

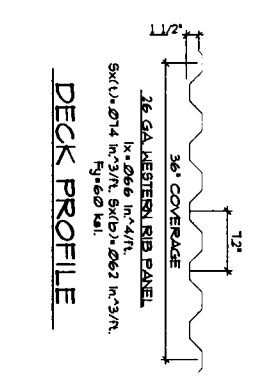
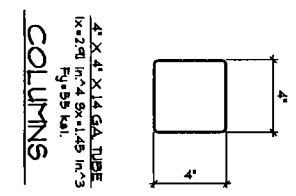
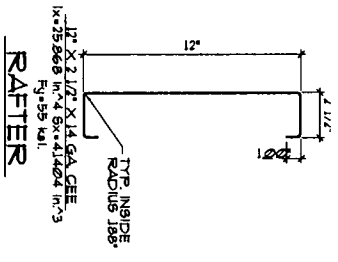
FOUNDATION & FRAMING PLAN
SCALE: 1/8" = 1'-0"

ELEVATION
SCALE: 3/8" = 1'-0"

BASE PLATE SOLD SEPARATELY

BOLTS NOT SUPPLIED

NOTE: STRUCTURE SHALL NOT BE MODIFIED OR ALTERED WITHOUT WRITTEN PERMISSION FROM WESTERN STATES DECKING. STRUCTURAL CALCULATION REQUIRED FOR ANY MODIFICATION.



1A) STANDARD FOOTING N.T.S.

1B) CAISSON FTG. W/ BASE PLATE N.T.S.

2) RAFTER TO COLUMN CONN. N.T.S.

3) BASE PLATE DETAIL N.T.S.

4) ROOF DECK CONNECTION N.T.S.

5A) OPT. SPREAD FTG. N.T.S.

5B) OPT. SPREAD FOOTING N.T.S.

6) FASCIA CHANNEL DETAIL N.T.S.

GENERAL STRUCTURAL NOTES

- CODE:**
2010 International Building Code
2007 American Iron and Steel Institute Handbook of Cold-Formed Steel Design
AISC 360 Supplement.
- LOADS:**
Roof Live Load = 40 PSF (Snow)
Basic Wind Speed = 90 mph, Importance Factor (I) = 1.0, Exposure = C
Occupancy Category = II, Seismic Design Category = 0
Basic Seismic - Resting System
Lateral: Confinement Columns
Longitudinal: Confinement Columns
Analysis Procedure: Equivalent Lateral Force Procedure
- FOUNDATIONS:**
Allowable soil bearing value is 1500 PSF at 24" below finish grade or existing natural grade, whichever is the lower elevation. Round or square caisson footing embedment depths for footings do not apply to locations where walls of the hole will not stand without supplemental supports, or where UNCOMPACTED fill of organic fill material exists. Design lateral soil pressure per IBC section 1804.2 for Class 3 soils.
- CONCRETE:**
All concrete herein required shall be done in accordance with ACI Standard 318-05, "Specifications for Structural Concrete for Buildings", which is hereby made a part of these documents, with the following modifications:
Para 21.2 General shall comply with ASTM C150, Type II, and shall conform to IBC.
Para 3.2 F_c shall be 2500 PSI minimum for all concrete at 28 days for all concrete.
Para 4.1.3 The use of earth cuts for forms is permitted.
Para 5.2 Reinforcing shall be new shielded steel complying with ASTM A615, Grade 40.
Concrete shall be thoroughly consolidated by suitable means during placement and shall be thoroughly worked around reinforcement and embedded fixtures and into corners of the forms.
Curing of concrete shall be in accordance with sections 1905.11.1 through 1905.11.3.
- STRUCTURAL STEEL:**
All structural steel shall be ASTM A36 (F_y=36,000 PSI) or ASTM A 572 GRADE 50 (F_y=50,000PSI). All pipe shall be ASTM A 501 (F_y= 36,000 PSI) or ASTM A51, Type "C" or "S" grade 1/2" (F_y= 36,000 PSI). All tubular steel shall be the ASTM A500 (F_y=45,000 PSI). All bolts shall be ASTM A325, Grade 5, and nuts shall be ASTM A325. All construction per latest AISC Handbook. All expansion bolts to have current (I.C.C. approved). All welding by welders holding valid certificates and having current experience in type of steel shown on the drawings or notes. Certificates shall be those issued by and accepted by the authority. All welding by E70 series low hydrogen rods. (Use E60 for ASTM A706 - grade 40 reinforcing bars). All welding per American Welding Society Standards.
Drawing scaling requirement
These drawings are to be not sealed by the engineer. All copies shall bear wet seals.
If a copy of this drawing is distributed without the proper wet seal the drawing is considered invalid. The duplication or copying of this drawing could mean the original drawing has been modified from its original content. All liability is removed from the below wet sealed. All wet sealed drawings are signed in blue ink and are accompanied with a 200 ink "VALID ONLY WHEN WET SEALED" stamp.
- STEEL DECKING / SCREW FASTENERS:**
Steel roof deck shall conform to the specifications of the steel deck institute. F_y = 80 KSI.
Screw connections to forming members shall be not less than noted below:
1. All Pipe End caps use (3) 1/2"-14 tek screws per steel. All Point Intermediate supports use (3) 1/2"-14 tek screws per steel.
2. 10' all point top stitch screws 1/4"-7/8" tek screws @ 18" o.c.
3. Minimum spacing of screws shall not be less than 3 diameters.
4. The head of the screw or washer shall have a diameter, d_w of not less than 5/16" washers shall be at least 0.05" thick.
All screws shall conform to SAE J78 provisions of structural screws.
- LIGHT GAUGE STRUCTURAL STEEL FRAMING:**
All structural steel framing material and its erection shall be in accordance with the latest edition of the American Iron and Steel Institute Specifications for the Design of Cold Formed Steel Structural Members.
All welding to be prepared by welders holding a valid certificate and having current experience in light gauge steel. Certificates shall be issued by an accepted testing agency. Do not drill or notch members without prior approval of the structural engineer. All welding to be performed in an approved fabricator's shop.
Structural steel members are furnished to a specified minimum yield point greater than 55 KSI. The grade and the ASTM specification number or other specification designation shall be indicated by printing, decal, tagging or other suitable means on each lift or bundle of fabricated elements.
- CONTRACTOR:**
The contractor must submit in writing any requests for modifications to the plans and specifications and no structural changes from the approved plans shall be made in the field, unless prior to making changes, written approval is obtained from the engineer. Shop drawings submitted to the engineer for review do not constitute "in writing" unless it is noted that specific changes are being requested. If changes are made without written approval, such changes shall be the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their responsibility to replace or repair the condition as directed by the engineer.
Contractor shall provide all temporary bracing, shoring, guying or other means to avoid excessive stresses and to hold structural elements in place during erection. The provisions shall remain in position until sufficient permanent members are erected to ensure the safety of the partially erected structure. The contract structural drawings and specifications represent the finished structure. Observation visits to the site by the structural engineer shall not include inspection of the above items. The above notes and specifications shall meet or exceed all state and local code requirements before erection.
The undersigned engineer will not supervise the fabrication or erection of this structure.

Design Thickness, inches	0.1046	0.0747	0.0598	0.0478	0.0359	0.0298	0.0239	0.0179	0.0135	0.0120
Code No.	12	14	16	18	20	22	24	26	29	30

WESTERN STATES DECKING, INC.
18' x 18'-2" x 10'-0" MAX. HT.
6 POST CARPORT
40 PSF (SNOW), 90 MPH, SEISMIC DESIGN CAT. 'D'
2010 ARIZONA BUILDING CODE

S. E. CONSULTANTS, Inc.
Structural Engineering Consultants

SHEET **S-1** of 1
Job 0197-11

design GCS
drawn JMC
check SWS
date 02/22/11

PLAN VIEWS & ELEVATIONS
DETAILS & PROFILES