

BEST METAL BUILDINGS, LLC.



**STRUCTURAL DESIGN
STANDARD PACKAGE
ENCLOSED BUILDING**

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

7 January 2020
Revision 0
M&A Project No. 19294S

Prepared for:

Best Metal Buildings, LLC
484 NW Turner Avenue
Lake City, Florida 32055

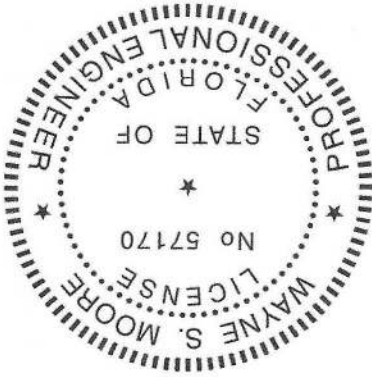
Prepared by:

Moore and Associates Engineering
and Consulting, Inc.

1009 East Avenue
North Augusta, SC 29841
401 South Main Street, Suite 200
Mount Airy, NC 27030



Digitally signed
by Wayne S
Moore
Date: 2020.01.07
12:27:23 -05'00'



This item has been electronically signed and
sealed by Wayne S. Moore, PE,
using a Digital Signature and date.

Printed copies of this document are not
considered signed and sealed and the
signature must be verified on any electronic
copies.

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

CLIENT: BMB

PROJECT MGR: VSM

CHECKED BY: PDH

DRAWN BY: JG

SHT. 1

DATE: 1-7-20

SCALE: NTS

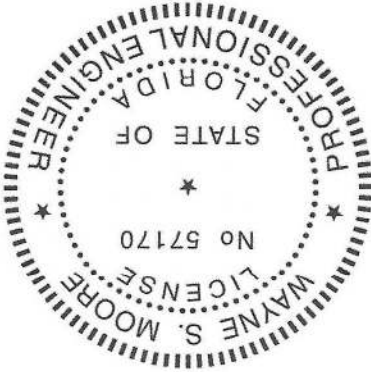
JOB NO: 19294S

DWG. NO: SK-3

REV: 0

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30-0"x20-0" SP ENCLOSED STRUCTURE

This item has been electronically signed and sealed by Wayne S. Moore, PE.
using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



DRAWING INDEX

SHEET 1	PE SEAL COVER SHEET
SHEET 2	DRAWING INDEX
SHEET 3	INSTALLATION NOTES AND SPECIFICATIONS
SHEET 4	TYPICAL SIDE AND END ELEVATIONS
SHEET 5	TYPICAL RAFTER/COLUMN END FRAMING SECTION (BOX EAVE RAFTER)
SHEET 5A	TYPICAL RAFTER/COLUMN END AND SIDE FRAMING SECTION (BOX EAVE RAFTER)
SHEET 6	COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)
SHEET 6A	COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)
SHEET 7	TYPICAL RAFTER/COLUMN END FRAMING SECTION (BOW RAFTER)
SHEET 7A	TYPICAL RAFTER/COLUMN END AND SIDE FRAMING SECTION (BOW RAFTER)
SHEET 8	COLUMN CONNECTION DETAILS (BOW RAFTER STRUCTURE)
SHEET 8A	COLUMN CONNECTION DETAILS (BOW RAFTER STRUCTURE)
SHEET 9	BASE RAIL ANCHORAGE OPTIONS
SHEET 10	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOX EAVE)
SHEET 11	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOW RAFTER)
SHEET 12	CONNECTION DETAILS
SHEET 13	CONNECTION DETAILS
SHEET 14	CONNECTION DETAILS
SHEET 15	CONNECTION DETAILS
SHEET 16	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 16A	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 17	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 18	VERTICAL ROOF/SIDING OPTION END AND SIDE ELEVATION AND SECTION
SHEET 19	HEADER OPTIONS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSH

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SCALE: NTS

JOB NO: 19294S

SHT. 2

DWG. NO: SK-3

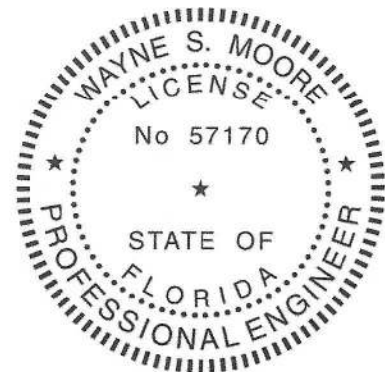
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR 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, 2015 IBC, AND 2012 IBC.
3. DESIGN LOADS ARE AS FOLLOWS:
 - A) DEAD LOAD = 15 PSF
 - B) LIVE LOAD = 12 PSF
 - C) GROUND SNOW LOAD = 10 PSF (UNBALANCED SNOW LOAD DUE TO DRIFTING HAS NOT BEEN EVALUATED).
4. LOW ULTIMATE WIND SPEED (LW) 105 TO 140 MPH (NOMINAL WIND SPEED 81 TO 108 MPH) MAXIMUM RAFTER/POST AND END COLUMN SPACING = 5.0 FEET.
5. HIGH ULTIMATE WIND SPEED (HW) 141 TO 170 MPH (NOMINAL WIND SPEED 109 TO 132 MPH) MAXIMUM RAFTER/POST AND END COLUMN SPACING = 4.0 FEET.
6. END WALL COLUMNS (POST) ARE EQUIVALENT IN SIZE AND SPACING TO SIDE WALL POSTS (UNLESS NOTED OTHERWISE).
7. RISK CATEGORY I.
8. WIND EXPOSURE CATEGORY B.
9. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2"x2 1/2"-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE). WHERE TS 2 1/2" x 2 1/2" - 14 GAUGE IS SPECIFIED, TS 2 1/4" x 2 1/4" - 12 GAUGE MAY BE USED AS AN OPTION.
10. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR HAT CHANNELS, AND COLUMNS (INTERIOR OR END) = 10" O.C. (MAX.) FOR LOW WIND AND 6" O.C. (MAX.) FOR HIGH WIND.
11. 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. ROOFING WITH SLOPES LESS THAN 3:12 MUST BE LAP SEALANT.
12. GROUND ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
13. STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT x 36" LONG AND ARE APPLICABLE ONLY IN MEDIUM TO STIFF SOILS (SUITABLE SOILS). HELIX ANCHORS, SEE DETAIL 2B, MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. STANDARD GROUND ANCHORS ARE ONLY ALLOWED FOR LOW WIND APPLICATIONS.
14. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:

SOIL SITE CLASS = D
 RISK CATEGORY I
 $R = 3.25$ $I_E = 1.0$
 $S_{DS} = 2.039$ $V = C_s W$
 $S_{D1} = 1.258$



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BNB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055**

30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SCALE: NTS

JDB NO: 19294S

SHT. 3

DWG. NO: SK-3

REV: 0

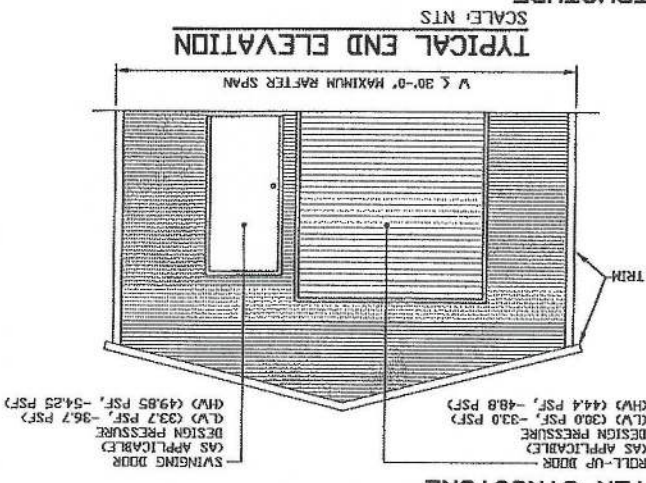
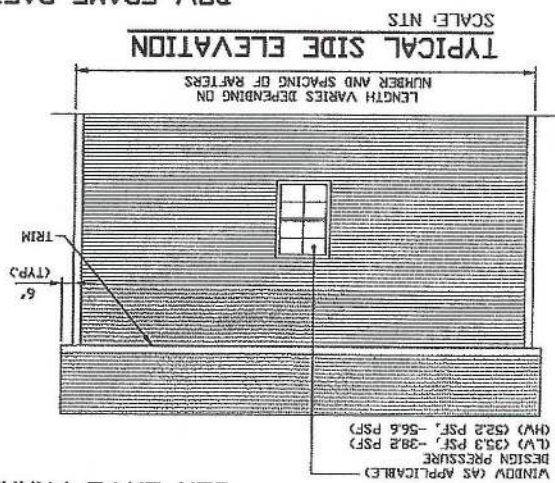
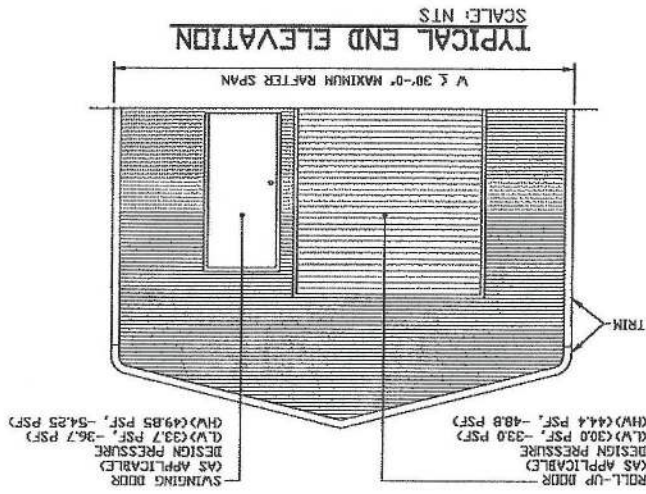
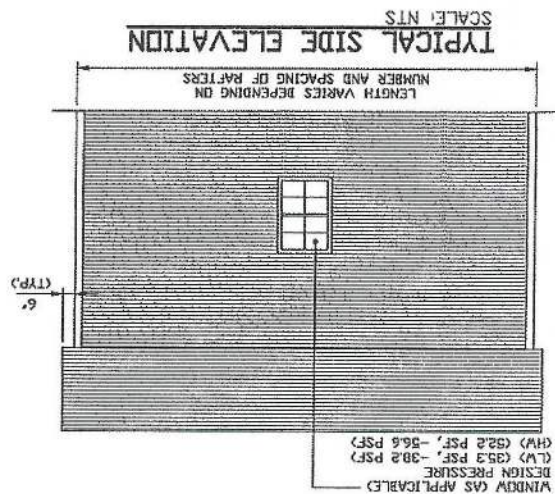
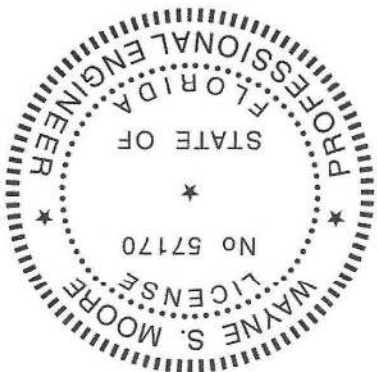
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR OTHERWISE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

CLIENT: BMB	SHT. 4	DWG. NO. SK-3	REV. 0
PROJECT MGR: VSM	DATE: 1-7-20	SCALE: NTS	JOB NO. 19294S
CHECKED BY: PDH	30'-0" x 20'-0" SP ENCLOSED STRUCTURE LAKE CITY, FLORIDA 32055 484 NW TURNER AVENUE BEST METAL BUILDINGS, LLC		
DRAWN BY: JG			

This item has been electronically signed and sealed by Wayne S. Moore, P.E.
using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



BOX EAVE RAFTER STRUCTURE

BOX FRAME RAFTER STRUCTURE

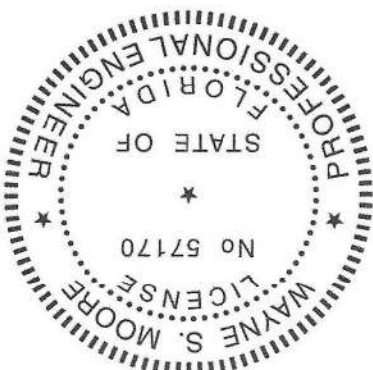
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

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

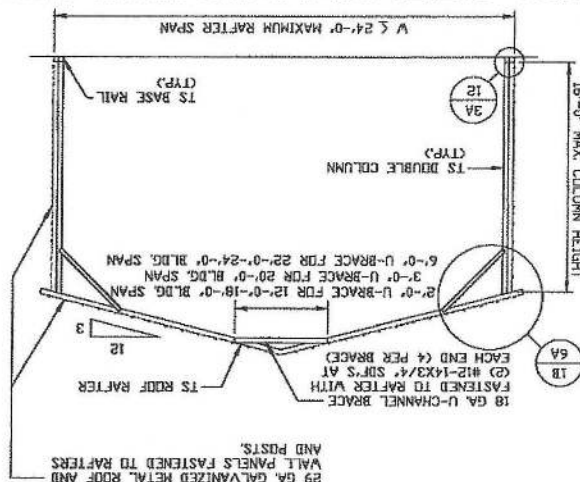
CLIENT: BMD	SHT. 5	DWG. NO. SK-3	REV. 0
PROJECT MGR: VSN	DATE: 1-7-20	SCALE: NTS	JOB NO. 19294S
CHECKED BY: PMH	30'-0" x 20'-0" SP ENCLOSED STRUCTURE		
DRAWN BY: JG	BEST METAL BUILDINGS, LLC 484 NW TURNER AVENUE LAKE CITY, FLORIDA 32055		

This item has been electronically signed and sealed by Wayne S. Moore, P.E.
using a Digital Signature and date.

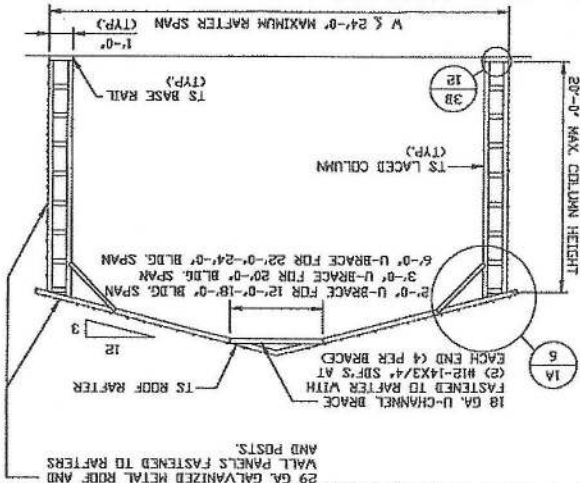
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



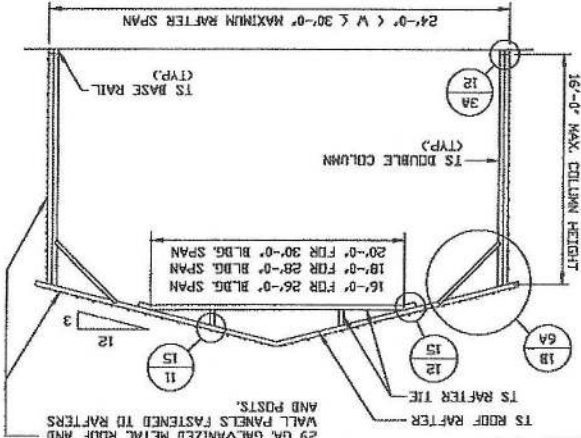
SCALE: NTS
TYPICAL RAFTER/COLUMN END FRAME SECTION



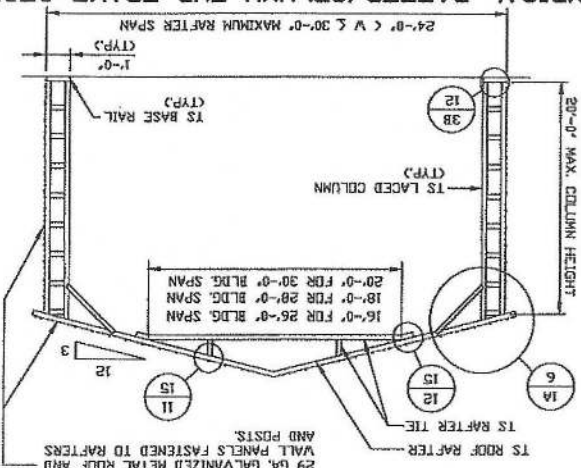
SCALE: NTS
TYPICAL RAFTER/COLUMN END FRAME SECTION

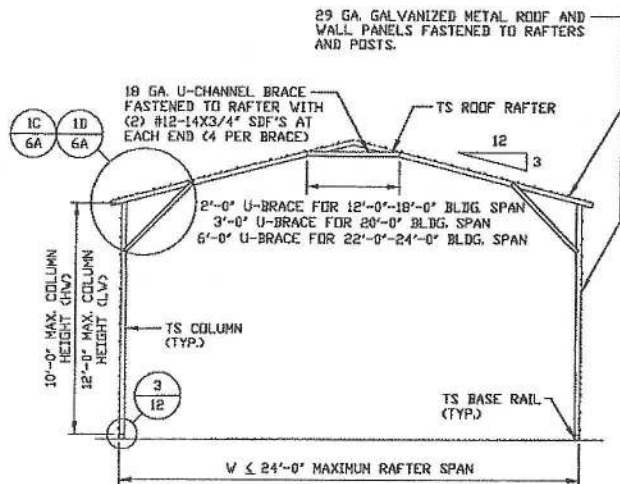


SCALE: NTS
TYPICAL RAFTER/COLUMN END FRAME SECTION

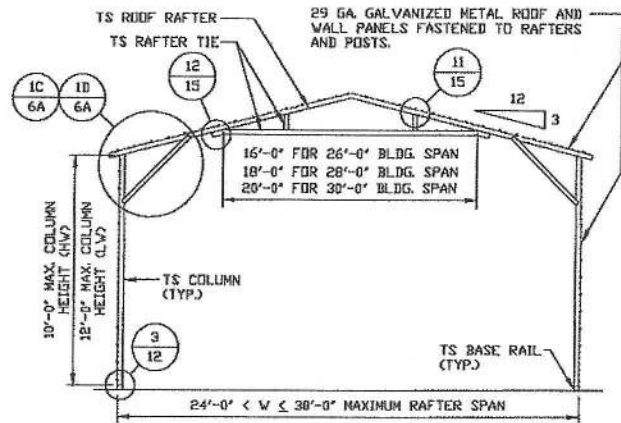


SCALE: NTS
TYPICAL RAFTER/COLUMN END FRAME SECTION

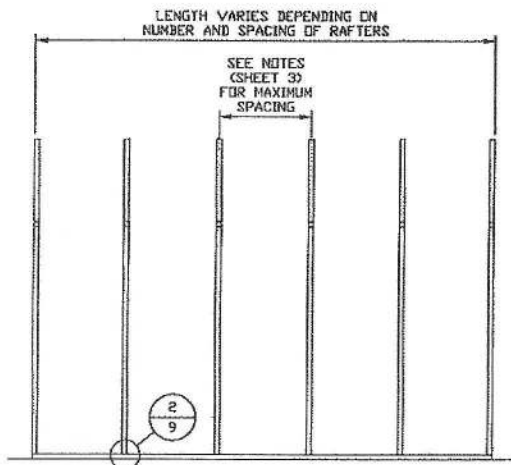




TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION
SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SHT. 5A

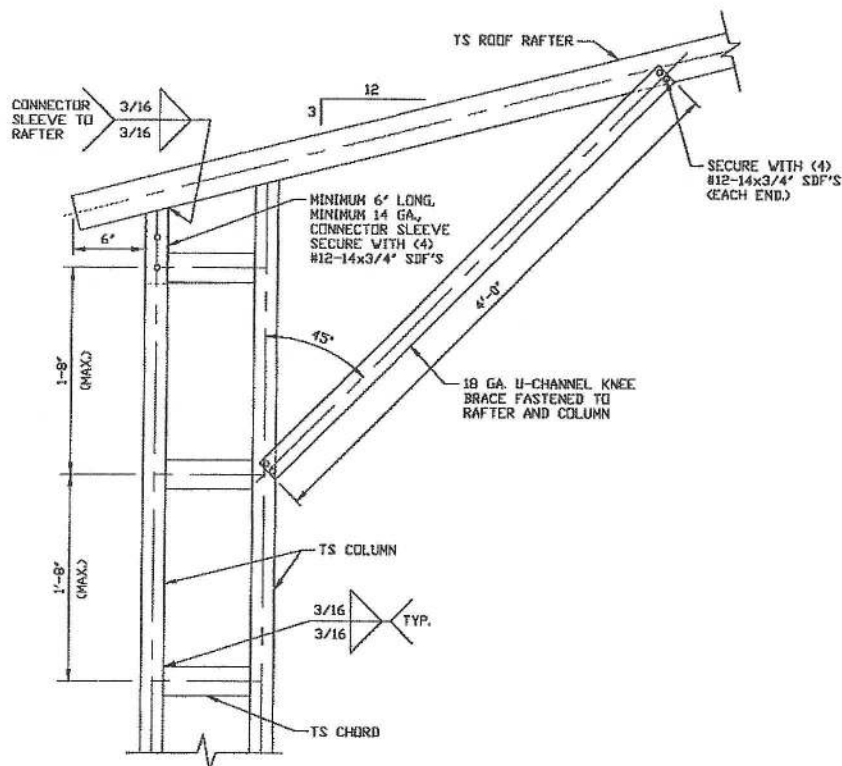
SCALE: NTS

DWG. NO: SK-3

JOB NO: 19294S

REV: 0

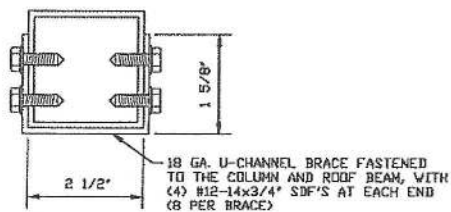
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**BOX EAVE RAFTER COLUMN CONNECTION
DETAIL FOR HEIGHTS 16'-0" < TO ≤ 20'-0"**

1A

SCALE: NTS



BRACE SECTION

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055**

30-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 6

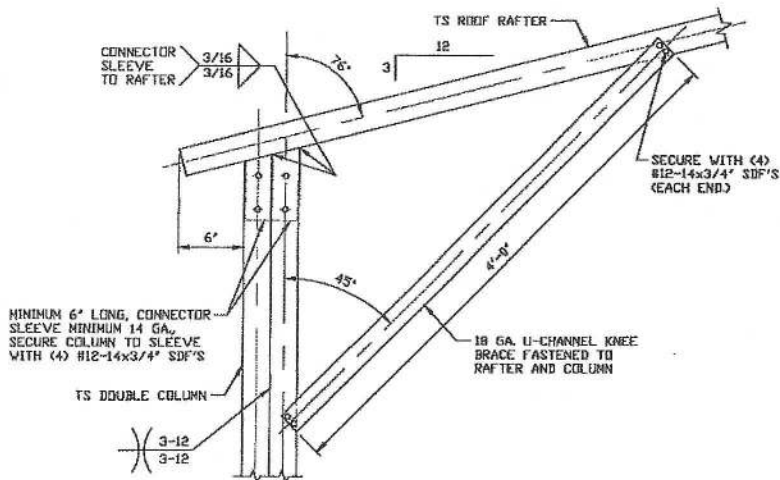
SCALE: NTS

DWG. NO: SK-3

JOB NO: 19294S

REV: 0

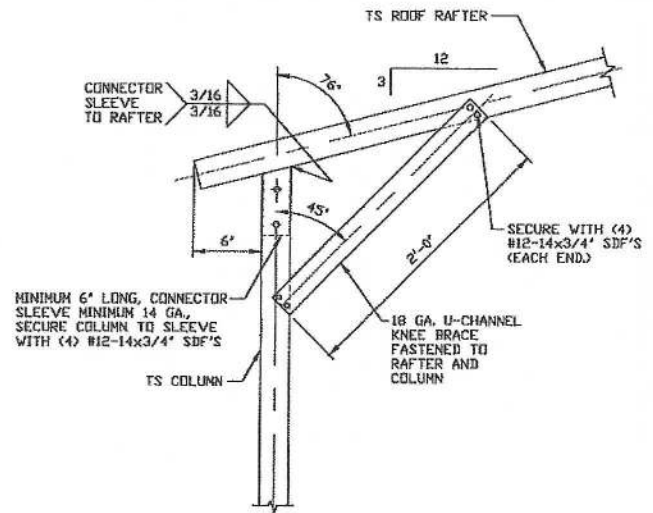
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**BOX EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS 10'-0" < TO ≤ 16'-0" (HW)
AND HEIGHTS 12'-0" < TO ≤ 16'-0" (LW)**

1B

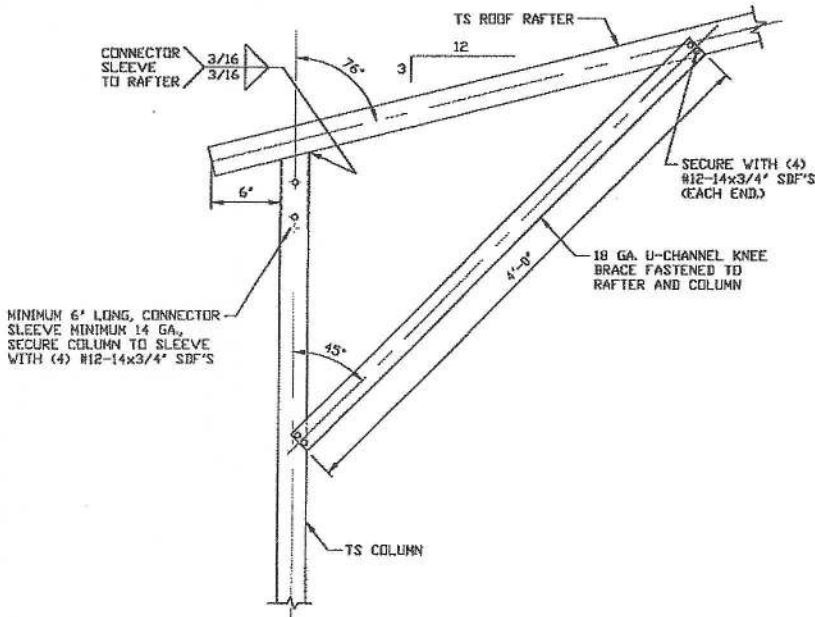
SCALE: NTS



**BOX EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS ≤ 8'-0" (HW),
AND HEIGHTS ≤ 10'-0" (LW)**

1D

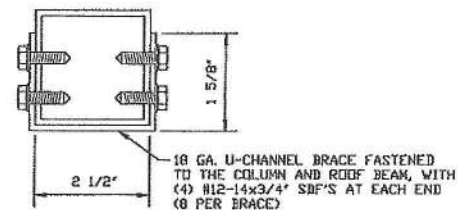
SCALE: NTS



**BOX EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS 8'-0" < TO ≤ 10'-0" (HW)
AND HEIGHTS 10'-0" < TO ≤ 12'-0" (LW)**

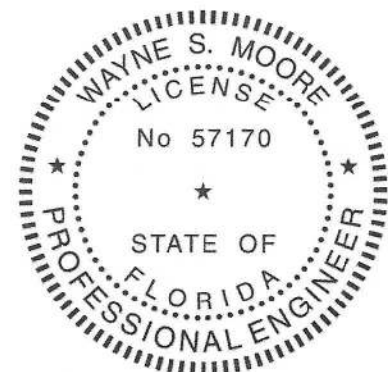
1C

SCALE: NTS



BRACE SECTION

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSH

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SCALE: NTS

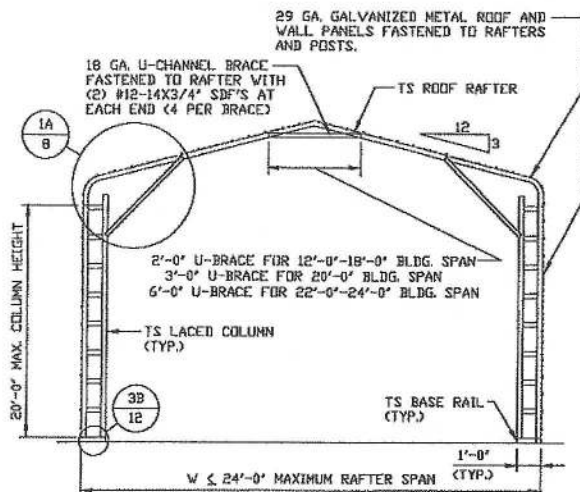
JOB NO: 19294S

SHT. 6A

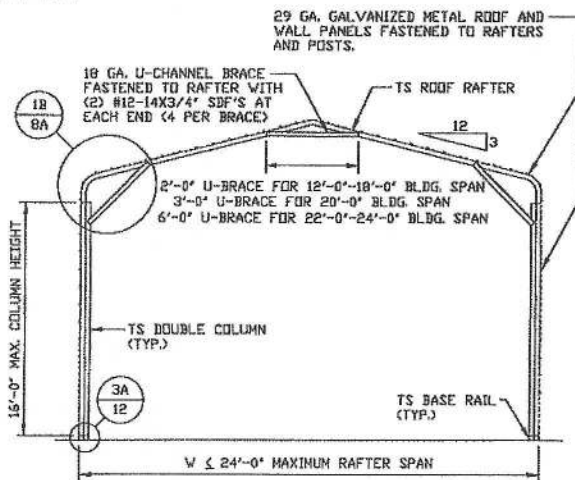
DWG. NO: SK-3

REV: 0

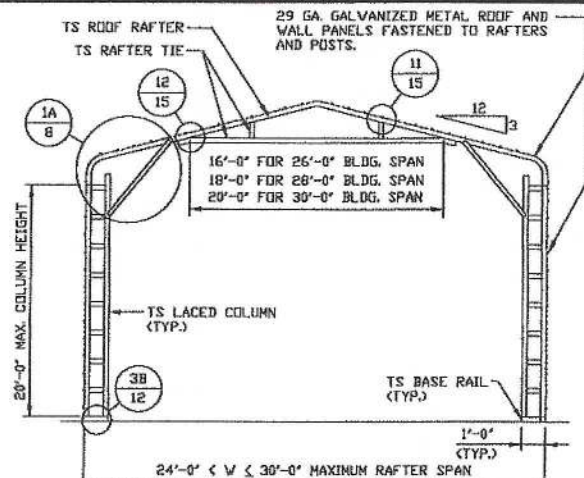
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



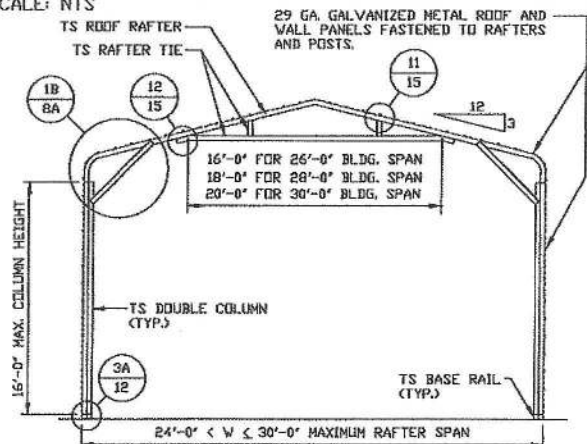
TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



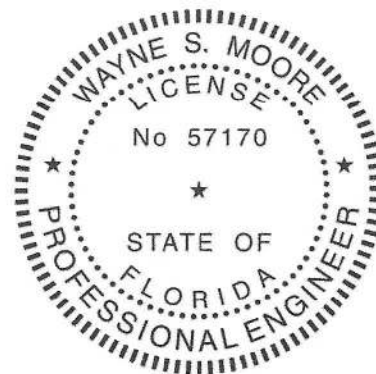
TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE.
using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055**

30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SCALE: NTS

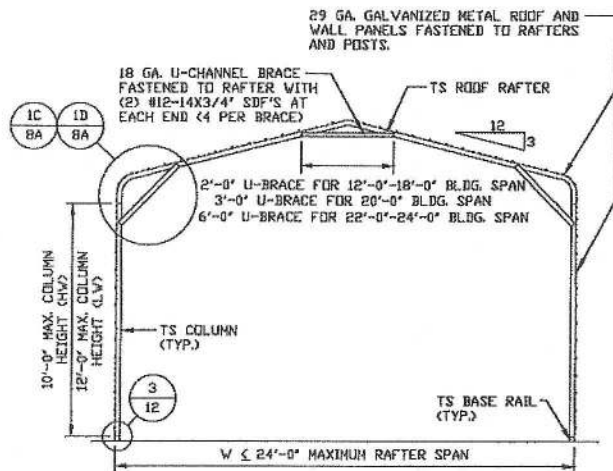
JDB NO: 19294S

SHT. 7

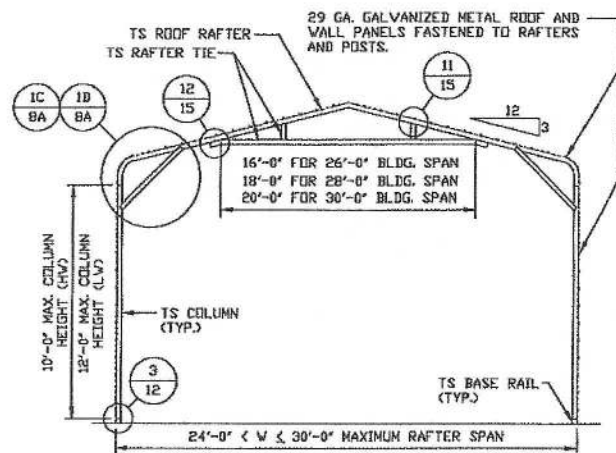
DWG. NO: SK-3

REV: 0

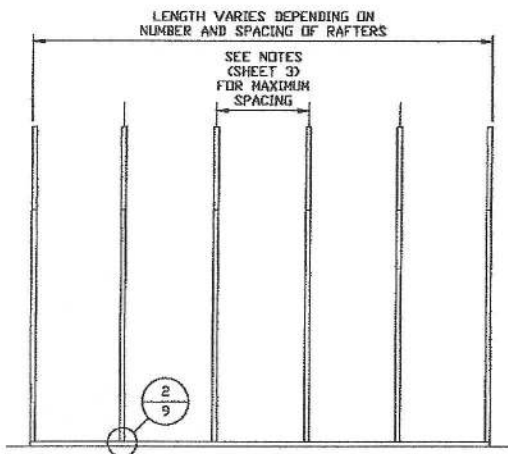
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN END FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN FRAMING SIDE SECTION
SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30-0"x20-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 7A

SCALE: NTS

DWG. NO: SK-3

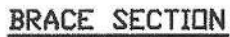
JOB NO: 19294S

REV: 0

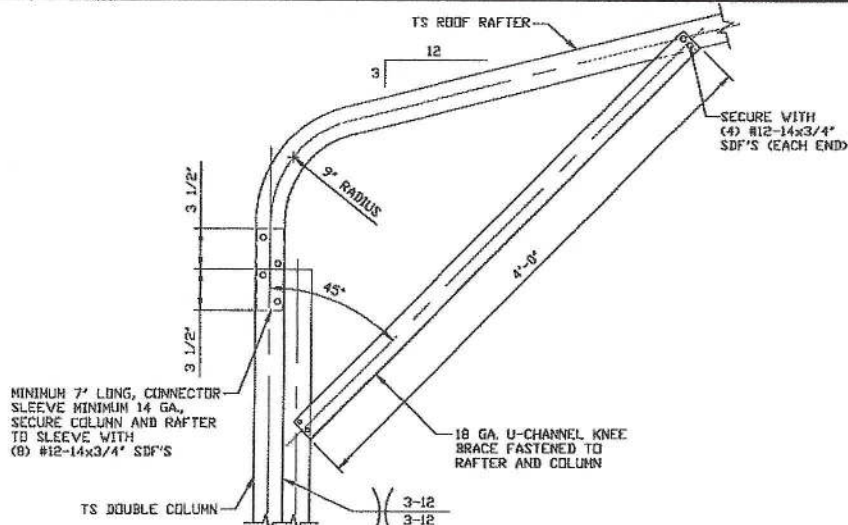
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



SCALE: NTS



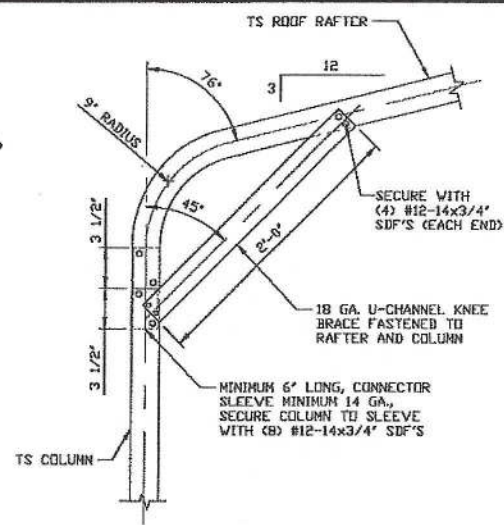
REV: 0



**BOW EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS 10'-0" < TO ≤ 16'-0" (HW)
AND HEIGHTS 12'-0" < TO ≤ 16'-0" (LW)**

1B

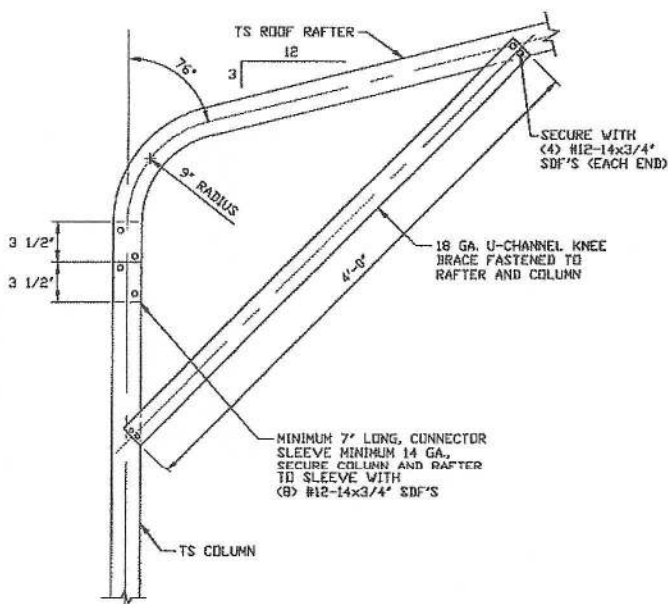
SCALE: NTS



**BOW EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS ≤ 8'-0" (HW)
AND HEIGHTS < 10'-0" (LW)**

1D

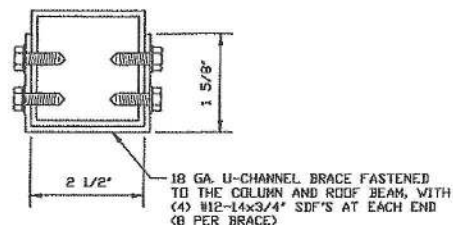
SCALE: NTS



**BOW EAVE RAFTER COLUMN
CONNECTION DETAIL FOR
HEIGHTS 8'-0" < TO ≤ 10'-0" (HW)
AND HEIGHTS 10'-0" < TO ≤ 12'-0" (LW)**

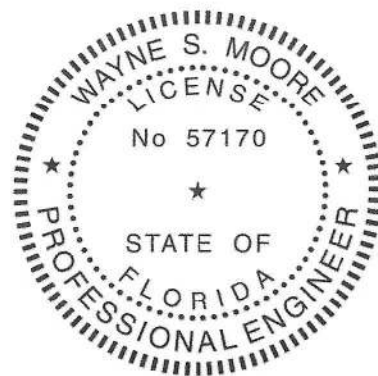
1C

SCALE: NTS



BRACE SECTION

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSH

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055**

30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 8A

SCALE: NTS

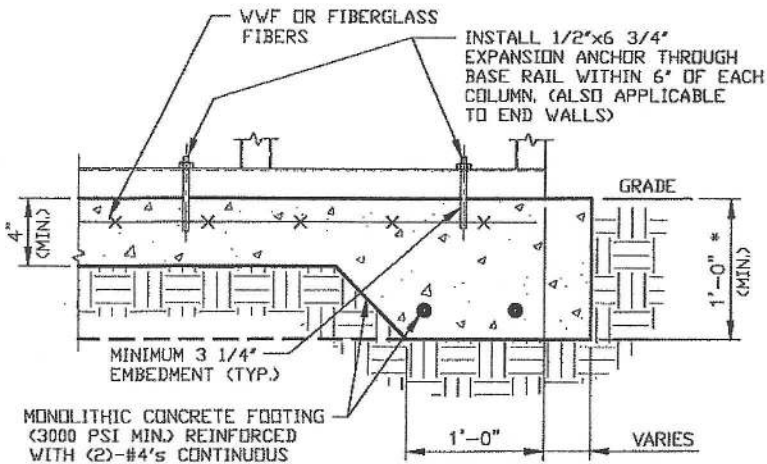
DWG. NO: SK-3

JOB NO: 19294S

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

BASE RAIL ANCHORAGE OPTIONS



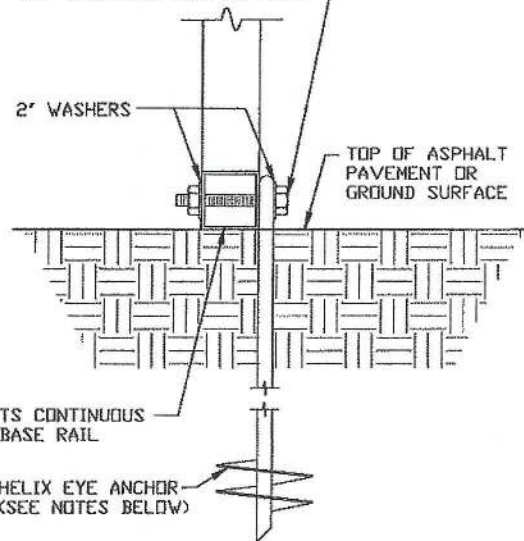
2A

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.

DRILL 5/8" DIAMETER HOLE
THROUGH THE BASE RAIL AND
SECURE TO ANCHOR EYE WITH
1/2" DIAMETER THROUGH BOLT



2B

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.



This item has been electronically signed and
sealed by Wayne S. Moore, PE.
using a Digital Signature and date.

Printed copies of this document are not
considered signed and sealed and the
signature must be verified on any electronic
copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0" x 20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SHT. 9

SCALE: NTS

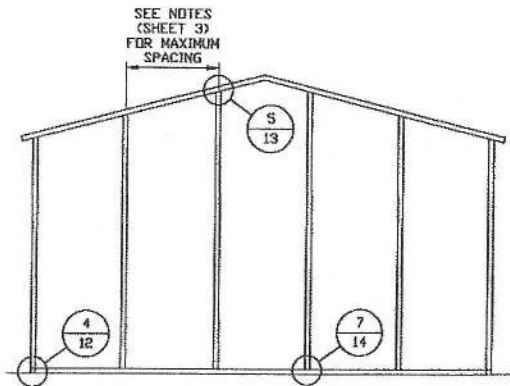
DWG. NO: SK-3

JOB NO: 19294S

REV: 0

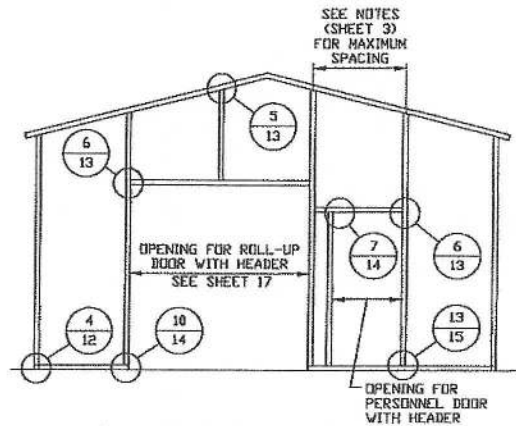
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND
CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY
BE SUBJECT TO LEGAL ACTION.

BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS



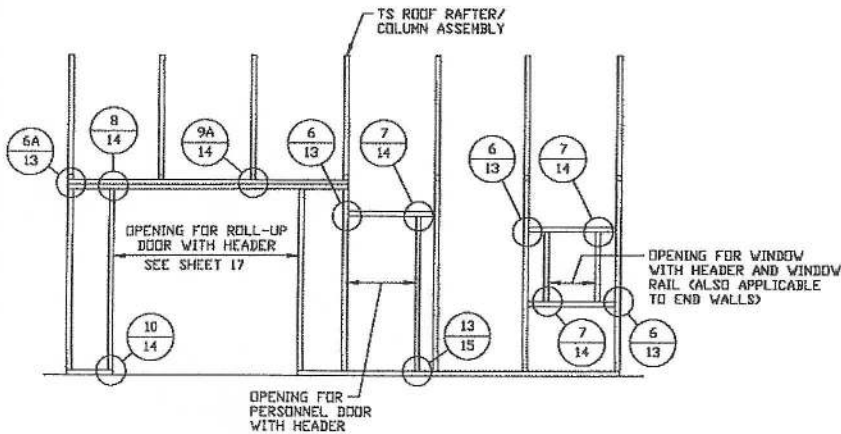
**TYPICAL BOX EAVE RAFTER
END WALL FRAMING SECTION**

SCALE: NTS



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

SCALE: NTS



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

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0" x 20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SCALE: NTS

JOB NO: 19294S

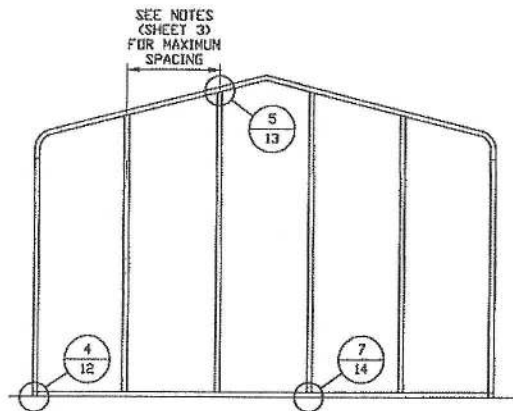
SHT. 10

DWG. NO: SK-3

REV: 0

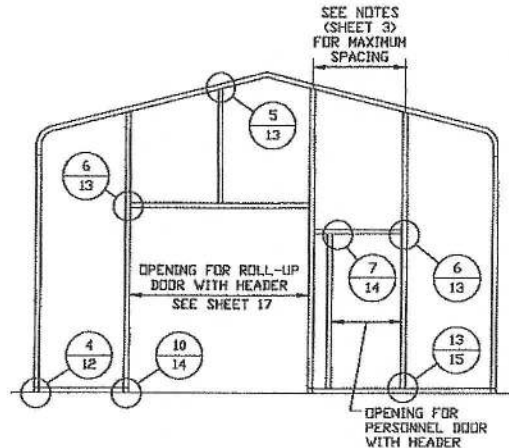
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

BOW RAFTER END WALL AND SIDE WALL OPENINGS



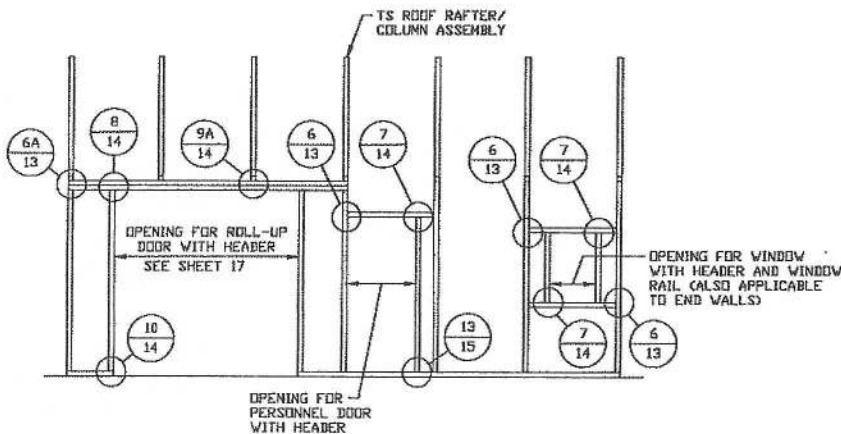
**TYPICAL BOW RAFTER
END WALL FRAMING SECTION**

SCALE: NTS



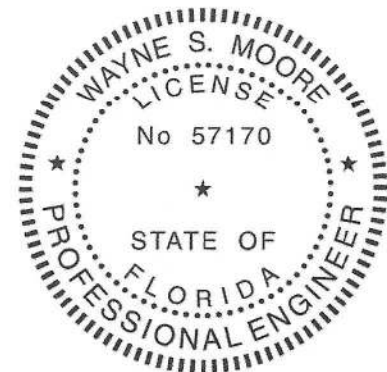
**TYPICAL BOW RAFTER END
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



**TYPICAL BOW RAFTER SIDE
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SHT. 11

SCALE: NTS

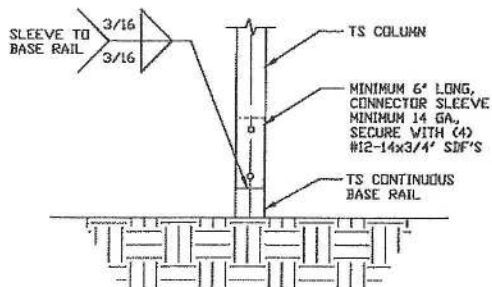
DWG. NO: SK-3

JOB NO: 19294S

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

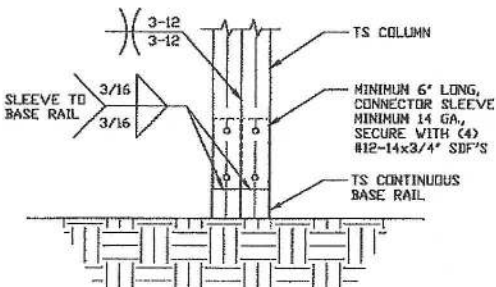
CONNECTION DETAILS



3

RAFTER COLUMN/BASE RAIL CONNECTION DETAIL

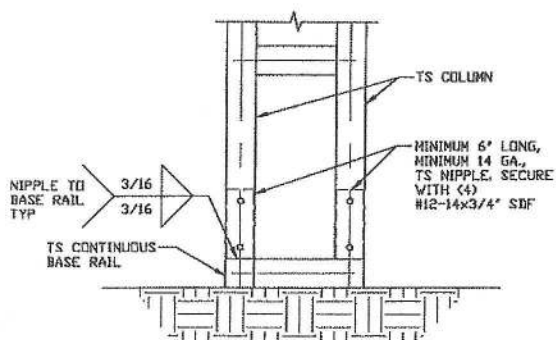
SCALE: NTS



3A

RAFTER COLUMN/BASE RAIL CONNECTION DETAIL

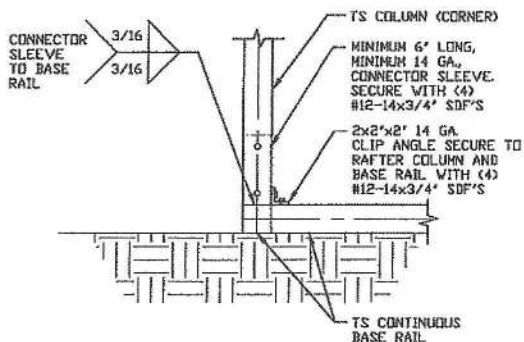
SCALE: NTS



3B

END COLUMN/BASE RAIL CONNECTION DETAIL

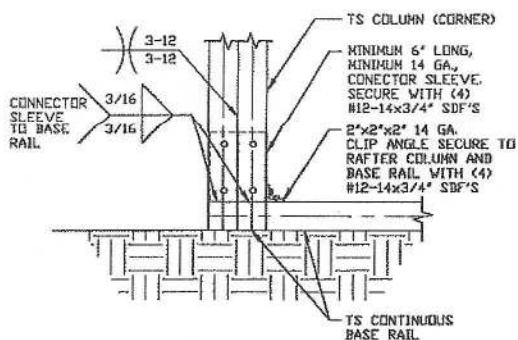
SCALE: NTS



4

END COLUMN/BASE RAIL CONNECTION DETAIL

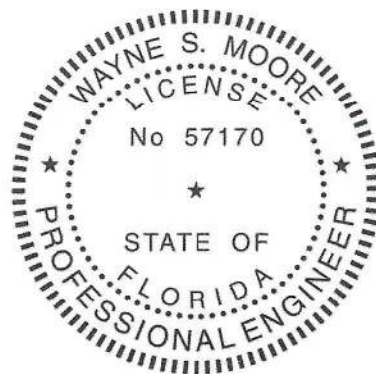
SCALE: NTS



4A

END COLUMN/BASE RAIL CONNECTION DETAIL

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 12

SCALE: NTS

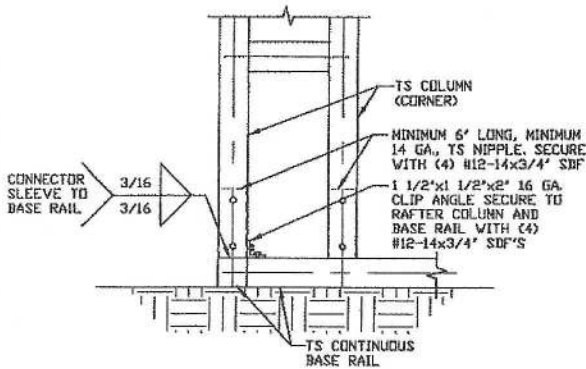
DWG. NO: SK-3

JOB NO: 19294S

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

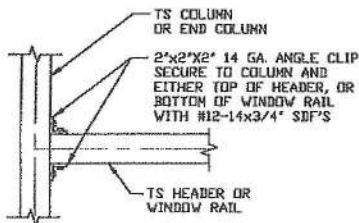
CONNECTION DETAILS



4B

END COLUMN/BASE RAIL CONNECTION DETAIL

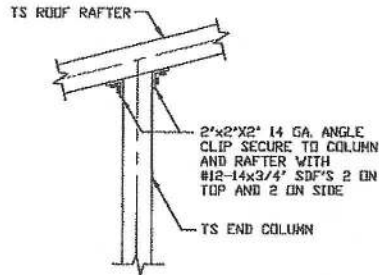
SCALE: NTS



6

COLUMN OR WINDOW RAIL/GIRT TO POST CONNECTION DETAIL

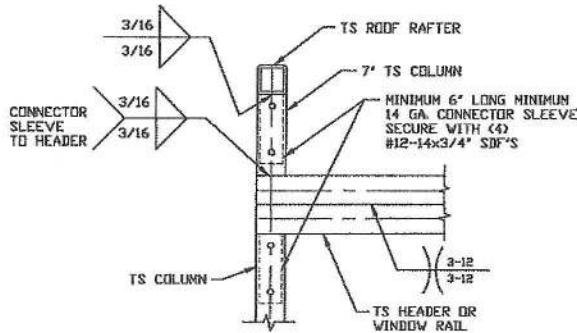
SCALE: NTS



5

END COLUMN/RAFTER CONNECTION DETAIL

SCALE: NTS



6A

COLUMN OR WINDOW RAIL TO POST CONNECTION DETAIL

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC

484 NW TURNER AVENUE

LAKE CITY, FLORIDA 32055

30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 13

SCALE: NTS

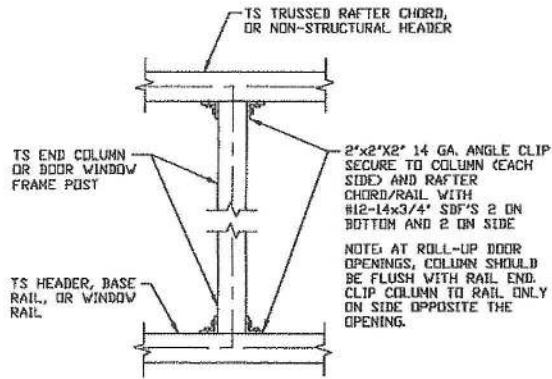
DWG. NO: SK-3

JOB NO: 19294S

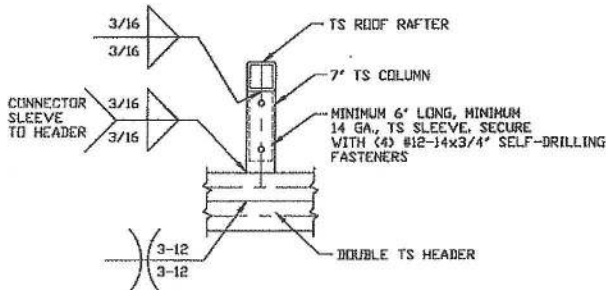
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

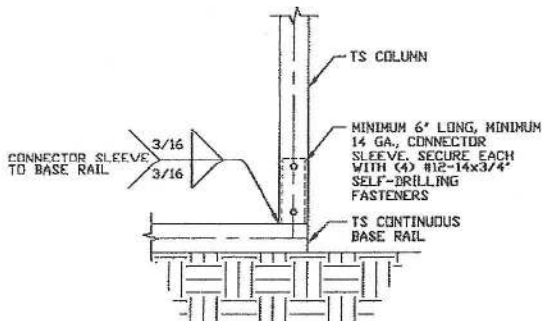
CONNECTION DETAILS



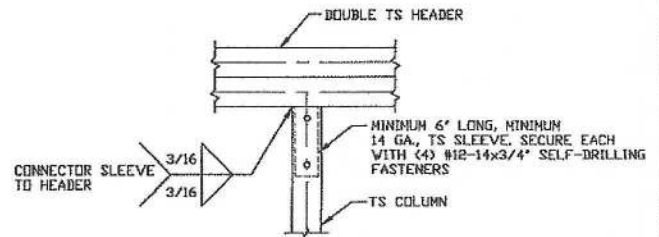
7 COLUMN TO WINDOW RAIL
CONNECTION DETAIL
SCALE: NTS



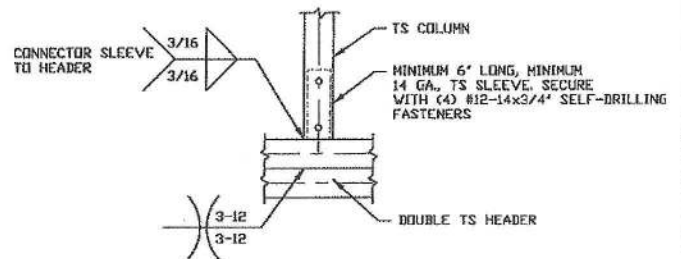
9A COLUMN/DOUBLE HEADER
CONNECTION DETAIL
SCALE: NTS



10 COLUMN/BASE RAIL
CONNECTION DETAIL
SCALE: NTS



8 DOUBLE HEADER/COLUMN
CONNECTION DETAIL
SCALE: NTS



9B COLUMN/DOUBLE HEADER
CONNECTION DETAIL
SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 14

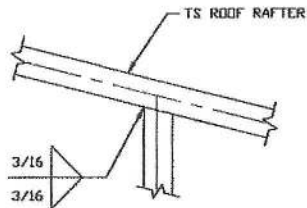
SCALE: NTS

DWG. NO: SK-3

JOB NO: 19294S

REV: 0

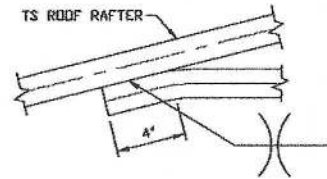
CONNECTION DETAILS



11

RAFTER TO CHORD CONNECTION DETAIL

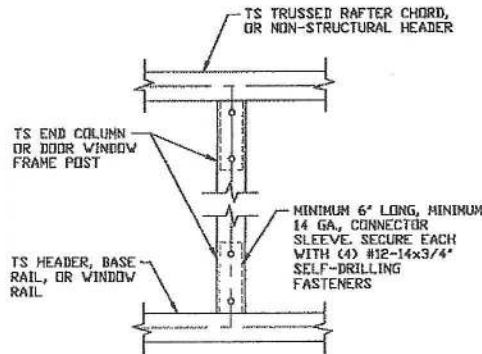
SCALE: NTS



12

COLLAR TIE CONNECTION DETAIL

SCALE: NTS



13

COLUMN TO HEADER OR BASE RAIL CONNECTION DETAIL

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 15

SCALE: NTS

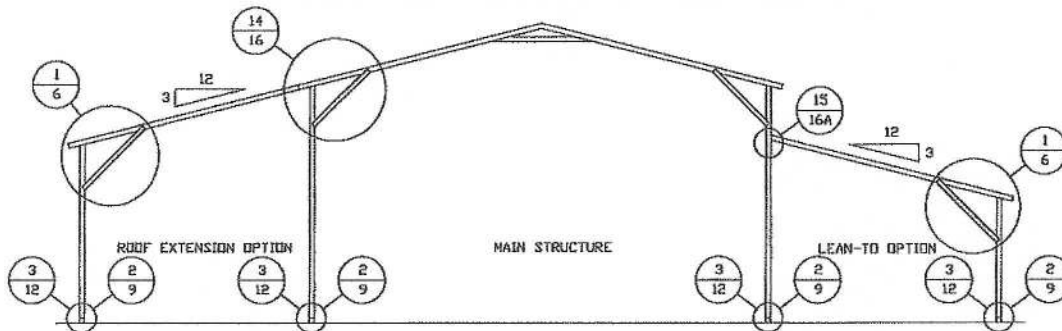
DWG. NO: SK-3

JOB NO: 19294S

REV: 0

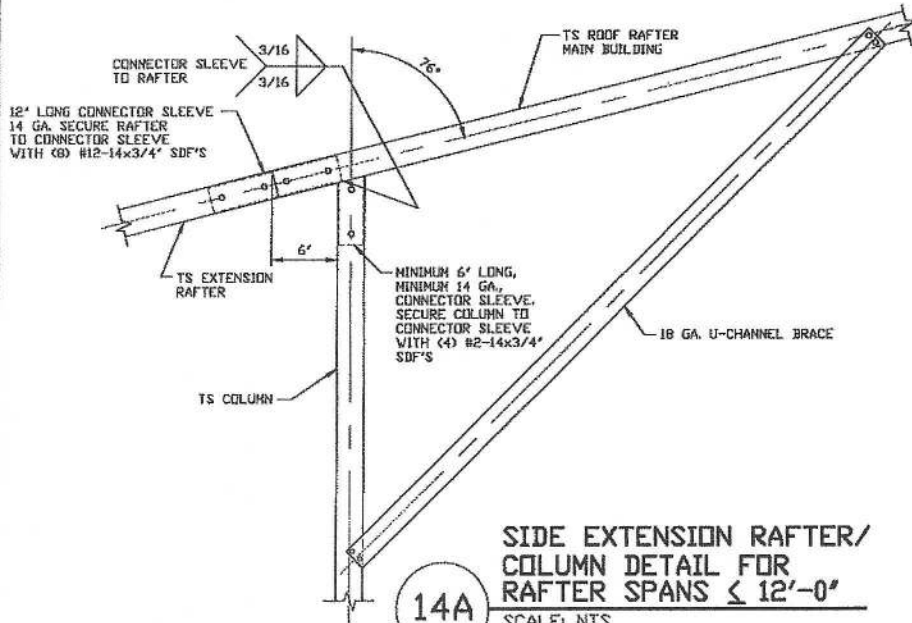
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

BOX EAVE RAFTER LEAN-TO OPTIONS



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

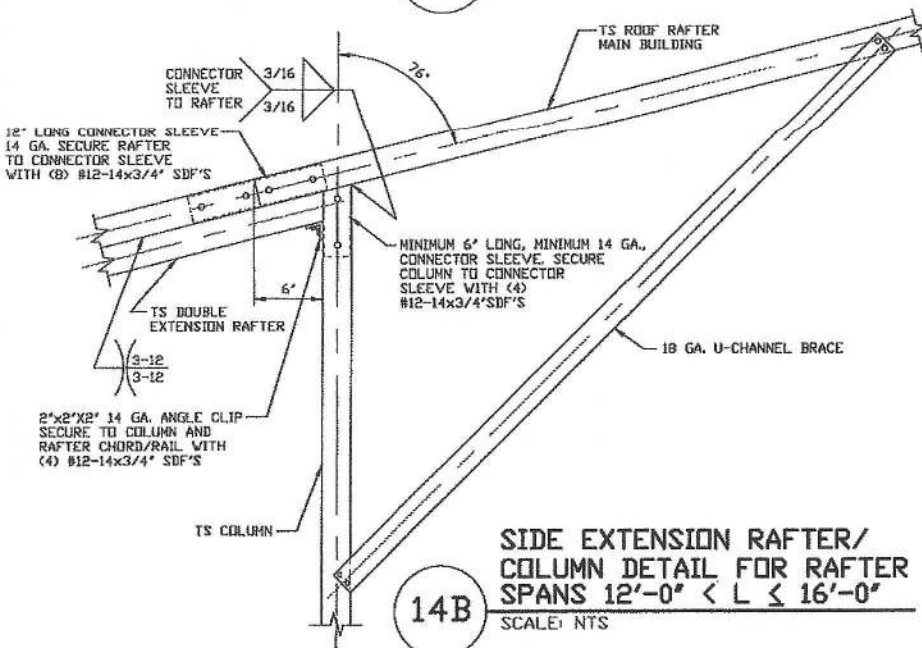
SCALE: NTS



**SIDE EXTENSION RAFTER/
COLUMN DETAIL FOR
RAFTER SPANS ≤ 12'-0"**

14A

SCALE: NTS



**SIDE EXTENSION RAFTER/
COLUMN DETAIL FOR RAFTER
SPANS 12'-0" < L ≤ 16'-0"**

14B

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SHT. 16

SCALE: NTS

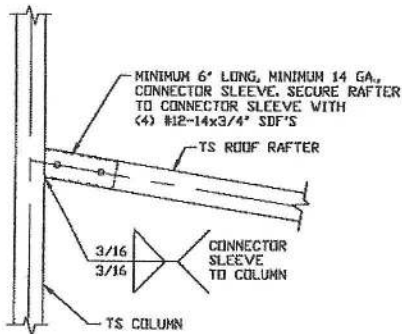
DWG. NO: SK-3

JOB NO: 19294S

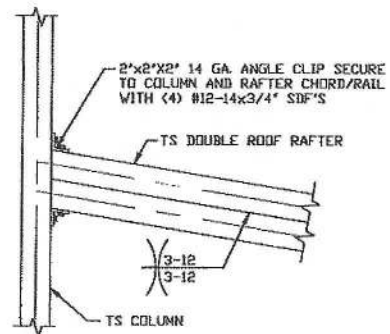
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

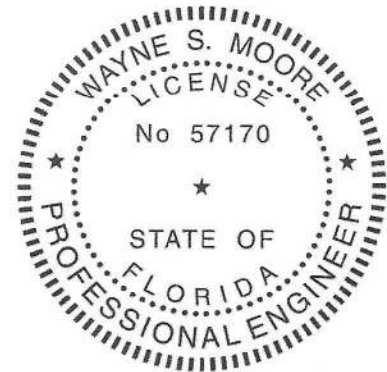
BOX EAVE RAFTER LEAN-TO OPTIONS



15A LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS $\leq 12'-0"$
SCALE: NTS



15B LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS $12'-0" < TO \leq 16'-0"$
SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0"x20'-0" SP ENCLOSED STRUCTURE**

DATE: 1-7-20

SCALE: NTS

JOB NO: 19294S

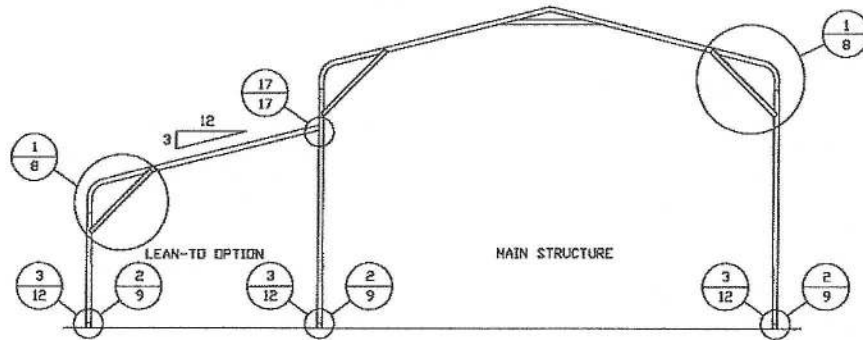
SHT. 16A

DWG. NO: SK-3

REV: 0

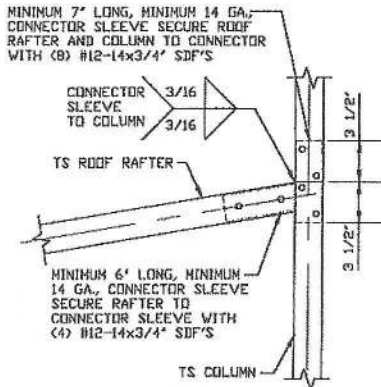
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

BOW EAVE RAFTER LEAN-TO OPTION



TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING SECTION

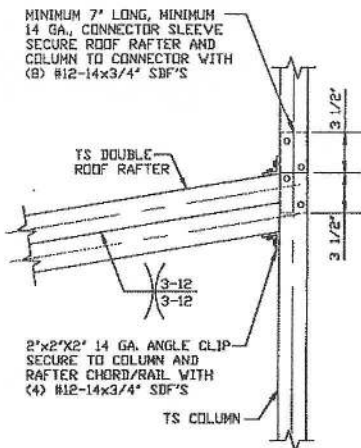
SCALE: NTS



**LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS < 12'-0"**

17A

SCALE: NTS



**LEAN-TO RAFTER TO
RAFTER COLUMN CONNECTION
DETAIL FOR RAFTER
SPANS 12'-0" < TO < 16'-0"**

17B

SCALE: NTS



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDM

PROJECT MGR: WSM

CLIENT: BMB

**BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055**

30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SHT. 17

SCALE: NTS

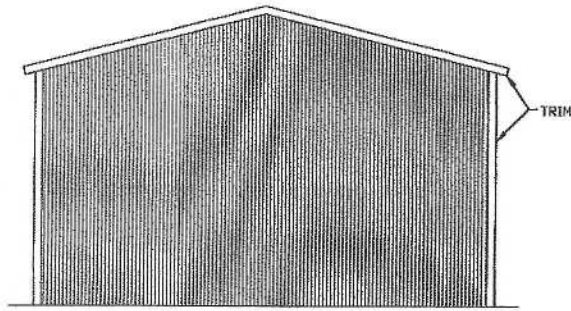
DWG. NO: SK-3

JOB NO: 19294S

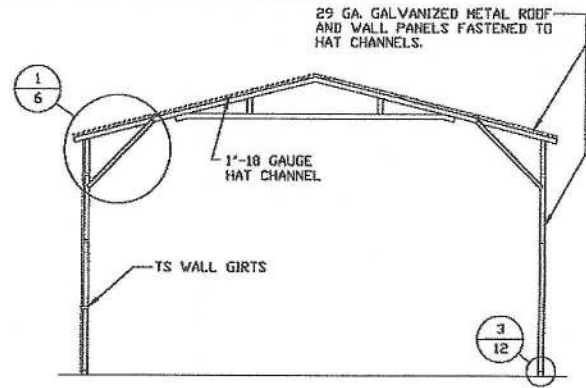
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

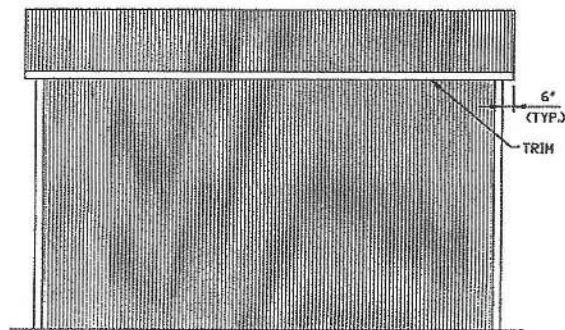
BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



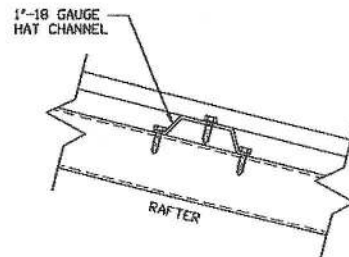
**TYPICAL END ELEVATION
VERTICAL ROOF/SIDING**
SCALE: NTS



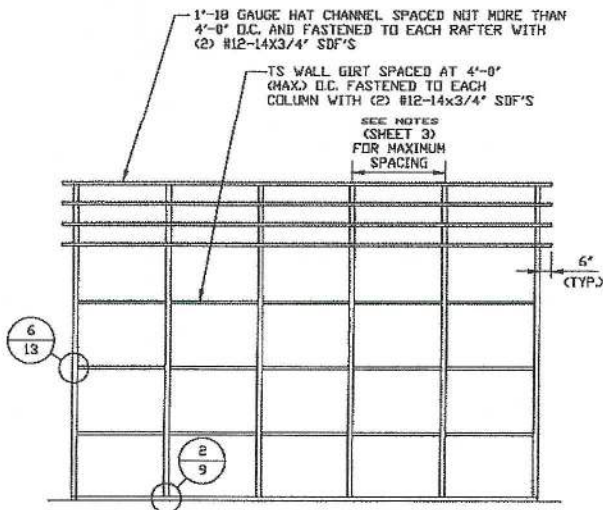
**TYPICAL SECTION VERTICAL
ROOF/SIDING OPTION**
SCALE: NTS



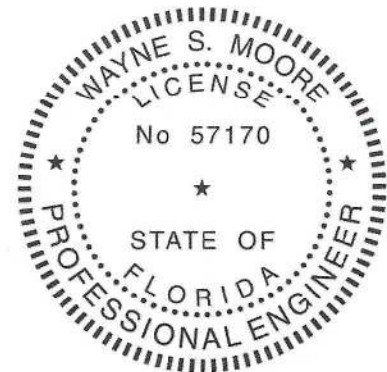
**TYPICAL SIDE ELEVATION
VERTICAL ROOF/SIDING**
SCALE: NTS



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



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



This item has been electronically signed and sealed by Wayne S. Moore, PE, using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC
484 NW TURNER AVENUE
LAKE CITY, FLORIDA 32055
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SCALE: NTS

JOB NO: 19294S

SHT. 18

DWG. NO: SK-3

REV: 0

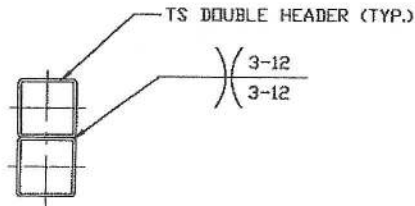
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



This item has been electronically signed and sealed by Wayne S. Moore, PE. using a Digital Signature and date.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

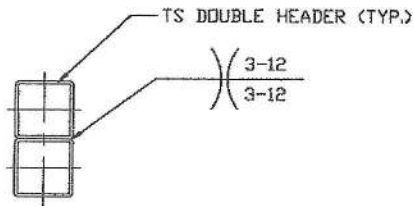
SIDE WALL HEADER OPTION



HEADER DETAIL FOR LENGTHS $\leq 16'-0"$

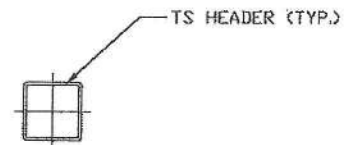
SCALE: NTS

END WALL HEADER OPTIONS



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

SCALE: NTS



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

SCALE: NTS

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

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: BMB

BEST METAL BUILDINGS, LLC

484 NW TURNER AVENUE

LAKE CITY, FLORIDA 32055

30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 1-7-20

SCALE: NTS

JOB NO: 19294S

SHT. 19

DWG. NO: SK-3

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.