

STRUCTURAL NOTES

1. GENERAL NOTES

- 1.1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE 8th EDITION (2023). THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCE STANDARD APPLIES TO THIS PROJECT. UNLESS OTHERWISE NOTED, ALL WORK AND MATERIALS SHALL CONFORM WITH THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
- 1.2. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS, DIMENSIONS, AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES OR FIELD CONDITIONS ENCOUNTERED IN CONFLICT WITH THE DRAWINGS IN WRITING TO THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE ARCHITECT OR ENGINEER OF RECORD.
- 1.3. THE STRUCTURE SHOWN ON THESE DRAWINGS IS SELF-SUPPORTING ONLY IN ITS COMPLETED FORM. THE DESIGN, ADEQUACY, SAFETY AND STABILITY OR ERECTION BRACING, FORMWORK, SHORING, AND TEMPORARY SUPPORTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 1.4. DETAILS LABELED AS "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION.
- 1.5. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK, AND THE GENERAL PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL OSHA REQUIREMENTS. THE STRUCTURAL ENGINEER OF RECORD HAS NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION PERSONNEL RELATED TO THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS.

2. DESIGN LOADS

ROOF LIVE LOAD 20 PSF

3. WIND LOAD DESIGN CRITERIA (PER ASCE 7-22)

WIND SPEED (ULT/ASD) = 155 MPH / 1203 MPH  
RISK CATEGORY = III  
WIND EXPOSURE CATEGORY = C  
ENCLOSURE CLASSIFICATION = ENCLOSED  
EDGE ZONE WIDTH (e) = 9'-0"

SEE CLADDING DIAGRAM (THIS SHEET FOR COMPONENTS AND CLADDING LOADING)

COMPONENT & CLADDING LOADS - ROOF		
TRIB AREA	PRESSURE	
ZONE (1)	ROOF - INTERIOR	
10 SQ. FT.	44.8	-113.7
20 SQ. FT.	40.8	-100.4
50 SQ. FT.	35.5	-82.8
100 SQ. FT.	31.5	-69.5
ZONE (2)	ROOF - INTERIOR EDGE	
10 SQ. FT.	44.8	-148.1
20 SQ. FT.	40.8	-133.5
50 SQ. FT.	35.5	-114.2
100 SQ. FT.	31.5	-99.6
ZONE (3)	ROOF - CORNER EDGE	
10 SQ. FT.	44.8	-106.6
20 SQ. FT.	40.8	-106.6
50 SQ. FT.	35.5	-106.6
100 SQ. FT.	31.5	-106.6

COMPONENT & CLADDING LOADS - WALLS		
TRIB AREA	PRESSURE	
ZONE (4)	WALLS - INTERIOR	
10 SQ. FT.	62.0	-67.2
50 SQ. FT.	59.2	-64.4
200 SQ. FT.	55.6	-60.8
500 SQ. FT.	52.9	-58.0
ZONE (5)	WALLS - CORNER	
10 SQ. FT.	62.0	-82.7
50 SQ. FT.	59.2	-77.2
200 SQ. FT.	55.6	-69.9
500 SQ. FT.	52.9	-64.4

NOTE:  
FOR EFFECTIVE AREAS BETWEEN THOSE GIVEN ABOVE THE LOADS MAY BE INTERPOLATED.  
OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREA.

LATERAL WIND RESISTING SYSTEM HAS BEEN DESIGNED FOR THE BUILDING AS A WHOLE (APARTMENTS OR CONDOS) NOT INDIVIDUAL PER UNIT (TOWNHOMES).

4. DEMOLITION

- 4.1. THE EXISTING PURLIN SYSTEM IS NOT CAPABLE OF SUPPORTING EXISTING SUSPENDED LOADS WITHOUT ADEQUATE BRACING. CONTRACTOR SHALL VERIFY BRACING IS IN PLACE OR SUSPENDED LOADING IS ADEQUATE SUPPORTED PRIOR TO REMOVING EXISTING METAL ROOF.

5. STRUCTURAL STEEL

- 5.1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE, W/ AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL OSHA REQUIREMENTS.
- 5.2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
- 5.2.1. ROLLED W AND WT SHAPES: ASTM A992, GRADE 50.  
5.2.2. ROLLED M, S, C AND MC SHAPES AND ANGLES: ASTM A36, Fy=36 KSI.  
5.2.3. PLATES AND BARS: ASTM A36, Fy=36 KSI.  
5.2.4. STEEL PIPE: ASTM A53, GRADE B, Fy=35 KSI.  
5.2.5. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):  
SQUARE AND RECTANGULAR SECTIONS: ASTM A500, GRADE C, Fy=50 KSI.  
ROUND SECTIONS: ASTM A500, GRADE C, Fy=46 KSI.
- 5.3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
- 5.4. ALL ANCHOR BOLTS SHALL BE ASTM F1554-36, U.N.O.

6. METAL ROOF DECK

- 6.1. METAL ROOF DECK SHALL BE GALVANIZED STEEL DECK WITH THE FOLLOWING MINIMUM PHYSICAL PROPERTIES:
- TYPE WIDE RIB TYPE B  
DEPTH 1 1/2 INCH  
GAUGE 22 (0.0295")  
STEEL YIELD STRENGTH 33 KSI  
MOMENT OF INERTIA 0.155 IN<sup>4</sup>  
SECTION MODULUS 0.186 IN<sup>3</sup>
- 6.2. ALL STEEL DECK SHALL BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE
- 6.3. ALL DECK SHALL BE INSTALLED WITH A MINIMUM OF TWO SPANS CONTINUOUS. AT LOCATIONS WHERE ONLY ONE SPAN IS POSSIBLE PROVIDE DOUBLE LAYER OF DECK WITH ROW OF #12 SCREWS @ 6"o.c. AT MIDSPAN.
- 6.4. ALL DECK SHALL BE FABRICATED FROM GALVANIZED SHEETS CONFORMING TO ASTM A653, CLASS G60 COATINGS.
- 6.5. CONNECT METAL DECK TO STRUCTURAL EXISTING PURLINS WITH #12 HEX HEAD SCREWS: (2) @ 6"o.c. IN ZONE 2 AND 3 AND 6"o.c. IN ZONE 1. PROVIDE (3) #10 SIDELAP FASTENERS FOR ALL SPANS. IN ADDITION TO THE EAVE AND RIDGE PURLIN ZONE 2 AND 3 INCLUDE THE ADJACENT PURLINS.

7. TIMBER FRAMING

- 7.1. STRUCTURAL TIMBER FRAMING MEMBERS SHALL BE No. 2 SOUTHERN PINE, OR STRONGER.
- 7.2. PROVIDE PRESSURE TREATED MEMBERS WHERE P.T. IS INDICATED AND AT OTHER LOCATIONS WHERE IN CONTACT WITH MASONRY/CONCRETE OR GROUND, OR WHERE EXPOSED TO WEATHER. ALL MEMBERS REQUIRED TO BE PRESSURE TREATED SHALL BE RATED FOR GROUND CONTACT WHEN ANY PORTION OF THE MEMBER IS WITHIN 12 INCHES OF GROUND.
- 7.3. EXCEPT WHERE FASTENERS ARE SPECIFIED, PROVIDE NAILING PATTERNS PER THE FBC. PROVIDE GALVANIZED FASTENERS WHERE INDICATED.

THRESHOLD INSPECTION PLAN

A. GENERAL REQUIREMENTS

- A.1. THE STRUCTURAL INSPECTIONS LISTED HEREIN SHALL BE PERFORMED BY A SPECIAL INSPECTOR. THE SPECIAL INSPECTOR SHALL BE CURRENTLY CERTIFIED BY THE FLORIDA BOARD OF PROFESSIONAL ENGINEERS.
- A.2. AS USED HEREIN FOR THE PURPOSE OF JOB SITE INSPECTION, THE TERM "SPECIAL INSPECTOR" OR "INSPECTOR" SHALL MEAN THE SPECIAL INSPECTOR OR HIS DULY AUTHORIZED REPRESENTATIVE EXCEPT THAT ALL REQUIRED REPORTS SHALL BE PREPARED BY, AND BEAR THE SEAL OF, THE SPECIAL INSPECTOR.
- A.3. THE INSPECTOR SHALL BE COMPLETELY FAMILIAR WITH THE CONTRACT DRAWINGS, SPECIFICATIONS AND REFERENCED SPECIFICATIONS.
- A.4. THE INSPECTOR SHALL OBSERVE ALL STRUCTURAL WORK AS NECESSARY TO DETERMINE THAT REQUIREMENTS OF THE ENFORCEMENT AGENCY, FLORIDA STATUTES AND THE CONTRACTS DOCUMENTS ARE BEING SATISFIED.
- A.5. THE INSPECTOR SHALL OBTAIN A JOB SCHEDULE FROM THE CONTRACTOR AND SHALL PLAN ALL INSPECTION REQUIRED TO CONFORM TO THE UPDATED SCHEDULE AND AS OUTLINED IN THIS PLAN.
- A.6. THE INSPECTOR SHALL ALSO PERFORM OCCASIONAL UNSCHEDULED VISITS TO INSPECT ONGOING CONSTRUCTION FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. THESE VISITS SHALL NOT BE ANNOUNCED IN ADVANCE TO THE CONTRACTOR.
- A.7. THE INSPECTOR SHALL BE RESPONSIBLE TO THE ENFORCEMENT AGENCY. THE INSPECTOR SHALL PROVIDE COPIES OF COMPREHENSIVE DAILY REPORTS ON A WEEKLY BASIS TO THE ENFORCEMENT AGENCY, THE ARCHITECT AND THE STRUCTURAL ENGINEER-OF-RECORD. THE FORMAT OF THE REPORT MUST BE REVIEWED BY THE ENGINEER-OF-RECORD PRIOR TO COMMENCING WORK. INDIVIDUAL REPORTS SHALL INCLUDE ALL OF THE FOLLOWING MINIMUM INFORMATION:
- A.7.a. DATE OF INSPECTION.  
A.7.b. NAME OF INSPECTION.  
A.7.c. OTHER PERSONNEL PRESENT DURING THE INSPECTIONS.  
A.7.d. WEATHER CONDITIONS.  
A.7.e. CONSTRUCTION PROGRESS REPORT.  
A.7.f. DETAILED CHECK-OFF REPORTS ON SPECIFIC AREAS.  
A.7.g. THRESHOLD TEST REPORTS, WELDERS' CERTIFICATES, SKETCHES OR OTHER SUPPLEMENTAL DATA.

- A.8. THE INSPECTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTOR AND THE STRUCTURAL ENGINEER VERBALLY AND IN WRITING OF ANY DISCREPANCIES OR DEFICIENCIES OBSERVED DURING THE PROGRESS OF STRUCTURAL WORK.
- A.9. THE INSPECTOR SHALL ENSURE THAT HE IS FURNISHED WITH COPIES OF ALL TEST REPORTS, STAMPED SHOP DRAWINGS, ETC. AND THAT THE WORK IS BEING COMPLETED ACCORDINGLY.
- A.10. THE SPECIAL INSPECTOR SHALL BE PRESENT AT THE PRECONSTRUCTION CONFERENCE AND MEET WITH THE REPRESENTATIVE OF THE ENFORCING AGENCY, OWNER CONTRACTOR, SUBCONTRACTOR, TESTING LABORATORIES AND OTHER INTERESTED PARTIES TO REVIEW SPECIFIC THRESHOLD INSPECTION REQUIREMENTS AND PROCEDURES.
- A.11. QUALITY CONTROL INSPECTION AND TESTING BY AN INDEPENDENT TESTING LABORATORY ARE REQUIRED BY THE SPECIFICATION FOR SOME STRUCTURAL ELEMENTS AND WILL BE AVAILABLE TO THE SPECIAL INSPECTOR TO THE SUPPLEMENT HIS OWN INSPECTIONS.

B. INSPECTIONS

B.1. GENERAL

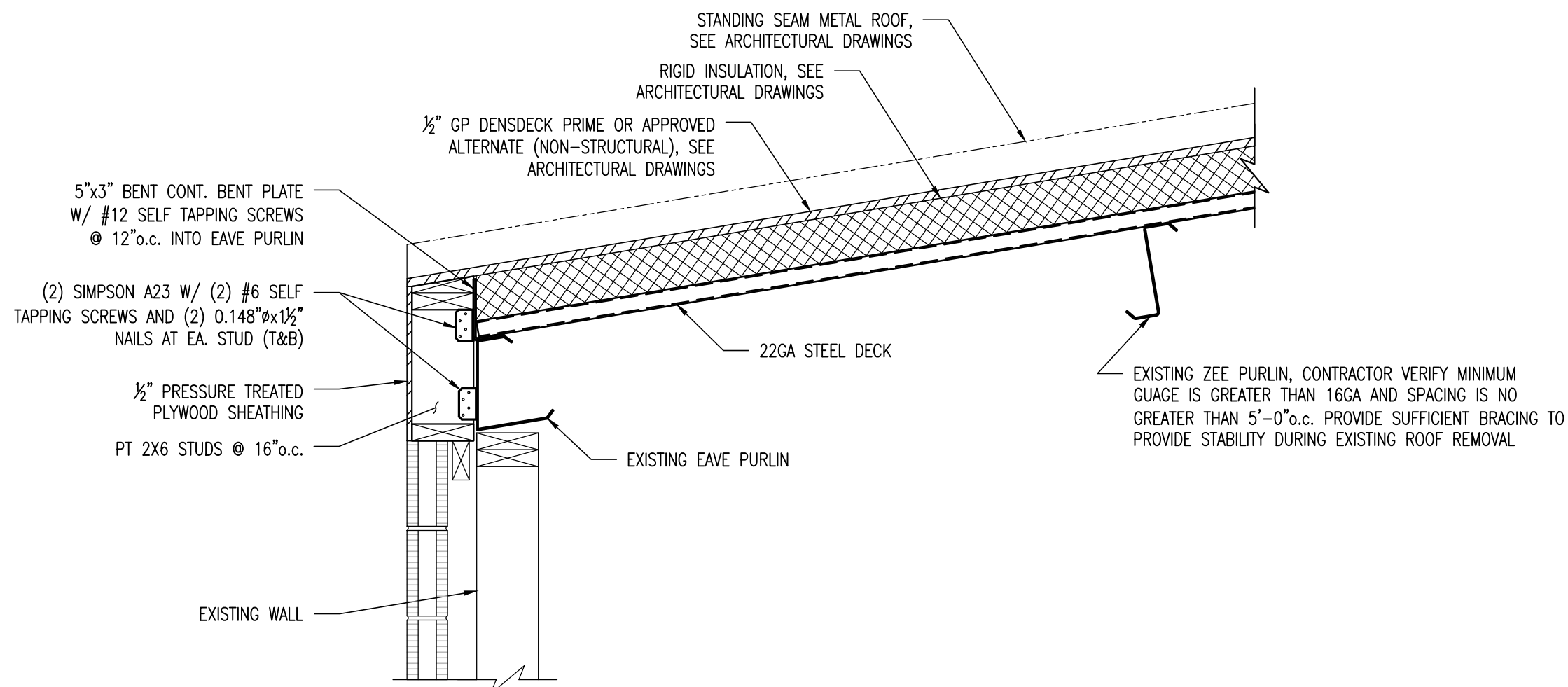
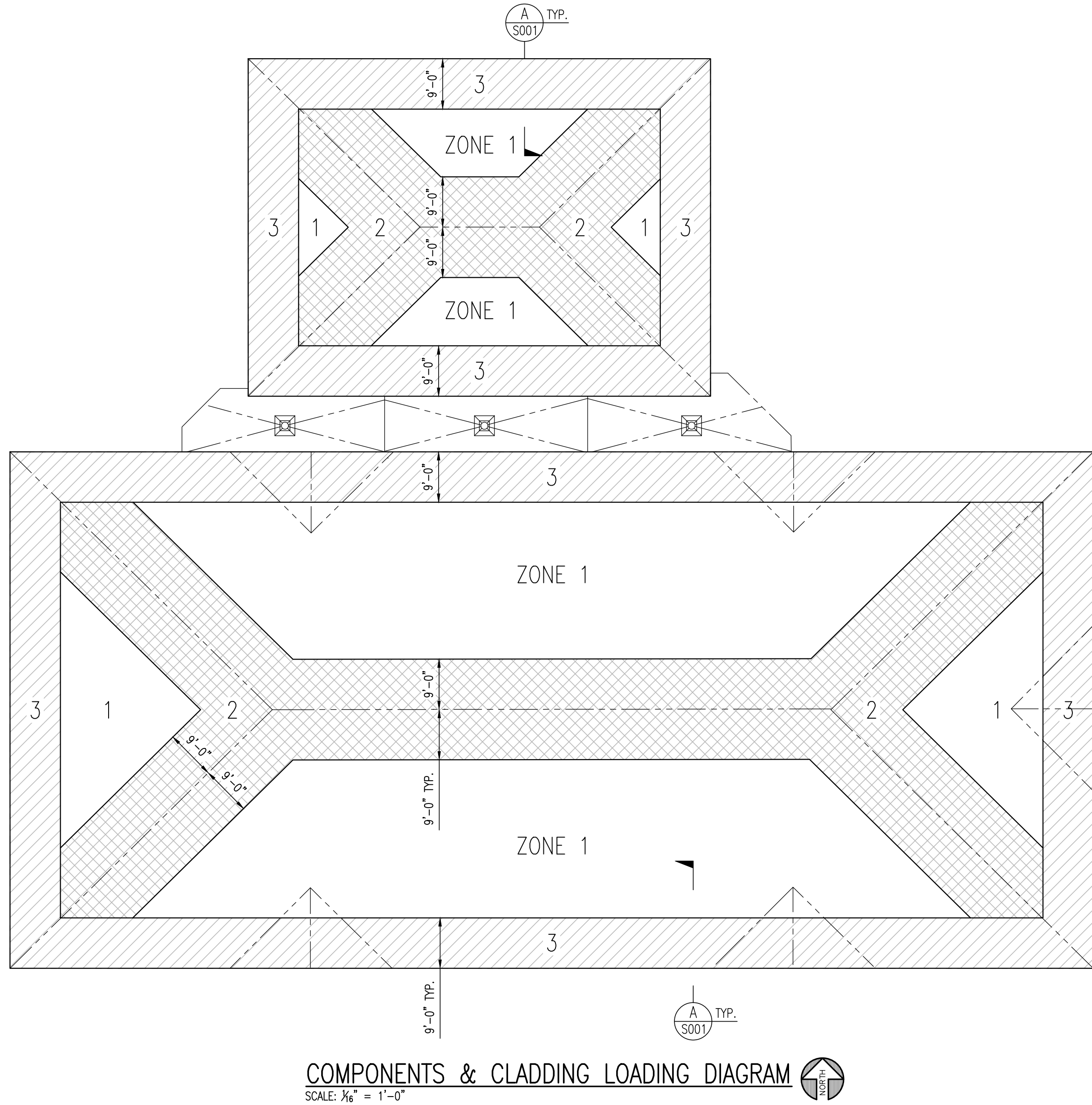
- B.1.a. REVIEW WITH THE CONTRACTOR THE CONSTRUCTION PROCEDURE BEFORE THE START OF ANY PHASE OF THE STRUCTURAL WORK TO MAKE SURE THAT IT ACCOMMODATES THE DESIGN.
- B.1.b. REVIEW WITH THE INDEPENDENT TESTING LABORATORY AND CONTRACTOR THE TYPE OF INSPECTION AND TESTING THAT IS REQUIRED BY THE SPECIFICATIONS BEFORE THAT START OF ANY PHASE OF THE STRUCTURAL WORK. ESTABLISH A CLEAR METHOD FOR MARKETING ALL TESTED AND INSPECTED ITEMS. CONFIRM THAT THE TESTING AGENCY IS USING QUALIFIED PERSONNEL AND COMPLETING ALL TESTS AND INSPECTIONS IN A TIMELY AND PROFESSIONAL MANNER.
- B.1.c. AFTER DELIVERY TO THE JOB, INSPECT STRUCTURAL MEMBERS FOR COMPLIANCE WITH THE OFFICIAL CONTRACT DOCUMENTS, DAMAGE AND FLAWS. CONFIRM THAT THE STRUCTURAL MEMBER ARE BEING PROTECTED AND STORED PROPERLY.
- B.1.d. VERIFY THAT ALL TESTS, SAMPLING AND/OR REPORTS HAVE BEEN COMPLETED BEFORE FINISHED WORK IS COVERED AND IS THEREFORE NO LONGER CAPABLE OF BEING INSPECTED OR TESTED.
- B.1.e. CONFIRM THE REPAIR AND TREATMENT OF AREAS CONTAINING DEFECTIVE WORK.

B.2. EXISTING CONDITIONS

- B.2.a. VERIFY THAT ALL OF THE EXISTING ROOF PURLINS ARE ADEQUATELY BRACED PRIOR TO DEMOLITION OF THE EXISTING METAL ROOFING. PURLIN BRACING SHALL CONSIST OF MANUFACTURERS STRAP X-BRACING OR SOLID BLOCKING SPACED 8' ON CENTER OR LESS.
- B.2.b. VERIFY THAT THE GAUGE OF ALL ROOF PURLINS IS 16 GAUGE OR THICKER

B.3. METAL ROOF DECK

- B.3.a. VERIFY COMPLIANCE OF MATERIALS (DECK AND DECK ACCESSORIES) WITH THE CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, GAUGE AND MATERIAL GRADE.
- B.3.b. VERIFY MECHANICAL FASTENING MEETS VISUAL INSPECTION CRITERIA.



TYPICAL ROOF DETAIL

SCALE: 1"=1'-0"

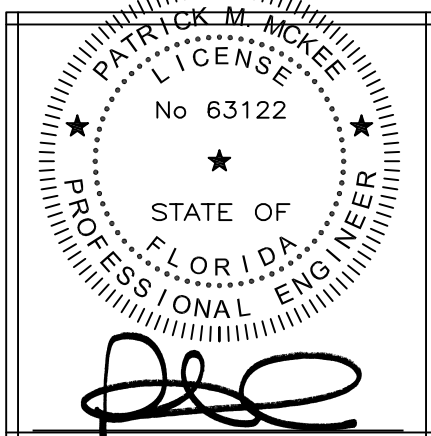
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CONSULTANTS



**KEVER McKEE**  
ENGINEERING

1624 Metropolitan Blvd., Ste. A  
Tallahassee, Florida 32308  
Office: (850) 727-5367  
Authorization No. 31293



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**ARCHITECTURE**  
**INTERIOR DESIGN**  
**BUILDING ENVELOPE**

231 JOHN KNOX RD, SUITE 105  
TALLAHASSEE, FL 32303  
PH: (850) 385 9200

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**RECEIVED**  
**ALLSTATE CONSTRUCTION**  
**01-14-2026**

**NELSON BUILDING REROOF**  
**BAY COUNTY SCHOOLS**  
**PANAMA CITY, FLORIDA**

CONSTRUCTION DOCUMENTS

PROJ. NO. 177625  
DATE 1/14/2026  
DRAWN J. KRELL  
CHECKED P. MCKEE  
APPROVED P. MCKEE  
REVISION  
REVISION DATE

Structural Notes

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