



**DESIGN LOADS:**

- ROOF LIVE LOAD: 100 psf
- BASIC WIND SPEED: 250 mph
- IMPORTANCE FACTOR: 1.0
- EXPOSURE CATEGORY: C
- DIRECTIONALITY FACTOR: 1.0
- TOPOGRAPHIC FACTOR: 1.0
- GUST EFFECT FACTOR: 0.85
- INTERNAL PRESS. COEFF: 10.55
- SEISMIC SITE CLASS D
- $S_s = 0.422$
- $S_1 = 0.165$
- $S_{ms} = 0.617$
- $S_{ml} = 0.353$
- $S_{ds} = 0.412$
- $S_{d1} = 0.235$

**GENERAL NOTES:**

- CONCRETE FOR FOOTINGS & FOUNDATIONS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000psi MINIMUM ( $f'_c = 3000$  psi)
- INSTALL ADHESIVE & MECHANICAL CONCRETE ANCHORS PER THE MANUFACTURER'S RECOMMENDATIONS
- THE FOUNDATION IS NOT DESIGNED FOR EXPANSIVE SOILS PREVALENT IN OKLAHOMA. THE FOUNDATION IS ASSUMED TO BE SUFFICIENTLY RIGID TO RESIST THESE FORCES
- THE FOUNDATION DOES NOT EXTEND BELOW FROST DEPTH AS THIS IS NOT A BUILDING-TYPE STRUCTURE & NO HARM WILL RESULT FROM OVERALL FOUNDATION MOVEMENT
- IBC SPECIAL INSPECTION REQUIREMENTS (AND ICC-500 REQUIREMENTS) CAN BE MET BY EMPLOYING A QUALIFIED THIRD-PARTY INSPECTOR TO OBSERVE THE SUBGRADE & STEEL REINFORCEMENT PRIOR TO CONCRETE PLACEMENT. PROVIDE VISUAL INSPECTION OF POST-INSTALLED ANCHORS (EPOXY BOLTS)

GENERAL BUILDING CODE REQUIREMENTS & ARCHITECTURAL/MECHANICAL REQUIREMENTS FOR THE SHELTERS ARE NOT ADDRESSED ON THESE STRUCTURAL PLANS

**CAST-IN-PLACE CONCRETE NOTES:**

- COMPLY W/ THE FOLLOWING:
  - ACI 301, SPECIFICATION FOR STRUCTURAL CONCRETE
  - ACI 117, SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION & MATERIALS
  - CRSI'S MANUAL OF STANDARD PRACTICE
- MATERIALS SHALL COMPLY W/ THE FOLLOWING:
  - REINFORCING BARS: ASTM A615 GRADE 60
  - WELDED WIRE REINFORCEMENT: ASTM A185, FLAT SHEET
  - PORTLAND CEMENT: ASTM C150, TYPE I OR II
  - FLY ASH: ASTM C618, TYPE C OR F
  - AGGREGATES: ASTM C33, UNIFORMLY GRADED
  - AIR-ENTRAINING ADMIXTURE: ASTM C260
  - CHEMICAL ADMIXTURES: ASTM C494, DO NOT USE CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE
  - VAPOR RETARDER: ASTM E1745, CLASS A
  - CURING/SEALING COMPOUND: ASTM C1315, TYPE 1, CLASS A CLEAR, WATERBORNE MEMBRANE-FORMING CURING & SEALING COMPOUND
- REFER TO THE GENERAL NOTES FOR THE MINIMUM COMPRESSIVE STRENGTH REQUIRED FOR EACH TYPE OF CONCRETE
- MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO SHALL BE 0.5
- SUMP LIMIT SHALL BE 4" PLUS OR MINUS 1". CONCRETE W/ HIGH RANGE WATER-REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE SHALL HAVE A SLUMP OF 2" TO 4" PRIOR TO ADDING ADMIXTURE
- MAINTAIN AIR CONTENT TO THE RANGE PERMITTED BY ACI 301. DO NOT ALLOW AIR CONTENT OF SLABS TO RECEIVE TROWELED FINISHES TO EXCEED 3%
- USE FLY ASH AS NEEDED TO REDUCE THE TOTAL AMOUNT OF PORTLAND CEMENT, WHICH WOULD OTHERWISE TO BE USED, BY NOT LESS THAN 30%
- FOR CONCRETE EXPOSED TO DE-ICING CHEMICALS, LIMIT FLY ASH TO 25% REPLACEMENT OF PORTLAND CEMENT BY WEIGHT
- CONSTRUCT FORMWORK ACCORDING TO ACI 301 & MAINTAIN TOLERANCES AND SURFACE IRREGULARITIES WITHIN ACI 347R LIMITS OF CLASS A (1/8") FOR CONCRETE EXPOSED TO VIEW & CLASS C (1/2") FOR OTHER CONCRETE SURFACES
- COMPLY W/ CRSI'S MANUAL OF STANDARD PRACTICE FOR FABRICATING, PLACING, & SUPPORTING REINFORCEMENT
- PROVIDE TROWELED FINISH FOR FLOOR SURFACES & FLOORS TO RECEIVE FLOOR COVERINGS, PAINT, OR OTHER THIN FILM FINISH COATINGS. PROVIDE NONSLIP BROOM FINISH TO EXTERIOR CONCRETE PLATFORMS, STEPS, & RAMPS
- CURE FORMED CONCRETE SURFACES BY MOIST CURING FOR AT LEAST SEVEN DAYS
- BEGIN CURING CONCRETE SLABS AFTER FINISHING. APPLY MEMBRANE FORMING CURING & SEALING COMPOUND TO CONCRETE

REVISIONS: PROJECT NUMBER:  
DATE:  
SHEET NUMBER:

**F101**