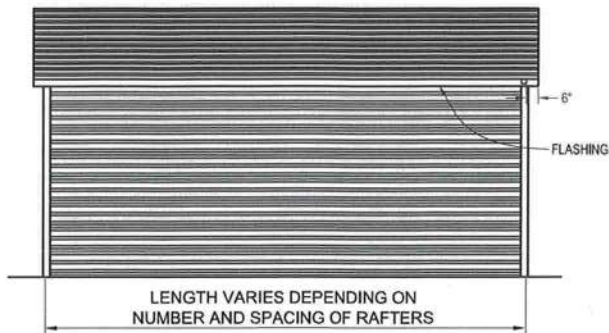
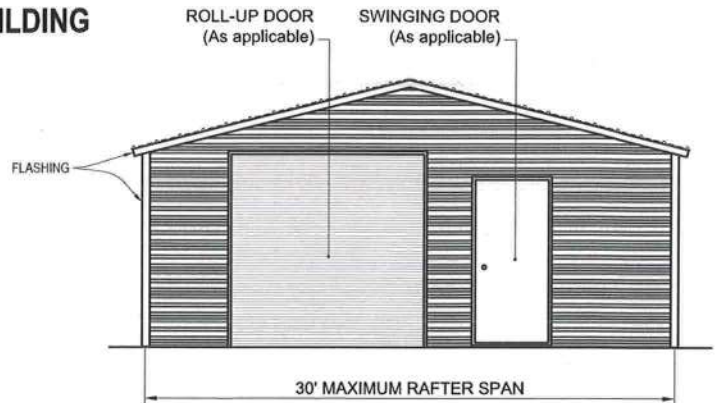


☐ **BOX EAVE FRAME RAFTER ENCLOSED BUILDING**  
(Sheets 2, 4, 5, 7, 8, 9, and 11)



TYPICAL SIDE ELEVATION - HORIZONTAL ROOF

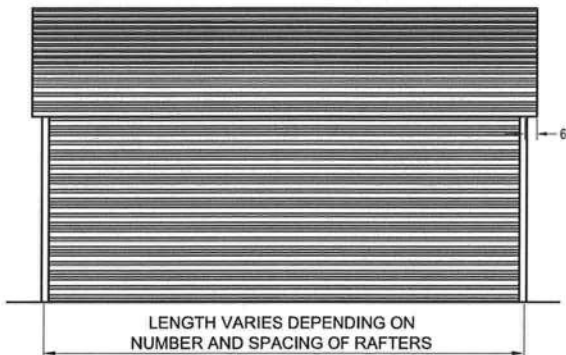
SCALE: 1/8" = 1'



TYPICAL END ELEVATION - HORIZONTAL ROOF

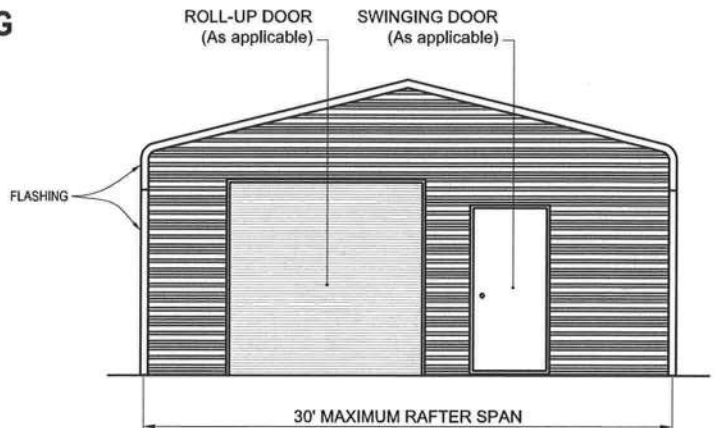
SCALE: 1/8" = 1'

☐ **BOW FRAME RAFTER ENCLOSED BUILDING**  
(Sheets 3, 4, 6, 7, 8, and 10)



TYPICAL SIDE ELEVATION

SCALE: 1/8" = 1'



TYPICAL END ELEVATION

SCALE: 1/8" = 1'

METAL FRAMING AND SIDING PREFABRICATED BY  
**BENNETT BUILDING SYSTEMS, LLC**  
1660 DIXON AIRLINE ROAD  
AUGUSTA, GA 30906

THESE ENGINEERING DRAWINGS ARE THE PROPERTY OF  
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SERVICES, INC. THESE DRAWING MAY NOT BE REPRODUCED  
WITHOUT THE WRITTEN CONSENT OF BECHTOL ENGINEERING  
& TESTING, INC., AND J&B BUILDING SERVICES, INC.

THIS IS TO CERTIFY THAT THE CALCULATIONS AND  
SPECIFICATIONS HEREIN HAVE BEEN PREPARED  
BY THE UNDERSIGNED PROFESSIONAL ENGINEER,  
AND ARE IN ACCORDANCE WITH THE  
REQUIREMENTS OF SECTION 1609 OF THE 2010  
FLORIDA BUILDING CODE. THE PLANS ARE VALID  
UNTIL THE NEXT REVISION OF THE FLORIDA  
BUILDING CODE.



**INSTALLATION PLANS AND DETAILS FRAMING AND FASTENER  
SPECIFICATIONS METAL CARPORT STRUCTURES**

FOR CONSTRUCTION IN THE STATE OF FLORIDA

PREPARED BY:

**BECHTOL ENGINEERING AND TESTING, INC.**

605 WEST NEW YORK AVENUE

DELAND, FLORIDA 32720

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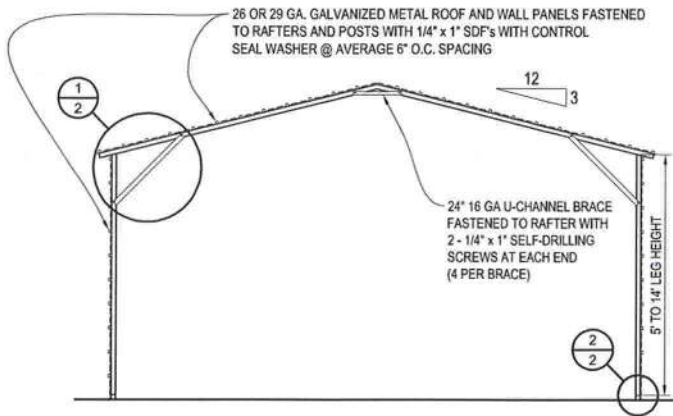
**GENERAL NOTES:**

1. RISK CATEGORY I OR II.
2. WIND EXPOSURE CATEGORY B, C, OR D.
3. ULTIMATE WIND SPEED 115 TO 150 MPH (NOMINAL WIND SPEED 89 TO 116 MPH);  
MAXIMUM RAFTER/POST AND END POST SPACING = 5.0 FEET.
4. ULTIMATE WIND SPEED 151 TO 180 MPH (NOMINAL WIND SPEED 117 TO 139 MPH);  
MAXIMUM RAFTER/POST AND END POST SPACING = 4.0 FEET.
5. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS (INTERIOR OR  
END) = 6 INCHES.
6. SPECIFICATIONS APPLICABLE TO 26 AND 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 14 GAUGE  
STEEL TUBE RAFTER FRAMES.
7. FASTENERS CONSIST OF 1/4"-14X3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.  
SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES  
OF 14° (3:12 PITCH). SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
8. GROUND ANCHORS REQUIREMENTS ARE 1 @ EACH CORNER AND ONE EVERY OTHER INTERIOR  
RAFTER POST LOCATION, AT A MAXIMUM OF 10' O.C., AND BOTH SIDES OF OPENINGS WHERE BASE RAIL  
IS ABSENT.
9. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.

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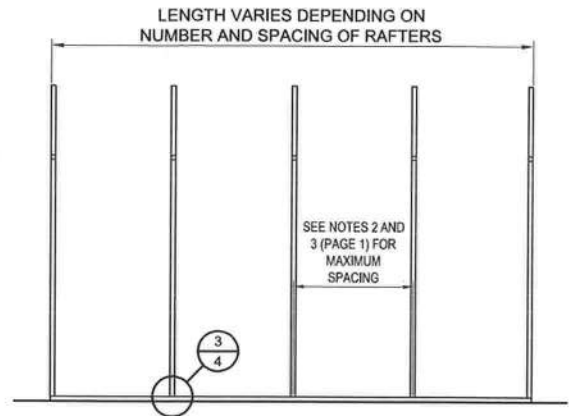
**J&B BUILDING SERVICES, INC.**

FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 1 OF 11



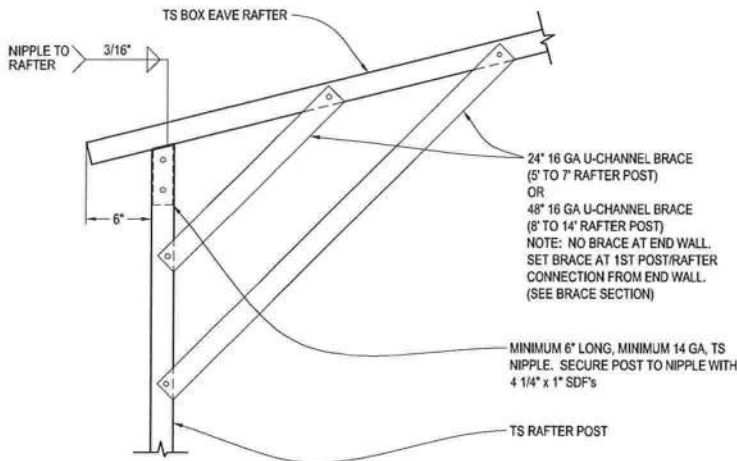
TYPICAL RAFTER/POST FRAME SECTION

SCALE: 1/8" = 1'



TYPICAL RAFTER/POST FRAMING PLAN

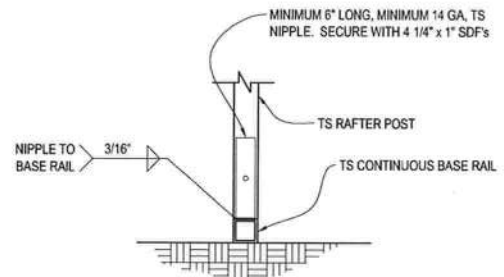
SCALE: 1/8" = 1'



BOX EAVE RAFTER/CORNER POST CONNECTION DETAIL

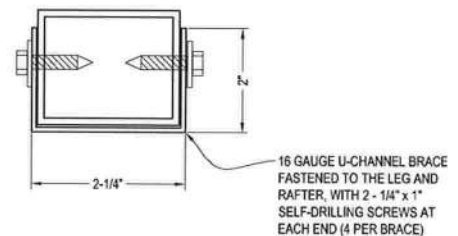
1

Not To Scale

RAFTER POST/  
BASE RAIL CONNECTION DETAIL

2

Not To Scale



BRACE SECTION

Not To Scale



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Florida License No. 38568



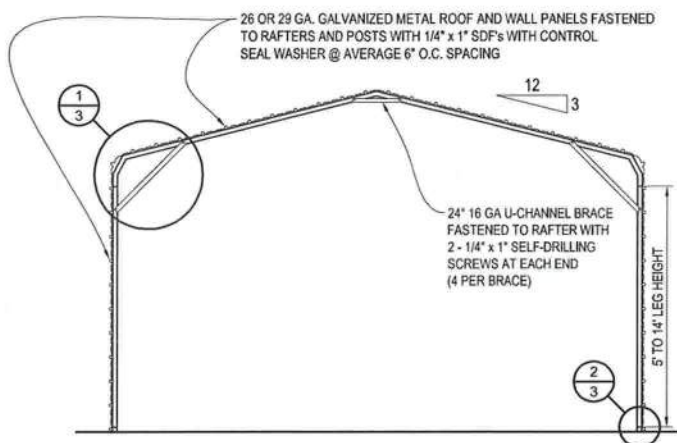
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**J&B BUILDING SERVICES, INC.**

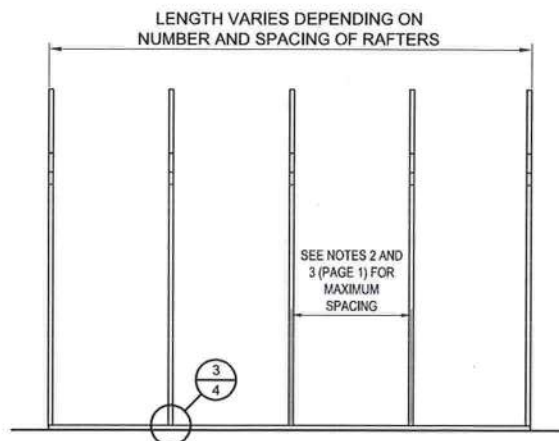
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DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 2 OF 11





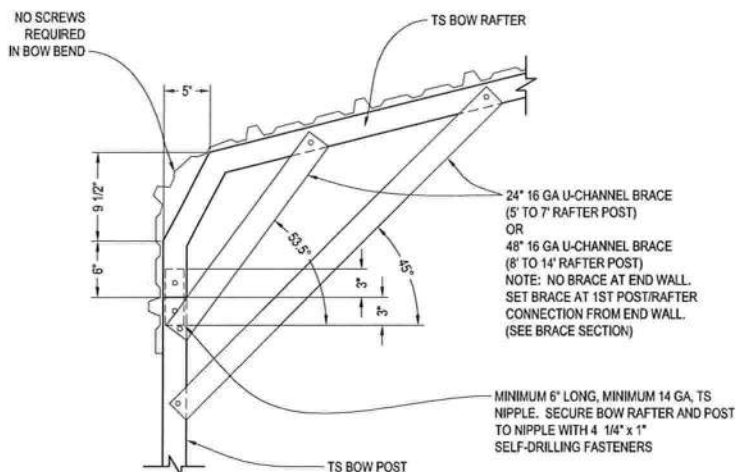
TYPICAL RAFTER/POST FRAME SECTION

SCALE: 1/8" = 1'



TYPICAL RAFTER/POST FRAMING PLAN

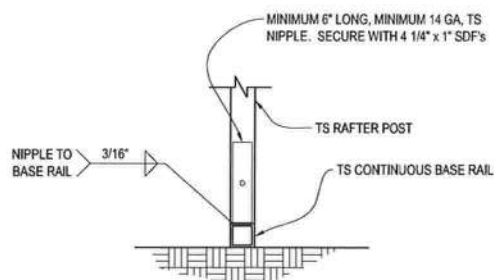
SCALE: 1/8" = 1'



BOW RAFTER/CORNER POST CONNECTION DETAIL

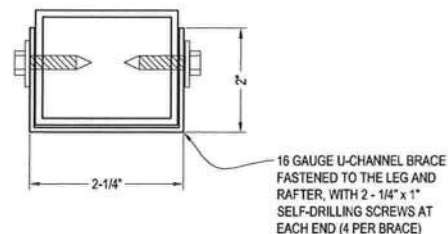
1

Not To Scale

RAFTER POST/  
BASE RAIL CONNECTION DETAIL

2

Not To Scale



BRACE SECTION

Not To Scale



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Florida License No. 38133



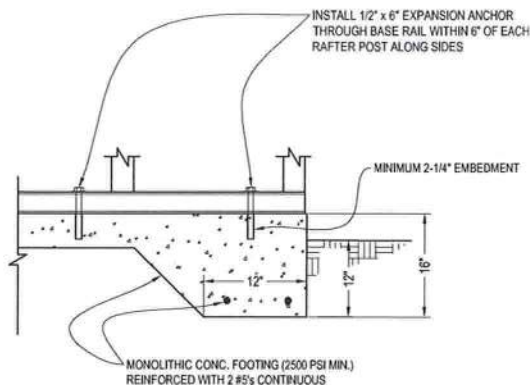
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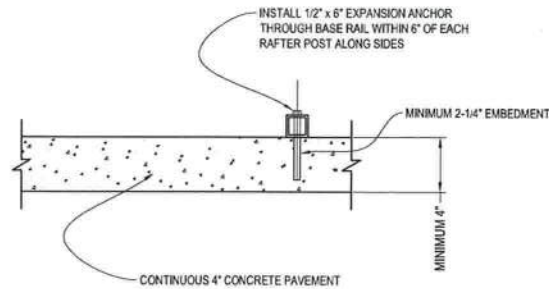
FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 3 OF 11

# BASE RAIL ANCHORAGE OPTIONS



**3A CONCRETE MONO. SLAB BASE RAIL ANCHORAGE**

Not To Scale



**3B CONCRETE SLAB BASE RAIL ANCHORAGE**

Not To Scale

(OPTIONAL - OPEN CARPORTS ONLY)

## CONCRETE:

Concrete Shall Have a Minimum Specified Compressive Strength of 2500 PSI at 28 Days.

## COVER OVER REINFORCING STEEL

For foundations, minimum concrete cover over reinforcing bars shall be:

3 inches in foundations where the concrete is cast against and permanently in contact with the earth or exposed to the earth or weather, and 1-1/2 inches elsewhere. Reinforcing bars embedded in grouted cells shall have a minimum clear distance of 1/4 inch for fine grout or 1/2 inch for coarse grout between reinforcing bars and any face of a cell. Reinforcing bars used in masonry walls shall have a masonry cover (including grout) of not less than 2 inches for masonry units with face exposed to earth or weather 1-1/2 inches for masonry units not exposed to earth or weather.

## REINFORCING STEEL:

The reinforcing steel shall be minimum Grade 40.

## GALVANIZATION:

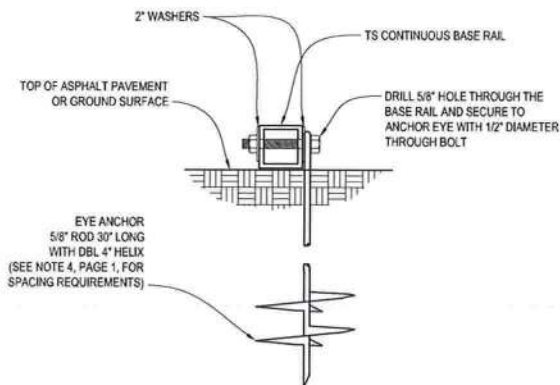
Metal accessories for use in exterior wall construction and not directly exposed to the weather shall be galvanized in accordance with ASTM A 153, Class B-2. Metal plate connectors, screws, bolts and nails exposed directly to the weather shall be stainless steel or hot dipped galvanized.

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

1. All reinforcement is bent cold;
2. The diameter of the bend, measured on the inside of the bar, is not less than six-bar diameters; and
3. Reinforcement partially embedded in concrete shall not be field bent.

## EXCEPTION:

Where bending is necessary to align dowel bars with a vertical cell, bars partially embedded in concrete shall be permitted to be bent at a slope of not more than 1 inch of horizontal displacement to 6 inches of vertical bar length.



**3C GROUND BASE RAIL ANCHORAGE**

Not To Scale

(CAN BE USED FOR ASPHALT)

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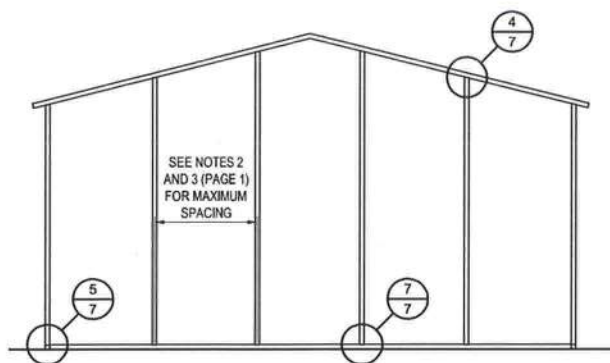
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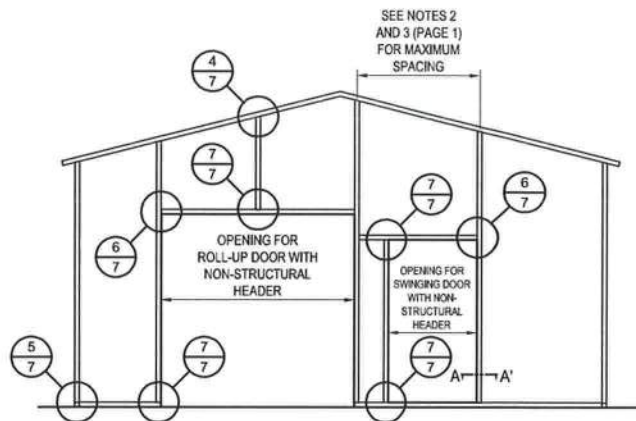
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DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 4 OF 11

# BOX EAVE RAFTER END WALL AND WALL OPENINGS



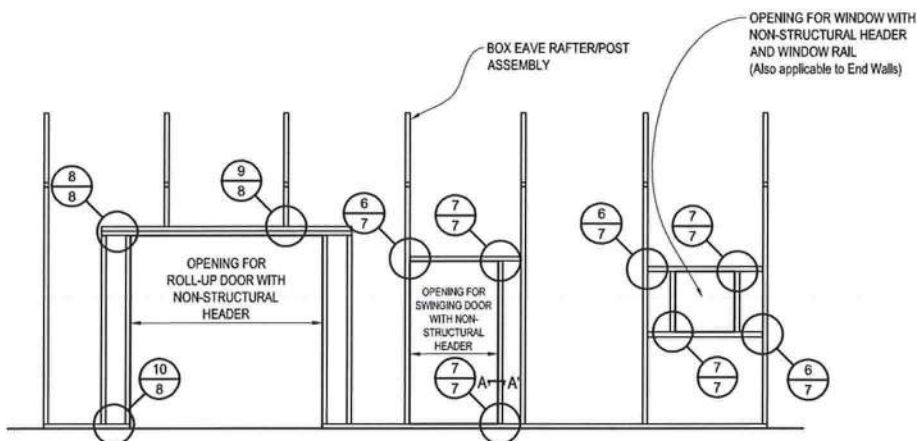
TYPICAL BOX EAVE RAFTER END WALL FRAMING PLAN

SCALE: 1/8" = 1'



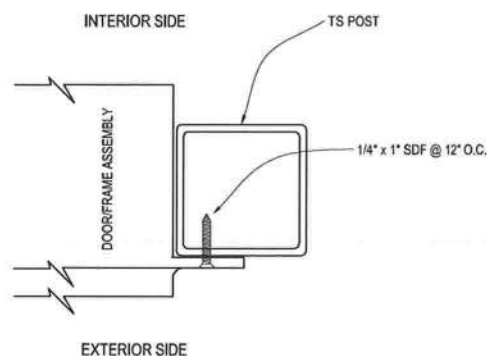
TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING PLAN

SCALE: 1/8" = 1'



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING PLAN

SCALE: 1/8" = 1'



SECTION A-A'

Not To Scale



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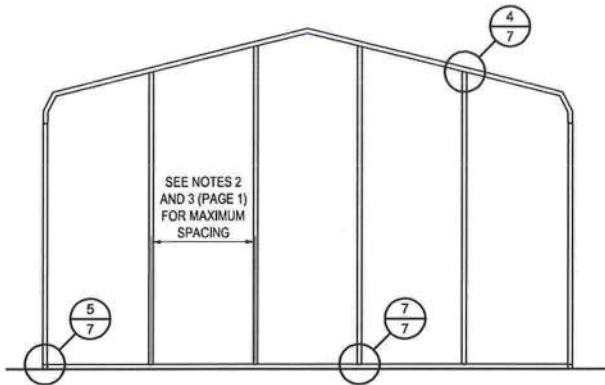
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**J&B BUILDING SERVICES, INC.**

FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 5 OF 11

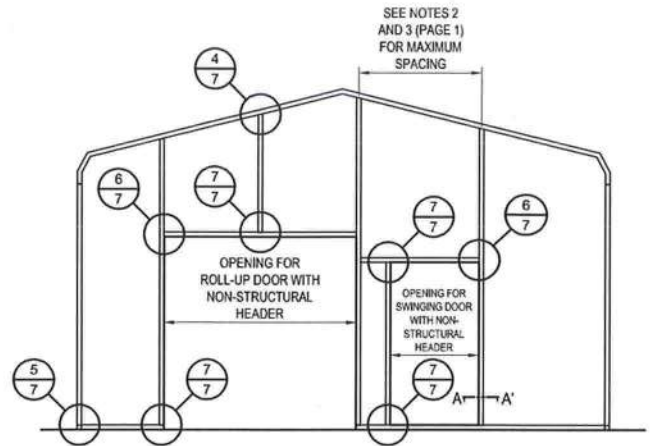


# BOW RAFTER END WALL AND WALL OPENINGS



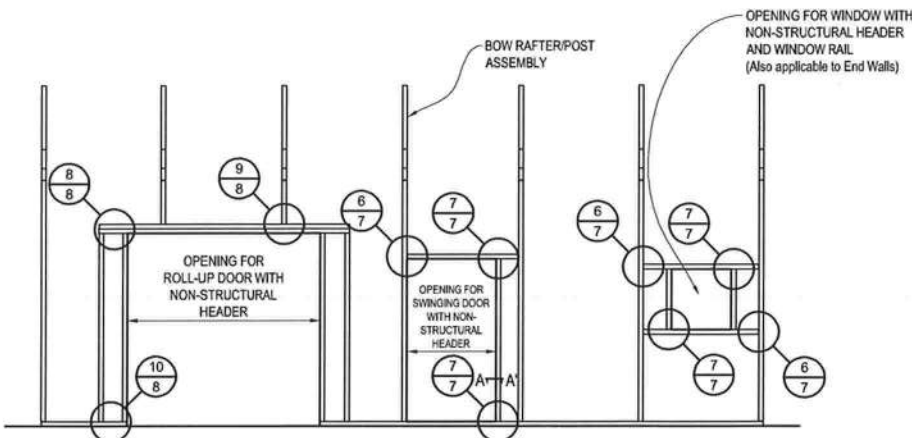
TYPICAL BOW RAFTER END WALL FRAMING PLAN

SCALE: 1/8" = 1'



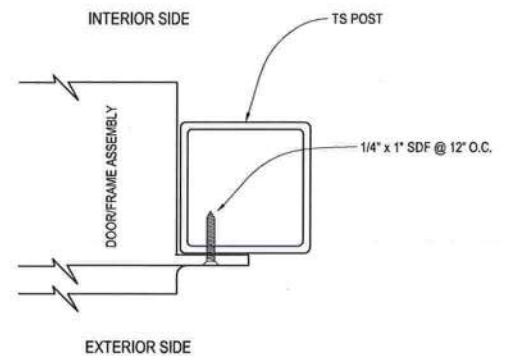
TYPICAL BOW RAFTER END WALL OPENINGS FRAMING PLAN

SCALE: 1/8" = 1'



TYPICAL BOW RAFTER SIDE WALL OPENINGS FRAMING PLAN

SCALE: 1/8" = 1'



SECTION A-A'

Not To Scale



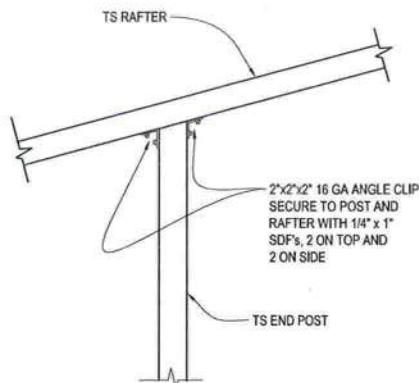
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**J&B BUILDING SERVICES, INC.**

FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 6 OF 11

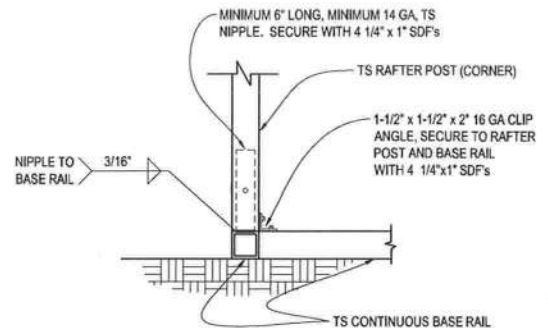
# BOX EAVE RAFTER WALL OPENING DETAILS



4

END POST/RAFTER CONNECTION DETAIL

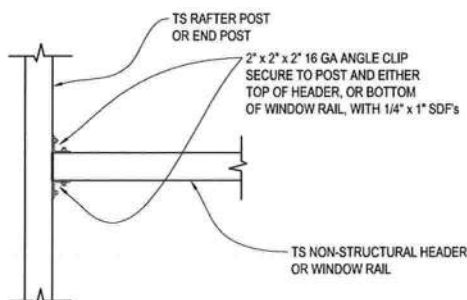
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5

END POST/BASE RAIL CONNECTION DETAIL

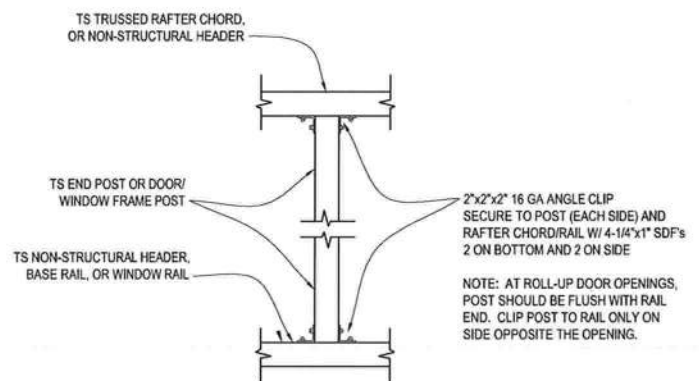
Not To Scale



6

NON-STRUCTURAL HEADER OR WINDOW  
RAIL TO POST CONNECTION DETAIL

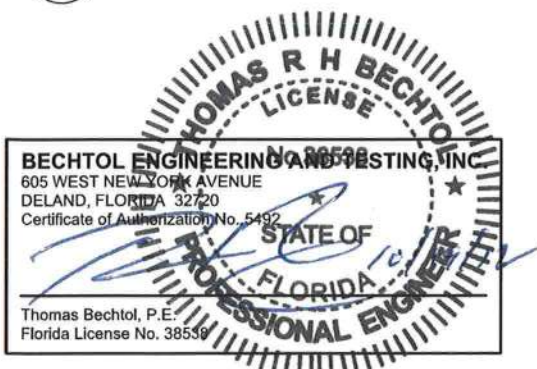
Not To Scale



7

POST TO NON-STRUCTURAL HEADER, BASE  
RAIL, OR WINDOW RAIL CONNECTION DETAIL

Not To Scale



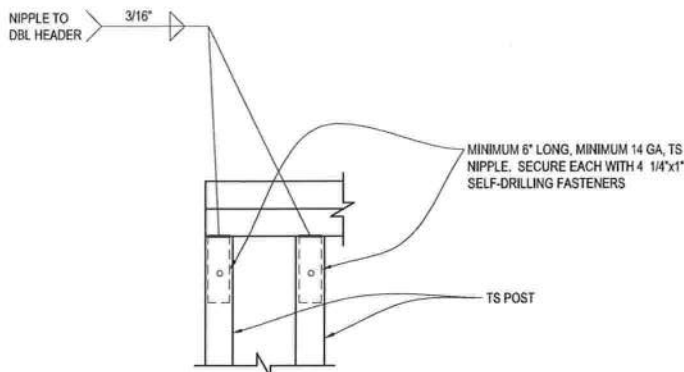
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FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 7 OF 11

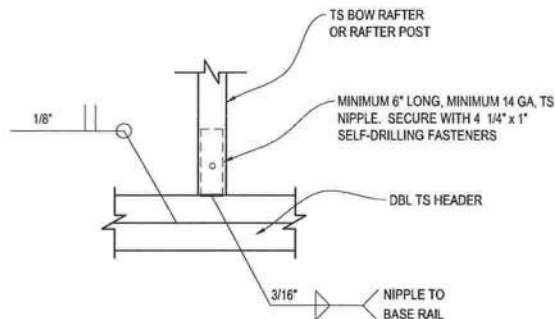
# BOX EAVE RAFTER WALL OPENING DETAILS



8

## DBL HEADER/POST CONNECTION DETAIL

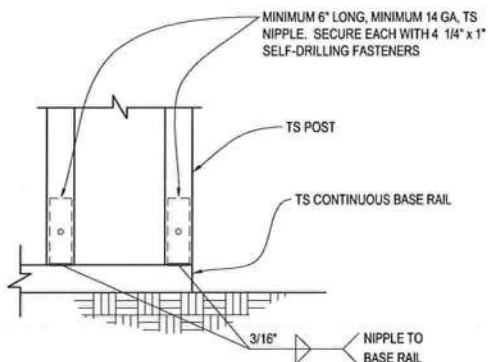
Not To Scale



9

## RAFTER POST/DBL HEADER CONNECTION DETAIL

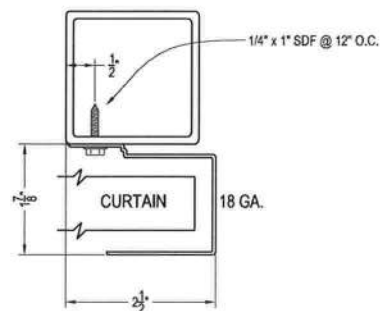
Not To Scale



10

## RAFTER POST/BASE RAIL CONNECTION DETAIL

Not To Scale



## SECTION THROUGH ROLL UP DOOR HEADER

Not To Scale

NOTE: Curtain is 26 GA. galvanized steel with baked on epoxy primer &amp; polyester top coat.

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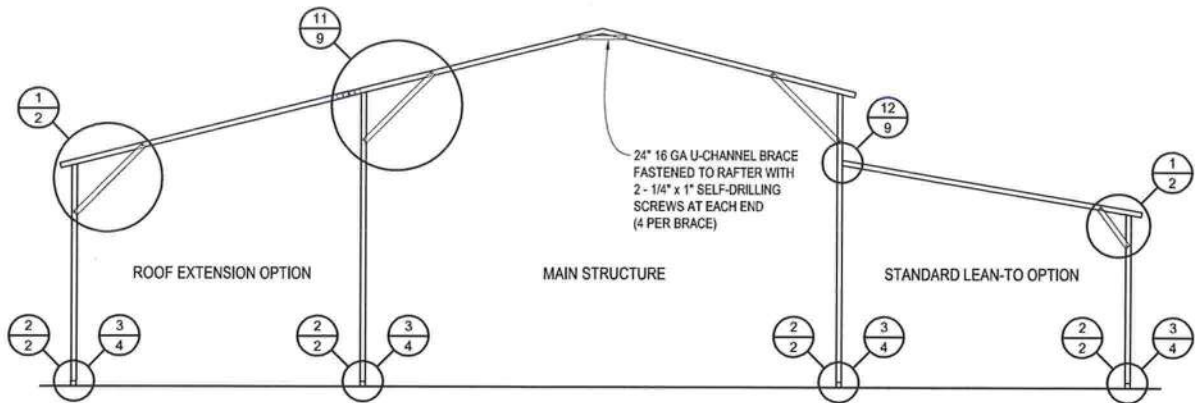
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FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 8 OF 11

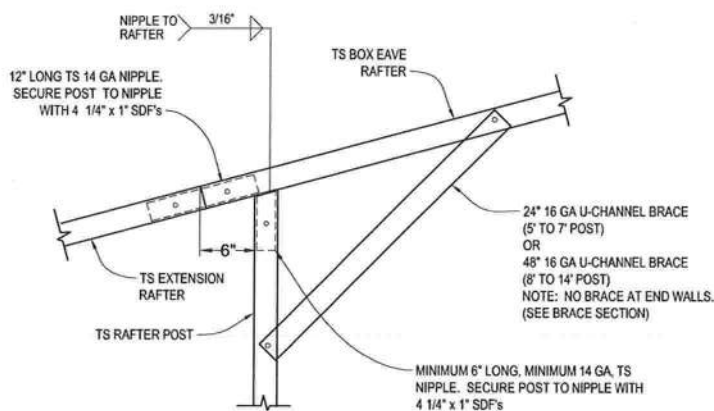


# BOX EAVE RAFTER LEAN-TO OPTIONS



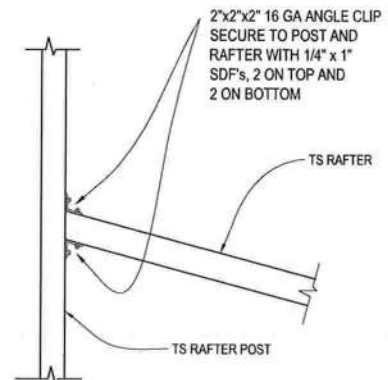
TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING PLAN (BOTH OPTIONS SHOWN)

SCALE: 1/8" = 1'



11 SIDE EXTENSION RAFTER/  
CORNER POST DETAIL

Not To Scale



12 LEAN-TO RAFTER TO RAFTER POST  
CONNECTION DETAIL

Not To Scale



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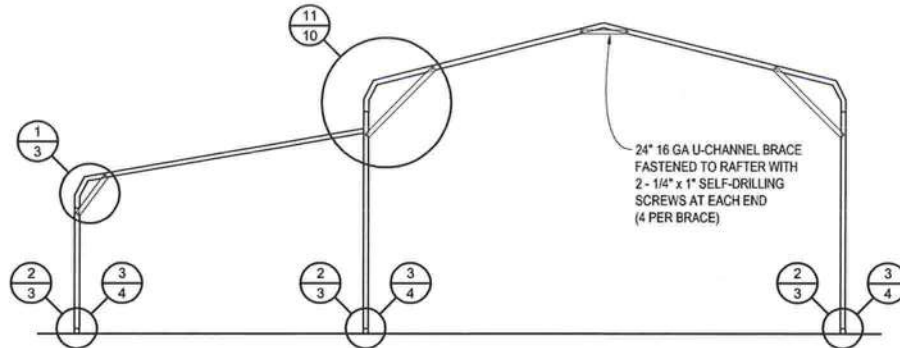
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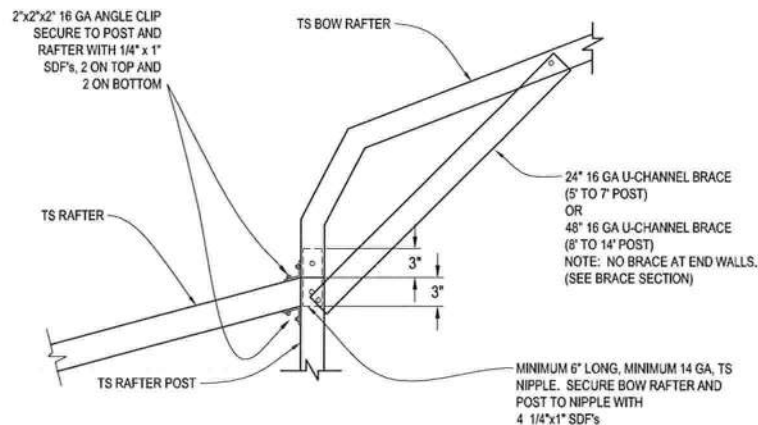
FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 9 OF 11

# BOW RAFTER LEAN-TO OPTION



TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING PLAN

SCALE: 1/8" = 1'



LEAN-TO RAFTER TO RAFTER POST  
CONNECTION DETAIL

11

Not To Scale

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STATE OF  
FLORIDA  
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Florida License No. 38880



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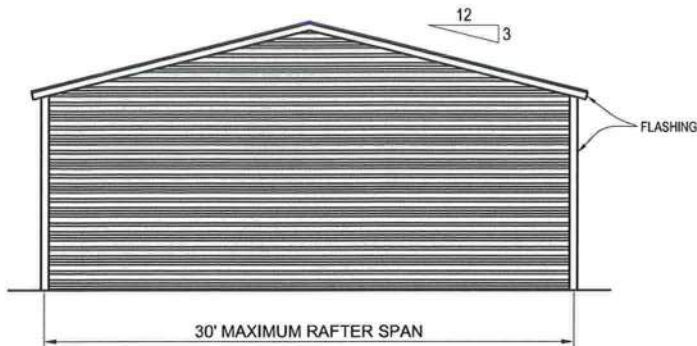
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FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 10 OF 11

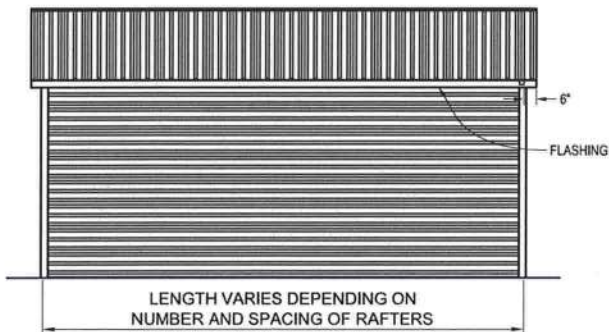


# BOX EAVE RAFTER VERTICAL ROOF OPTION



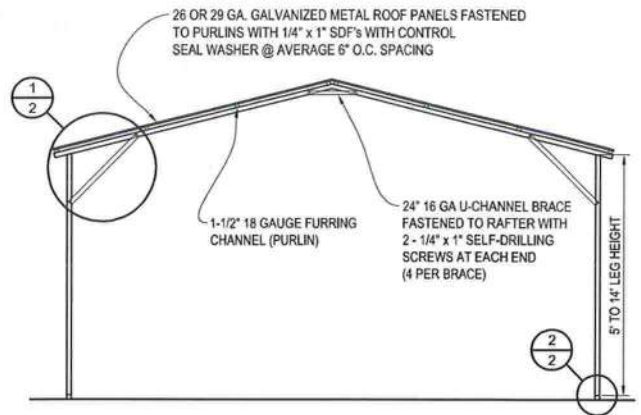
TYPICAL END ELEVATION - VERTICAL ROOF

SCALE: 1/8" = 1'



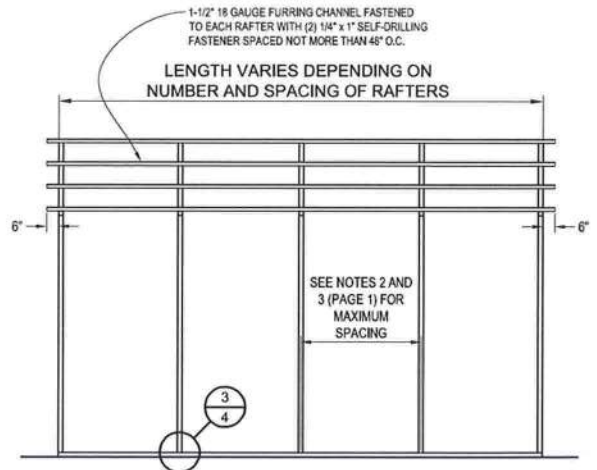
TYPICAL SIDE ELEVATION - VERTICAL ROOF

SCALE: 1/8" = 1'



TYPICAL SECTION - VERTICAL ROOF OPTION

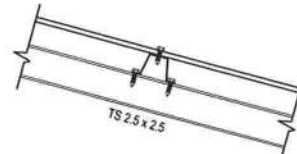
SCALE: 1/8" = 1'



TYPICAL FRAMING PLAN - VERTICAL ROOF OPTION

SCALE: 1/8" = 1'

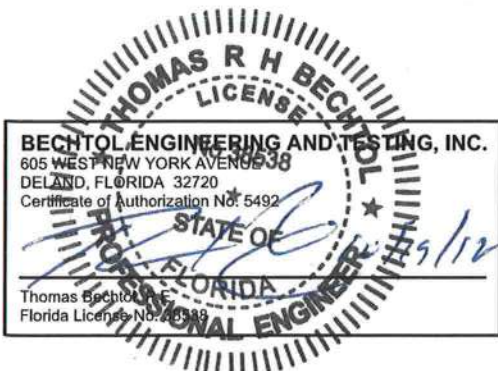
1-1/2" 18 GAUGE FURRING CHANNEL FASTENED TO EACH RAFTER WITH (2) 1/4" x 1" SELF-DRILLING FASTENER SPACED NOT MORE THAN 48" O.C.



## ROOF PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS)

Not To Scale



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FIELD:	CHECKED: JP	DATE: 8-15-12	PROJ. NO.: G10132
DRAWN: RR	APPROVED: TB	SCALE: NOTED	SHEET 11 OF 11