

**STRUCTURAL DESIGN**  
**ENCLOSED BUILDING**  
**EXPOSURE B**

**MAXIMUM 30'-0" WIDE X 20'-0" EAVE HEIGHT- BOX EAVE  
FRAME AND BOW FRAME**

**18 December 2017**

**Revision 4**

**M&A Project No. 16022S/17300S**

**Prepared for:**

**Tubular Building Systems, LLC  
631 SE Industrial Circle  
Lake City, Florida 32025**

**Prepared by:**

**Moore and Associates Engineering and Consulting, Inc.  
1009 East Avenue  
North Augusta, SC 29841**

**401 S. Main Street, Suite 200  
Mount Airy, NC 27030**

Digitally signed  
by Wayne S  
Moore  
Date:  
2020.03.18  
12:15:14 -04'00'



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## **Florida Product Approval Codes**

### **Roll-Up Doors:**

Janus International Corporation Model 3652: 14425.1

### **Walk-In Door:**

Elixir Door & Metal Company blank (no window): 17996.5

Elixir Door & Metal Company regular door w/ 9 light window: 17996.6

### **Window:**

Kinro 993.7

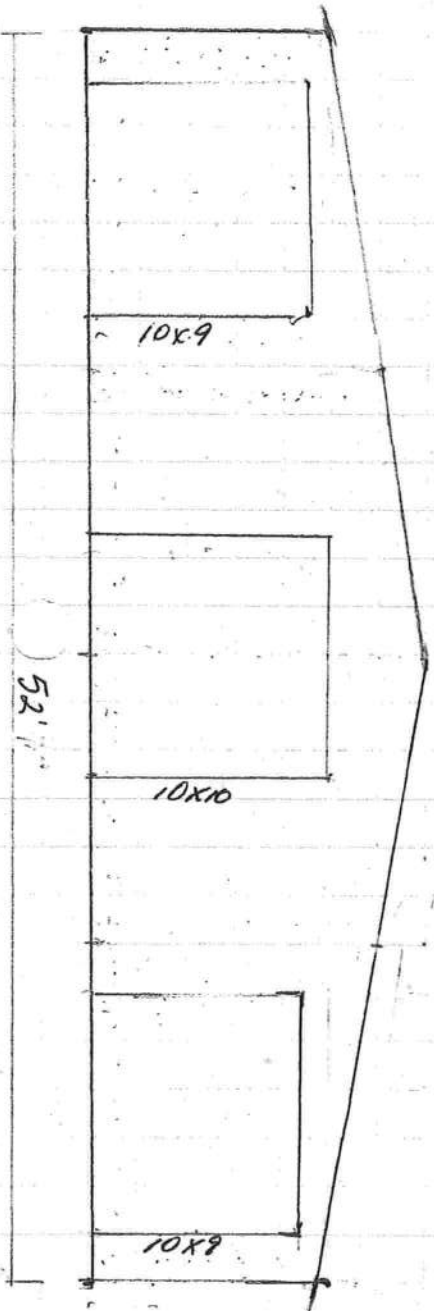
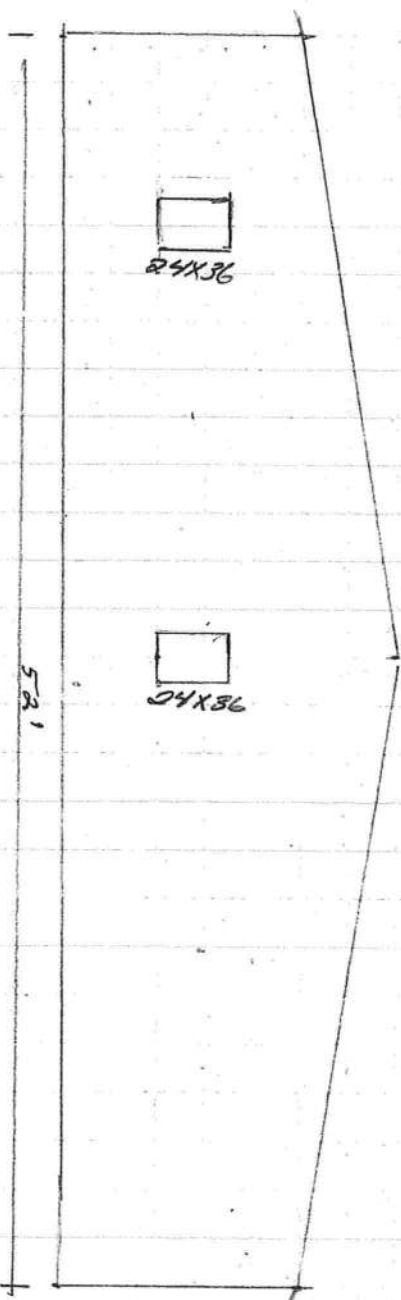
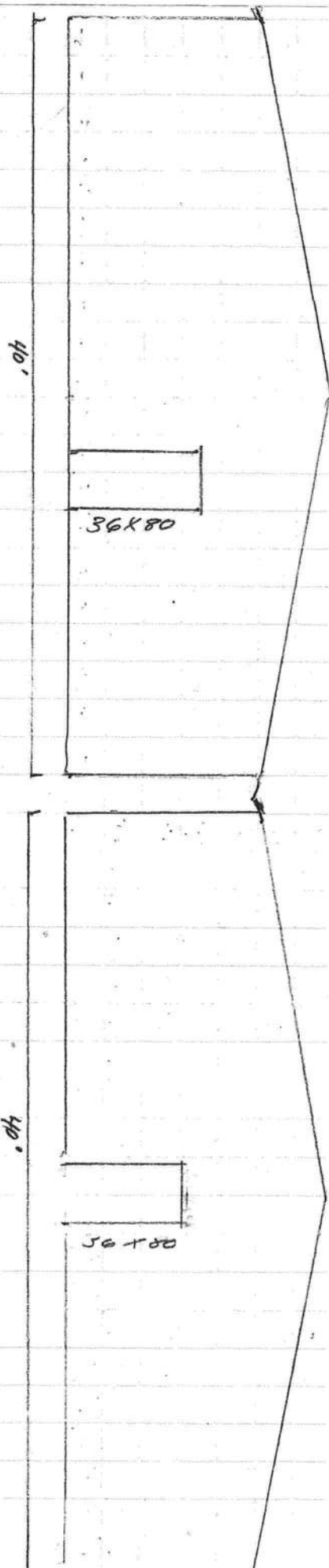
### **Roof Deck:**

Capital Metal Supply Inc. Ag Panel: 20147.1

### **Wall Panel:**

Capital Metal Supply Inc. Ag Panel: 20148.1

If you have any questions on concern, please contact Donald Little at 386-961-0006 or at [tubularbuildingsystems@gmail.com](mailto:tubularbuildingsystems@gmail.com).



- ① Box CASE FRAME RAFTER BUILDING 24x40
- ② ROOF EXTENSION LEANTO OPTIONS 14x40
- ③ 24x36 WINDOWS
- ④ 36x80 STEEL DOORS
- ⑤ 10x9 Rollup door
- ⑥ 10x10 Rollup door




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	CHECKED BY: PDH			
	PROJECT MGR: WSM	DATE: 12-18-17	SCALE: NTS	JOB NO: 16022S/17300S
	CLIENT: TBS	SHT. 1	DWG. NO: SK-3	REV. 4

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**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SCALE: NTS**

**JOB NO:  
16022S/17300S**

**SHT. 2**

**DWG. NO: SK-3**

**REV: 4**

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## INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR A MAXIMUM 30'-0" WIDE X 20'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
2. DESIGN WAS DONE IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE (FBC) 6TH EDITION, 2012 INTERNATIONAL BUILDING CODE (IBC), AND 2015 IBC.
3. DESIGN LOADS ARE AS FOLLOWS:
  - A) DEAD LOAD = 1.5 PSF
  - B) LIVE LOAD = 12 PSF
  - C) GROUND SNOW LOAD = 10 PSF
4. LOW ULTIMATE WIND SPEED 105 TO 140 MPH (NOMINAL WIND SPEED 81 TO 108 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 50 FEET
5. HIGH ULTIMATE WIND SPEED 141 TO 170 MPH (NOMINAL WIND SPEED 109 TO 132 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 40 FEET
6. LOW HAZARD RISK CATEGORY I (WIND)
7. WIND EXPOSURE CATEGORY B
8. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2" X 2 1/2" - 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS. FOR VERTICAL PANELS, 29 GAUGE METAL PANELS SHALL BE FASTENED TO 18 GAUGE HAT CHANNELS (UNLESS OTHERWISE NOTED).
9. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS, INTERIOR = 9" OR END = 6", (MAX)
10. FASTENERS CONSIST OF #12-14X3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14" (3:12 PITCH) OR LESS. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
11. GROUND ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
12. GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/WELDED NUT X 30" LONG IN SUITABLE SOIL CONDITIONS MAY BE USED FOR LOW (< 108 MPH NOMINAL) WIND SPEEDS ONLY. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USE IN UNSUITABLE SOILS AS NOTED.
13. OPTIONAL BASE RAIL ANCHORAGE MAY BE USED FOR LOW AND MUST BE USED FOR HIGH WIND SPEEDS.
14. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
 

SOIL SITE CLASS = D  
 RISK CATEGORY I/II/III  
 R= 3.25      I<sub>E</sub>= 10  
 S<sub>DS</sub>= 1.522      V= C<sub>s</sub>W  
 S<sub>D1</sub>= 0.839



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**CLIENT: TBS**

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**SCALE: NTS**

**JOB NO:  
16022S/17300S**

**SHT. 3**

**DWG. NO: SK-3**

**REV: 4**

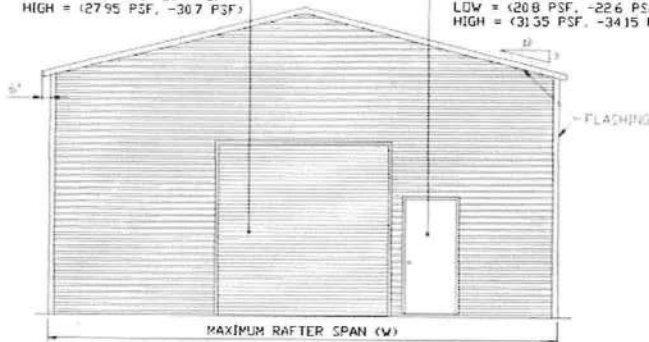
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## BOX EAVE FRAME RAFTER ENCLOSED BUILDING

ROLL-UP DOOR  
(AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (18.5 PSF, -20.4 PSF)  
HIGH = (27.95 PSF, -30.7 PSF)

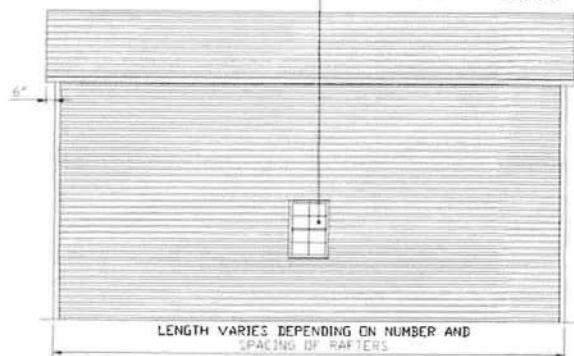
SWINGING DOOR  
(AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (20.8 PSF, -22.6 PSF)  
HIGH = (31.35 PSF, -34.15 PSF)



**TYPICAL END ELEVATION-HORIZONTAL ROOF**

SCALE: NTS

WINDOW (AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (21.8 PSF, -23.6 PSF)  
HIGH = (32.85 PSF, -35.6 PSF)



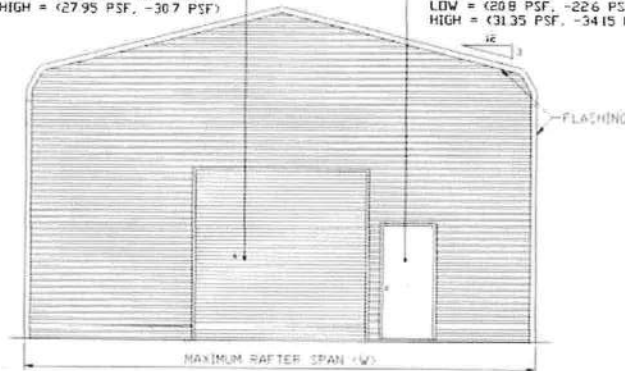
**TYPICAL SIDE ELEVATION-HORIZONTAL ROOF**

SCALE: NTS

## BOW FRAME RAFTER ENCLOSED BUILDING

ROLL-UP DOOR  
(AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (18.5 PSF, -20.4 PSF)  
HIGH = (27.95 PSF, -30.7 PSF)

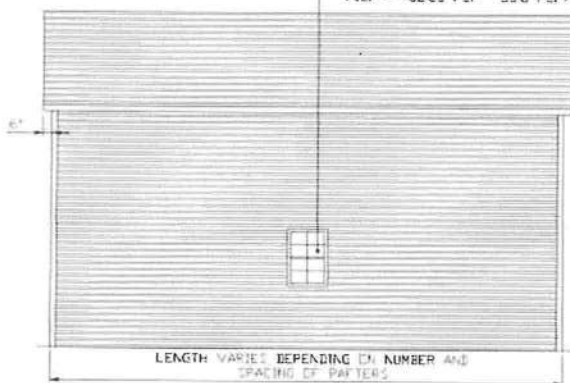
SWINGING DOOR  
(AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (20.8 PSF, -22.6 PSF)  
HIGH = (31.35 PSF, -34.15 PSF)



**TYPICAL END ELEVATION**

SCALE: NTS

WINDOW (AS APPLICABLE)  
DESIGN PRESSURE  
LOW = (21.8 PSF, -23.6 PSF)  
HIGH = (32.85 PSF, -35.6 PSF)



**TYPICAL SIDE ELEVATION**

SCALE: NTS



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30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

DATE: 12-18-17

SHT. 4

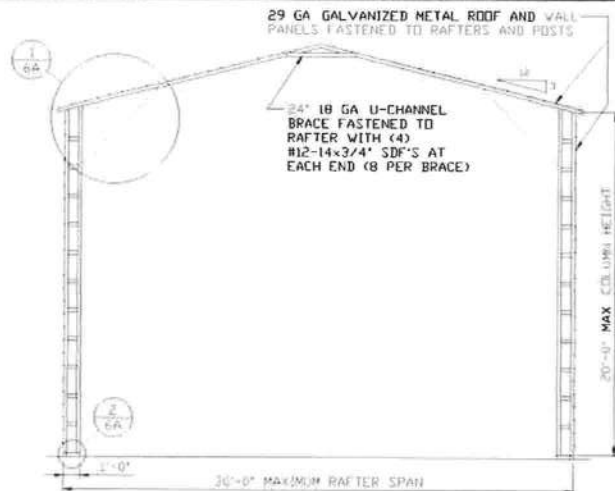
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JOB NO:  
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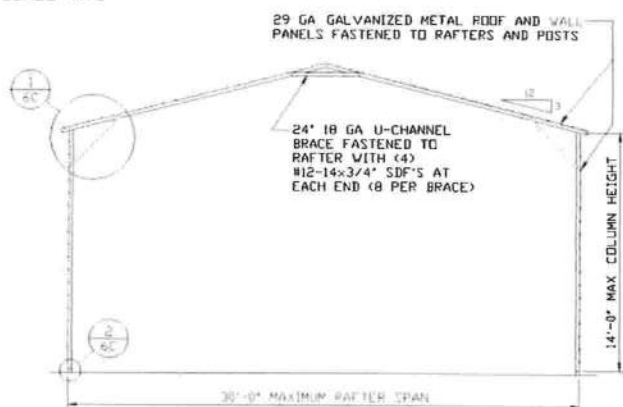
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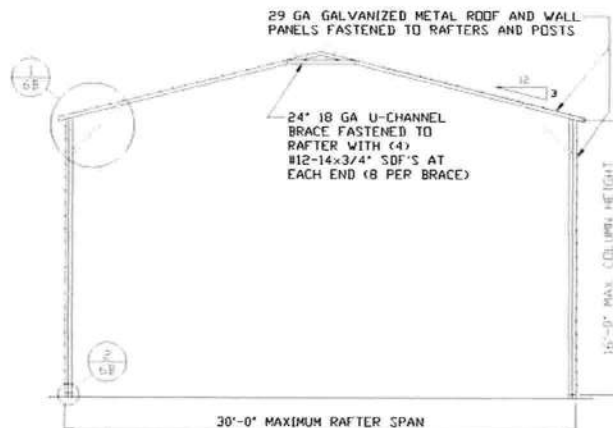
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SCALE: NTS



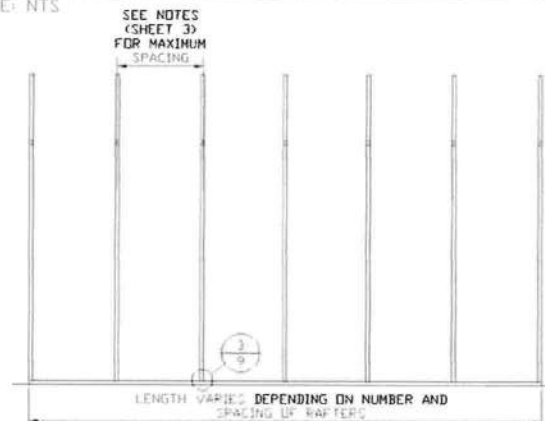
**TYPICAL RAFTER/COLUMN END FRAME SECTION**

SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**

SCALE: NTS



**TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION**

SCALE: NTS



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SHT. 5

SCALE: NTS

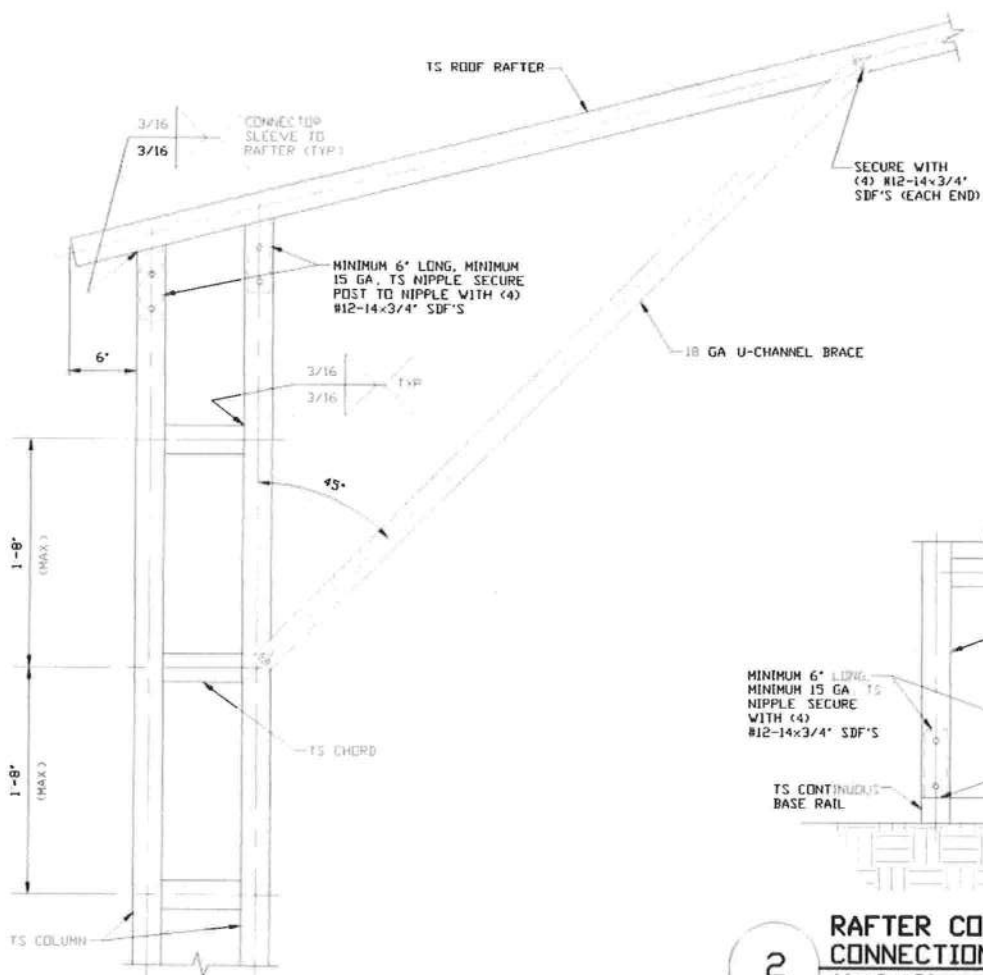
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JOB NO:  
16022S/17300S

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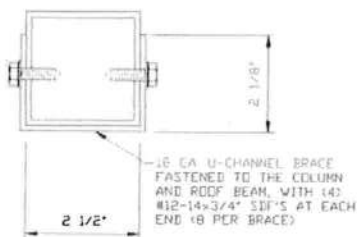
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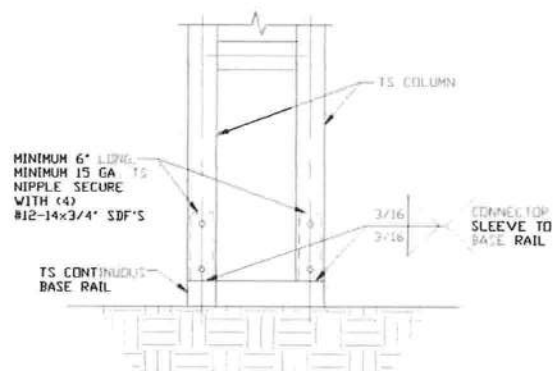
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CONNECTION DETAIL  
FOR HEIGHTS 16'-0" < TO ≤ 20'-0"**

SCALE: NTS



**BRACE SECTION**

SCALE: NTS



**RAFTER COLUMN/BASE RAIL  
CONNECTION DETAIL**

SCALE: NTS



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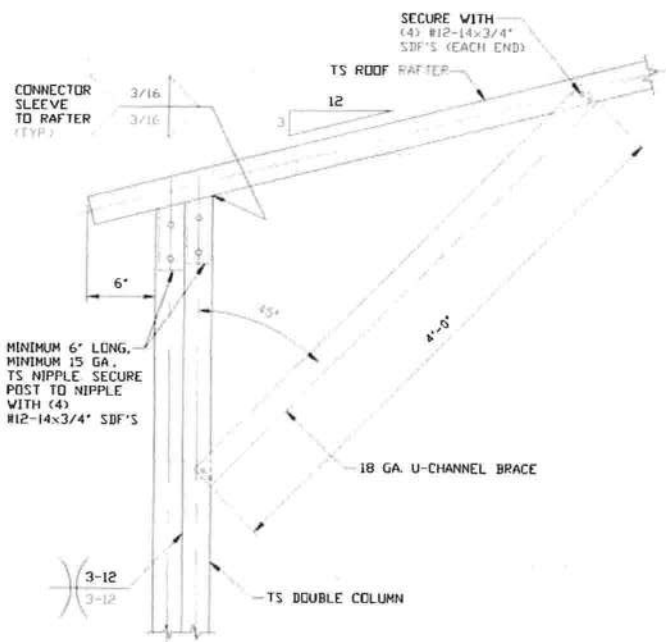
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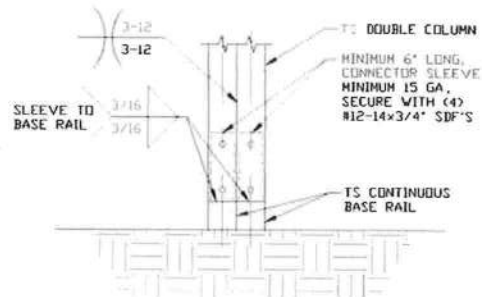
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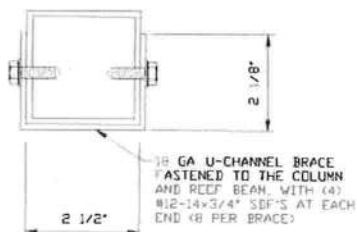
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**1** BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS 14'-0" < TO ≤ 16'-0"  
SCALE: NTS



**2** RAFTER COLUMN/BASE RAIL  
CONNECTION DETAIL  
SCALE: NTS



**BRACE SECTION**  
SCALE: NTS



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30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

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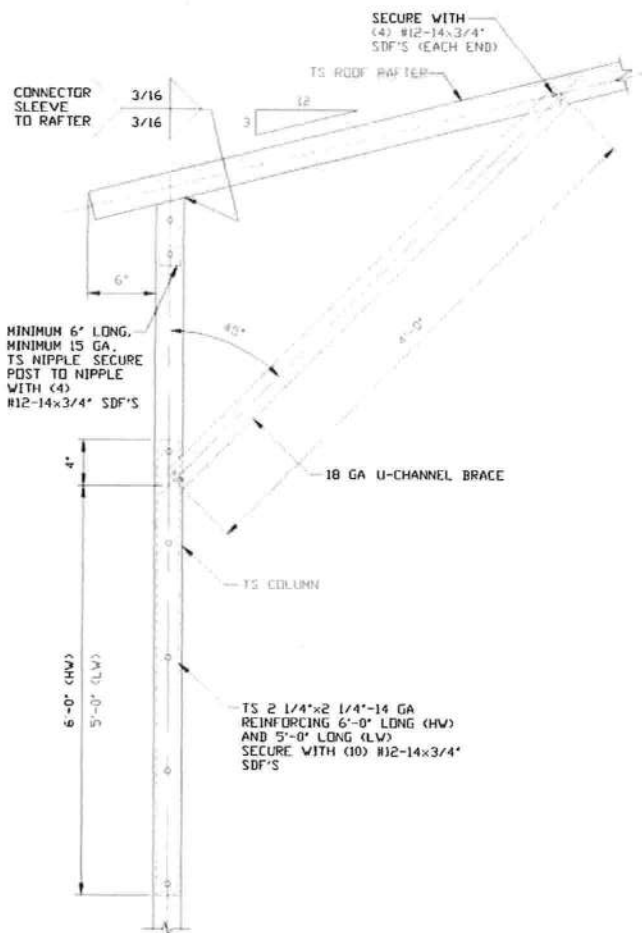
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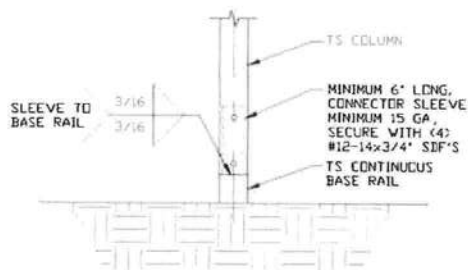
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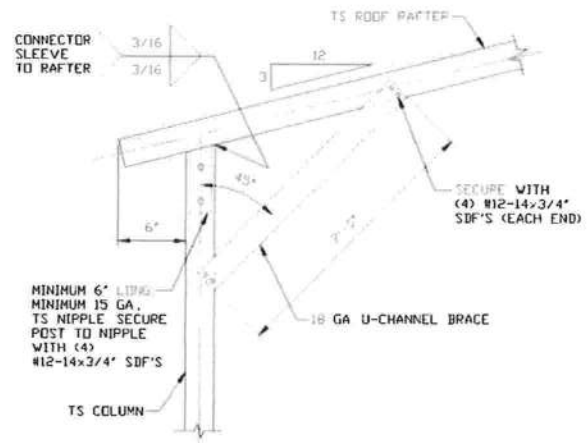
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**BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS 10'-0" < TO ≤ 14'-0"**  
SCALE: NTS



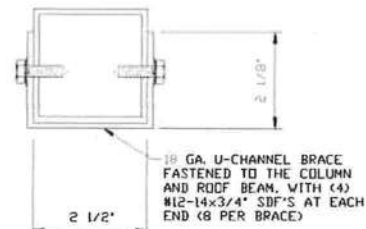
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**RAFTER COLUMN/BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS



1B

**BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS ≤ 10'-0"**  
SCALE: NTS



**BRACE SECTION**  
SCALE: NTS



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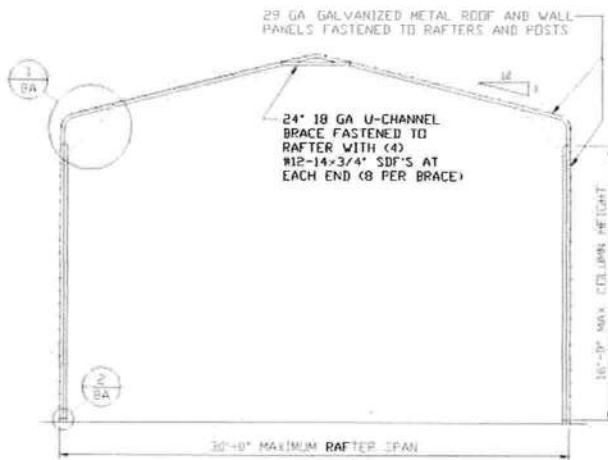
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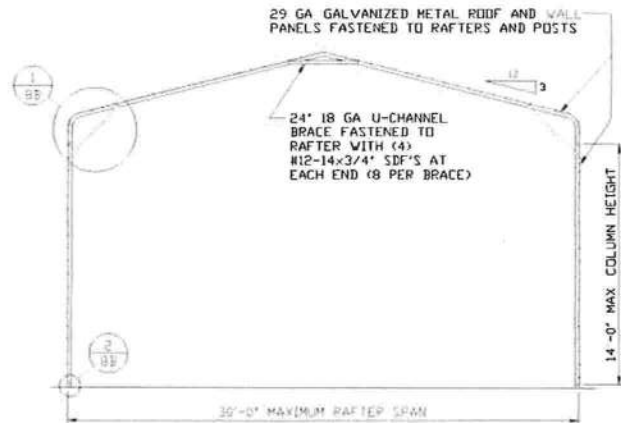
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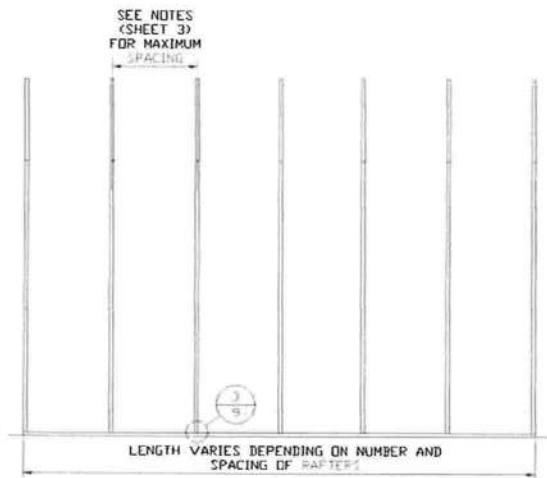
**TYPICAL RAFTER/COLUMN END FRAME SECTION**

SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**

SCALE: NTS



**TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION**

SCALE: NTS



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**SHT. 7**

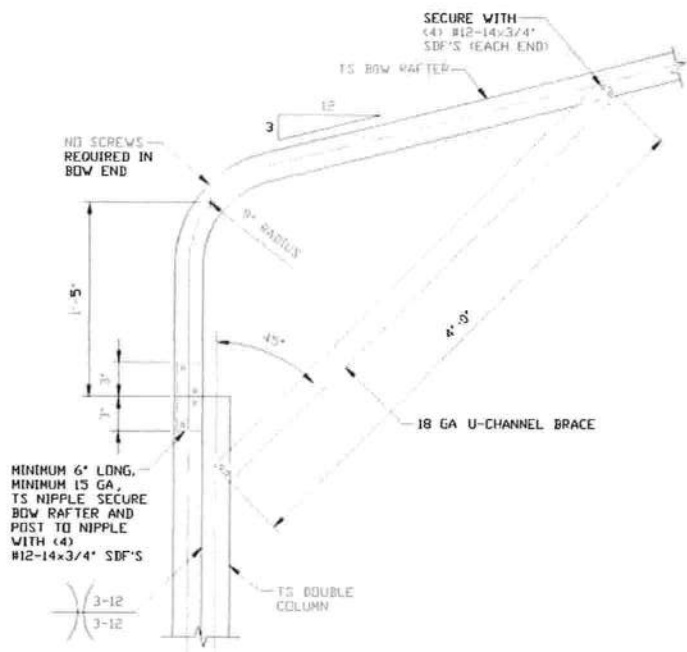
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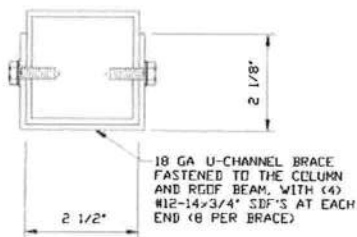
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**BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS 14'-0" < TO ≤ 16'-0"**  
SCALE: NTS



**2 RAFTER COLUMN/BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS

**BRACE SECTION**  
SCALE: NTS



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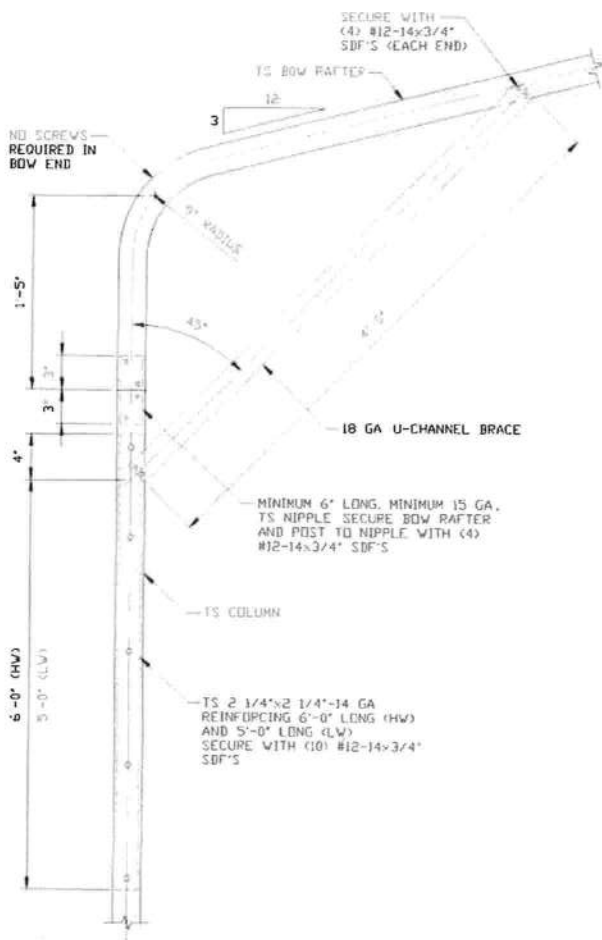
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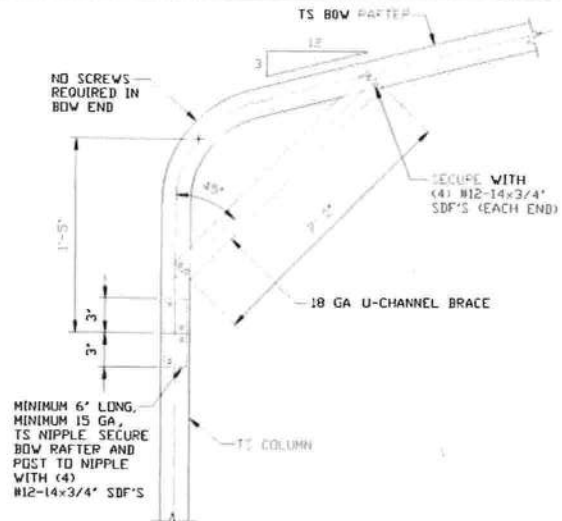
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**REV: 4**

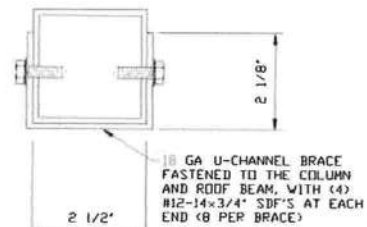
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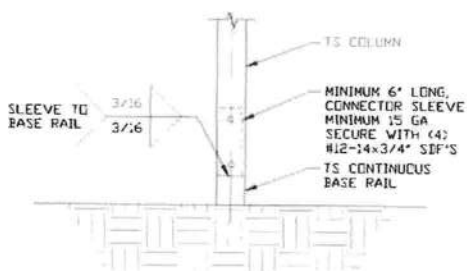
**1A** BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS 10'-0" < TO < 14'-0"  
SCALE: NTS



**1B** BOX EAVE RAFTER COLUMN  
CONNECTION DETAIL  
FOR HEIGHTS < 10'-0"  
SCALE: NTS



**BRACE SECTION**  
SCALE: NTS



**2** RAFTER COLUMN/BASE RAIL  
CONNECTION DETAIL  
SCALE: NTS



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**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TBS**

**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 08**

**SCALE: NTS**

**DWG. NO: SK-3**

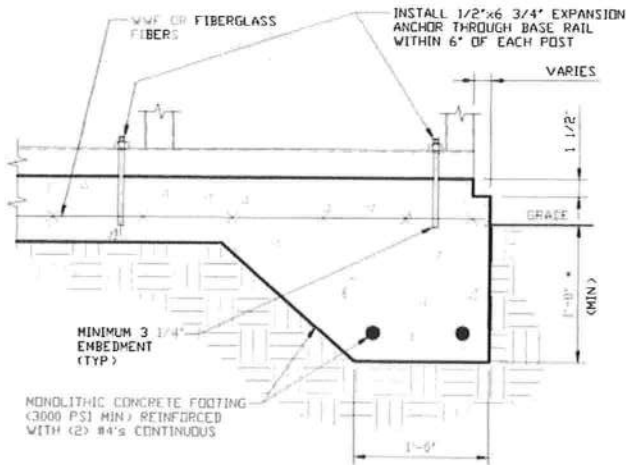
**JOB NO:  
16022S/17300S**

**REV: 4**

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## BASE RAIL ANCHORAGE OPTIONS FOR LOW AND HIGH WIND SPEED



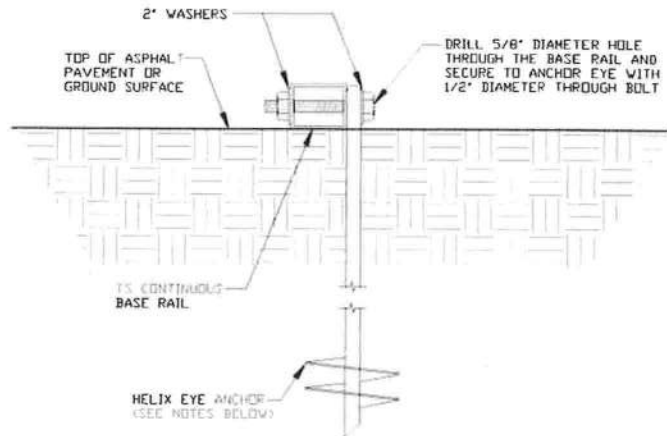
3A

### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS

(MINIMUM ANCHOR EDGE DISTANCE IS 4")

\* COORDINATE WITH LOCAL CODES/ORD



3B

### GROUND BASE HELIX ANCHORAGE

SCALE: NTS

(CAN BE USED FOR ASPHALT)

## GENERAL NOTES

### CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

### COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:

3 INCHES IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER, AND 1 1/2 INCHES ELSEWHERE

### REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

### REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:

1. REINFORCEMENT IS BENT COLD.
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.

### HELIX ANCHOR NOTES:

1. FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILTS AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT.
2. FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT.
3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT.
4. FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL USE MINIMUM (2) 6" HELICES WITH MINIMUM 50 INCH EMBEDMENT.
5. FOR VERY LOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL USE MINIMUM (2) 8" HELICES WITH MINIMUM 60 INCH EMBEDMENT.



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PROJECT MGR: WSM

CLIENT: TBS

**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

DATE: 12-18-17

SHT. 9A

SCALE: NTS

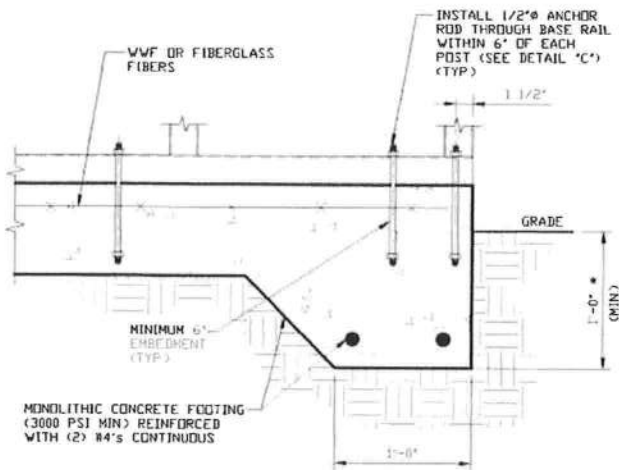
DWG. NO: SK-3

JOB NO:  
16022S/17300S

REV: 4

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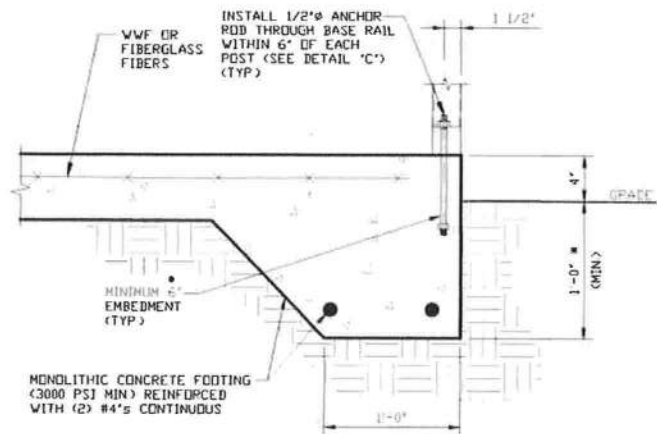
## OPTIONAL FOUNDATION ANCHORAGE FOR LOW & HIGH WIND SPEED



1A

### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS  
(MINIMUM ANCHOR EDGE DISTANCE IS 1 1/2")  
\* COORDINATE WITH LOCAL CODES/ORD.



1B

### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS  
(MINIMUM ANCHOR EDGE DISTANCE IS 1 1/2")  
\* COORDINATE WITH LOCAL CODES/ORD.

## GENERAL NOTES

### CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

### COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:

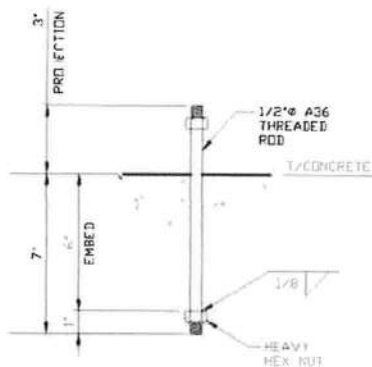
3 INCHES IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER, AND 1 1/2 INCHES ELSEWHERE

### REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60, THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT

### REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:

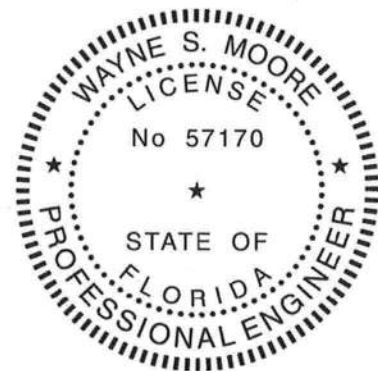
- 1 REINFORCEMENT IS BENT COLD
- 2 THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR IS NOT LESS THAN SIX-BAR DIAMETERS
- 3 REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



1C

### ANCHOR ROD THROUGH BASE RAIL DETAIL

SCALE: NTS



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PROJECT MGR: VSM

CLIENT: TBS

TUBULAR BUILDING SYSTEMS  
30'-0" x 20'-0" ENCLOSED BUILDING EXP. B

DATE: 12-18-17

SHT. 9B

SCALE: NTS

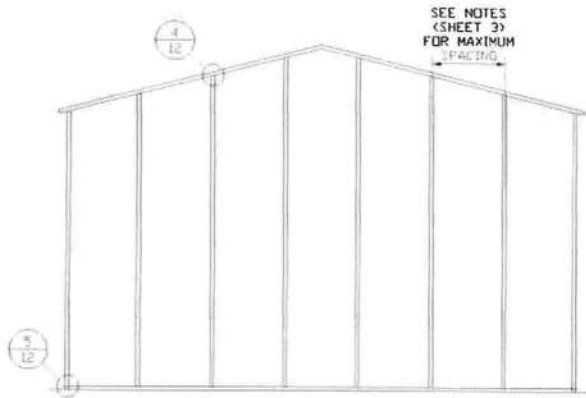
DWG. NO: SK-3

JOB NO:  
16022S/17300S

REV: 4

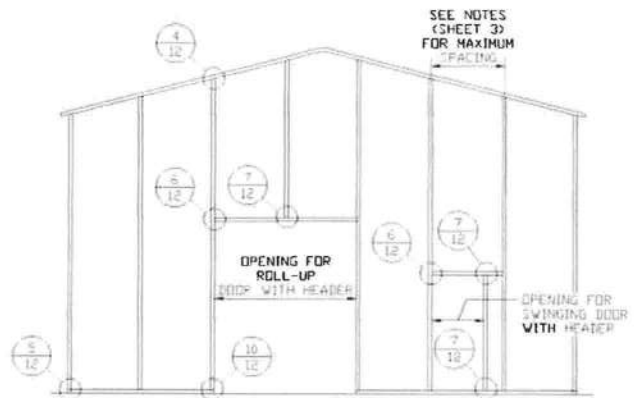
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## BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS



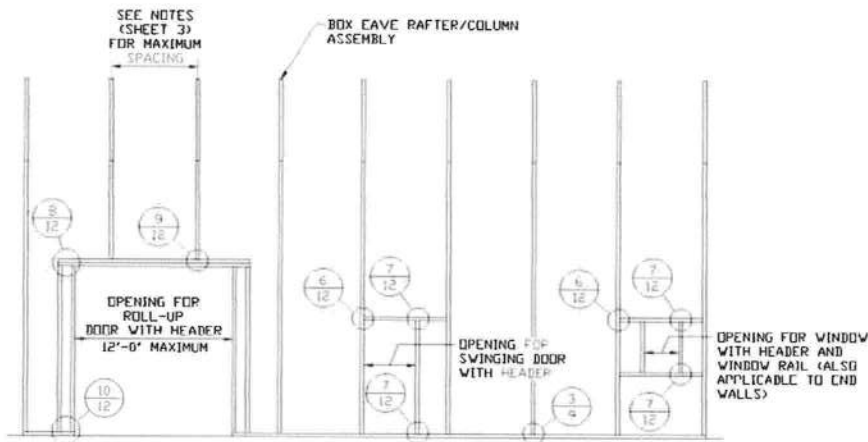
**TYPICAL BOX EAVE RAFTER  
END WALL FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER END  
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER SIDE  
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



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**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 10**

**SCALE: NTS**

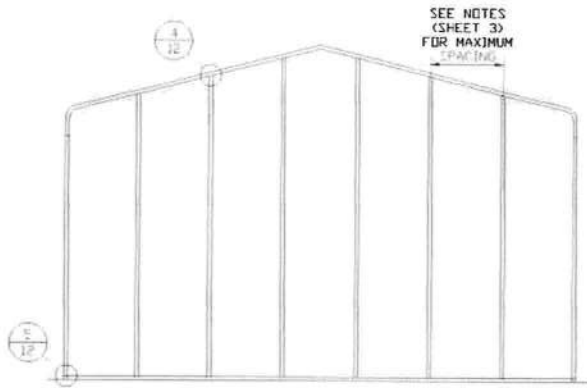
**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**REV: 4**

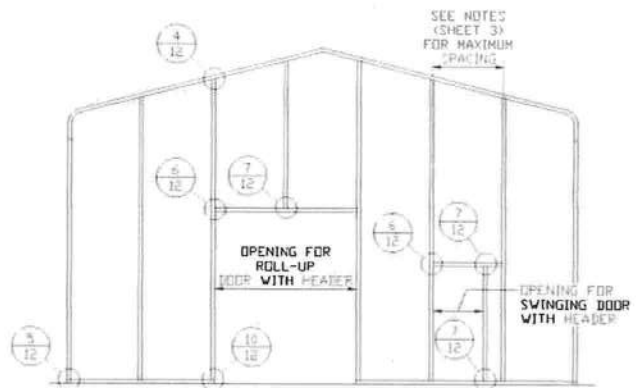
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## BOW RAFTER END WALL AND SIDE WALL OPENINGS



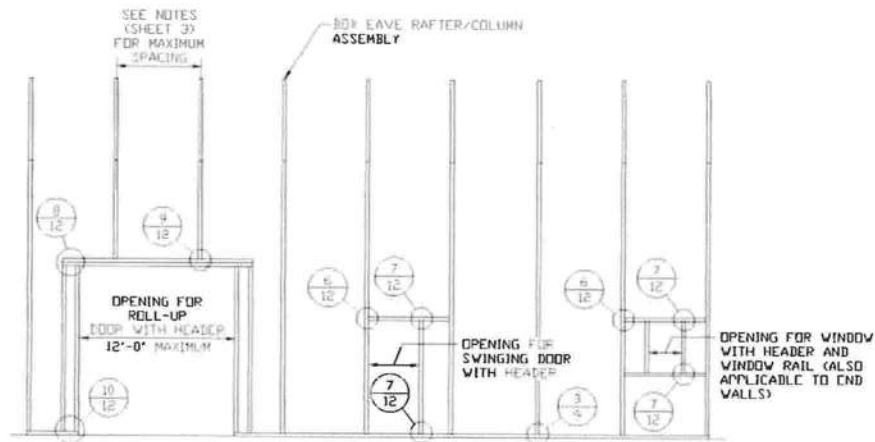
**TYPICAL BOX EAVE RAFTER  
END WALL FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER END  
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER SIDE  
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



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**CLIENT: TBS**

**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 11**

**SCALE: NTS**

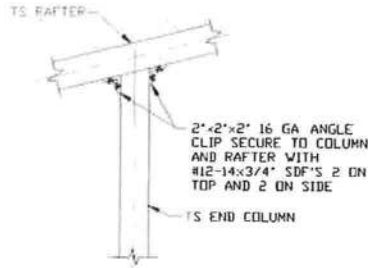
**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**REV: 4**

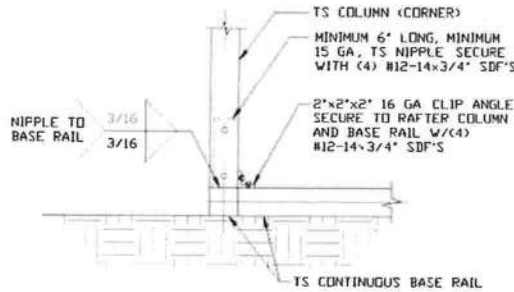
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# BOW AND BOX EAVE RAFTER WALL OPENING DETAILS



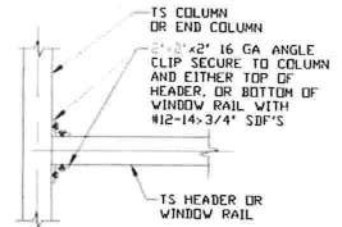
**4** END COLUMN/RAFTER CONNECTION DETAIL

SCALE: NTS



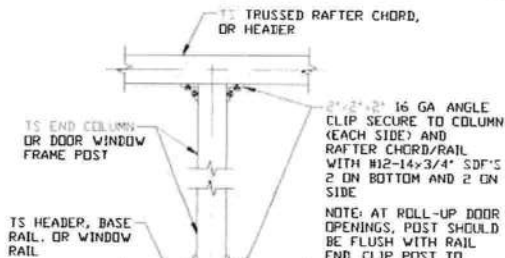
**5** END COLUMN/BASE RAIL CONNECTION DETAIL

SCALE: NTS



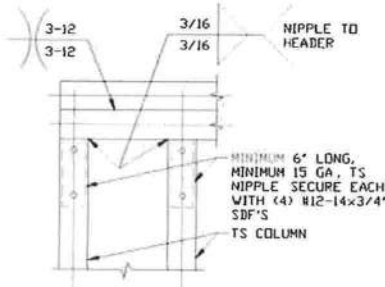
**6** HEADER OR WINDOW RAIL TO COLUMN CONNECTION DETAIL

SCALE: NTS



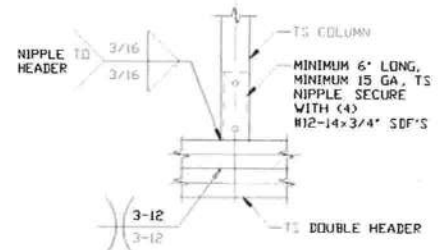
**7** COLUMN TO HEADER, BASE RAIL, OR WINDOW RAIL CONNECTION DETAIL

SCALE: NTS



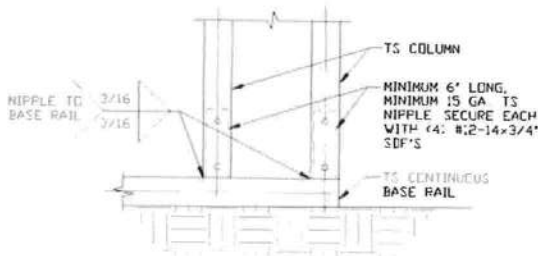
**8** DOUBLE HEADER/COLUMN CONNECTION DETAIL

SCALE: NTS



**9** COLUMN/DOUBLE HEADER CONNECTION DETAIL

SCALE: NTS



**10** COLUMN/BASE RAIL CONNECTION DETAIL

SCALE: NTS



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**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TBS**

**TUBULAR BUILDING SYSTEMS  
30'-0" x 20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 12**

**SCALE: NTS**

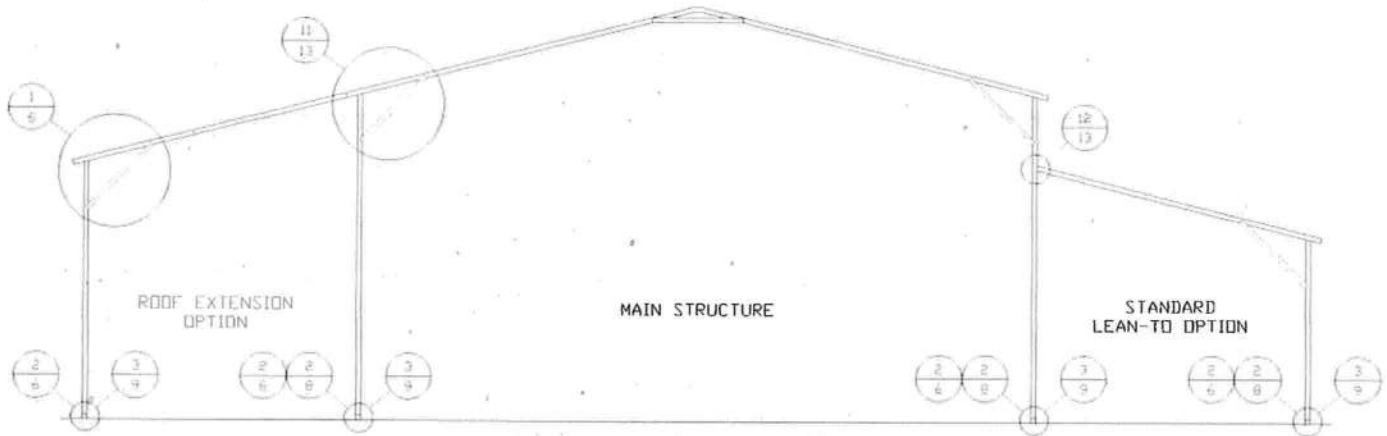
**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**REV: 4**

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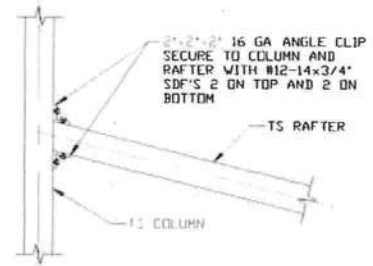
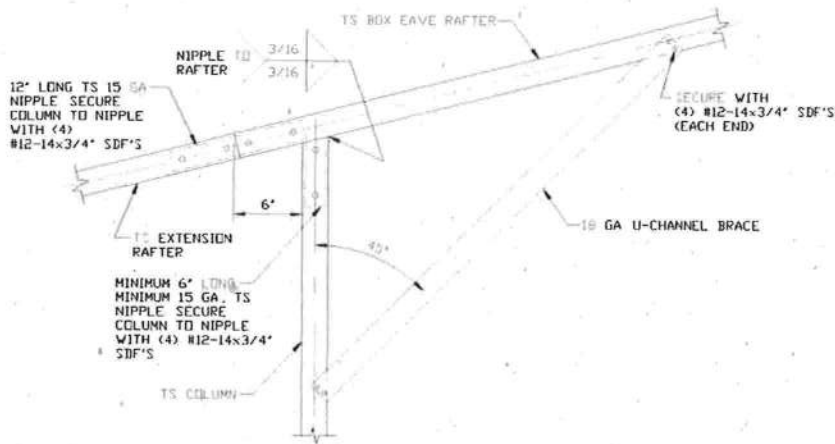
## BOX EAVE RAFTER LEAN-TO OPTIONS



### TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

SCALE: NTS

MAXIMUM WIDTH OF SINGLE MEMBER RAFTER LEAN-TO IS 16'-0"



12

### LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL

SCALE: NTS

11A

### SIDE EXTENSION RAFTER/COLUMN DETAIL

SCALE: NTS



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**TUBULAR BUILDING SYSTEMS  
30'-0" x 20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 13**

**SCALE: NTS**

**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**REV: 4**

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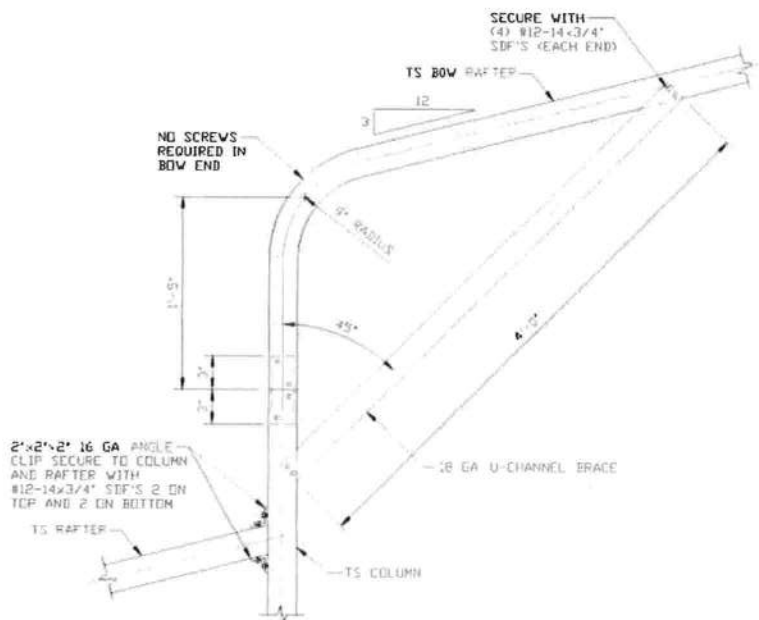
Diagram illustrating a building structure with a 'STANDARD LEAN-TO OPTION' and a 'MAIN STRUCTURE'. The diagram shows a cross-section of the building with various structural details and dimensions indicated by circular callouts containing numbers and fractions.

Key features and dimensions:

- STANDARD LEAN-TO OPTION:** The left portion of the structure, showing a gabled roof and vertical supports.
- MAIN STRUCTURE:** The larger, central portion of the building with a gabled roof.
- Dimensions and Callouts:**
  - Top left:  $\frac{1}{8}$  (circled)
  - Top center:  $\frac{12}{14}$  (circled)
  - Bottom left:  $\frac{2}{6}$ ,  $\frac{3}{9}$ ,  $\frac{2}{6}$ ,  $\frac{7}{8}$ ,  $\frac{3}{9}$  (circled)
  - Bottom right:  $\frac{2}{6}$ ,  $\frac{2}{8}$ ,  $\frac{3}{9}$  (circled)

SCALE: NTS

MAXIMUM WIDTH OF SINGLE MEMBER RAFTER LEAN-TO IS 16'-0"



13

### SIDE EXTENSION RAFTER/COLUMN DETAIL

SCALE: NTS



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CLIENT: TBS

TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B

DATE: 12-18-17

SHT. 14

SCALE: NTS

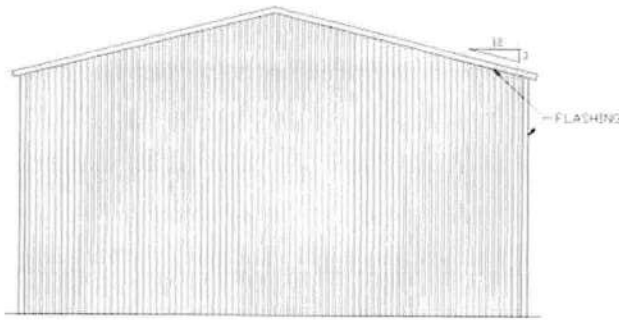
DWG. NO: SK-3

**JOB NO:**  
**16022S/17300S**

REV. 4

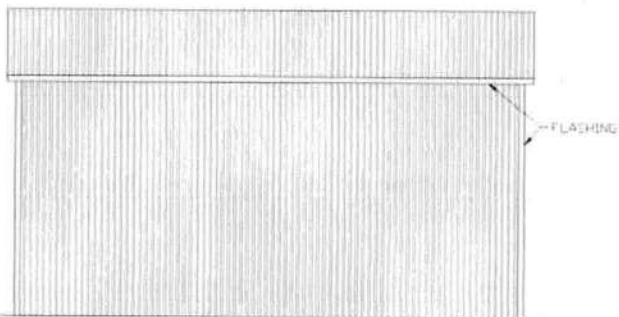
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## BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



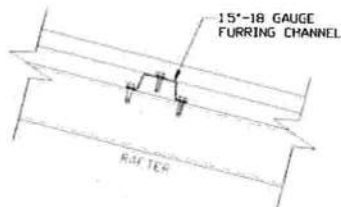
**TYPICAL END ELEVATION  
VERTICAL ROOF/SIDING OPTION**

SCALE: NTS



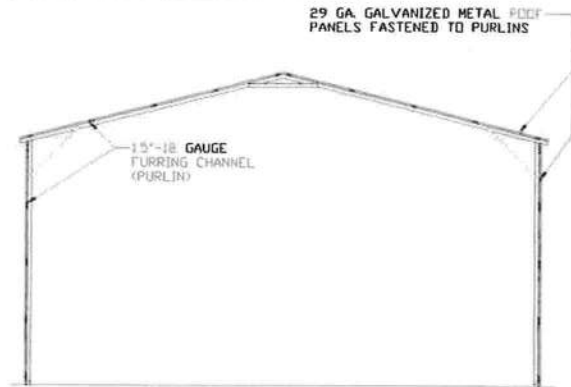
**TYPICAL SIDE ELEVATION  
VERTICAL ROOF/SIDING OPTION**

SCALE: NTS



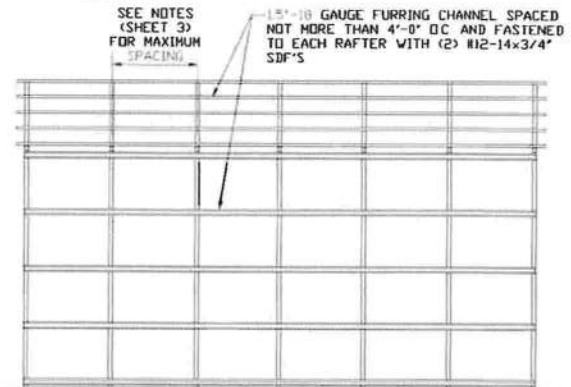
**ROOF PANEL ATTACHMENT**

(ALTERNATE FOR VERTICAL ROOF PANELS)  
SCALE: NTS



**TYPICAL SECTION VERTICAL  
ROOF/SIDING OPTION**

SCALE: NTS



**TYPICAL FRAMING SECTION  
VERTICAL ROOF/SIDING OPTION**

SCALE: NTS



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**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TBS**

**TUBULAR BUILDING SYSTEMS  
30'-0" x 20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SHT. 15**

**SCALE: NTS**

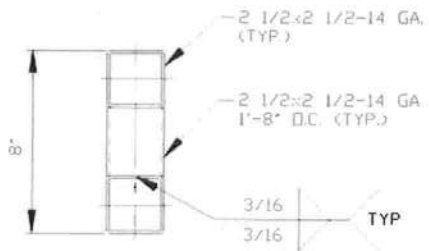
**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**REV: 4**

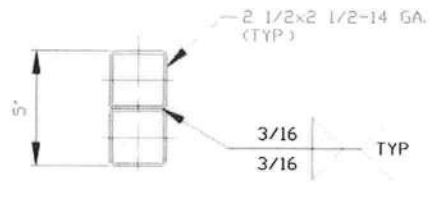
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## OPTIONAL DOOR HEADER



**HEADER DETAIL FOR DOOR  
OPENINGS 12'-0" < LENGTH ≤ 15'-0"**

SCALE: NTS



**HEADER DETAIL FOR DOOR  
OPENINGS LENGTH ≤ 12'-0"**

SCALE: NTS



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**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TBS**

**TUBULAR BUILDING SYSTEMS  
30'-0"x20'-0" ENCLOSED BUILDING EXP. B**

**DATE: 12-18-17**

**SCALE: NTS**

**DWG. NO: SK-3**

**JOB NO:  
16022S/17300S**

**SHT. 16**

**REV: 4**

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Outside measurement of foundation  
Equals Basic Building Dimension  
plus Seven (7) inches

40'7"

Outside edge of foundation / footing

46'

Basic Building  
Dimension  
to outside of Base Rail

Basic Building  
Dimension  
to outside of Base Rail

52'

BUILDING SLAB

See Corner  
Detail Sheet 3

Building  
Base Rail

3-1/2" wide x 1-1/2" high Notch  
in Concrete outside  
of basic building  
dimensions

Outside measurement of foundation  
Equals Basic Building Dimension  
plus Seven (7) inches

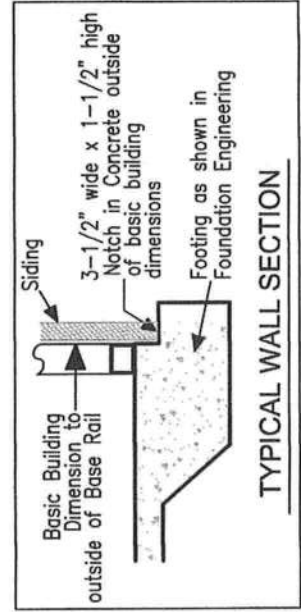
52'7"

## IMPORTANT - NOTES

Record Measurements  
in these spaces provided

All basic building dimensions  
are to the outside of the  
frame Base Rail and DO NOT  
INCLUDE the 3-1/2" x 1-1/2"  
notch in the concrete footing

See Sheet 3 of 3  
for Detail of Building  
corner configuration



## TYPICAL BUILDING FOUNDATION MEASUREMENTS





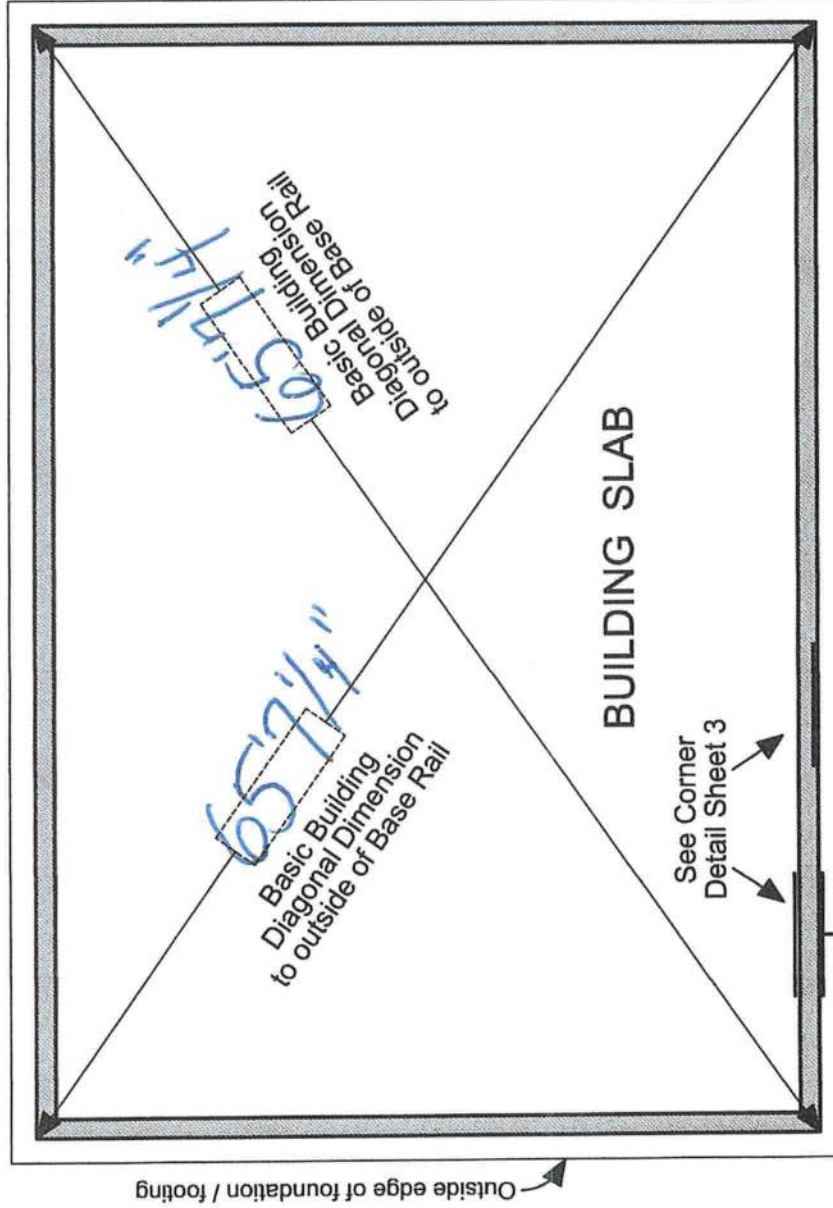
## IMPORTANT - NOTES



Record Measurements  
in these spaces provided

All basic building diagonal dimensions  
are to the outside corner of the  
frame Base Rail and DO NOT  
INCLUDE the 3-1/2" x 1-1/2"  
notch in the concrete footing

See Sheet 3 of 3  
for Detail of Building  
corner configuration

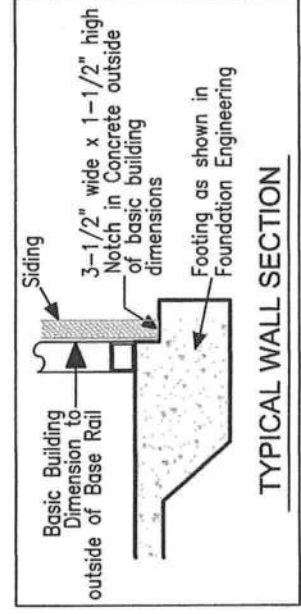


BUILDING SLAB

See Corner  
Detail Sheet 3

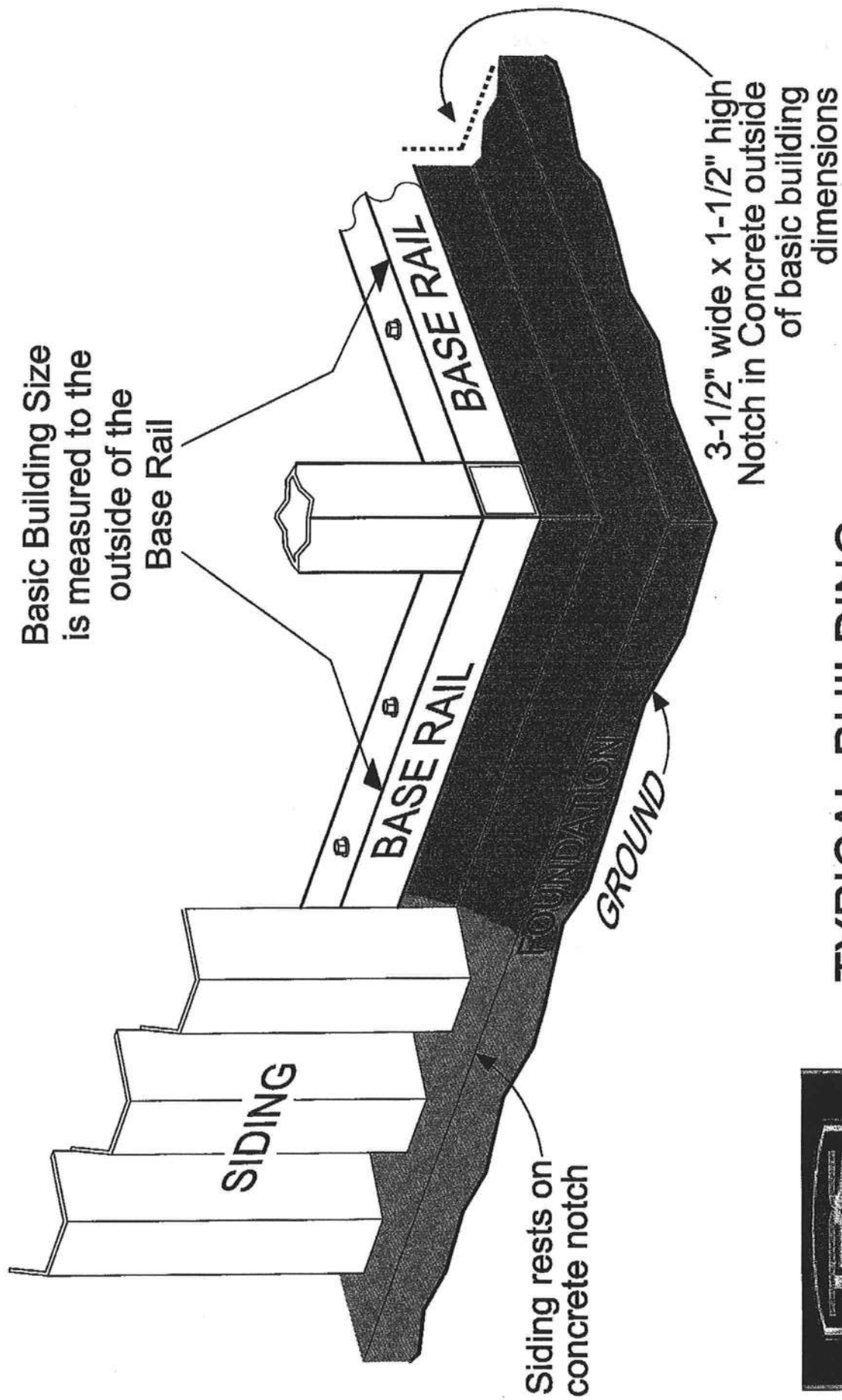
Building  
Base Rail

3-1/2" wide x 1-1/2" high Notch  
in Concrete outside  
of basic building  
dimensions



## TYPICAL BUILDING FOUNDATION MEASUREMENTS DIAGONALS





## TYPICAL BUILDING CORNER DETAIL

