



DR. RAM A. GOEL, PH.D., P.E.  
F.P.E. 47431  
SONY FM LLC  
CORY LAKE RECREATION CENTER  
10329 FLORISSA BLVD. SUITE F  
LAKE WORTH, FL 33467  
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Job # 2173  
Drawn By: S.K.  
Checked By: R.C.  
Issue Date: 08-18-21  
Revisions:  
Date Description  
1/1/1  
2/1/1  
3/1/1  
4/1/1

PREFABRICATED UTILITY STRUCTURE  
ELITE METAL MANUFACTURING, LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060

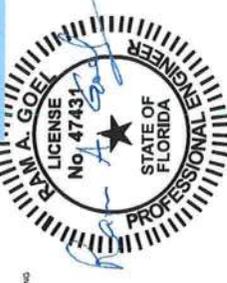
1

**WINDOW AND DOOR NOTE**  
EXTERIOR WINDOWS AND GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING AGENCY TO THE FOLLOWING REQUIREMENTS:  
INDENTIFY THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTITY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION:  
ANSI/AMA/AMMA 10115.297  
THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 330, STANDARD TEST METHOD FOR DETERMINING THE PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND DOORS BY UNIFORM STATIC AIR PRESSURE.  
DESIGN WAS DONE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE (7TH EDITION) (FBC) 2020 SUPPLEMENT AMENDMENTS 2008 INTERNATIONAL BUILDING CODE (IBC), 2009 IBC AND 2012 IBC.

- GENERAL NOTES:**
1. ALL STEEL SHALL BE 50 KSI STEEL.
  2. FASTEN METAL ROOF AND WALL PANELS TO FRAMING WITH 1/4" X 3/4" SELF DRILLING FASTENERS WITH CONTROL SEAL WASHER @ 6" O.C. AVERAGE.
  3. ALL FIELD CONNECTIONS SHALL BE "3/8\" SELF DRILLING SCREWS.
  4. ALL SHOP CONNECTIONS SHALL BE WELDED.
  5. CONCRETE EXPANSION ANCHORS SHALL BE WELT ANK-TITE MODEL AT 1252, OR SLEEVE ANCHOR MODEL HSA 1250, OR EQUIVALENT. GROUND ANCHOR REQUIREMENTS ARE 1@ EACH CORNER AND 1@ EACH END OF THE WALL. ALL ANCHORS SHALL BE AT A MAXIMUM 10\" O.C. AND BOTH SIDES OF OPENINGS WHERE BASE NAIL IS ABSENT. GROUND ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.
  6. POSTRAFTER BRACING: BRACE ON EVERY POSTRAFTER CONNECTION, EXCEPT FOR END WALLS.

26 OR 29 GA. METAL ROOF AND WALL PANELS  
DESIGN PRESSURE  
@ 5'-0\" O.C. FASTENER SPACING

Ram Goel  
Professional Engineer  
License No. 47431  
State of Florida  
Date: 08/18/21  
Signature: [Signature]



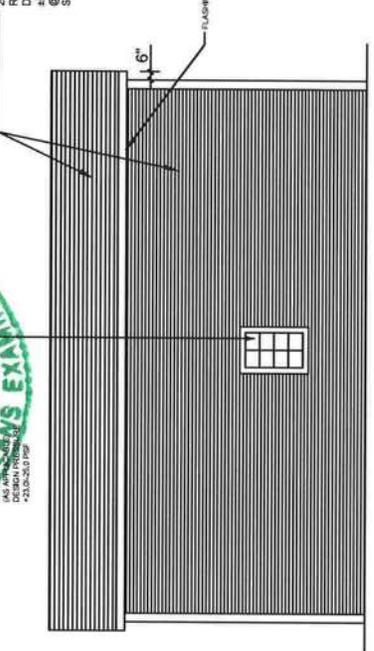
THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR WIND LOADS OF 150 MPH

NOTE:  
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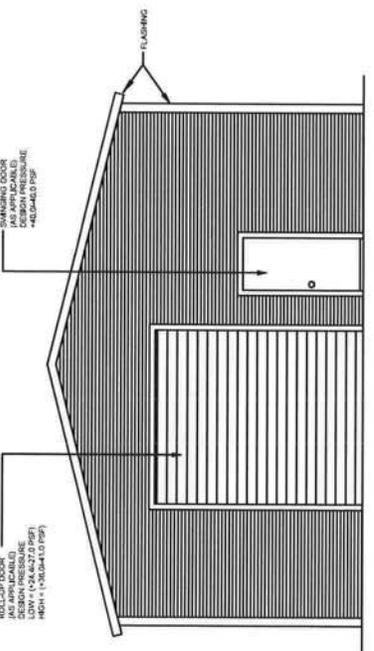
**TABLE 1**  
**BOWRAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS**

| RISK CATEGORY     | WIND EXPOSURE CATEGORY | ULTIMATE WIND SPEED (MPH) | NOMINAL WIND SPEED (MPH) | MAXIMUM RAFTER/BOW AND END POST SPACING (FEET) | AVERAGE FASTENER SPACING ON CENTERS, LONG FASTENERS OR PURLINS, AND POSTS OR GIRTS (INCHES) |                  |
|-------------------|------------------------|---------------------------|--------------------------|--|---|------------------|
|                   |                        |                           |                          |  | INTERIOR BOWS/RAFTERS   | END BOWS/RAFTERS |
| I, II, III, or IV | B, C, or D             | 115 TO 150                | 89 TO 115                | 5.0  | 6   | 6                |
|                   |                        | 151 TO 139                | 117 TO 139               | 4.0  | 6   | 6                |

NOTES:  
1. SPECIFICATIONS APPLICABLE TO 26 OR 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 1/4\" GAUGE STEEL TUBE BOW FRAMES.  
2. FASTENERS CONSIST OF "3/8\" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.  
3. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14:12 PITCH. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.  
4. WIND ANCHOR REQUIREMENTS ARE 1 @ EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST LOCATION, AT MAXIMUM OF 10' O.C., AND BOTH SIDES OF OPENINGS.  
5. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.



TYPICAL SIDE ELEVATION-HORIZONTAL ROOF  
SCALE: NOT TO SCALE



TYPICAL END ELEVATION-HORIZONTAL ROOF  
SCALE: NOT TO SCALE

LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

3\" MAXIMUM RAFTER SPAN

SWANING DOOR (AS APPLICABLE) FASTENERS SHALL BE 1/4\" X 3/4\" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER @ 6\" O.C. AVERAGE

ROLL-UP DOOR (AS APPLICABLE) FASTENERS SHALL BE 1/4\" X 3/4\" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER @ 6\" O.C. AVERAGE



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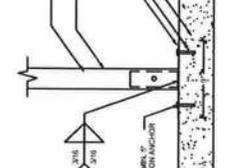
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 A1 / /  
 A2 / /  
 A3 / /

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 ELITE METAL MANUFACTURING, LLC  
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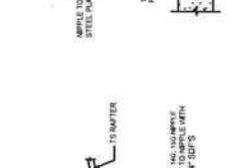
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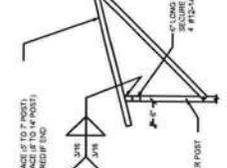
1. CONCRETE BASE RAIL ANCHORAGE (OPTIONAL)  
 SCALE: NTS



2. CONCRETE BASE RAIL ANCHORAGE (OPTIONAL - OPEN CARPORT ONLY)  
 SCALE: NTS



3. BOX EAVE RAFTER/CORNER POST DETAIL  
 SCALE: NTS



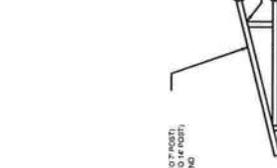
4. ALTERNATE POST TO CONCRETE FOUNDATION CONNECTION DETAIL  
 SCALE: NTS



5. SIDE EXTENSION RAFTER/CORNER POST DETAIL  
 SCALE: NTS



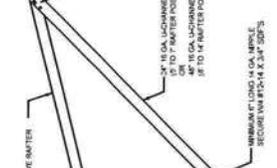
6. GABLE RAIL TO RAFTER POST CONNECTION DETAIL  
 SCALE: NTS



7. BASE RAIL ANCHORAGE  
 SCALE: NTS

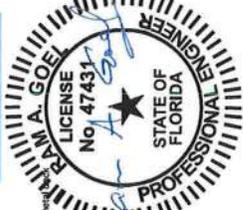


8. ROOF PANEL ATTACHMENT  
 SCALE: NTS

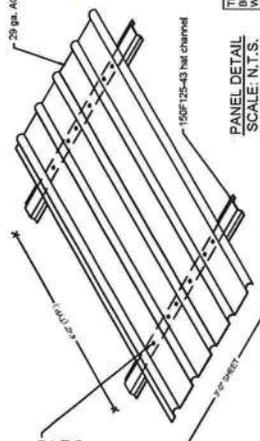


9. BRACE SECTION  
 SCALE: NTS

**Ram Goel**  
 Digitally signed by Ram Goel  
 DN: cn=Ram Goel, o=SONEY FM LLC, ou=SONEY FM LLC, email=ramgoel@sonyfm.com, c=US  
 10:45:15AM '21



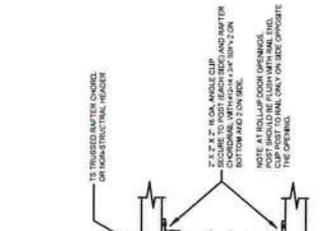
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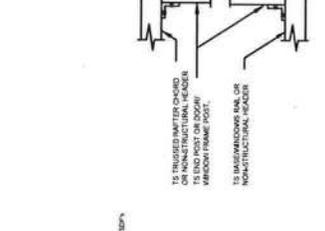
10. PANEL DETAIL  
 SCALE: N.T.S.

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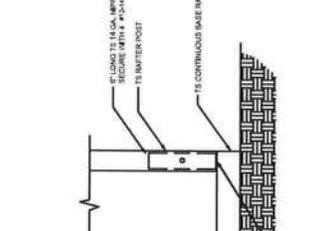
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 LIVE OAK, FL 32060



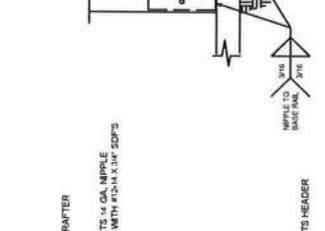
1 RAFTER POST/DOBL. HEADER DETAIL  
SCALE NTS



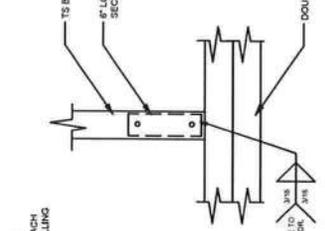
2 RAFTER POSTBASE BASE RAIL CONNECTION DETAIL  
SCALE NTS



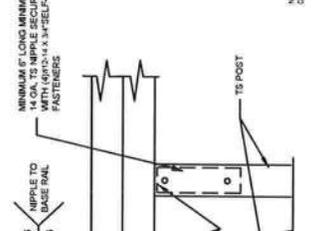
3 RAFTER POSTBASE WINDOW RAIL OR GIRT TO POST CONNECTION DETAIL  
SCALE NTS



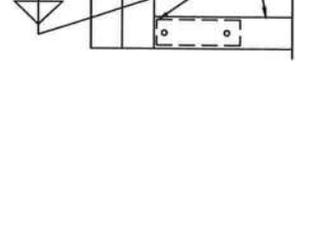
4 POST TO RAIL TRUSS CHORD OR NON-STRUCTURAL HEADER CONNECTION DETAIL  
SCALE NTS



5 END POSTRAFTER CONNECTION DETAIL  
SCALE NTS



6 END POSTBASE RAIL CONNECTION DETAIL  
SCALE NTS



7 NON-STRUCTURAL HEADER WINDOW RAIL OR GIRT TO POST CONNECTION DETAIL  
SCALE NTS



8 POSTBASE RAIL CONNECTION DETAIL  
SCALE NTS

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THE FOLLOWING IS COMPLIANT TO THE FLORIDA PROFESSIONAL ENGINEERING STATUTE AND ADEQ 7-16 FOR WIND LOADS OF 160 MPH.

SECTION A SCALE NTS

DOUBLE OR SINGLE DOOR OPTIONS  
24, 26, OR 29 GAUGE SKIN

TUBING OPTIONS:  
2 1/4 X 2 1/4  
2 1/2 X 2 1/2  
2 X 3

SECTION THROUGH ROLL UP DOOR HEADER  
SCALE NTS  
CURTAIN 2 1/4\"/>

1/2\"/>

1/2\"/>

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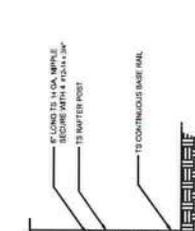
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DOUBLE OR SINGLE DOOR OPTIONS  
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TUBING OPTIONS:  
2 1/4 X 2 1/4  
2 1/2 X 2 1/2  
2 X 3

SECTION THROUGH ROLL UP DOOR HEADER  
SCALE NTS  
CURTAIN 2 1/4\"/>

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SECTION A SCALE NTS

DOUBLE OR SINGLE DOOR OPTIONS  
24, 26, OR 29 GAUGE SKIN

TUBING OPTIONS:  
2 1/4 X 2 1/4  
2 1/2 X 2 1/2  
2 X 3

SECTION THROUGH ROLL UP DOOR HEADER  
SCALE NTS  
CURTAIN 2 1/4\"/>

1/2\"/>



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DOUBLE OR SINGLE DOOR OPTIONS  
24, 26, OR 29 GAUGE SKIN

TUBING OPTIONS:  
2 1/4 X 2 1/4  
2 1/2 X 2 1/2  
2 X 3

SECTION THROUGH ROLL UP DOOR HEADER  
SCALE NTS  
CURTAIN 2 1/4\"/>

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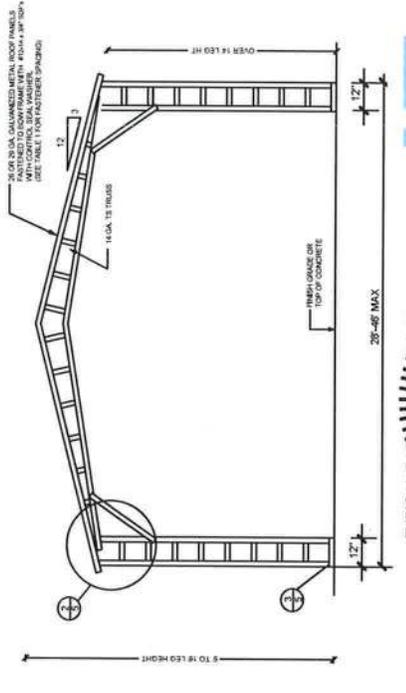
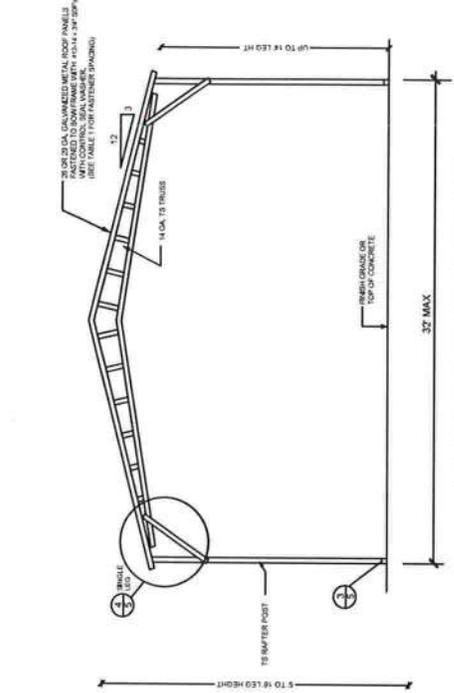
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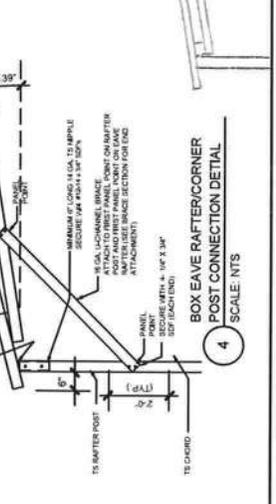
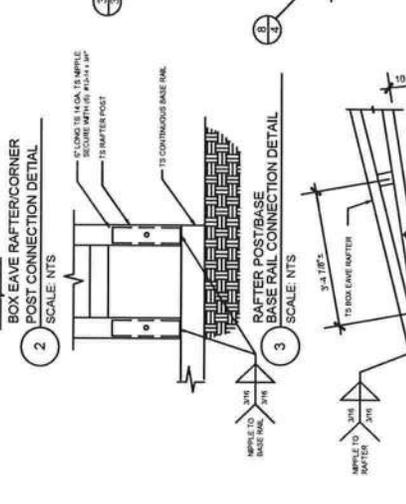
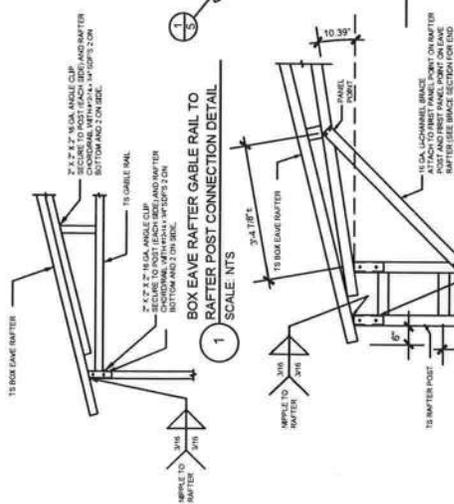
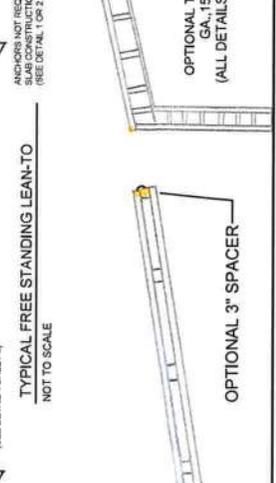
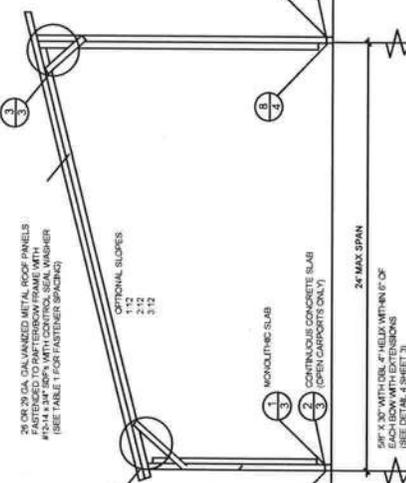
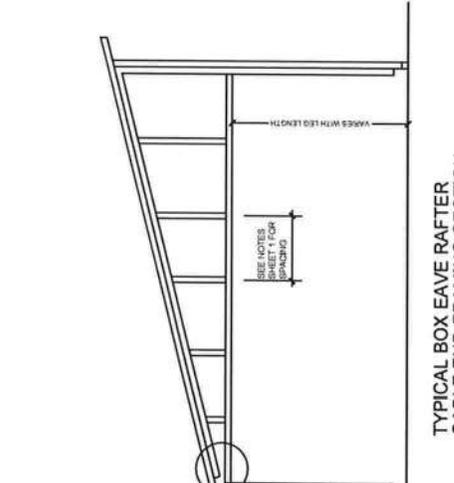


**Ram Goel**  
 State of Florida Professional Engineer  
 License No. 47431

THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE 2020, 7TH EDITION AND ASCE 7-18 FOR WIND LOADS OF 80 MPH

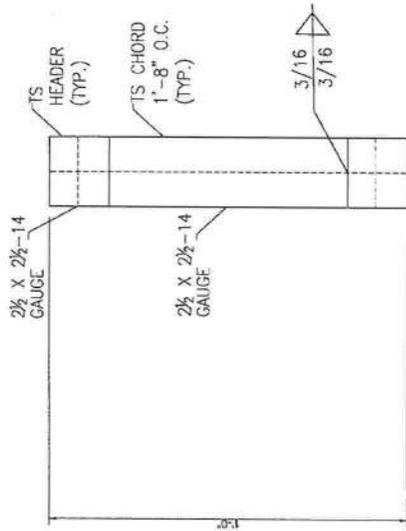
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 2. CONSIDERED SEALED & SEALED. THIS SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

RAM A. GOEL, P.E. # 47431  
 10000 W. BAYVIEW BLVD., SUITE 1000  
 MIAMI, FL 33149





# OPTIONAL HEADER



HEADER DETAIL FOR DOOR  
 OPENINGS 12'-0" < LENGTH < 20'-0"  
 (SEE 101)



DR. RAM A. GOEL, PH.D., P.E.  
 F.P.E. 47431  
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Job # 2173  
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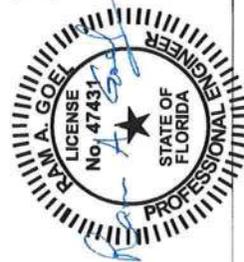
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| Rev. | Date | Description |
|------|------|-------------|
| 1    | 11/1 |             |
| 2    | 11/1 |             |
| 3    | 11/1 |             |

OPTIONAL HEADER  
 ELITE METAL MANUFACTURING, LLC  
 10121 88TH TRACE  
 LIVE OAK, FL 32060

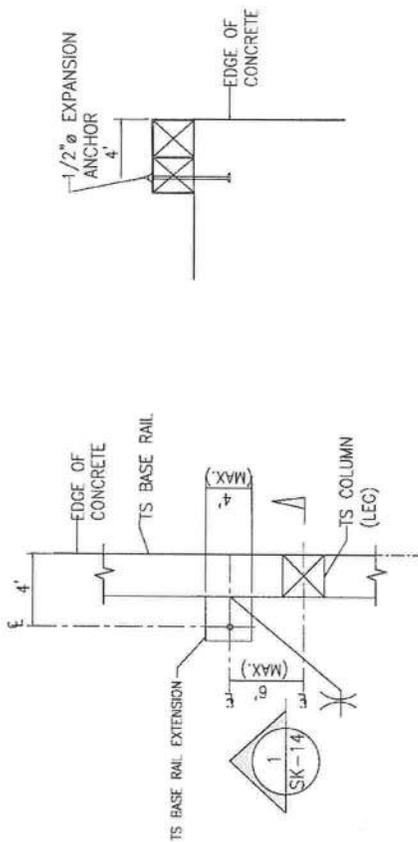
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NOTE:  
 1. THIS SET HAS BEEN REVIEWED AND SEALED BY:  
 DR. RAM A. GOEL, LICENSE NO. 47431, PROFESSIONAL ENGINEER, STATE OF FLORIDA.  
 2. CONTRACTOR SHALL VERIFY THE QUALITY OF THE WORK AND SHALL BE RESPONSIBLE FOR ANY DEFECTS OR OMISSIONS.  
 THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE 2000, 7TH EDITION AND ASCE 7-16 FOR WIND LOADS OF 90 MPH.



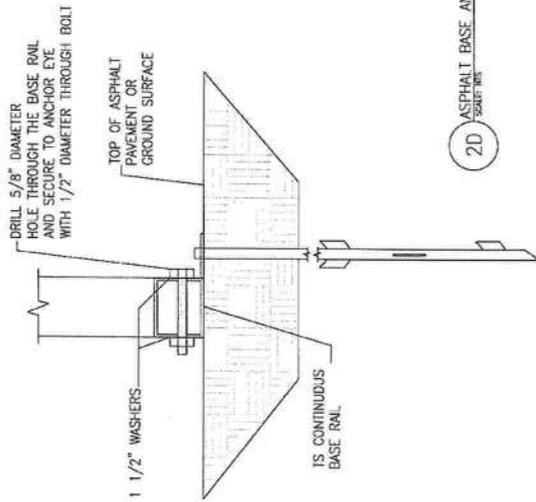
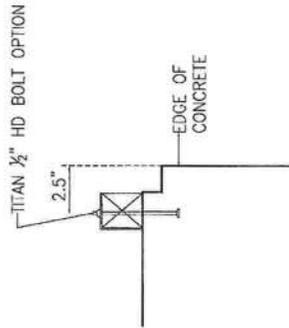
Digitally signed by Ram Goel  
 DN: cn=Ram Goel, o=SONEY FM LLC, ou=SONEY FM LLC, email=ramgoel@sonyfm.com, c=US  
 Date: 2021.09.28 10:50:26-04'00'

ADDITIONAL BASE RAIL ANCHORAGE OPTION



TYPICAL ANCHOR DETAIL WHEN  
BASE RAIL IS NEAR EDGE OF CONCRETE

SECTION 1  
SCALE: N.T.S. SK-14



2D ASPHALT BASE ANCHORAGE  
SECRETARY



DR. RAM A. GOEL, PH.D., P.E.  
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| 4   | 8/18/21 | Revised     |

ADDITIONAL BASE RAIL ANCHORAGE OPTION  
ELITE METAL MANUFACTURING, LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060



THE FOLLOWING IS COMPLIANT TO THE FLORIDA  
STRUCTURAL CODE WITH EDITION AND ASCE 7-16 FOR  
WIND LOADS OF 180 MPH

DATE: 10/14/2021  
BY: RAM A. GOEL  
CHECKED: RAM A. GOEL  
DESIGNED: RAM A. GOEL  
REVIEWED: RAM A. GOEL

Dr. Ram A. Goel, P.E. # 47431  
Professional Engineer  
State of Florida