

Job Aid:

Checklist for Design of Masonry

■ Structural Notes

1. Applicable code specified (city and date).
2. Applied loads shown including wind, seismic and live loads.
3. Is the masonry strength $f'm$ specified?
4. Is the method to verify the $f'm$ specified? (Unit strength method).
5. Is type S mortar specified?
6. Is high or low lift grouting specified?
7. Are cleanouts required?
8. Is special inspection required? Are prism tests required?
9. Have full allowable stresses been used in the design?

■ Design

10. Is h/t less than 30? If not, verify calculations.
11. Is the wall laterally supported with straps or other methods capable of resisting at least 420 lb/ft?
12. Does the bar fit in the cell?
13. Are locations of laps shown (Min. 48 dia.)? Are they in locations where stresses are less than 80% of the allowable?
14. Are dowel laps sufficient (Min. 48 dia.)?
15. Is there continuous horizontal reinforcement at the window, and door head?
16. Is there continuous horizontal reinforcement at the floor?
17. Are window and door connections designed and shown on the drawings?
18. Are there expansion joints at the corners?
19. Are there provisions made in connections to accommodate thermal movement? (Steel roof rigidly attached at a masonry corner)?
20. Is the brick masonry confined between other materials without expansion joints?

■ Specifications

21. Is a color, pattern and workmanship panel required?
22. Is a grouting demonstration panel required?
23. Are materials specified in accordance with the correct standards? Brick?
 Is the Hollow clay brick of sufficient strength? Cement? Lime? Sand?
 Grout? Mortar? Is the mortar specified by proportions?
 Reinforcement? Is weldable steel required?
24. Are there requirements for handling and storage of materials?
25. Is there a requirement for a preconstruction meeting?
26. Are shop drawings required?
27. Are control joint size and materials specified?
28. Are sealant compatibility tests required?
29. Are the cleaning methods included?
30. Does the specification require wetting of the brick?
31. Are the joint finished specified? If raked joints are used is this in the analysis?
32. Are weep holes and fill materials specified?
33. Is the sealing procedures and materials specified?
34. Are cold weather and hot weather construction provisions included?
35. Are requirements for protecting the work included?
36. Is it required to verify dimensions prior to laying the masonry?
37. Is a written quality control procedure required?
38. Are prism test requirements included both prior to construction and during construction?