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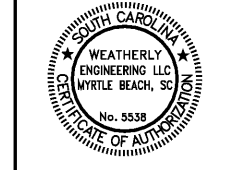
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Job Number: 15017 (WE 18-126)
Date: 03/14/18
Drawn by: CMW
Checked by: DWS

Notes:
BIDDING DOCUMENTS

Revisions:

General Notes & Load Table

LOAD TABLE
2015 INTERNATIONAL BUILDING CODE AND ASCE 7-10

RISK CATEGORY: - III
BASIC LATERAL-FORCE RESISTING SYSTEM:
SPECIAL REINFORCED MASONRY SHEARWALLS

LIVE LOADS:
1. FLOOR LOADS:
A. Offices = 50 p.s.f.
B. Corridors: First Floor = 40 p.s.f.
C. Classrooms = 40 p.s.f.
D. Assembly: Fixed seating = 60 p.s.f.
Moveable Seating = 100 p.s.f.
E. Light Storage = 125 p.s.f.
2. ROOF LOADS:
A. Basic roof live load = 20 psf
3. PARTITIONS:
A. Partition load = 15 psf

Note: It shall be unlawful to place, cause or permit to be placed, on any floor or roof of a building, structure, or portion thereof, a load greater than is permitted by these requirements. (per IBC 1603.2)

DEAD LOADS:
1. USE ACTUAL DEAD LOADS OF MATERIALS
SNOW LOADS:
GROUND SNOW LOAD - $P_g = 10$ psf
WIND LOADS:
 $V_{ultimate} = 154$ (mph)
 $V_{50} = 120$ (mph)
WIND EXPOSURE = C
In wind borne regions, glazed openings shall be protected in the accordance with IBC 2015, ASCE 7-10 & local codes/requirements.

INTERNAL PRESSURE COEFFICIENT:
Enclosed Building $C_{pi} = 1.0$
COMPONENTS & CLADDING (see chart below)

The wind pressures below are the minimum unless otherwise specified by applicable codes. *

ZONE	C&C WIND PRESSURES (ULTIMATE) BASED ON EFFECTIVE WIND AREA (psf)			
	10ft ²	20ft ²	50ft ²	100ft ²
ROOF ①	+35 -56	+32 -54	+28 -52	+25 -51
ROOF ②	+35 -97	+32 -89	+28 -79	+25 -71
ROOF ③	+35 -143	+32 -134	+28 -121	+25 -112
WALL ④	+61 -66	+58 -63	+55 -60	+52 -57
WALL ⑤	+61 -81	+58 -76	+55 -69	+52 -63
EDGE OVERHANG CORNER OVERHANG ②	+26 -113	+23 -113		
EDGE OVERHANG CORNER OVERHANG ③	+26 -190	+23 -171		

$a =$ width of pressure coeff. zone = 10 feet
Roof Net Uplift = (Zone Suction Reduced by Dead Load)

SEISMIC LOADS:
SOIL SITE CLASS - D
SEISMIC IMPORTANCE FACTOR - $I_e = 1.25$
CENTRAL RESPONSE ACCELERATIONS
 $S_a = 1.0$ $S_1 = 0.34$
SPECTRAL RESPONSE COEFFICIENTS
 $S_{ds} = 0.74$ $S_{d1} = 0.39$
SEISMIC DESIGN CATEGORY = D
RESPONSE MODIFICATION FACTOR - $R = 5$
SEISMIC RESPONSE COEFFICIENT - $C_s = 0.19$
DESIGN BASE SHEAR - 375 kips
ANALYSIS PROCEDURE - EQUIVALENT FORCE METHOD

* Much of the information presented in this load table originates from the applicable building code(s). The structural design for systems such as metal studs, exterior doors, windows, skylights, roofing systems, etc. will be more complicated and more building specific than indicated in this table. Designers and suppliers must refer to the applicable building codes, site conditions and architectural drawings to adequately design and / or specify their individual components and systems.

METAL DECKING:

1. SHOP DRAWING NOTE: THIS NOTE IS DIRECTED TO THE CONTRACTOR, STEEL SUPPLIERS AND DETAILERS FOR STRUCTURAL AND MISCELLANEOUS STEEL, DECKING, JOISTS AND JOIST GIRDERS.

THE DETAILERS/SUPPLIERS SHALL BE PROVIDED A FULL SET OF CONSTRUCTION DOCUMENTS (INCLUDING ADDENDUMS AND SPECIFICATIONS) BY THE CONTRACTOR FOR THEIR USE IN ORDER TO PROPERLY DETAIL THE PROJECT. DECK EDGES, DIMENSIONS, TOP OF STEEL, SLOPES, ARE CONTROLLED BY THE ARCHITECTURAL DRAWINGS.

DESIGNATION:

SIMILAR DESIGNATION:

IT IS RECOMMENDED THAT THE DETAILER USE APPROPRIATE DESIGNATIONS FOR THE ARCHITECT, CIVIL ENGINEER, MECHANICAL ENGINEER, ELECTRICAL ENGINEER, ETC.

IT IS IMPORTANT FOR THE CONTRACTOR TO REVIEW THE SHOP DRAWINGS FROM HIS DETAILERS AND TO PROVIDE THE NECESSARY COORDINATION BETWEEN THE STEEL JOISTS AND DECKING SHOP DRAWINGS PRIOR TO SUBMITTING TO THE DESIGN TEAM. SHOP DRAWINGS SUBMITTED TO THE DESIGN TEAM WITHOUT THE CONTRACTORS REVIEW ARE SUBJECT TO BE RESUBMITTED, REJECTED OR OTHER SIMILAR ACTION MAY BE TAKEN BY THE ARCHITECT AND/OR ENGINEER.

2. THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING BEAMS, JOISTS, BRIDGING, DECKING (INCLUDING TEMPORARY SHORING) AND ALL CONNECTIONS. THESE SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE PROJECT STATE. AS PART OF SHOP DRAWINGS, STEEL FABRICATOR SHALL SUPPLY EMBEDDED STEEL PLATE AND BRACKET LOCATION DRAWINGS. THE STRUCTURAL DRAWINGS ARE NOT TO BE REPRODUCED FOR SHOP DRAWINGS, SECTION SHEETS OR ERECTION PLANS. SUBMIT AN AMPLIFIED NUMBER OF SETS OF SHOP DRAWINGS TO ALLOW FOR EACH DESIGN PROFESSIONAL TO RETAIN A SET FOR THE FILE. SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR FOR (BUT NOT LIMITED TO) DIMENSIONS, ELEVATIONS, AND ERECTION PROCEDURES PRIOR TO ARCHITECT & STRUCTURAL ENGINEERS REVIEW. AMPLIFIED TIME AS DETERMINED BY THE STRUCTURAL ENGINEER SHALL BE ALLOTTED FOR HIS REVIEW OF SHOP DRAWINGS. THE CONTRACTOR MAY ISSUE SHOP DRAWINGS EARLY TO ALLOW FOR ADDITIONAL FABRICATION TIME. THE MEMBERS OF THE DESIGN DURING THE SHOP DRAWING PROCESS AND SHALL BE STAMPED BY A REGISTERED ENGINEER REGISTERED IN THE PROJECT STATE.

3. DECKING CONTRACTOR TO COORDINATE OPENINGS SIZES AND LOCATIONS FROM ARCHITECTURAL AND MECHANICAL DRAWINGS. METAL DECK SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD A446 AND A525.

4. METAL ROOF DECKING SHALL BE 22 GAUGE, 1-1/2" DEEP TYPE "B", G60 GALVANIZED STEEL ROOF DECK (SEE PLAN FOR LOCATIONS) TO BE INSTALLED WITH A 366 FASTENER PATTERN AT ALL END AND INTERMEDIATE SUPPORTS WITH A MIN. OF 8 SIDE LAP FASTENERS PER SPAN. SIDE LAP FASTENERS TO BE #10 TEK SCREWS. SPECIFIC FASTENERS SHALL BE PER DECK FASTENING DETAILS ON DRAWINGS.

ALL 3" 20 GAUGE VULCRAFT TYPE 3N20 G60 GALVANIZED ROOF DECK (SEE PLAN FOR LOCATIONS) TO BE INSTALLED WITH A 244 FASTENER PATTERN AT ALL END AND INTERMEDIATE SUPPORTS WITH A MIN. OF 8 SIDE LAP FASTENERS. SIDE LAP FASTENERS TO BE #10 TEK SCREWS. SPECIFIC FASTENERS SHALL BE PER DECK FASTENING DETAILS ON DRAWINGS.

5. PROVIDE 4 X 4 X 1/4 INGLS SURROUNDING ALL METAL DECK PENETRATIONS UNLESS OTHERWISE NOTED.

6. CONSTRUCTION EQUIPMENT SUCH AS WHEEL BARROWS, ETC. SHALL NOT BE ALLOWED ON THE STEEL DECKS. CONSTRUCTION EQUIPMENT WEIGHTS SHALL BE SUPPORTED DIRECTLY ON THE STEEL JOISTS.

7. THE CONTRACTOR SHALL INSTALL 1/4" THICK BENT PLATE(S) AS NECESSARY AT RIDGE, HIP, EAVE AND VALLEY LOCATIONS TO ADEQUATELY SUPPORT THE EDGE OF METAL ROOF DECK PANELS. THE PLATE(S) SHALL BE CONFIGURED IN THE SHAPE OF AN ANGLE (LEGGED CHANNEL OR TUBE) TO PROVIDE A MINIMUM BEARING AND SUPPORT WIDTH OF 2 INCHES. IN FLOOR SYSTEMS, A FABRICATED SQUARE TUBE (FROM 1/4" THICK PLATES) OR A 1/4" THICK STEEL TUBE OF THE PROPER DIMENSION SHALL BE USED AT ALL UNSUPPORTED EDGES OF FLOOR DECK.

8. DO NOT HANG OR ATTACH MECHANICAL SYSTEMS, DUCTS, CONDUIT, PIPING, EQUIPMENT, ETC. FROM THE ROOF DECKING.

9. THE CONTRACTOR SHALL SUPPORT THE EDGE OF ALL ROOF AND FLOOR DECKING WITH A STEEL ANGLE. APPROPRIATE FASTENERS ARE 5 X 3 X 1/4" ANGLE (LONG LEG VERTICAL) WITH 3/4" (4" EMBEDMENT) EXPANSION BOLTS AT 2'-0" ON CENTER SHALL BE USED AT MASONRY OR CONCRETE WALLS UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. A 5 X 5 X 5/16" ANGLE SHALL BE USED AT LOCATIONS IN WHICH THE DECK SUPPORT MUST SPAN BETWEEN STEEL JOISTS AND/OR BEAMS. PROVIDE THAT THE STEEL DECK CHANGE LOCATION, STEEL TUBES MAY BE REQUIRED TO ACT AS SHIMS TO PROVIDE CONTINUOUS SUPPORT FOR DECK. THESE TUBES MAY OR MAY NOT BE INDICATED IN THE DETAILS (FOR CLARITY).

10. THE FIREPROOFING ASSOCIATED WITH STRUCTURAL MEMBERS IS NOT SHOWN IN THE STRUCTURAL DRAWINGS. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL REFER TO THE ARCHITECTURAL DRAWINGS AND APPLICABLE BUILDING CODE FOR FIRE RATING INCLUDING MATERIALS AND METHODS.

11. DECK PAINTING/GALVANIZING SHALL BE COMPATIBLE WITH ADHESIVE REQUIREMENTS FOR ANY AREAS REQUIRING FIREPROOFING.

12. ALL STEEL REQUIRING PAINT SHALL BE PROPERLY CLEANED AND PREPARED TO ACCEPT THE APPROPRIATE PAINT FOR THE PROJECT. THE REQUIREMENTS FOR PAINT, ETC. DECKING SHALL BE PAINT, COLOR AND SO ON SHALL BE PER OWNER.

COLD-FORMED STEEL FRAMING/ METAL STUDS:

1. ALL EXTERIOR WALLS CONSTRUCTED OF METAL STUDS SHALL BE SHEATHED WITH ONE HALF INCH EXTERIOR GRADE GYPSUM SHEATHING WITH BLOCKING AT SEAMS. GYPSUM SHEATHING IS TO BE ATTACHED TO METAL STUDS, BLOCKING, TOP AND BOTTOM TRACKS WITH #8 X 1 INCH- BULGE HEAD SCREWS AT 4" ON CENTER ALONG SHEATHING EDGES AND 4" ON CENTER AT INTERMEDIATE STUDS (SPACES OF WALL). ALL SCREWS SHALL BE HOT-DIPPED GALVANIZED.

2. ALL STEEL FRAMING SHALL BE INSTALLED BY PERSONNEL EXPERIENCED IN LIGHT GAGE METAL FRAMING INSTALLATION.

3. WHERE STEEL FRAMING MEMBERS ARE COMPONENTS OF ASSEMBLIES INDICATED IN THE CONSTRUCTION DOCUMENTS FOR A FIRE-RESISTANCE RATING, INCLUDING THOSE REQUIRED FOR COMPLIANCE WITH GOVERNING REGULATIONS, PROVIDE MEMBERS WHICH HAVE BEEN APPROVED BY THE GOVERNING AUTHORITIES.

4. GAUGE STEEL FRAMING MEMBERS SHALL BE PROTECTED AGAINST RUSTING AND DAMAGE. IT IS RECOMMENDED THAT ALL MATERIAL SHALL BE DELIVERED TO THE PROJECT SITE IN BUNDLES, FULLY IDENTIFIED WITH NAME, BRAND, TYPE AND GRADE. STORE OFF GROUND IN A DRY VENTILATED SPACE AND/OR PROTECT WITH SUITABLE WATERPROOF COVERINGS. ALL METAL STUDS, TRACKS, CLIPS ETC. SHALL BE GALVANIZED. MINIMUM GALVANIZING FOR WALL SYSTEMS AND ASSEMBLIES SHALL BE AS FOLLOWS:

- G40 GALVANIZING RECOMMENDED FOR INTERIOR (INTERIOR/INTERIOR) WALL SYSTEMS.
- G60 GALVANIZING RECOMMENDED FOR EXTERIOR (INTERIOR/EXTERIOR) WALL SYSTEMS. (NOTE: G60 RECOMMENDED FOR BUILDINGS LOCATED WITHIN 3 MILES OF SALTWATER.)
- G90 GALVANIZING RECOMMENDED FOR ALL EXTERIOR (EXTERIOR/EXTERIOR) WALL SYSTEMS. THIS INCLUDES ALL WALLS AND OTHER METAL STUD FEATURES SUBJECT TO EXTERIOR CONDITIONS ON BOTH SIDES.

NOTE: THE GALVANIZING RECOMMENDED ABOVE IS TO BE CONSIDERED AS A MINIMUM PER THE STRUCTURAL ENGINEER OF RECORD FOR THE PROJECT. ADDITIONAL GALVANIZING AND PRECAUTIONS MAY BE REQUIRED PER THE ARCHITECT, MANUFACTURER AND/OR LOCAL AND STATE BUILDING CODES DEPENDING ON THE WALL SYSTEM/APPLICATION. IN ANY CASE, GALVANIZING MAY NOT PROVIDE THE INTENDED LONG TERM PROTECTION WITHOUT PROPER FLASHING, SEALING, CALKING ETC. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE FABRICATION AND OVERALL CONSTRUCTION OF ALL METAL STUD WALL, TRUSS, SOFFITS, HEADERS AND THE LIKE TO ASSURE PROPER CONSTRUCTION AND PROTECTION OF METAL STUD ASSEMBLIES AND SYSTEMS. DUE TO THE QUANTITIES OF METAL STUDS FOUND IN AND ON THE PROJECT THE CONTRACTOR MAY ASSIGN SPECIALLY SKILLED STAFF OR RETAIN AN INSPECTOR FOR THE PURPOSE OF PROVIDING THE PROJECT WITH CONTINUAL OBSERVATION OF THE CONSTRUCTION OF THE WALLS AND METAL STUD ASSEMBLIES FOR THIS PROJECT.

5. THE CONTRACTOR SHALL PROVIDE THE MANUFACTURERS STANDARD STEEL RUNNERS/TRACKS, BLOCKING, LINTELS, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS AND ACCESSORIES AS RECOMMENDED BY THE MANUFACTURER FOR THE PARTICULAR APPLICATION TO PROVIDE A COMPLETE STRUCTURAL SYSTEM.

6. UNLESS OTHERWISE REQUIRED, SCREWS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

7. CONTRACTOR TO PROVIDE STANDARD STRUCTURAL STEEL "C" SHAPED STEEL STUD OF SIZE, SHAPE AND GAUGE INDICATED IN THE DRAWINGS. STUDS SHALL HAVE A NOMINAL 1-5/8" FLANGE WITH THE MANUFACTURERS RECOMMENDED FLANGE RETURN LIP.

Ordering Plans