

# APS Roofing Design Criteria

1. Design to IBC 2006 standards.
2. Current APS / PSFA Specifications
  - a. Built up Roofing over Light Weight Concrete (LWC) dated Jan 10
  - b. Built up Roofing over Insulation dated Jan 10
3. Division 5 **Sheet Metal Decking**: (Make sure this language is used in section for puddle welds – preferred method of attachment is tek screw or powder actuated i.e Hilti)
  - a. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on both surfaces of deck with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
  - b. Repair Painting: Wire brush and clean rust spots, welds, and abraded areas on both surfaces of prime-painted deck immediately after installation and apply repair paint.
  - c. Provide final protection and maintain conditions to ensure that steel deck is without damage or deterioration at time of Substantial Completion.
4. Make sure the **Rough Carpentry Section** (Division 6) does not indicate any Pressure Treated wood on the roof area. All wood blocking / nailer, parapet framing coverings, etc are to be Fire-Retardant Treated Wood only. **Use ES-1 Nailing Detail**. (See APS Rough Carpentry Spec)
5. **Sheet Metal Flashing and Trim** All coping and edge metal securement must meet ES – 1 standard. Continuous cleats and tapered perlite are acceptable under the coping cap.
6. **Roof top accessories**: (Section 7720); Roof top ladders / Parapet wall crossing ladders: Can not touch roofing. Must have walk pad at bottom of ladder, each side. If crossing a parapet, must have minimum of 6" clearance above coping cap / top of parapet. Must have walk plate surface across coping cap / parapet.
7. All **roof top penetrations** must be a minimum of 8" above finished roof system including roof hatch.
8. All **mechanical equipment** curbing must allow for 18" clearance above finished roof system. This can be accomplished with a curb only or a combination of curb and metal equipment stand/rack.
9. When using the **Perma Flash system** (JM flashing product for penetrations) must specify 1 coat of TopGard Base Coat, and 2 coats of TopGard 4000 be applied. Thirty (30) days must elapse prior to the application of the Coating. No aluminizing acceptable.

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10. All penetrations will have a minimum of **18” radius clear space** to allow for warrantable flashing.
11. **Crickets** are to be dimensioned on drawings. Calculation: (1/6 distance between roof drains plus distance roof drain is from wall) divided by 4. Always round up to 4’ interval for maximum material usage.
12. **Section 1506.7 - Canales/ Scuppers.** All canales and/or scuppers must have a metal pan lining extending not less than 6 inches (152 mm) past the inside of the parapet and not less than 6 inches (152 mm) from each side of the canale or scupper opening. All canales and scuppers must have positive drainage.
13. If this is a LEED project, must ensure JM GlasKap CR or GAF EnergyCap Cap sheet is specified. This will also apply to the wall flashings.
14. Contractor shall provide and maintain a fume recovery system acceptable to the Owner for the duration of the project to control fumes/odors associated with bitumen kettle. 3.5 B.
15. **Add to Summary of Work:** If during the course of this project, the rooftop mechanical equipment (heating and/or cooling) must be taken out of service to accomplish the work, Contractor shall provide temporary portable heating and/or cooling systems to maintain the building’s interior environment equal to the building’s own heating and/or cooling system.
16. Roof drains shall be detailed as Froet drains. Use the LP “Low profile” OFS “over flow strainer” detail. Ensure the details identify the appropriate extension ring detail (DEX) and elevation from roof deck.
17. Any roofing slope over 1” / 12” needs to have back nailing identified on the prints for the GC to install.
18. Coping cap installation shall have continuous cleats installed. No chair systems acceptable.
19. Under coping cap, continuous tapered perlite will be installed to provide for rigidity.
20. An Isometric drawing of the roofing system will be detailed in the drawings for every roofing system called for in the specifications.