

DIMENSIONAL LUMBER FRAMING

- ALL STRUCTURAL LUMBER DESIGN SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS-2018).
- LOCATION, NUMBER, AND DIMENSIONS OF FRAMING MEMBERS SHOW GENERAL ARRANGEMENT ONLY. ACTUAL SPANS, SPACINGS, ETC. SHALL BE DETERMINED FROM ARCHITECTURAL DETAILS.
- SEE ARCHITECTURAL PLANS AND DETAILS FOR EDGE SECTIONS, HEADER AND LINTEL LOCATIONS, AND ALL NON-STRUCTURAL FRAMING AND TRIM.
- ALL WOOD FRAMING MATERIAL SHALL BE SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT. ALLOWABLE STRESS REQUIREMENTS OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE "SCHEDULE OF REQUIRED STRESS VALUES".
- ALL STUD AND WALL FRAMING SHALL BE NO. 2 GRADE SOUTHERN YELLOW PINE (SYP). "STUD" GRADE MATERIAL IS STRICTLY PROHIBITED FROM USE.
- ALL JOIST, RAFTER & MISC. FRAMING SHALL BE NO. 2 GRADE SOUTHERN YELLOW PINE. PROVIDE FULL-DEPTH BLOCKING AT ENDS. PROVIDE FULL-DEPTH (OR METAL) BRIDGING AT MIDSPAN AND AT A MAXIMUM SPACING OF 8'-0" O.C. IN BETWEEN.
- ALL LUMBER EXPOSED TO EXTERIOR ENVIRONMENT OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED TO A MINIMUM RETENTION OF 0.25 lbs. OF ACQ PER CUBIC FOOT OF WOOD, AND EACH PIECE SHALL BEAR THE THIRD PARTY QUALITY MARK. "ABOVE GRADE USE": ALL LUMBER IN CONTACT WITH THE GROUND SHALL BE PRESSURE TREATED TO A MINIMUM RETENTION OF 0.40 lbs. OF ACQ PER CUBIC FOOT OF WOOD, AND EACH PIECE SHALL BEAR THE THIRD PARTY QUALITY MARK. "GROUND CONTACT USE": REFERENCE STANDARD AWPA U1 AND ASTM D1760 FOR PRESSURE TREATMENT OF TIMBER PRODUCTS.
- WHERE POSSIBLE ALL CUTS AND HOLES SHOULD BE COMPLETED BEFORE TREATMENT. CUTS AND HOLES DUE TO ON-SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTION (PER AWPS STD. 144).
- THE CONTRACTOR SHALL CAREFULLY SELECT LUMBER TO BE USED IN LOAD BEARING APPLICATIONS. THE LENGTH OF SPLIT ON THE WIDE FACE OF 2" NOMINAL LOAD BEARING FRAMING SHALL BE LIMITED TO LESS THAN 1/2 OF THE WIDE FACE DIMENSION. THE LENGTH OF SPLIT ON THE WIDE FACE OF 3" (NOMINAL) AND THICKER LUMBER SHALL BE LIMITED TO 1/2 OF THE NARROW FACE DIMENSIONS.
- ALL WOOD JOISTS AND HEADERS WHICH FRAME INTO BEAMS SHALL BE SUPPORTED BY SIMPSON LUS HANGERS WITH THE SAME WIDTH AND DEPTH OF THE LUMBER. U.N.O. USE HANGERS WITH CONCEALED FLANGES WHERE THE CONNECTOR CANNOT BE HIDDEN BY WOOD TRIM OR THE SUPPORT MEMBER IS WIDER THAN THE STANDARD FLANGE.
- PROVIDE NAILING PATTERN IN COMPLIANCE WITH IBC RECOMMENDED FASTENING SCHEDULE.
- LOAD BEARING STUD WALLS SHALL BE CONTINUOUSLY BRIDGED AT MID-HEIGHT AND UNSUPPORTED PLYWOOD WALL SHEATHING JOINTS WITH SOLID WOOD BLOCKING, U.N.O.
- ALL COLES IN STRUCTURAL WOOD FRAMING SHALL BE PERMITTED WITHOUT PRIOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER AND ARCHITECT.
- PROVIDE FULL-DEPTH BLOCKING AT ENDS OF RAFTERS AND JOISTS. PROVIDE FULL-DEPTH (OR METAL) BRIDGING AT MIDSPAN AND AT A MAXIMUM SPACING OF 8'-0" O.C. IN BETWEEN.
- STRUCTURAL STEEL PLATE CONNECTORS SHALL CONFORM TO ASTM A 36 SPECIFICATIONS AND BE 1/2" THICK UNLESS OTHERWISE INDICATED. BOLTS CONNECTING WOOD MEMBERS SHALL BE PER ASTM A 307 AND BE 1/2" DIAMETER UNLESS OTHERWISE INDICATED. PROVIDE WASHERS FOR ALL BOLTS IN CONTACT WITH WOOD SURFACES.
- BOLT HOLES SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. BOLTED CONNECTIONS SHALL BE SNUGGED TIGHT BUT NOT TO THE EXTENT OF CRUSHING WOOD UNDER WASHERS.
- HOLES AND NOTCHES DRILLED OR CUT INTO WOOD FRAMING SHALL NOT EXCEED THE REQUIREMENTS OF IBC, SECTION 23.
- ALL PLATES, ANCHORS, NAILS, BOLTS, NUTS, WASHERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE HOT DIP GALVANIZED.
- ADEQUATE BRACING SHALL BE PROVIDED UNTIL PERMANENT BRACING AND/OR DIAPHRAGMS ARE INSTALLED.
- OVERLAP ALL TOP PLATES AT CORNERS.
- JOINTS IN THE DOUBLE TOP PLATES OF WALLS SHALL BE OFFSET A MINIMUM LAP LENGTH OF 4'-0" & NAILED WITH NOT LESS THAN (15) 16d NAIL ON EACH SIDE OF THE JOINT.
- ALL BEAMS SHALL HAVE LATERAL SUPPORT AT THE COMPRESSION EDGE AT A MAXIMUM OF 24' O.C. AND AT BEARING POINTS WITH A MINIMUM BEARING LENGTH OF 3'-1/2".
- PROVIDE DOUBLE JOISTS OR SOLID BLOCKING AT 24" O.C. UNDER ALL PARTITIONS AND TO SUPPORT CONCENTRATED LOADS FROM FRAMING ABOVE, UNLESS NOTED OTHERWISE.
- PROVIDE DOUBLE HEADER BEAMS OF THE SAME SIZE AS JOISTS OR RAFTERS TO FRAME AROUND OPENINGS IN PLYWOOD DECK UNLESS OTHERWISE INDICATED.
- PROVIDE DOUBLE LAYER PLYWOOD UNDER ALL CERAMIC OR STONE TILE FLOORS.
- PROVIDE HEADERS, BRIDGING, CONNECTORS, BLOCKING, TRIMMERS, ETC. AS REQUIRED AND RECOMMENDED BY AISC TIMBER CONSTRUCTION STANDARDS AND IBC 2006 U.N.O.
- WOOD FRAMING MATERIALS:
 - ALL DIMENSIONAL LUMBER SHALL BE #2 SYP KD OR BETTER AND PROVIDE NOT LESS THAN THE DESIGN VALUES LISTED IN TABLE 1 OF THE SOUTHERN PINE REFERENCE DESIGN VALUES BY THE SOUTHERN FORESTRY PRODUCTS ASSOCIATION DATED JUNE 1, 2013. PREFABRICATED "MICRO-LAM" LUMBER HEADERS AND BEAMS SHALL BE AS MANUFACTURED BY "TRUSS JOIST WEYERHAEUSER" OR APPROVED EQUAL. DO NOT CUT OR NOTCH MICRO-LAM MATERIAL WITHOUT THE MANUFACTURER'S APPROVAL. PRE-ENGINEERED MEMBERS SHALL HAVE THE FOLLOWING PROPERTIES:
 LVL F/b = 2600 psi Fv = 285 psi E = 2.0 mpsi F/c = 750 psi
 PSL F/b = 2900 psi Fv = 300 psi E = 2.0 mpsi F/c = 750 psi
 - SHEATHING:
 - WALLS.....APA RATED SHEATHING, EXPOSURE 1 OR EXTERIOR
 - ROOF.....APA RATED SHEATHING, EXPOSURE 1, 2, OR EXTERIOR
 - FLOOR.....APA RATED SHEATHING, EXPOSURE 1
- ALL BOLTS SHALL BE ASTM A307 WITH WASHERS, GALVANIZED.
- NAILS IN ACCORDANCE WITH MINIMUM NAILING REQUIREMENTS OF IBC EXCEPT WHERE NOTED IN DETAILS OR SPECIFICATIONS. ALL NAILS TO BE GALVANIZED.

PRE-ENGINEERED WOOD TRUSSES

- WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATIONS OF THE NATIONAL FOREST PRODUCTS ASSOCIATION, THE DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES OF THE TRUSS PLATE INSTITUTE AND INTERNATIONAL BUILDING CODE.
- ALL TRUSSED RAFTERS SHALL BE DESIGNED, FABRICATED, AND ERECTED TO SUPPORT THE FOLLOWING MINIMUM LOADS:
 - LIVE - TOP CHORD = 20 PSF
 - DEAD - TOP CHORD = 15 PSF
 - DEAD - BOTTOM CHORD = 15 PSF + MECHANICAL EQUIPMENT
- WOOD MATERIALS SHALL BE SOUTHERN PINE, DOUGLAS FIR OR LARCH AND SHALL BE KILN DRIED AND USED AT 19% MAXIMUM MOISTURE CONTENT. PROVIDE GRADE NO. 2 OR AS REQUIRED TO SATISFY STRESS REQUIREMENTS.
- PROVIDE AT EACH SUPPORT GALVANIZED METAL HURRICANE PLATE ANCHORAGES SUFFICIENT TO RESIST HORIZONTAL AND VERTICAL WIND COMPONENTS WITH A SAFETY FACTOR OF 3. MINIMUM UPLIFT LOAD AS DETERMINED BY TRUSS MANUFACTURER FROM REQUIREMENTS OF LOCAL BUILDING CODES.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AS REQUIRED FOR SAFE ERECTION AND PERFORMANCE OF THE TRUSSES. THE GUIDELINES SET FORTH BY THE TRUSS PLATE INSTITUTE PUBLICATION "HB-91, COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" SHALL BE A MINIMUM REQUIREMENT.
- SHOP DRAWINGS, COMPUTATIONS, ETC. TO BE SUBMITTED FOR REVIEW. SHOP DRAWINGS SHALL PROVIDE ERECTION LAYOUT FOR TRUSS RAFTERS, OUTRIGGERS, HEADERS, BRACING, ETC. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR SUPPORT LOCATIONS.
- CALCULATIONS AND DRAWINGS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS BEING CONSTRUCTED.
- TRUSS WEB TO CHORD CONNECTION SHALL BE MADE WITH APPROVED GALVANIZED STEEL TRUSS CONNECTION PLATES MEETING ALL REQUIREMENTS OF THE TRUSS PLATE INSTITUTE.
- TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED NOR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- ALL TRUSS RAFTERS SHALL MEET THE FOLLOWING MINIMUM STRESS GRADES:
 - TOP CHORDS.....SYP #2 KD MG
 - BOTTOM CHORDS.....SYP #2 KD MG
 - WEB MEMBERS.....SYP #2 KD
 - OTHER.....SYP #2 KD

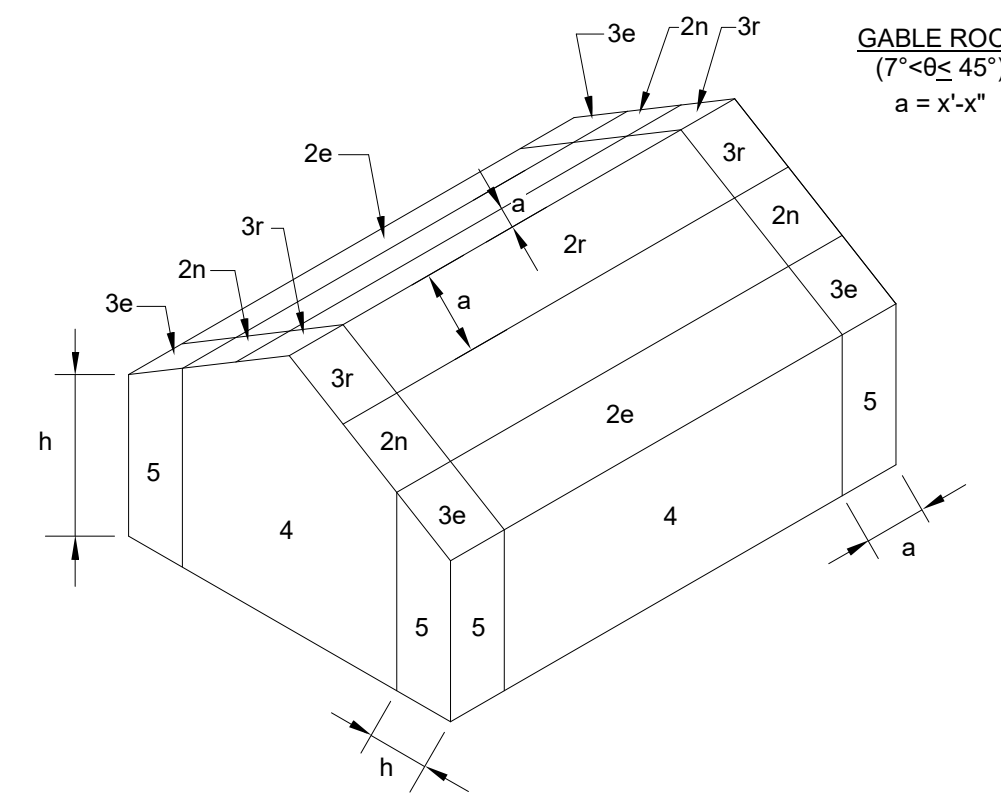
STRUCTURAL DESIGN CRITERIA

- BUILDING CODE: 2021 INTERNATIONAL BUILDING CODE
- GRAVITY LOADS (ASCE 7-16):

ROOF	DISTRIBUTED
	LL = 20 PSF
	DL = 20 PSF
GROUND SNOW LOAD, Pg = 10 PSF	
RAIN INTENSITY	15-min/100yr 60-min/100yr
	8.24 in./h 4.35 in./h

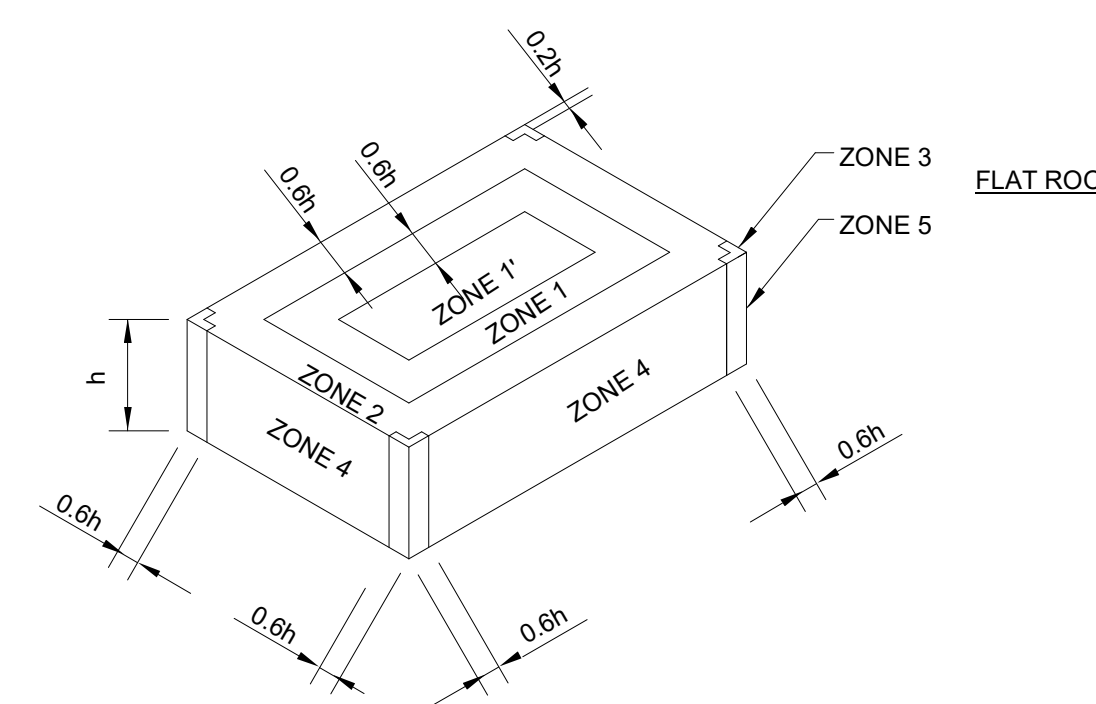
- WIND LOADS (ASCE 7-16):
 - BASIC WIND SPEED (3 SEC GUST) = 148 MPH
 - RISK CATEGORY = II
 - EXPOSURE CATEGORY = B
 - Gc = ± 0.18

- SEISMIC CRITERIA (IBC 2021/ASCE 7-16):
 - RISK CATEGORY = II
 - IMPORTANCE FACTOR = 1.00
 - DESIGN CATEGORY = B
 - SITE CLASS =
 - Ss = 0.217 g
 - Si = 0.087 g
 - Ses = 0.231 g
 - S01 = 0.139 g
 - SEISMIC FORCE RESISTING SYSTEM = STEEL ORDINARY MOMENT FRAMES
 - SEISMIC RESPONSE COEFFICIENT, C_s = 0.066
 - RESPONSE MODIFICATION FACTOR, R = 3.5
 - ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE
 - SEISMIC BASE SHEAR = C_w WHERE W=WEIGHT OF STRUCTURE



Zone	Figure	A <= 2.00 sq ft psf		A = 10.00 sq ft psf		A = 20.00 sq ft psf		A = 50.00 sq ft psf	
1	30.3-2B	27.05	-67.01	21.99	-67.01	19.81	-67.01	16.93	-40.76
1_OH	30.3-2B	16.00	-76.84	16.00	-76.84	16.00	-76.84	16.00	-59.34
2e	30.3-2B	27.05	-67.01	21.99	-67.01	19.81	-67.01	16.93	-40.76
2e_OH	30.3-2B	16.00	-76.84	16.00	-76.84	16.00	-76.84	16.00	-59.34
2n	30.3-2B	27.05	-97.75	21.99	-97.75	19.81	-84.51	16.93	-67.01
2n_OH	30.3-2B	16.00	-107.58	16.00	-107.58	16.00	-97.65	16.00	-84.53
2r	30.3-2B	27.05	-97.75	21.99	-97.75	19.81	-84.51	16.93	-67.01
2r_OH	30.3-2B	16.00	-107.58	16.00	-107.58	16.00	-97.65	16.00	-84.53
3e	30.3-2B	27.05	-97.75	21.99	-97.75	19.81	-84.51	16.93	-67.01
3e_OH	30.3-2B	16.00	-126.03	16.00	-126.03	16.00	-108.82	16.00	-86.07
3r	30.3-2B	27.05	-116.19	21.99	-116.19	19.81	-99.53	16.93	-77.52
3r_OH	30.3-2B	16.00	-144.47	16.00	-144.47	16.00	-122.26	16.00	-92.90
4	30.3-1	36.27	-39.34	36.27	-39.34	34.64	-37.71	32.48	-35.55
5	30.3-1	36.27	-48.57	36.27	-48.57	34.64	-45.30	32.48	-40.98

Zone	Figure	A = 100.00 sq ft psf		A = 200.00 sq ft psf		A = 250.00 sq ft psf		A > 500.00 sq ft psf	
1	30.3-2B	16.00	-20.90	16.00	-20.90	16.00	-20.90	16.00	-20.90
1_OH	30.3-2B	16.00	-46.11	16.00	-46.11	16.00	-46.11	16.00	-46.11
2e	30.3-2B	16.00	-20.90	16.00	-20.90	16.00	-20.90	16.00	-20.90
2e_OH	30.3-2B	16.00	-46.11	16.00	-46.11	16.00	-46.11	16.00	-46.11
2n	30.3-2B	16.00	-53.77	16.00	-40.53	16.00	-36.27	16.00	-36.27
2n_OH	30.3-2B	16.00	-74.60	16.00	-64.67	16.00	-61.48	16.00	-61.48
2r	30.3-2B	16.00	-53.77	16.00	-40.53	16.00	-36.27	16.00	-36.27
2r_OH	30.3-2B	16.00	-74.60	16.00	-64.67	16.00	-61.48	16.00	-61.48
3e	30.3-2B	16.00	-53.77	16.00	-40.53	16.00	-36.27	16.00	-36.27
3e_OH	30.3-2B	16.00	-68.86	16.00	-51.65	16.00	-46.11	16.00	-46.11
3r	30.3-2B	16.00	-60.86	16.00	-60.86	16.00	-60.86	16.00	-60.86
3r_OH	30.3-2B	16.00	-70.70	16.00	-70.70	16.00	-70.70	16.00	-70.70
4	30.3-1	30.84	-33.92	29.21	-32.28	28.68	-31.76	27.05	-30.12
5	30.3-1	30.84	-37.71	29.21	-34.44	28.68	-33.39	27.05	-30.12



Zone	Figure	A <= 10.00 sq ft psf		A = 20.00 sq ft psf		A = 50.00 sq ft psf		A = 100.00 sq ft psf	
1	30.3-2A	16.00	-51.50	16.00	-48.10	16.00	-43.61	16.00	-40.21
1'	30.3-2A	16.00	-29.58	16.00	-29.58	16.00	-29.58	16.00	-29.58
2	30.3-2A	16.00	-67.93	16.00	-63.57	16.00	-57.79	16.00	-53.42
3	30.3-2A	16.00	-92.59	16.00	-83.85	16.00	-72.30	16.00	-63.57
4	30.3-1	29.58	-32.05	28.27	-30.74	26.54	-29.01	25.23	-27.70
4_P (P1/P4)	30.3-2A	40.42	-42.93	39.09	-41.60	37.33	-39.84	35.99	-38.50
4_P (P3/P2)	30.3-2A	40.42	-79.45	39.09	-75.01	37.33	-69.13	35.99	-64.68
4_P (P1-P2) / (P3-P4)	30.3-2A	119.87	83.35	114.10	80.69	106.46	77.16	100.68	74.49
5	30.3-1	29.58	-39.45	28.27	-36.82	26.54	-33.36	25.23	-30.74
5_P (P1/P4)	30.3-2A	40.42	-50.46	39.09	-47.79	37.33	-44.27	35.99	-41.60
5_P (P3/P2)	30.3-2A	40.42	-104.54	39.09	-95.65	37.33	-83.90	35.99	-75.01
5_P (P1-P2) / (P3-P4)	30.3-2A	144.96	90.88	134.74	86.88	121.22	81.59	111.00	77.59

Zone	Figure	A = 200.00 sq ft psf		A = 500.00 sq ft psf		A > 1000.00 sq ft psf	
1	30.3-2A	16.00	-36.81	16.00	-32.32	16.00	-32.32
1'	30.3-2A	16.00	-25.46	16.00	-20.01	16.00	-16.00
2	30.3-2A	16.00	-49.06	16.00	-43.28	16.00	-43.28
3	30.3-2A	16.00	-54.83	16.00	-43.28	16.00	-43.28
4	30.3-1	23.92	-26.39	22.19	-24.65	22.19	-24.65
4_P (P1/P4)	30.3-2A	34.66	-37.17	32.90	-35.40	32.90	-35.40
4_P (P3/P2)	30.3-2A	34.66	-60.24	32.90	-54.36	32.90	-54.36
4_P (P1-P2) / (P3-P4)	30.3-2A	94.90	71.83	87.26	68.30	87.26	68.30
5	30.3-1	23.92	-28.12	22.19	-24.65	22.19	-24.65
5_P (P1/P4)	30.3-2A	34.66	-38.93	32.90	-35.40	32.90	-35.40
5_P (P3/P2)	30.3-2A	34.66	-66.12	32.90	-54.36	32.90	-54.36
5_P (P1-P2) / (P3-P4)	30.3-2A	100.77	73.59	87.26	68.30	87.26	68.30

NOT FOR CONSTRUCTION

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Pulte Del Webb Ocean Isle Beach Amenity Center
Ocean Isle Beach, NC 28469
LS3P PROJECT: 7154-231756

A	DATE	DESCRIPTION
A	2025.02.14	100% DESIGN DEVELOPMENT
B	2025.03.21	50% CONSTRUCTION DOCUMENTS
C	2025.05.28	PRICING DOCUMENTS

SHEET NAME:
GENERAL NOTES

ORIG SUBMISSION: 03/20/14

SHEET:
S-002