



# PLAN CHECK CORRECTION SHEET WATER TANKS FOR FIRE PROTECTION 2023 LAPC

This is intended to provide uniform application of the codes by the plan check staff and to help the public apply the codes correctly.

**Section: Mechanical Plan Check**

Plan Check/PCIS Application No.: \_\_\_\_\_ Date: \_\_\_\_\_

Job Address: \_\_\_\_\_

Applicant Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

Plan Check Engineer: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: firstname.lastname@lacity.org

Your feedback is important; please visit our website to complete a Customer Survey at [www.ladbs.org/LADBSWeb/customer-survey.jsf](http://www.ladbs.org/LADBSWeb/customer-survey.jsf).

If you have any questions or need clarification on any plan check matters, please contact a plan check supervisor or call our Customer Hotline at (213) 482-0056.

Your plans have been examined and the issuance of a permit is withheld for the reasons set forth. The approval of plans and specifications does not permit the violation of any section of the Code, or other local ordinance or state law.

**INSTRUCTIONS:**

- Corrections with circled item numbers apply to this plan check.
- Additional corrections are at the end of the list.
- Incomplete or non-legible drawings or calculations will not be accepted.
- Incorporate all comments as marked on the checked set of plans and calculations and this correction sheet.
- For each correction indicate the sheet number and detail or note number on the plans where the corrections are made.
- **WHEN YOU HAVE COMPLIED WITH ALL CORRECTIONS, CALL OR EMAIL THE PLAN CHECK ENGINEER TO MAKE AN APPOINTMENT FOR VERIFICATION**
- **PLEASE BRING THE MARKED UP PLANS AND THE CORRECTIONS SHEET TO THE VERIFICATION APPOINTMENT**

**SEE MARKED UP PLANS FOR CLARIFICATIONS OF CORRECTIONS.**

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request will provide reasonable accommodation to ensure equal access to its programs, services and activities.

## **PLAN DETAILS**

1. Provide an elevation drawing of the water storage tank. Show the tank piping on the tank side of the connection to the yard or sprinkle system, size and arrangement of all pipes, size, location, and type of all valves, tank heater, and other accessories. (NFPA 22, 4.6.2.1 and 4.6.2.2)
2. No tanks shall serve more than one building. (LAPC 2050.2(1))
3. Connect the tank to at least two water mains, located in different streets Separate supply piping shall be provided between each connection to the water main and the tank. (LABC 403.3.2) (For buildings over 120 feet above the lowest of Fire Department Vehicle access)
4. Install a fill line connected to the city water main. (LAPC 2050.2(2): NFPA 22, 14.4.1.)
5. Install the automatic filling pipe on the opposite half of the tank from the pump suction pipe. (NFPA 22, 14.4.10.1)
6. Show a detail of the automatic multiple fill lines. The automatic fill lines shall be a minimum of two inches in diameter and shall not exceed a maximum of four inlets into the tank. (NFPA 22, 4.6.2.1 and 4.6.2.2)
7. There shall be an approved normally closed tank fill valve supplied from the city water and also from the approved fire department connection to allow for the manually filling of the water storage tank from those sources. (Fire Department Memo, LAPC 2050 .2(2))
8. Install a fill line bypass. (LAPC 2050.2(2))
9. Install an anti-vortex plate assembly. (NFPA 22, 14.2.13.1)
10. The anti-vortex plate shall have a minimum distance of 6 inches above the bottom of the tank. (NFPA 22, 14.2.13.3)
11. The anti-vortex plate shall be at least twice the diameter of the outlet. (NFPA 22, 14.2.13.2)
12. Show low water level to be not more than 4 inches below the designated fire service level. (NFPA 22, 14.4.3)
13. Provide an alarm when the water level is 12 inches below the designated fire service level. (NFPA 22, 14.9.1)

14. Set the high water initiating device a minimum of 3 inches above the full water line and below the overflow level. (Fire Department Memo)
15. The overflow pipe shall be at least one pipe diameter greater than the fill line (NFPA 22, 14.6.2.3)
16. Alternatively install an overflow having a capacity greater than the fill connection, but not less than 3 inches. (NFPA 22, 14.6.1)
17. The inlet of the overflow pipe shall be located at the top capacity line or high waterline and at least 2 inches below the top of the tank. (NFPA 22, 14.6.2.1 and 14.6.2.2)

## **NOTES ON PLANS**

18. Plans shall bear, in every sheet, the license number and signature of the licensed engineer registered in the appropriate classification by the State of California or of the licensed contractor that will do the installation. (LAPC 101.5.2)
19. State on the plans the net capacity of the tank in gallons. (LAPC 2050.2 and NFPA 22, 4.1.4)
20. The capacity of the tank shall be based on the required standpipe demand capacity for the duration as specified in Table 19.3.2.1 of NFPA 13 or the requirements of in section 403.3.3 of the 2019 California Building code whichever is greater (LAPC 2050.2(3))
21. State the material of the water storage tank. (NFPA 22, 4.4.1)

## **CALCULATIONS**

22. Provide calculations showing that the tank fill line is sized to replenish at a rate equal or greater than the required fire pump capacity. (LAPC 2050.2(2))
23. The sump pump/sewage ejector has been sized to accommodate an overflow discharge of \_\_\_\_\_gpm. Provide calculations showing that in the worst case scenario (high pressure at the city main) when the fill line fails open (or one fill line in case of multiple fill lines) the flow to the tank does not exceed the flow of the sump pump.
24. The minimum discharge pipe sizing shall be based on the hydraulic demand of the

system(s) but shall not be less than 6 in.  
(NFPA 22, 14.2.2)





