

GENERAL NOTES AND SPECIFICATIONS:

PART 1 - REQUIREMENTS AND CONTRACTOR'S RESPONSIBILITIES:

- 1. Solid fixed wall areas (e.g. kickplates and/or window panels) shall not exceed 25% of the total wall area for the design of screened room (structures with solid roofs and screened walls as defined by the Florida Building Code 6TH EDITION 2017).
- 2. Unless otherwise noted by the contractor in writing, this design assumes that no screen walls are to be placed upon a walking surface which is more than 30" above grade or an adjacent walking surface.
- 3. Structural characteristics and limitations for the aluminum components were calculated based upon the requirements of the 2010 Aluminum Design Manual (aluminum.org) as required by Florida Building Code Sixth Edition (2017) Section 2002.4
- 4. In the absence of geotechnical information to the contrary, this foundation design is based upon an allowable soil bearing capacity of 2000 psf.
- 5. Any and all existing structures to which the new work (new work shall be construed to mean that work which is described and specified on these construction documents) are to be attached shall be structurally sound and of adequate structural integrity & capacity to support the applied loads from the assemblies detailed in these plans & specifications. The contractor and/or owner shall be responsible for ensuring the existing building is in compliance with the requirements of chapter 14 of the Florida Building Code 6th Edition (2017)- Existing Building, including retaining an independent professional to verify same.

PART 2 - PRODUCTS AND MATERIALS (except concrete):

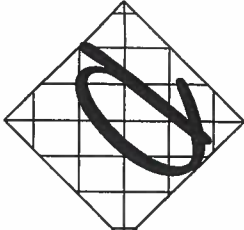
- 1. Aluminum Structural Shapes: Aluminum alloy 6061t6 or 6005t5 conforming to ASTM B 211, rolled or extruded. Shapes and thicknesses as indicated on the Drawings.
- 2. Aluminum Sheet and Plate: must conform to ASTM B 209
- 3. Dimensions, characteristics and engineering properties of de facto standard industry profiles and/or shapes have been taken from the AAF guide To Aluminum Construction In High Wind Areas (Appendix A), 2010 Edition.
- 4. The contractor shall furnish documentation (a purchase order or invoice pertaining to the new work) stating that the aluminum products conform to the specifications of this project as noted above and on the construction documents.
- 5. The contractor shall obtain and submit appropriate product approval information and documentation as required by the authority having jurisdiction for any and all solid roofs (all roofs other than screen) to be placed upon and connect to a framework which is part of the new work.
- 6. Unless specifically noted otherwise: The use of fiberglass screening with a thread diameter of 0.013" is assumed. A thread pattern of 18 by 14 threads per inch is likewise assumed in these specifications and has been incorporated in this design. Fiberglass screen cloth shall comply with ASTM D 3656 and SH4 1201.

PART 3 - FABRICATION NOTES:

- 1. All fasteners utilized for the new work in accordance with these plans and specifications shall be corrosion resistant and compatible for use with aluminum alloy materials. All such fasteners shall meet or exceed the requirements set forth in the General Requirements, Section 5d of the AAF Guide to Aluminum Construction In High Wind Areas, 2010 Edition. "Steel fasteners shall have a minimum ultimate tensile strength of 60 ksi and a maximum ultimate tensile strength of 120 ksi and shall be coated for corrosion resistance " By virtue of the Florida Building Code - Building, 6th edition 2017 Edition, Section 2002.4.1 the AAF Guide to Aluminum Construction In High Wind Areas, 2010 Edition, is a code approved prescriptive design document.
- 2. Minimum edge distance between exterior frame and the edges of supporting sills and/or footings shall be 2" minimum. All fasteners utilized for the connection of the new work to concrete shall have a minimum edge distance of 3".
- 3. All primary members shall be connected with bolts, screws, or other positive fasteners.
- 4. Contractor shall provide all critical minimum edge & distances as required for all fasteners, anchors etc.
- 5. Contractor is responsible for the protection of and compatibility with dissimilar metals and pressures treated lumber.
- 6. Removable Vinyl or Acrylic Panels may be installed in the In-fill Panels provided they conform to the requirements of Section 2002.2.3 FBC. Screen cloth shall be fastened to the aluminum extrusions with industry standard vinyl splices. The vinyl splices is incidental to the design of the new work, except that the vinyl splices shall be continuous at each individual screen panel, that is, formed perimeter of each screened opening, typically rectangular (but not always). Diagonal braces, whether in the roof or wall surfaces need not have screen "spliced" into them.

PART 4 - CONCRETE CONSTRUCTION NOTES:

- 1. Concrete work shall conform to "Building Code Requirements for Reinforced concrete" (ACI-318) and "Specifications for Structural Concrete (ACI- 301), Latest edition.
- 2. All concrete mixes shall contain a water-reducing admixture conforming to ASTM C-94. All air-entraining admixtures shall conform to ASTM C-260. Minimum concrete mix shall be as follows:
  - a. Ultimate compressive strength at 28 days = 3000 psi;
  - b. Slump range 3" ±1";
  - c. Maximum aggregate size 1";
  - d. Entrained Air 5% to 7%;
  - e. Density of ready-mix concrete 145 lbs per cubic foot.
- 3. Reinforcing steel shall conform to ASTM A615, GRADE 40 (fy = 40 ksi). Lap continuous #5 bars (and smaller) a minimum of 30" for tension U.N.O. Provide corner bars of the same size as horizontal reinforcement. Minimum cover for concrete reinforcing steel shall be 3" unless noted otherwise in accordance with ACI-318 latest edition.
- 4. Welded wire fabric (WUF) shall conform to ASTM A-185. Lap sheets on mesh space and wire tie adjacent sheets together. Cut alternate reinforcement at control joints.
- 5. All sills on grade shall have construction or control joints not to exceed 12'-0" spacing U.N.O.
- 6. Electrical conduit and other pipes to be embedded in structural concrete floors, sills or walls shall be placed in accordance with the requirements of ACI-318, Paragraph 6.3.
- 1. For all concrete sills on grade included in the new work, minimum slab thickness nominal 4 inches (actual thickness 3½") with 6x6 W/14/1.4 (a.k.a. 6x6 D/O) welded wire fabric (WUF); or alternatively, synthetic fiber reinforcement.
- 8. For additional foundation requirements, refer to drawings and specifications included with these project documents.



DRISCOLL ENGINEERING, INC.

CONSULTING ENGINEERS

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GAINESVILLE, FL. 32606  
CA 8690

PH (352) 331-1513 PH (352) 505-3366

PROJECT DESCRIPTION: SCREEN ENCLOSURE

OWNER: FORGMAN

LOCATION: 385 RACETRACK RD

CITY: LAKE CITY, FL

CONTRACTOR: MERRITT ALUMINUM

ADDRESS: 27 JUNIPER RADIAL

CITY: OCALA, FL 34480

ULTIMATE WIND SPEED: 130

NOMINAL WIND SPEED: 101

WIND EXPOSURE CATEGORY: B

RISK CATEGORY 11

INTERNAL PRESSURE COEFFICIENT Gcpi= +/- 0.0

DESIGN PRESSURE PER TABLE 2002.4 OF 2017 FBC 6TH EDITION

DESIGN LOAD BEARING VALUE OF SOIL (SEE  
GENERAL NOTES AND SPECIFICATIONS PART 1 NOTE 4)

DATE: 7-8-19 PROJECT NO: DA19-252

SHEET

1

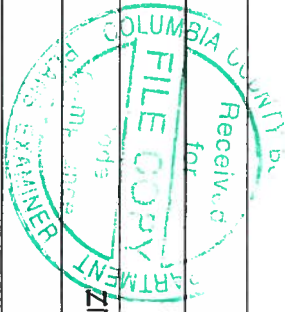
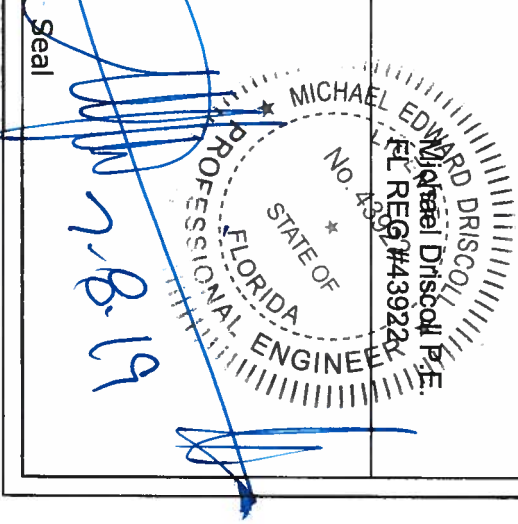


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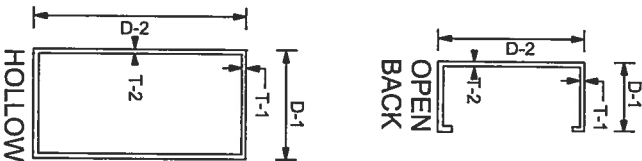
- Sheet 1: Cover Sheet.
- Sheet 2: Specifications, Loads applied to host and Design Pressures.
- Sheet 3: Plans.
- Sheet 4: Details.



COMPONENT PROPERTIES

SELF MATING SECTIONS					MAJOR AXIS BENDING ALLOWABLE STRESS	MAJOR AXIS BENDING ALLOWABLE MOMENT	SECTION MODULUS
WIDTH	WIDTH	DEPTH	WEB	FLANGE	F <sub>b</sub> x (ksi)	M <sub>b</sub> x (in-kips)	S <sub>x</sub>
UNITS	INCHES	INCHES	INCHES	INCHES			
2"x4" S1B	b	d	w	f	F <sub>b</sub> x	(in-kips)	S <sub>x</sub>
2"x4" S1B	2	4	0.046	0.100	9.3	9.3	1.000
2"x5" S1B	2	5	0.050	0.116	10.1	15.2	1.510
2"x6" S1B	2	6	0.050	0.120	9.1	17.6	1.944
2"x7" S1B	2	7	0.035	0.120	9.4	22.8	2.425
2"x8" S1B	2	8	0.072	0.124	16.3	12.6	4.441
2"x9" S1B (L)	2	9	0.072	0.224	15.8	16.3	4.827
2"x9" S1B (H)	2	9	0.082	0.306	18.1	110.8	6.123
2"x10" S1B	2	10	0.092	0.314	17.4	147.6	8.462

PATIO SECTIONS							
2"x2"x.090	2	2	.046	.046	16.0	4.1	.245
2"x3"x.050	2	3	.050	.050	11.2	7.9	.416
2"x3"x.070	2	3	.070	.070	11.2	11.6	1.000
2"x4"x.050	2	4	.050	.050	16.3	11.6	.649
2"x5"x.050	2	5	.050	.050	15.3	15.3	1.000

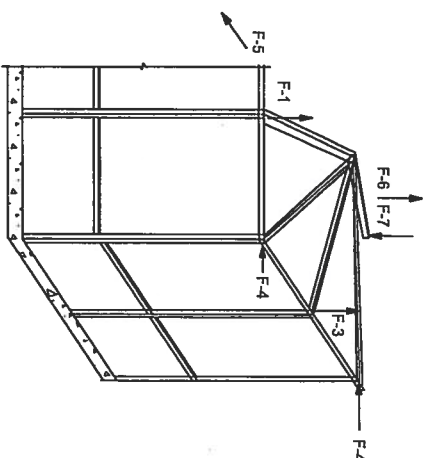


NOTES:

- A- ALL FASTENERS @ POST TO HOST CONNECTIONS SHALL BE 3/8" DIA. 1" MAX DISTANCE FROM POST. BRICK PAVERS ARE NOT CONSIDERED AS EMBEDMENT MATERIAL. (SEE NOTE: SHEET 1 PART 3-1)
- B- ALL FASTENERS FOR ALL OTHER CONNECTIONS TO HOST SHALL BE 1/4" DIA. EACH GIRT & 24" MAX SPACING 2" MIN EMBEDMENT. (SEE NOTE: SHEET 1 PART 3-1)

LOADS

F-1	UPLIFT MAIN COLUMNS	2044 LBS
F-2	GRAVITY LOAD @ MAIN COLUMNS	2544 LBS
F-3	UPLIFT SIDE COLUMNS	85 LBS
F-4	LATERAL LOAD MAIN WALL & HOST	1688 LBS
F-5	PULL OFF FROM HOST @ BEAM	435 LBS
F-6	UPLIFT @ HOST	460 LBS EA
F-7	GRAVITY @ HOST	464 LBS EA



DRAWING L-1

PLANS AND SPECIFICATIONS

The plans and specifications presented herein are applicable only for the anticipated construction at the location shown. Driscoll Engineering, Inc. (DEI) shall be immediately notified of any changes or field deviations to these plans so that the specifications and requirements can be re-evaluated. DEI shall be given the opportunity to review final plans and specifications to determine if the intent of these plans & specifications have been followed and/or if supplemental details or recommendations are required. DEI warrants that these plans & specifications and limitations as defined in these plans contained have been prepared in accordance with generally accepted professional engineering practice. No other warranties are implied or expressed.

CORPORATE PROTECTION

It is understood and agreed that DEI's Basic Services do not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the Client. The Client assumes all responsibility for interpretation of these plans & specifications and for construction observation and supervision and waives any claims against the DEI that may be in any way connected thereto.

In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold DEI harmless from any loss, claim or cost, including reasonable attorney's fees and costs of defense, arising or resulting from the performance of such services by other person or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to these plans & specifications to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct by DEI.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by DEI as instruments of service shall remain the property of DEI. DEI shall retain all common law, statutory and other reserved rights, including the copyright thereto.

DEFECTS IN SERVICE

The Client shall promptly notify DEI of any defects or suspected defects in DEI's work or services of which the Client becomes aware, so that DEI may take measures to minimize the consequences of such a defect. The Client warrants that he or she will impose a similar notification requirement on all contractors in his or her Client/Contractor contract and shall require all subcontractors at any level to contain a like requirement. Failure by the Client, and the Client's contractors or subcontractors to notify DEI, shall relieve DEI of the costs of remedying the defects above the sum such remedy would have cost had prompt notification been given.

VERIFICATION OF EXISTING CONDITIONS

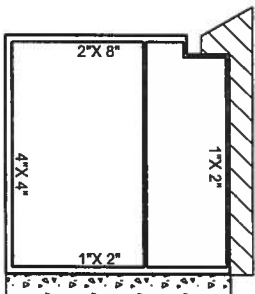
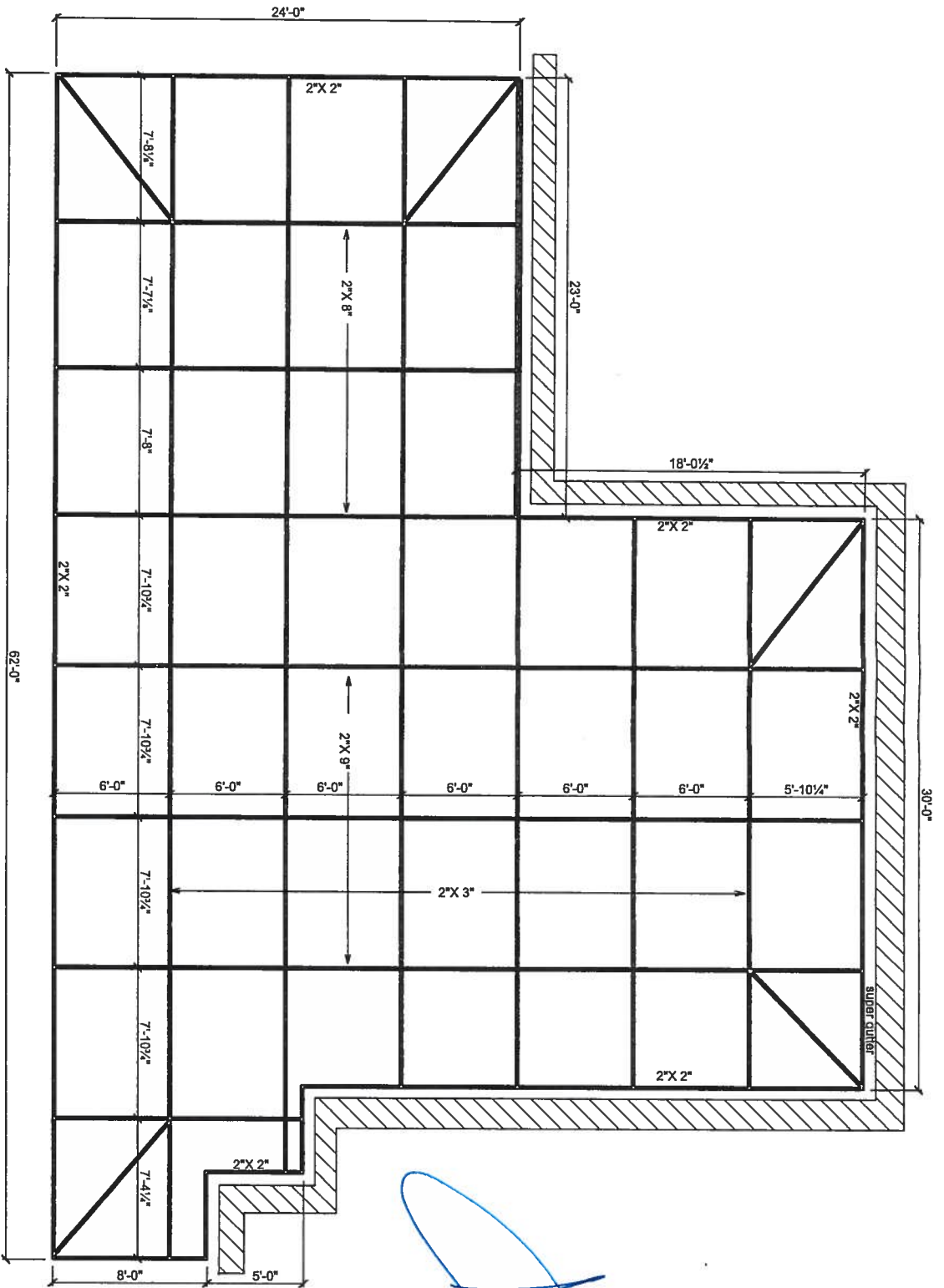
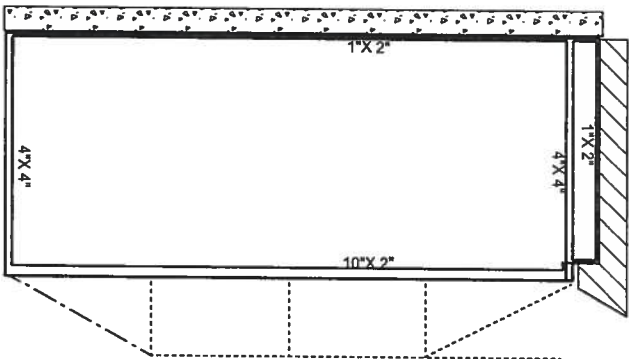
Inasmuch as the remodeling and/or rehabilitation of an existing building requires that certain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying otherwise adequate or serviceable portions of the building, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the DEI harmless from any claim, liability or cost (including reasonable attorney's fees and costs of defense) for injury or economic loss arising or alleged arising out of the professional services provided by these plans & specifications, excepting only those damages, liabilities, or costs attributable to the sole negligence or willful misconduct of DEI.

MICHAEL E. DRISCOLL P.E.  
FL REG. #43922



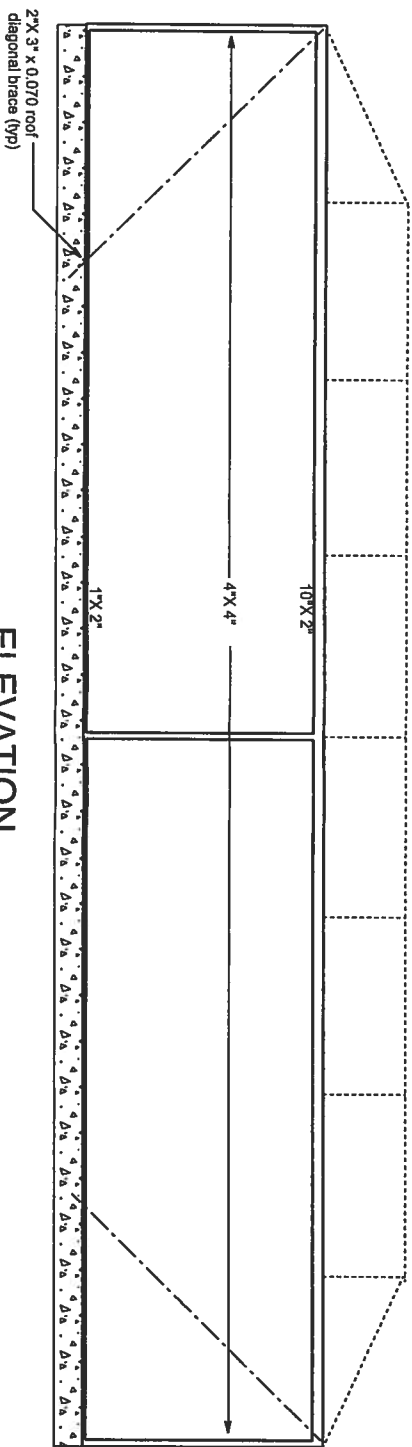
FORGMAN  
385 RACETRACK LANE  
GAINESVILLE, FL DA19-252



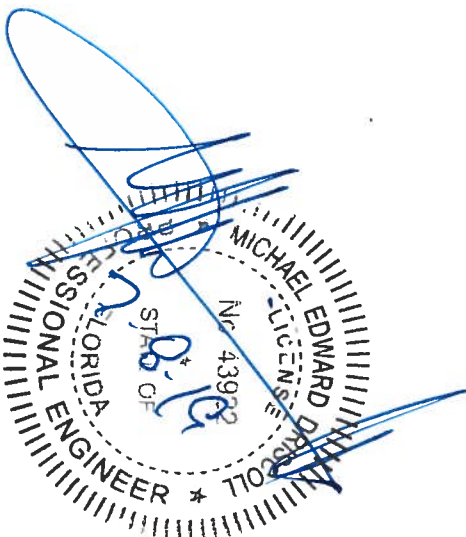


ELEVATION

PLAN VIEW



ELEVATION



**DRISCOLL ENGINEERING, INC.**  
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PROJECT:

**FORGMAN**  
**385 RACETRACK LANE**  
**GAINESVILLE, FL DA19-252**

sheet:

**3**

HOST STRUCTURE AREA  
 130 MPH EXPOSURE (B)

MICHAEL E. DRISCOLL, P.E.  
 FL REG. #43922

SCREW PATTERN EQUAL SPACING  
1" TOP & BOTTOM & 3/4" FROM ENDS  
5/8" MIN. BETWEEN EACH SCREW

NUMBER OF SCREWS SEE TABLE BELOW

MIN 2 SCREWS IN  
PLATE CENTER  
EVENLY SPACED

SEE TABLE BELOW FOR  
SPICE PLATE DETAILS

#10 SMS @  
24" MAX SPACING

3/8" MAX. EDGE DISTANCE  
FROM BEAM TO PLATE

1" (TYP)  
3/4" (TYP)

1.8" FOR 2" X 7" BEAMS & SMALLER  
4.9" FOR 2" X 8" BEAMS

BEAM SIZE SEE TABLES

BEAM SIZE

THICKNESS

#14 SCREWS  
PER END

# 14 SCREWS  
PER SIDE

2" X 5" X 0.050X 0.116 S.M.B

1/4"

12

24

2" X 6" X 0.050X 0.120 S.M.B

3/16"

14

28

2" X 7" X 0.050X 0.120 S.M.B

3/16"

14

28

2" X 8" X 0.072X 0.224 S.M.B

3/16"

16

32

2" X 9" X 0.082X 0.306 S.M.B

3/16"

16

32

ALL MITERED BEAM SPLICES SHALL BE MOMENT CONNECTIONS  
MITERED BEAM SPLICE DETAIL SEE PLAN FOR SIZE

ALL SPLICE PLATE MATERIAL  
TO BE 6061 T6 OR 5052-H32

CONNECTION MAY BE ROTATED FOR MANSARD GABLE OR HIP CONNECTIONS

2" WIDE X 3/16" GUTTER BRACE ATTACH TO  
FASCIA W/1-3/8" DIA. STAINLESS STEEL LAG  
SCREWS 1-1/2" EMBEDMENT @ EA. BEAM

ATTACH GUTTER @ EACH TRUSS TAIL  
W/1- 1/4" DIA. STAINLESS STEEL LAG  
SCREWS 1-1/2" EMBEDMENT

EXISTING TRUSS

CONTINUOUS ANGLE  
SUPPORT FOR ANGLED FASCIA

1" DIA.  
ALUMINUM SLEEVE

GUTTER

2" X 2" ATTACH TO GUTTER W/ #10 SMS  
@ EACH END & 24" MAX SPACING  
ATTACH TO BEAM W/ 2 #10 SMS

BEAM FLAT, SLOPING  
OR VERTICAL

2" X 2" X 4" X 1/8" ALUMINUM ANGLE ATTACH  
TO BEAM W/ 4- #12 SMS ATTACH TO GUTTER  
W/ 4 #12 SMS EACH SIDE OF BEAM

1/2" DIA. LAG SCREW THRU ANGLE, GUTTER  
AND INTO SOLID WOOD FASCIA 2" MIN EMBED  
EACH SIDE EACH BEAM.

BEAM CONNECTION TO SUPER GUTTER  
ANGLED OR STRAIGHT FASCIA

N.T.S.

(4) #10 X 2" EACH SIDE  
INTO SCREW BOSSES  
(TYP)

PURLIN

3" X 3" X 0.063" PLATE

PURLINS TO BEAM

N.T.S.

(4) #10 X 2" EACH SIDE  
INTO SCREW BOSSES  
(TYP)

CHAIR RAIL

BEAMS

CHAIR RAILS TO POST

N.T.S.

2" X 2" X 1/8" ANGLE ATTACH TO BEAM  
W/ 6 #12 SMS EACH SIDE ATTACH TO  
SOLID WOOD 6-5/16" X 2-1/2" LAG SCREWS

1" (TYP)

BEAM

BEAM TO WOOD CONNECTION

2" X 2" X 1/8" ANGLE ATTACH TO EACH TRUSS TAIL  
W/1- 3/8" DIA. STAINLESS STEEL LAG  
SCREWS 1-1/2" EMBEDMENT (24" MAX SPACING)  
EXISTING TRUSSES  
OR RAFTERS

2" WIDE X 3/16" GUTTER BRACE ATTACH TO  
FASCIA W/1-3/8" DIA. STAINLESS STEEL LAG  
SCREWS 1-1/2" EMBEDMENT @ EA. BEAM

1" DIA.  
ALUMINUM SLEEVE

2" X 2" ATTACH TO GUTTER W/ #10 SMS  
@ EACH END 24" O.C. MAX & TO BEAM

2" X 2" X 4" X 1/8" ALUMINUM ANGLE  
ATTACH TO GUTTER W/ 4- #12 SMS  
EACH SIDE OF BEAM

1/2" DIA. LAG SCREW THRU ANGLE, GUTTER  
AND INTO SOLID WOOD FASCIA 2" MIN EMBED  
EACH SIDE EACH BEAM.

2" X 2" SUPER  
GUTTER

ATTACH FACIA TO TRUSS  
W/ 1- 3/8" DIA. LAG SCREW  
2" MIN EMBEDMENT

EVE RAIL  
#10 SMS  
END VIEW

2" MAX  
TO END

24" (TYP)

#10 SMS

2" X 2" TOP RAIL & CORNER POST  
STITCH CONNECTION

N.T.S.

POST 3" X 3" X 0.090

2-3" X 3" X 4" X 1/4"  
ANGLE ATTACH TO CONCRETE  
W/ 4 EACH 3/8" DIA X 4" SIMPSON  
TITEN ANCHORS ATTACH TO POST  
W/ 3- 1/2" DIA. SS THRU BOLTS NUT & WASHER

POST TO CONCRETE/ WOOD JOIST

BEAM CONNECTION TO SUPER GUTTER  
PLAN VIEW

5" GUTTER ONLY

MITER CONNECTION ATTACH  
2" X 3" X 1/8" RECEIVER CHANNEL  
W/ 4 #10 SMS INTO BEAM & BRACE

DIAGONAL BRACE

BEAM

MITER CONNECTION ATTACH  
W/ 4 #10 SMS INTO EDGE RAIL  
THRU SCREW BOSSES

DIAG. BRACES  
(SEE PLAN FOR SIZE)

EDGE RAIL

DIAGONAL ROOF BRACE DETAIL  
PLAN VIEW

CONNECTOR TO CONCRETE USE  
1/4" DIA. SIMPSON TITEN (OR EQUAL) 2" FROM EACH  
RAIL END & 24" MAX SPACING 2" MIN EMBED OR  
CONNECT TO SOLID WOOD BACKING W/ 1/4" DIA. LAG  
SCREWS 2" FROM EACH RAIL END & 24" MAX  
SPACING 1-1/2" MIN EMBED.

CHAIR RAIL

HOST

2" MAX  
TO END

24" (TYP)

RAIL TO HOST @ CHAIR RAIL CONNECTION  
WOOD OR MASONRY HOST CHOOSE CONNECTOR THAT IS APPLICABLE

N.T.S.

2" X 2" X 1/8" ANGLE ATTACH TO EACH BEAM  
W/ 6 #12 SMS EACH SIDE

1" (TYP)

BEAM

BEAM TO BEAM CONNECTION

NOTCH POST FOR CARRIER BEAM  
ATTACH W/ 3- 1/2" DIA. THRU BOLTS  
NUT & WASHER

CARRIER BEAM  
(SEE PLAN FOR SIZE)

3" WIDE X 1.8" X 1/8"  
ATTACH W/ 8 #12 SMS  
SCREWS

POST/ COLUMN  
(SEE PLAN FOR SIZES)

POST/ COLUMN TO BEAM

N.T.S.

1/8" SS ANGLE BRACKET W/  
9 # 14 X 3/4" S.M.S. TO COLUMN  
& EVE RAIL

5/16" EYE BOLT WELDED  
CLOSED W/ DOUBLE NUTS.  
1/8" STAINLESS STEEL CABLE

CABLE CAPACITIES SHALL  
BE MIN. 3800 LBS

DOUBLE COMPRESSION SLEEVES

45° Min

1/8" STAINLESS  
STEEL CABLE

ATTACH TO 3/8" DIA X 3" SIMPSON TITEN  
W/ 1" DIA SS WASHER

CABLE CONNECTION

CONNECTOR TO CONCRETE  
1/4" DIA. X 3" LAG SCREWS 2" FROM EACH  
RAIL END & 24" MAX SPACING 2" MIN EMBED  
FOR POST TO CONCRETE  
CONNECTION

POST (TYP) SEE DETAILS  
FOR POST TO CONCRETE  
CONNECTION

2" MAX  
TO END

24" (TYP)

2" MAX  
TO END

SIDE VIEW


2" MAX  
TO END

24" (TYP)

2" MAX  
TO END

BOTTOM RAIL TO CONCRETE CONNECTION

N.T.S.



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FORGMAN

385 RACETRACK LANE

GAINESVILLE, FL DA19-252

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STATE OF FLORIDA  
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MICHAEL EDWARD DRISCOLL  
11/15/2009

sheet:  
4