

ENCLOSED GABLE END BUILDING

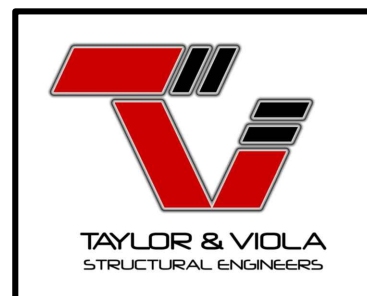
MAXIMUM >31' TO <50'-0" WIDE x <20'-0" MAXIMUM EVE HEIGHT (BOX FRAME)  
(UP TO) 145 M.P.H. WIND ZONE - 35 P.S.F. SNOW LOAD

FOR:

**ELITE CARPORTS, LLC**

715 WILLOW STREET  
MOUNT AIRY, NORTH CAROLINA 27030  
TELE: 336-415-5122

ISSUE DATE: MARCH 03, 2024



NOTE: THESE DRAWINGS ARE VALID FOR (1) ONE CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 SC BUILDING CODE (2021IBC)

TAYLOR & VIOLA  
STRUCTURAL ENGINEERS  
No. C00130

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 BUILDING CODE OF ALABAMA (2021 IBC)

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 KENTUCKY BUILDING CODE (2015 IBC)

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 VA CONSTRUCTION CODE (2018 IBC)

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2012 IBC

4/3/24

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 61406.

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

4/5/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2017 OHIO BUILDING CODE WITH AMENDMENTS

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

4/3/24

DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

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NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

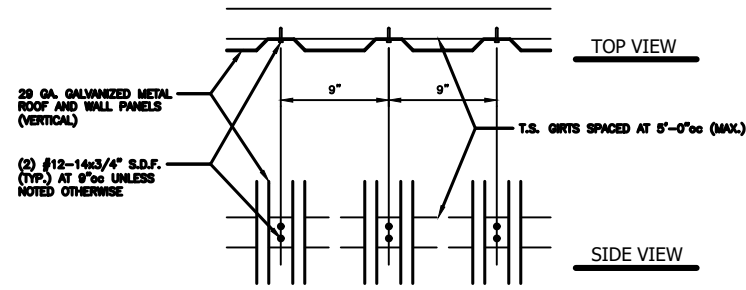
TAYLOR & VIOLA  
STRUCTURAL ENGINEERS  
NORTH CAROLINA  
P.O.B. 2616 HICKORY  
TELE: 828-328-6331 FAX: 828-322-1801  
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4/3/24

Project No. 24-507  
Sheet No. SOA

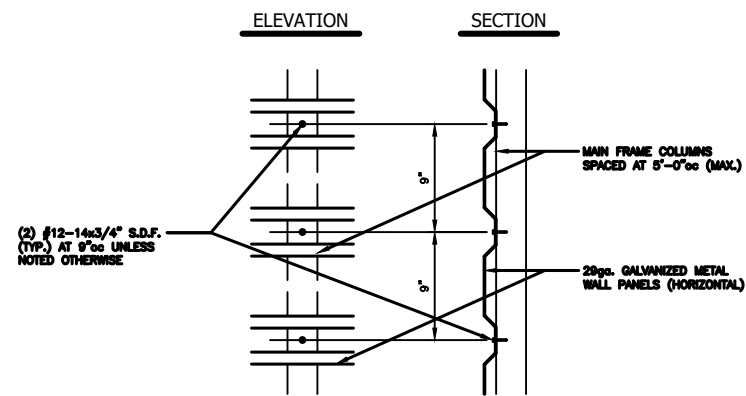
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211 Stone Drive, Pilot Mountain, NC 27041  
Telephone: (336) 399-6277

Date: 04/03/24  
Revisions:



(VERTICAL) SIDING CONNECTION DETAIL

SCALE: 1-1/2" = 1'-0"



(HORIZONTAL) SIDING CONNECTION DETAIL

SCALE: 1-1/2" = 1'-0"

## APPENDIX "B" STRUCTURAL DESIGN

**DESIGN LOADS:**

<b>IMPORTANCE FACTORS</b>	WIND	(1w)	1.00	
	SNOW	(1s)	1.00	
	SEISMIC	(1e)	1.00	
<b>DEAD LOADS</b>	ROOF	13	P.S.F.	
	ROOF COLLATERAL	0	P.S.F.	
<b>LIVE LOADS</b>	ROOF	20	P.S.F.	
<b>GROUND SNOW LOAD:</b>		35	P.S.F.	* DRIFT LOAD HAS NOT BEEN CALCULATED
<b>WIND LOAD:</b>	BASIC WIND SPEED	V 145	M.P.H.	(ASCE 7-16)
	EXPOSURE CATAGORY	A/B/C		

**SEISMIC DESIGN CATAGORY**       A     B     C     D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

OCCUPANCY CATEGORY    1/II

SPECTRAL RESPONSE ACCELERATION    Ss VARIES BASED ON SITE %g    S1 VARIES BASED ON SITE %g

SITE CLASSIFICATION    D     FIELD TEST     PRESUMPTIVE     HISTORICAL DATA

**BASIC STRUCTURAL SYSTEM (CHECK ONE)**

<input type="checkbox"/> BEARING WALL	<input type="checkbox"/> DUAL W/ SPECTRAL MOMENT FRAME
<input checked="" type="checkbox"/> BUILDING FRAME	<input type="checkbox"/> DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
<input type="checkbox"/> MOMENT FRAME	<input type="checkbox"/> INVERTED PENDULUM

ANALYSIS PROCEDURE     SIMPLIFIED     EQUIVALANT LATERAL FORCE     MODAL

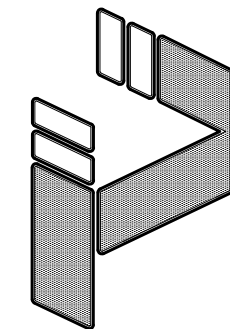
LATERAL DESIGN CONTROL?     EARTHQUAKE     WIND

SOIL BEARING CAPACITIES:  
PRESUMPTIVE BEARING CAPACITIES:    1,500 P.S.F.

**GENERAL NOTES:**

1. MAX FRAME SPACING SHALL BE 60"oc UNLESS NOTED OTHERWISE.
2. MAX. END-WALL COLUMN SPACING SHALL BE 60"oc UNLESS NOTED OTHERWISE.
3. TUBE MATERIAL SHALL BE 2-1/2" x 2-1/2" x 14 ga. 50 KSI MIN. UNLESS NOTED OTHERWISE.
4. ALL FASTENERS SHALL BE (2) #12 SELF TAPPING AT 9"o.c. UNLESS NOTED OTHERWISE.
5. 1,500 PSF ASSUMED BEARING CAPACITY UNLESS NOTED OTHERWISE.
6. THESE DRAWINGS ARE NOT APPLICABLE TO OPEN / PARTIALLY OPEN BUILDINGS.
7. THESE DRAWINGS ARE NOT DESIGNED FOR SLEEPING QUARTERS.

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



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31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

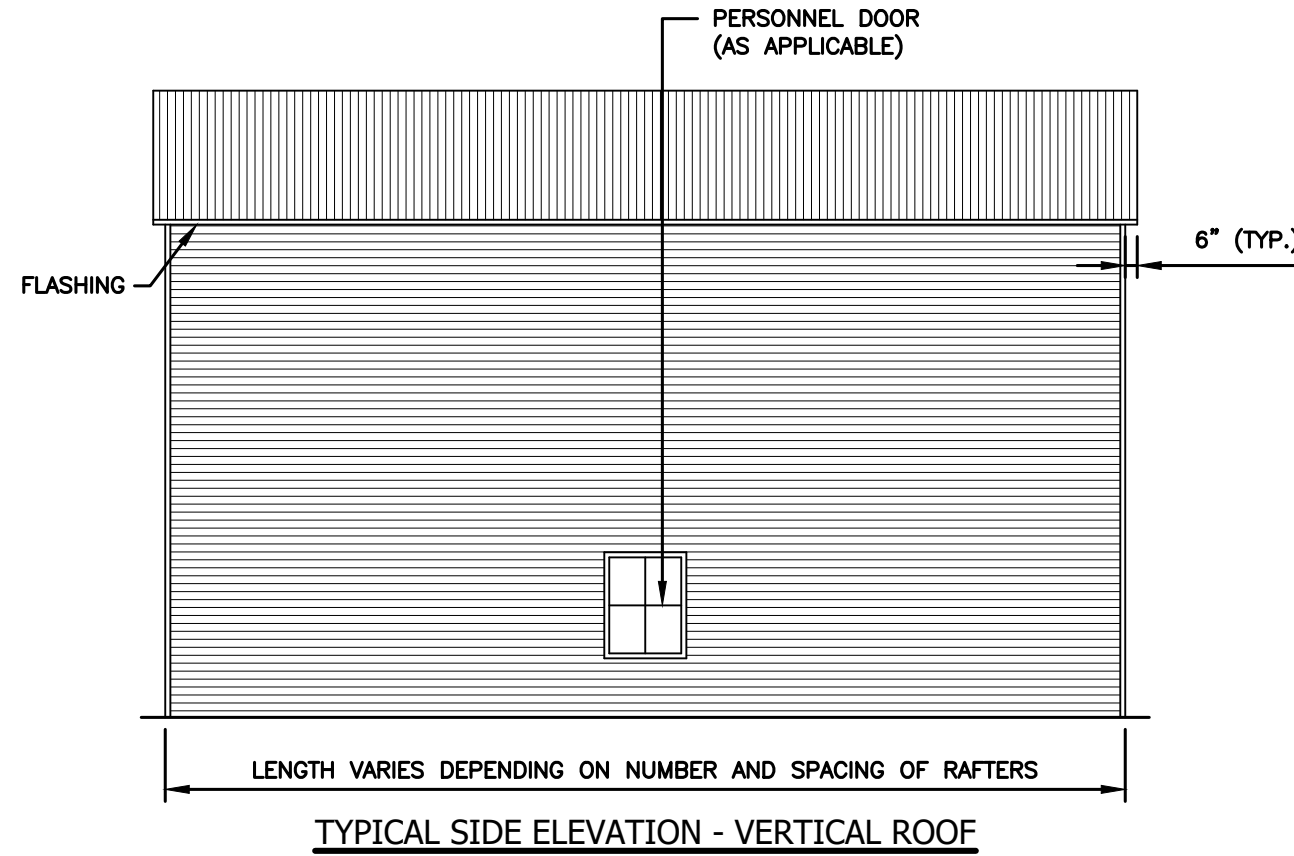
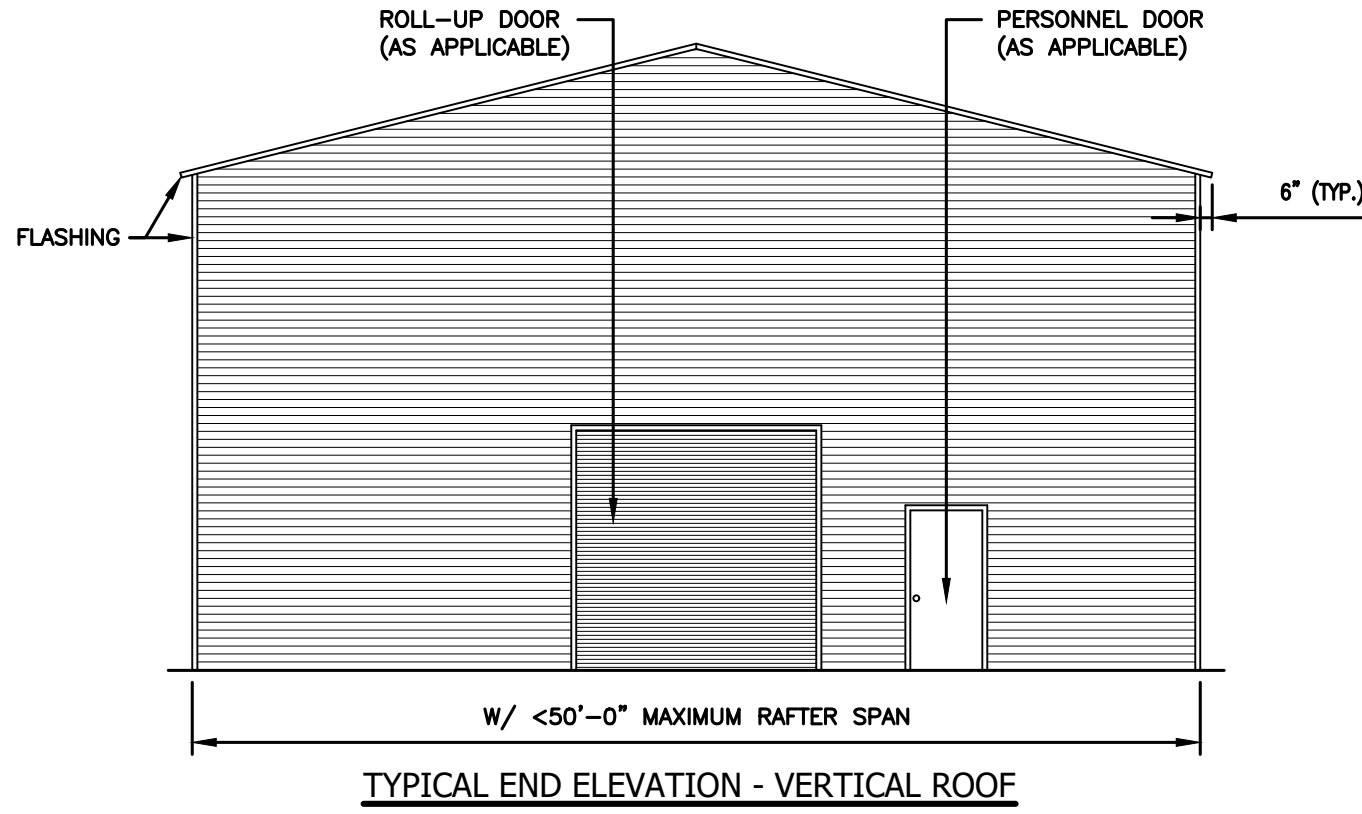
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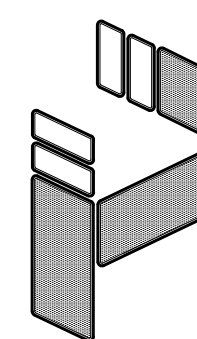
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Project No. 24-507  
Sheet No. S0B

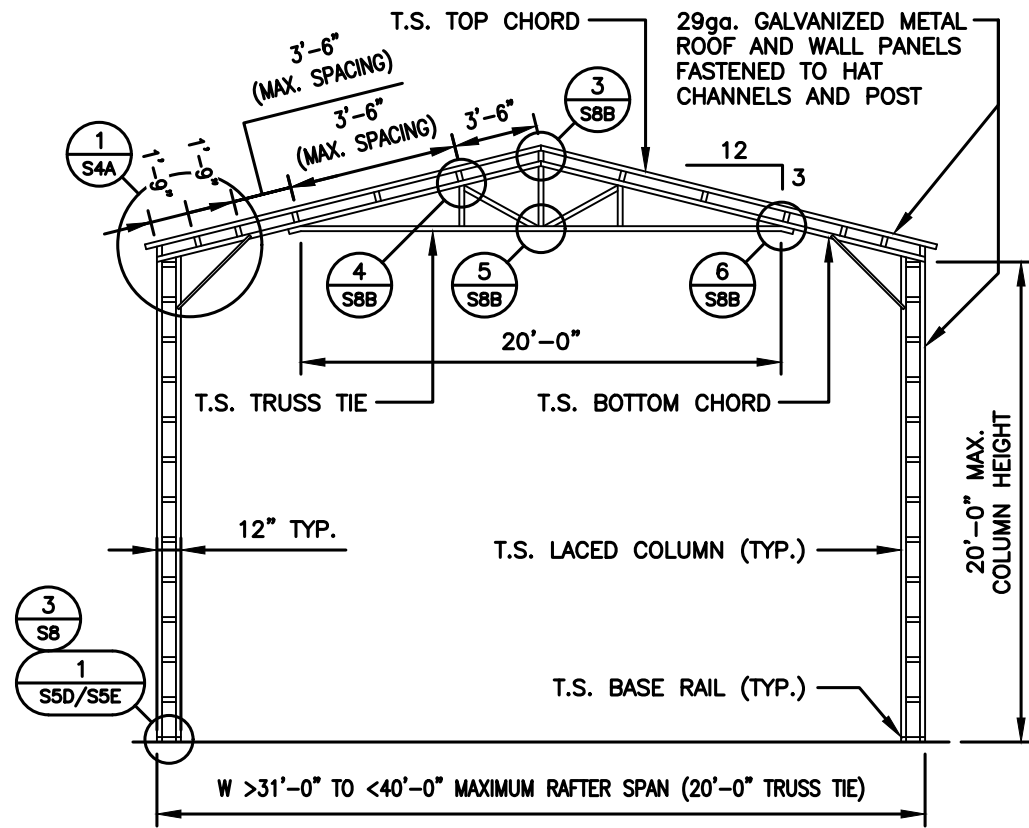
BOX EVE FRAME RAFTER STURCTURE



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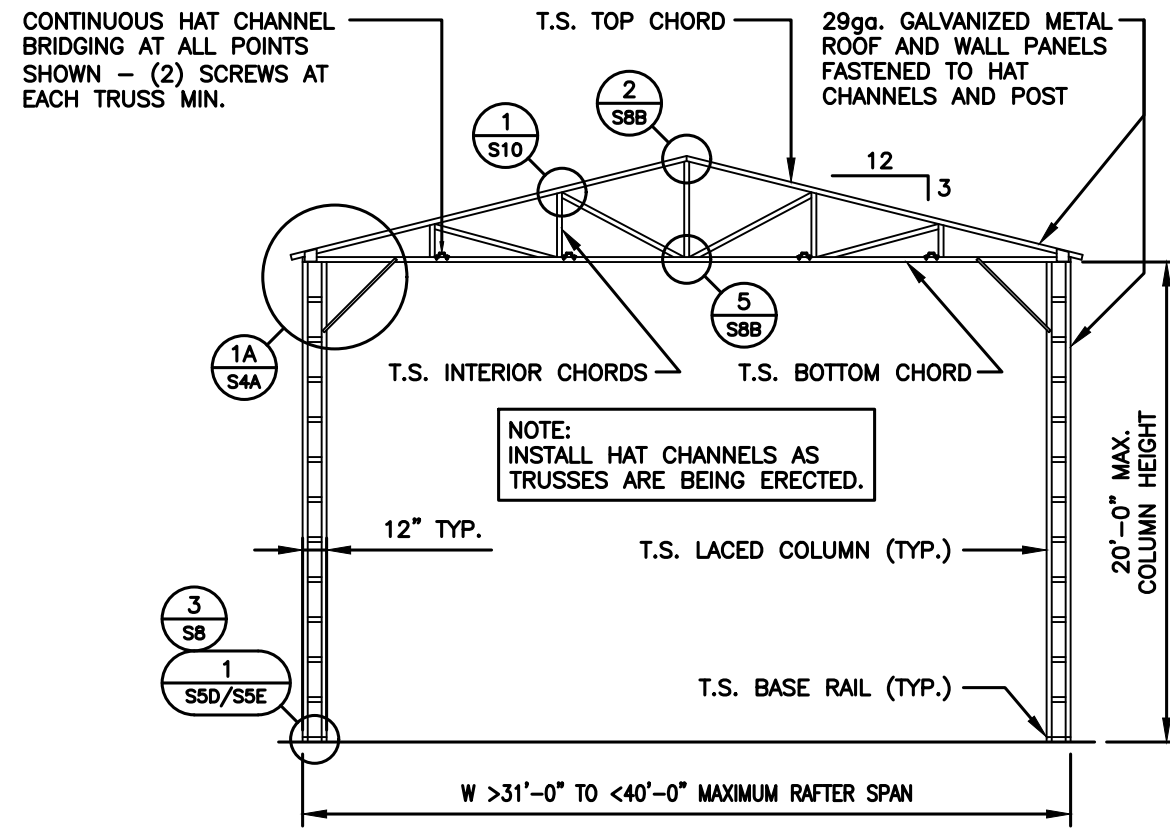
<p>31' - 50' WIDTH 20'-0" EAVE HEIGHT 145 WIND ZONE 35 P.S.F. SNOW</p>		 <p><b>TAYLOR &amp; VIOLA</b> STRUCTURAL ENGINEERS P.O.B. 2616 HICKORY NORTH CAROLINA TELE: 828-328-6331 FAX: 828-322-1801 WWW.TAYLORVIOLA.COM</p>	
<p>Project No. 24-507</p>	<p><b>JCMT Associates, PLLC</b></p> <p>211 Stone Drive, Pilot Mountain, NC 27041 Telephone: (336) 399-6277</p>	<p>Date: 04/03/24</p>	<p>Revisions: -</p>
<p>Sheet No. S1</p>			

(>31' TO <40' WIDE / <20' HIGH) BOX EAVE RAFTER END WALL SECTIONS



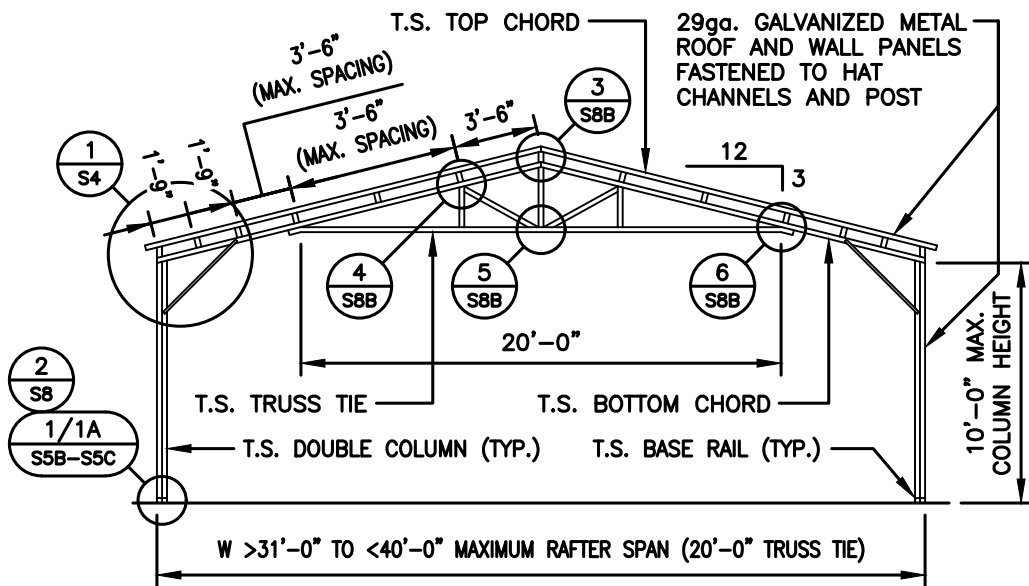
TYPICAL RAFTER / COLUMN FRAME SECTION

NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.  
MATERIAL MAY BE USED FOR TRUSS METAL.

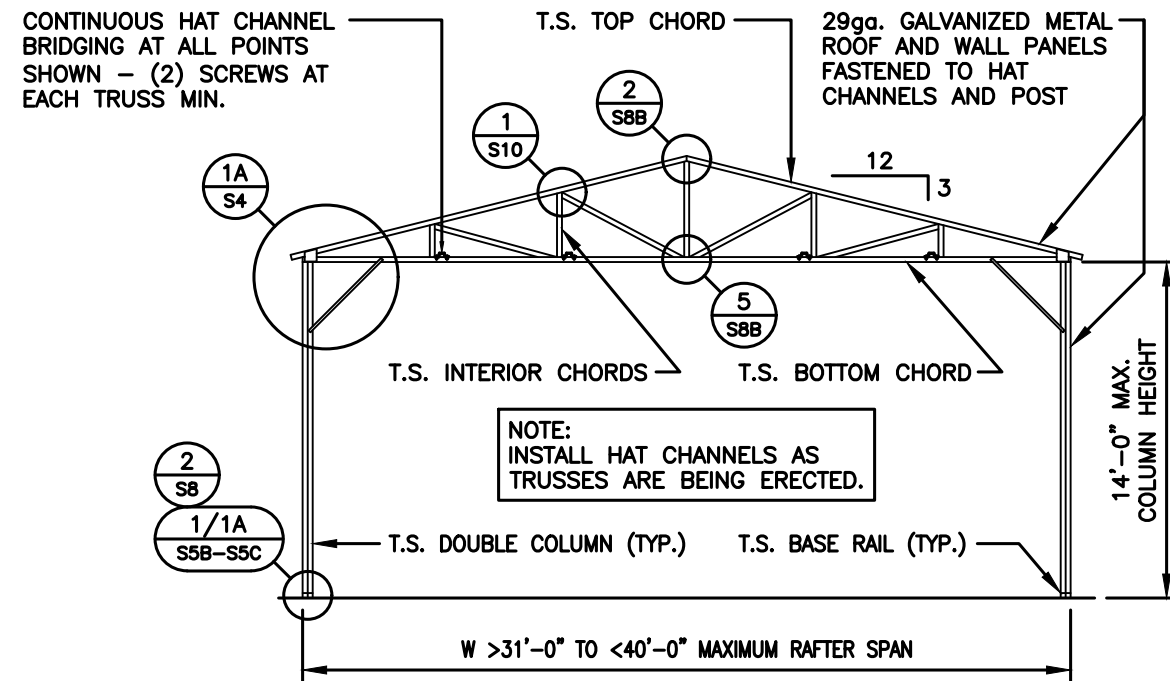


TYPICAL RAFTER / COLUMN FRAME SECTION (FLAT BOTTOM CHORD TRUSS OPTION)

NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.  
MATERIAL MAY BE USED FOR TRUSS METAL.



TYPICAL RAFTER / COLUMN FRAME SECTION



TYPICAL RAFTER / COLUMN FRAME SECTION (FLAT BOTTOM CHORD TRUSS OPTION)

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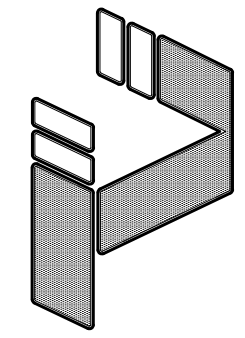


31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

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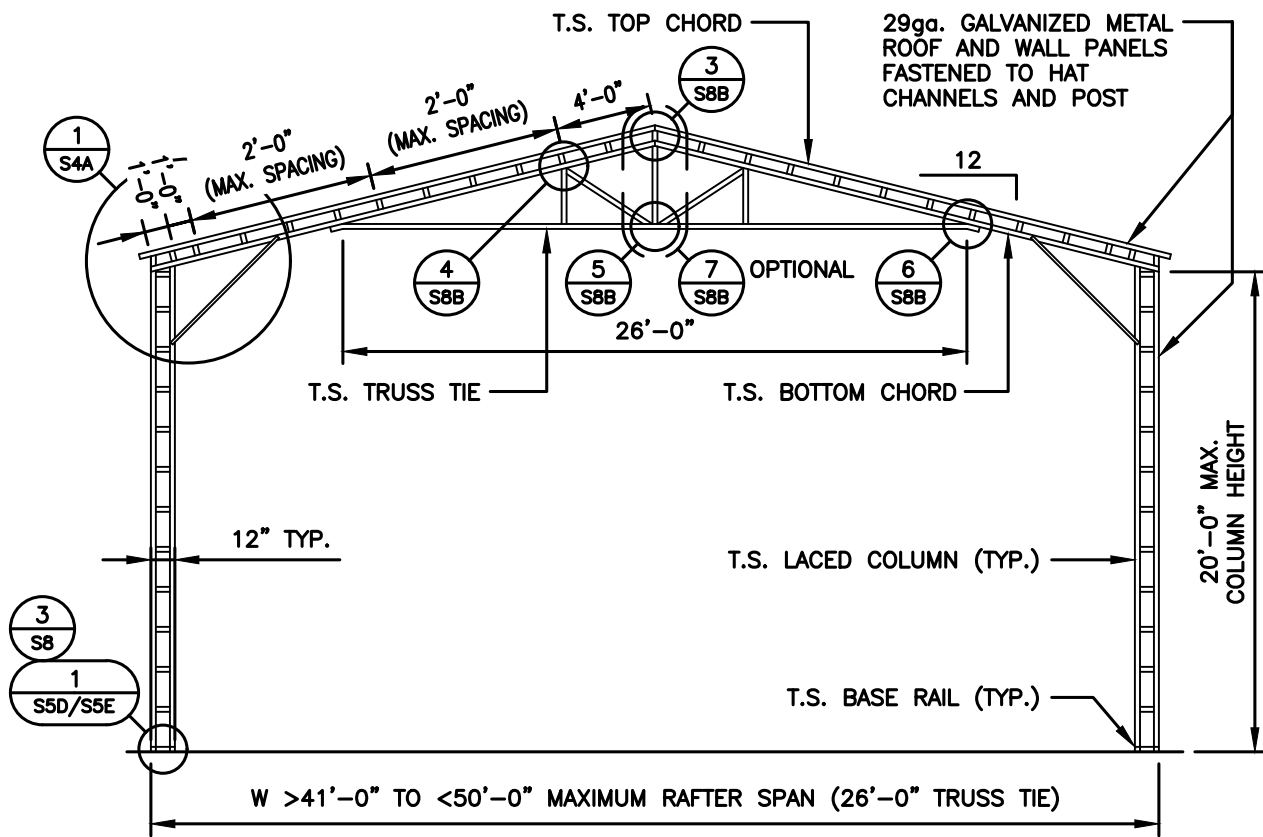
Project No. 24-507  
Sheet No. S2



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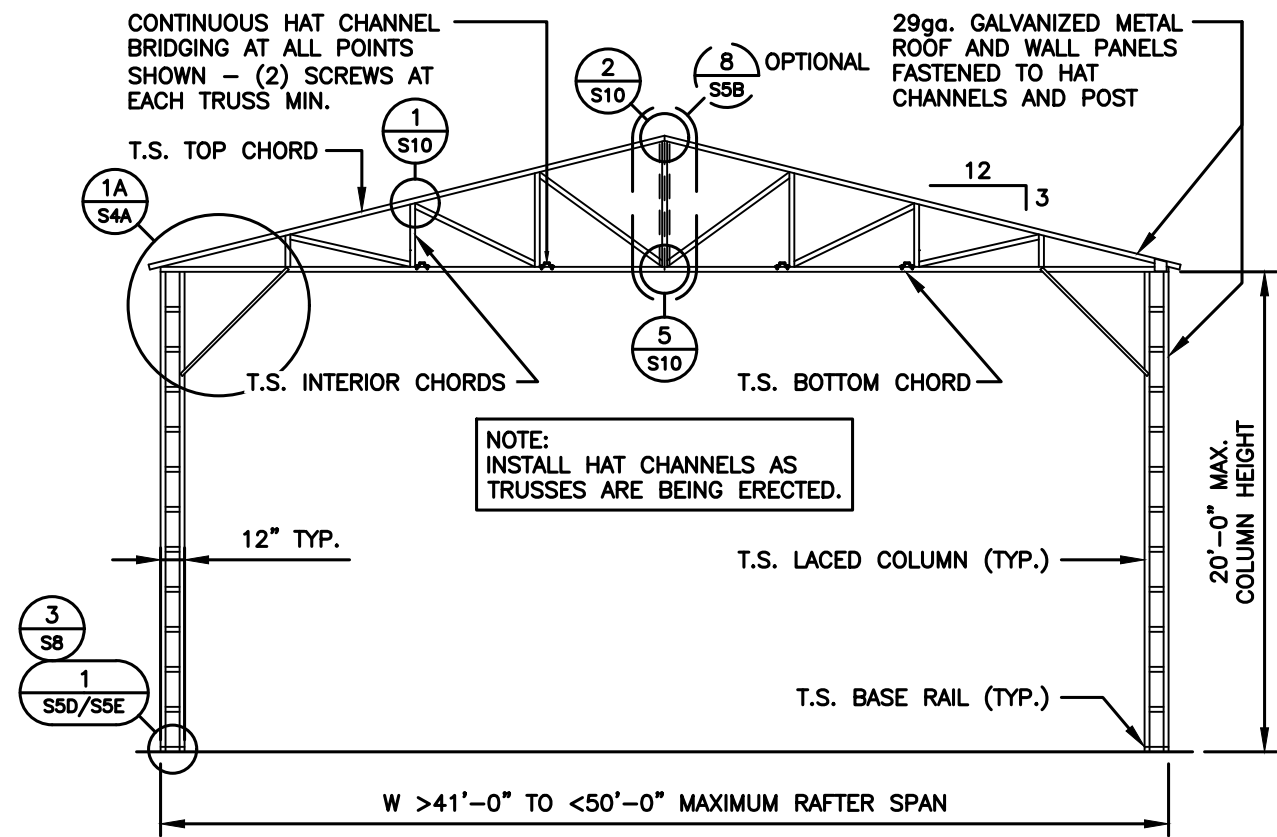
Date: 04/03/24  
Revisions:

**(>41' - <50' WIDE / <20' HIGH) BOX EAVE RAFTER END WALL SECTIONS**



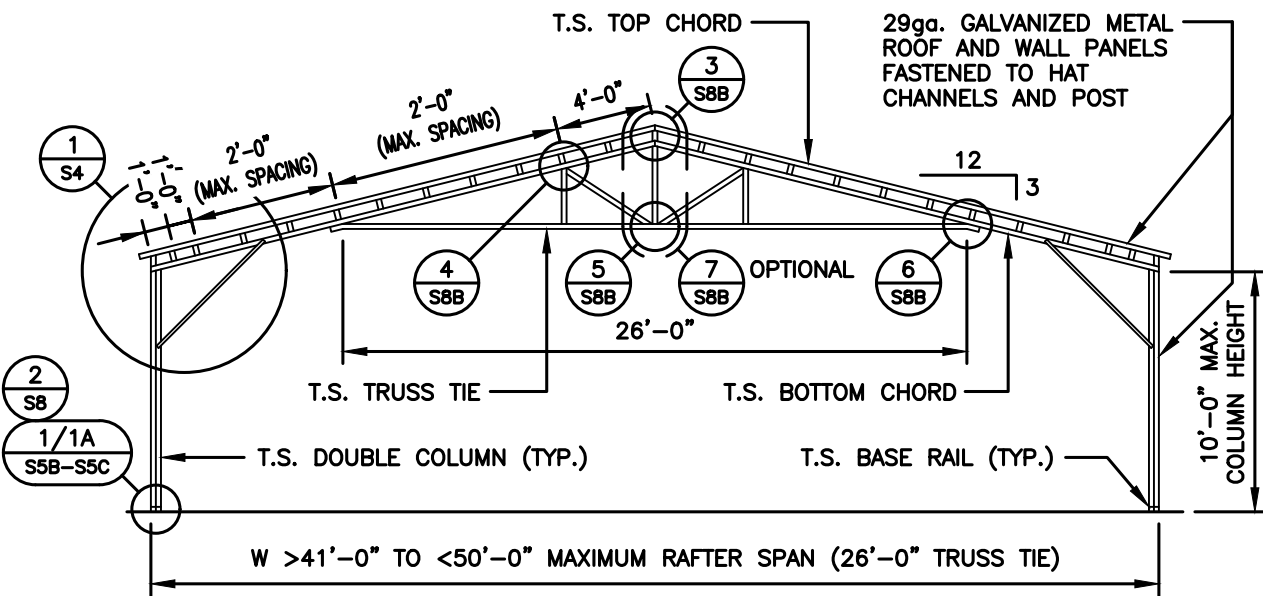
**TYPICAL RAFTER / COLUMN FRAME SECTION**

NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.  
MATERIAL MAY BE USED FOR TRUSS METAL.

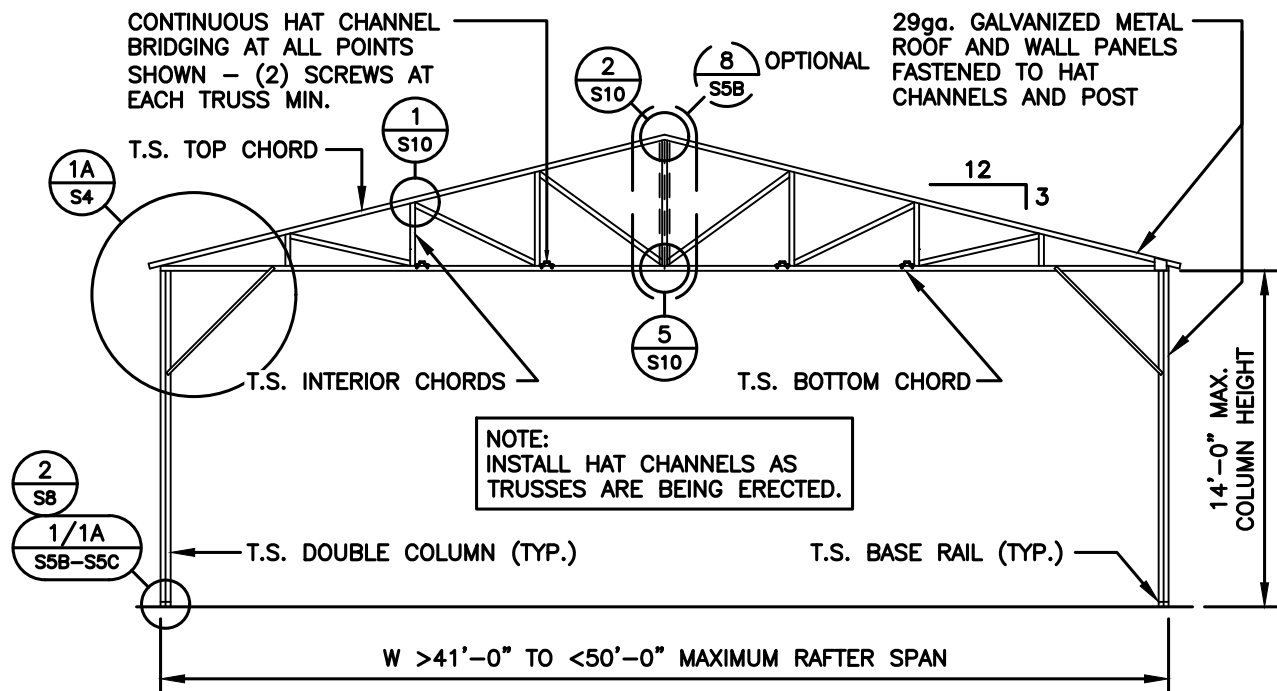


**TYPICAL RAFTER / COLUMN FRAME SECTION (FLAT BOTTOM CHORD TRUSS OPTION)**

NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.  
MATERIAL MAY BE USED FOR TRUSS METAL.



**TYPICAL RAFTER / COLUMN FRAME SECTION**



**TYPICAL RAFTER / COLUMN FRAME SECTION (FLAT BOTTOM CHORD TRUSS OPTION)**

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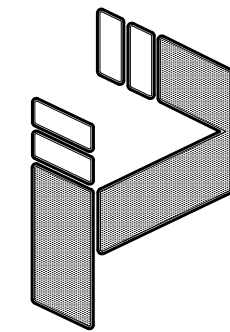


31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

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Sheet No. S2A

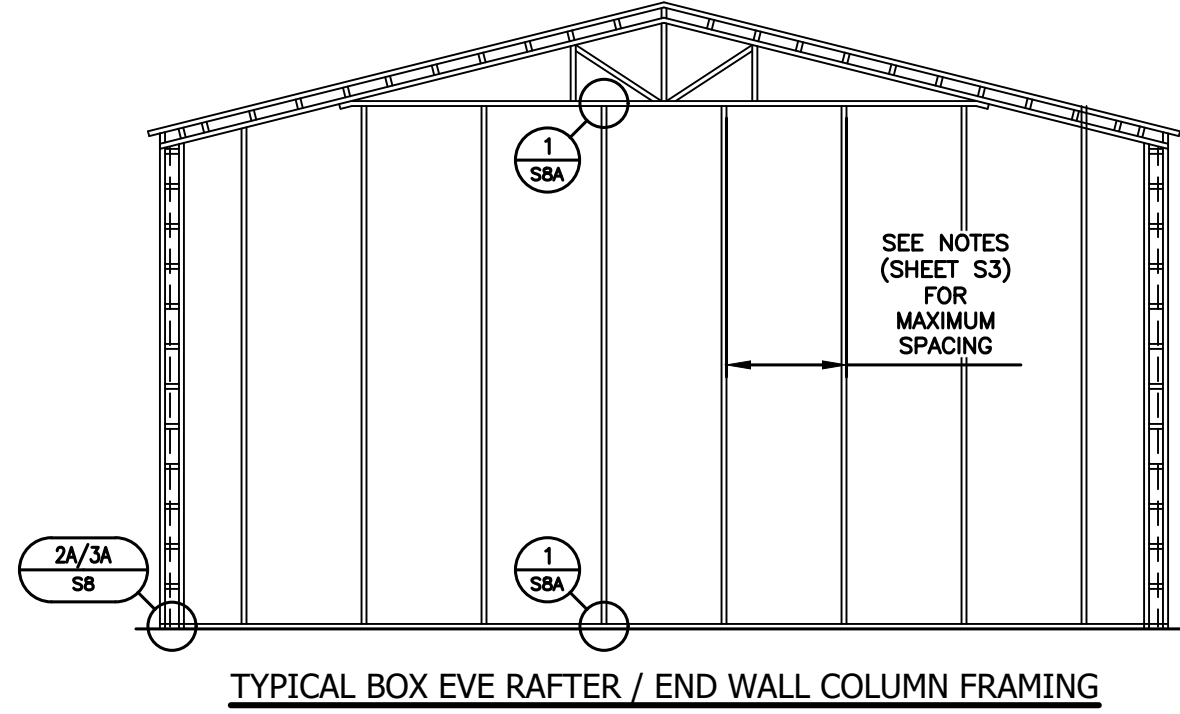
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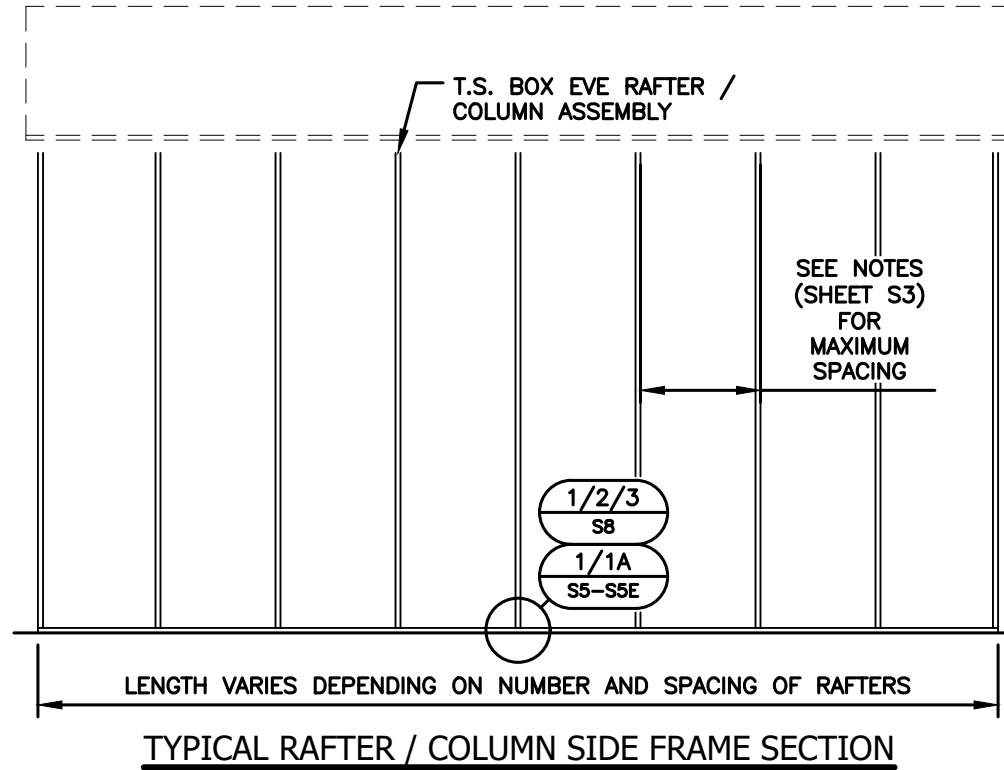
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TYPICAL SIDE / END FRAMING ELEVATIONS



NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.  
MATERIAL MAY BE USED FOR TRUSS METAL.



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31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

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24-507

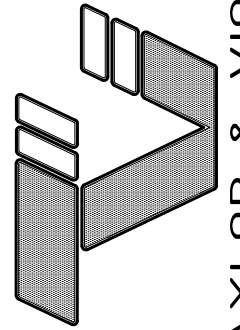
Sheet No.  
S3

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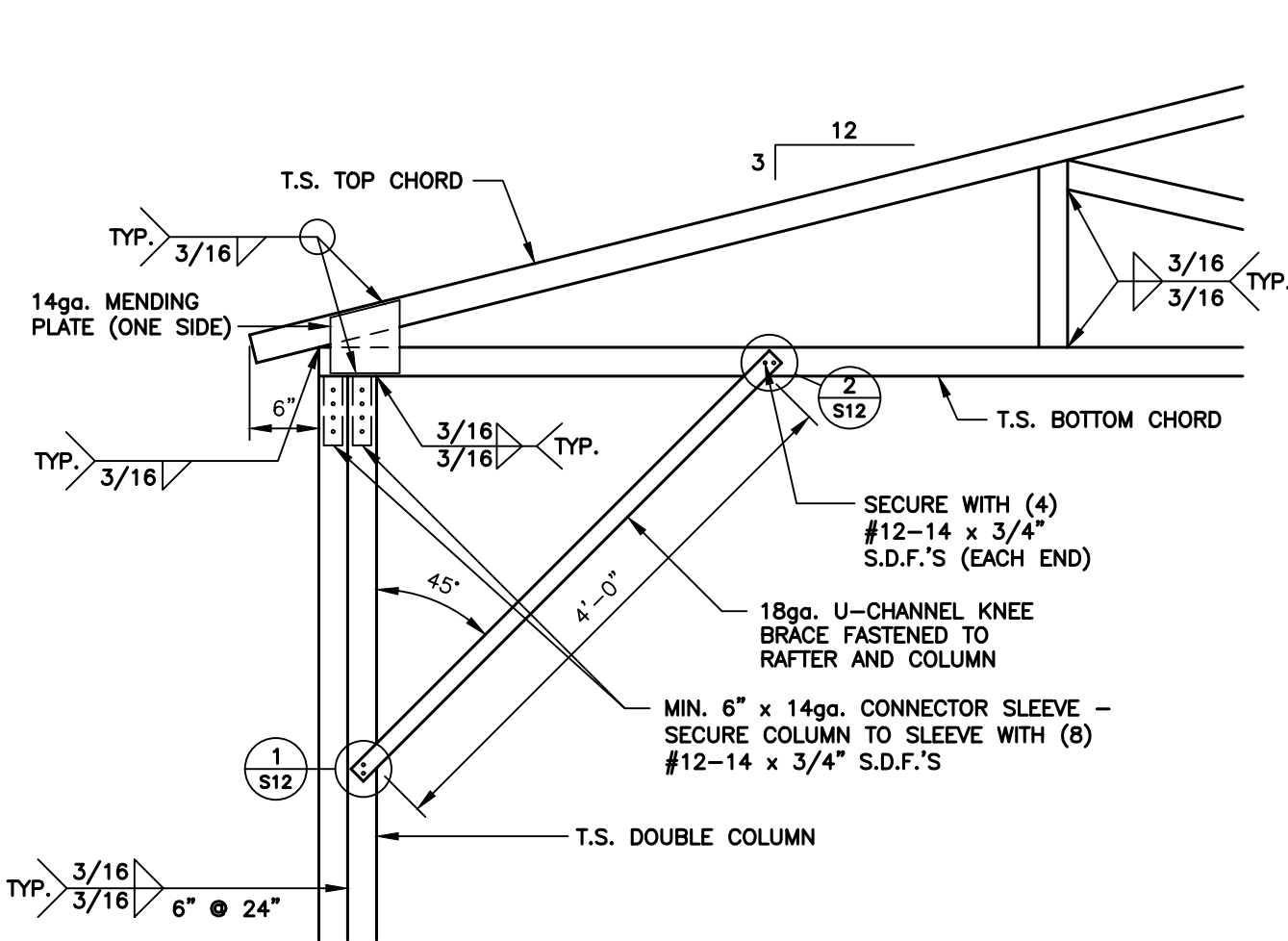
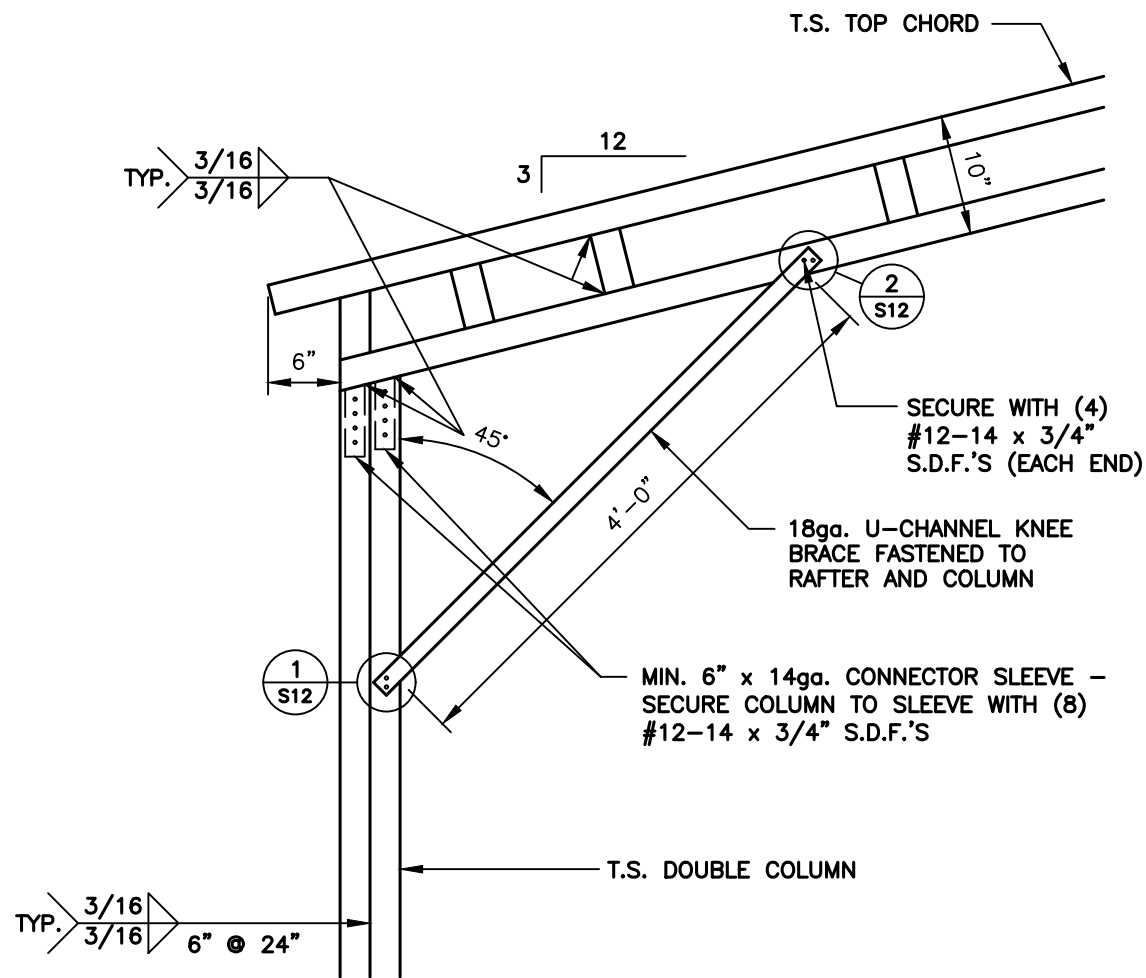
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**DOUBLE COLUMN OPTIONS**

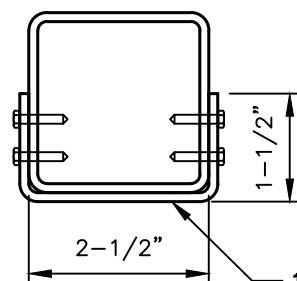


**1** BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS < 10'-0"

**S4** SCALE: 3/4" = 1'-0"

**1A** BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS < 14'-0" (FLAT BOTTOM CHORD OPTION)

**S4** SCALE: 3/4" = 1'-0"



**BRACE SECTION**

18ga. U-CHANNEL BRACE FASTENED TO THE COLUMN AND BOTTOM CHORD, WITH #12-14 x 3/4" S.D.F.'S AT EACH END AS SHOWN IN ELEVATION.

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31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW



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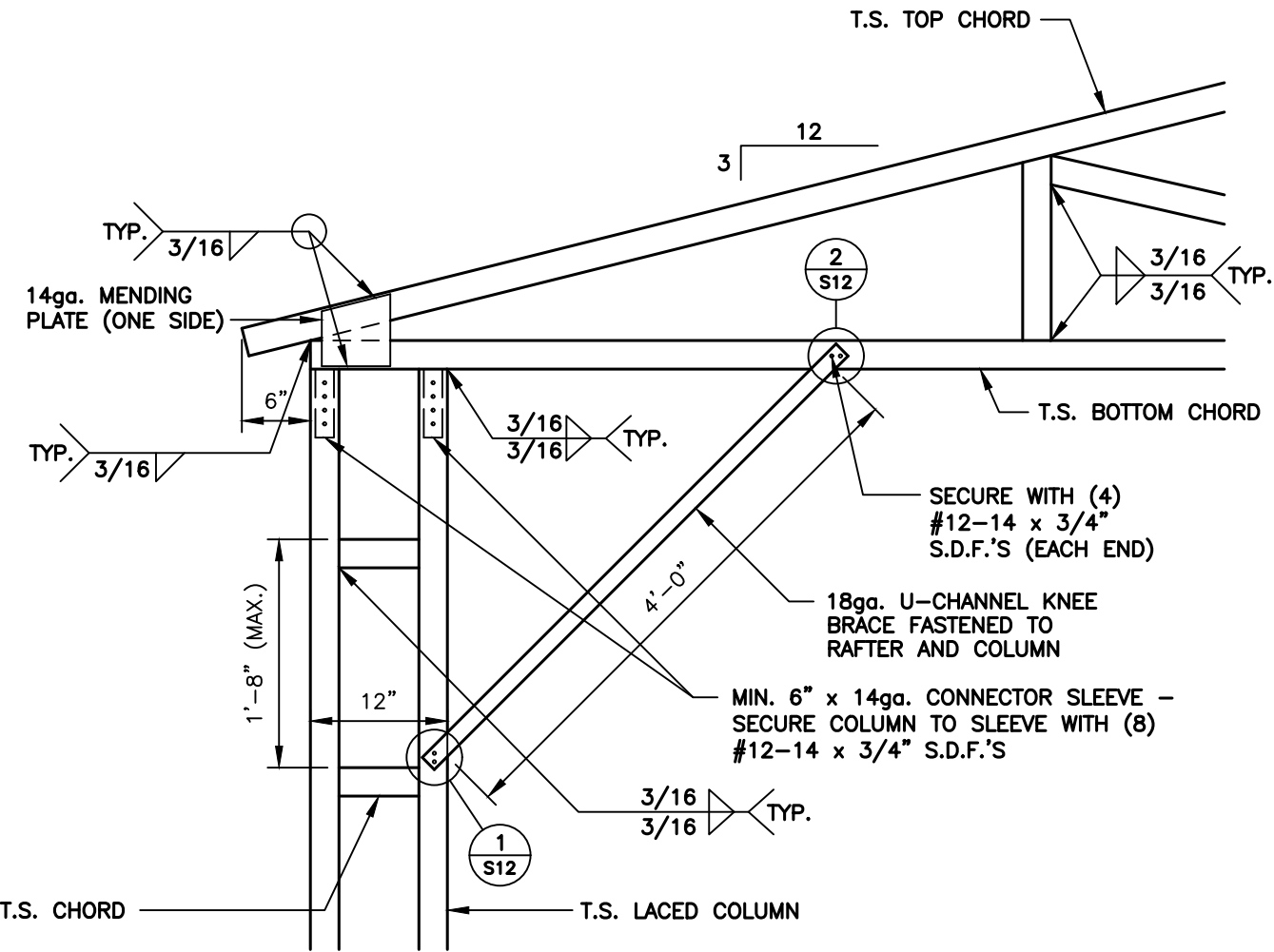
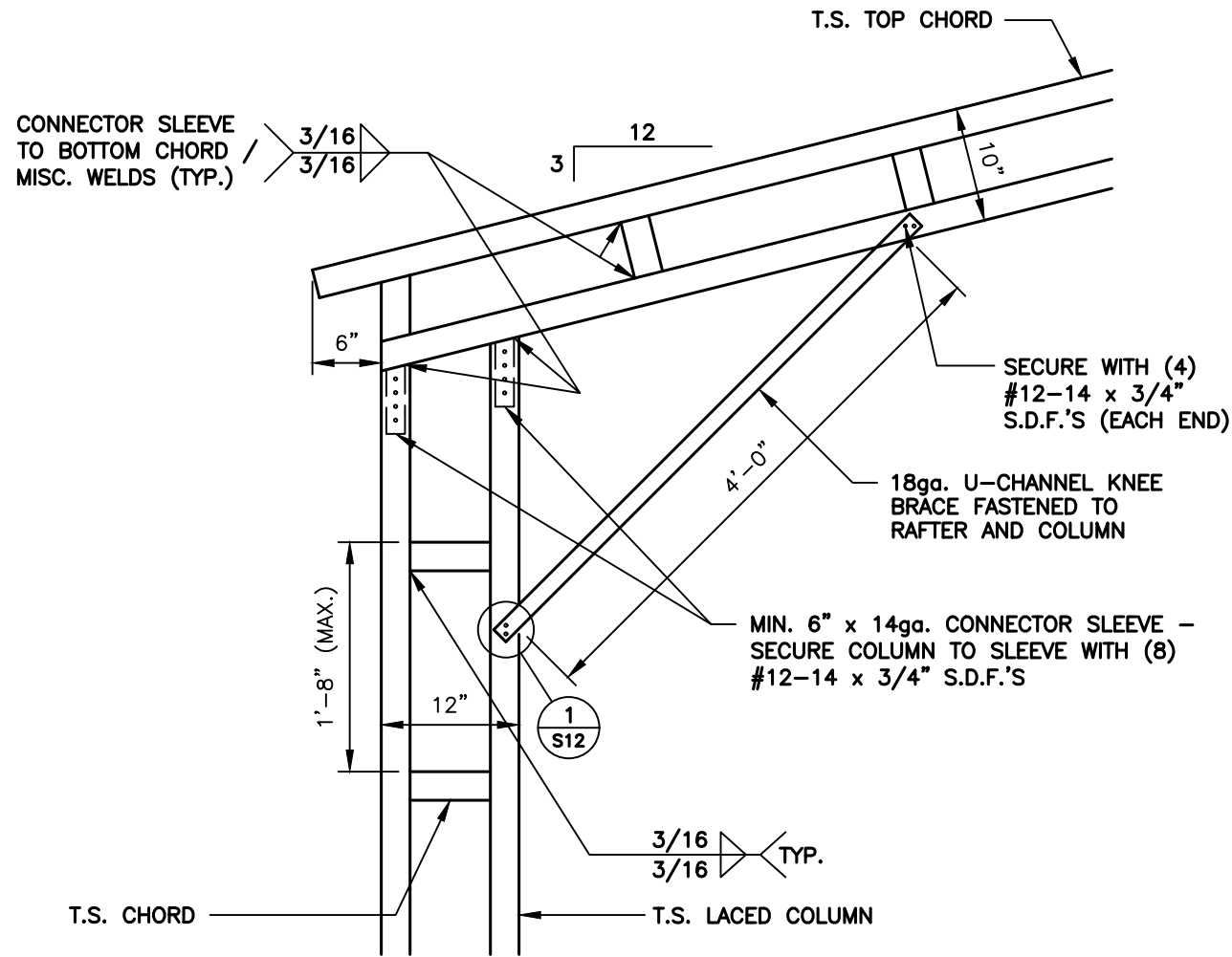
Revisions:

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Sheet No. S4



LACED COLUMN OPTIONS

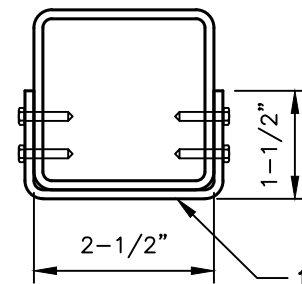


BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS <20'-0"

1 S4A SCALE: 3/4" = 1'-0"

BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS <20'-0" (FLAT BOTTOM CHORD OPTION)

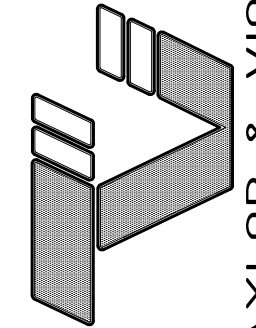
1A S4A SCALE: 3/4" = 1'-0"



BRACE SECTION

18ga. U-CHANNEL BRACE FASTENED TO THE COLUMN AND BOTTOM CHORD, WITH #12-14 x 3/4" S.D.F.'S AT EACH END AS SHOWN IN ELEVATION.

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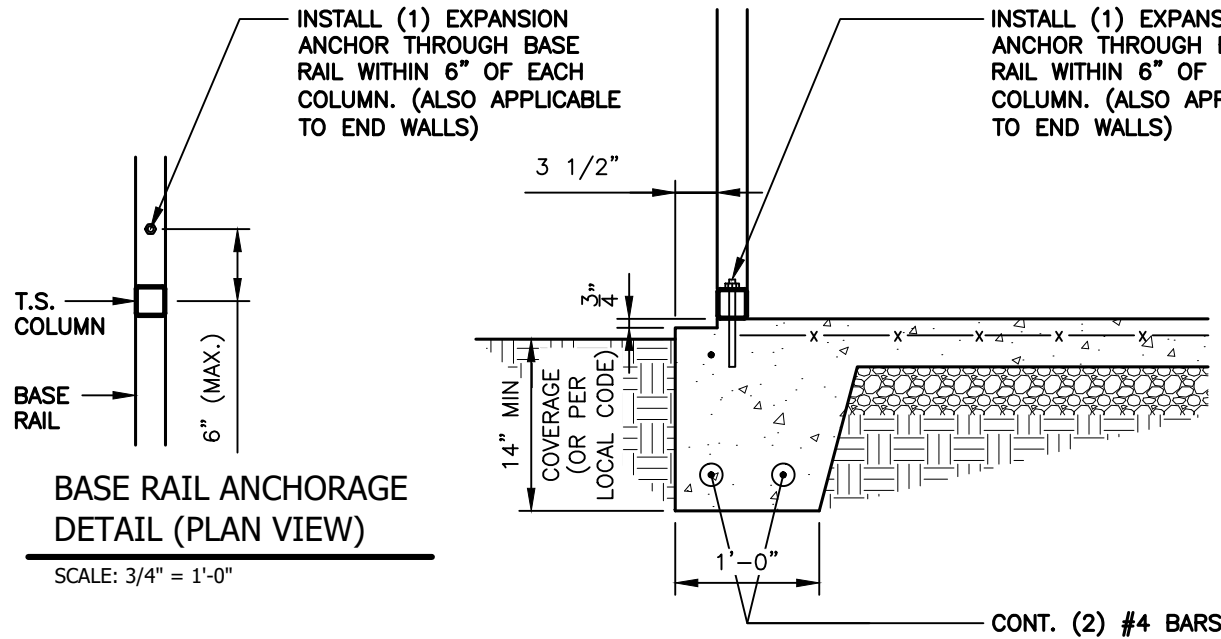
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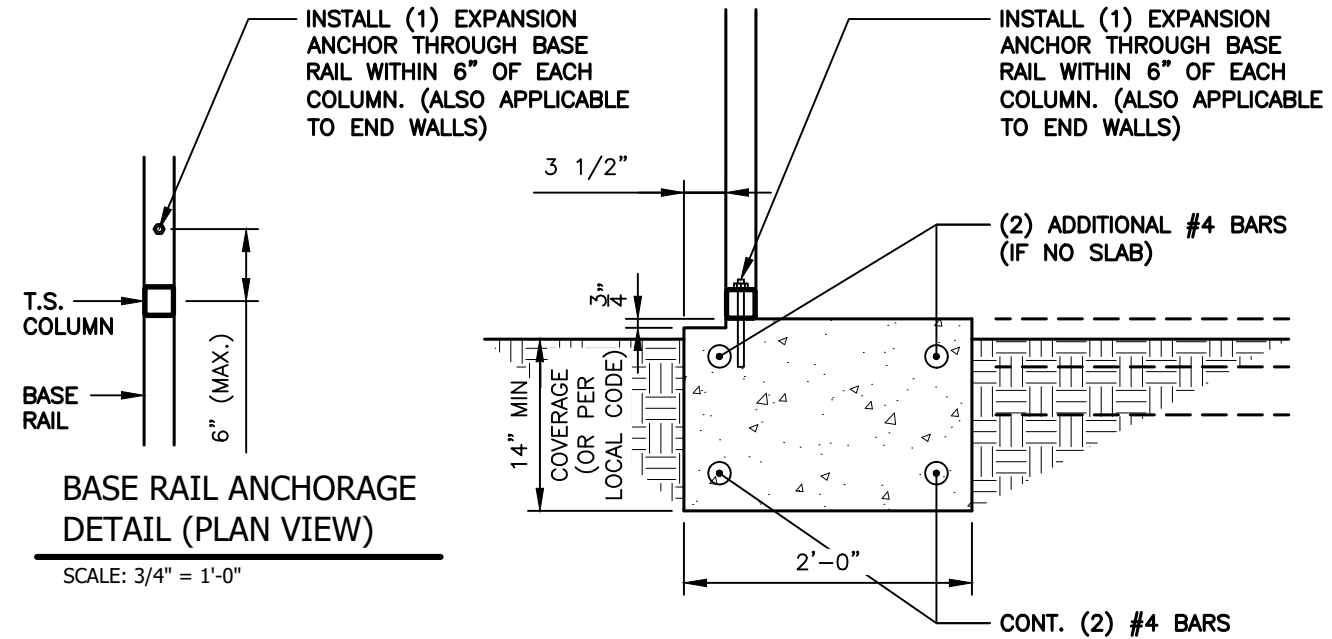
Sheet No. S4A

**SINGLE COLUMN OPTIONS (LEAN-TO ONLY)**

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**1**  
**S5** BASE RAIL ANCHORAGE DETAIL  
SCALE: 3/4" = 1'-0"



**1A**  
**S5** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
SCALE: 3/4" = 1'-0"

**GENERAL NOTES:**

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 2,000 P.S.F.

**CONCRETE:**  
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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 AND 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 IN 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.

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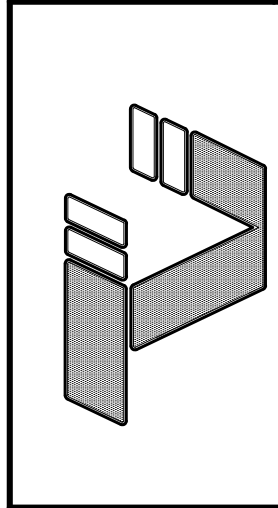
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S5

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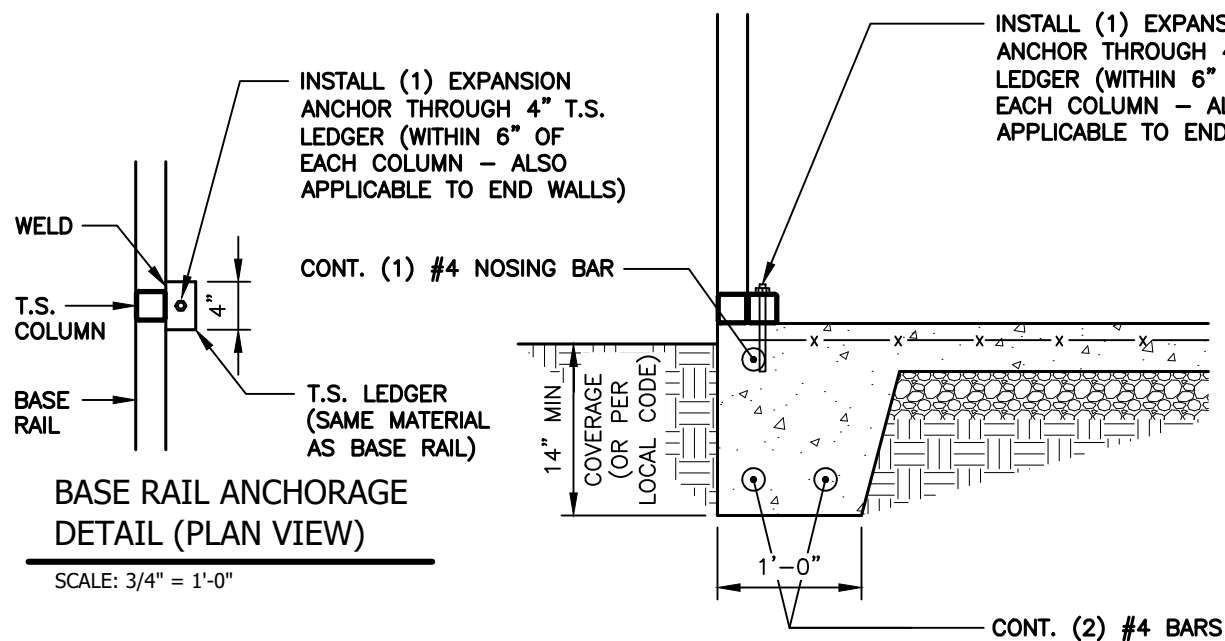
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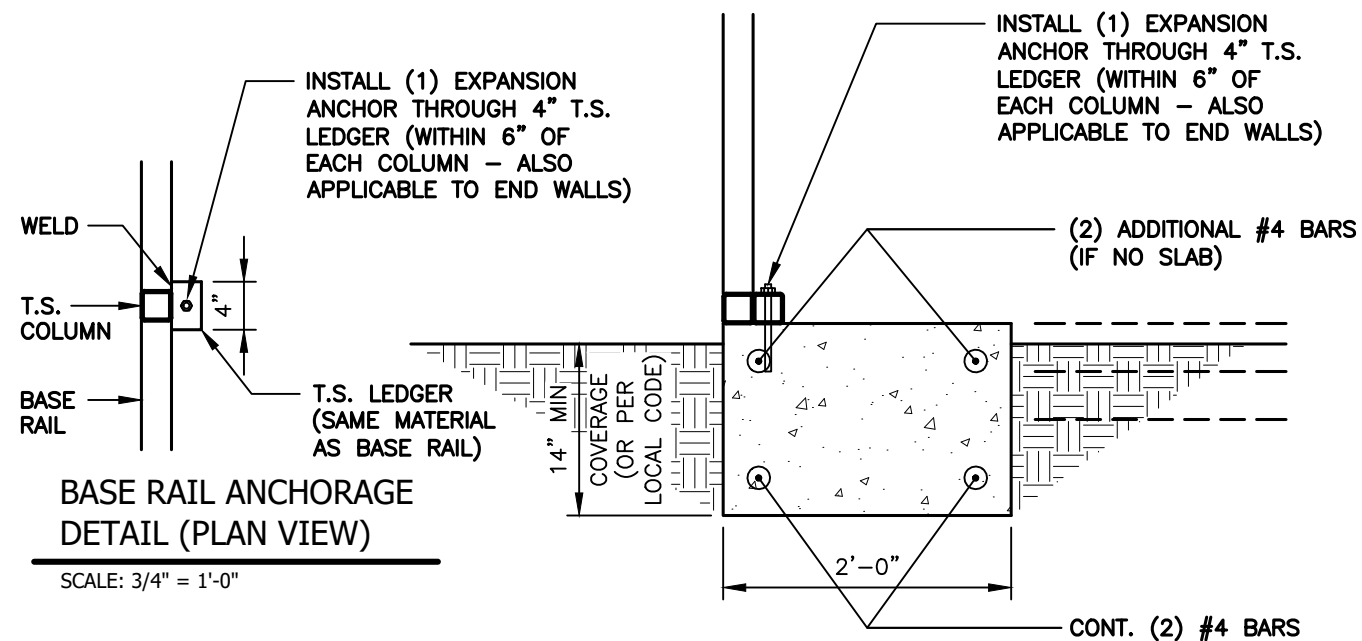
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STRUCTURAL ENGINEERS  
P.O.B. 2616 HICKORY NORTH CAROLINA  
TELE: 828-328-6331 FAX: 828-322-1801  
WWW.TAYLORVIOLA.COM

**SINGLE COLUMN OPTIONS - NO SIDING LEDGE (LEAN-TO ONLY)**

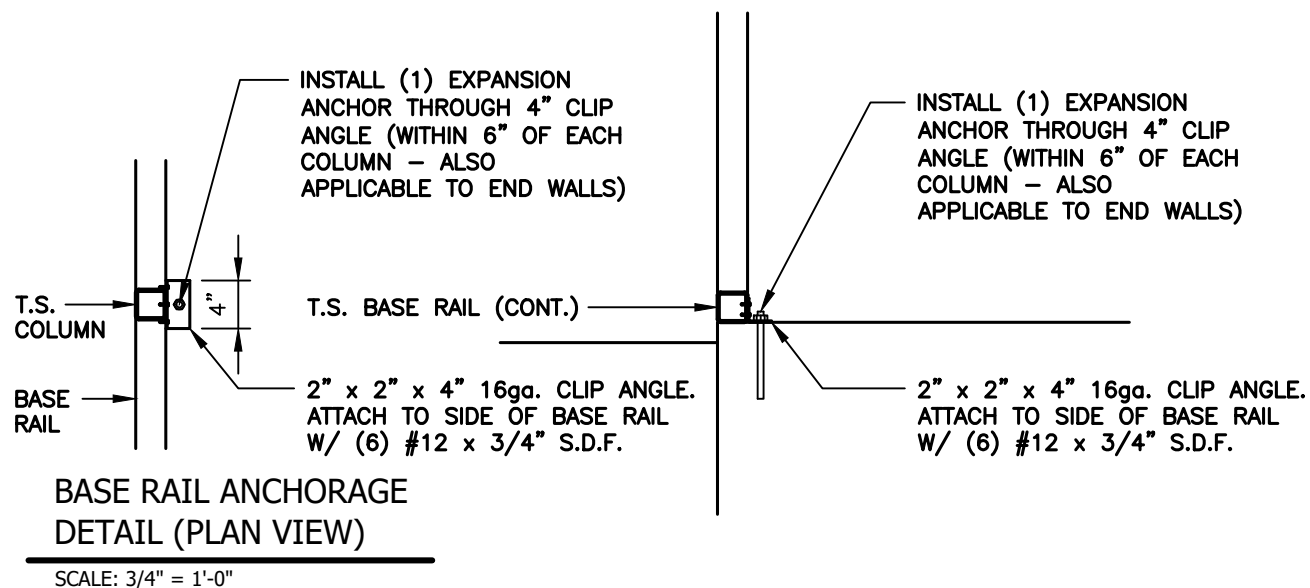
ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**1** BASE RAIL ANCHORAGE DETAIL  
S5A SCALE: 3/4" = 1'-0"



**1A** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
S5A SCALE: 3/4" = 1'-0"



**2** (ALTERNATE) BASE RAIL ANCHORAGE DETAIL  
S5A SCALE: 3/4" = 1'-0"

**GENERAL NOTES:**

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 2,000 P.S.F.

CONCRETE:  
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. AT 28 DAYS.

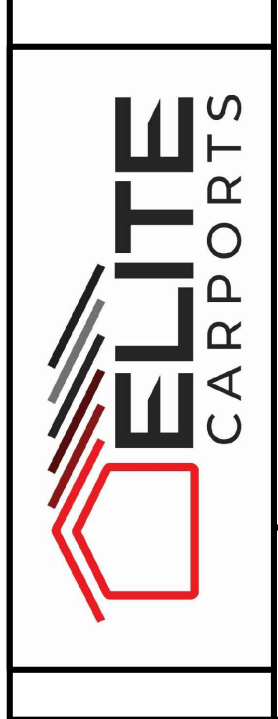
COVER OVER REINFORCING STEEL:  
FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:  
3" IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH AND WEATHER AND 1-1/2" ELSEWHERE.

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 IN 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.

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

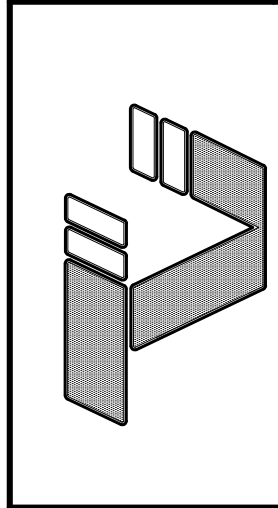


Project No. 24-507  
Sheet No. S5A

**JCMT Associates, PLLC**

211 Stone Drive, Pilot Mountain, NC 27041  
Telephone: (336) 399-6277

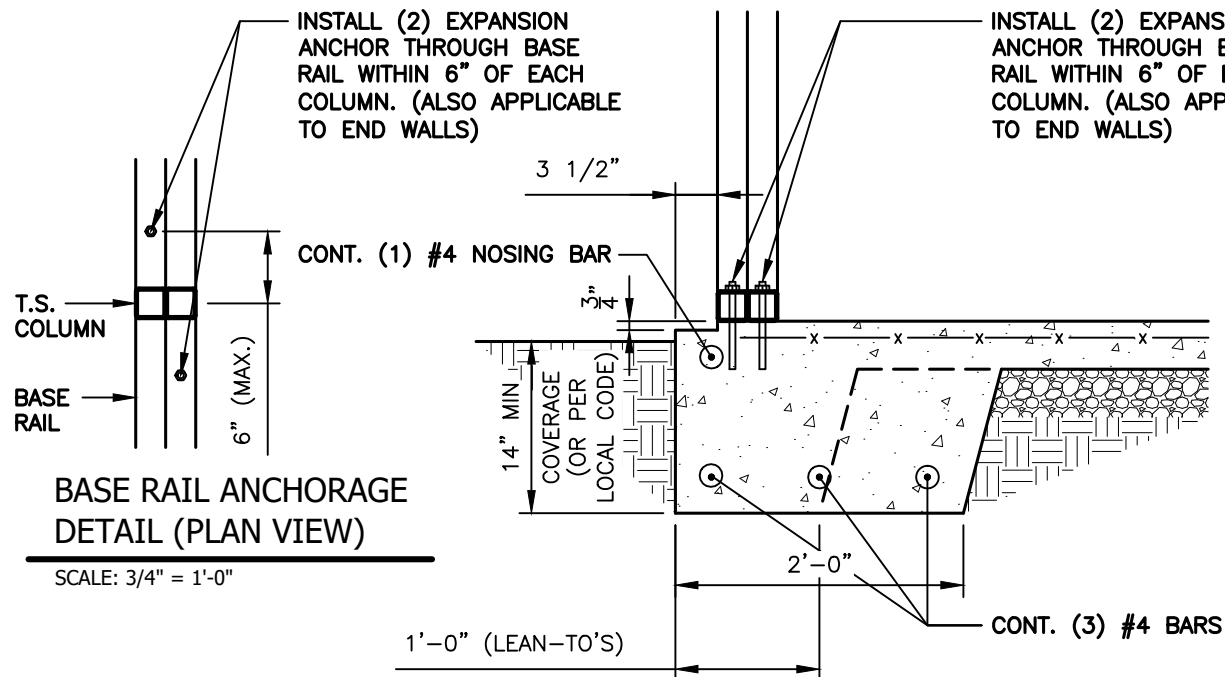
Date: 04/03/24  
Revisions:



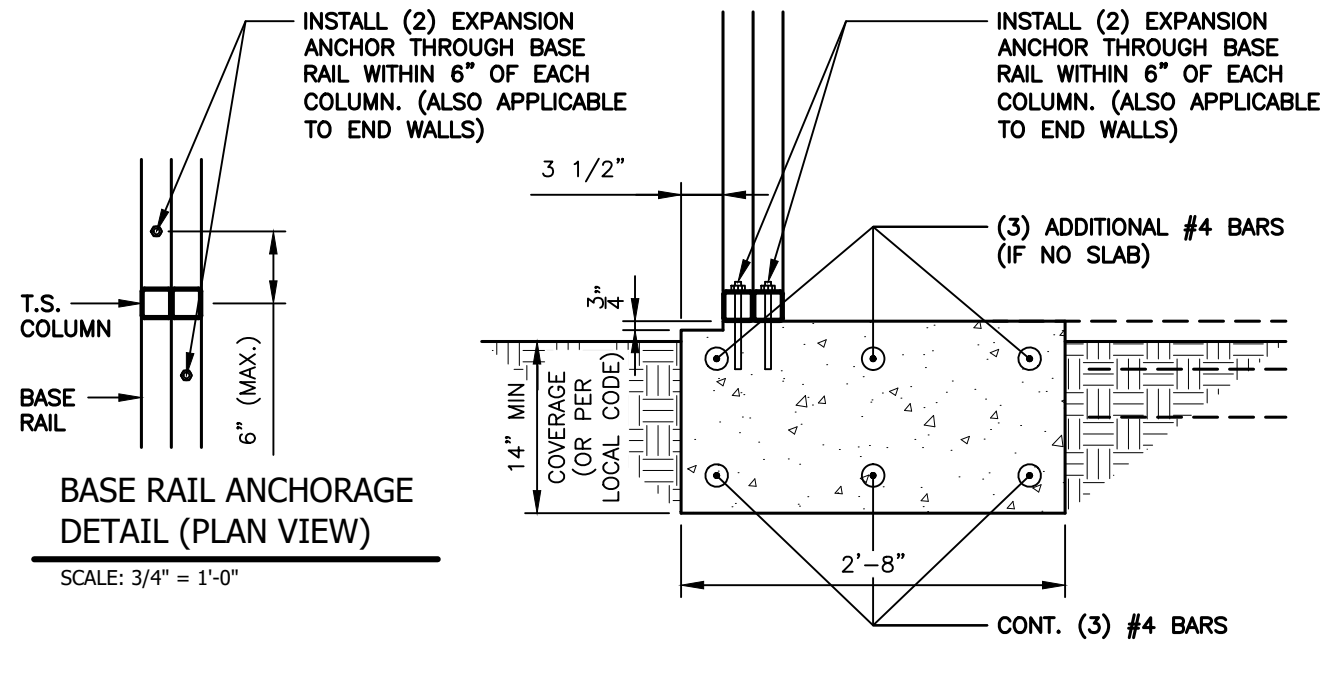
**TAYLOR & VIOLA**  
STRUCTURAL ENGINEERS  
P.O.B. 2616 HICKORY NORTH CAROLINA  
TELE: 828-328-6331 FAX: 828-322-1801  
WWW.TAYLORVIOLA.COM

**DOUBLE COLUMN OPTIONS**

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**1**  
**S5B** BASE RAIL ANCHORAGE DETAIL  
SCALE: 3/4" = 1'-0"



**1A**  
**S5B** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
SCALE: 3/4" = 1'-0"

**GENERAL NOTES:**

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 2,000 P.S.F.

**CONCRETE:**  
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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 AND WEATHER AND 1-1/2" ELSEWHERE.

**REINFORCING STEEL:**

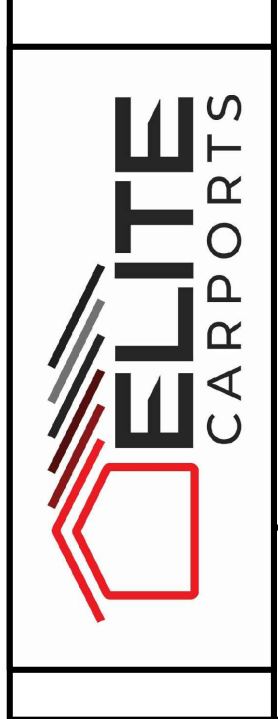
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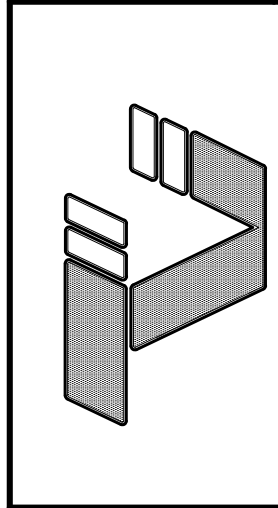
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW



Project No. 24-507  
Sheet No. S5B

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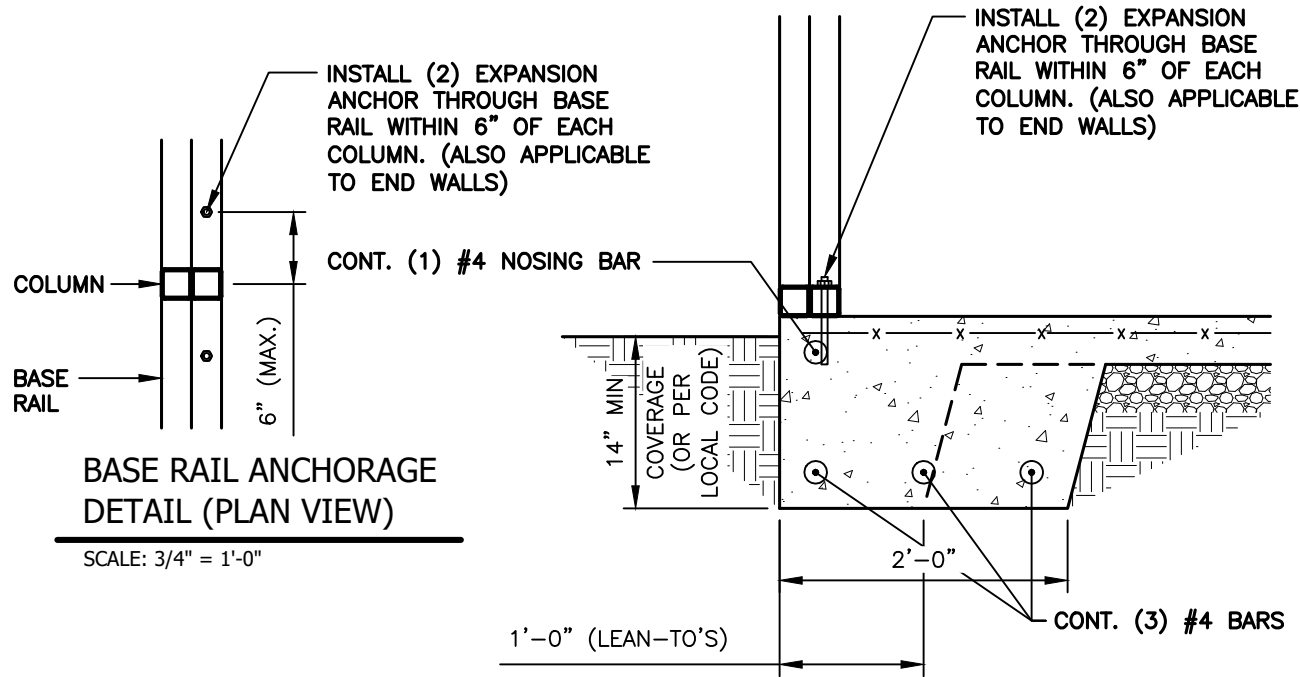
Date: 04/03/24  
Revisions:



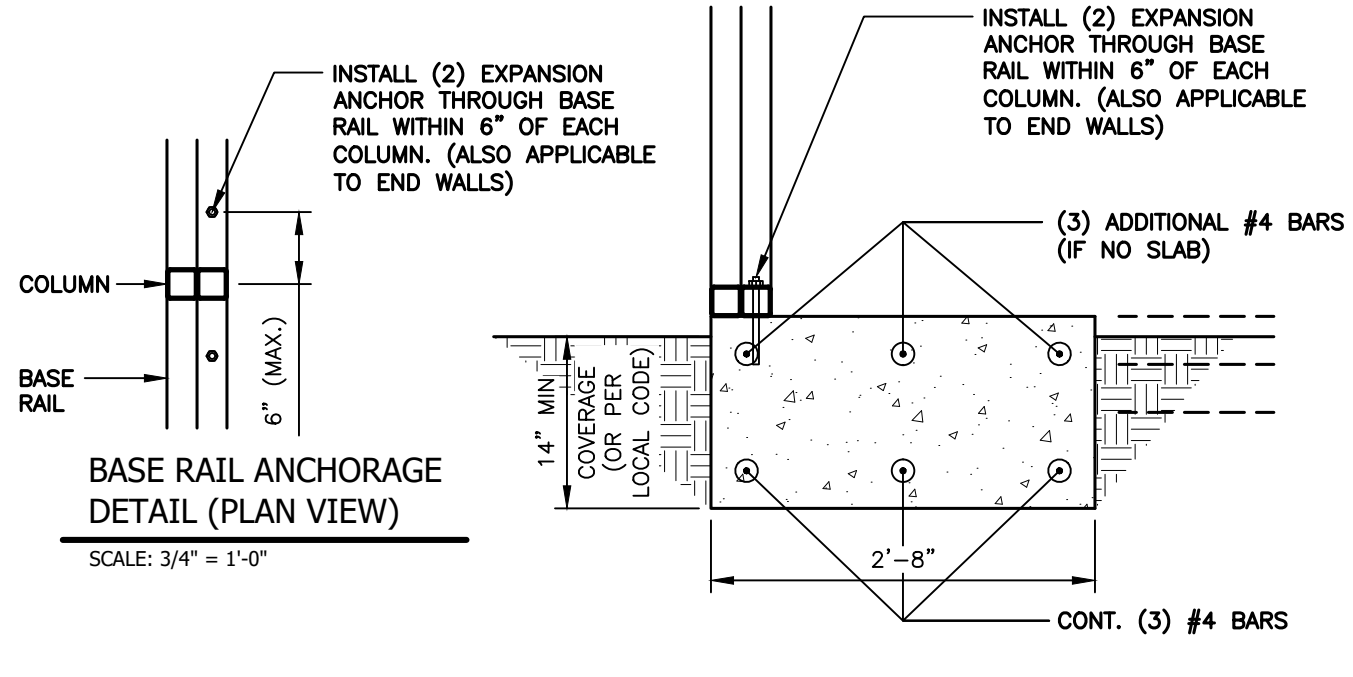
TAYLOR & VIOLA  
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WWW.TAYLORVIOLA.COM

**DOUBLE COLUMN OPTIONS - NO SIDING LEDGE**

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**1** BASE RAIL ANCHORAGE DETAIL  
S5C SCALE: 3/4" = 1'-0"



**1A** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
S5C SCALE: 3/4" = 1'-0"

**GENERAL NOTES:**

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**REINFORCING STEEL:**

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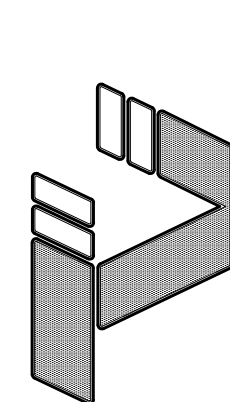


31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

**JCMT Associates, PLLC**

Project No. 24-507  
Sheet No. S5C

Date: 04/03/24  
Revisions:

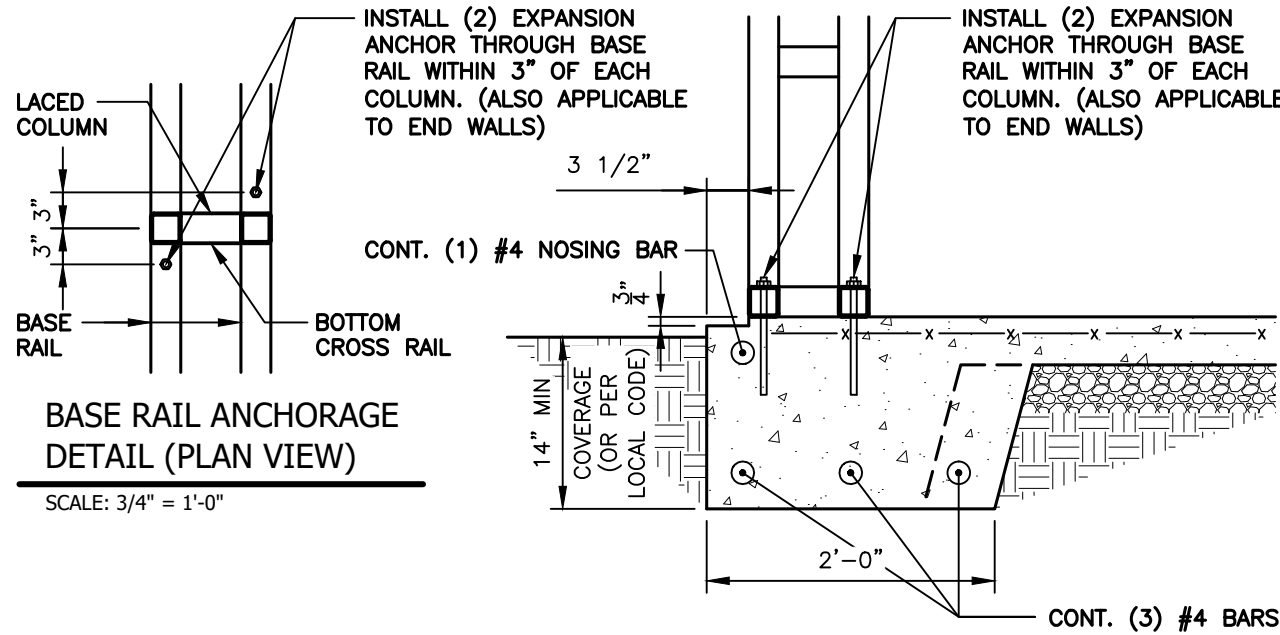


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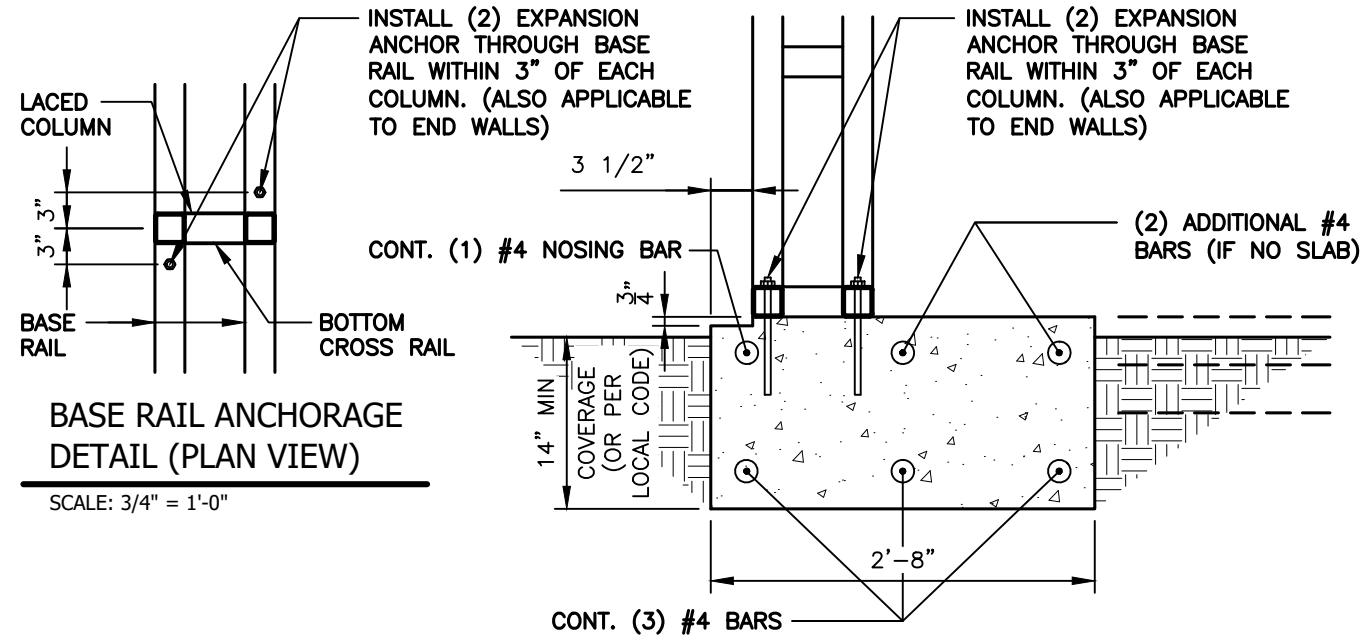
211 Stone Drive, Pilot Mountain, NC 27041  
Telephone: (336) 399-6277

**LACED COLUMN OPTIONS**

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
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UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**1** BASE RAIL ANCHORAGE DETAIL  
S5D SCALE: 3/4" = 1'-0"



**1A** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
S5D SCALE: 3/4" = 1'-0"

**GENERAL NOTES:**

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**REINFORCING STEEL:**

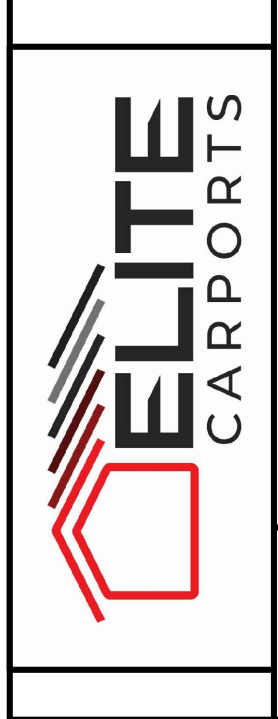
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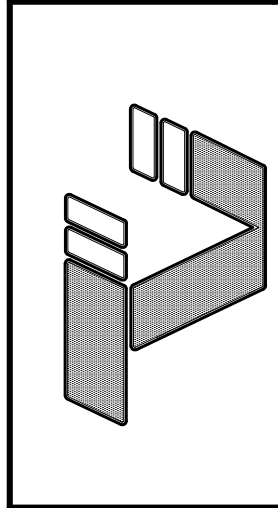
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW



Project No. 24-507  
Sheet No. S5D

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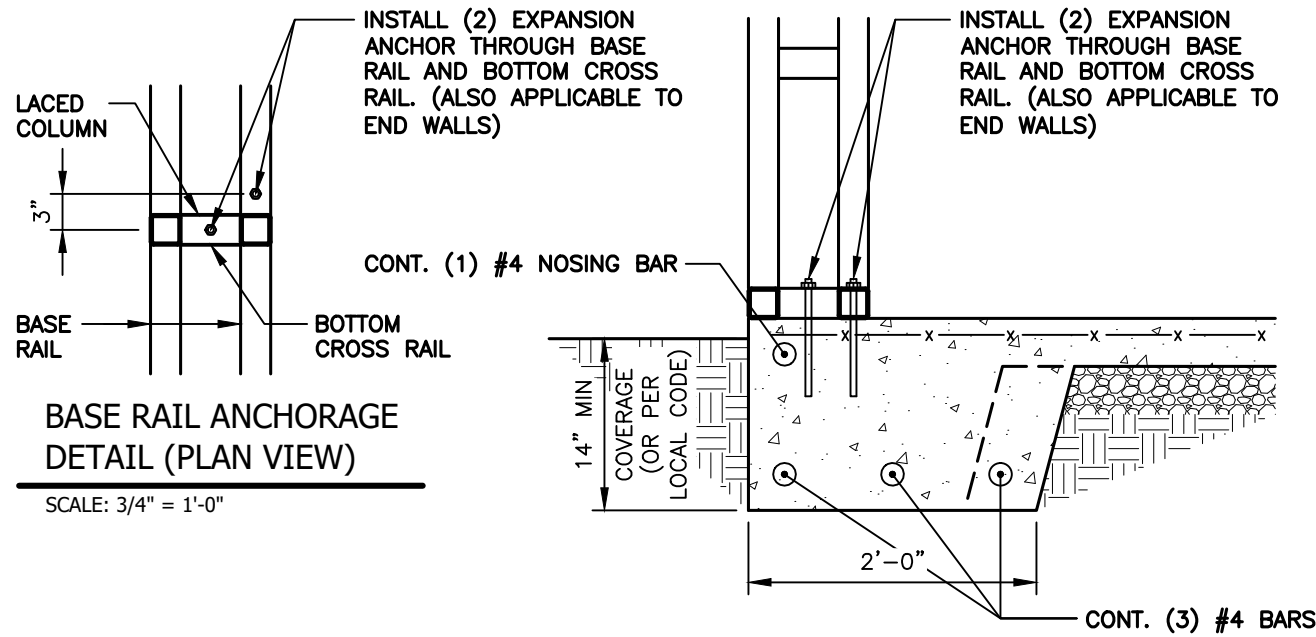
Date: 04/03/24  
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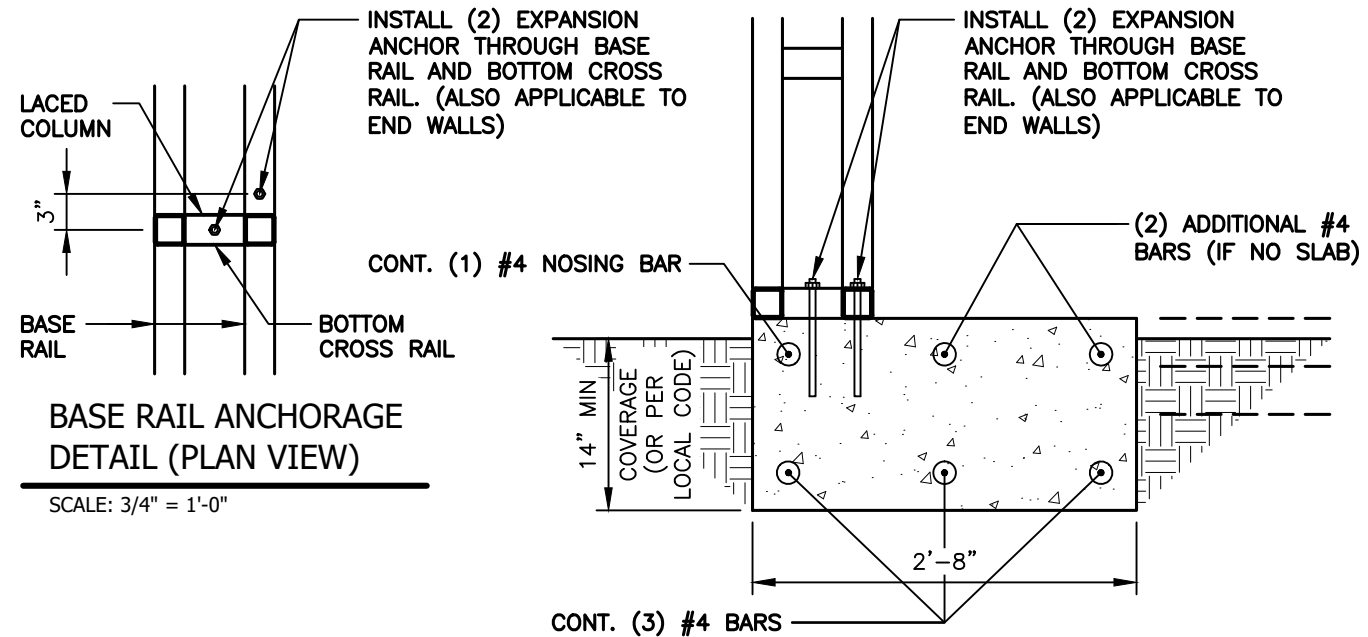
TAYLOR & VIOLA  
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WWW.TAYLORVIOLA.COM

LACED COLUMN OPTIONS (NO SIDING LEDGE)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
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**1** BASE RAIL ANCHORAGE DETAIL  
S5E SCALE: 3/4" = 1'-0"



**1A** BASE RAIL ANCHORAGE DETAIL (NO SLAB)  
S5E SCALE: 3/4" = 1'-0"

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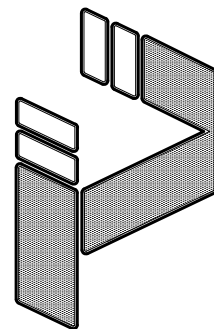
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Date: 04/03/24  
Revisions:



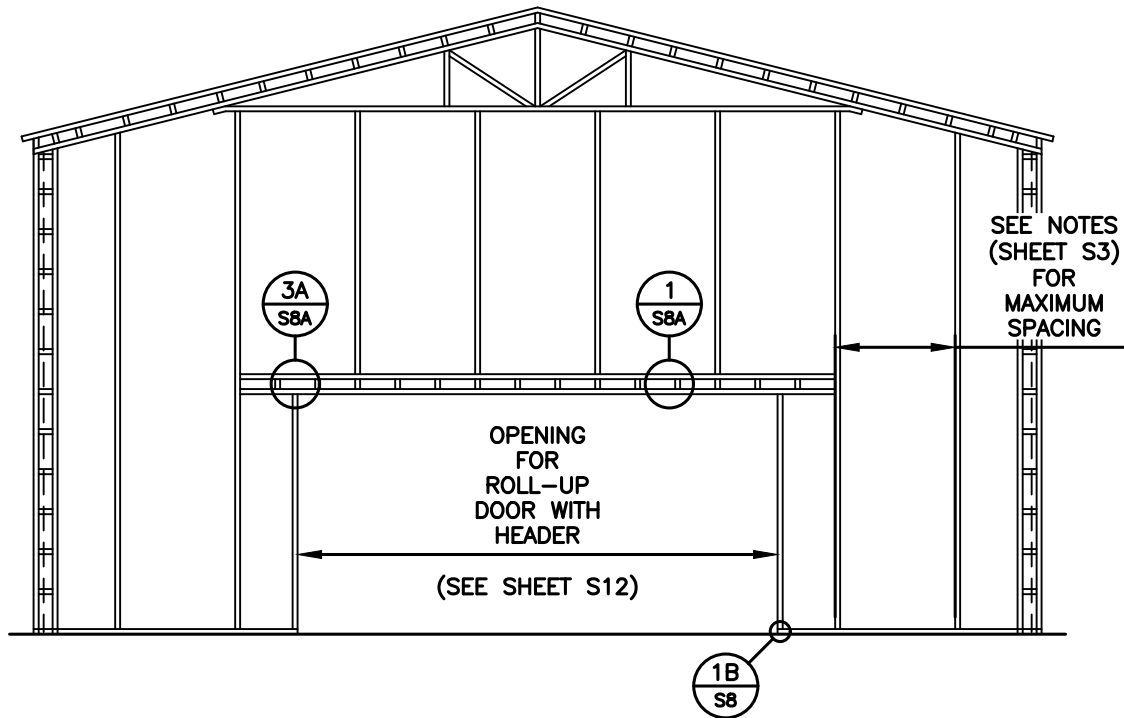
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TELE: 828-328-6331 FAX: 828-322-1801  
WWW.TAYLORVIOLA.COM

31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

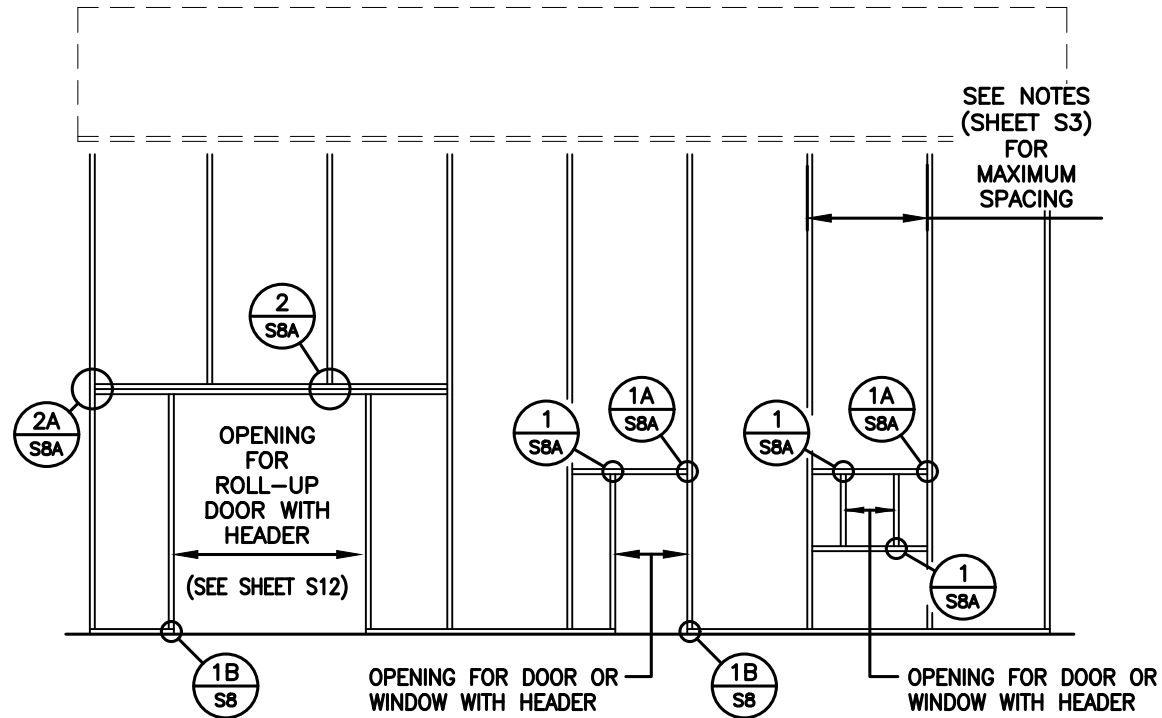
Project No. 24-507  
Sheet No. S5E

**TYPICAL SIDE / END WALL OPENING FRAMING SECTIONS**

NOTE:  
ROLL UP DOORS SHALL HAVE ONE JAMB  
EACH SIDE + ONE FRAME COLUMN BETWEEN  
OR SITE SPECIFIC SHALL BE REQ'D.

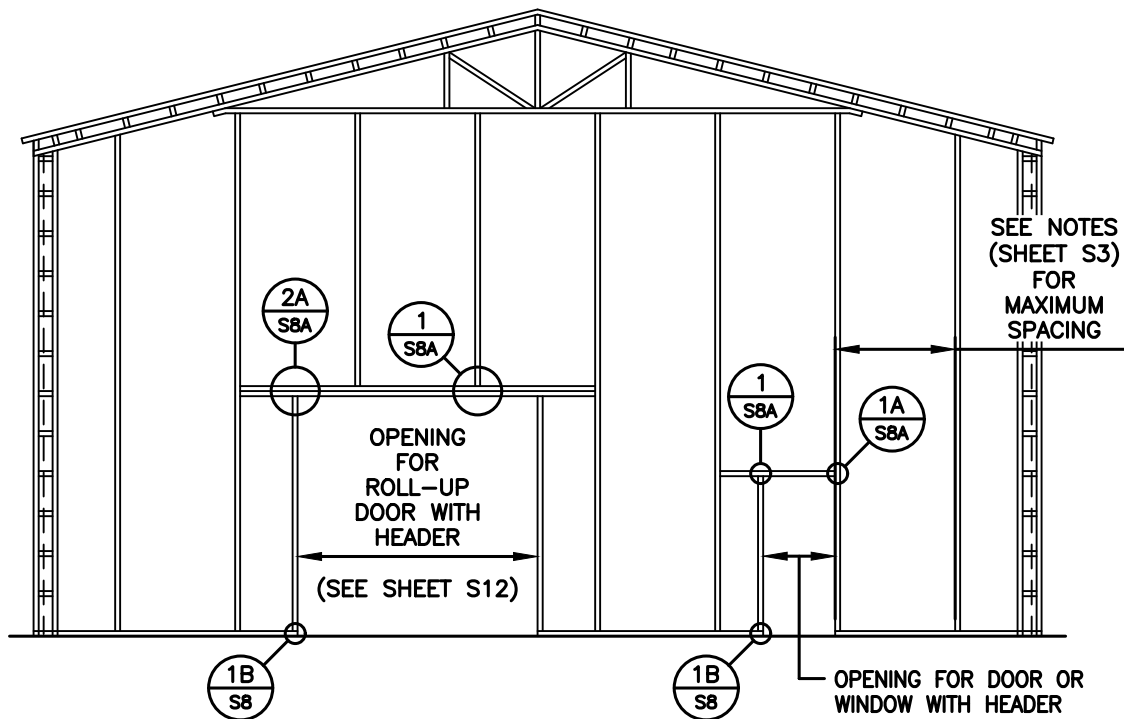


**TYPICAL END WALL FRAMING SECTION**

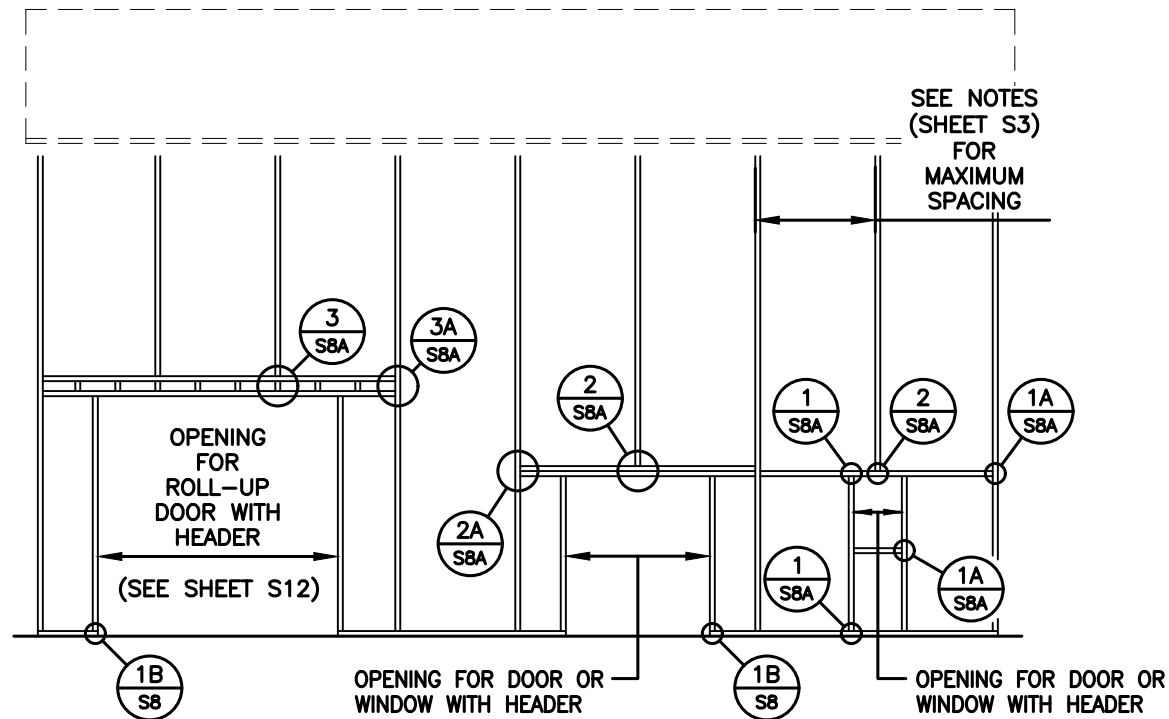


**TYPICAL SIDE WALL OPENING FRAMING SECTION**

NOTE:  
ROLL UP DOORS SHALL HAVE ONE JAMB  
EACH SIDE + ONE FRAME COLUMN BETWEEN  
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**TYPICAL END WALL FRAMING SECTION**



**TYPICAL SIDE WALL OPENING FRAMING SECTION**

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31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

Date:  
04/03/24

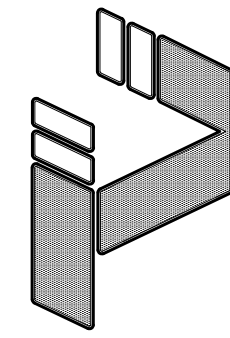
Project No.  
24-507

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Revisions:

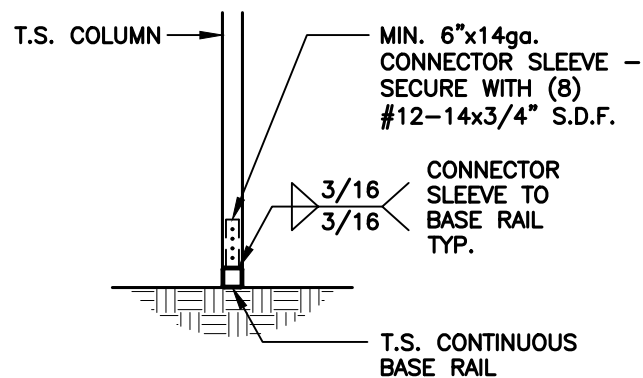
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S7



TAYLOR & VIOLA  
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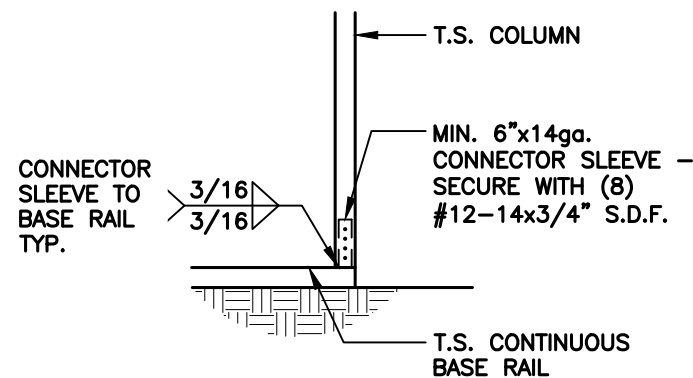


**BASE RAIL CONNECTION DETAILS**



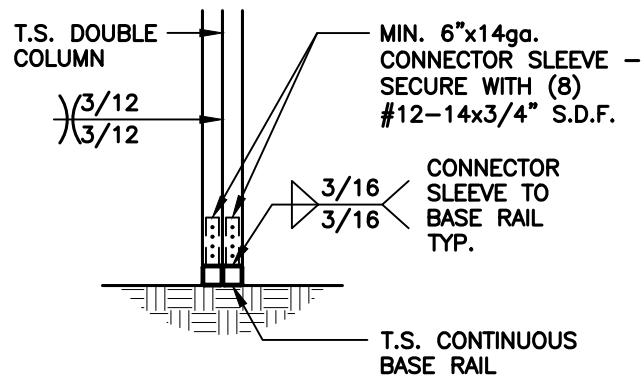
**1**  
COLUMN / BASE RAIL CONNECTION DETAIL

S8 SCALE: 1/2" = 1'-0"



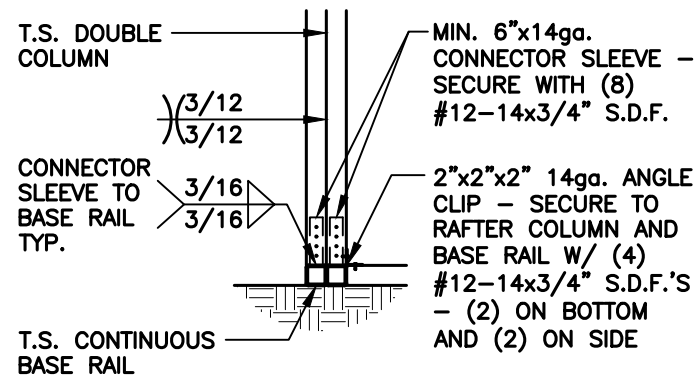
**1B**  
COLUMN / BASE RAIL CONNECTION DETAIL

S8 SCALE: 1/2" = 1'-0"



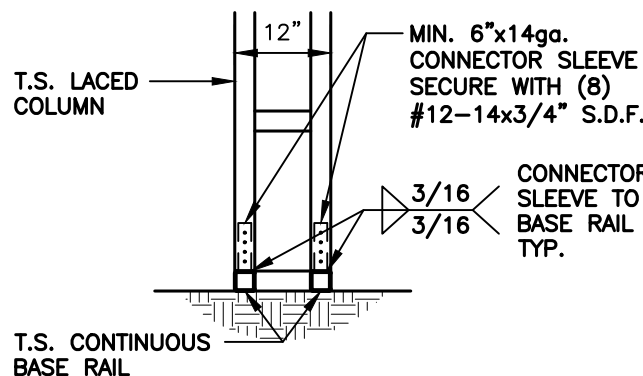
**2**  
COLUMN / BASE RAIL CONNECTION DETAIL

S8 SCALE: 1/2" = 1'-0"



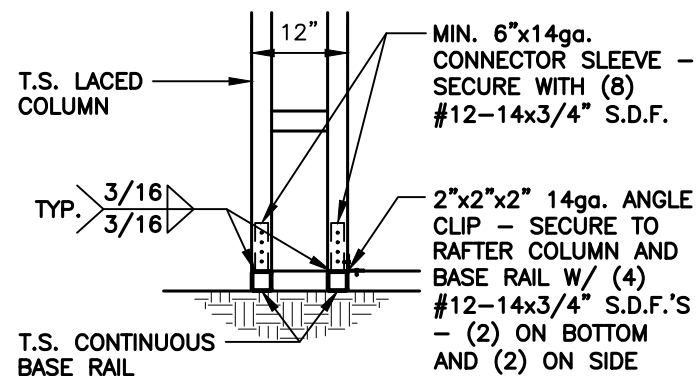
**2A**  
END COLUMN / BASE RAIL CONNECTION DETAIL

S8 SCALE: 1/2" = 1'-0"



**3**  
COLUMN / BASE RAIL CONNECTION DETAIL

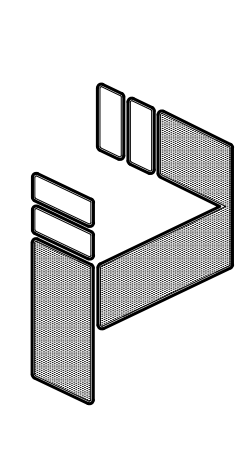
S8 SCALE: 1/2" = 1'-0"



**3A**  
END COLUMN / BASE RAIL CONNECTION DETAIL

S8 SCALE: 1/2" = 1'-0"

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31' - 50' WIDTH  
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145 WIND ZONE  
35 P.S.F. SNOW

**JCMT Associates, PLLC**

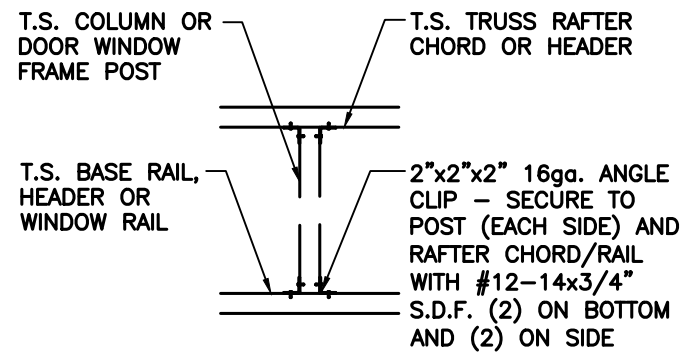
Date: 04/03/24  
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Project No. 24-507  
Sheet No. S8

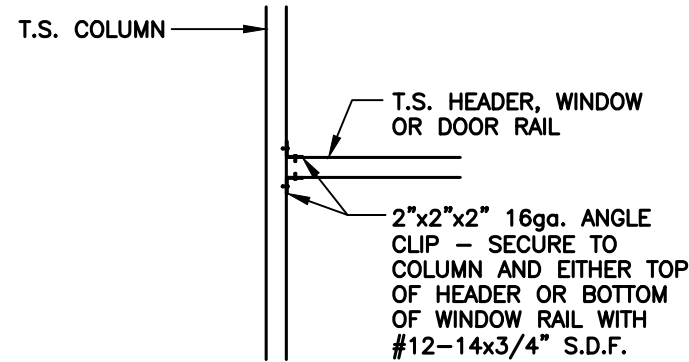
211 Stone Drive, Pilot Mountain, NC 27041  
Telephone: (336) 399-6277

**CONNECTION DETAILS**



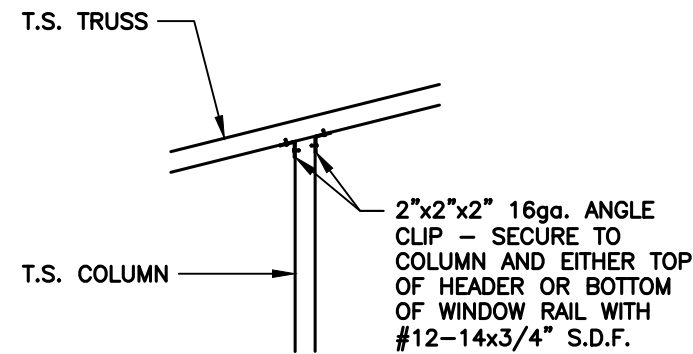
**1**  
SBA POST TO TRUSS / HEADER CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



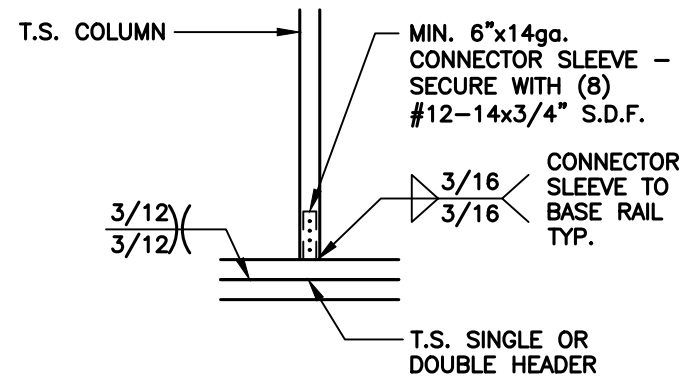
**1A**  
SBA HEADER RAIL TO POST CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



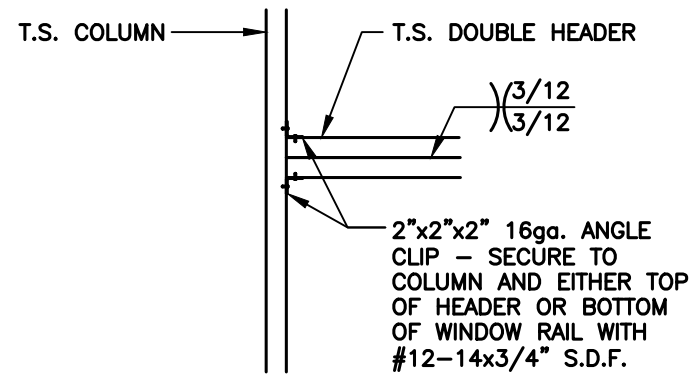
**1B**  
SBA POST TO TRUSS CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



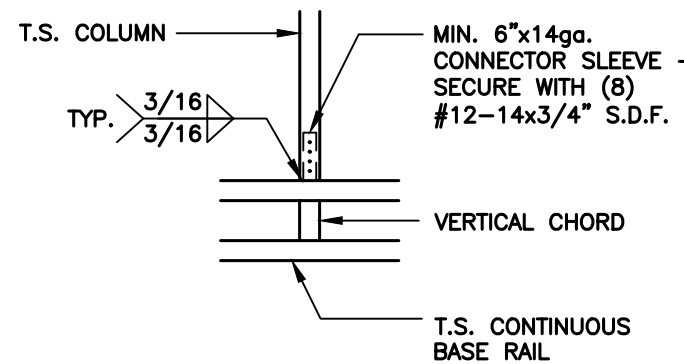
**2**  
SBA POST TO DOUBLE HEADER CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



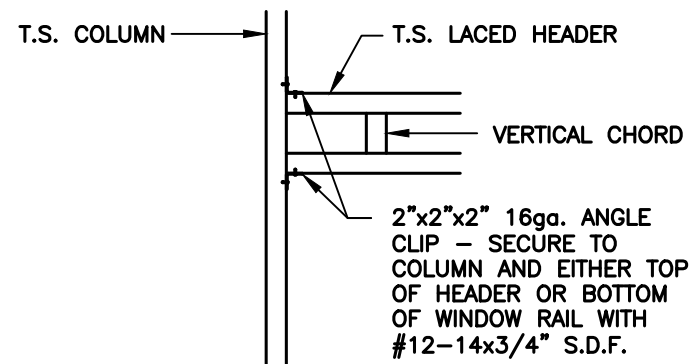
**2A**  
SBA DOUBLE HEADER TO POST CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



**3**  
SBA POST TO LACED HEADER CONNECTION DETAIL

SCALE: 1/2" = 1'-0"



**3A**  
SBA LACED HEADER TO POST CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



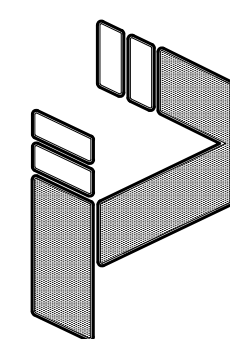
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

**JCMT Associates, PLLC**

Project No. 24-507  
Sheet No. S8A

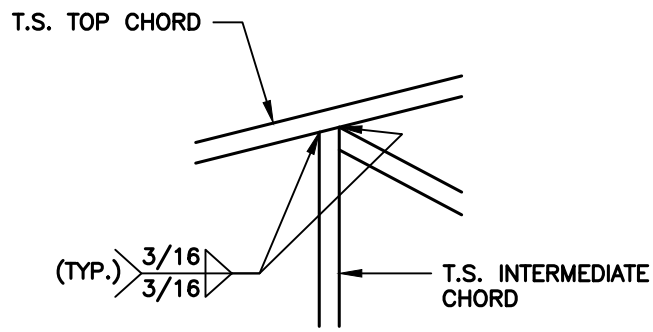
211 Stone Drive, Pilot Mountain, NC 27041  
Telephone: (336) 399-6277

Date: 04/03/24  
Revisions:

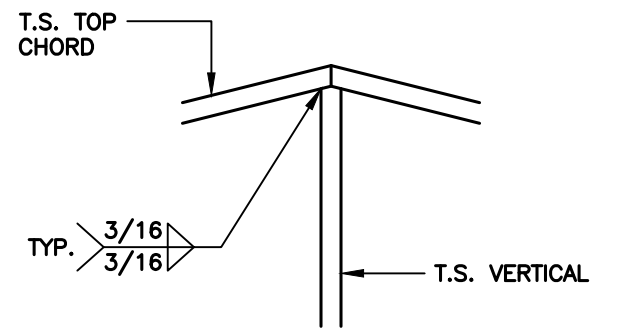


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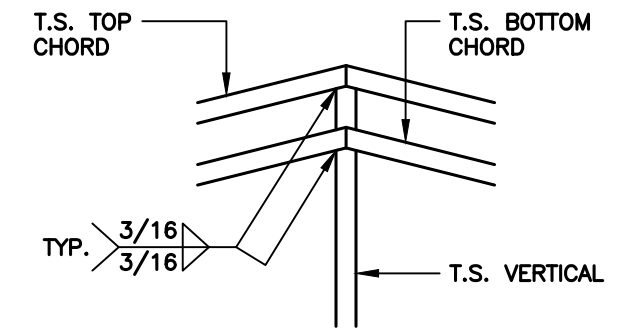
**TRUSS CONNECTION DETAILS**



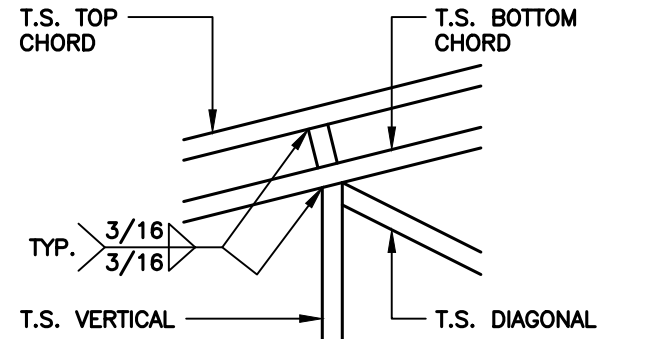
**1**  
**S8B** INTERMEDIATE CHORD / TOP CHORD CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



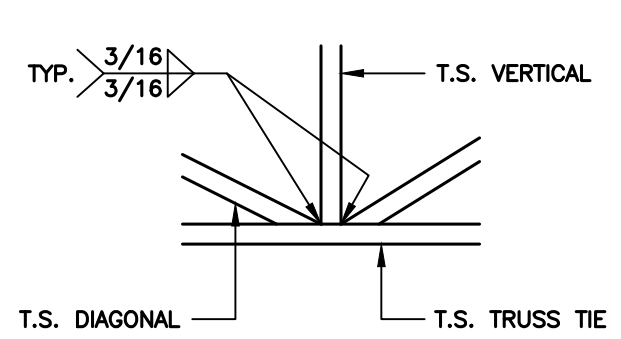
**2**  
**S8B** CENTER POST / TRUSS CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



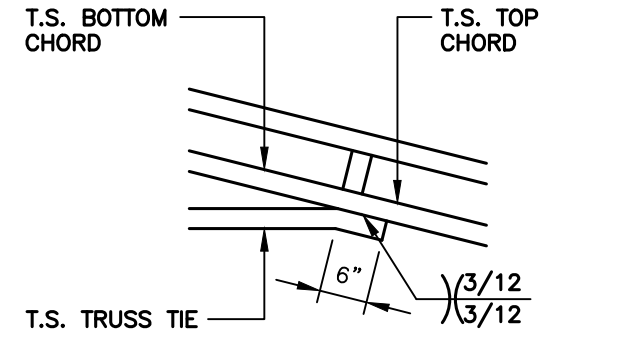
**3**  
**S8B** CENTER POST / TRUSS CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



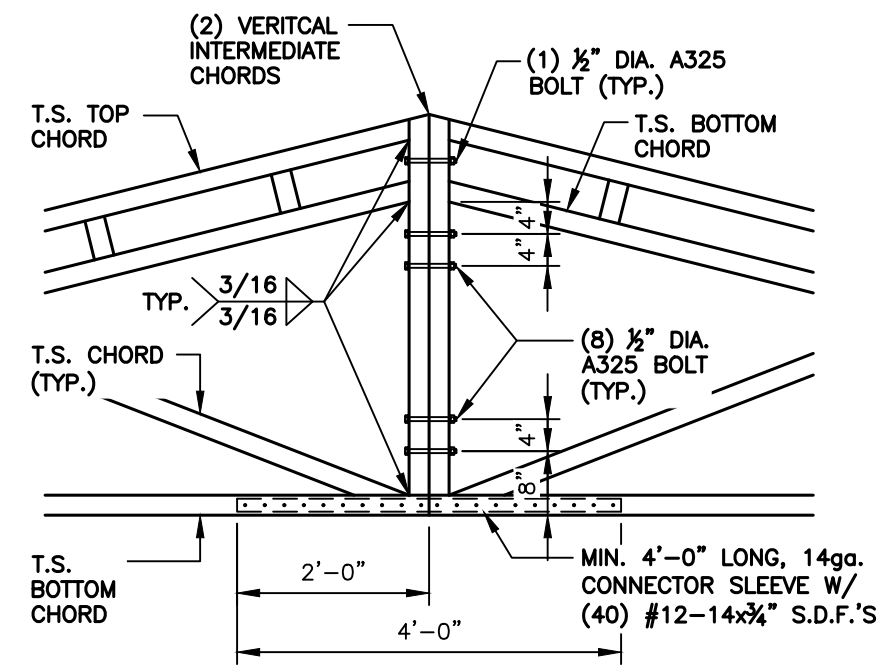
**4**  
**S8B** VERTICAL / DIAGONAL / TRUSS CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



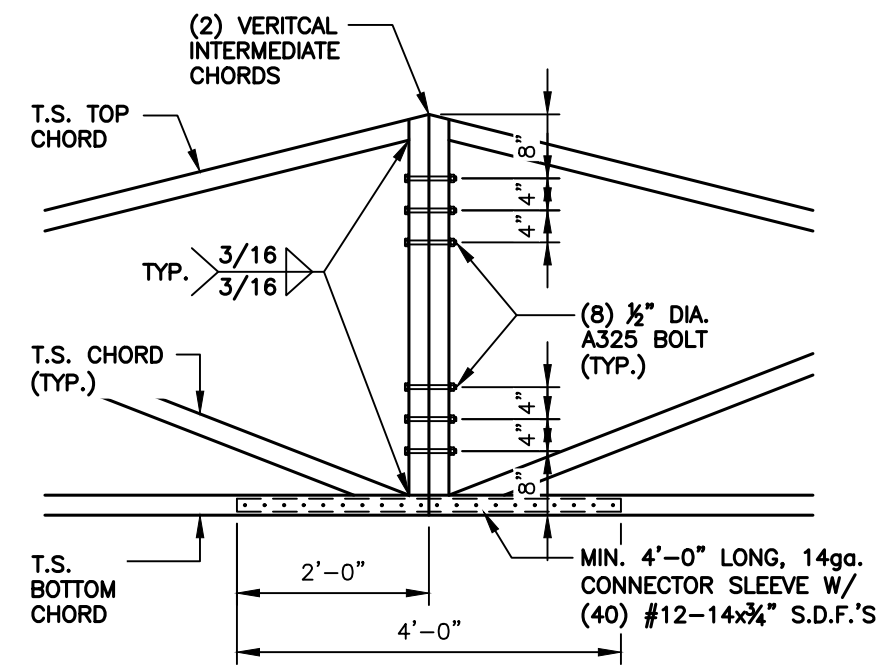
**5**  
**S8B** CENTER POST / TRUSS TIE CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



**6**  
**S8B** TRUSS TIE / TRUSS CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



**7**  
**S8B** SPLICE CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"



**8**  
**S8B** SPLICE CONNECTION DETAIL  
SCALE: 1/2" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



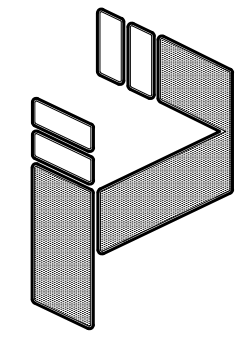
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

**JCMT Associates, PLLC**

Project No. 24-507  
Sheet No. S8B

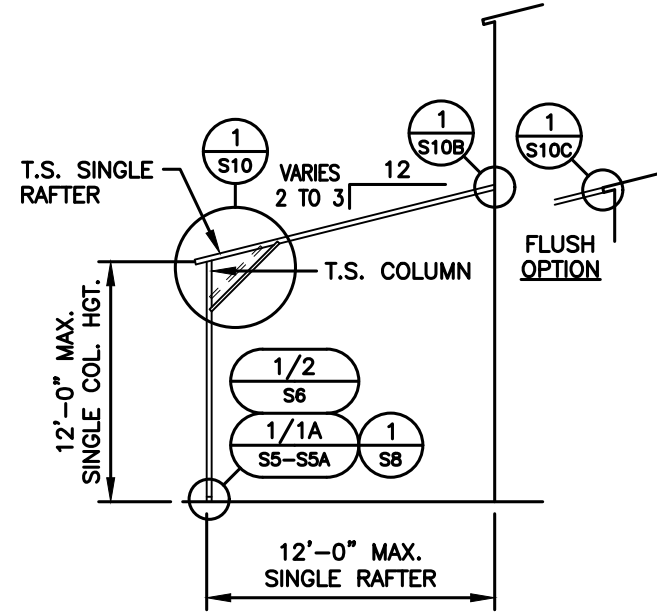
Date: 04/03/24  
Revisions:

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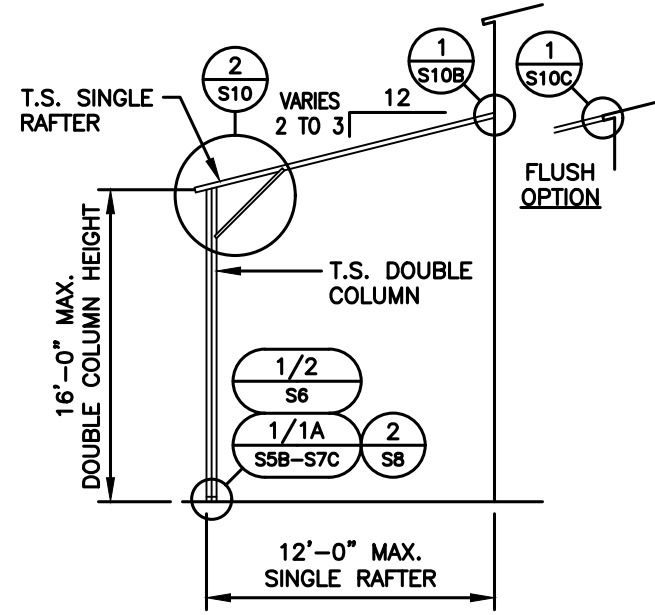


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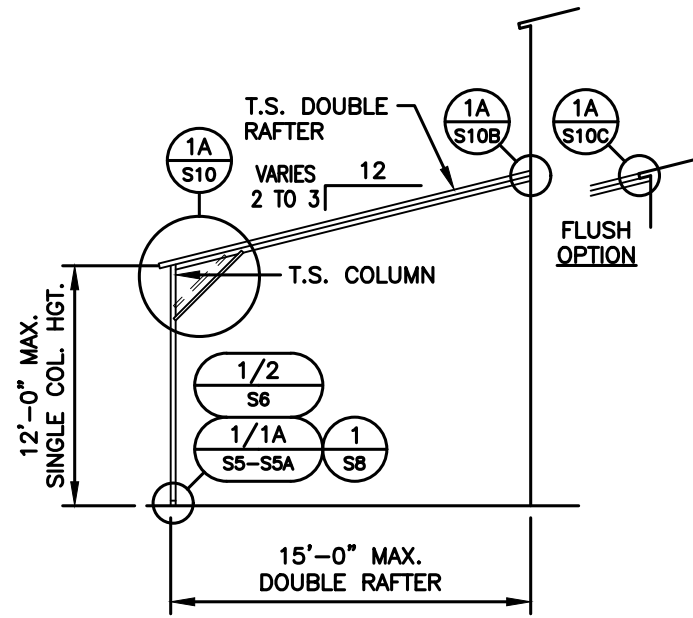
LEAN-TO FRAMING OPTIONS



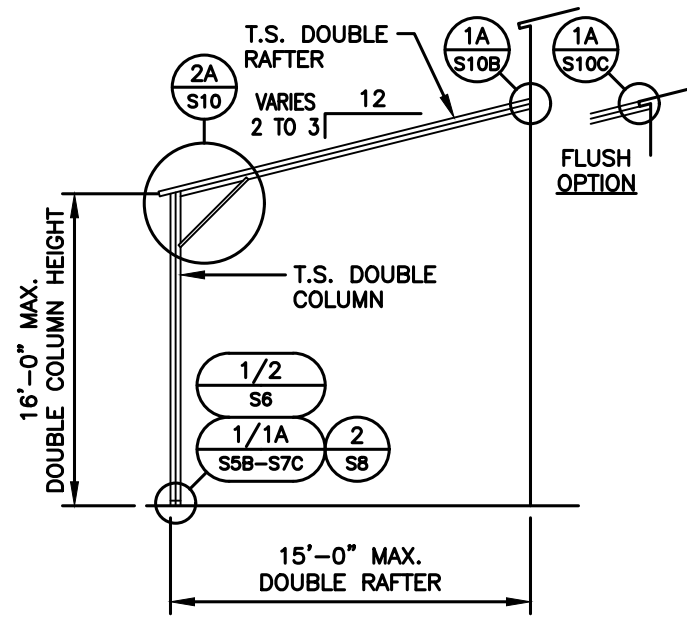
SINGLE RAFTER / SINGLE COLUMN  
LEAN-TO FRAMING SECTION



SINGLE RAFTER / DOUBLE COLUMN  
LEAN-TO FRAMING SECTION



DOUBLE RAFTER / SINGLE COLUMN  
LEAN-TO FRAMING SECTION



DOUBLE RAFTER / DOUBLE COLUMN  
LEAN-TO FRAMING SECTION

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

Project No.  
24-507

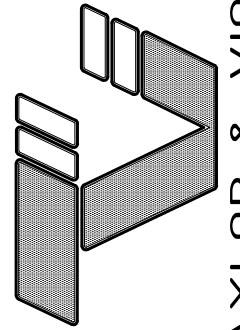
Sheet No.  
S9

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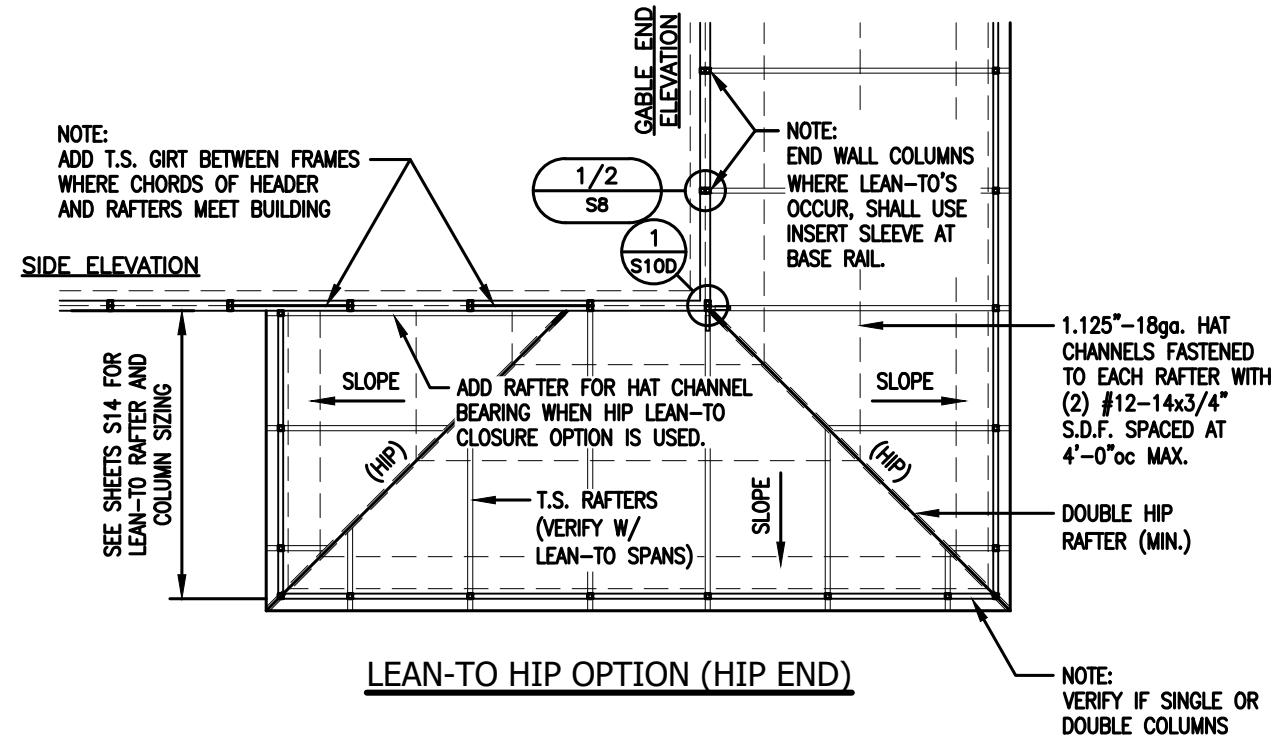
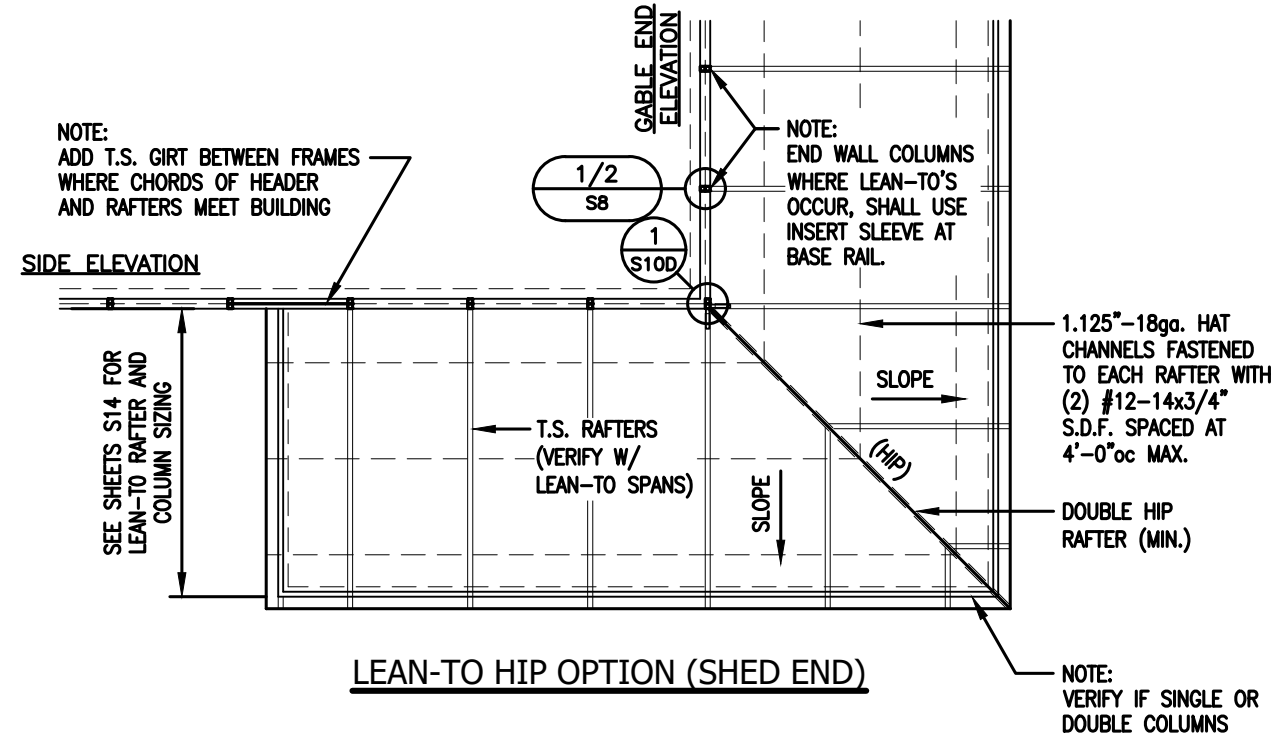
Date:  
04/03/24

Revisions:  
-



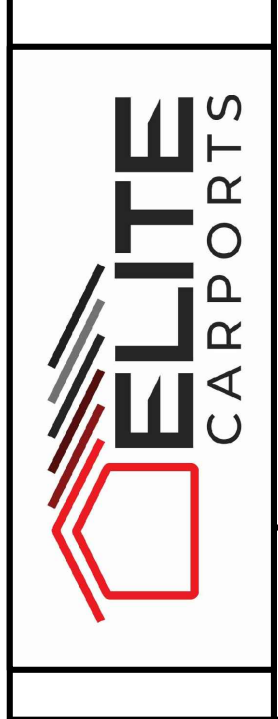
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**LEAN-TO HIP FRAMING OPTIONS**



NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW



Project No.  
24-507

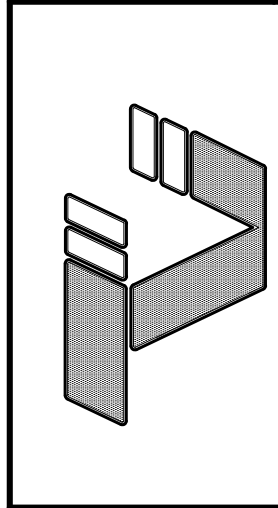
Sheet No.  
S9A

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Date:  
04/03/24

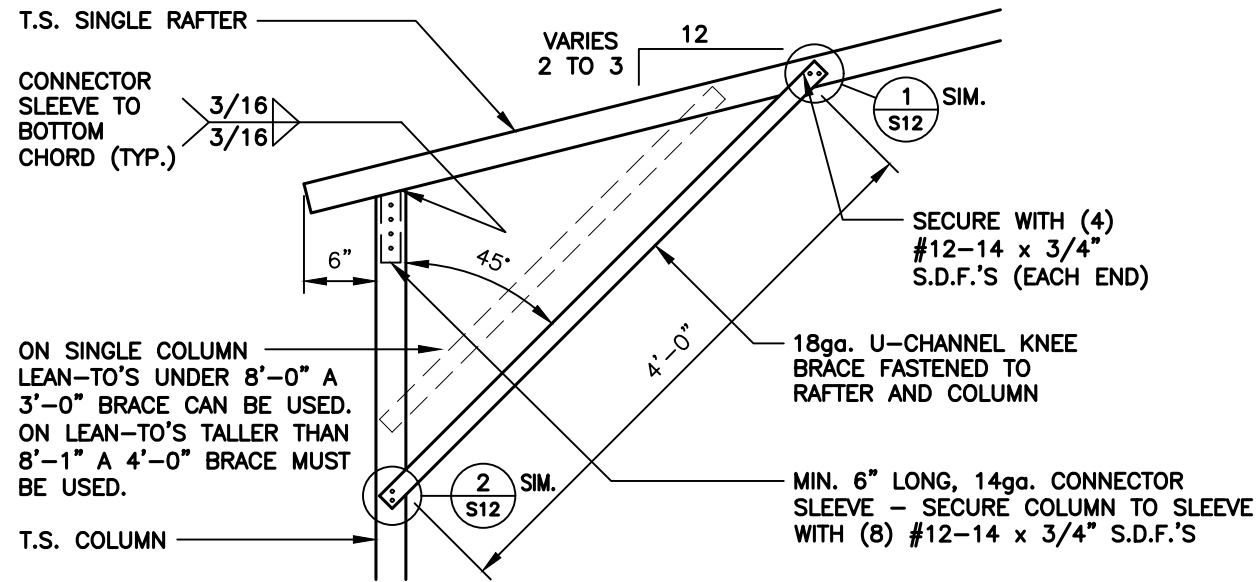
Revisions:  
-



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NORTH CAROLINA

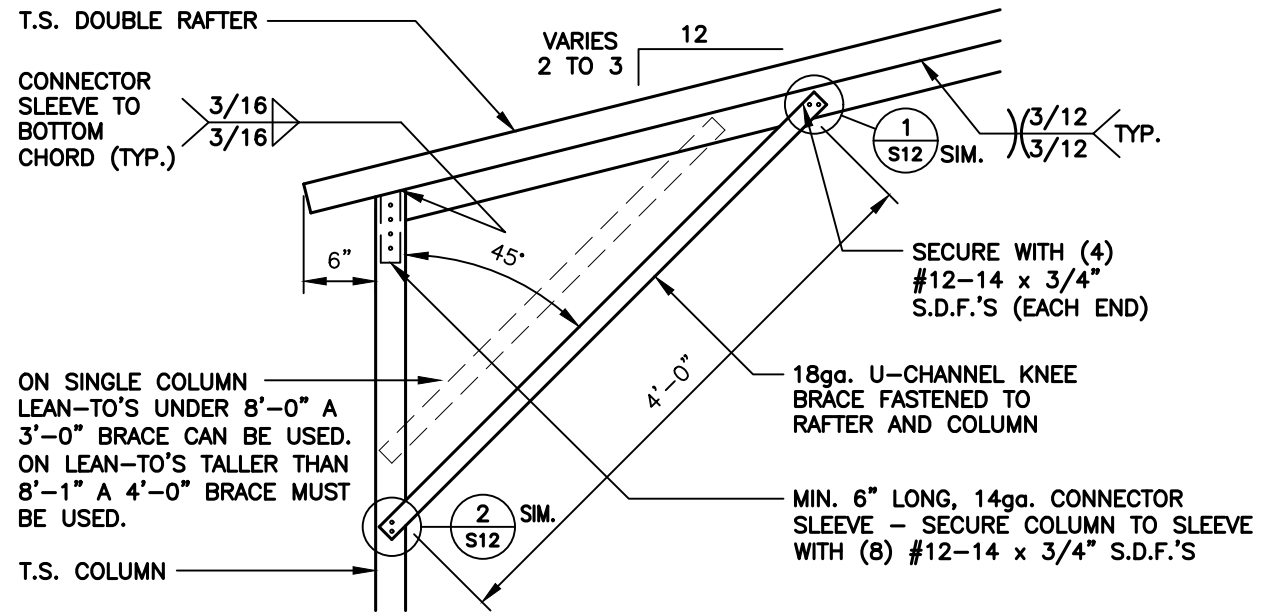
P.O.B. 2616 HICKORY  
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LEAN-TO FRAMING OPTIONS



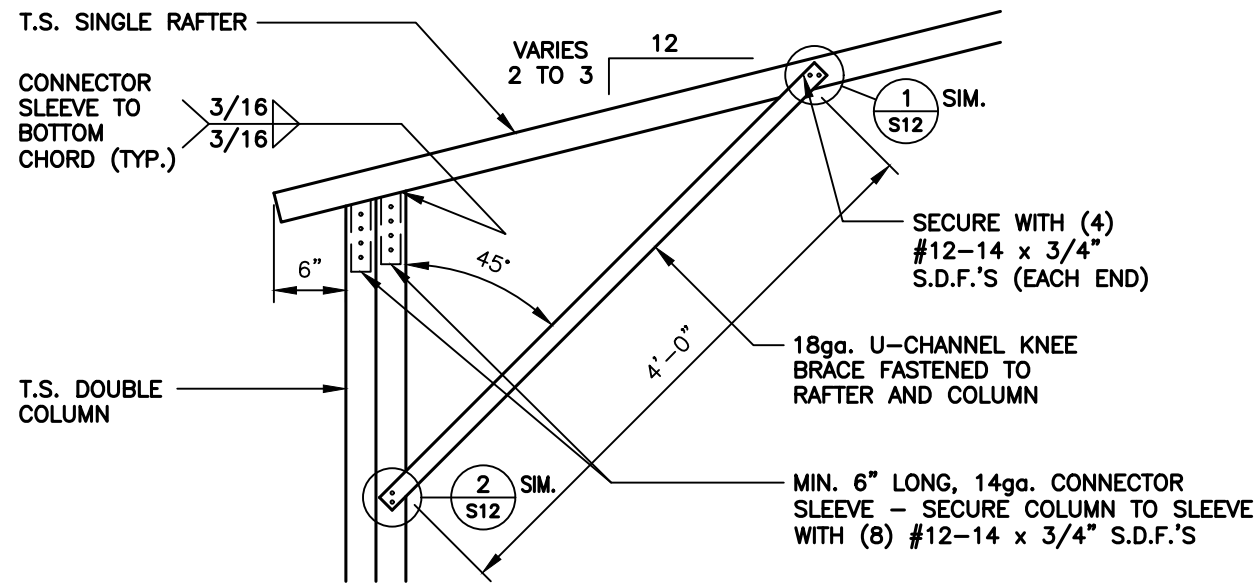
1 LEAN-TO SINGLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

S10 SCALE: 3/4" = 1'-0"



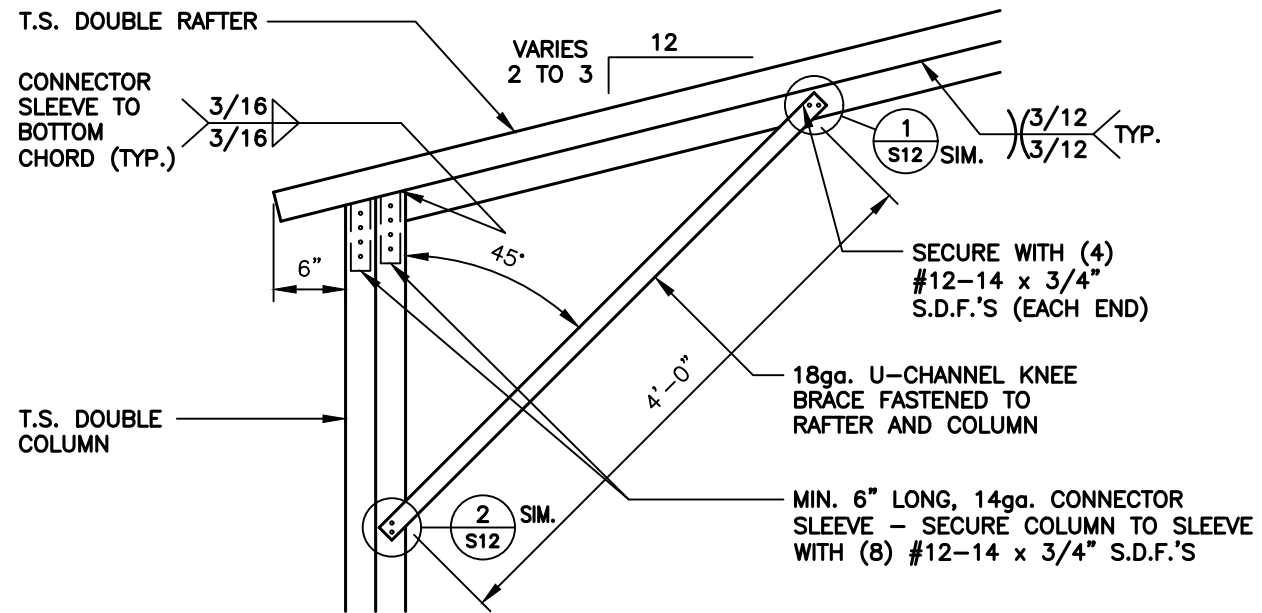
1A LEAN-TO DOUBLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

S10 SCALE: 3/4" = 1'-0"



2 LEAN-TO SINGLE RAFTER / DOUBLE COLUMN CONNECTION DETAIL

S10 SCALE: 3/4" = 1'-0"



2A LEAN-TO DOUBLE RAFTER / DOUBLE COLUMN CONNECTION DETAIL

S10 SCALE: 3/4" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



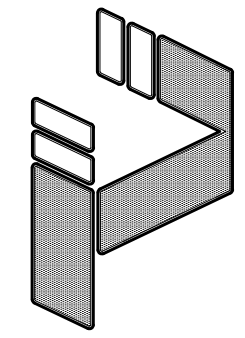
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

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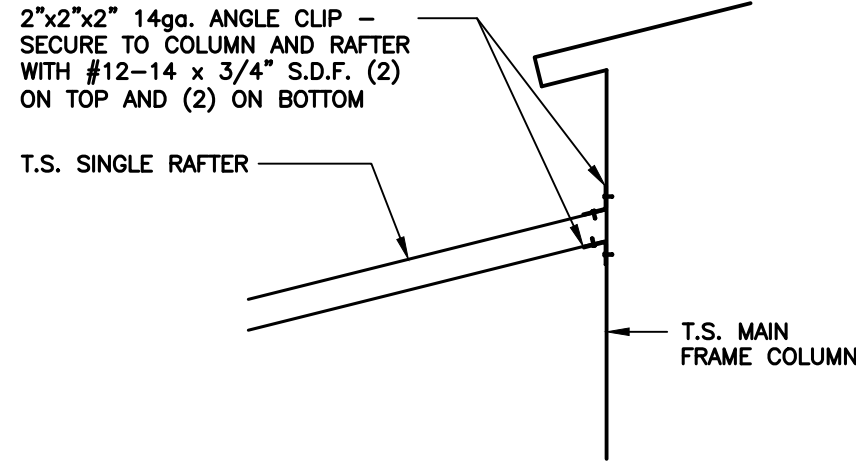
Project No. 24-507  
Sheet No. S10

Date: 04/03/24  
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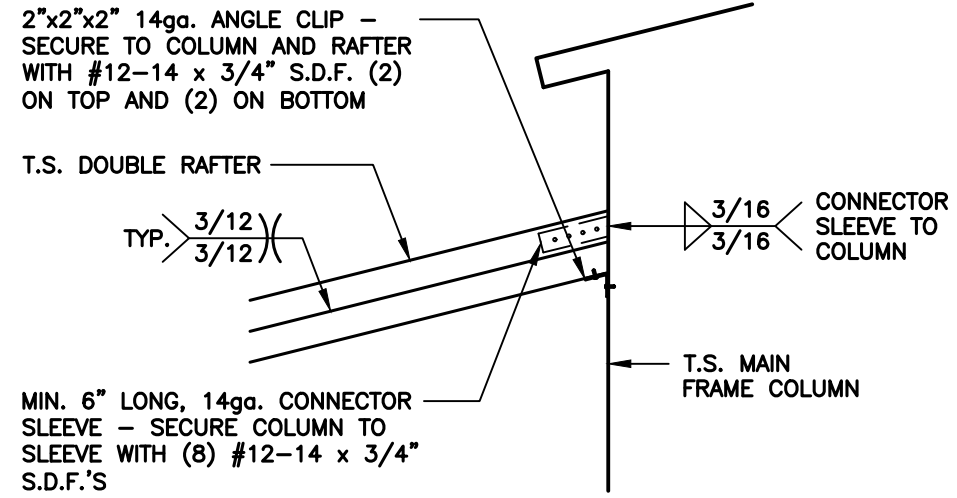
LEAN-TO FRAMING OPTIONS



LEAN-TO SINGLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1  
S10B

SCALE: 3/4" = 1'-0"



LEAN-TO DOUBLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1A  
S10B

SCALE: 3/4" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



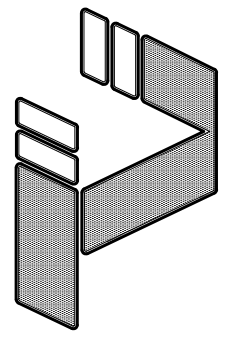
31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

Project No.  
24-507  
Sheet No.  
S10B

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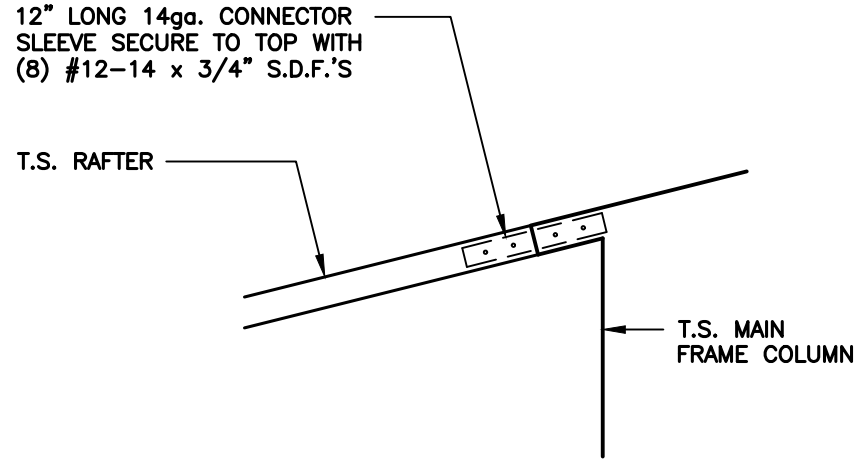
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Date:  
04/03/24  
Revisions:  
-



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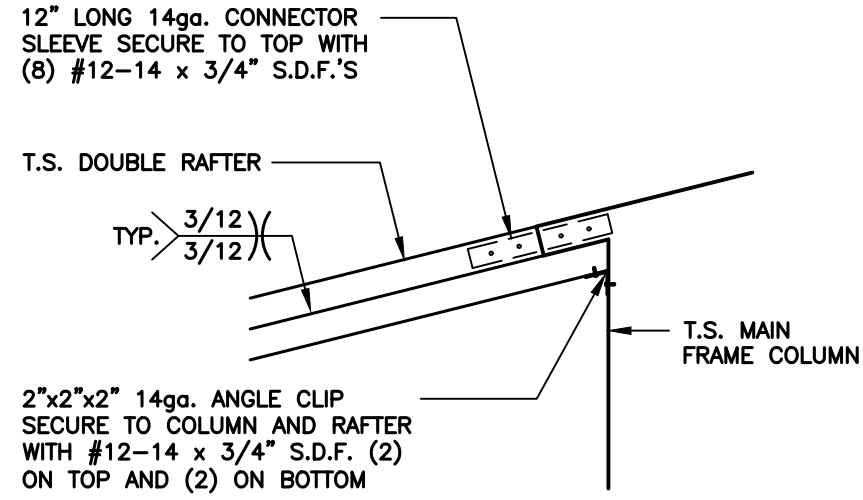
LEAN-TO FRAMING OPTIONS



1  
S10C

LEAN-TO SINGLE RAFTER / BUILDING FRAME  
(FLUSH) CONNECTION DETAIL

SCALE: 3/4" = 1'-0"


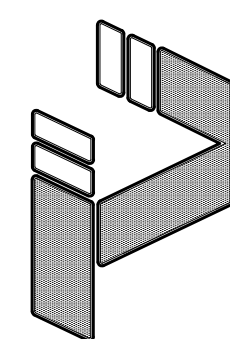


1A  
S10C

LEAN-TO SINGLE RAFTER / BUILDING FRAME  
(FLUSH) CONNECTION DETAIL

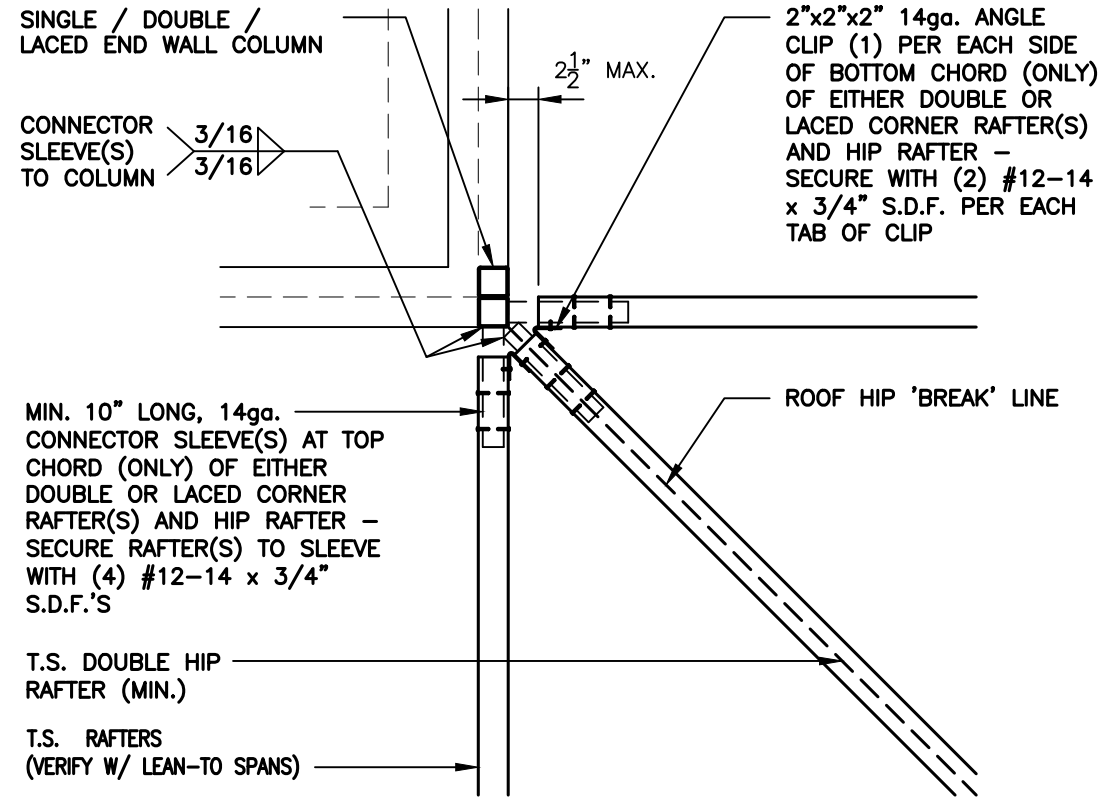
SCALE: 3/4" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

	31' - 50' WIDTH 20'-0" EAVE HEIGHT 145 WIND ZONE 35 P.S.F. SNOW	Project No. 24-507
	JCMT Associates, PLLC 211 Stone Drive, Pilot Mountain, NC 27041 Telephone: (336) 399-6277	Sheet No. S10C
	TAYLOR & VIOLA STRUCTURAL ENGINEERS P.O.B. 2616 HICKORY NORTH CAROLINA TELE: 828-328-6331 FAX: 828-322-1801 WWW.TAYLORVIOLA.COM	Date: 04/03/24
		Revisions: -



LEAN-TO FRAMING OPTIONS

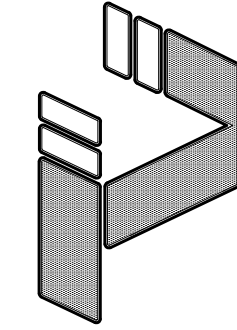


1  
S10D

END WALL COLUMN / HIP RAFTER  
CONNECTION DETAIL

SCALE: 3/4" = 1'-0"

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



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04/03/24  
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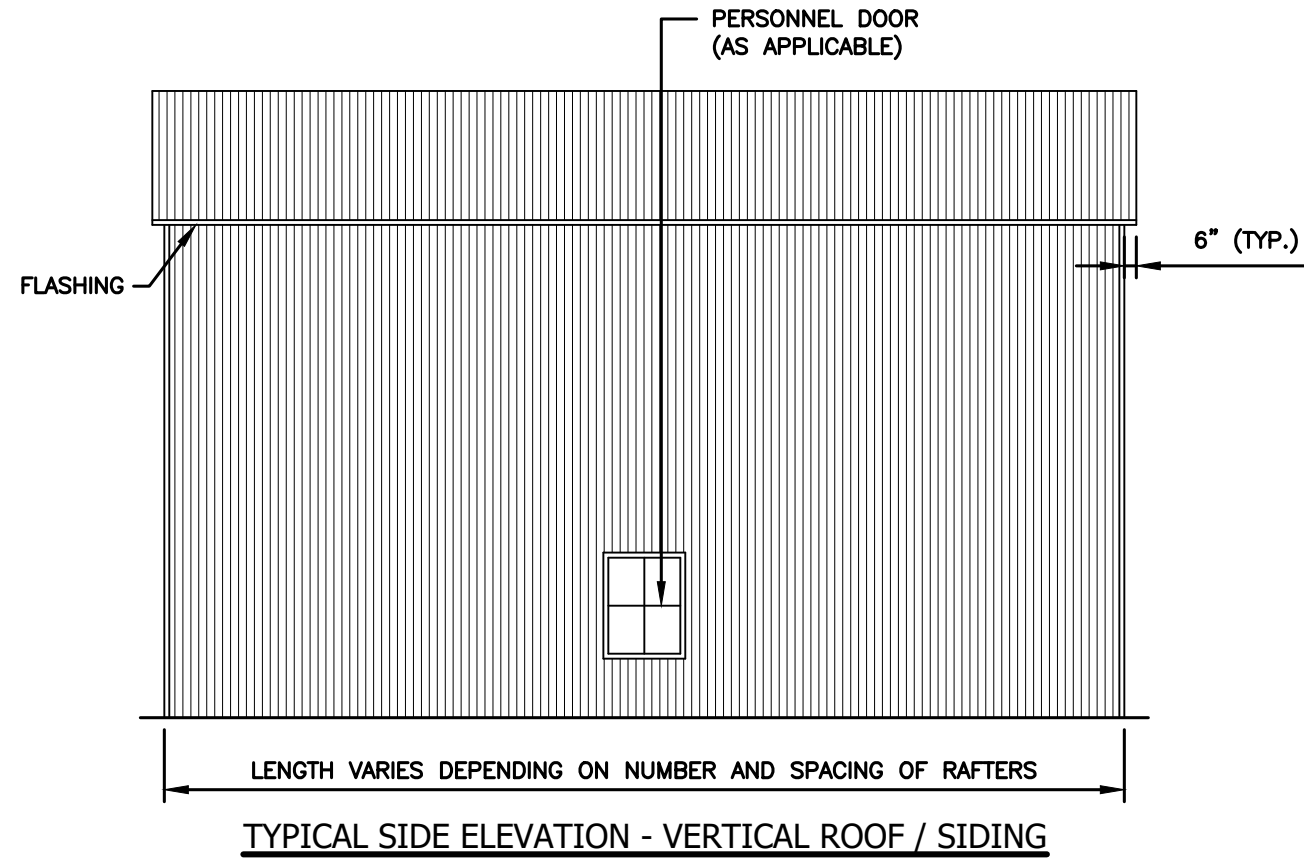
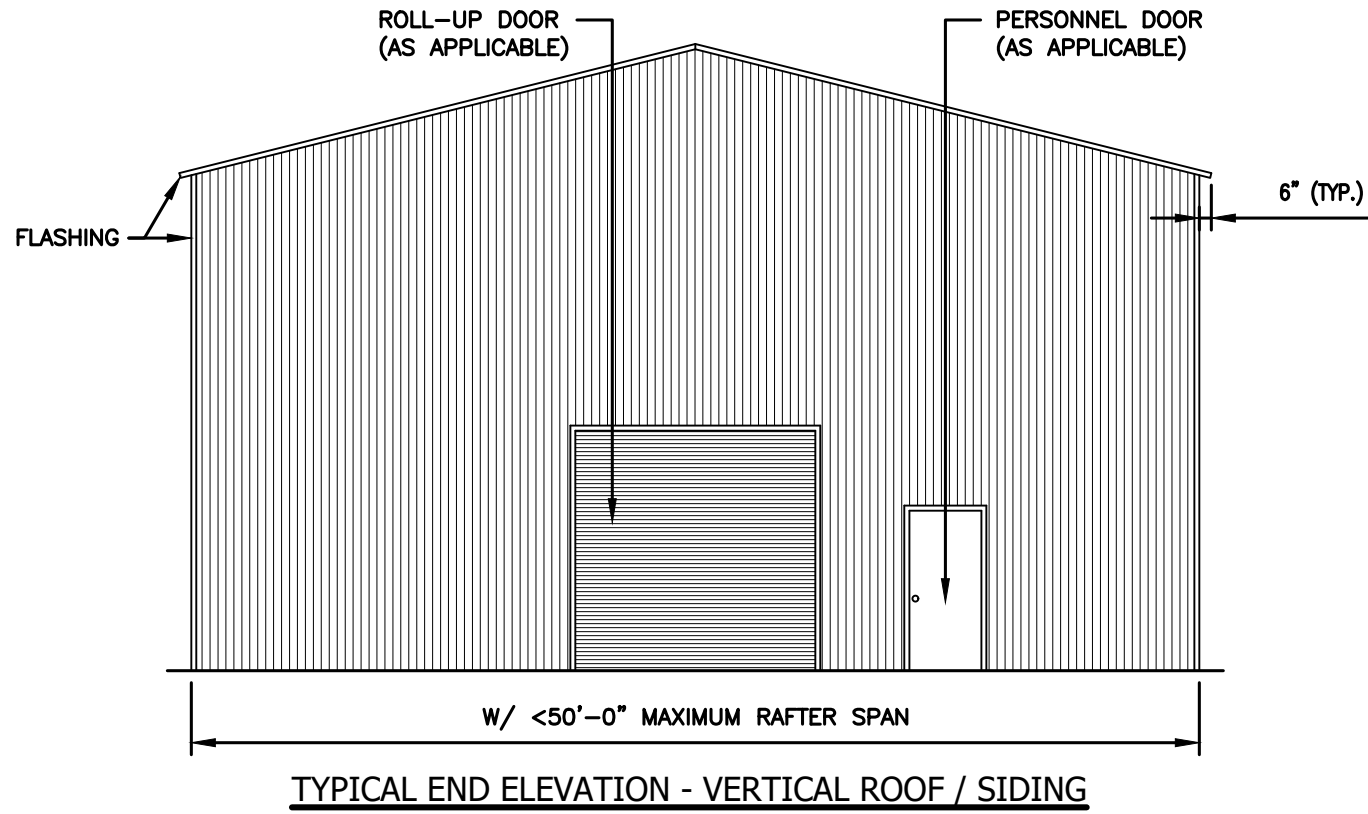
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Telephone: (336) 399-6277

31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW


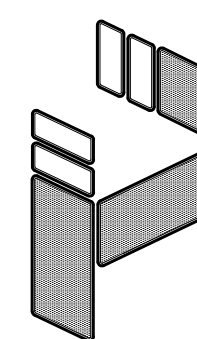
Project No.  
24-507

Sheet No.  
S10D

VERTICAL ROOF / SIDING OPTION

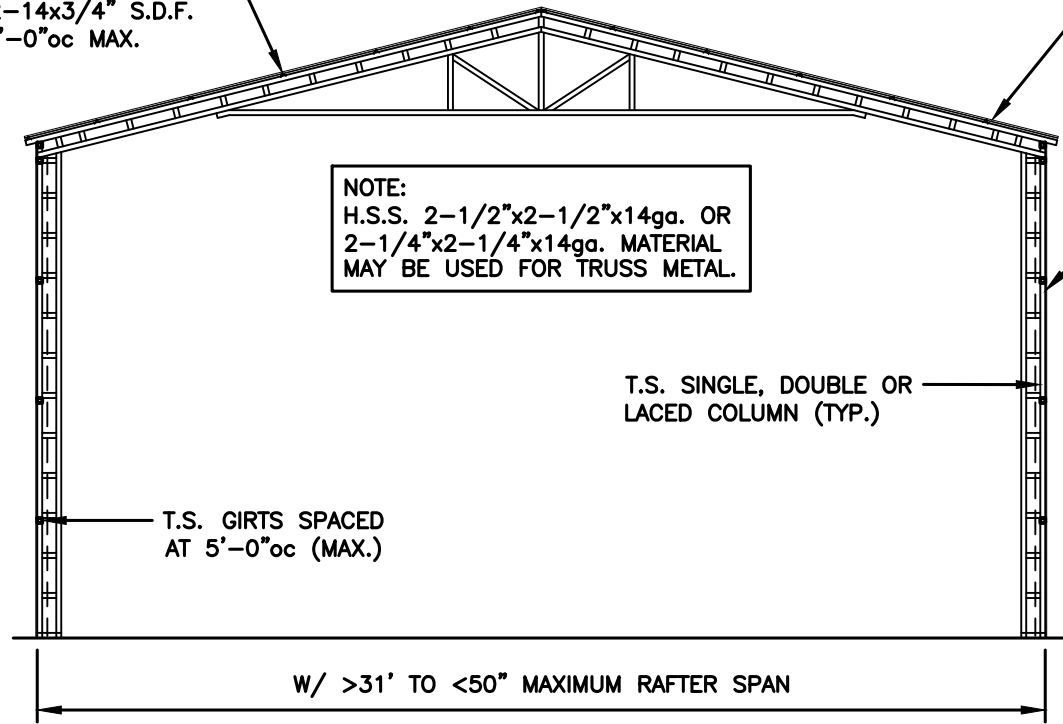


NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

<p>31' - 50' WIDTH 20'-0" EAVE HEIGHT 145 WIND ZONE 35 P.S.F. SNOW</p>		 <p><b>TAYLOR &amp; VIOLA</b> STRUCTURAL ENGINEERS P.O.B. 2616 HICKORY NORTH CAROLINA TELE: 828-328-6331 FAX: 828-322-1801 WWW.TAYLORVIOLA.COM</p>	
<p>Project No. 24-507</p>	<p><b>JCMT Associates, PLLC</b></p> <p>211 Stone Drive, Pilot Mountain, NC 27041 Telephone: (336) 399-6277</p>	<p>Date: 04/03/24</p>	
<p>Sheet No. S11</p>		<p>Revisions: -</p>	

VERTICAL ROOF / SIDING OPTION

1.125"-18ga. HAT CHANNELS FASTENED TO EACH RAFTER WITH (2) #12-14x3/4" S.D.F. SPACED AT 4'-0"oc MAX.



NOTE:  
H.S.S. 2-1/2"x2-1/2"x14ga. OR  
2-1/4"x2-1/4"x14ga. MATERIAL  
MAY BE USED FOR TRUSS METAL.

T.S. SINGLE, DOUBLE OR  
LACED COLUMN (TYP.)

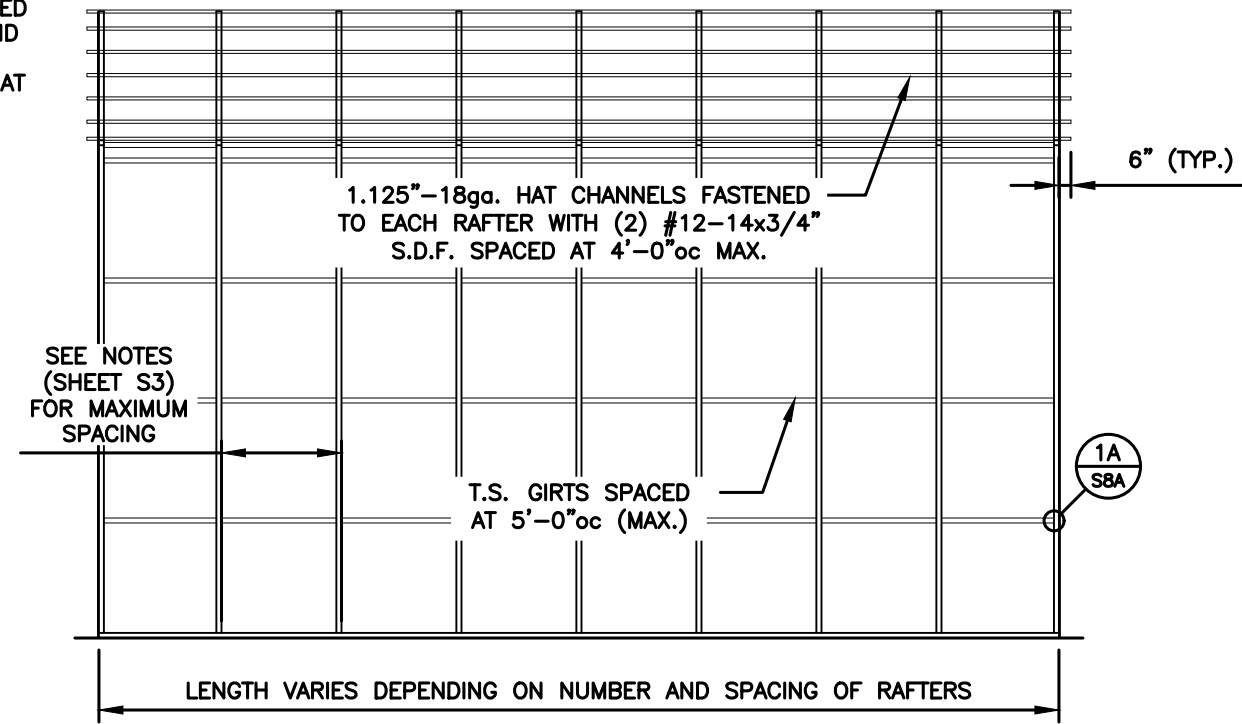
T.S. GIRTS SPACED  
AT 5'-0"oc (MAX.)

W/ >31' TO <50" MAXIMUM RAFTER SPAN

TYPICAL SECTION VERTICAL ROOF / SIDING OPTION

MAIN BUILDING COLUMNS TO BE DOUBLE COLUMNS FOR  
COLUMN HEIGHTS <10'-0"  
MAIN BUILDING COLUMNS TO BE LACED COLUMNS FOR  
COLUMN HEIGHTS >10'-1" TO <20'-0"

29ga. GALVANIZED  
METAL ROOF AND  
WALL PANELS  
FASTENED TO HAT  
CHANNELS



1.125"-18ga. HAT CHANNELS FASTENED  
TO EACH RAFTER WITH (2) #12-14x3/4"  
S.D.F. SPACED AT 4'-0"oc MAX.

6" (TYP.)

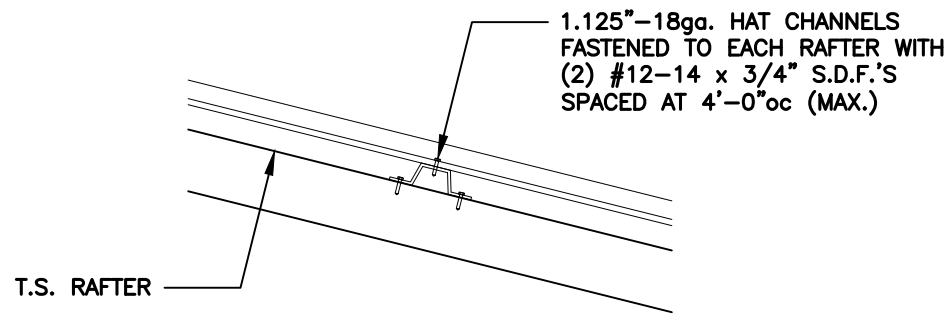
SEE NOTES  
(SHEET S3)  
FOR MAXIMUM  
SPACING

T.S. GIRTS SPACED  
AT 5'-0"oc (MAX.)

1A  
SBA

LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

TYPICAL SIDE FRAMING SECTION VERTICAL ROOF / SIDING OPTION

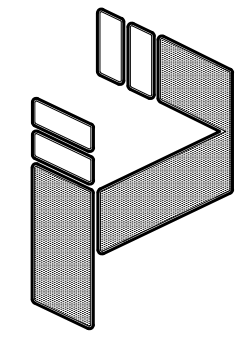


1.125"-18ga. HAT CHANNELS  
FASTENED TO EACH RAFTER WITH  
(2) #12-14 x 3/4" S.D.F.'S  
SPACED AT 4'-0"oc (MAX.)

T.S. RAFTER

(TYPICAL) ROOF PANEL ATTACHMENT

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



31' - 50' WIDTH  
20'-0" EAVE HEIGHT  
145 WIND ZONE  
35 P.S.F. SNOW

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Project No.  
24-507

Date:  
04/03/24

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S11A

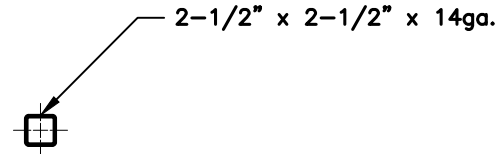
Revisions:  
-

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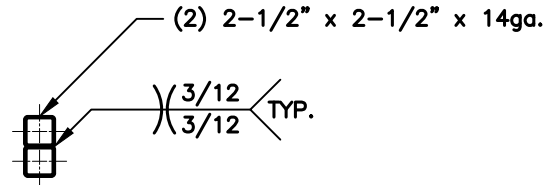
GENERAL NOTE:  
 PROVIDE DOUBLE WYTHE HEADER  
 ON DOUBLE COLUMNS.

HEADER OPTIONS

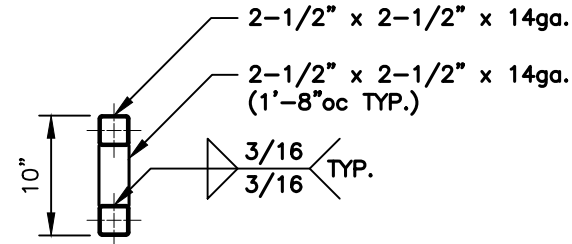
SIDE WALL HEADER OPTIONS



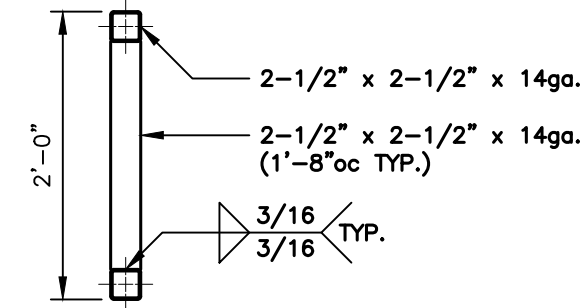
SINGLE T.S. HEADER DETAIL  
 FOR OPENINGS <4'-0"



DOUBLE T.S. HEADER DETAIL  
 FOR OPENINGS >4'-0" TO <12'-0"

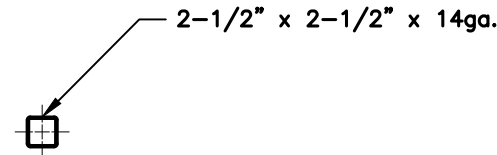


LACED T.S. HEADER DETAIL  
 FOR OPENINGS >12'-1" TO <15'-0"

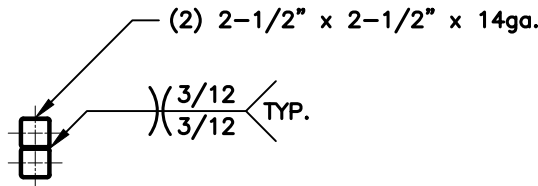


LACED T.S. HEADER DETAIL  
 FOR OPENINGS >15'-1" TO <20'-0"

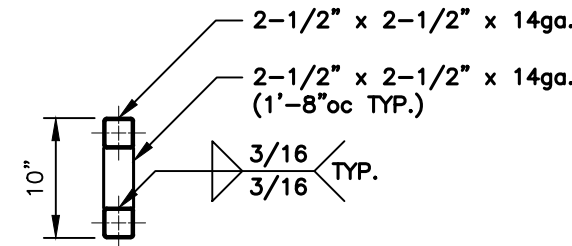
END WALL HEADER OPTIONS



SINGLE T.S. HEADER DETAIL  
 FOR OPENINGS <7'-0"

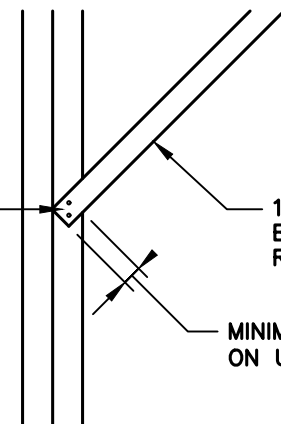


DOUBLE T.S. HEADER DETAIL  
 FOR OPENINGS >7'-1" TO <16'-0"



LACED T.S. HEADER DETAIL  
 FOR OPENINGS >16'-1" TO <20'-0"

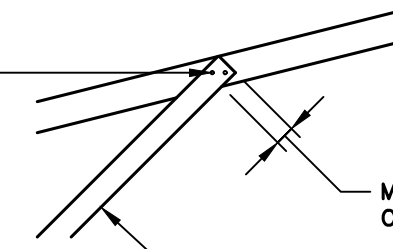
SECURE WITH (4) W12-14x3/4"  
 S.D.F.'S (EACH END) MINIMUM  
 11/16" SPACING FROM  
 FASTENER TO FASTENER AND  
 FROM FASTENER TO EDGE



18ga. U-CHANNEL KNEE  
 BRACE FASTENED TO  
 RAFTER AND COLUMN

MINIMUM 1-5/8" COPE  
 ON U-CHANNEL WEB

SECURE WITH (4) W12-14x3/4"  
 S.D.F.'S (EACH END) MINIMUM  
 11/16" SPACING FROM  
 FASTENER TO FASTENER AND  
 FROM FASTENER TO EDGE



MINIMUM 1-5/8" COPE  
 ON U-CHANNEL WEB

18ga. U-CHANNEL KNEE  
 BRACE FASTENED TO  
 RAFTER AND COLUMN

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



31' - 50' WIDTH  
 20'-0" EAVE HEIGHT  
 145 WIND ZONE  
 35 P.S.F. SNOW

JCMT Associates, PLLC

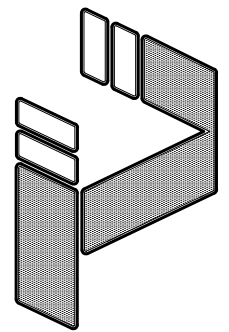
211 Stone Drive, Pilot Mountain, NC 27041  
 Telephone: (336) 399-6277

Project No.  
24-507

Sheet No.  
S12

Date:  
04/03/24

Revisions:  
-



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**1** U-CHANNEL TO COLUMN CONNECTION DETAIL  
 S12 SCALE: 3/4" = 1'-0"

**2** U-CHANNEL TO TRUSS CONNECTION DETAIL  
 S12 SCALE: 3/4" = 1'-0"