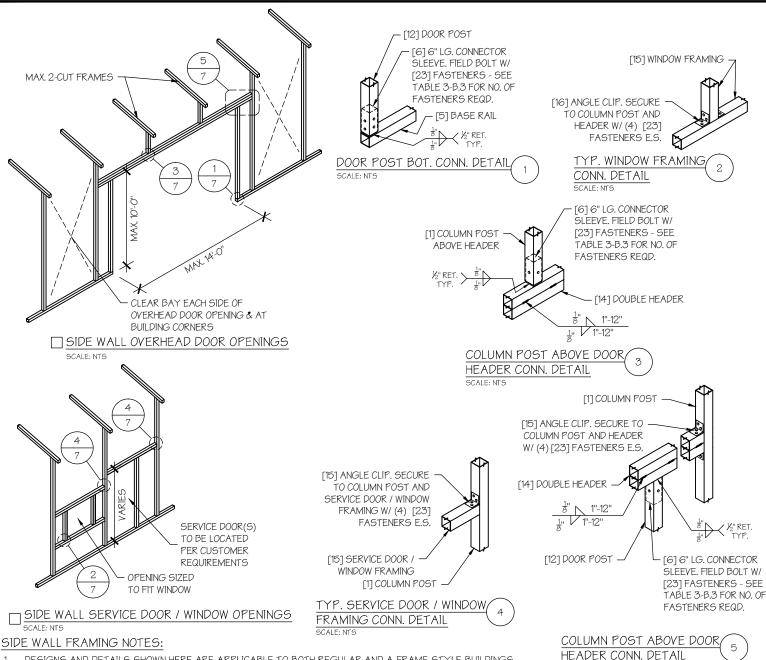
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SCALE: NTS

- DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
- 2. MAX. HEIGHT OF SIDE WALL OVERHEAD DOOR OPENINGS IS 2 FT LESS THAN THE EAVE HEIGHT.
- OVERHEAD DOOR OPENINGS CANNOT CUT THROUGH MORE THAN 2 FULL FRAMES.
- MIN. 1 CLEAR BAY MUST BE MAINTAINED BETWEEN ANY 2 OVERHEAD DOOR OPENINGS. A CLEAR BAY IS A SPACE BETWEEN TWO FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
- MIN. 1 CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
- SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

SIDE WALL FRAMING & OPENINGS

7 / 11 SHEET NO.:

AW DRAWN BY:

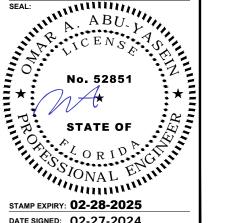
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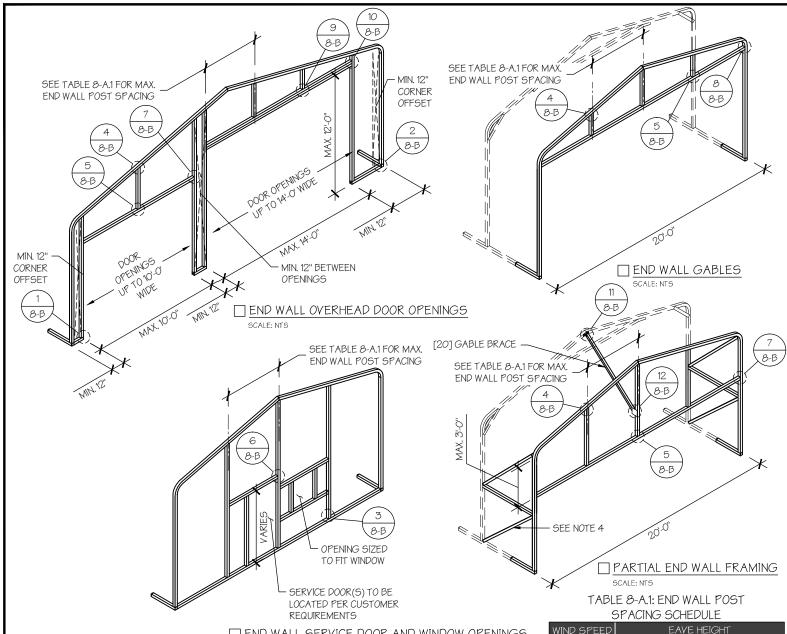
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STAMP EXPIRY: **02-28-2025**



TEND WALL SERVICE DOOR AND WINDOW OPENINGS SCALE: NTS

(MPH)

105

115

130

□ 140

155

□ 165 - 180

■ UP TO 7'

5'

5'

4.5'

4.5

4'

3.5

■ 8' TO 9'

5'

5'

4.5'

4.5

4'

3'

■10' T0 12

4'

3'

2.5'

2'

END WALL FRAMING NOTES:

- DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
- 2. MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
- SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
- 4. DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES. SEE SHEET 9 FOR DIAGONAL BRACE CONNECTION DETAILS.

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

END WALL FRAMING

8-A / 11 SHEET NO .:

AW

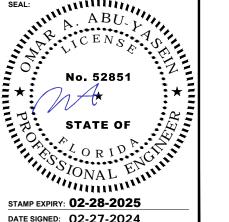
DATE: 1/26/22 DRAWN BY:

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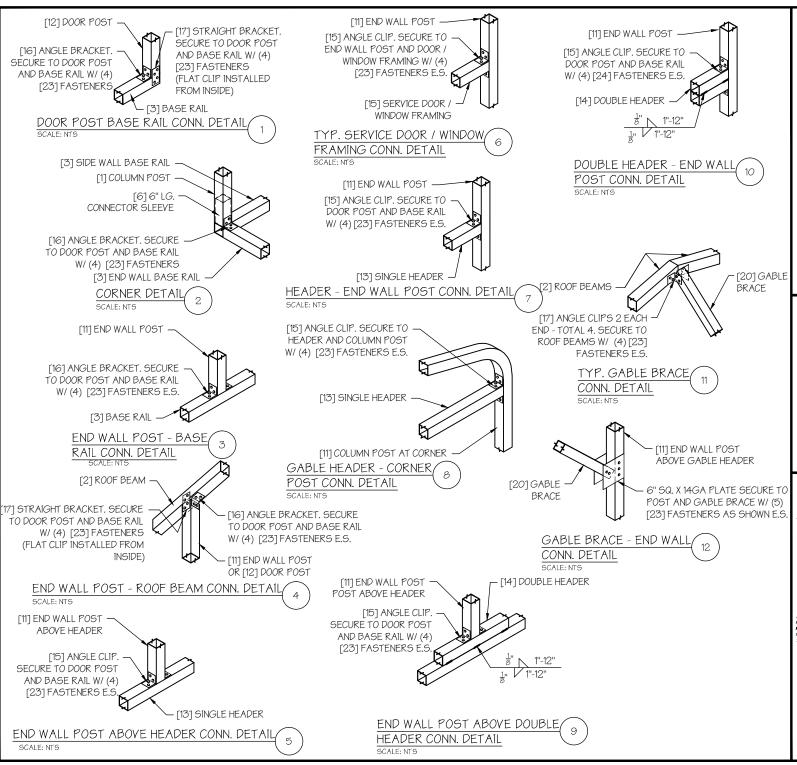
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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

END WALL FRAMING DETAILS

8-B / 11 SHEET NO.:

AW

DRAWN BY:

DATE: 1/26/22

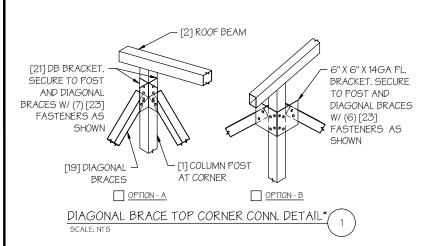
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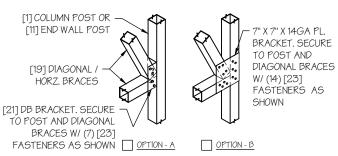
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CORNER DIAGONAL **BRACING - SEE NOTES** FOR REQUIREMENTS

DIAGONAL BRACING AT CORNERS

SCALE: NTS

7" X 7" X 14GA PL. [1] COLUMN POST -BRACKET. SECURE TO POST AND DIAGONAL [21] DB BRACKET. SECURE BRACES W/ (14) [23] TO POST AND DIAGONAL FASTENERS AS SHOWN BRACES W/ (7) [23] FASTENERS AS SHOWN [19] DIAGONAL BRACES [3] BASE RAIL OPTION - B OPTION - A

DIAGONAL BRACE BOT. CORNER CONN. DETAIL SCALE: NTS

* INSIDE VIEW SHOWN FOR CLARITY

CORNER BRACING NOTES:

- DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
 - FOR 3 SIDED ENCLOSED BUILDINGS 140 MPH OR GREATER WIND SPEED - THE BUILDING MUST BE DESIGNED WITH OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
- 2. SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
- 3. ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.

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DRAWING INFORMATION

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LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

CORNER BRACING **DETAILS**

9 / 11 SHEET NO.:

ΑW DRAWN BY:

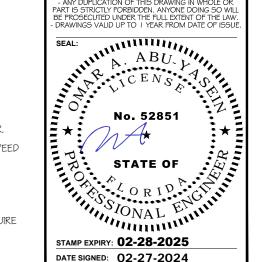
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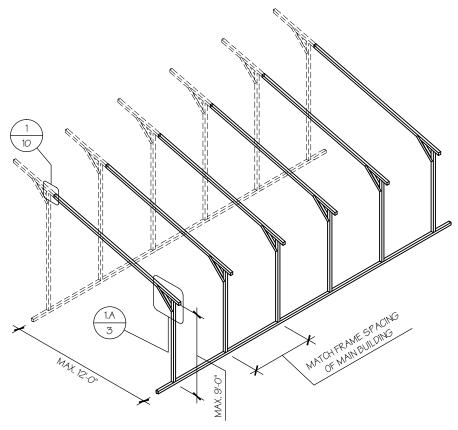
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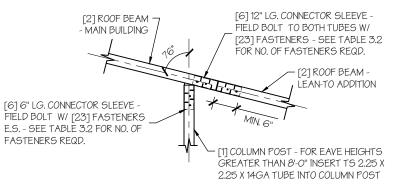
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OPTIONAL LEAN-TO ADDITION

SCALE: NTS



LEAN-TO ATTACHMENT DETAIL SCALE: NTS

LEAN-TO ADDITION NOTES:

- 1. LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
- 2. ROOF SLOPE, PURLIN, GIRT AND FRAME SPACING OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
- 3. IF THE LEAN-TO ADDITION IS "OPEN "(BOTH END WALLS OR SIDE WALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE 4.

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

OPTIONAL LEAN-TO **ADDITION**

10 / 11 SHEET NO .:

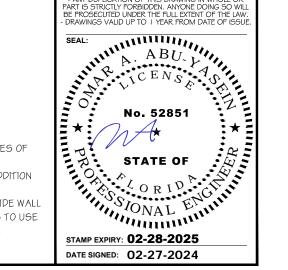
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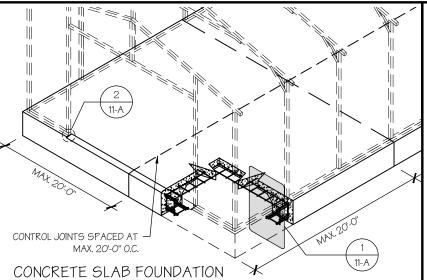
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CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- 3. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4"
- 4. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.2.
- 5. THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 53" FOR 14GA MATERIAL AND 53" FOR 12GA MATERIAL.
- 6. DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.



SCALE: NTS

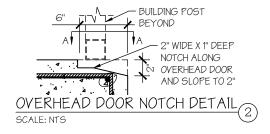


TABLE 11-A.1: NOTCH WIDTH

HORIZONT	AL/OPEN	VERTICAL				
□14GA	□ 12GA	□ 14GA	□ 12GA			
2 3/4" 2 7/8"		13/4"	17/8"			

MIN. 4" EDGE DIST.

NOTE: DEPTH IS TO BE 11/2"

ANCHOR - SEE TABLE 11-A.2

[1] COLUMN POST

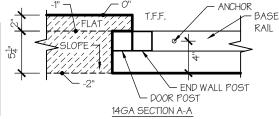
TABLE 11-A.2: CONCRETE SLAB ANCHOR SCHEDULE

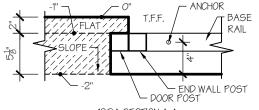
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER		
ENCLOSED	□105 T0 135	(1) 1/2"Ø X 7"		
ENCLUSED	□136 TO 180	(2) 1/2"Ø X 7"		
OPEN	□105 T0 135	(1) 1/2"Ø X 7"		
OFEN	□136 TO 180	(2) 1/2"Ø X 7"		

NOTES:

131 BASE RAIL

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 23"
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.





MIN. 4" EDGE DIST 12GA SECTION A-A NOTCH - SEE TABLE 11-A.1 GRADE MAX. 6' (2% SLOPE) [1] COLUMN POST ANCHOR - SEE 31 BASE RAIL TABLE 11-A.2 7 2 SECTION B-B

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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

FOUNDATION OPTION 1: CONCRETE SLAB

11-A / 11 SHEET NO .:

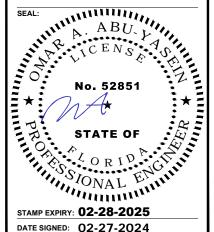
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MIN. 4" THK. SLOPE - AWAY ICRETE SLAB FROM SLAB) W6X6-6/6 WELDED CAL N. 12" APE ·(0) WIRE OR #4 @ 24" E.W., OR FIBER MESH AS PER L CODE. OR I BELOW G AS RECOMMENDED BY MANUFACTURER

(3) #4 REBAR CONT. ☐ STANDARD EDGE DETAIL GRADE (MIN. 2% NOTCHED EDGE DETAILS EDGE OFFSET DETAIL

SCALE: NTS

CONCRETE SLAB FOUNDATION NOTES:

- 1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND. ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4"
- 4. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.1.
- 5. THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS !" FOR 14GA MATERIAL AND 1" FOR 12GA MATERIAL.
- 6. DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- 7. CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

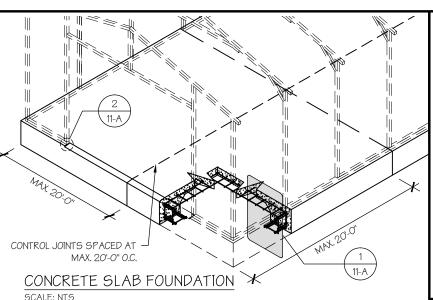
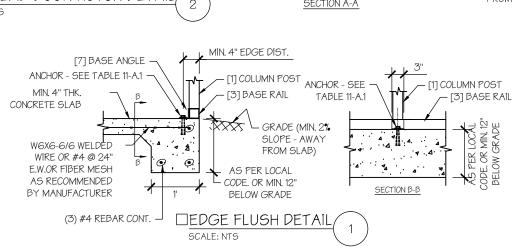


TABLE 11-A.1: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	□105 T0 135	(1) 1/2"Ø X 7"
ENCLUSED	□136 TO 180	(2) 1/2"Ø X 7"
OPEN	□105 T0 135	(1) 1/2"Ø X 7"
OF EIN	□136 TO 180	(2) 1/2"Ø X 7"

- ANCHORS ARE TO BE CONCRETE WEDGE OR **EXPANSION ANCHORS**
- MIN. EMBEDMENT DEPTH TO BE $2\frac{7}{8}$ ".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

ANCHOR **BUILDING POST** BASE RAIL 2" WIDE X 1" DEEP NOTCH ALONG OVERHEAD DOOR AND SLOPE TO 2" END WALL POST OVERHEAD DOOR NOTCH DETAIL DOOR POST SECTION A-A SCALE: NTS



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-2029

SHEET TITLE:

FOUNDATION OPTION 1: CONCRETE SLAB

11-A / 11 SHEET NO .:

ΑW DRAWN BY:

DATE: 1/26/22

CHECKED BY: OAA

DATE: 1/26/22

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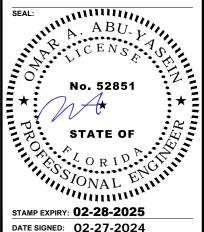


TABLE 11-B.1: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	□105 T0 135	(1) 1/2"Ø X 7"
	□136 TO 180	(2) 1/2"Ø X 7"
OPEN	□105 T0 135	(1) 1/2"Ø X 7"
	□136 TO 180	(2) 1/2"Ø X 7"

NOTES:

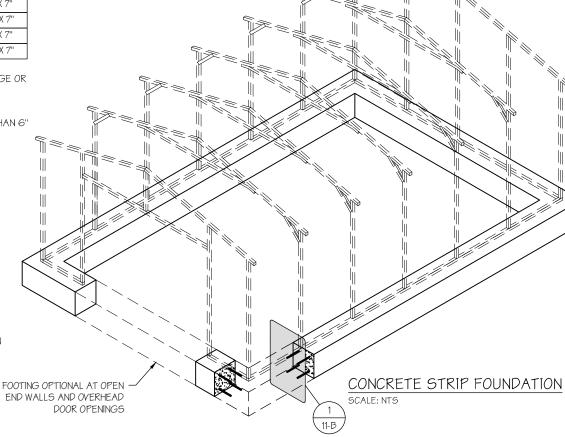
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- 2. MIN. EMBEDMENT DEPTH TO BE $2\frac{7}{8}$ ".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

TABLE 11-B.2: CONC. STRIP SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
□105 T0 130	12" X 12"
□140 T0 155	18" X 12"
□165 TO 180	26" X 12" 21 X 15" 18" X 18"

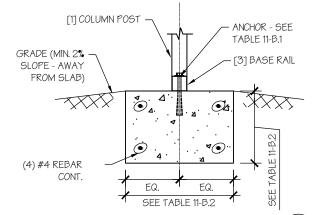
NOTES:

WIDTH AND DEPTH DIMENSIONS CAN BE INTERCHANGED.



CONCRETE STRIP FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE
- 4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- 5. DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.
- 8. BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.



☐ CONCRETE STRIP FOUNDATION DETAIL SCALE: NTS

MANUFACTURED BY:



ENGINEERED BY:



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

FOUNDATION OPTION 2: CONCRETE STRIP

11-B / 11 SHEET NO .:

AW DRAWN BY:

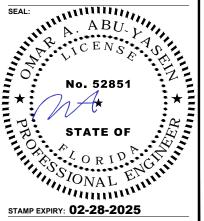
DATE: 1/26/22

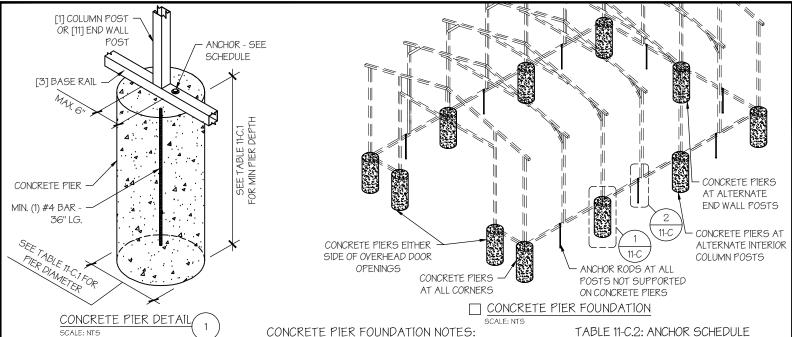
CHECKED BY: OAA

DATE: 1/26/22

LEGAL INFORMATION

ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE





- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE PIER FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE PIERS SHALL BE LOCATED AT ALL 4 CORNERS. ON EACH SIDE OF OVERHEAD DOOR OPENINGS AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
- 3. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST WITH A PIER.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- 5. MIN. NUMBER OF CONCRETE ANCHORS PER POST WITH A PIER SHALL BE AS SHOWN IN TABLE 11-C.2.
- 6. TWO ANCHORS AND A PIER ARE REQUIRED AT DIAGONAL BRACING LOCATIONS WHEN REQUIRED.
- 7. ALL POSTS NOT SUPPORTED ON CONCRETE PIERS SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. THREADED ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- 8. PIERS SHALL BE FORMED BY DIGGING A HOLE OF THE SAME SIZE AS THE PIER ON LEVEL GRADE AND FILLING IT WITH CONCRETE. THRD. ROD ANCHORS SHOULD BE DROPPED INTO THE PIERS PRIOR TO POURING THE CONCRETE.
- 9. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- 10. CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

E	ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
	ENCLOSED	□105 T0 135	(1) 1/2"Ø X 7"
		□136 TO 180	(2) 1/2"Ø X 7"
	OPEN	□105 T0 135	(1) 1/2"Ø X 7"
		□136 TO 180	(2) 1/2"Ø X 7"
	OPEN		(7)

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- 2. MIN. EMBEDMENT DEPTH TO BE 2\(\frac{7}{6}\)".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

MANUFACTURED BY:



ENGINEERED BY:



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

FOUNDATION OPTION 3: CONCRETE PIERS

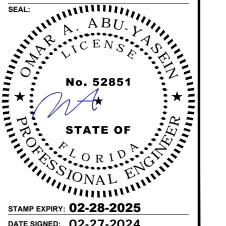
11-C / 11 SHEET NO .:

ΑW DATE: 1/26/22 DRAWN BY:

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

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DATE SIGNED: 02-27-2024



ANCHOR ROD INTO SOIL DETAIL

[1] COLUMN POST

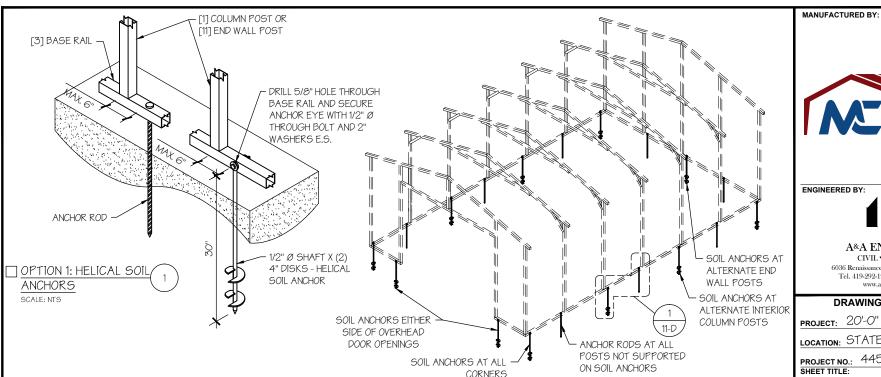
OR [11] END WALL

[3] BASE RAIL

SCALE: NTS

POST

ANCHOR ROD



SOIL FOUNDATION NOTES:

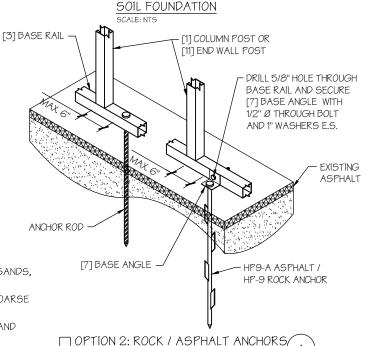
- DESIGNS SHOWN ON THIS SHEET ARE FOR SOIL ANCHOR FOUNDATION.
- 2. SOIL ANCHORS (HELICAL OR ROCK/ASPHALT) SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS, ON POSTS WITH DIAGONAL BRACING IF REQUIRED, AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
- 3. HELICAL ANCHORS ARE TO BE USED ONLY IF THE DRIVING TORQUE INTO THE GROUND IS 150 FT-LBS OR GREATER. MANUFACTURER IS NOT RESPONSIBLE FOR SOIL QUALITY AT SITE.
- 4. HELICAL ANCHORS CAN ONLY BE USED FOR CLASS 2, 3 & 4 SOILS (SEE SOIL CLASSIFICATIONS THIS PAGE).
- 5. ALL POSTS WITH NO ANCHORS ADJACENT SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- 6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.

SOIL CLASSIFICATIONS:

SOIL CLASS DESCRIPTION

- SANDY GRAVEL AND GRAVEL. VERY THIN DENSE AND/OR CEMENTED SANDS. COARSE GRAVEL/COBBLES, PRELOADED SILTS, CLAYS AND CORAL.
- SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT AND SANDY CLAYS.
- LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS AND ALLUVIAL FILLS.

*FROM HUD "MODEL MANUFACTURED HOME INSTALLATION STANDARDS"



SCALE: NTS



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DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 445-23-20**2**9

SHEET TITLE:

FOUNDATION OPTION 4: SOIL ANCHORS

11-D / 11 SHEET NO .:

ΑW DRAWN BY:

DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

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