

Metal Grating Notes:

MG-1 Scope of Work

The contractor shall provide all labor, materials, equipment and incidentals as shown and specified and are required to furnish and install grating, stair treads and supports.

MG-2 Quality Assurance

- A. Comply with applicable provisions and recommendations of the following: NAAMM Metal Bar Grating Manuals designated ANSI/NAAMM MBG 531 for Steel, Stainless Steel and Aluminum Gratings and Stair Treads.
- B. The steel used in the Bearing Bars shall be of rectangular section and conform to ASTM A1011 Hot Rolled Carbon Steel Sheet and Strip. The Cross Bars shall be of ASTM A510 Carbon Steel Rods and Course Round Wire.
- C. No substitution of materials will be accepted unless they are submitted for review and the Architect/Engineer approves their use.

MG-3 Submittals

- A. The contractor shall submit to the owner or its representative, for approval, shop drawings for fabrication and erection of the work. Included shall be plans, elevations, sections and details of the work.
- B. The contractor shall submit the manufacturer's specifications, load tables, anchor details and standard installation details.
- C. The contractor may be required to take field dimensions to verify "as built" conditions to ensure proper fit of grating.

MG-4 General

- A. Grating shall be Arnic Standard Welded Type "W" 19-4-33 resistance welded grating as manufactured by Alabama Metal Industries Corp. or approved equal.
- B. Bearing bars: Rectangular 3/16" steel bars of an appropriate 3/4" deep, on 1 3/16" centers.
- C. Cross Bars: Twisted wire rod, at 4" on center, resistance welded to the bearing bars and at right angles to them.
- D. Surface: The bearing bars shall have a smooth top surface unless the Architect/Engineer determines the need for a serrated surface.
- E. Loading: At a uniform load of 100 pounds per square foot, deflection shall not exceed 1/4 inch over the required span.
- F. Finish: Manufacturers standard shop coat of black paint as required by Architect/Engineer.

MG-5 Shop Fabrication

- A. All required cutting, fitting and welding shall be performed in the manufacturers shop in accordance with the approved shop drawings and shall be in compliance with the NAAMM Metal Bar Grating Manual tolerances and welding standards.
- B. All cutouts to clear obstructions shall have a recommended clearance of 1 inch. When banding and toe plates are required they shall be welded to the grating in accordance with NAAMM standards.
- C. The finish coating, paint or galvanizing shall be applied after all of the required fabrication is complete.

MG-6 Installation

- A. The grating shall be received at the job site by the contractor, unloaded and protected from damage prior to the requirement for it to be installed.
- B. The installing contractor shall prepare the site for installation, determining that deviations from the approved drawings are corrected prior to grating placement.
- C. Grating shall be installed in accordance with the approved shop drawings and the installation clearance called for in the NAAMM Metal Bar Grating Manual, including the use of the prescribed anchor system.
- D. Pipe penetrations of 4" or less shall be cut in the field. When installed, Grating Cross Bars shall be in alignment.

UNDERFLOOR FILL NOTES:

UF-1 BEFORE ANY CONSTRUCTION IS BEGUN, PERFORM ROUGH GRADING AND CUT SWALES SO THAT GROUNDS WILL DRAIN AWAY FROM THE BUILDING. MAINTAIN DRAINAGE DURING ALL PHASES OF CONSTRUCTION SO THAT STORM WATER WILL BE CONDUCTED AWAY FROM THE BUILDING. KEEP EXCAVATIONS PUMPED FREE OF STORM WATER AT ALL TIMES.

UF-2 PRECAUTIONS SHALL BE TAKEN TO PROTECT OPEN EXCAVATIONS FROM EXCESSIVE LOSS OR GAIN IN NATURAL MOISTURE LEVEL PRIOR TO PLACEMENT OF BASE MATERIAL. KEEP MOIST DURING DRY WEATHER AND KEEP STORM WATER PUMPED OUT, INCLUDING NIGHTS AND WEEKENDS, DURING RAINS.

UF-3 IN THE AREA OCCUPIED BY THE FOUNDATION, REMOVE ALL ORGANIC MATERIALS, ROOTS, ETC. FROM THE SITE. DO NOT USE FOR UNDERFLOOR FILL. REMOVE ADDITIONAL MATERIAL AS NECESSARY TO PROVIDE A MINIMUM OF 2'-0" OF SELECT FILL AS PER UF-6.

UF-4 THE RESULTING SURFACE SHALL BE PROOF ROLLED WITH A SUFFICIENTLY HEAVY ROLLER (15 TONS) TO LOCATE AND DENSITY WEAK AND COMPRESSIBLE ZONES. A MINIMUM OF 6 PASSES OF THE ROLLER IS REQUIRED. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT FILL.

UF-5 THE ROLLED SUBGRADE SHALL BE SCARIFIED JUST PRIOR TO FILL PLACEMENT TO A MINIMUM DEPTH OF 6" AND RECOMPACTED TO MINIMUM OF 95% OF THE MAXIMUM DENSITY DETERMINED BY THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) TEX-113-e COMPACTION TEST, MAINTAINING MOISTURE CONTENT BETWEEN -1 AND +3 PERCENTAGE POINTS UNTIL COVERED.

UF-6 BEGINNING AT THE LOW END, BUILD UP TO THE ELEVATION OF THE BOTTOM OF THE SLAB WITH SELECT STONE FILL CONFORMING TO #57 STONE. A MINIMUM THICKNESS OF 2'-0" IS REQUIRED. NO DIRT FILL SHALL BE USED UNDER THE BUILDING FOUNDATION. LD EXAMPLES.

UF-7 ALL FILL SHALL BE PLACED IN 8" LOOSE HORIZONTAL LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698 COMPACTION TEST. EXCESS FILL AT BUILDING PERIMETER SHALL BE CUT AND GRADED TO COMPLY WITH FINISHED GRADE REQUIREMENTS.

UF-8 PERFORM ALL EARTH WORK DESCRIBED ABOVE BEFORE TRENCHING FOR GRADE BEAMS OR MECHANICAL LINES.

CONCRETE NOTES:

CN-1 CONCRETE SHALL BE LABORATORY DESIGNED TO DEVELOP MINIMUM 28-DAY COMPRESSIVE STRENGTHS AS GIVEN BELOW. REFER TO SPECIFICATIONS FOR AGGREGATES, CEMENT, ADMIXTURES, ETC.

DRILLED PIERS & PIER CAPS	3,000 PSI
GRADE BEAMS, SLABS-ON-GRADE	3,000 PSI
BEAMS AND FLAT SLAB FLOOR SYSTEM	4,000 PSI
BEAM, GIRDER, AND JOIST FLOOR SYSTEM	4,000 PSI
SLABS ON METAL FORMS	3,000 PSI
COLUMNS AND WALLS	5,000 PSI
PRECAST CONCRETE	5,500 PSI

NOTE: FLY ASH WILL BE PERMITTED UP TO 20% PORTLAND CEMENT REPLACEMENT, REFER TO SPECIFICATIONS.

CN-2 REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

A615-GR 60	FOOTING SPIRALS
A185	WELDED WIRE FABRIC
A615-GR 60	BEAM STIRRUPS, COLUMN TIES
A615-GR 60	ALL OTHER REINFORCING
ASTM A108-60T	HEADED CONCRETE ANCHORS
ASTM A496	DEFORMED BAR ANCHORS

CN-3 DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 318). BAR SUPPORTS SHALL HAVE PLASTIC COATED LEGS OR BE HOT DIPPED GALVANIZED AFTER FABRICATION.

CN-4 BAR LAPS AND SPLICES SHALL BE A LENGTH EQUAL TO AT LEAST 40 BAR DIAMETERS. SEE "CORNER DETAILS" FOR CONTINUOUS BARS AT CORNERS. SPIRALS SHALL BE LAPPED 1-1/2 TURNS. WELDED WIRE MESH SHALL BE LAPPED 8" MINIMUM AT SPLICE POINTS, OR 1-1/2 MESHES, WHICHEVER IS GREATEST.

CN-5 CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION JOINTS IN MONOLITHIC CONCRETE FORMING SO THAT NOT MORE THAN 400 CUBIC YARDS IS POURED IN ONE DAY. LOCATION OF CONSTRUCTION JOINTS MUST HAVE PRIOR APPROVAL OF STRUCTURAL ENGINEER OF RECORD AND SHALL GENERALLY BE LOCATED AT OR NEAR MID-POINTS OF SPANS OF SLAB, BEAMS AND WALLS. ALL CONTINUOUS REINFORCING SHALL BE CARRIED THROUGH THE JOINT. SEE DETAILS FOR CONTINUOUS KEY BETWEEN ADJACENT POURS.

CN-6 SEE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATION AND SIZES OF ALL SLAB OPENINGS AND SLEEVES, INSERTS, ANCHORS AND BOLTS REQUIRED BY ABOVE.

CN-7 REFER TO ARCHITECTURAL DRAWINGS FOR ALL FLOOR FINISHES, DIMENSIONS AND LOCATIONS OF SLAB DROPS AND DEPRESSIONS.

CN-8 MECHANICAL AND ELECTRICAL CONDUITS IN SLABS SHALL RUN UNDER THE TOP LAYER OF SLAB REINFORCING OR WELDED WIRE FABRIC. PROVIDE A MINIMUM OF 1-1/2" CLEAR BETWEEN INDIVIDUAL CONDUITS, AND BETWEEN CONDUIT AND PARALLEL REINFORCING. DO NOT "BUNDLE" CONDUITS.

CN-9 "HEADED CONCRETE ANCHORS" (HCA) SHALL BE OF 50,000 PSI STEEL ROD WITH UPSET ENDS, AUTOMATICALLY ARC WELDED THROUGH CERAMIC FERRULES, "NELSON CONCRETE ANCHORS" OR EQUAL.

STEEL FRAMING NOTES:

SF-1 WIDE FLANGE STRUCTURAL STEEL SHALL CONFORM TO ASTM A992, FY=50 KSI. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, GRADE B, FY=35. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, FY=46 KSI, ALL OTHERS SHALL CONFORM TO ASTM A36, FY=36 KSI. CONNECTIONS SHALL CONFORM TO REQUIREMENTS OF AISC.

SF-2 STEEL JOISTS AND BRIDGING SHALL CONFORM TO STEEL JOIST INSTITUTE SPECIFICATIONS.

SF-3 JOIST ERECTION PRECAUTION (OSHA REQUIREMENT) AT ALL COLUMNS NOT FRAMED BY BEAMS IN AT LEAST TWO DIRECTIONS: THE JOIST CLOSEST TO THE COLUMN ON BOTH SIDES OF THE BEAM SHALL BE BOLTED TO THE BEAM.

SF-4 ROOF DECK IS 1-1/2" Z2 GAUGE TYPE B RIB DECK COMPLYING WITH STEEL DECK INSTITUTE; ATTACH TO SUPPORTING MEMBERS BY PLUG WELDING DIRECTLY THROUGH BOTTOM OF THE RIBS AT EVERY SUPPORT. WELD EACH SHEET AT BOTH SIDES AND AT OTHER RIBS SO THAT SPACING BETWEEN WELDS ACROSS THE WIDTH OF EACH SHEET DOES NOT EXCEED 18", IN ACCORDANCE WITH STEEL DECK INSTITUTE'S SPECIFICATIONS.

SF-5 FLOOR SLAB ON STEEL JOISTS SHALL BE 3" REGULAR WEIGHT CONCRETE SLAB (REINFORCED WITH 6# x W2.9/W2.9 WWF) ON GALVANIZED HEAVY DUTY 9"16" DEEP 28 GAUGE CORRUGATED STEEL DECK WITH MINIMUM 1-011 IN. 4FT., S=035 IN. 3FT (VULCRAFT TYPE 0.6C OR EQUAL). ATTACH STEEL DECK TO SUPPORTING MEMBERS BY PLUG WELDING AT EVERY SUPPORT IN ACCORDANCE WITH STEEL DECK INSTITUTE'S SPECIFICATIONS.

SF-6 WHERE METAL DECK IS SUPPORTED CONTINUOUSLY WELD DECK TO STEEL SUPPORT AT 12" o.c.

SF-7 WHERE FLOOR DECK CHANGES DIRECTIONS, PROVIDE DECK SUPPORT L 3 X 2-1/2 X 3/16 (L.L.H.) ACROSS ENDS OF SEATED JOISTS.

SF-8 TYPICAL STEEL JOIST SEAT ANCHORAGE: FIELD WELD EACH SEAT WITH TWO 1" LONG BY 1/8" WELDS FOR K-SERIES AND TWO 2" LONG BY 1/4" WELDS FOR LH-SERIES.

SF-9 STRUCTURAL FRAMING CONNECTIONS SHALL BE SEATED COLUMN CAPS, CLIP ANGLES OR WEB PLATES AS INDICATED ON DETAILS. USE A325 HIGH STRENGTH BOLTS OR WELDS SUFFICIENT TO DEVELOP REACTION CAPACITY ALLOWABLE UNIFORM LOAD/SPAN DIVIDED BY TWO AS SHOWN IN AISC MANUAL SECTION 2 (9th EDITION).

SF-10 DECK STOP ANGLES, FASCIA ANGLES, HANGERS, CLIPS AND OTHER STRUCTURAL AND MISCELLANEOUS MEMBERS SHALL BE CONNECTED OR JOINED USING 3/16" OR LARGER FILLET OR GROOVE WELDS AS REQUIRED FOR ADEQUATE CONNECTION.

SF-11 WHERE OPENINGS THROUGH ROOF ARE REQUIRED, FRAME AS DETAILED.

SF-12 WHERE BRACING ANGLES ARE SHOWN BETWEEN END OF JOIST BOTTOM CHORD AND SUPPORTING BEAM OR GIRDER, MAKE THESE CONNECTIONS AFTER ALL DEAD LOAD ON JOISTS IS IN PLACE. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL FINAL CONNECTIONS ARE COMPLETED.

SF-13 JOIST BRACES (AT EACH COLUMN) OCCUR AT OR NEAR EVERY INTERIOR COLUMN AT THREE JOISTS THAT ARE CLOSEST TO THE COLUMN CENTERLINE; SEE PLAN AND DETAILS.

SF-14 PROVIDE ADEQUATE AND APPROPRIATE STRUCTURAL STEEL FRAMING APPROVED BY THE ENGINEER FOR THE SUPPORT AND MOUNTING OF MECHANICAL EQUIPMENT RESTING ON, OR SUSPENDED FROM, STEEL JOISTS. NO CONCENTRATED LOADS, HANGERS, ETC. SHALL BE ATTACHED TO THE TOP OR BOTTOM CHORD OF JOIST EXCEPT AT "PANEL POINTS" (THE JUNCTURES OF CHORDS AND DIAGONAL WEB MEMBERS). JOISTS SHALL BE MODIFIED OR STRENGTHENED TO CARRY SUCH LOADS.

SF-15 STEEL STAIRS TO BE DESIGNED AND DETAILED FOR LL=100 PSF BY STEEL FABRICATOR UNDER DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER (SPECIALITY ENGINEER); SHOP DRAWINGS TO BE SIGNED AND SEALED BY THE SPECIALITY ENGINEER.

SLAB-ON-GRADE NOTES: (GRADE SUPPORTED SLABS ONLY)

SG-1 FLOOR SLAB IS 6" THICK WITH #4 AT 12" o.c. EACH WAY IN TOP OF SLABS. SUPPORT REBARS ON SUPPORTS SPACED AT 4'-0" o.c. EACH WAY AS SPECIFIED. PLACE SLAB ON 15 MIL. PLASTIC SHEATHING VAPOR BARRIER USING 6" LAPS W/ TAPE.

SG-2 SAW CUT CONTINUOUS JOINTS IN SLAB WHERE SHOWN ON FOUNDATION PLAN 18" WIDE AND 1-1/4" DEEP WITHIN 24 HOURS AFTER FINISHING. FILL WITH SILICONE SEALANT OR OTHER MATERIAL WHICH WILL PRODUCE A SMOOTH AND FLUSH SLAB SURFACE.

SG-3 PROVIDE KEYED AND DOWELED SLAB CONSTRUCTION JOINTS WHERE SHOWN ON PLANS.

SG-4 THE USE OF CJ OR SJ SHOWN ON PLAN MAY BE MODIFIED BY CONTRACTOR TO MATCH POURING SEQUENCE.

COMPOSITE METAL DECK WITH CONCRETE SLAB FLOOR NOTES:

CS-1 DESIGN OF COMPOSITE STEEL BEAMS AND DETAILS FOR CONSTRUCTION ARE BASED ON THE FOLLOWING DECK SYSTEM:

COMPOSITE METAL DECK	
VULCRAFT 3VL1, 19 GA., 3" DEEP	
CONCRETE FILL	
5" THICK ABOVE DECK FLUTES	145 PCF

CS-2 DECK SHALL BE INSTALLED IN THREE SPAN LENGTHS AT ALL POSSIBLE LOCATIONS. TWO SPAN AND SINGLE SPAN LENGTHS OF DECK SHALL BE SHORED TO SUPPORT CONSTRUCTION LOADS AND THE WEIGHT OF WET CONCRETE. TWO SPAN UNSHORED DECK SHALL NOT BE USED. AT THE CONTRACTOR'S OPTION PROPERLY SIZED, HEAVIER GAUGE DECK, INSTALLED IN SINGLE SPAN LENGTHS, MAY BE USED TO ELIMINATE THE NEED FOR SHORING.

CS-3 INTERMEDIATE SHORING OF THREE SPAN LENGTHS OF DECK TO SUPPORT CONSTRUCTION LOADS AND WET CONCRETE IS NOT REQUIRED, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

CS-4 REINFORCE THE SLAB OVER THE METAL DECK WITH 4 X 4 - W2.9 X W2.9 WELDED WIRE MESH.

CS-5 PLACE AN EXTRA LAYER OF WIRE MESH 6'-0" WIDE IN THE TOP OF THE SLAB ABOVE ALL INTERIOR BEAMS WHICH RUN PARALLEL TO THE DECK SPAN.

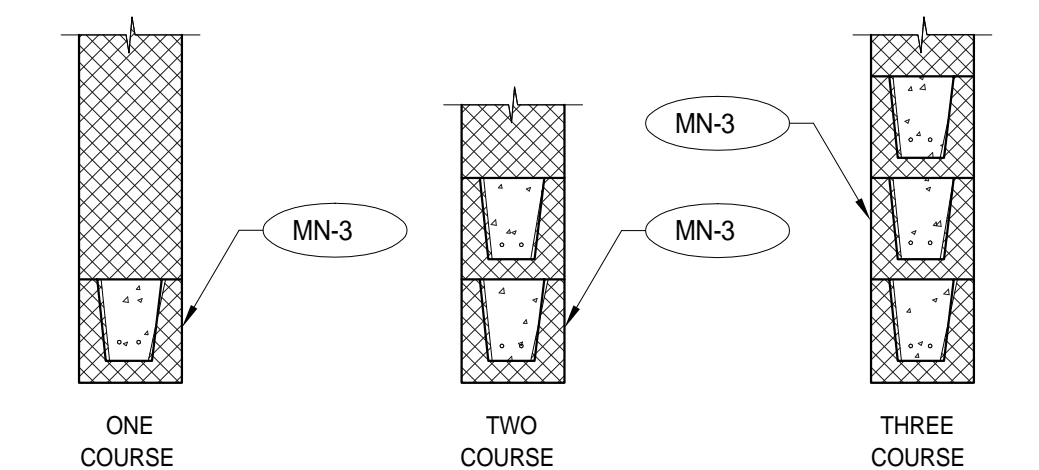
CS-6 PLACE SUPPORT FOR WIRE MESH ON METAL DECK, SO THAT THE MESH IS MAINTAINED IN POSITION 3/4" BELOW THE TOP OF SLAB.

CS-7 DECK SHALL RUN IN THE DIRECTIONS SHOWN ON THE DRAWINGS.

CS-8 UNLESS OTHERWISE INDICATED ON THE DETAILS, METAL EDGE FORM SHALL BE 14 GAUGE COLD FORMED STEEL, WELDED AT SUPPORTING BEAM FLANGE AT 12" o.c.

CS-9 COMPOSITE FLOOR SLABS SHALL BE PLACED AND FINISHED TO PROVIDE A FLOOR WITHIN SPECIFIED FINISHING TOLERANCES. THE SPECIFIED CONCRETE SLAB THICKNESS SHALL BE MAINTAINED AT COLUMN LOCATIONS. SLAB THICKNESS AWAY FROM COLUMNS WILL VARY DUE TO BEAM AND DECK DEFLECTIONS. GAMBERS BEAMS ARE DESIGNED TO DEFLECT TO A STRAIGHT LINE UNDER FULL WEIGHT OF CONCRETE SLAB. THE CONTRACTOR SHALL BE FAMILIAR WITH THE CONDITIONS OF THE PROJECT AND FURNISH THE MATERIALS REQUIRED TO CREATE THE SPECIFIED FLOOR ELEVATION.

ANTICIPATED MEMBER DEFLECTION	
UNCAMBERED BEAMS	5/8"
METAL DECK	1/4"



CMU LINTEL SCHEDULE

SIZE	CLEAR OPENING		REMARKS
	GREATER THAN	UP TO	
ONE COURSE	-	4'-0"	8" BEARING @ EA. END
TWO COURSE	4'-0"	8'-6"	8" BEARING @ EA. END
THREE COURSE	8'-6"	14'-0"	8" BEARING @ EA. END

MASONRY WALL REINFORCEMENT:

MN-1 PROVIDE GROUTED REINFORCED VERTICAL CELLS AND HORIZONTAL BOND BEAMS AT WALL TOP EDGES, CORNERS, FREE ENDS, WINDOW AND DOOR JAMBS, LINTELS AND OTHER LOCATIONS WHERE SHOWN ON ARCHITECTURAL DRAWINGS. REINFORCE EACH GROUTED CELL AND BOND BEAM WITH 1-#4 BAR CONTINUOUS (REINFORCE LINTELS AS SPECIFIED BELOW).

MN-2 BASIC VERTICAL REINFORCEMENT FOR EXTERIOR WALLS SHALL BE #6 @ 16" o.c. (EVERY OTHER VERTICAL CELL). ALL CELLS SHALL BE FILLED WITH CONCRETE GROUT.

MN-3 PROVIDE GROUTED REINFORCED LINTELS WITH 8" BEARING EACH END OF ALL DOORS, WINDOWS, AND OTHER OPENINGS. USE ONE-COURSE LINTELS FOR OPENINGS UP TO 4'-0"; TWO-COURSE LINTELS FOR OPENINGS UP TO 8'-6"; THREE-COURSE LINTELS FOR OPENINGS UP TO 14'-0". REINFORCE EACH COURSE WITH 2-# 5 BAR CONTINUOUS.

MN-4 PROVIDE MATCHING DOWELS IN FOUNDATION FOR ALL VERTICAL REINFORCEMENT.

MN-5 CMU SHALL HAVE A UNIT STRENGTH OF 1,900 PSI. USE TYPE S MORTAR. REINFORCED CMU SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF Fm=1,500 PSI. GROUT FOR FILLED CELLS SHALL BE MADE OF CEMENT, SAND AND FEA GRAVEL IN APPROXIMATE RATIO OF 1:3:2 AND SHALL HAVE 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI.

MN-6 ANCHOR MASONRY TO STRUCTURE AS SHOWN IN DETAILS. SEE SPECIFICATIONS FOR ORDINARY MASONRY ANCHORS INCLUDING DOVETAIL ANCHOR SLOTS IN ADJACENT CONCRETE MEMBERS.

MN-7 LEVEL 1 INSPECTED MASONRY REQUIRES CONTRACTOR TO SUBMIT AT CONTRACTORS COST, COMPRESSIVE WALL DESIGN STRENGTH (Fm) VERIFIED BY INDEPENDENT TESTING LAB BY PRISM TESTS BEFORE MASONRY CONSTRUCTION BEGINS. PROVIDE UNIT MASONRY STRENGTH, GROUT MIX DESIGN AND MORTAR MX DESIGN.

CONTRACTOR NOTE

THE STRUCTURAL SYSTEM FOR THIS PROJECT SHALL NOT BE CONSTRUCTED BY USING THE STRUCTURAL DRAWINGS ALONE. THESE DRAWINGS WERE DEVELOPED FROM DATA DERIVED PRIMARILY FROM THE ARCHITECTURAL DRAWINGS AND SECONDARILY FROM MEP, CIVIL AND OTHER DISCIPLINES' DOCUMENTS. IT IS INTENDED THAT CONSTRUCTION PROCEED BY UTILIZING ALL OF THE INFORMATION CONTAINED IN THE ENTIRE SET OF CONSTRUCTION DOCUMENTS TAKEN AS A WHOLE; FAILURE TO DO SO WILL RESULT IN ERRORS WHICH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES:

GN-1 THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2006) AS AMENDED AND ADOPTED BY THE GOVERNING AUTHORITY, AND APPLICABLE INDUSTRY STANDARDS (AISC, ACI, ETC.).

GN-2 THE DESIGN LOADS ARE:

SUPERIMPOSED DEAD LOADS
MECHANICAL DUCTS/CONDUITS, CEILING, ETC. 5 PSF
MECHANICAL EQUIPMENT AS INDICATED ON PLANS

FLOOR LIVE LOAD	100 PSF
COORDINATOR OFFICES	50 PSF
MOVEABLE PARTITIONS	20 PSF
MECHANICAL ROOMS	150 PSF (NON REDUCIBLE)

ASSEMBLY AREAS:	
FIXED SEATS	60 PSF
LOBBIES	100 PSF
BUILDING CATEGORY	100 PSF
STAGES & PLATFORMS	125 PSF
CATWALKS	40 PSF

ROOF LIVE LOAD	
FLAT ROOF	20 PSF
PITCHED ROOF	20 PSF

ROOF SNOW LOAD	
GROUND SNOW Pg	5 PSF
SNOW EXPOSURE FACTOR Ce	1.0
SNOW LOAD IMPORTANCE FACTOR Is	1.1
THERMAL FACTOR Ct	1.0

WIND LOAD	
BASIC WIND SPEED (3 SECOND GUST)	125 MPH
WIND LOAD IMPORTANCE FACTOR Iw	1.15
BUILDING CATEGORY	III
WIND EXPOSURE	B
INTERNAL PRESSURE COEF.	±0.18
COMPONENTS AND CLADDING WIND PRESSURE	REFER TO ASCE 07-05

EARTHQUAKE LOADS	
SEISMIC IMPORTANCE FACTOR Ie	1.25
SPECTRAL RESPONSE ACCELERATION Ss	11.2%
SPECTRAL RESPONSE ACCELERATION S	4.8%
SPECTRAL RESPONSE COEF. SD	1.0%
SPECTRAL RESPONSE COEF. SD	7.7%
SEISMIC SOIL CLASSIFICATION	E
SEISMIC DESIGN CATEGORY	B

FLOOR LOAD	
ELEVATION OF LOWEST FLOOR	REF. ARCH. DWGS.

GN-3 ALLOWABLE STRESS DESIGN LOAD COMBINATIONS (FOR ALL DESIGNS EXCEPT CONCRETE)

D	
D+L	
D+L+(Lr OR S OR R)	
D+H OR 0.7E)+(Lr OR S OR R)	
0.6D+W	
0.6D+0.7E	

STRENGTH DESIGN LOAD COMBINATIONS (FOR CONCRETE DESIGN)

1.4D	
1.2D+1.6L+0.5(Lr OR S OR R)	
1.2D+1.6(Lr OR S OR R)+0.8W	
1.2D+1.6W+0.5(Lr OR S OR R)	
1.2D+1.0E+L+S	
0.9D+1.0E OR 1.6W	

GN-4 PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND FABRICATOR SHALL VERIFY ALL QUANTITIES, DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

GN-5 UTILITIES PENETRATING BUILDING SHALL BE FLEXIBLE, USING SLEEVE JOINTS, BENDS, LOOPS, ETC. TO PERMIT MOVEMENTS DUE TO EXPANSIVE UNDERLYING SOILS.

GN-6 PROVIDE ADEQUATE AND APPROPRIATE STRUCTURAL STEEL FRAMING FOR THE SUPPORT AND MOUNTING OF MECHANICAL EQUIPMENT RESTING ON, OR SUSPENDED FROM, STEEL SUPERSTRUCTURE.

GN-7 THE STRUCTURAL DRAWINGS FOR THIS PROJECT ARE COPYRIGHTED AND SHALL NOT BE REPRODUCED FOR USE AS FABRICATOR'S ERECTION DRAWINGS. THE CONTRACTOR SHALL ALLOW ADEQUATE TIME AND EXPENSE FOR SUBCONTRACTORS TO PRODUCE THEIR OWN ORIGINAL ERECTION AND PLACEMENT DRAWINGS.

GN-8 THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. ANY PROPOSED APPLICATION OF CONSTRUCTION LOADS OR OF ANY LOADS TO THE PARTIALLY COMPLETED STRUCTURE WHICH EXCEED THE DESIGN LOADS WILL REQUIRE REANALYSIS AND PROBABLE REDESIGN.

GN-9 PROVIDE 5.0 TONS OF EXTRA REINFORCING STEEL, DETAILING, LABOR FOR PLACING AND FABRICATION AS DIRECTED IN THE FIELD AND SHOP.

GN-10 PROVIDE 10.0 TONS OF EXTRA STRUCTURAL STEEL, DETAILING, LABOR FOR ERECTION AND FABRICATION AS DIRECTED IN THE FIELD AND SHOP.

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