

DESIGN CRITERIA

1. Related Sections: See related Division 05 Design Criteria.
2. This Section specifies steel composite floor deck, non-composite form deck and steel roof deck.
3. All steel deck shall have hot-dip galvanized finish prepared for field painting.
4. All steel deck exposed to customer areas shall be finish painted.
5. Verify that Contract Documents do not graphically show or indicate anything suspended from steel roof deck.
6. Locations of large roof mounted equipment (i.e., refrigeration mechanical centers, HVAC units, etc.) need to be accurately shown on structural drawings, with allowable openings in steel roof deck clearly identified. If actual deck opening sizes cannot be identified during design, the approximate size and location along with criteria establishing maximum opening sizes and required reinforcing for steel deck shall be noted on the structural drawings. This large roof mounted equipment typically has numerous penetrations through the steel roof deck (for HVAC ductwork, pipes, conduits, etc. that enter the building from the underside of these units) and ideally should be located above the cold storage rooms, not above the sales area. This location will provide maximum space for coordination of these items and keep it out of the view of customers. Leaks (roof or condensation) are also less of a nuisance in these areas. This location will also minimize noise transmission from the roof-mounted equipment into customer areas. Coordinate location of equipment and placement of sound attenuation insulation (on top of the steel roof deck) directly beneath the roof top equipment with Division 23 Design Criteria.
7. If the project requirements dictate a FM approved roof system, evaluate the metal deck fastening, deck properties and fastener approvals as indicated by Factory Mutual Guidelines.
8. In accordance with the IBC all projects are assigned to a Seismic Design Category. Where required by project location, add applicable requirements of the IBC and referenced codes and standards.
9. Testing and Inspection: Although the IBC requires special inspections be performed by special inspectors who are engaged by the owner or the design professional, this Section specifies the Contractor shall engage the special inspectors.
10. The Guide specifications indicate decking is to be fastened by welding. Mechanical fastening may be used if acceptable to the project A/E.

END OF SECTION