

MINIMUM DESIGN LOADS: PER 2018 NC RESIDENTIAL BUILDING CODE / 2015 IRC WITH NC AMENDMENTS

SUNROOM CATEGORY II (PER 2015 IRC R301.2.1.1.1 & AAMA / NPEA / NSA 2100)

NOTE: COMPONENTS HAVE BEEN CHECKED AGAINST DESIGN LOADS SHOWN & FOUND TO BE ACCEPTABLE STRUCTURALLY

DEAD LOADS:

- 1. ROOF: 6 PSF
- 2. WALLS: 6 PSF
- 3. FLOOR: 12 PSF

SNOW LOADS: GROUND SNOW LOAD 20 PSF

ULTIMATE DESIGN WIND SPEED: 120 MPH, 3 SEC. GUSTS

LIVE LOADS:

- 1. ROOF: 20 PSF
- 2. FLOOR: 40 PSF

DEFLECTION LIMITS:

- 1. ROOF: L/120 (PER 2015 IRC TABLE R301.7 NOTE C)
- 2. WALLS: L/175
- 3. FLOOR: L/240 (TOTAL LOAD), L/360 (LIVE LOAD)

ALLOWABLE SOIL PRESSURE CONSIDERED (PRESUMPTIVE) = 2000 PSF

THIS THERMALLY ISOLATED SUNROOM IS UNCONDITIONED AND NOT HABITABLE

NOTE: THIS STRUCTURE HAS BEEN EVALUATED FOR VERTICAL AND LATERAL LOADS REQUIRED BY THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.

SQUARE FOOTAGE OF SUNROOM = 169

NOTES:

1. ALLVIEW (CA5) SUNROOM; WHITE IN COLOR
2. CONSTRUCT SUNROOM ON NEW DECK
3. ELECTRICAL BY GDI
4. CONCRETE
  - A) CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
  - B) ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. EXTERIOR FLOORS AND EXPOSED CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AND 5% TO 7% AIR ENTRAINMENT.
5. WOOD
  - A) MATERIALS - FRAMING LUMBER
    - i) WOOD POSTS: NO. 2 GRADE (OR BETTER) SOUTHERN PINE OR DOUGLAS FIR
    - ii) 2x8, 2x10, 2x12 NO. 2 GRADE (OR BETTER) SOUTHERN PINE OR DOUGLAS FIR
  - B) WOOD MEMBERS SHALL BE PRESSURE-TREATED FOR THE FOLLOWING CONDITIONS:
    - i) IN DIRECT CONTACT WITH THE GROUND
    - ii) SILLS OR PLATES ON CONCRETE WITHIN 8" OF FINISHED GRADE
    - iii) JOISTS AND SUBFLOORS WITHIN 18" OF FINISH GRADE AND BEAMS WITHIN 12" OF FINISH GRADE
    - iv) EXPOSED EXTERIOR DECKS
  - C) FASTENERS
    - ALL FASTENERS AND HARDWARE USED TO CONNECT TO PRESSURE TREATED WOOD MEMBERS SHALL EITHER BE 304 OR 316 STAINLESS STEEL, OR HOT DIPPED GALVANIZED PER ASTM-A653 COATING DESIGNATION G-185 AND ASTM-A153
6. STRUCTURAL ALUMINUM
  - A) ALL EXTRUSIONS SHALL BE COMMERCIAL GRADE ALUMINUM SUPPLIED BY GREAT DAY IMPROVEMENTS, LLC.
  - B) ROOF PANELS SHALL BE 3" OR 6" THICK SUPER FOAM ROOF PANELS FACED WITH A 0.024" ALUMINUM SKIN TOP AND BOTTOM.
7. THIS SUNROOM IS CONSIDERED AS NON-CONDITIONED SPACE, EXEMPT FROM ENERGY REQUIREMENTS (PER 2015 IRC SECTION N1102.1, NOTE 2)

GREAT DAY IMPROVEMENTS  
PATIO ENCLOSURES, RALEIGH  
WILLIAMS RESIDENCE

SHEET #	DESCRIPTION
1	COVER
2	ELEVATION "B" WALL
3	ELEVATION "A" & "C" WALL
4	DECK PLAN
5	ELECTRICAL PLAN
6	FLOOR PLAN
7	ROOF PLAN
8	SYSTEM DETAILS
9	SYSTEM DETAILS

DATE	3/15/24
DRAWN	PIH
SCALE	NTS
SHEET	1 OF 9

KEVIN WILLIAMS  
76 GROVER PLACE  
CAMERON, NC 28326  
JOB #21002

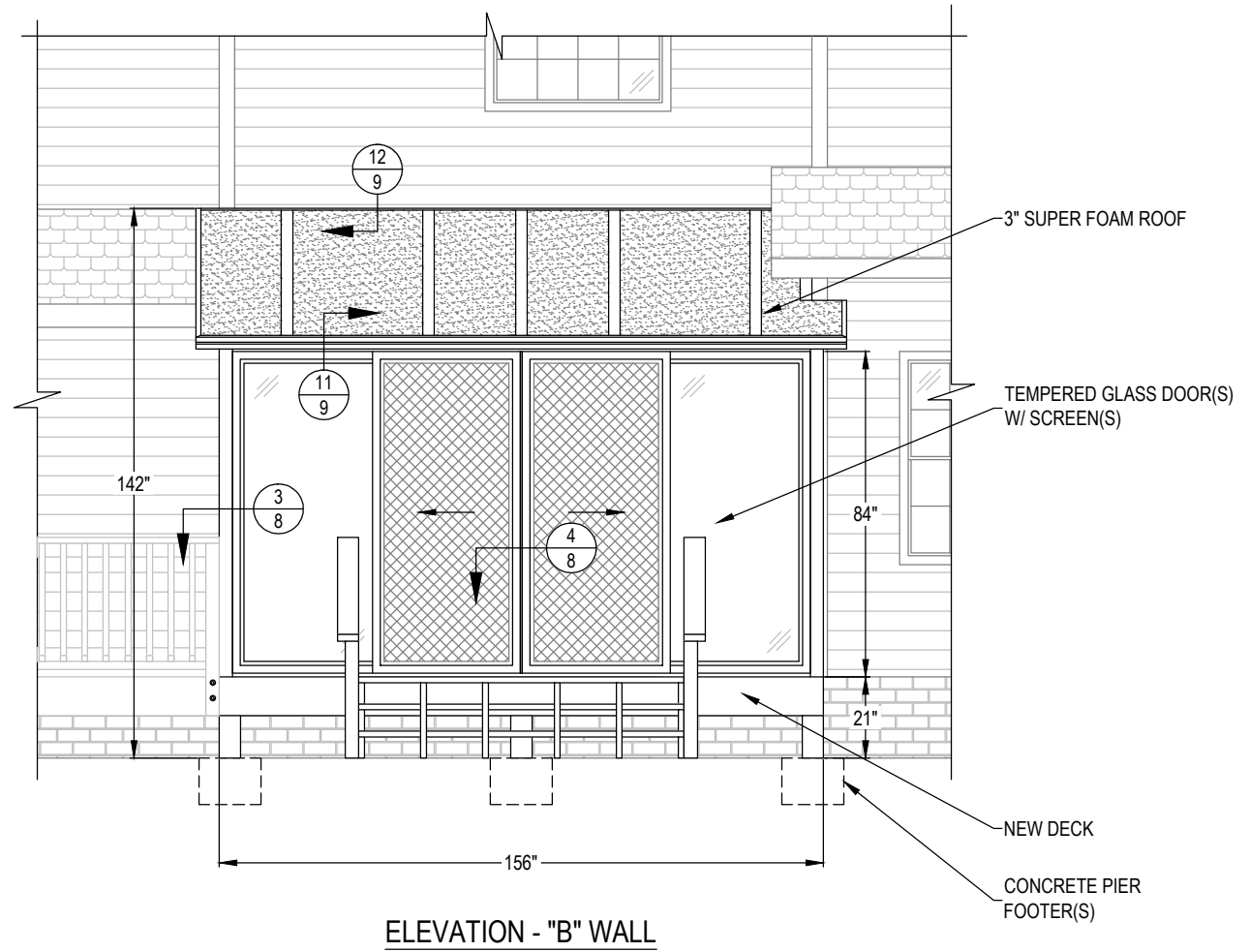
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951 AVIATION PKWY, SUITE 1000  
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984-212-8850



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PH. # 859-393-9049



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ELEVATION - "B" WALL



DATE	3/15/24
DRAWN	PIH
SCALE	1/4" = 1'-0"
SHEET	2 OF 9

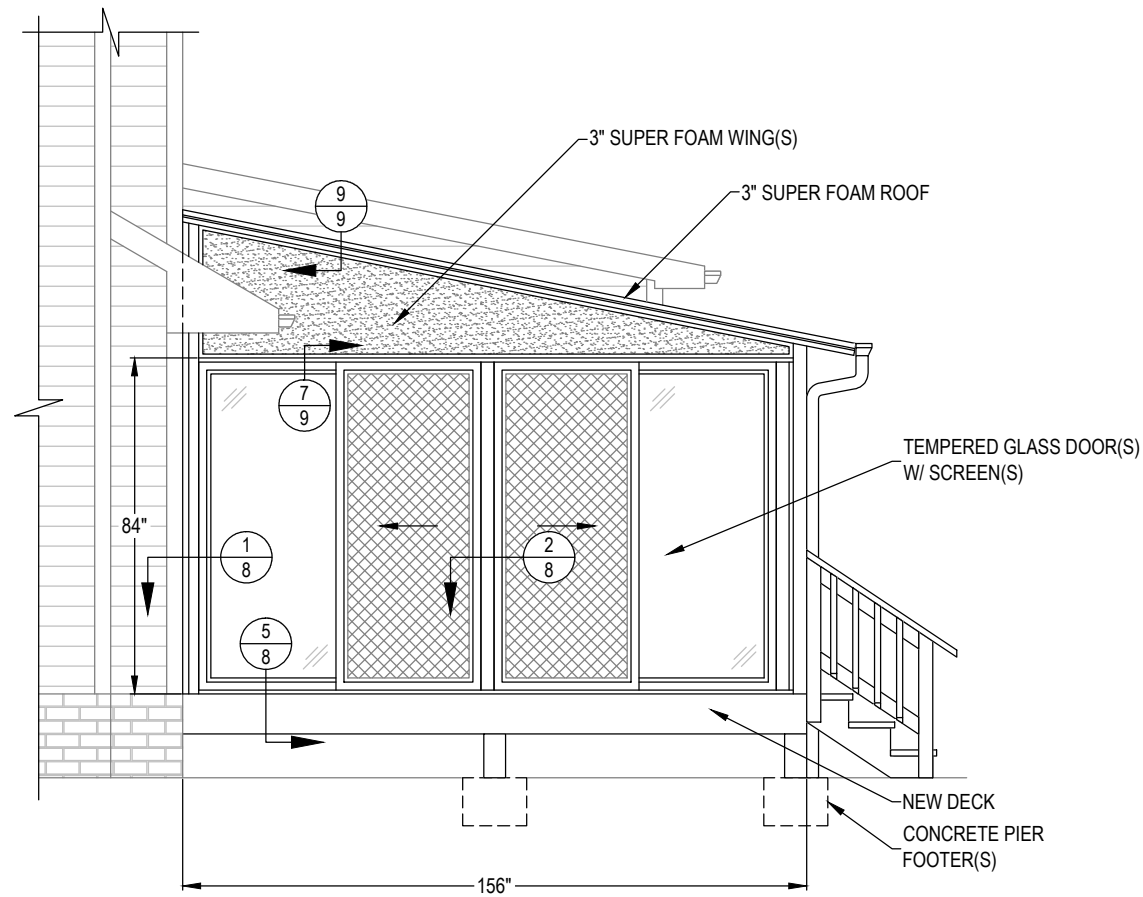
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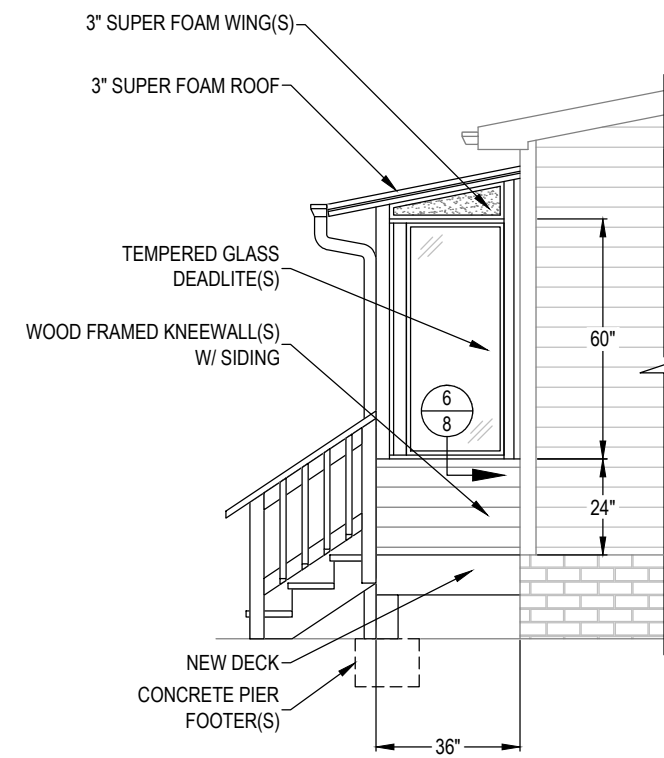


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ELEVATION - "A" WALL  
(OPEN DECK & RAILING NOT SHOWN FOR CLARITY)



ELEVATION - "C" WALL

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SHEET	3 OF 9

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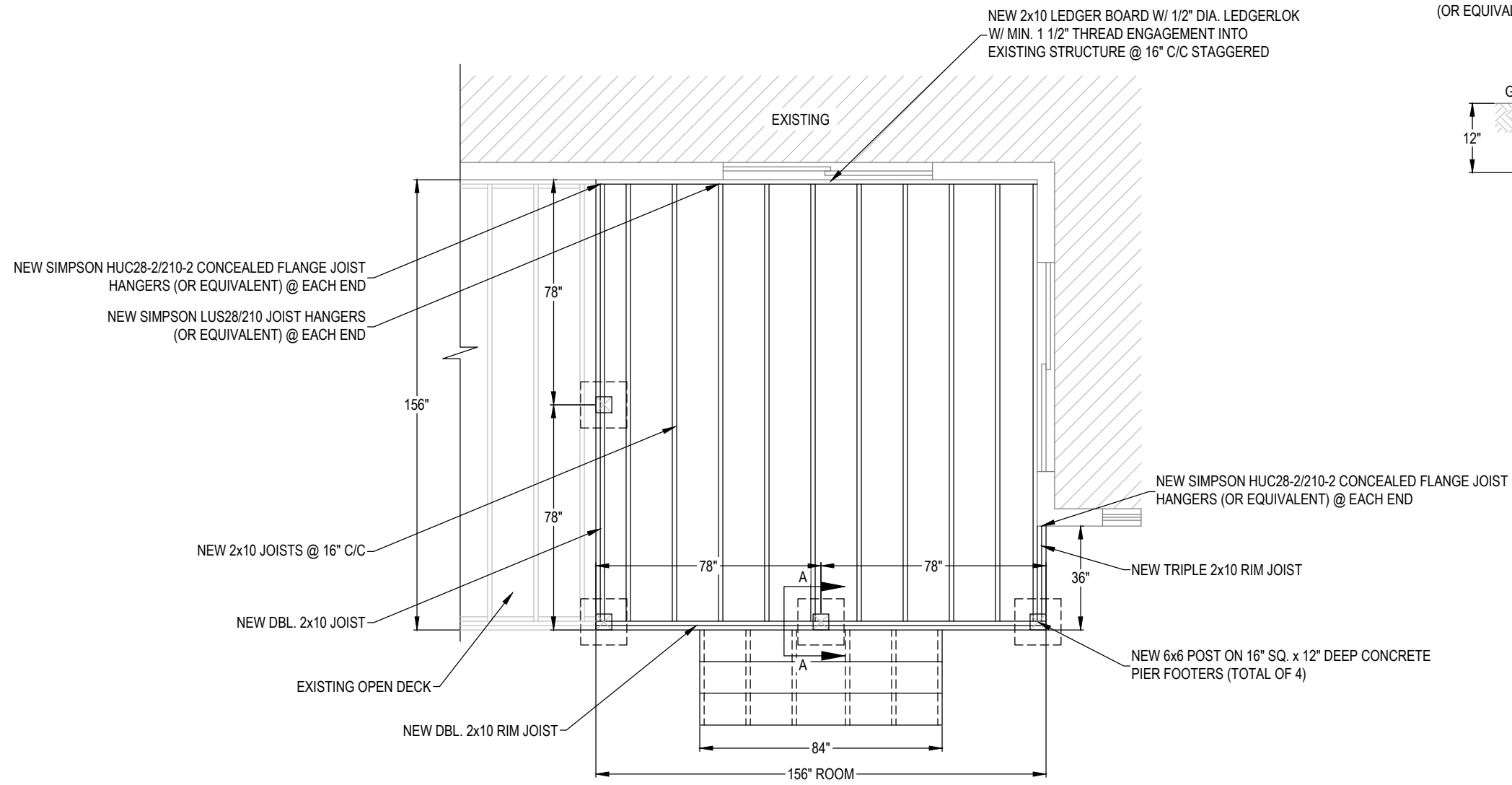
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NOTE: DECK TO BE BUILT PER 2018 NC RESIDENTIAL CODE

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SCALE	AS NOTED
SHEET	4 OF 9

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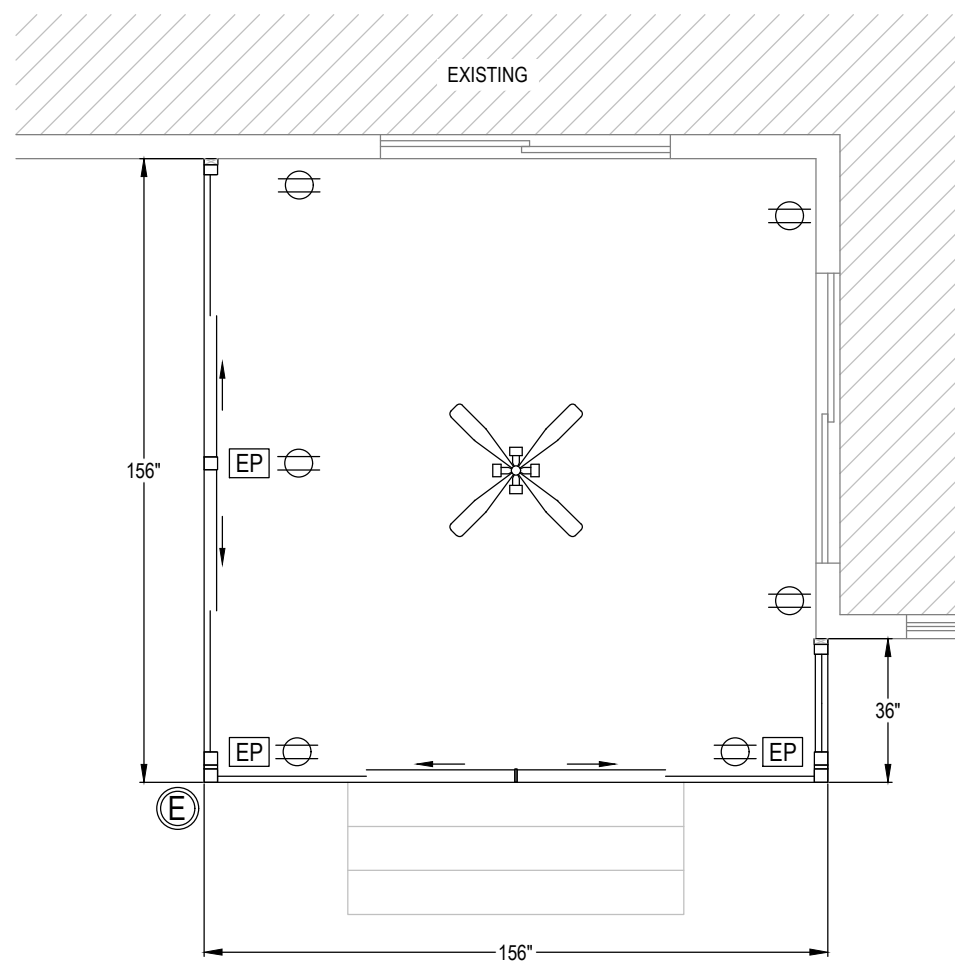
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

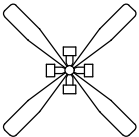


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**ELECTRICAL PLAN**

**GDI ELECTRICAL SYMBOL LEGEND**

-  ELECTRICAL RACEWAY POST
-  DUPLEX RECEPTACLE
-  EXIT LIGHT
-  CEILING FAN W/ LIGHT

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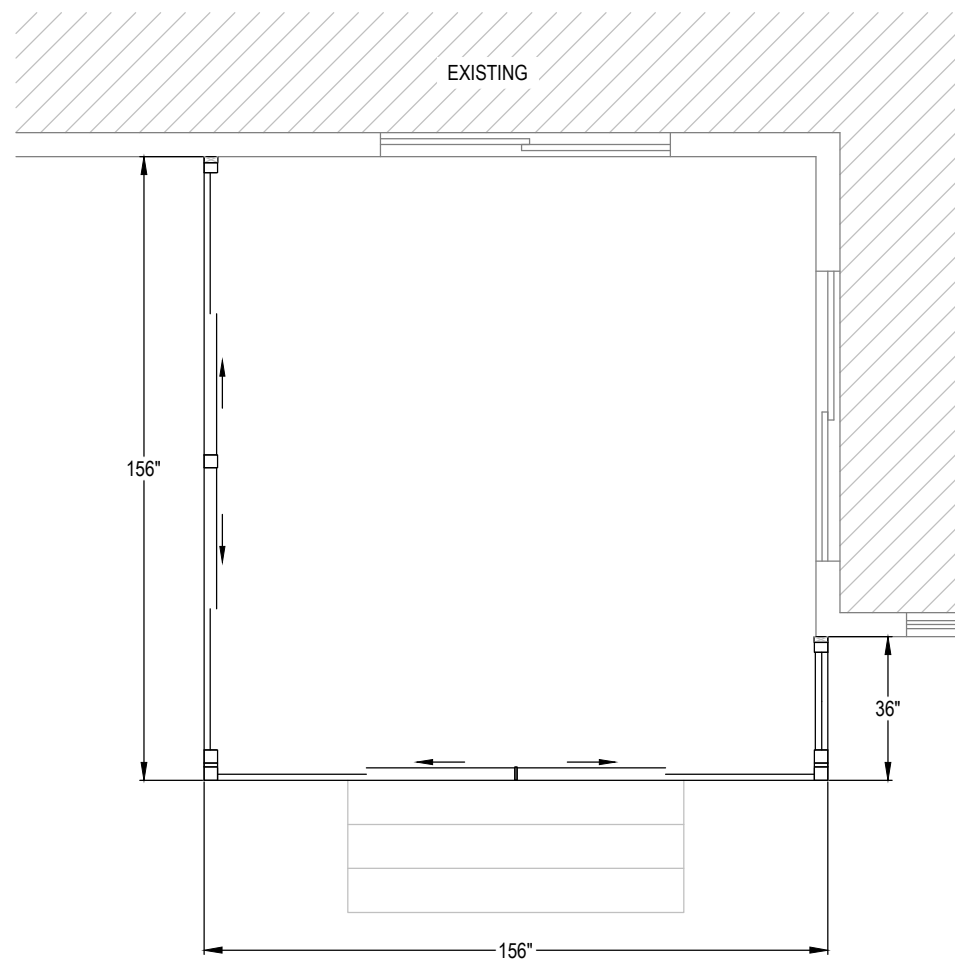


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ENGINEER'S STAMP APPLIES TO  
SUNROOM STRUCTURE ONLY;  
ELECTRICAL BY OTHERS

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FLOOR PLAN

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SHEET	6 OF 9

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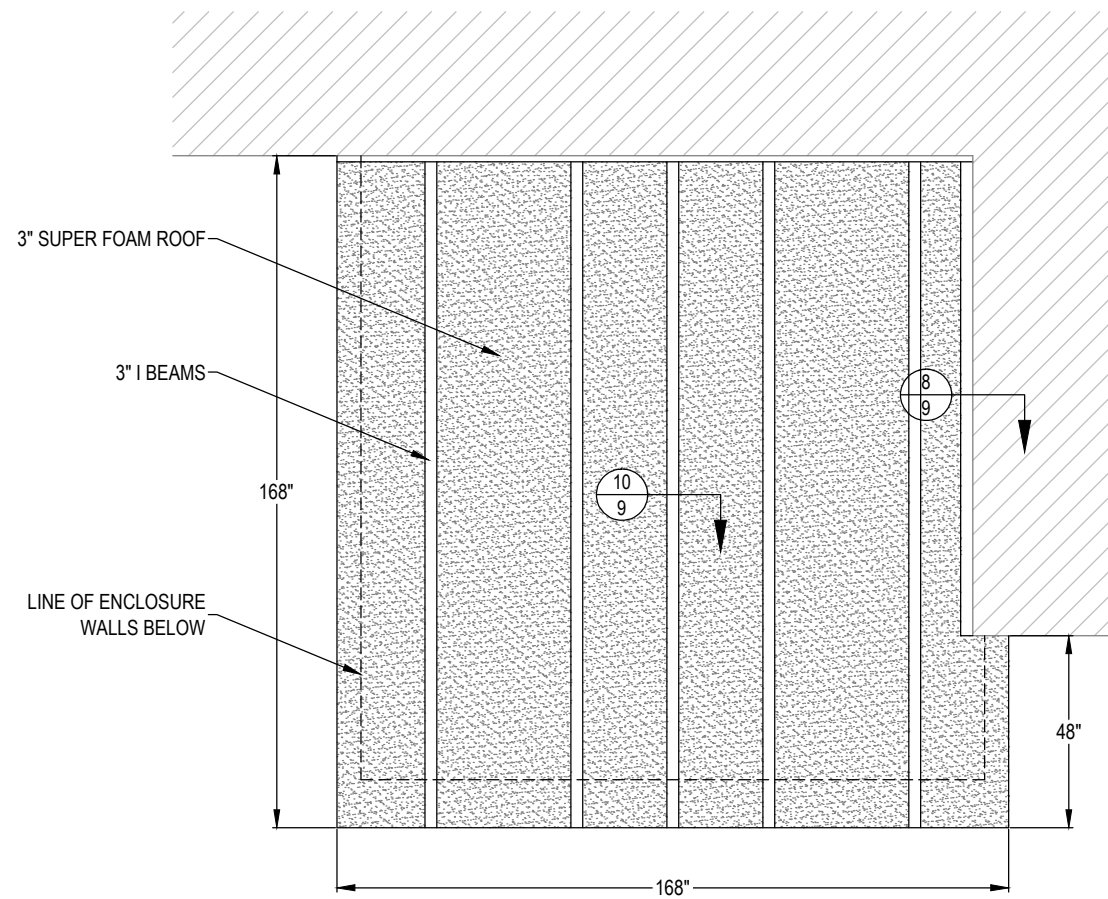
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ROOF PLAN

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SHEET	7 OF 9

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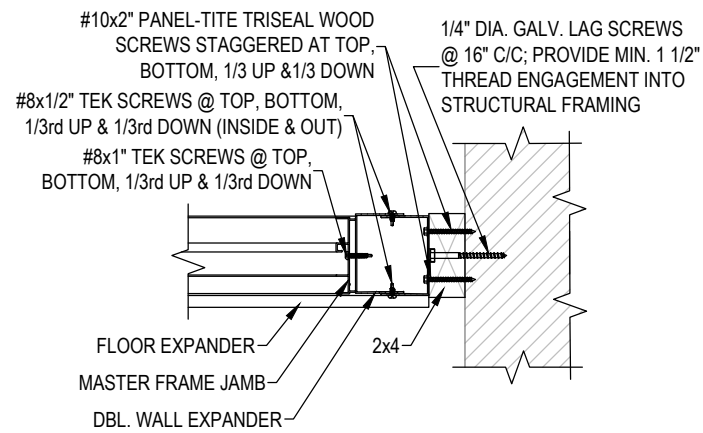
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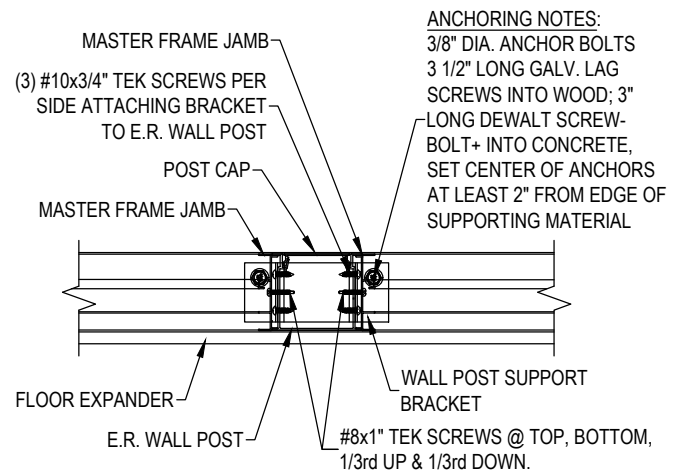
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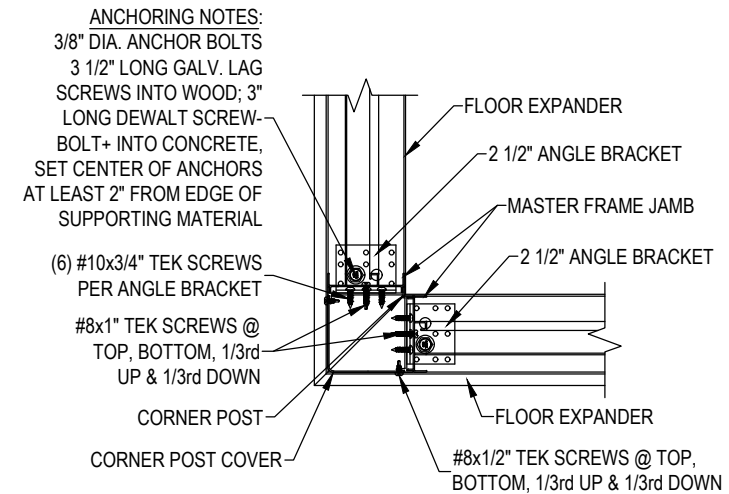
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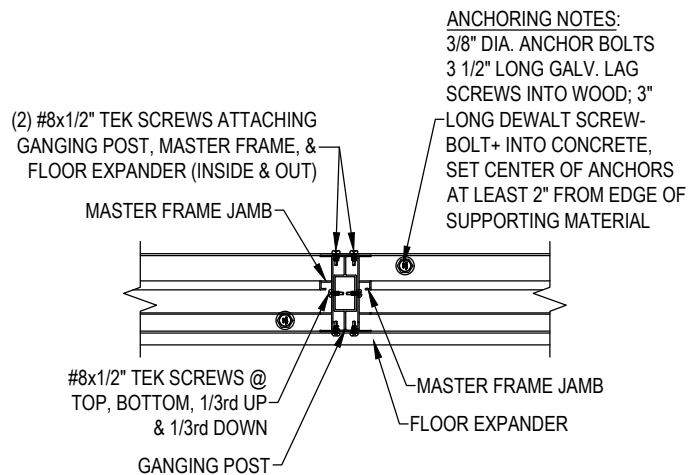
1 PLAN VIEW OF MASTER FRAME JAMB & DBL.  
8 EXPANDER CONNECTION @ EXISTING WALL



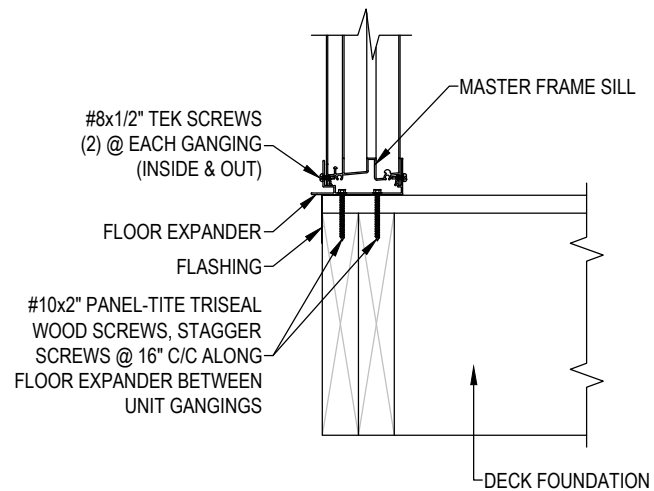
2 PLAN VIEW OF MASTER FRAME JAMBS  
8 CONNECTION @ E.R. WALL POST



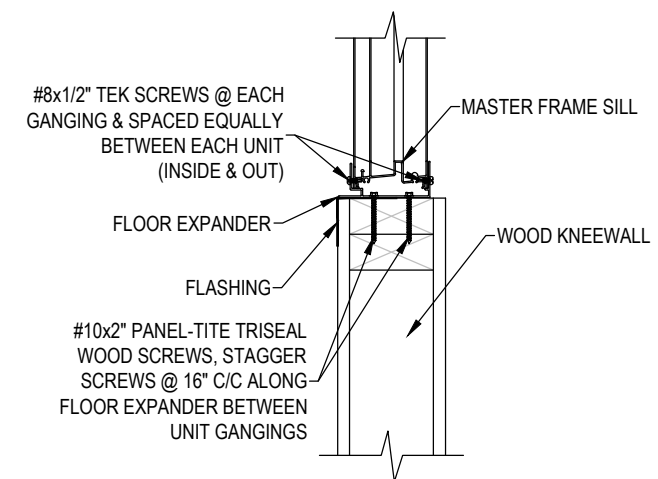
3 PLAN VIEW OF MASTER FRAME JAMBS  
8 CONNECTION @ CORNER POST



4 PLAN VIEW OF MASTER FRAME JAMBS  
8 CONNECTION @ GANGING POST



5 SECTION THROUGH MASTER FRAME SILL  
8 CONNECTION @ DECK FOUNDATION



6 SECTION THROUGH MASTER FRAME SILL  
8 CONNECTION @ WOOD KNEEWALL

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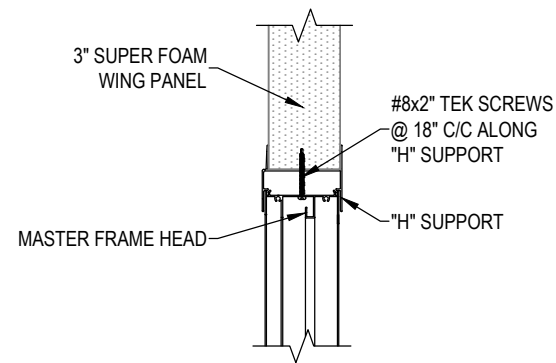


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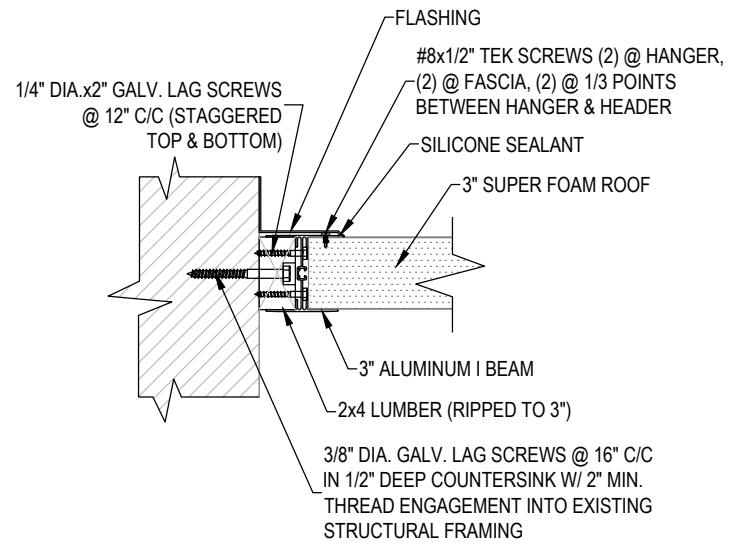


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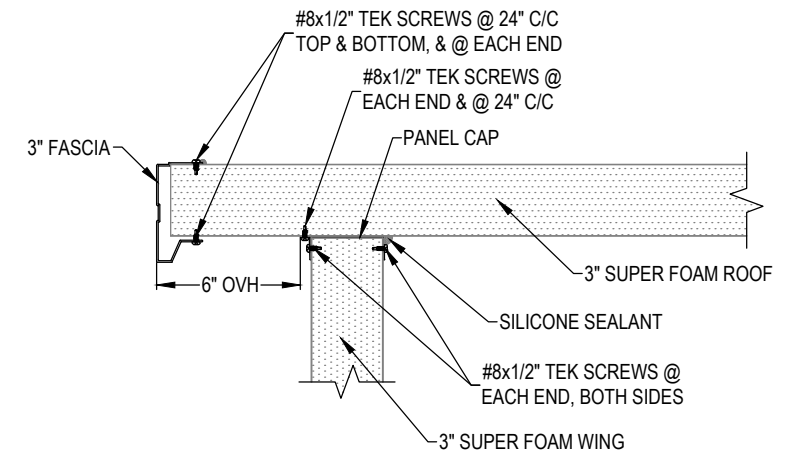




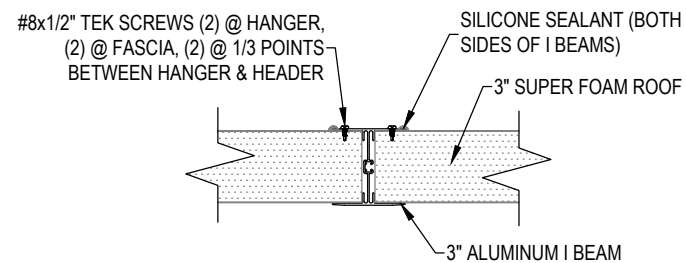
7 SECTION THROUGH MASTER FRAME  
9 HEAD CONNECTION @ FOAM WING



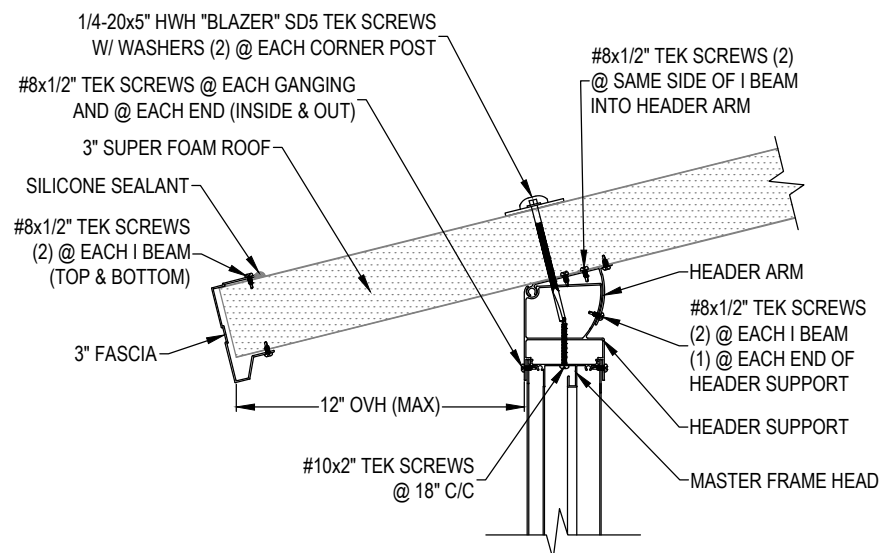
8 3" ROOF PANEL & I BEAM  
9 CONNECTION @ EXISTING WALL



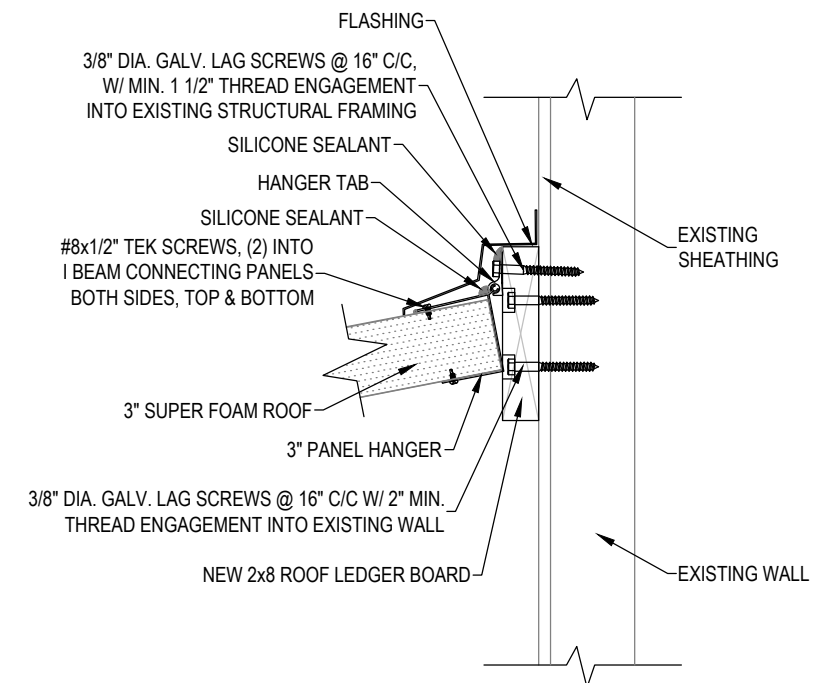
9 SECTION THROUGH 3" SUPER FOAM ROOF PANEL  
9 CONNECTION @ 3" SUPER FOAM WING PANEL



10 SECTION THROUGH 3" ROOF  
9 CONNECTION @ I BEAM



11 SECTION THROUGH MASTER FRAME & HEADER  
9 CONNECTION @ 3" SUPER FOAM ROOF



12 SECTION THROUGH 3" SUPER FOAM ROOF & PANEL  
9 HANGER ASSEMBLY CONNECTION @ EXISTING WALL

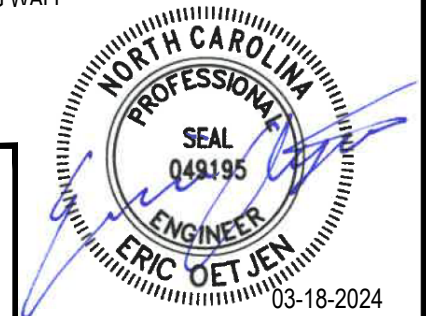
DATE	3/15/24
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SCALE	1 1/2" = 1'-0"
SHEET	9 OF 9

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