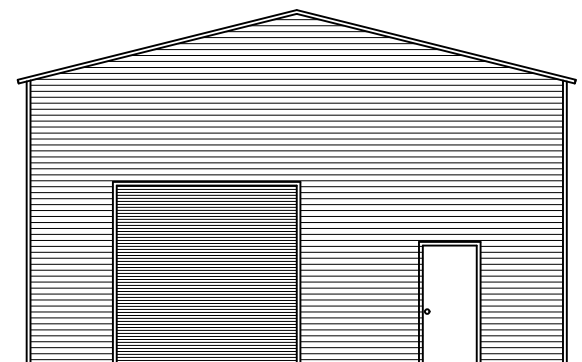




ENCLOSED GABLE END BUILDING

MAXIMUM 30'-0" WIDE X 20'-0" EAVE HEIGHT WITH BOX FRAME / (UP TO) 145 M.P.H. WIND ZONE - 35 P.S.F. SNOW LOAD

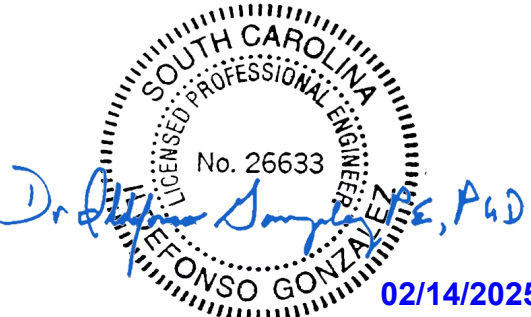
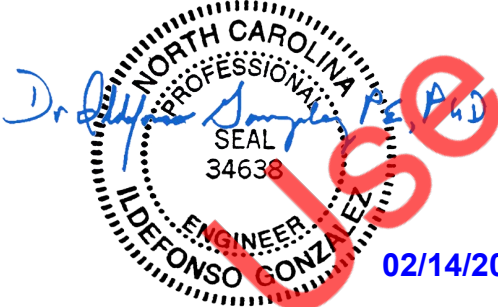
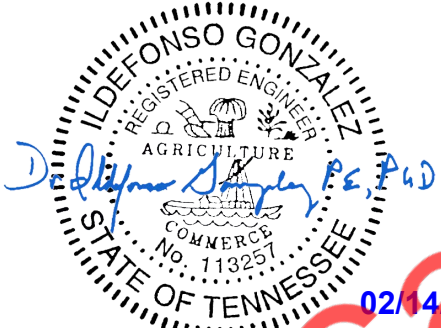
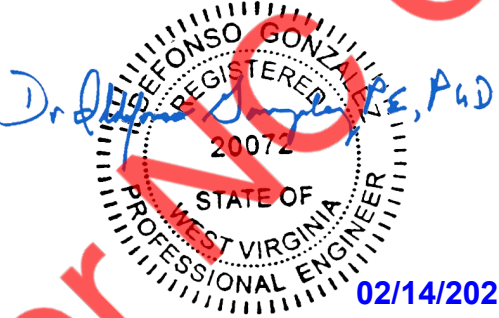
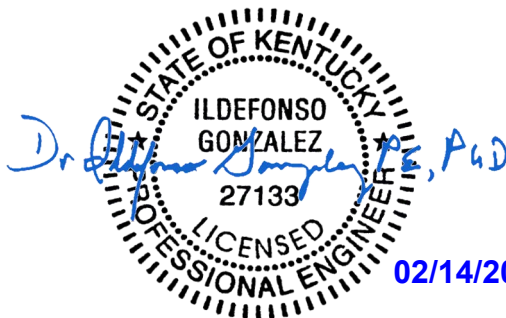
For Carports & Garages Only

FOR:

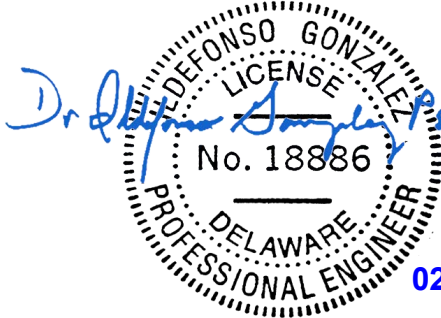
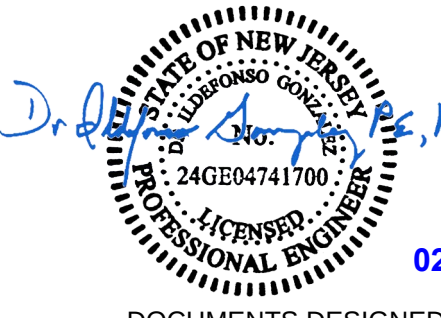
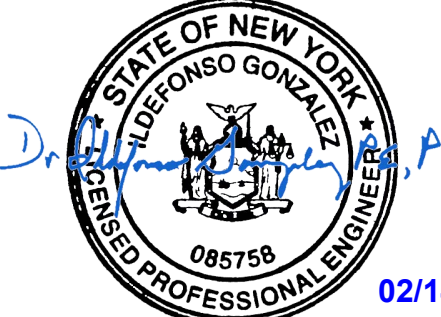
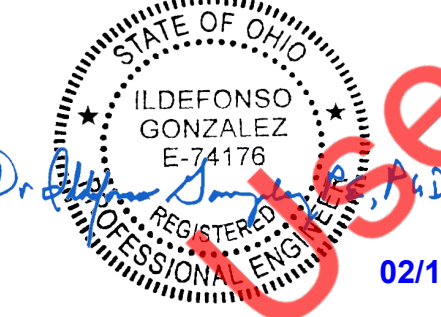
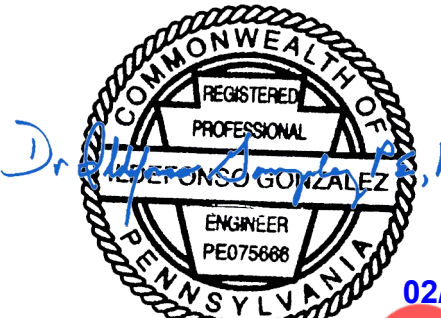
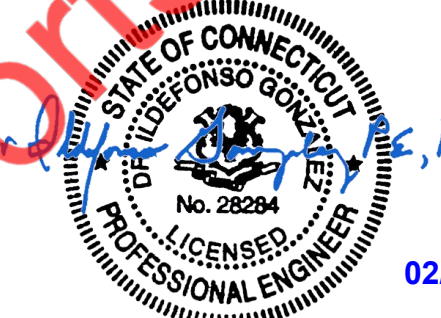
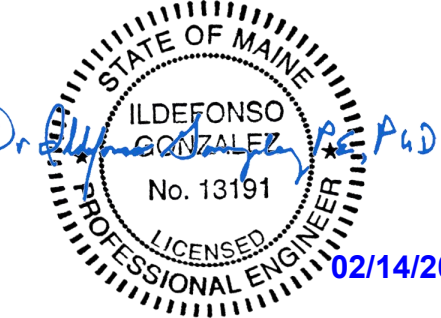
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116 EAST MARKET STREET
ELKIN, NORTH CAROLINA
TELE: 336-368-0668

ISSUE DATE: 02.25.25

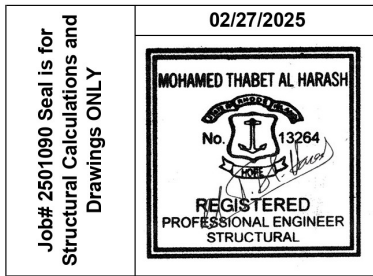


 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 BUILDING CODE OF ALABAMA (2021 IBC)	 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC				
 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 IBC	 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 BUILDING CODE OF North Carolina (2015 IBC)				
 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC	 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 IBC				
 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC	 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 KENTUCKY BUILDING CODE (2015 IBC)				
 Dr. Al Gonzalez P.E. DOtec Engineering 424 Jefferson Street St. Charles, MO 63301 Ph 636-724-9872 Fx 636-724-9032 WWW.DOTECENGINEERING.COM ALG@DOTECENGINEERING.COM	NC CARPORTS & GARAGES 116 EAST MARKET STREET ELKIN, NORTH CAROLINA 28621 TELE: 336-368-0668 <table border="1"> <tr> <td>DRAWN BY: BKS</td><td>PROJECT NO: MISC</td></tr> <tr> <td>DATE: 02/14/2025</td><td>SHEET NO: S1</td></tr> </table>	DRAWN BY: BKS	PROJECT NO: MISC	DATE: 02/14/2025	SHEET NO: S1
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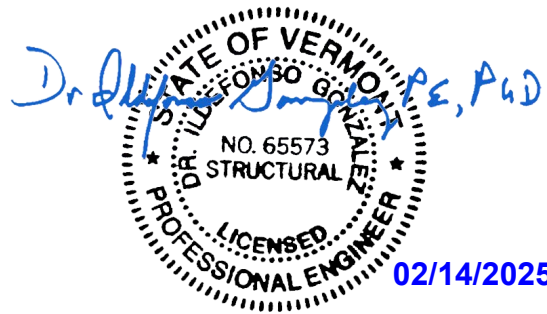
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 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE NINTH EDITION OF THE MA STATE BUILDING CODE 2021	 02/14/2025 DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2015 IBC				
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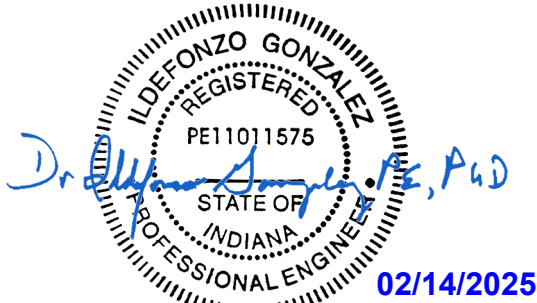
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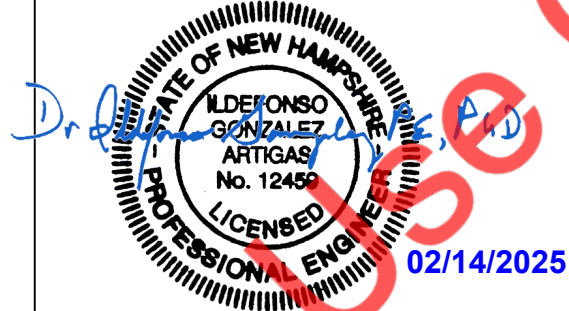
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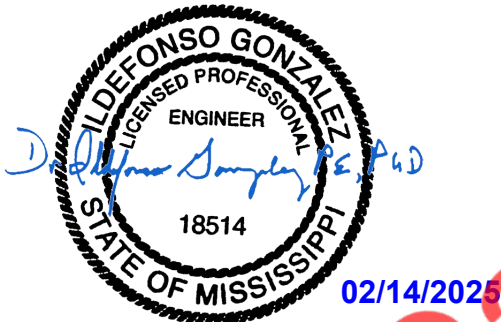
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DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC



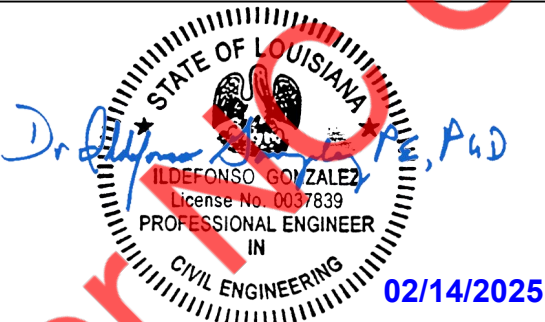
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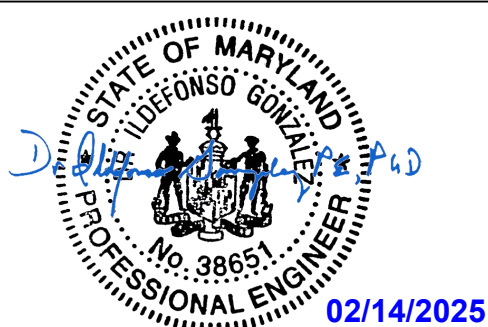
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DOCUMENTS DESIGNED AND DRAWN TO MEET 2021 BUILDING CODE OF ARKANSAS (2021 IBC)



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



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



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S1	P.E. SEALS SHEET
S1A	P.E. SEALS SHEET
S2	DRAWING INDEX
S3	GENERAL NOTES AND SPECIFICATIONS
S4	SIDE AND END ELEVATIONS
S5	TYPICAL RAFTER / COLUMN FRAME SECTIONS
S5A	TYPICAL RAFTER / COLUMN FRAME SECTIONS
S5B	TYPICAL RAFTER / COLUMN FRAME AND SIDE FRAMING SECTION
S6	COLUMN CONNECTION DETAILS (LACED COLUMN)
S6A	COLUMN CONNECTION DETAILS (DOUBLE AND SINGLE COLUMN)
S6B	COLUMN CONNECTION DETAILS (LACED COLUMN)
S6C	COLUMN CONNECTION DETAILS (DOUBLE AND SINGLE COLUMN)
S7	BASE RAIL ANCHORAGE
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S7F	BASE RAIL ANCHORAGE
S7G	BASE RAIL ANCHORAGE
S8	BASE RAIL ANCHORAGE
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S9	TYPICAL END WALL OPENINGS FRAMING SECTIONS
S9A	TYPICAL SIDE WALL OPENINGS FRAMING SECTIONS
S10	CONNECTION DETAILS
S11	CONNECTION DETAILS
S12	CONNECTION DETAILS
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S15	LEAN-TO OPTIONS
S15A	LEAN-TO CONNECTION DETAILS
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S16	VERTICAL ROOF / SIDING OPTION END AND SIDE ELEVATION
S16A	VERTICAL ROOF / SIDING OPTION END SECTION
S16B	VERTICAL ROOF / SIDING OPTION SIDE SECTION
S17	SIDE WALL HEADER OPTIONS
S17A	END WALL HEADER OPTIONS



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S2

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DESIGN LOADS:

IMPORTANCE FACTORS WIND (1w) 1.00
 SNOW (1s) 1.00
 SEISMIC (1e) 1.00

DEAD LOADS ROOF 13 P.S.F.
 ROOF COLLATERAL 0 P.S.F.

LIVE LOADS ROOF 20 P.S.F.

GROUND SNOW LOAD: 35 P.S.F. * DRIFT LOAD HAS NOT BEEN CALCULATED

WIND LOAD: BASIC WIND SPEED V 145 M.P.H. (ASCE 7-16)
 EXPOSURE CATEGORY B

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☒ C ☐ D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

OCCUPANCY CATEGORY I/II *NOT FOR SLEEPING QUARTERS

SPECTRAL RESPONSE ACCELERATION Ss 20.5 %g S1 8.8 %g

SITE CLASSIFICATION D ☐ FIELD TEST ☐ PRESUMPTIVE ☐ HISTORICAL DATA

BASIC STRUCTURAL SYSTEM (CHECK ONE)

☐	BEARING WALL	☐	DUAL W/ SPECTRAL MOMENT FRAME
☒	BUILDING FRAME	☐	DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
☐	MOMENT FRAME	☐	INVERTED PENDULUM

ANALYSIS PROCEDURE ☐ SIMPLIFIED ☒ EQUIVALENT LATERAL FORCE ☐ MODAL

LATERAL DESIGN CONTROL? ☐ EARTHQUAKE ☒ WIND

SOIL BEARING CAPACITIES:
 PRESUMPTIVE BEARING CAPACITIES: 2,000 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 14ga. 50 K.S.I. MIN. UNLESS NOTED OTHERWISE.
4. ALL FASTENERS SHALL BE (2) #12 SELF TAPPING AT 9"o.c. UNLESS NOTED OTHERWISE.
5. 2,000 P.S.F. ASSUMED BEARING CAPACITY UNLESS NOTED OTHERWISE.
6. THESE DRAWINGS ARE NOT APPLICABLE TO PARTIALLY OPEN / ENCLOSED OR OPEN BUILDINGS.
7. IF FRAME SPACING IS AT 48"oc (SIDE & END WALLS) - GROUND SNOW LOAD CAN INCREASE TO 43.5 P.S.F. (EXCLUDING DRIFT).



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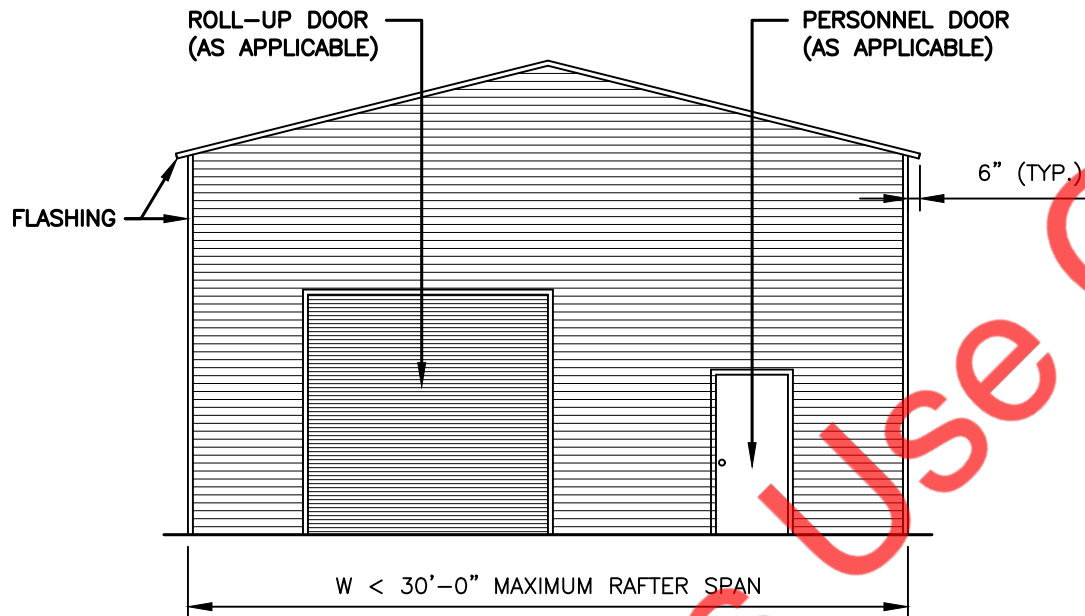
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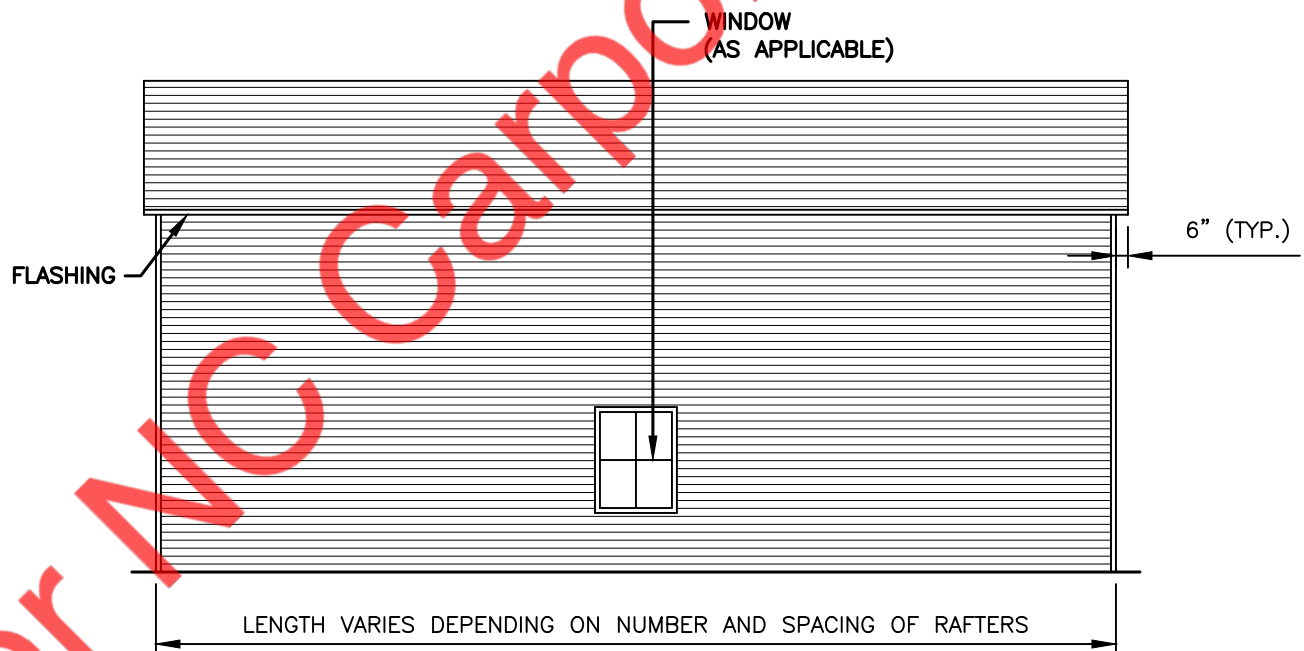
SHEET NO:
S3

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BOX EVE FRAME RAFTER STRUCTURE



TYPICAL END ELEVATION



TYPICAL SIDE ELEVATION



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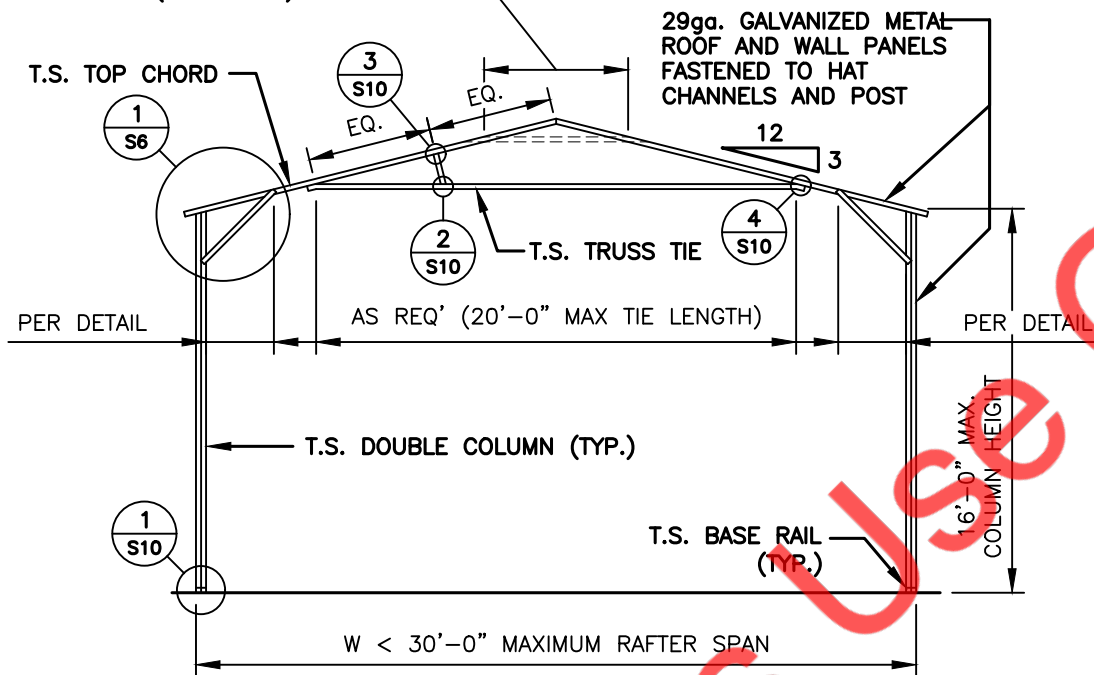
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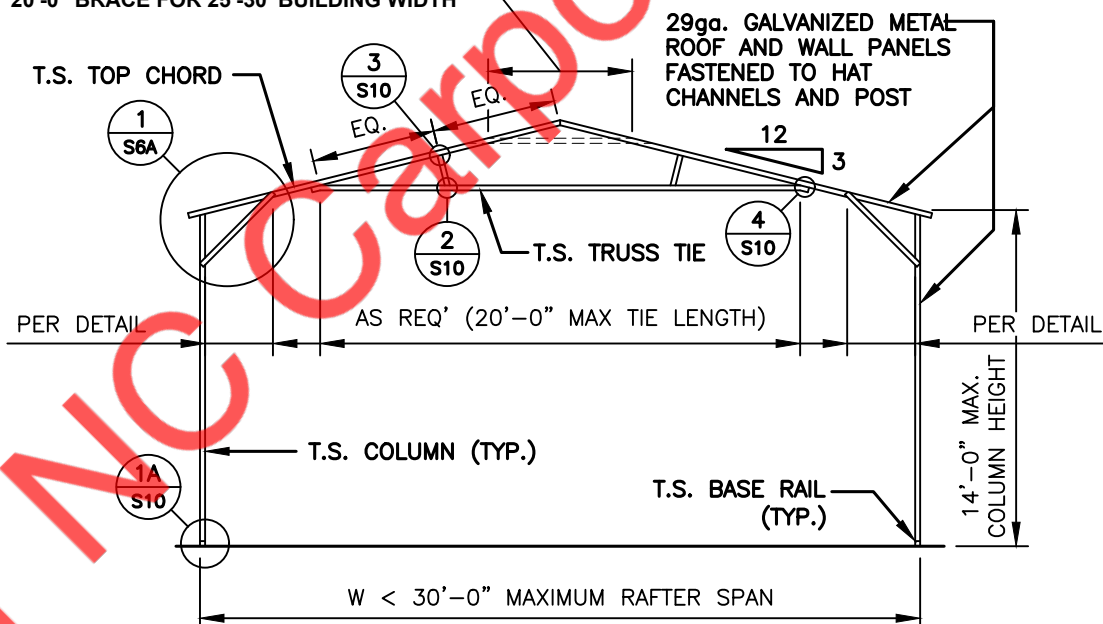
'U' BRACE TRUSS TIE - NOTE:
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'



TYPICAL RAFTER / COLUMN FRAME SECTION

'U' BRACE TRUSS TIE - NOTE:
 2'-0" BRACE FOR 12'-18' BUILDING WIDTH
 4'-0" BRACE FOR 19'-20' BUILDING WIDTH
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20'-0" BRACE FOR 25'-30' BUILDING WIDTH

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



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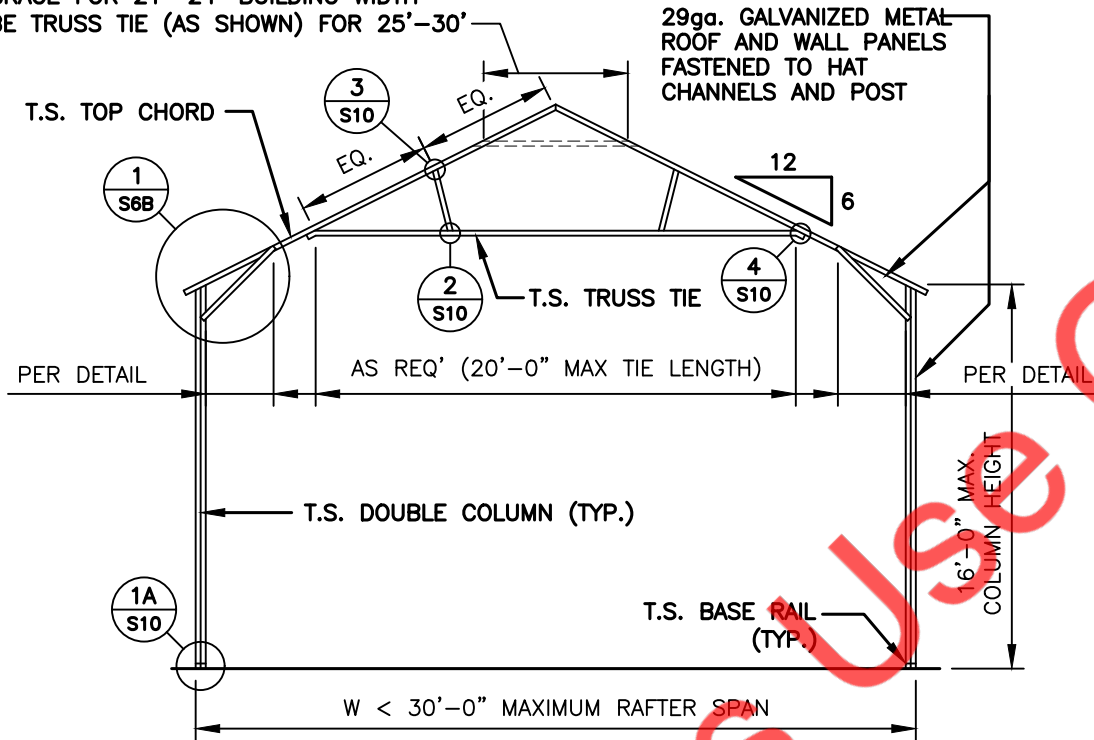
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20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'



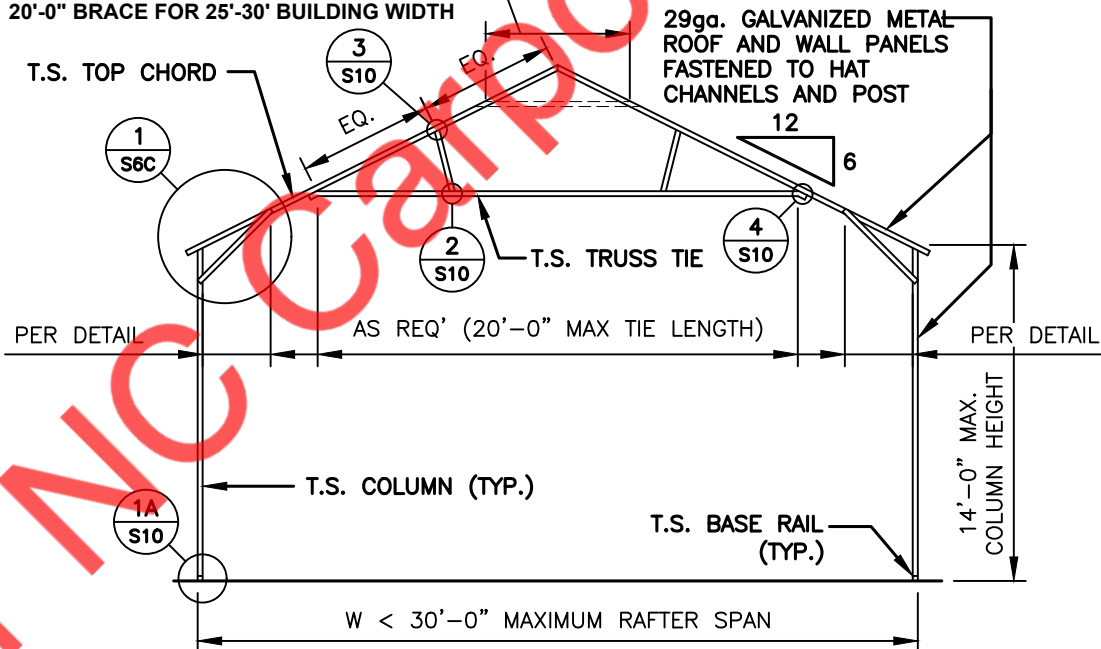
TYPICAL RAFTER / COLUMN FRAME SECTION

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MATERIAL MAY BE USED FOR TRUSS METAL.



TYPICAL RAFTER / COLUMN FRAME SECTION



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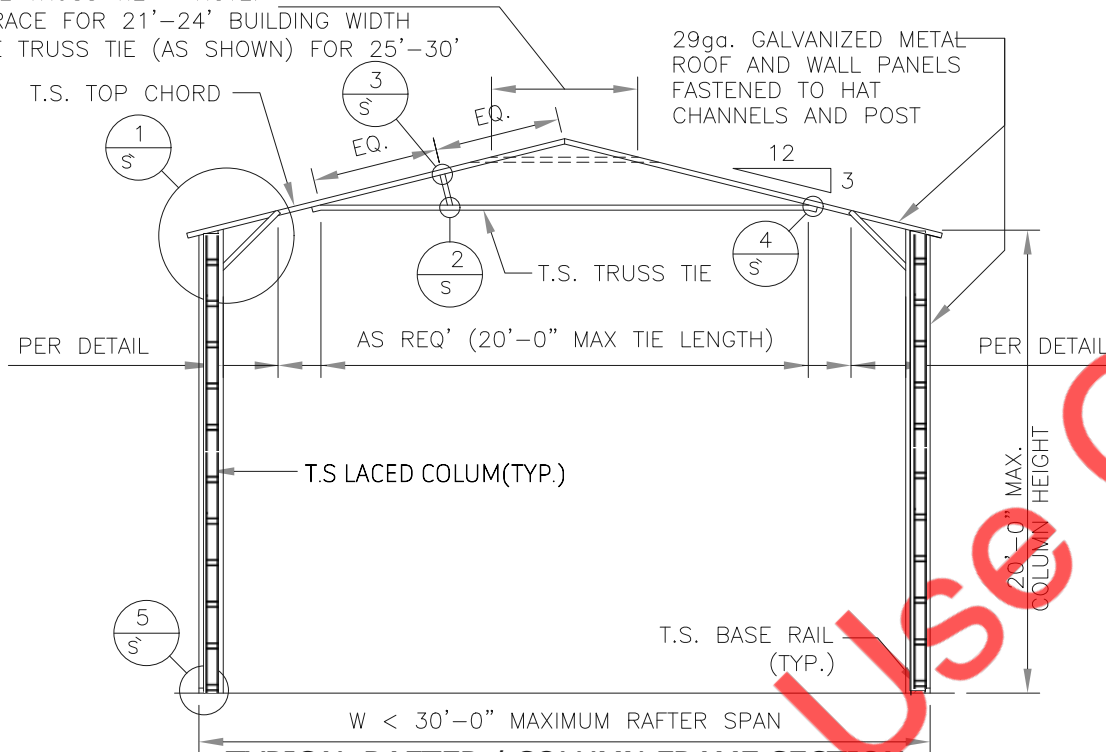
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'U' BRACE TRUSS TIE - NOTE:

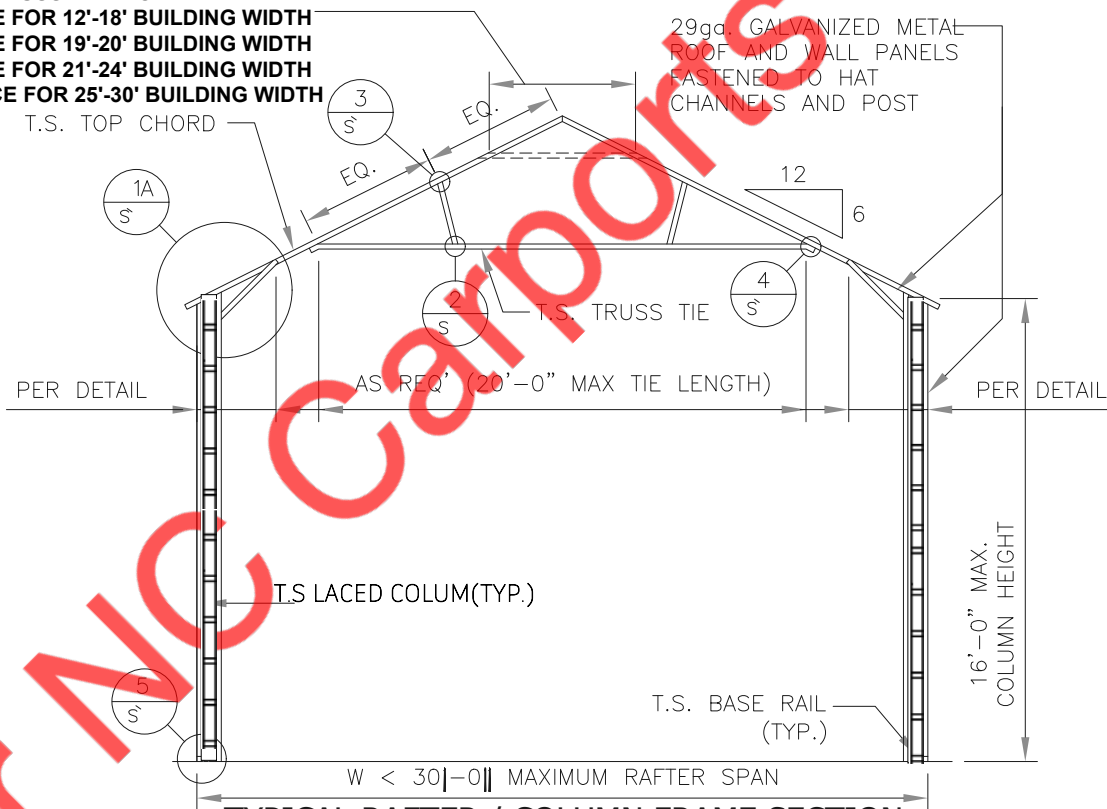
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20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'



TYPICAL RAFTER / COLUMN FRAME SECTION

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TYPICAL RAFTER / COLUMN FRAME SECTION



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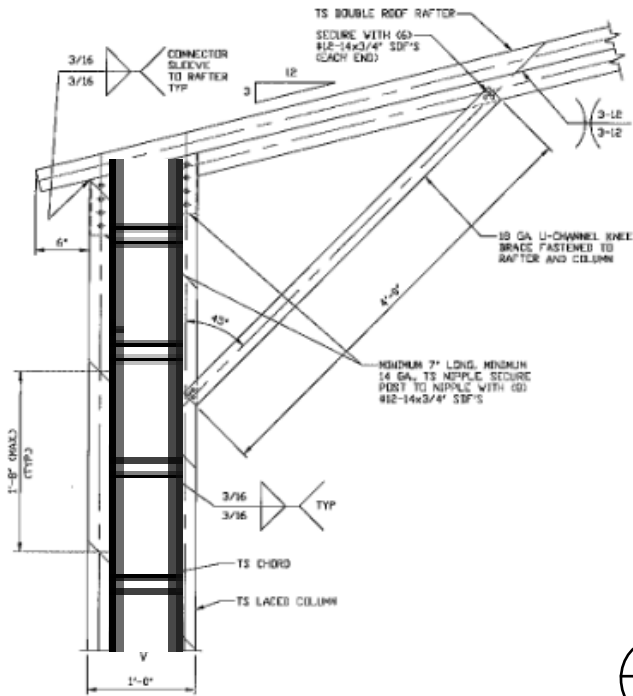
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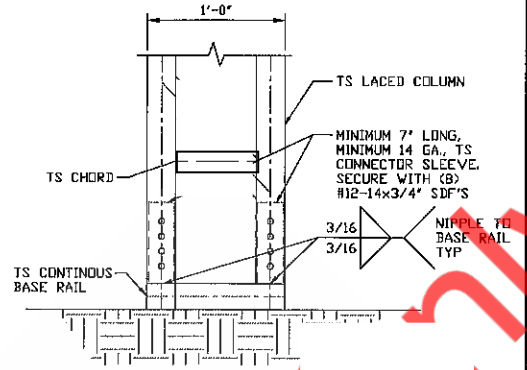
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CONNECTION DETAILS

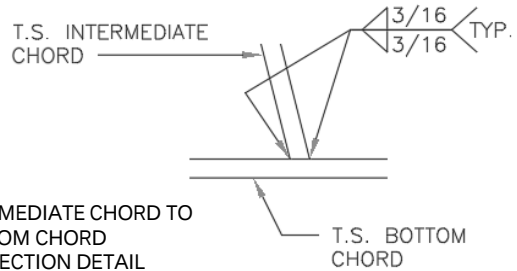


BOX EAVE RAFTER COLUMN CONNECTION DETAIL 16'
<20 ' HIGHTD 15' <TO< 20' FOR APPLICABLE RISK CAT
WIND SPEED

N.T.S

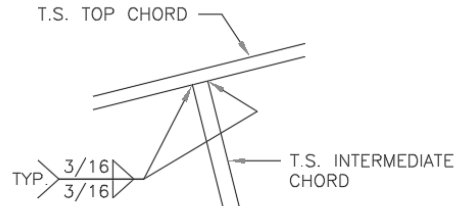


5 LACED COLUMN /BASE PAIL CONN. DETAIL
S' N.T.S



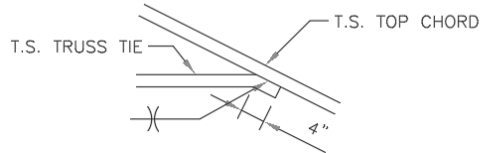
INTERMEDIATE CHORD TO
BOTTOM CHORD
CONNECTION DETAIL

N.T.S



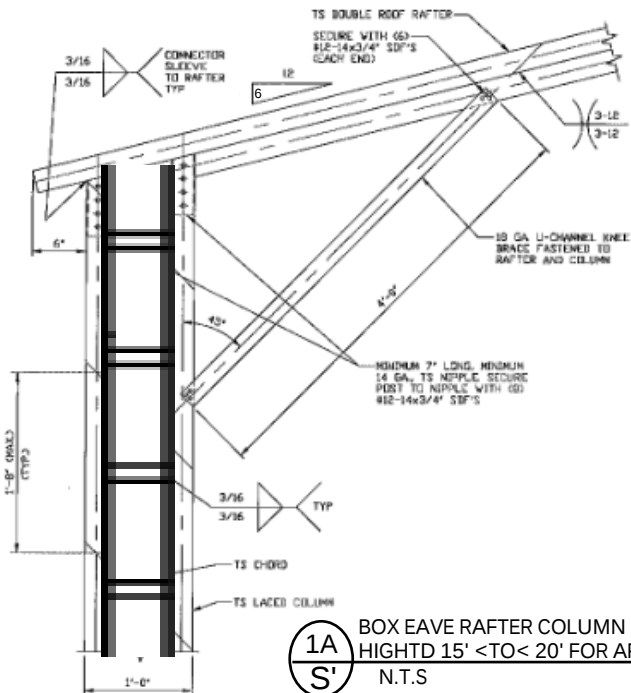
INTERMEDIATE CHORD TO TOP CHORD
CONNECTION DETAIL

N.T.S



TRUSS TIE CONNECTION DETAIL

N.T.S



BOX EAVE RAFTER COLUMN CONNECTION DETAIL 16' < TO <20' HIGHTD 15' <TO< 20' FOR APPLICABLE RISK CATEGORY WIND SPEED

N.T.S



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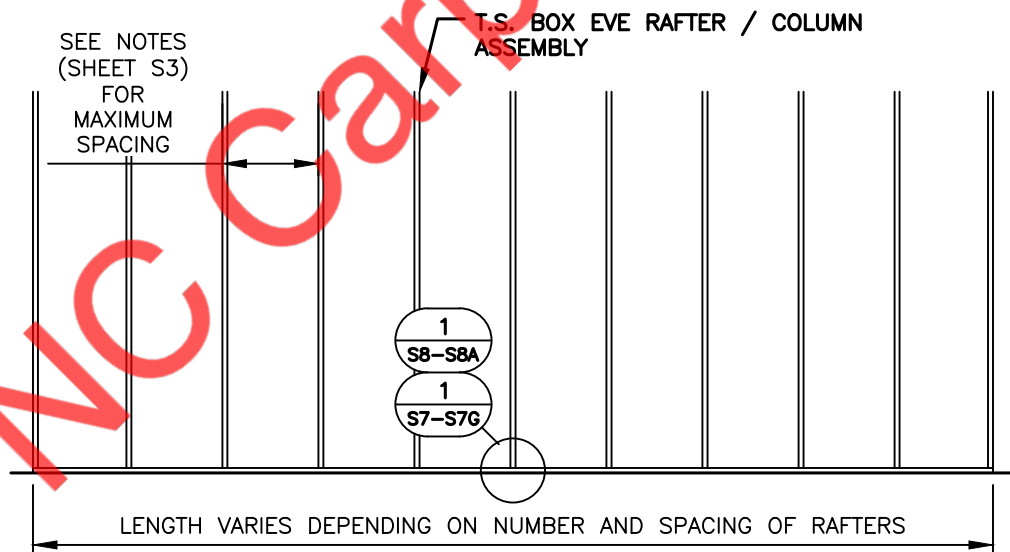
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NOTE:
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2-1/4"x2-1/4"x14ga. MATERIAL
MAY BE USED FOR TRUSS METAL.



TYPICAL RAFTER / COLUMN SIDE FRAME SECTION



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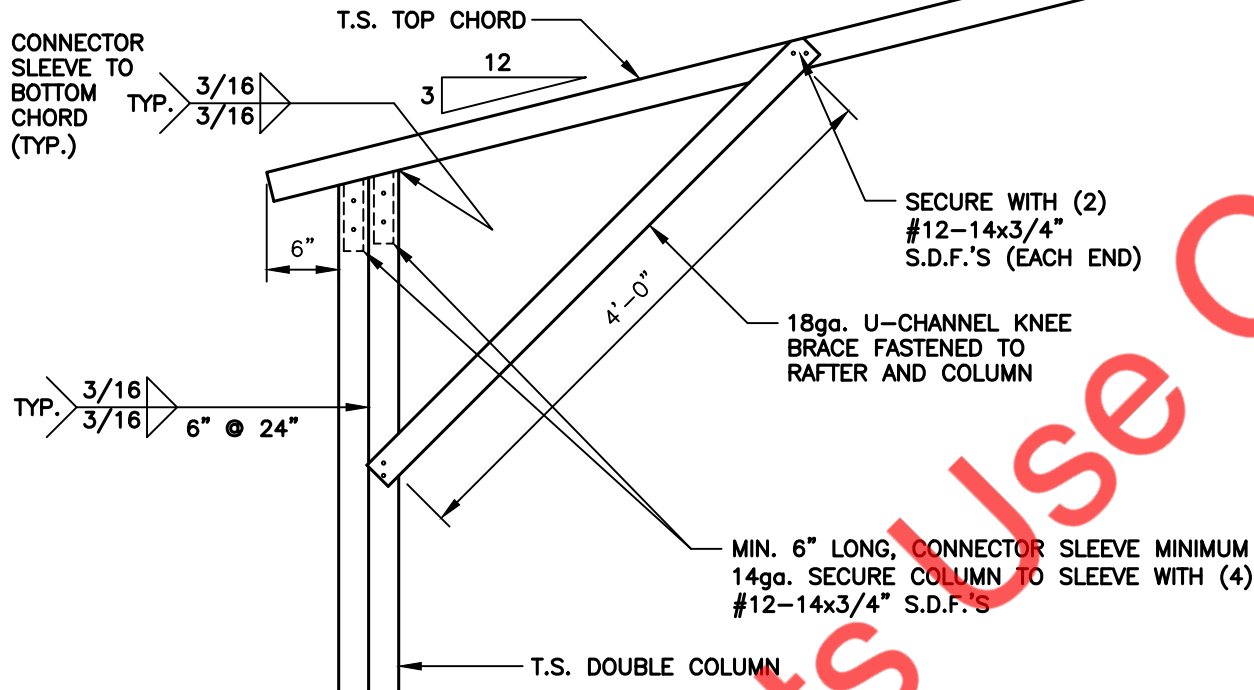
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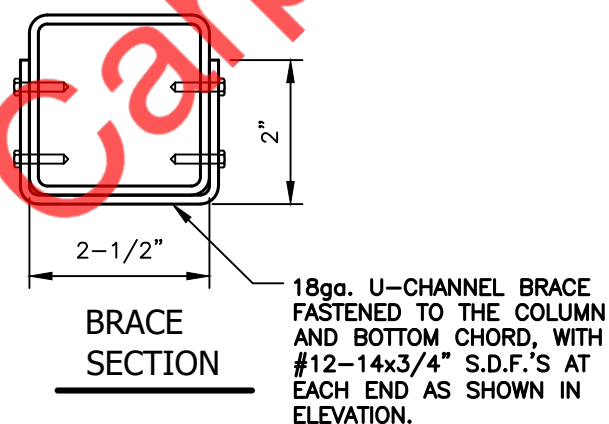
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S5B

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



1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHT.S. 14'-1" < TO 16'-0"

S6 SCALE 3/4" - 1'



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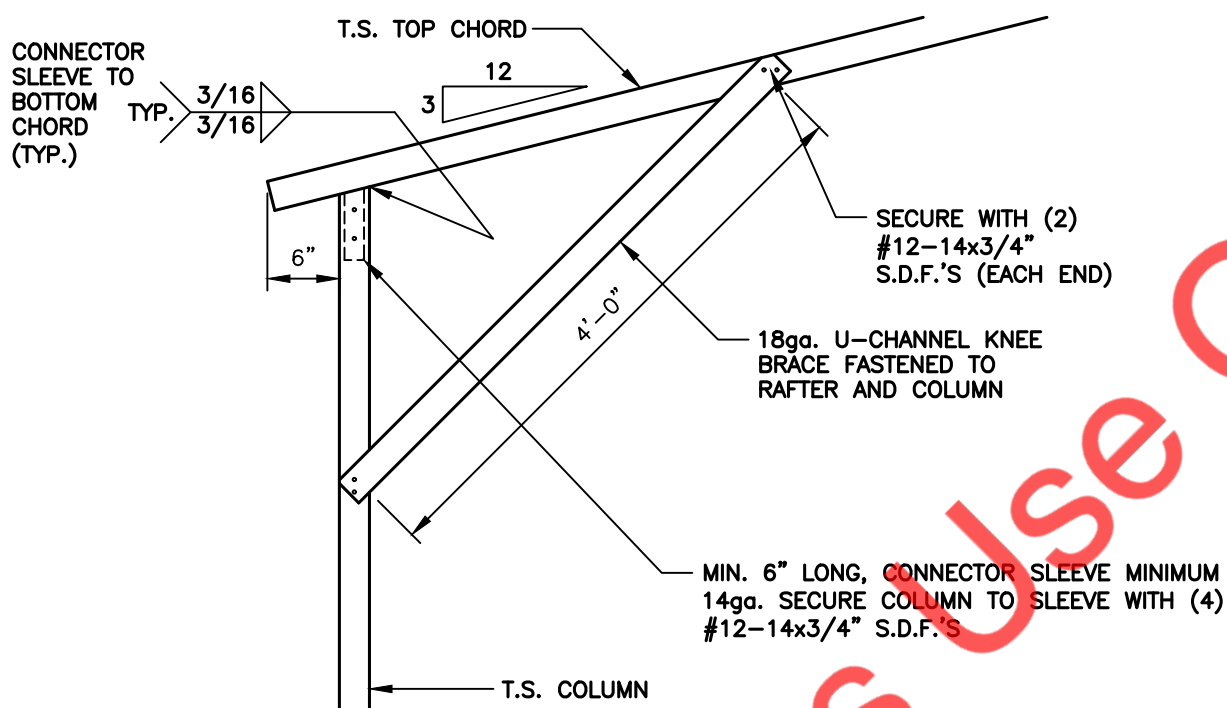
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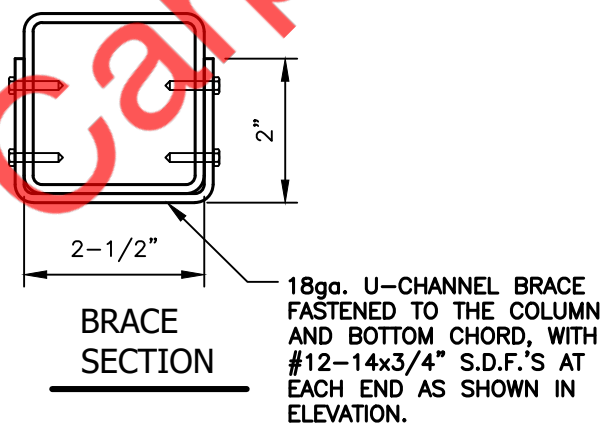
SHEET NO:
S6

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1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHT.S. < 14'-0"

S6A SCALE: $\frac{3}{4}" = 1'-0"$



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S6A

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CONNECTOR
SLEEVE TO
BOTTOM
CHORD
(TYP.)

TYP.

3/16
3/16

T.S. TOP CHORD

12

6

SECURE WITH (2)
#12-14x3/4"
S.D.F.'S (EACH END)

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

MIN. 6" LONG, CONNECTOR SLEEVE MINIMUM
14ga. SECURE COLUMN TO SLEEVE WITH (4)
#12-14x3/4" S.D.F.'S

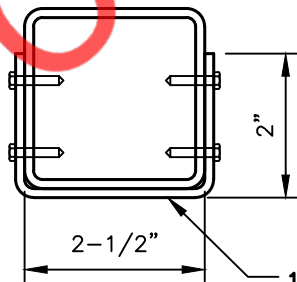
T.S. COLUMN

1

BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHT.S. 14'-1" < TO

S6C

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



BRACE
SECTION

18ga. U-CHANNEL BRACE
FASTENED TO THE COLUMN
AND BOTTOM CHORD, WITH
#12-14x3/4" S.D.F.'S AT
EACH END AS SHOWN IN
ELEVATION.



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S6B

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CONNECTOR
SLEEVE TO
BOTTOM
CHORD
(TYP.)

TYP. $\frac{3}{16}$
 $\frac{3}{16}$

T.S. TOP CHORD

12
6

SECURE WITH (2)
#12-14x3/4"
S.D.F.'S (EACH END)

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

MIN. 6" LONG, CONNECTOR SLEEVE MINIMUM
14ga. SECURE COLUMN TO SLEEVE WITH (4)
#12-14x3/4" S.D.F.'S

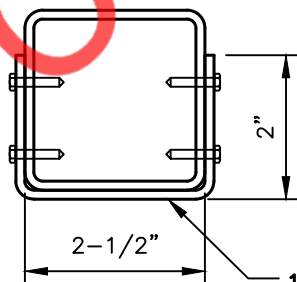
T.S. COLUMN

1

BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHT.S. < 14'-0"

S6C

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



BRACE
SECTION

18ga. U-CHANNEL BRACE
FASTENED TO THE COLUMN
AND BOTTOM CHORD, WITH
#12-14x3/4" S.D.F.'S AT
EACH END AS SHOWN IN
ELEVATION.



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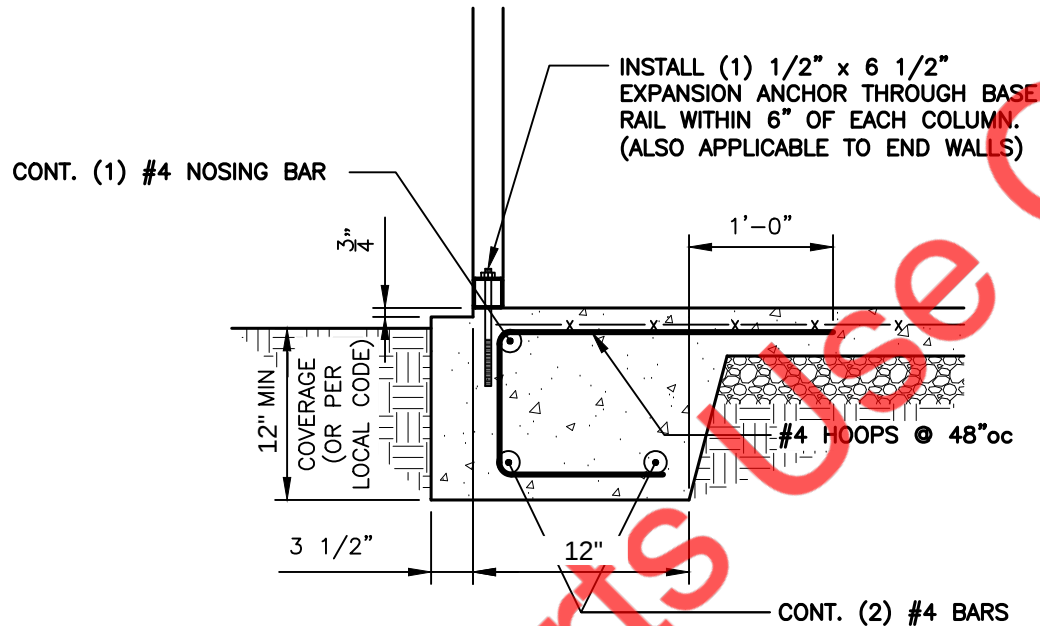
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S6C

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

CONCRETE BASE RAIL ANCHORAGE



BASE RAIL ANCHORAGE DETAIL

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 MAT BE BENT IN THE SHOP OF 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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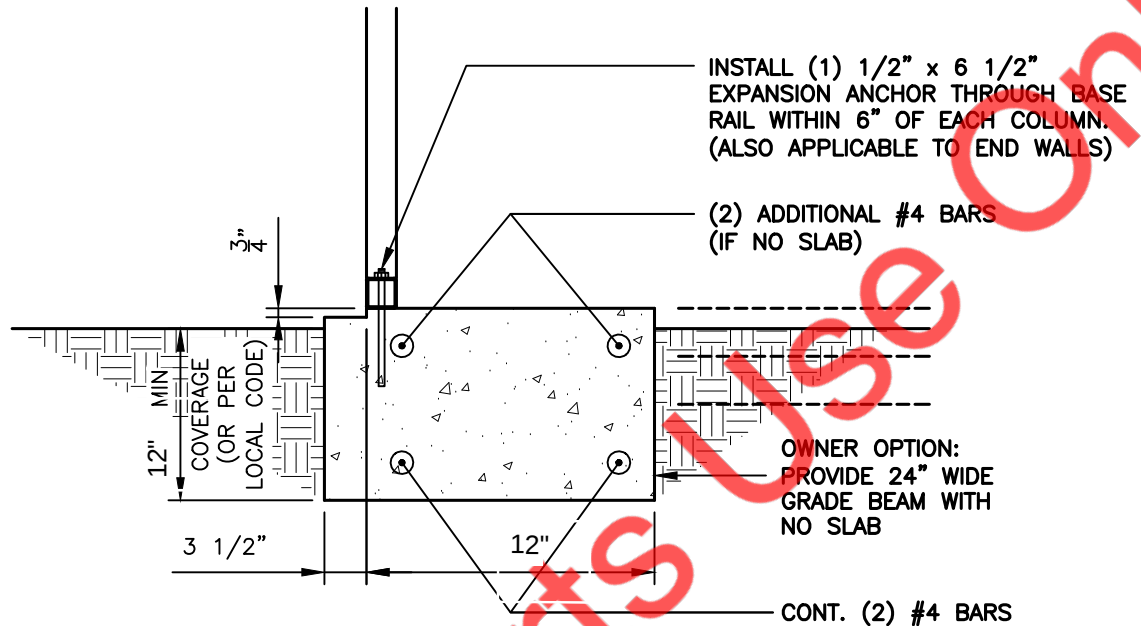
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S7

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

CONCRETE BASE RAIL ANCHORAGE (NO SLAB)



1 BASE RAIL ANCHORAGE DETAIL
S7A 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:

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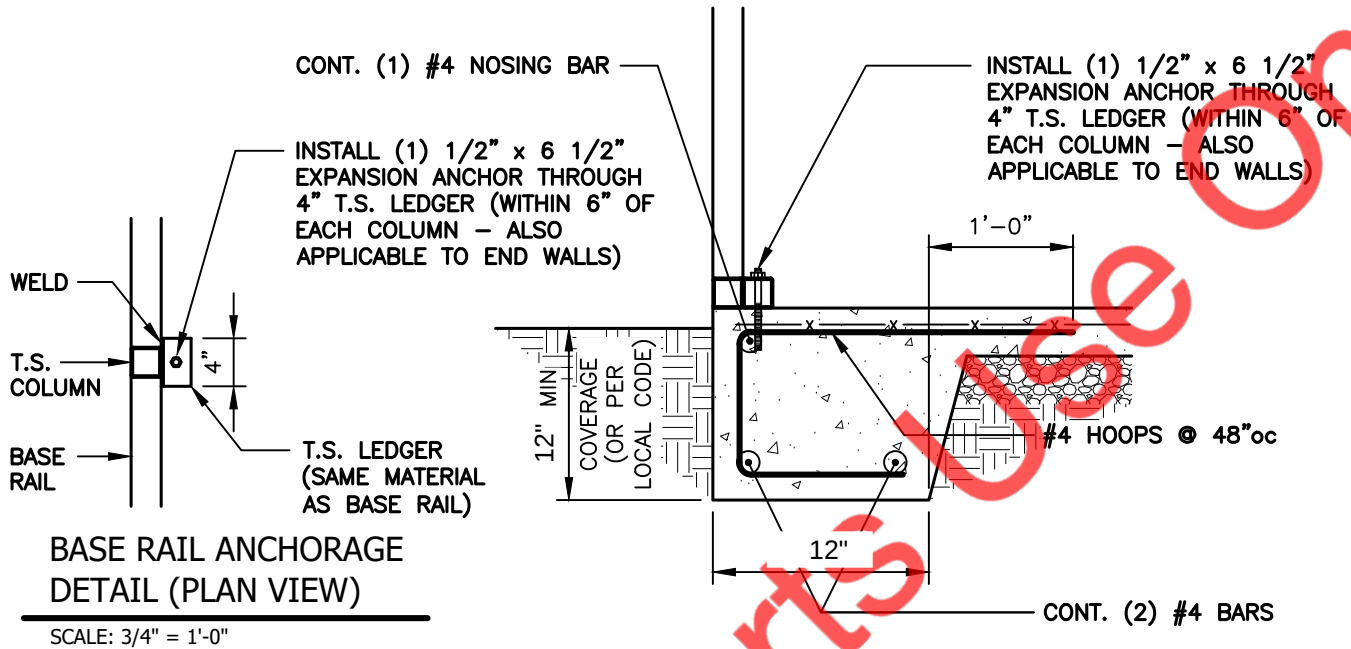
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S7A

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

CONCRETE BASE RAIL ANCHORAGE



1
S7B

BASE RAIL ANCHORAGE DETAIL

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:

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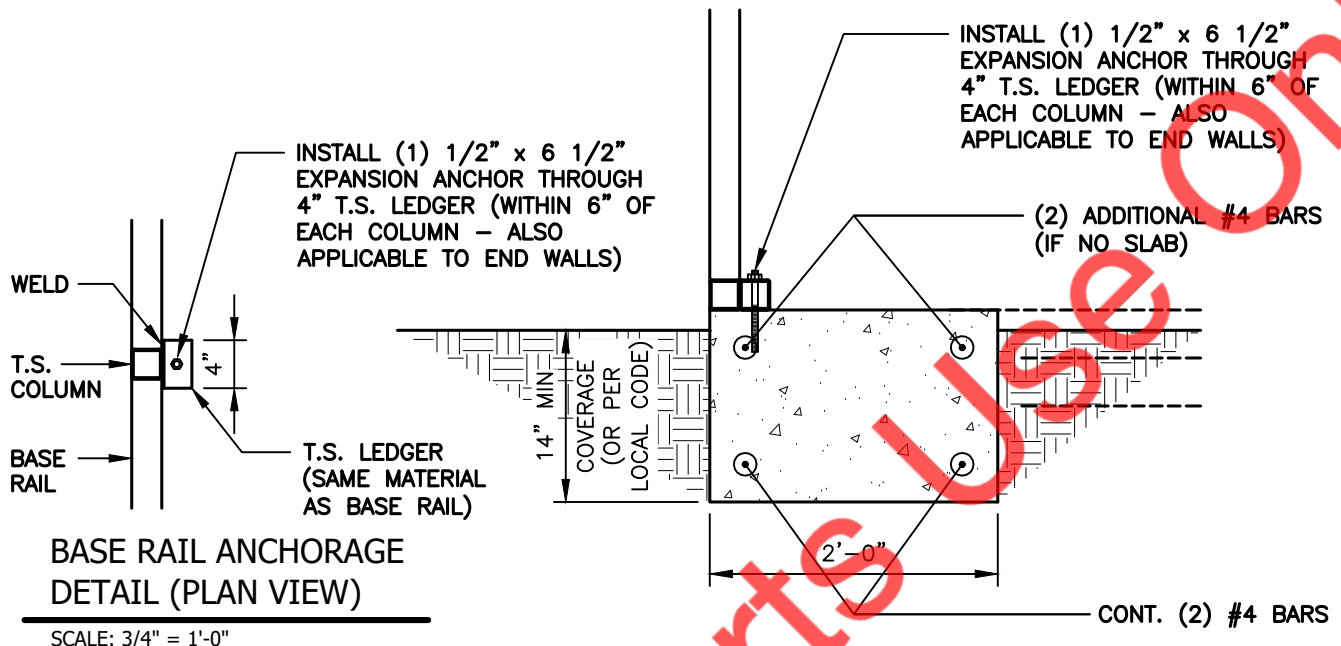
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S7B

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CONCRETE BASE RAIL ANCHORAGE (NO SLAB)



1 BASE RAIL ANCHORAGE DETAIL
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:

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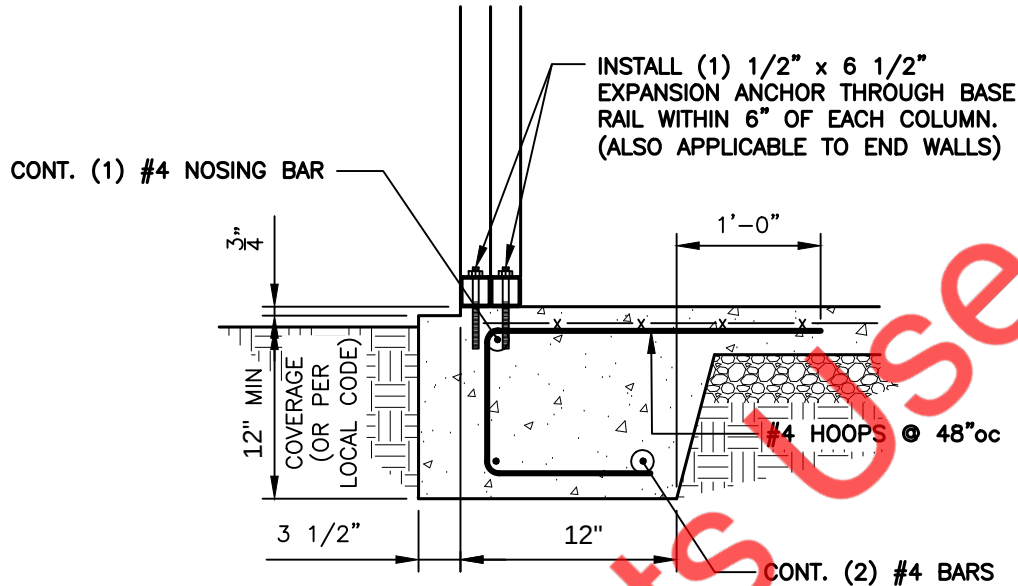
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S7C

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CONCRETE BASE RAIL ANCHORAGE



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

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CONCRETE:

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

COVER OVER REINFORCING STEEL:

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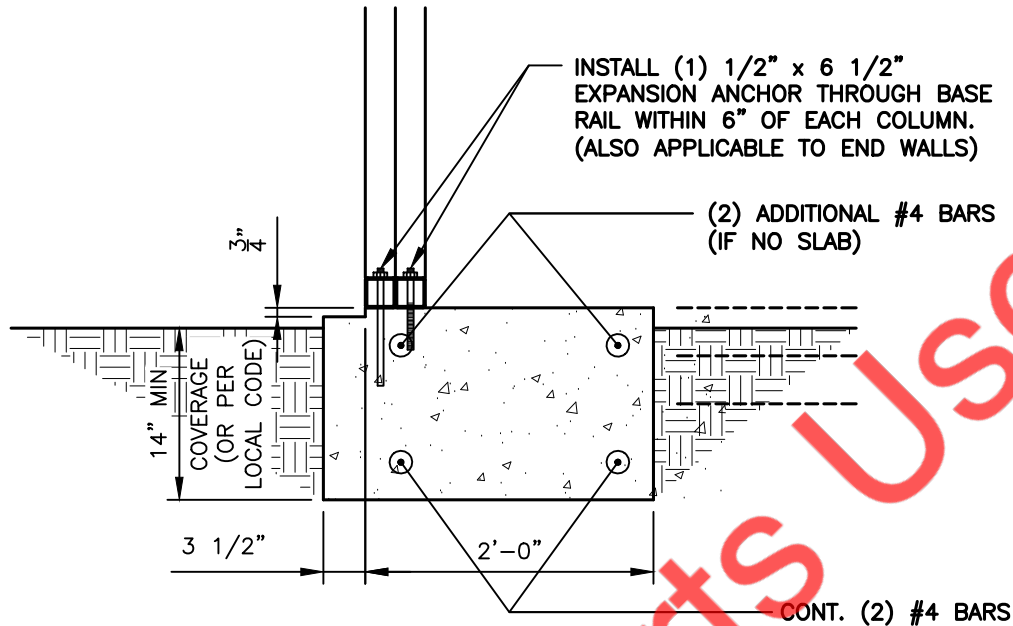
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S7D

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CONCRETE BASE RAIL ANCHORAGE (NO SLAB)



BASE RAIL ANCHORAGE DETAIL

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:

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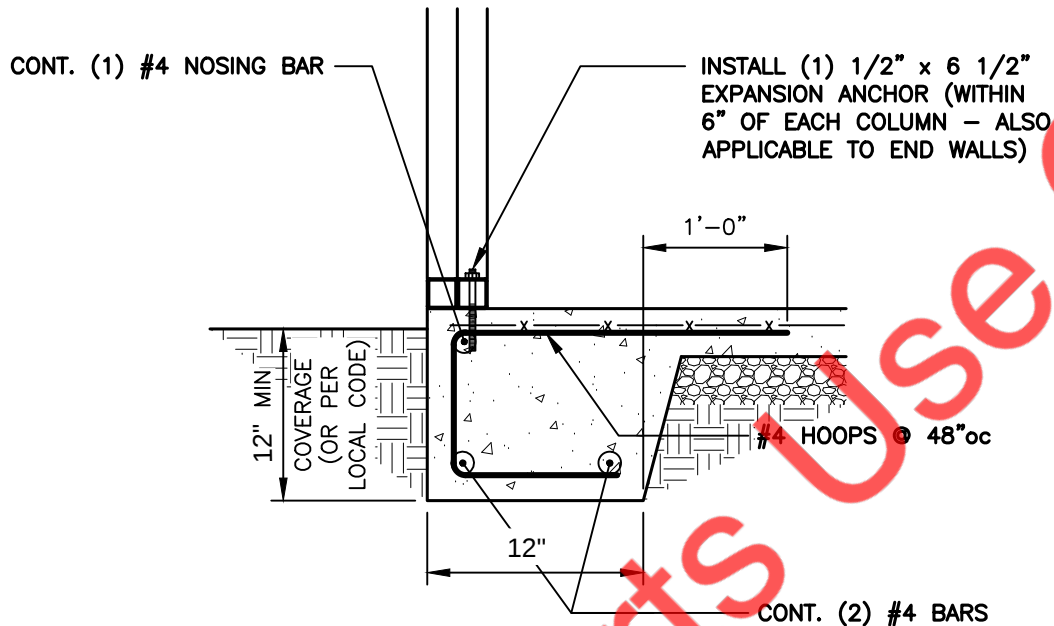
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S7E

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CONCRETE BASE RAIL ANCHORAGE



BASE RAIL ANCHORAGE DETAIL

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:

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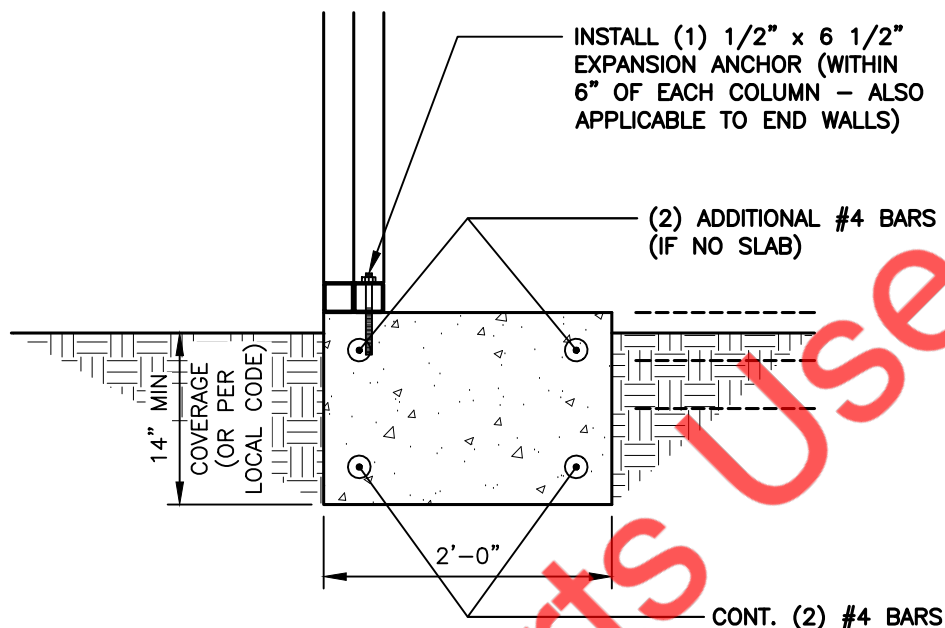
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CONCRETE BASE RAIL ANCHORAGE (NO SLAB)



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

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CONCRETE:

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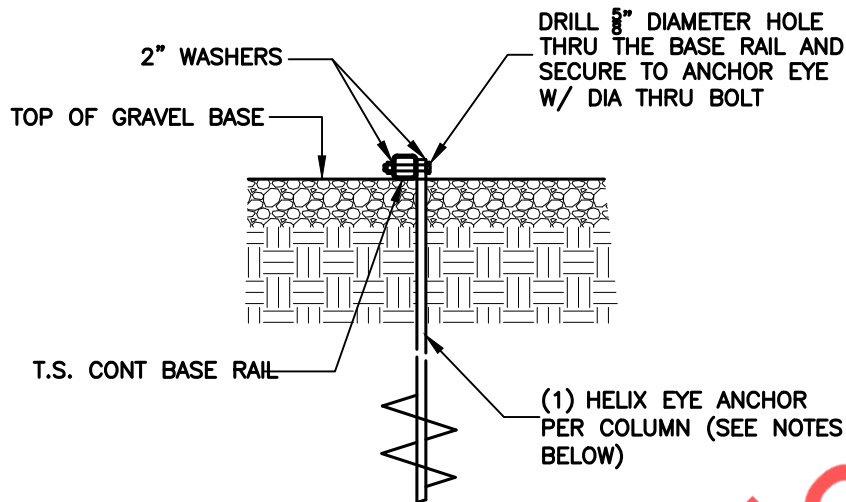
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S7G

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SOIL NAIL BASE RAIL ANCHORAGE



1 BASE RAIL ANCHORAGE DETAIL
S8 SCALE: 3/4" = 1'-0"

HELIX EMBEDMENT INFORMATION:

FOR VERY DENSE OR CEMENTED SANDS, COARSE GRAVEL, COBBLES, CALICHE, PRELOADED SILT.S. AND CLAYS, USE MIN. (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

FOR CORAL, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

FOR MED DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT.S., AND CLAYS, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILT.S., USE MIN (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

FOR VERY LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILT.S. AND ALLUVIAL FILL, USE MIN (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

NOTE:

IN ALL CASES, IF FROST DEPTH EXCEEDS STATED DEPTH, ANCHOR SHOULD EXTEND A MIN. OF 12" BELOW FROST LINE.



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NC CARPORTS
& GARAGES

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TELE: 336-368-0668

DRAWN BY:
BKS

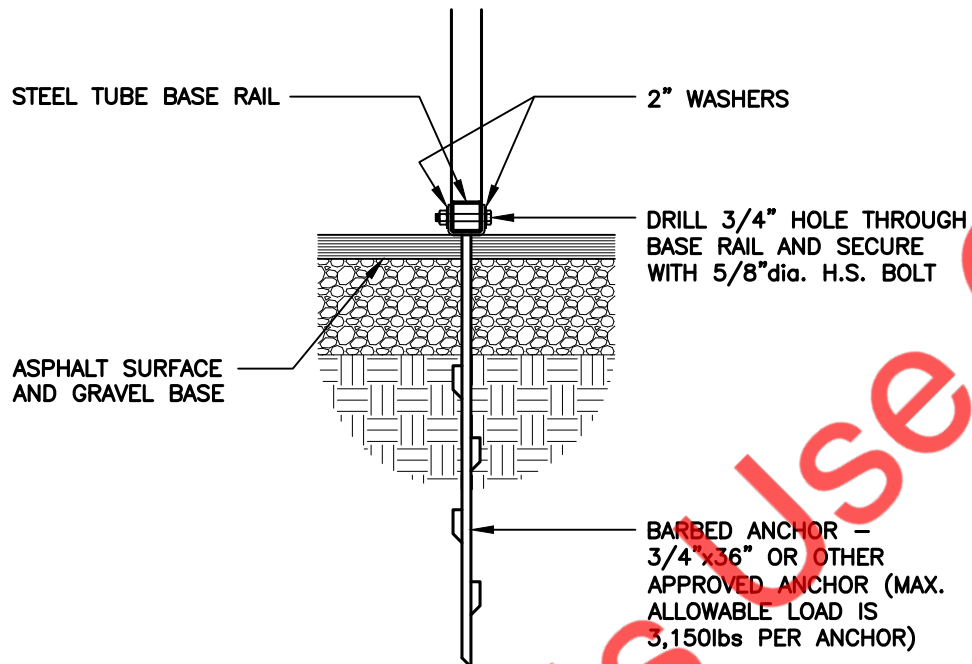
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MISC

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S8

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

ASPHALT ANCHOR BASE RAIL ANCHORAGE



ASPHALT / BASE RAIL ANCHORAGE DETAIL

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



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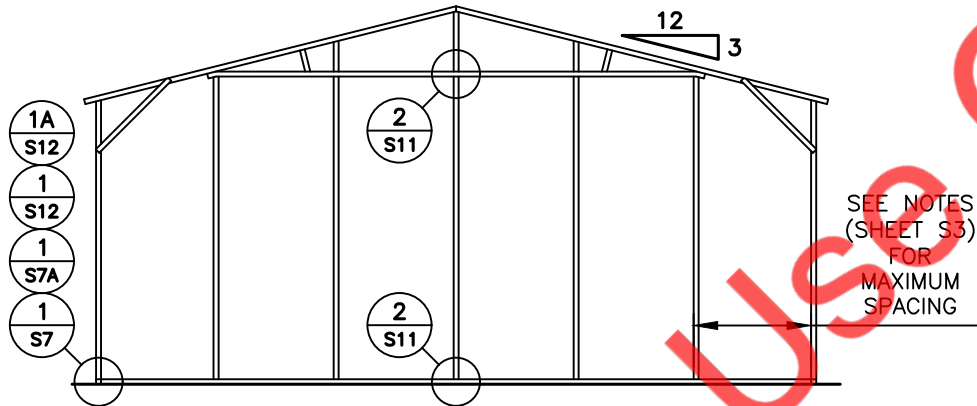
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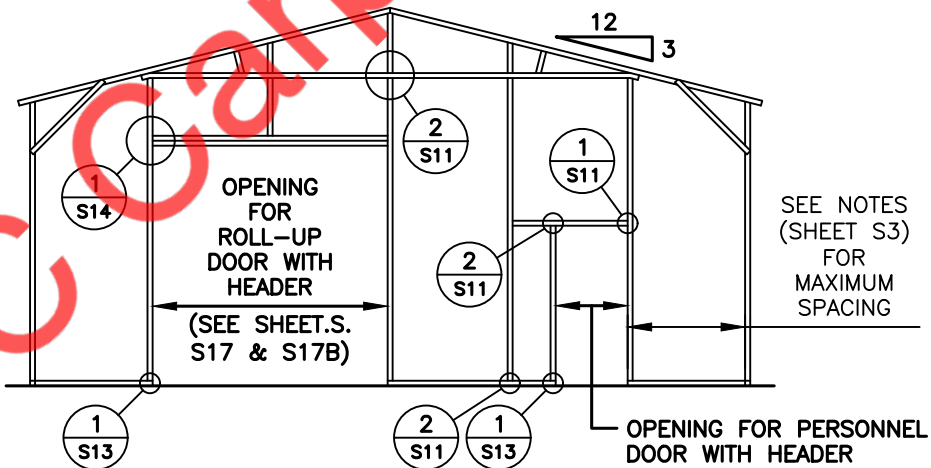
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BOX EVE RAFTER END WALL OPENINGS



TYPICAL BOX EVE RAFTER / END WALL COLUMN FRAME SECTION

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



TYPICAL BOX EVE RAFTER END WALL OPENINGS FRAMING SECTION



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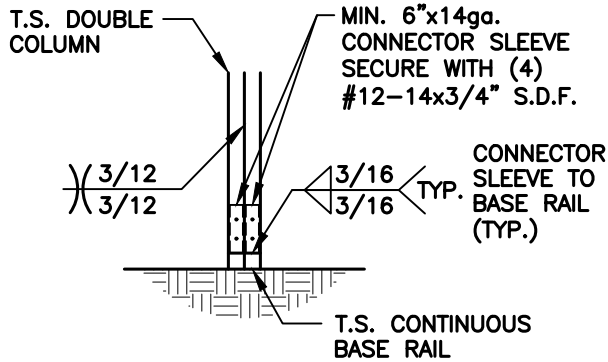
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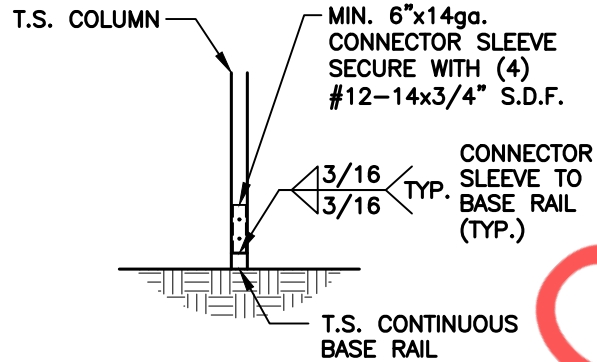
CONNECTION DETAILS



**POST / BASE RAIL
CONNECTION DETAIL**

1
S10

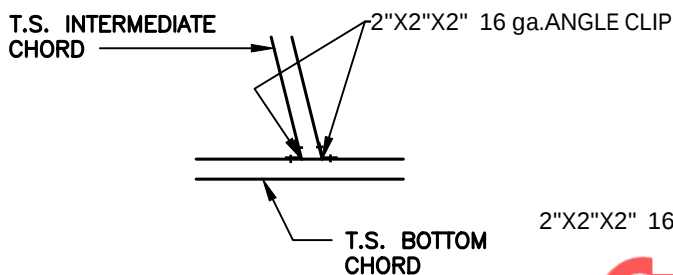
SCALE: 1/2" = 1'-0"



**POST / BASE RAIL
CONNECTION DETAIL**

1A
S10

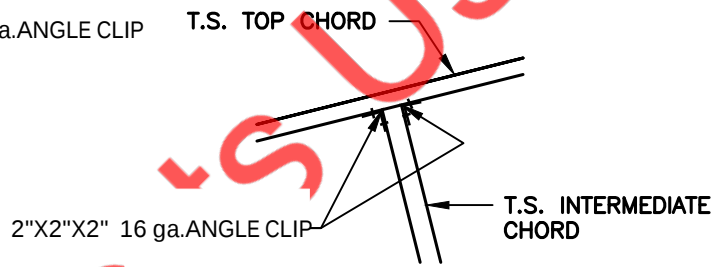
SCALE: 1/2" = 1'-0"



**INTERMEDIATE CHORD
TO BOTTOM CHORD
CONNECTION DETAIL**

2
S10

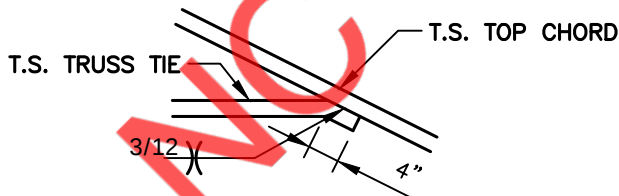
SCALE: 1/2" = 1'-0"



**INTERMEDIATE CHORD TO TOP
CHORD CONNECTION DETAIL**

3
S10

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



**TRUSS TIE
CONNECTION DETAIL**

4
S10

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



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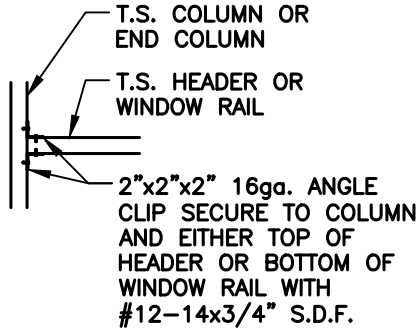
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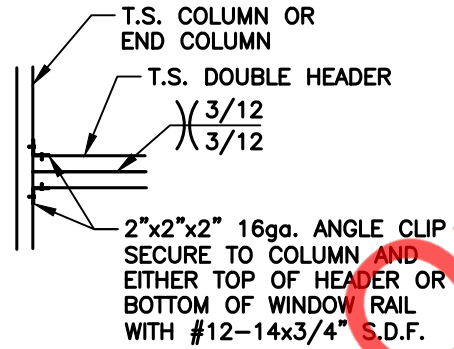
CONNECTION DETAILS



COLUMN OR WINDOW
RAIL / WALL GIRT TO POST
CONNECTION DETAIL

1
S11

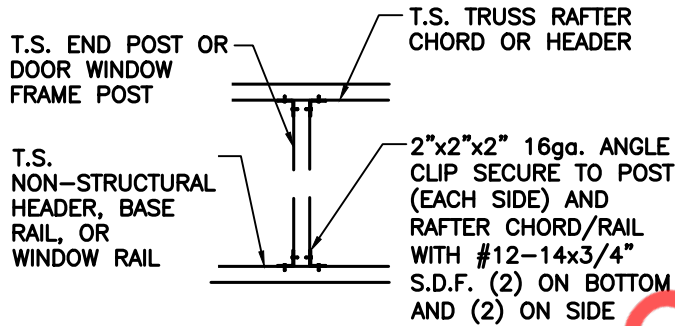
SCALE: 1/2" = 1'-0"



COLUMN / DOUBLE HEADER
CONNECTION DETAIL

1A
S11

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



DOOR OR WINDOW HEADER
RAIL TO POST CONNECTION
DETAIL

2
S11

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



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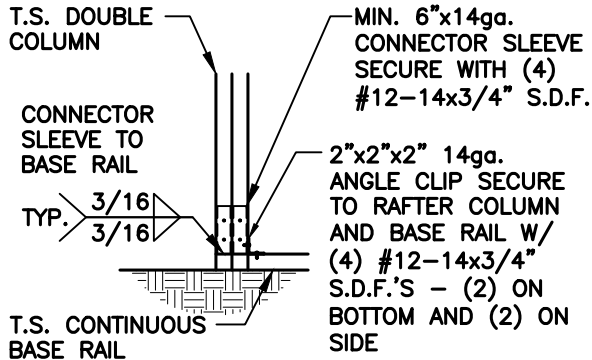
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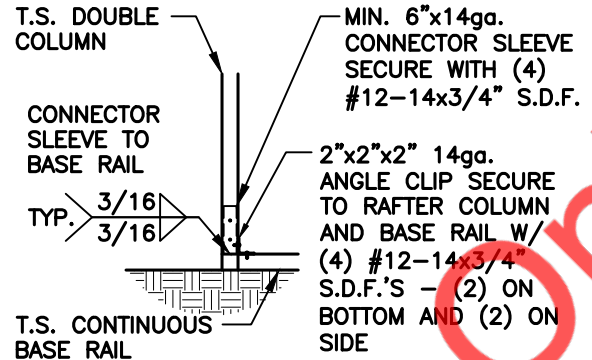
CONNECTION DETAILS



END COLUMN / BASE RAIL
CONNECTION DETAIL

1
S12

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



END COLUMN / BASE RAIL
CONNECTION DETAIL

1A
S12

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



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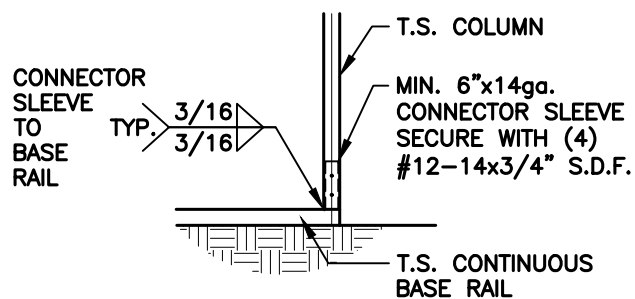
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S12

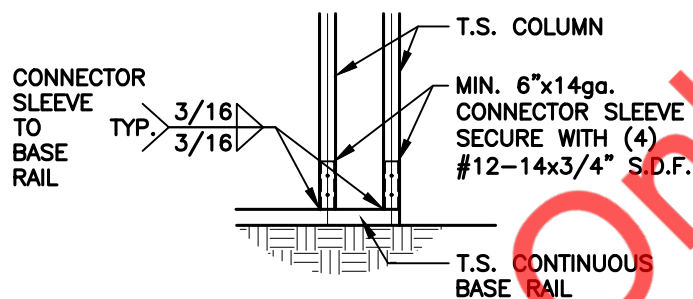
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CONNECTION DETAILS



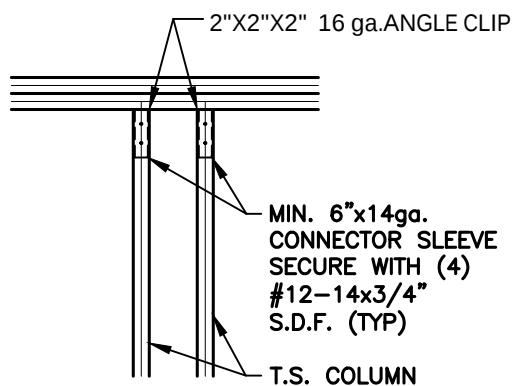
1
COLUMN / BASE RAIL
CONNECTION DETAIL

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



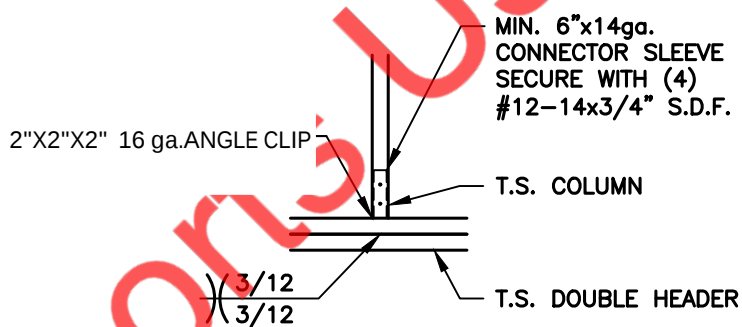
1A
COLUMN / BASE RAIL
CONNECTION DETAIL

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



2
DOUBLE HEADER / COLUMN
CONNECTION DETAIL

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



3
COLUMN / DOUBLE HEADER
CONNECTION DETAIL

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



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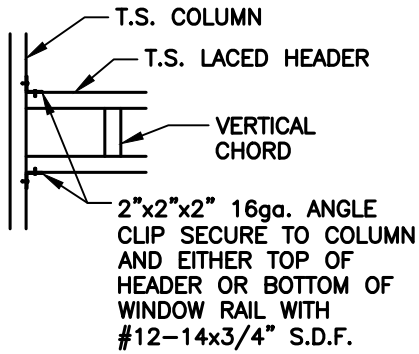
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S13

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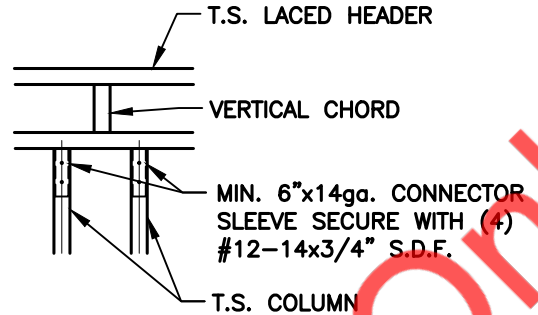
CONNECTION DETAILS



COLUMN / LACED HEADER
CONNECTION DETAIL

1
S14

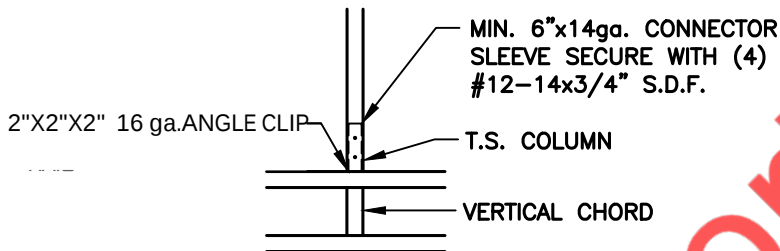
SCALE: 1/2" = 1'-0"



LACED HEADER / COLUMN
CONNECTION DETAIL

2
S14

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



COLUMN / LACED HEADER
CONNECTION DETAIL

3
S14

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



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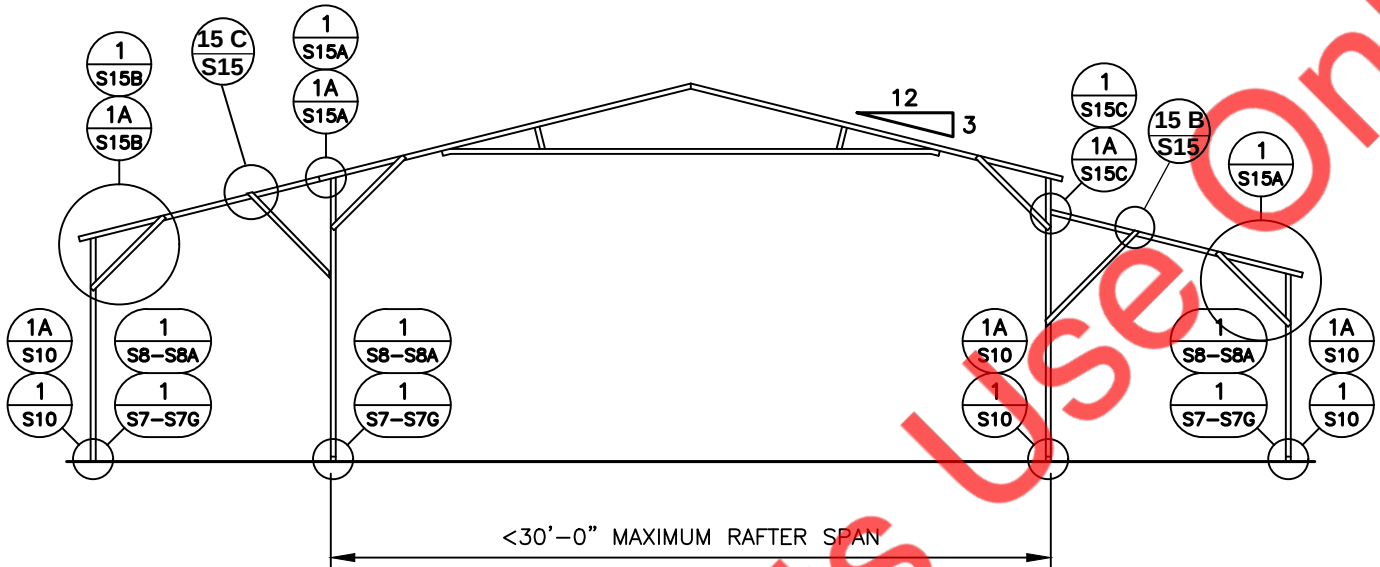
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S14

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BOX EVE RAFTER LEAN-TO OPTIONS



TYPICAL LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

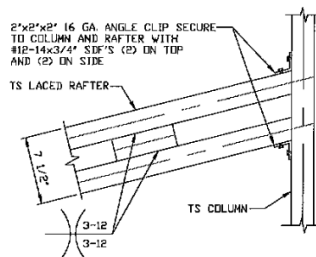
MAXIMUM WIDTH OF SINGLE MEMBER ROOF EXTENSION AND LEAN-TO OPTION IS 12'-0"

MAXIMUM WIDTH OF DOUBLE MEMBER ROOF EXTENSION AND LEAN-TO IS 15'-0"

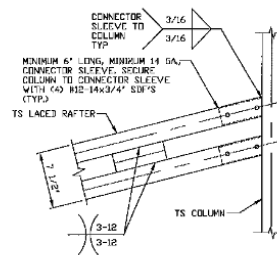
12'-0" MAX. LEAN-TO HEIGHT WITH SINGLE COLUMN

16'-0" MAX. LEAN-TO HEIGHT WITH DOUBLE COLUMN

20'-0" MAX. LEAN-TO HEIGHT WITH DOUBLE COLUMN



15B
LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR SPAN 16'-0" < L ≤ 20'-0"
SCALE: NTS



15C
LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR SPAN 16'-0" < L ≤ 20'-0"
SCALE: NTS



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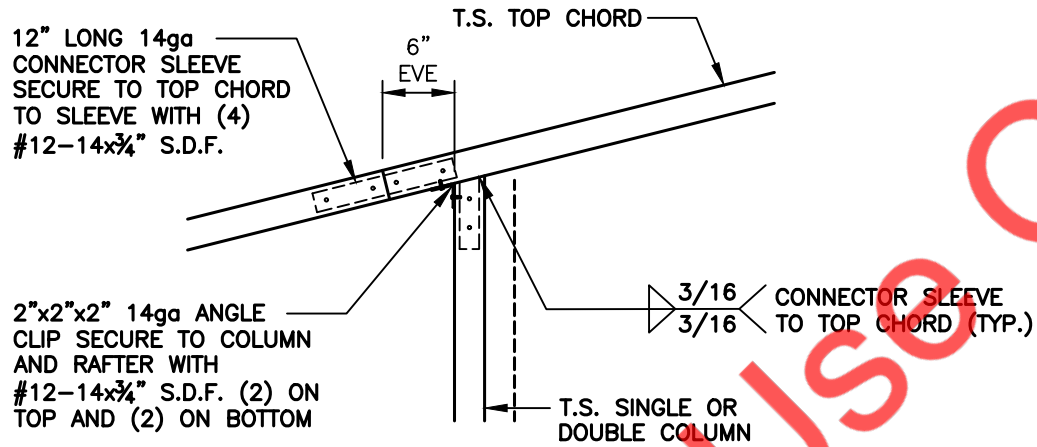
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S15

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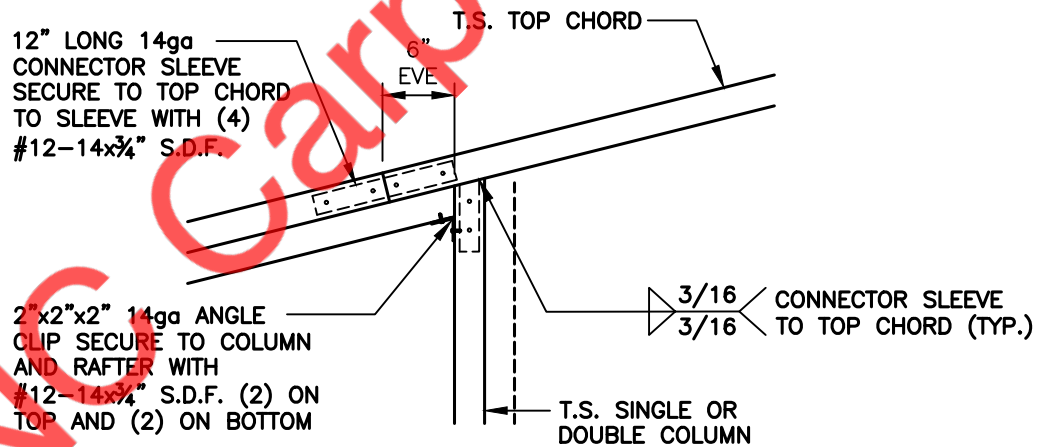
LEAN-TO CONNECTION DETAILS



ROOF EXTENSION RAFTER / CORNER POST
DETAIL FOR WIDTHS < 12'-0"

1
S15A

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



ROOF EXTENSION RAFTER / CORNER POST
DETAIL FOR WIDTHS < 15'-0"

1A
S15A

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



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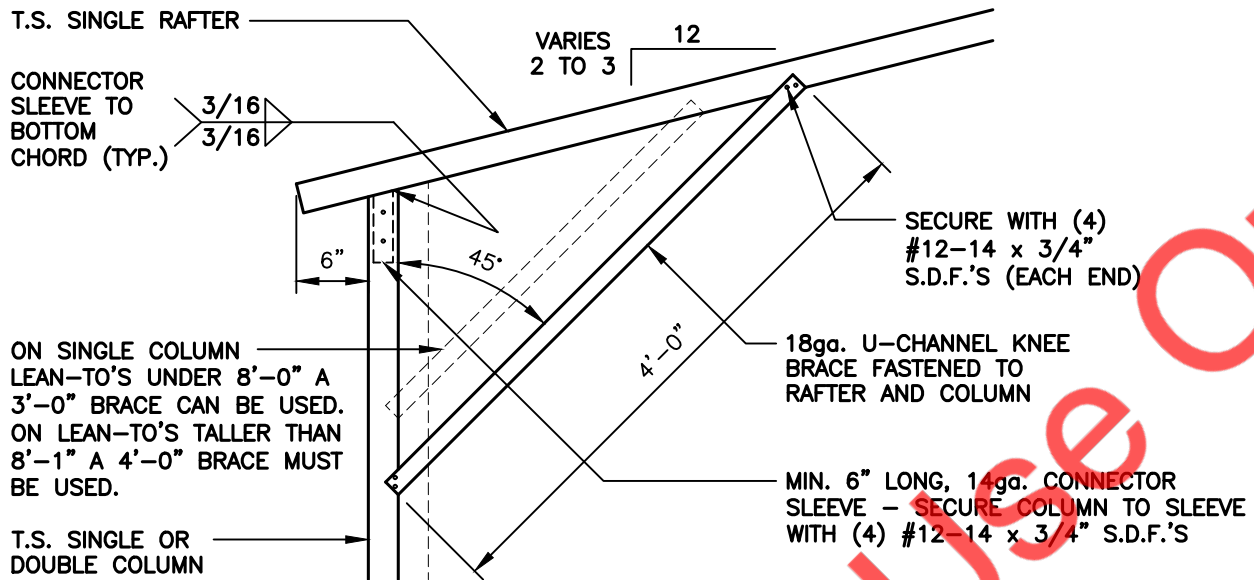
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S15A

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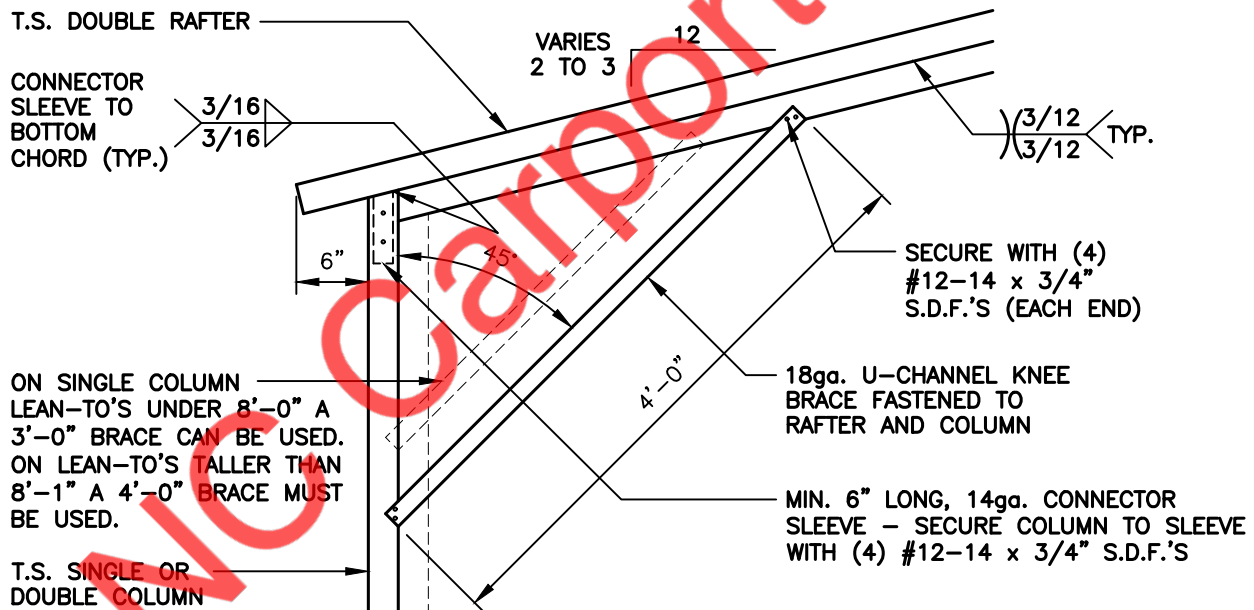
LEAN-TO CONNECTION DETAILS - SINGLE COLUMN



LEAN-TO SINGLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

1
S15B

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



LEAN-TO DOUBLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

1A
S15B

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



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S15B

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LEAN-TO / MAIN FRAME CONNECTION DETAILS

2"x2"x2" 14ga. ANGLE CLIP
SECURE TO COLUMN AND RAFTER
WITH #12-14 x 3/4" S.D.F. (2)
ON TOP AND (2) ON BOTTOM

T.S. SINGLE RAFTER

T.S. MAIN
FRAME COLUMN

LEAN-TO SINGLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1

S15C

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

2"x2"x2" 14ga. ANGLE CLIP
SECURE TO COLUMN AND RAFTER
WITH #12-14 x 3/4" S.D.F. (2)
ON TOP AND (2) ON BOTTOM

T.S. SINGLE RAFTER

TYP. $\frac{3}{12}$ / $\frac{3}{12}$

T.S. MAIN
FRAME COLUMN

LEAN-TO DOUBLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1A

S15C

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



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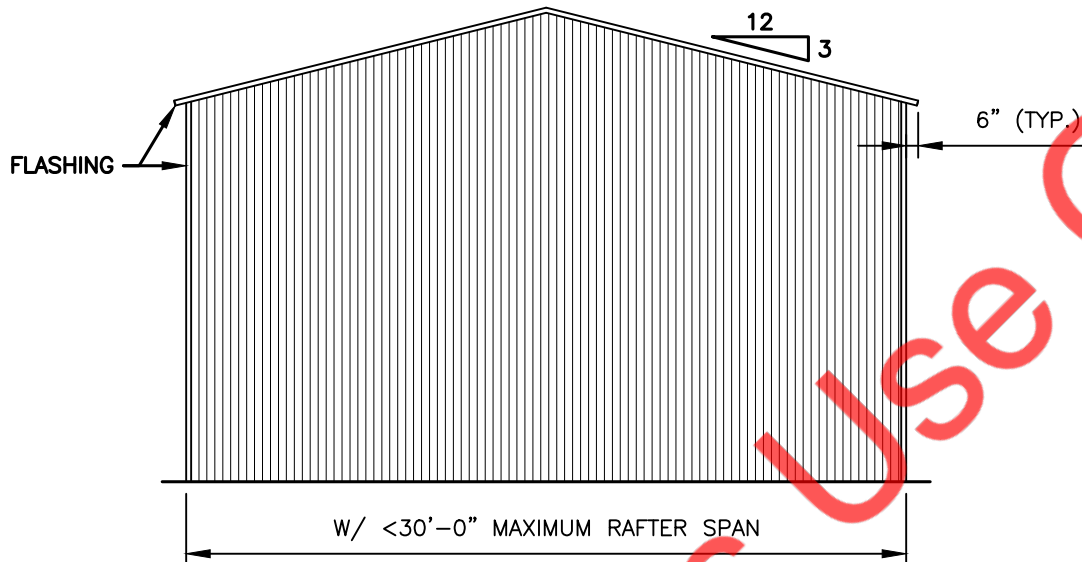
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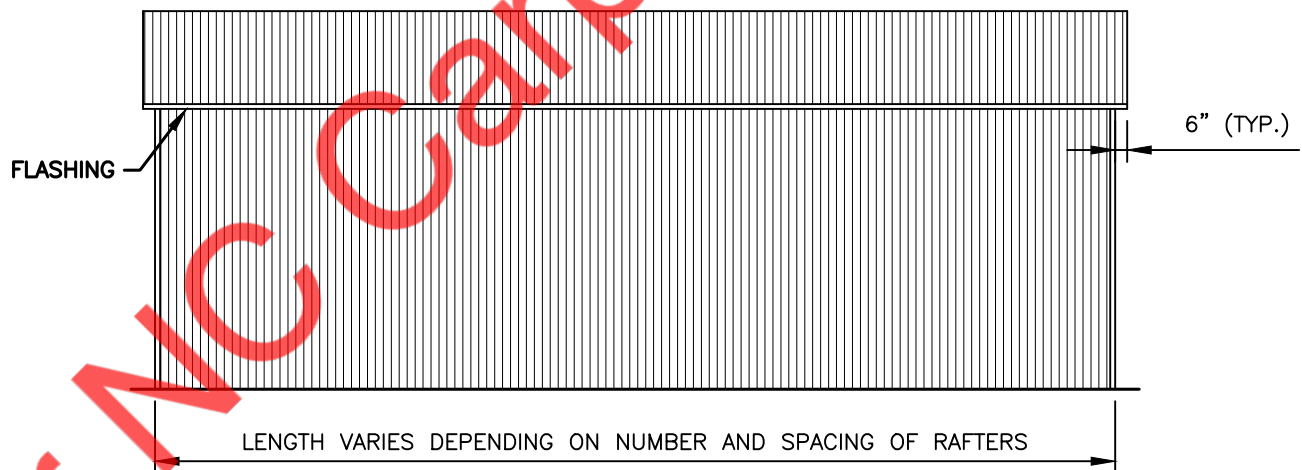
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VERTICAL ROOF / SIDING OPTION



TYPICAL END ELEVATION - VERTICAL ROOF / SIDING



TYPICAL SIDE ELEVATION - VERTICAL ROOF / SIDING



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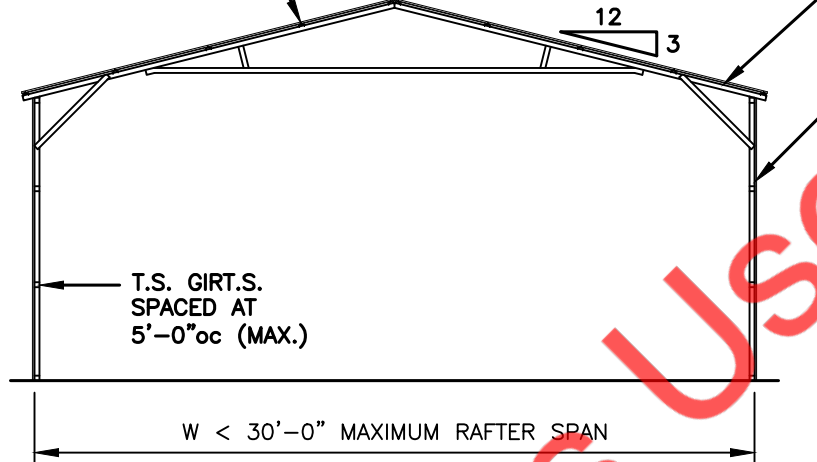
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S16

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

VERTICAL ROOF / SIDING OPTION

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

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



TYPICAL SECTION VERTICAL ROOF / SIDING 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.



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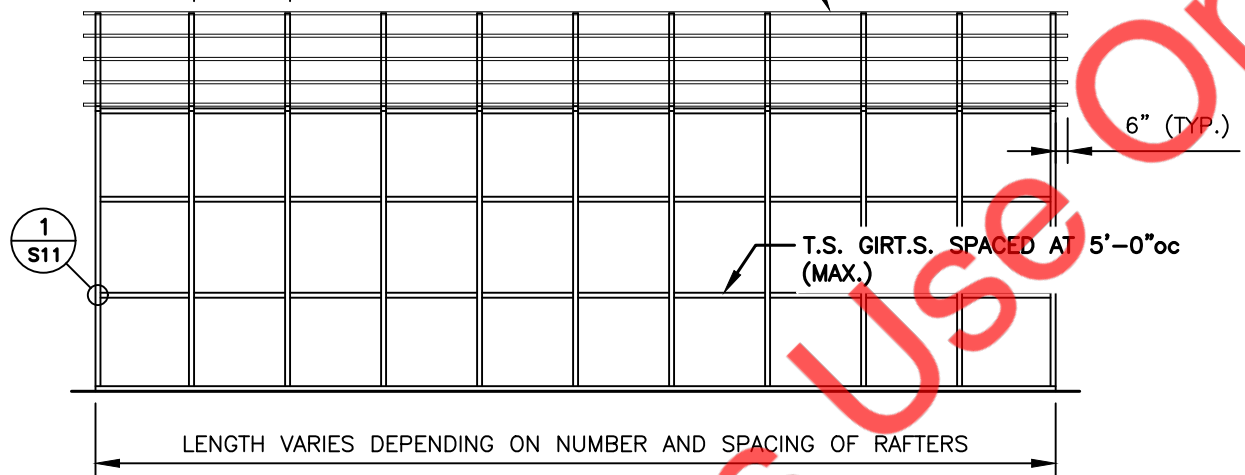
SHEET NO:
S16A

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VERTICAL ROOF / SIDING OPTION

SEE NOTES
(SHEET S3)
FOR MAXIMUM
SPACING

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



TYPICAL SIDE FRAMING SECTION VERTICAL ROOF / SIDING OPTION

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

T.S.
RAFTER

ROOF PANEL ATTACHMENT
NT.S.



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ELKIN, NORTH CAROLINA 28621
TELE: 336-368-0668

DRAWN BY:
BKS

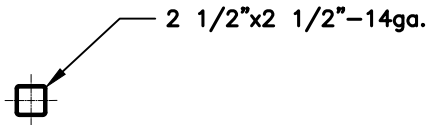
PROJECT NO:
MISC

DATE:
02/14/2025

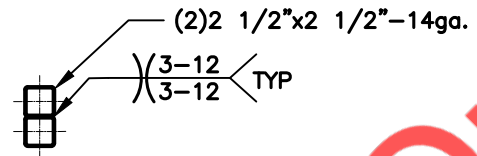
SHEET NO:
S168

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

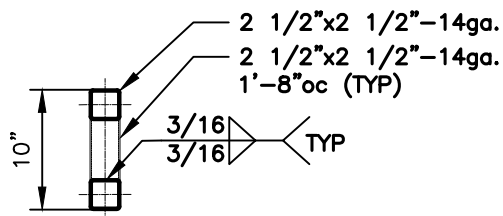
SIDE WALL HEADER OPTIONS



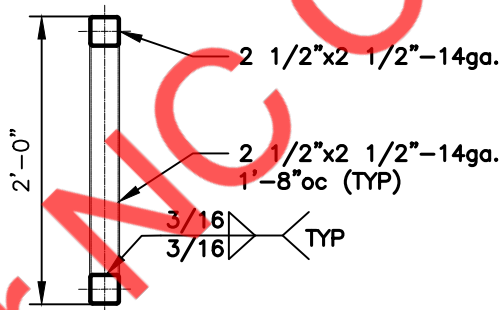
HEADER DETAIL FOR DOOR
OPENINGS < 4'-0"
NT.S.



HEADER DETAIL FOR DOOR
OPENINGS 4'-1" < TO < 12'-0"
NT.S.



LACED HEADER DETAIL FOR DOOR
OPENINGS 12'-1" < TO < 15'-0"
NT.S.



LACED HEADER DETAIL FOR DOOR
OPENINGS 15'-1" < TO < 20'-0"



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NC CARPORTS
& GARAGES

116 EAST MARKET STREET
ELKIN, NORTH CAROLINA 28621
TELE: 336-368-0668

DRAWN BY:
BKS

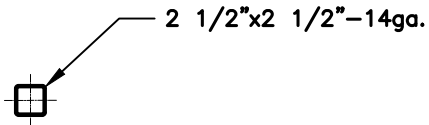
PROJECT NO:
MISC

DATE:
02/14/2025

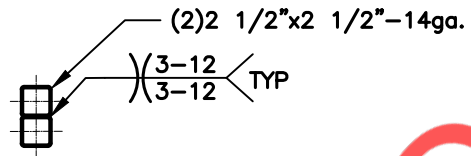
SHEET NO:
S17

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

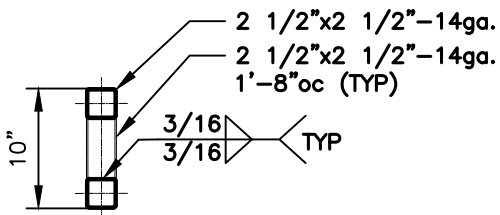
END WALL HEADER OPTIONS



HEADER DETAIL FOR DOOR
OPENINGS < 7'-0"
NT.S.



HEADER DETAIL FOR DOOR
OPENINGS 7'-1" < TO < 16'-0"
NT.S.



LACED HEADER DETAIL FOR DOOR
OPENINGS 16'-1" < TO < 20'-0"
NT.S.



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DATE:
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SHEET NO:
S17A

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