

JAMES SITES  
2735 JOHNSTON COUNTY RD  
ANGIER NC 27501

# **NORTHEDGE STEEL**

## **STRUCTURAL DESIGN ENCLOSED BUILDING**

**MAXIMUM 30'-0" WIDE X 16'- 0" EAVE HEIGHT-  
BOX EAVE FRAME AND BOW FRAME**

14 April 2022  
Revision 0  
M&A Project No. 21204S

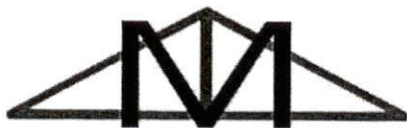
**Prepared for:**

**Northedge Steel, LLC  
350 Forum Parkway  
Rural Hall, NC 27045**

**Prepared by:**



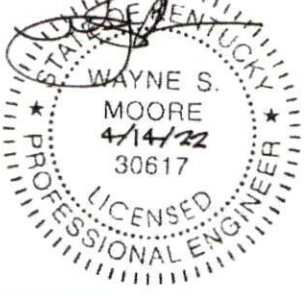




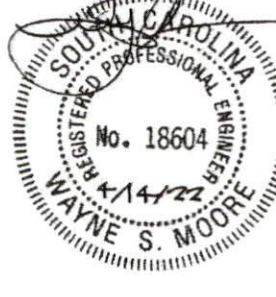


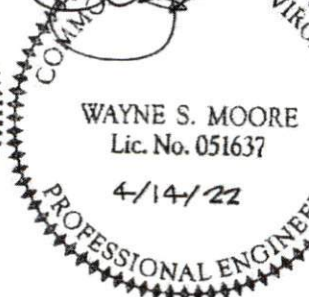

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MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.		NORTHEDGE STEEL, LLC 350 FORUM PARKWAY RURAL HALL, NC 27045 30'-0" x 16'-0" ENCLOSED STRUCTURE	
DRAWN BY: LT		CHECKED BY: PDM	
PROJECT MGR: WSM		DATE: 4-14-22	SCALE: NTS
CLIENT: NORTHEDGE		SHT. 1	JOB NO: 21204S
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## INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR MAXIMUM 30'-0" WIDE x 16'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
2. DESIGN WAS DONE IN ACCORDANCE WITH ALL THE APPLICABLE BUILDING CODES LISTED ON SHEET 3A.
3. DESIGN LOADS ARE AS FOLLOWS:
  - A) ROOF DEAD LOADS:
    - SELF-WEIGHT = 1.5 PSF
    - MEP = 0 PSF
    - COLLATERAL = 0 PSF
  - B) ROOF LIVE LOAD = 12 PSF
  - C) FLOOR LIVE LOAD = 100 PSF (4' CONCRETE SLAB-ON-GRADE)
  - D) GROUND SNOW LOAD = 60 PSF
    - = 35 PSF
    - = 30 PSF (W < 24'-0"), WITH U-CHANNEL RAFTER TIE

NOTE: UNBALANCED LOADING DUE TO SNOW DRIFTING FROM AN ADJACENT TALLER STRUCTURE HAS NOT BEEN EVALUATED.
4. 3-SECOND GUST WIND SPEED = < 115 MPH (NOMINAL WIND SPEED = < 89 MPH).
5. MAXIMUM RAFTER/COLUMN AND END COLUMN SPACING = 3.5 FEET FOR SL 35 PSF < TO < 60 PSF AND 5.0 FEET FOR < 35 PSF (UNLESS NOTED OTHERWISE).
6. END WALL COLUMNS (POSTS) ARE EQUIVALENT TO SIDE WALL COLUMNS IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
7. RISK CATEGORY I (NOT FOR HUMAN HABITATION).
8. WIND EXPOSURE CATEGORY B/C.
9. SPECIFICATIONS APPLICABLE TO 29 GAUGE (FOR SL < 35 PSF) AND 26 GAUGE (FOR SL 35 PSF < TO < 60 PSF) METAL PANELS FASTENED DIRECTLY TO 2 1/2" x 2 1/2" - 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE), TS 2 1/4" x 2 1/4" - 12 GAUGE MAY BE USED AS AN OPTION.
9. CONNECTOR SLEEVES ARE MINIMUM 6' LONG, TS 2 1/4"x2 1/4"-14 GAUGE FOR 2 1/2"x2 1/2"-14 GAUGE AND TS 2"x2"-12 GAUGE FOR 2 1/4"x2 1/4"-12 GAUGE FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
10. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 GRADE 50 WITH MINIMUM YIELD STRENGTH (F<sub>y</sub>) OF 54 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS OF G60.
11. AVERAGE PANEL FASTENER SPACING ON-CENTERS = 9" O.C. (MAX.)
12. 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. ROOF SLOPES LESS THAN 3:12 REQUIRE USE OF LAP JOINT SEALANT.
13. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6' OF EACH RAFTER COLUMN ALONG SIDES.
14. STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT x 36" LONG AND MAY BE USED IN SUITABLE SOILS. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. COORDINATE WITH LOCAL CODES/ORDINANCES REGARDING MINIMUM LENGTH FOR FROST DEPTH PROTECTION.
15. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATION ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.
16. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
  - SOIL SITE CLASS = D
  - RISK CATEGORY I
  - R = 3.25      I<sub>E</sub> = 1.0
  - S<sub>DS</sub> = 2.625 g      V = C<sub>s</sub>W
  - S<sub>D1</sub> = 2.13 g
17. IF MORE THAN 50% OF COLUMN (LEG) ARE REMOVED IN ANY LONGITUDINAL (SIDE) WALLS OF A BUILDING, THE ENGINEER IS TO BE NOTIFIED TO DETERMINE WHETHER PORTAL FRAMES OR OTHER LONGITUDINAL STABILITY ELEMENTS WILL BE REQUIRED.
18. THIS MASTER DESIGN IS A GENERIC MASTER DESIGN PRIMARILY INTENDED FOR PLANT FABRICATION AND ERECTION A/CN TO SHOP DRAWINGS. THE MASTER DESIGN IS NOT PRIMARILY INTENDED FOR CONSTRUCTION PERMIT. WHEN APPLYING FOR BUILDING PERMIT, THE CERTIFIED BUILDING OFFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR BUILDING PERMIT. ANY VARIATION FROM THE ANALYSIS/DESIGN PARAMETERS OF THE MASTER DESIGN REQUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

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DRAWN BY: LT

CHECKED BY: PDH

PROJECT MGR: VSH

CLIENT: NORTEDGE

NORTEDGE STEEL, LLC  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0"x16'-0" ENCLOSED STRUCTURE

DATE: 4-14-22

SCALE: NTS

JOB NO: 21204S

SHT. 3

DWG. NO: SK-3

REV: 0

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## LIST OF APPLICABLE BUILDING CODES

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

GEORGIA STATE MINIMUM STANDARD BUILDING CODE  
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

INDIANA BUILDING CODE, 2014 EDITION  
(ADOPTS THE IBC 2012 WITH AMENDMENTS)

2018 KENTUCKY BUILDING CODE  
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

2015 MICHIGAN BUILDING CODE  
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

2018 NORTH CAROLINA BUILDING CODE  
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

OHIO BUILDING CODE 2017  
(ADOPTS THE 2015 WITH AMENDMENTS)

2018 SOUTH CAROLINA BUILDING CODE  
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2012 OF TENNESSEE  
(ADOPTS THE IBC 2012 WITH AMENDMENTS)

BUILDING CODE 2018 OF NASHVILLE AND DAVIDSON  
COUNTY (ADOPTS THE IBC 2018 WITH AMENDMENTS)

2018 VIRGINIA CONSTRUCTION CODE  
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2015 OF WEST VIRGINIA  
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

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**SHT. 3A**

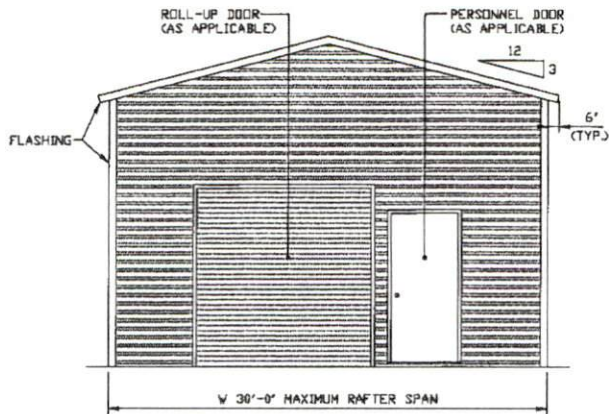
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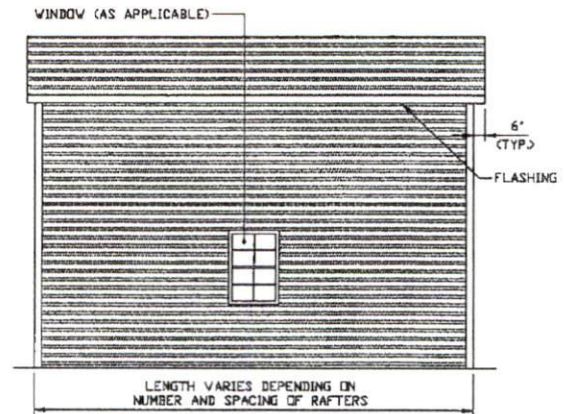
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## BOX EAVE FRAME RAFTER STRUCTURE

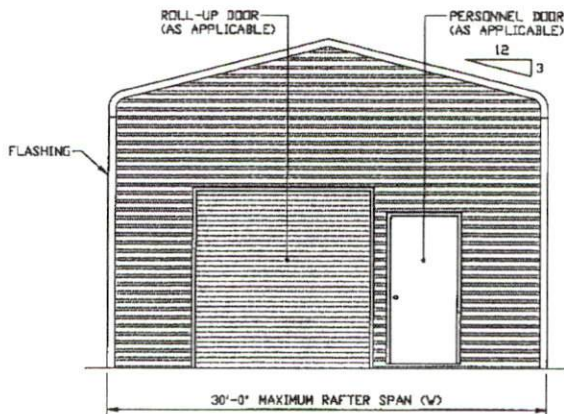


**TYPICAL END ELEVATION**  
SCALE: NTS

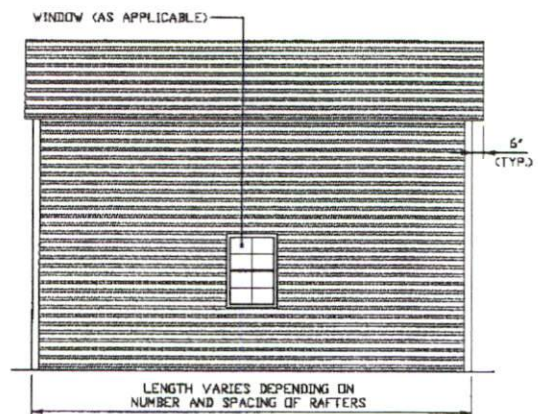


**TYPICAL SIDE ELEVATION**  
SCALE: NTS

## BOW FRAME RAFTER STRUCTURE



**TYPICAL END ELEVATION**  
SCALE: NTS



**TYPICAL SIDE ELEVATION**  
SCALE: NTS

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SHT. 4

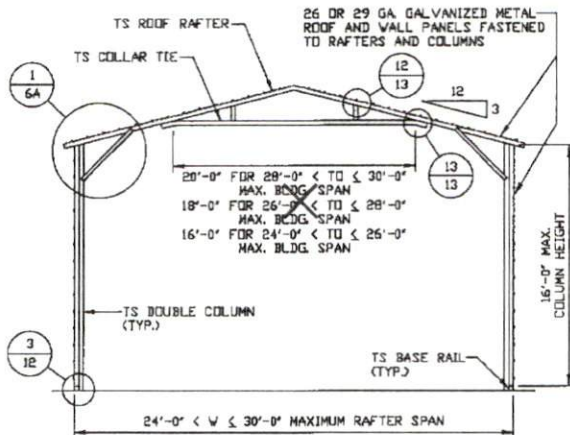
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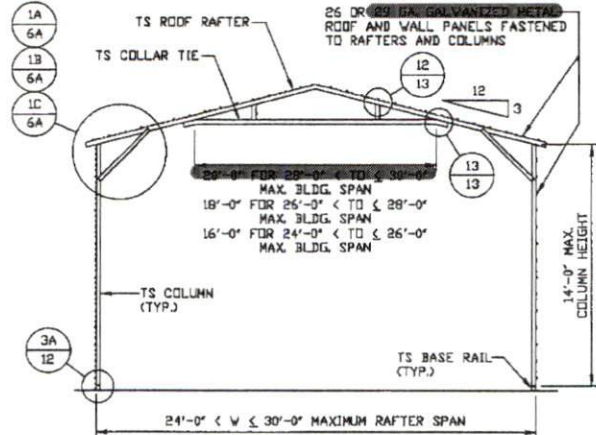
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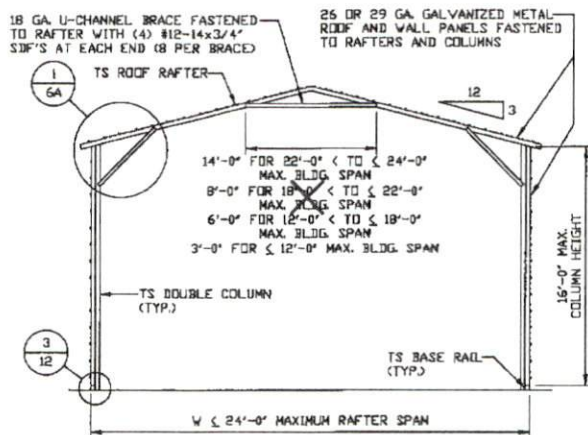
# ≤ 35 PSF SNOW LOAD



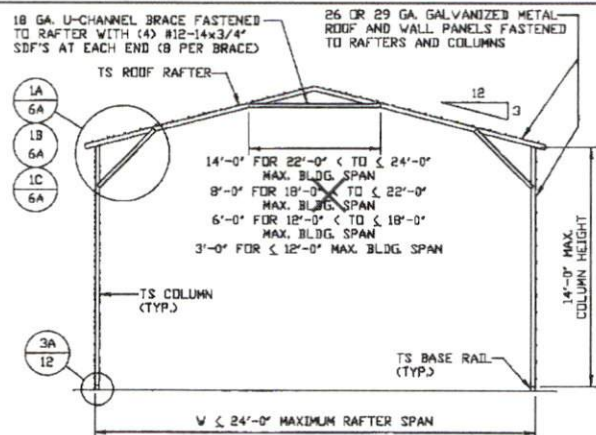
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SCALE: NTS



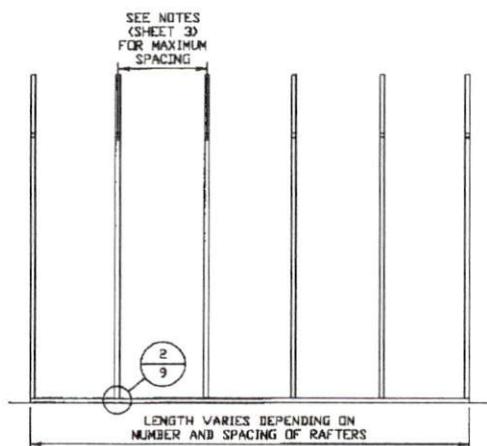
**TYPICAL RAFTER/COLUMN FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION**  
SCALE: NTS

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SHT. 5A

SCALE: NTS

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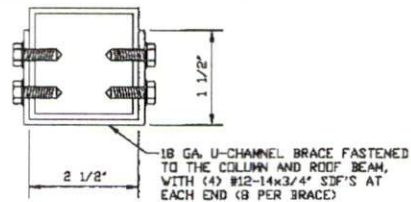
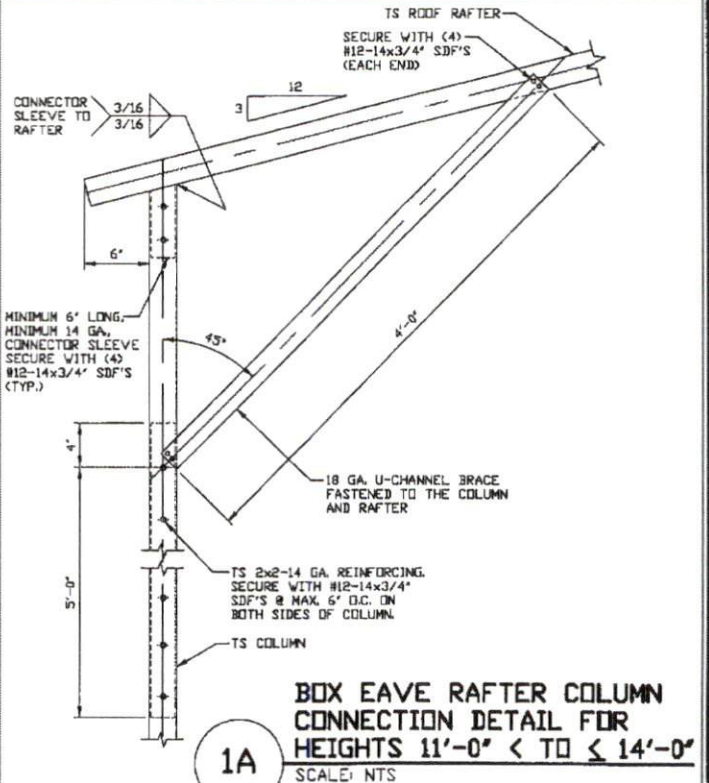
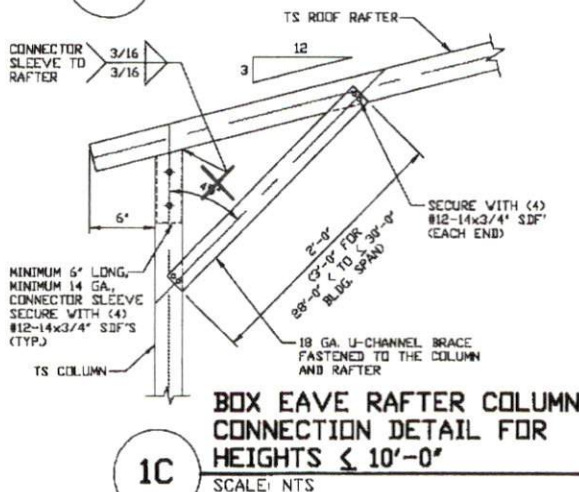
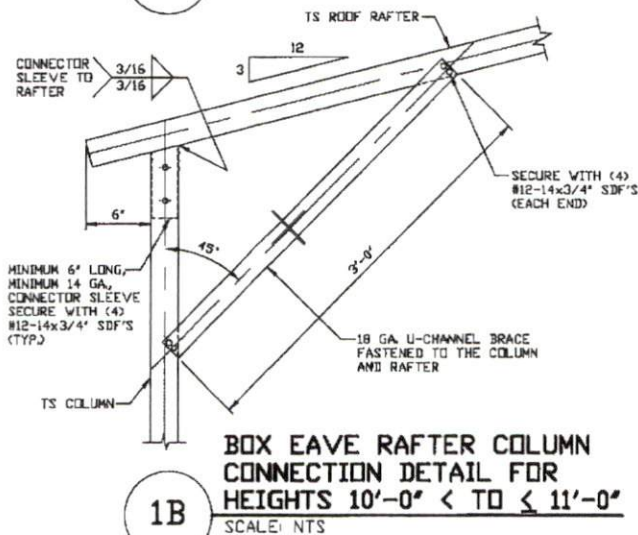
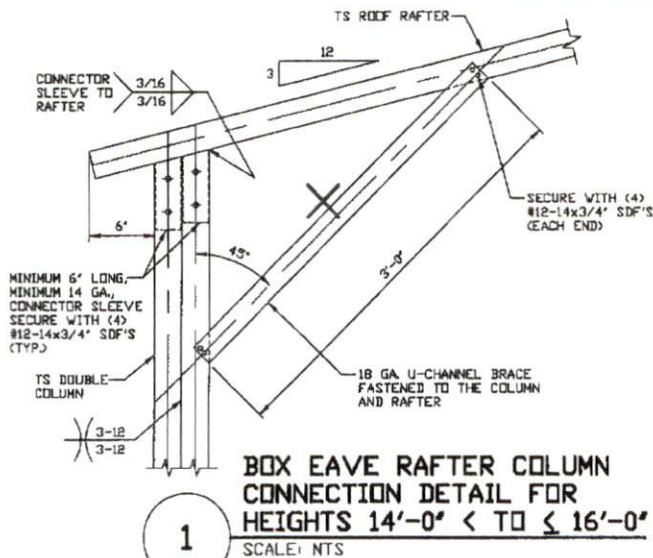
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# ≤ 35 PSF SNOW LOAD



**BRACE SECTION**  
SCALE: NTS

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SCALE: NTS

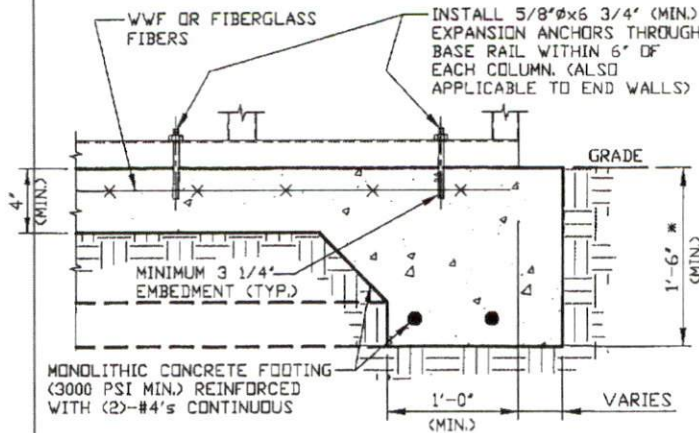
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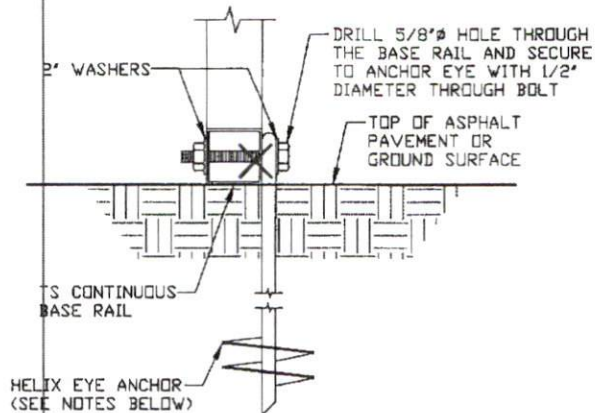
## BASE RAIL ANCHORAGE OPTIONS FOR $\leq 35$ PSF SNOW LOAD



2

### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS  
MINIMUM ANCHOR EDGE DISTANCE IS 4".  
\* COORDINATE WITH LOCAL BUILDING CODE  
AND/OR BUILDING OFFICIAL REGARDING  
REQUIRED FOOTING DEPTH.



2A

### GROUND BASE HELIX ANCHORAGE

SCALE: NTS (CAN BE USED FOR ASPHALT)

### GENERAL NOTES

NOTE: CONCRETE MONOLITHIC SLAB DESIGN BASED ON  
MINIMUM SOIL BEARING CAPACITY OF 1,500 PSF.

#### 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" 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" 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" EMBEDMENT OR  
SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
2. FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM  
30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM  
50" EMBEDMENT.
3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY  
STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH  
MINIMUM 30 INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM  
50" EMBEDMENT.
4. FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND  
SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM  
50" EMBEDMENT.
5. FOR VERY LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER  
CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8" HELICES  
WITH MINIMUM 60" EMBEDMENT.

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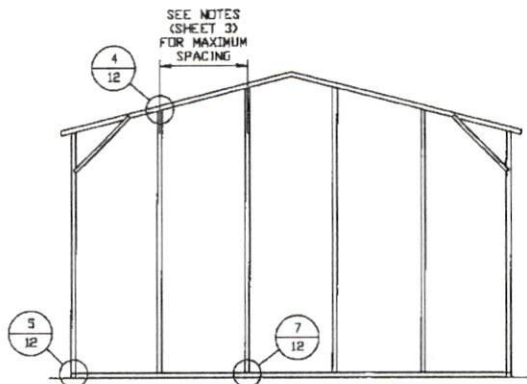
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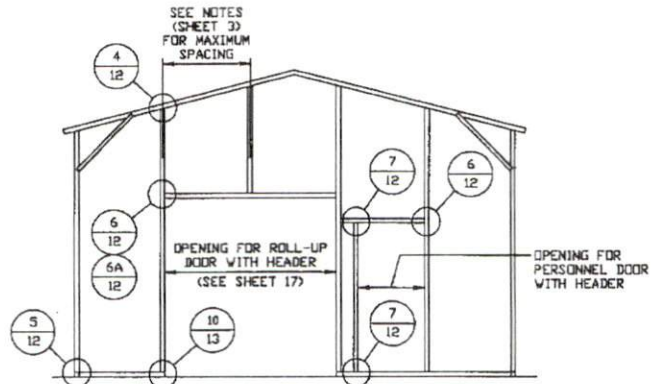
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## BOX EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



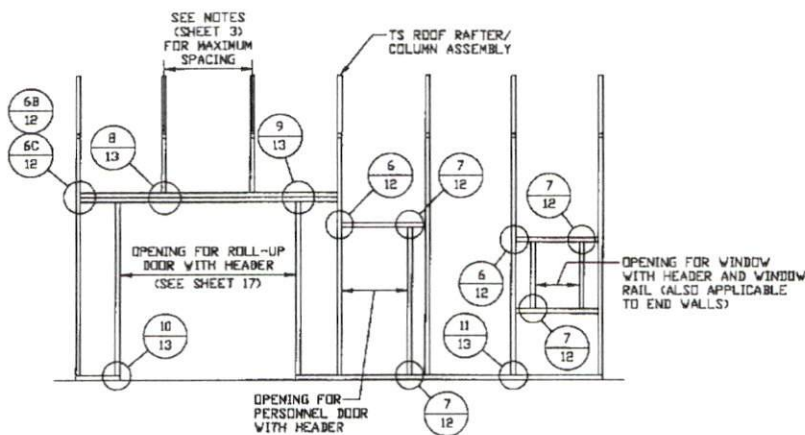
**TYPICAL BOX EAVE RAFTER  
END WALL FRAMING SECTION**

SCALE: NTS



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

SCALE: NTS



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

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**SCALE: NTS**

**DWG. NO: SK-3**

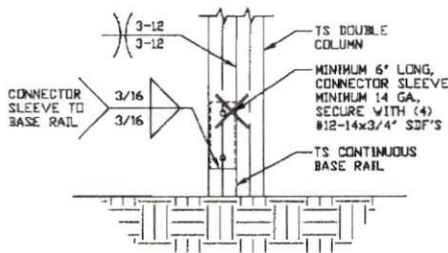
**JOB NO: 212045**

**REV: 0**

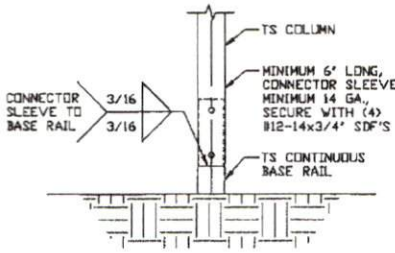
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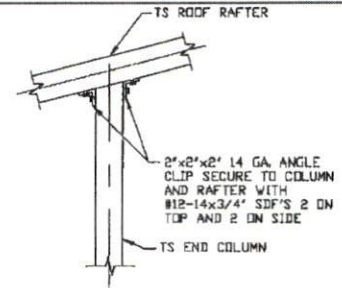
## CONNECTION DETAILS



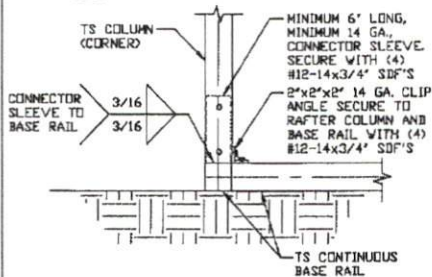
**3**  
**RAFTER COLUMN/  
BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS



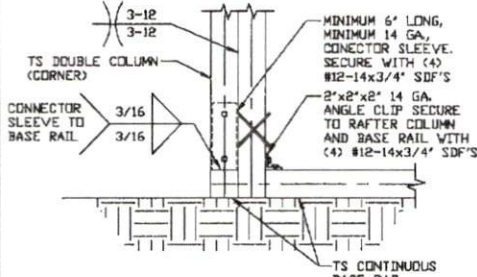
**3A**  
**RAFTER COLUMN/  
BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS



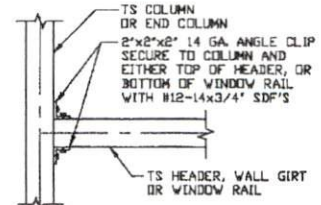
**4**  
**END COLUMN/RAFTER  
CONNECTION DETAIL**  
SCALE: NTS



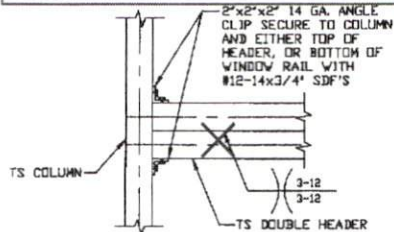
**5**  
**END COLUMN/BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS



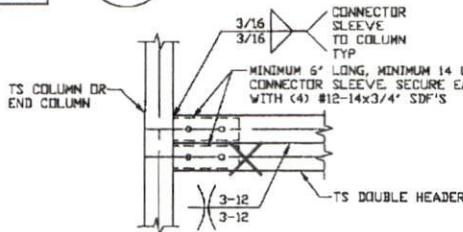
**5A**  
**END COLUMN/BASE RAIL  
CONNECTION DETAIL**  
SCALE: NTS



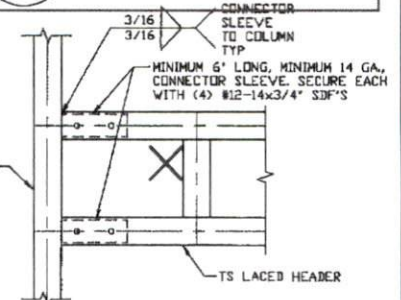
**6**  
**COLUMN OR WINDOW  
RAIL/GIRT TO POST  
CONNECTION DETAIL**  
SCALE: NTS



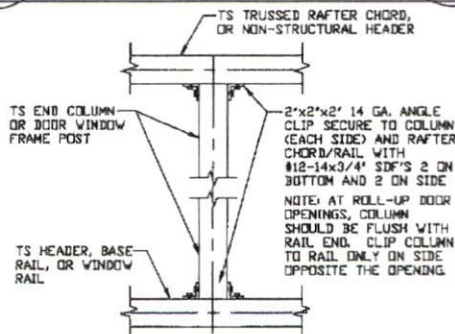
**6A**  
**END WALL DOUBLE  
HEADER/COLUMN  
CONNECTION DETAIL**  
SCALE: NTS



**6B**  
**SIDE WALL DOUBLE  
HEADER/COLUMN  
CONNECTION DETAIL**  
SCALE: NTS



**6C**  
**SIDE WALL LACED  
HEADER/COLUMN  
CONNECTION DETAIL**  
SCALE: NTS



**7**  
**COLUMN TO WINDOW RAIL  
CONNECTION DETAIL**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: VSM**

**CLIENT: NORTEDGE**

**NORTEDGE STEEL, LLC**  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0" x 16'-0" ENCLOSED STRUCTURE

**DATE: 4-14-22**

**SHT. 12**

**SCALE: NTS**

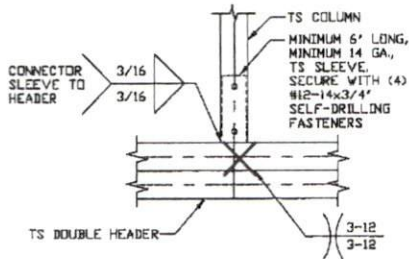
**DWG. NO: SK-3**

**JOB NO: 21204S**

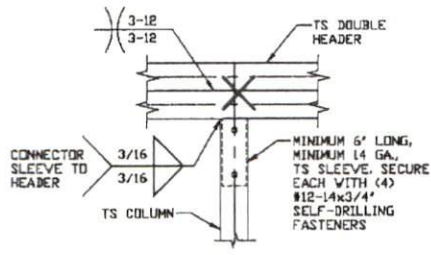
**REV: 0**

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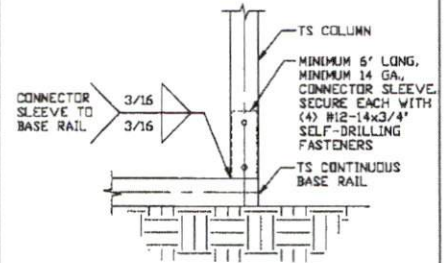
## CONNECTION DETAILS



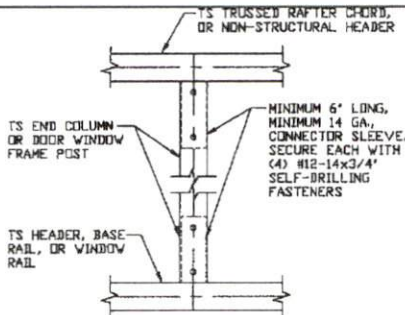
**8 COLUMN/DOUBLE HEADER CONNECTION DETAIL**  
SCALE: NTS



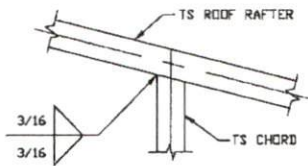
**9 DOUBLE HEADER/COLUMN CONNECTION DETAIL**  
SCALE: NTS



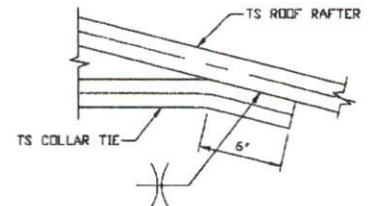
**10 COLUMN/BASE RAIL CONNECTION DETAIL**  
SCALE: NTS



**11 COLUMN TO HEADER OR BASE RAIL CONNECTION DETAIL**  
SCALE: NTS



**12 RAFTER TO CHORD CONNECTION DETAIL**  
SCALE: NTS



**13 COLLAR TIE CONNECTION DETAIL**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: LT

CHECKED BY: PDH

PROJECT MGR: VSM

CLIENT: NORTEDGE

NORTEDGE STEEL, LLC  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0" x 16'-0" ENCLOSED STRUCTURE

DATE: 4-14-22

SHT. 13

SCALE: NTS

DWG. NO SK-3

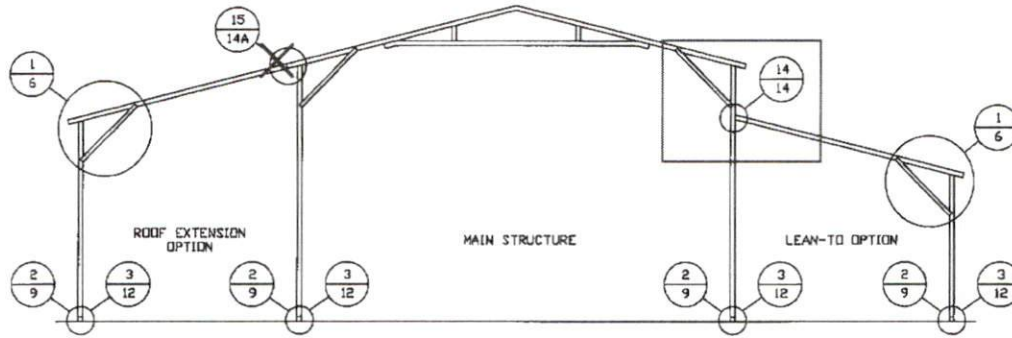
JOB NO: 212045

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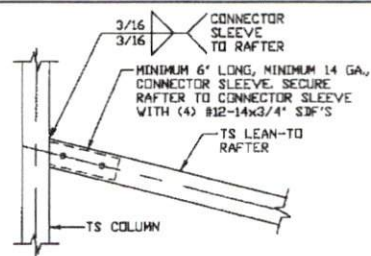
## BOX EAVE RAFTER LEAN-TO OPTIONS



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

SCALE: NTS

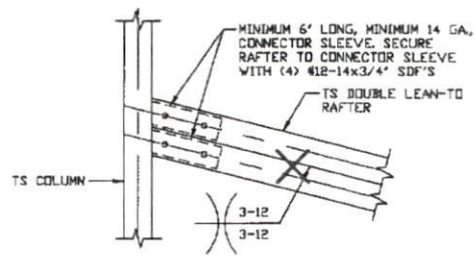
MAXIMUM HEIGHT OF A MAIN STRUCTURE SINGLE COLUMN WITH LEAN-TO OR ROOF EXTENSION IS NOT APPLICABLE FOR 35 PSF < TO ≤ 60 PSF SL)  
 MAXIMUM HEIGHT OF A MAIN STRUCTURE SINGLE COLUMN WITH LEAN-TO OR ROOF EXTENSION IS 12'-0" FOR ≤ 35 PSF SL)  
 REFERENCE RAFTER COLUMN CONNECTION DETAILS FOR APPROPRIATE COLUMN HEIGHT AND TUBING SPECIFICATION.  
 NOTE: LEAN-TO COLUMN SPACING MATCHES MAIN BUILDING COLUMN SPACING.



**LEAN-TO RAFTER TO RAFTER  
 COLUMN CONNECTION DETAIL  
 FOR RAFTER SPANS ≤ 10'-0"  
 WITH 35 PSF < TO ≤ 60 PSF SL  
 AND FOR RAFTER SPANS 12'-0"  
 WITH ≤ 35 PSF SL**

14

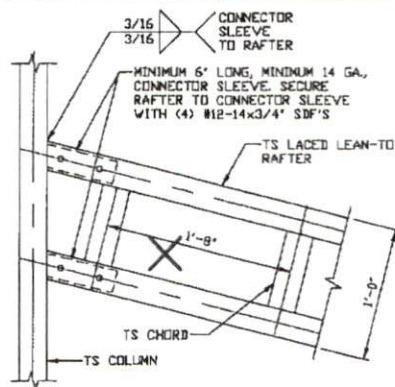
SCALE: NTS



**LEAN-TO RAFTER TO RAFTER COLUMN  
 CONNECTION DETAIL FOR RAFTER  
 SPANS 10'-0" < TO ≤ 16'-0" WITH  
 35 PSF < TO ≤ 60 PSF SL AND FOR  
 RAFTER SPANS 12'-0" < TO ≤ 16'-0"  
 WITH ≤ 35 PSF SL**

14A

SCALE: NTS



**LEAN-TO RAFTER TO RAFTER  
 COLUMN CONNECTION DETAIL FOR  
 RAFTER SPANS 16'-0" < TO ≤ 24'-0"**

14B

SCALE: NTS

**MOORE AND ASSOCIATES  
 ENGINEERING AND CONSULTING, INC.**

DRAWN BY: LT

CHECKED BY: PMH

PROJECT MGR: VSH

CLIENT: NORTEDGE

NORTEDGE STEEL, LLC  
 350 FORUM PARKWAY  
 RURAL HALL, NC 27045  
 30'-0"x16'-0" ENCLOSED STRUCTURE

DATE: 4-14-22

SHT. 14

SCALE: NTS

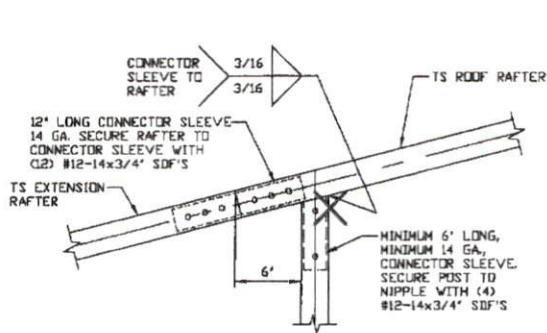
DWG. NO. SK-3

JOB NO. 21204S

REV. 0

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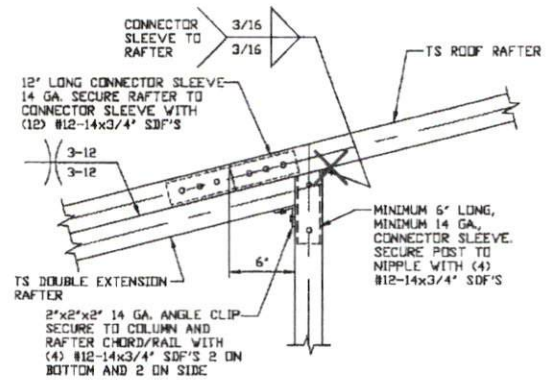
## BOX EAVE RAFTER LEAN-TO OPTIONS



**SIDE EXTENSION RAFTER/  
COLUMN CONNECTION DETAIL  
FOR RAFTER SPANS  $\leq 10'-0''$   
WITH 35 PSF < TO  $\leq 60$  PSF SL  
AND FOR RAFTER SPANS  $12'-0''$   
WITH  $\leq 35$  PSF SL**

**15**

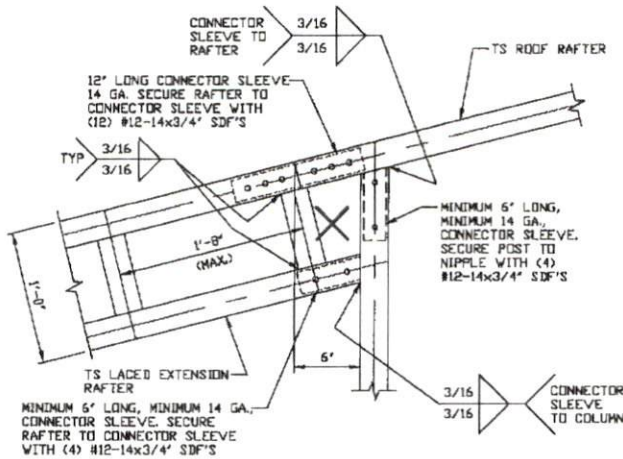
SCALE: NTS



**SIDE EXTENSION RAFTER/COLUMN  
CONNECTION DETAIL FOR RAFTER  
SPANS  $10'-0'' < \text{TO} \leq 16'-0''$  WITH  
35 PSF < TO  $\leq 60$  PSF SL AND FOR  
RAFTER SPANS  $12'-0'' < \text{TO} \leq 16'-0''$   
WITH  $\leq 35$  PSF SL**

**15A**

SCALE: NTS



**SIDE EXTENSION RAFTER/COLUMN  
DETAIL FOR RAFTER  
SPANS  $16'-0'' < \text{TO} \leq 24'-0''$**

**15B**

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: VSM**

**CLIENT: NORTEDGE**

**NORTEDGE STEEL, LLC  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0"x16'-0" ENCLOSED STRUCTURE**

**DATE: 4-14-22**

**SHT. 14A**

**SCALE: NTS**

**BWG. NO SK-3**

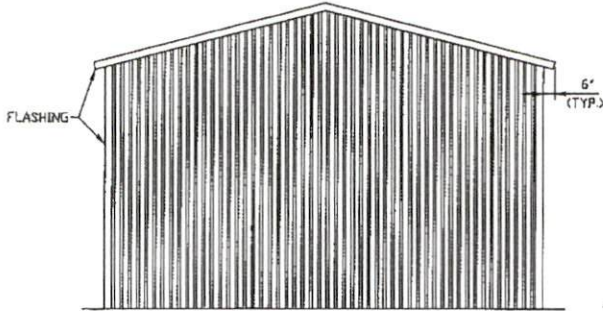
**JOB NO: 21204S**

**REV: 0**

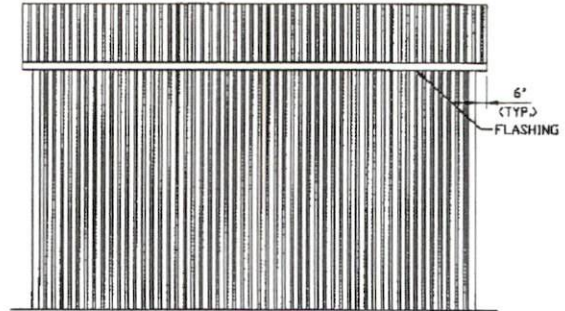
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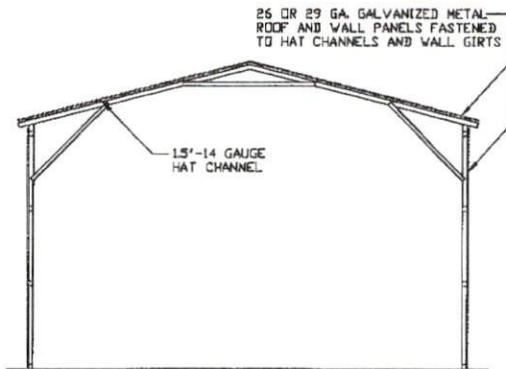
## BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



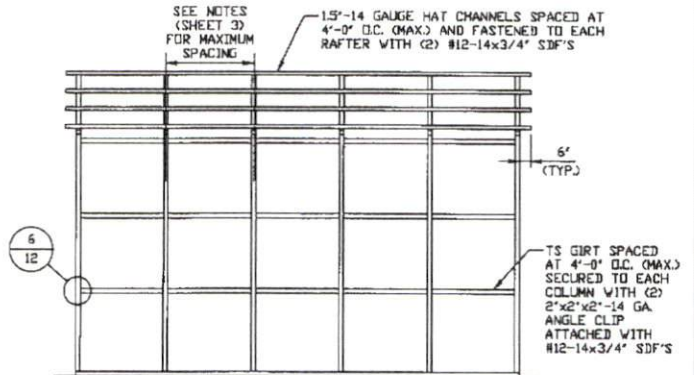
**TYPICAL END ELEVATION  
VERTICAL ROOF/SIDING**  
SCALE: NTS



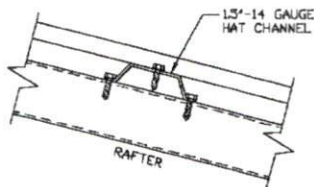
**TYPICAL SIDE ELEVATION  
VERTICAL ROOF/SIDING**  
SCALE: NTS



**TYPICAL SECTION VERTICAL  
ROOF/SIDING OPTION**  
SCALE: NTS



**TYPICAL FRAMING SECTION  
VERTICAL ROOF/SIDING OPTION**  
SCALE: NTS



**ROOF PANEL ATTACHMENT**  
(ALTERNATE FOR VERTICAL ROOF PANELS)  
SCALE: NTS

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DRAWN BY: LT

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: NORTEDGE

NORTEDGE STEEL, LLC  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0"x16'-0" ENCLOSED STRUCTURE

DATE: 4-14-22

SHT. 16

SCALE: NTS

DWG. NO SK-3

JOB NO. 212045

REV: 0

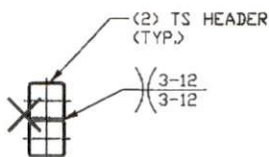
## SIDE WALL HEADER OPTIONS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



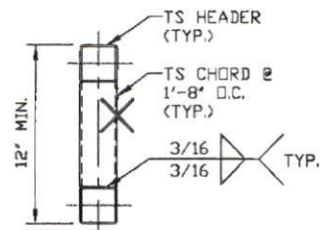
**HEADER DETAIL FOR DOOR  
OPENINGS LENGTHS  $\leq 5'-0"$**

SCALE: NTS



**HEADER DETAIL FOR  
DOOR OPENINGS  
 $5'-0" < \text{LENGTHS} \leq 9'-0"$  WITH  
 $35 \text{ PSF} < \text{TD} \leq 60 \text{ PSF SL}$  AND  
 $5'-0" < \text{LENGTHS} \leq 10'-0"$   
WITH  $\text{SL} \leq 35 \text{ PSF}$**

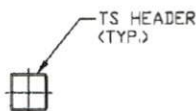
SCALE: NTS



**HEADER DETAIL FOR  
DOOR OPENINGS  
 $9'-0" < \text{LENGTHS} \leq 16'-0"$  WITH  
 $35 \text{ PSF} < \text{TD} < 60 \text{ PSF SL}$  AND  
 $10'-0" < \text{LENGTHS} < 16'-0"$   
WITH  $\leq 35 \text{ PSF SL}$**

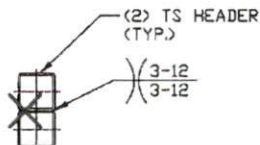
SCALE: NTS

## END WALL HEADER OPTIONS



**HEADER DETAIL FOR DOOR  
OPENINGS LENGTHS  $\leq 14'-0"$**

SCALE: NTS



**HEADER DETAIL FOR  
DOOR OPENINGS  
 $14'-0" < \text{LENGTHS} \leq 16'-0"$**

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: LT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: NORTEDGE**

NORTEDGE STEEL, LLC  
350 FORUM PARKWAY  
RURAL HALL, NC 27045  
30'-0" x 16'-0" ENCLOSED STRUCTURE

**DATE: 4-14-22**

**SHT. 17**

**SCALE: NTS**

**DWG. NO: SK-3**

**JOB NO: 212045**

**REV: 0**

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