



FIRE PREVENTION MANUAL

FIRE EXTINGUISHING SYSTEMS

405.030 SPECIFIC APPLICATION WINDOW SPRINKLERS

EFFECTIVE: JANUARY 2010

SCOPE

This policy clarifies the Fresno Fire Department's (FFD or Department) requirement related to the installation of water curtains within the City of Fresno and contract service areas. These requirements apply to both required and voluntary systems.

PURPOSE

This policy has been established to provide direction for the requirements for the installation of water curtains as noted in the *California Building Code (CBC)* and *National Fire Protection Association (NFPA) Standard 13*.

BACKGROUND

As noted in the *California Fire Code (CFC)*, the fire code official has the authority to formulate policies they deem necessary based upon local conditions related to fire sprinkler installations. Currently, Tyco WS specific application window sprinklers are listed for use, subject to specific conditions, including a number of installation requirements, under *International Code Council Evaluation Service (ICC-ES) ESR 2397*.

REQUIREMENTS

Based upon the need for uniformity in application across the Department's diverse service delivery area, and after careful deliberation, the Department has determined the following:

1. All proposed water curtains shall use Tyco WS specific application window sprinklers.
2. Tyco WS specific application window sprinklers require sprinklers and piping on both sides of the water curtain in accordance with their listing.
3. All water curtain supply piping shall be on its own riser, with a separate, supervised control valve, water flow switch, bell and drain. The water curtain

riser shall also be marked with a permanent and durable sign indicating its function. These systems are commonly used as an alternate, equivalent means of fire protection for fire resistance rated construction, and as such, the water curtain must remain in service should the standard fire sprinkler system be taken out of service for any reason.

4. Any proposed water curtain installation shall show a complete section detail of the installation on the sprinkler plan set. This detail shall show fire sprinkler head positions, window style to be protected, mullions or butt joints, etc.
5. Any proposed water curtain installation shall show a note on the plans that the spare head kit will include water curtain sprinkler heads. Update head legend to show correct fire sprinkler heads and counts.
6. All water curtains shall also comply with *NFPA 13, Section 8.15.26 et. al.*

REFERENCES

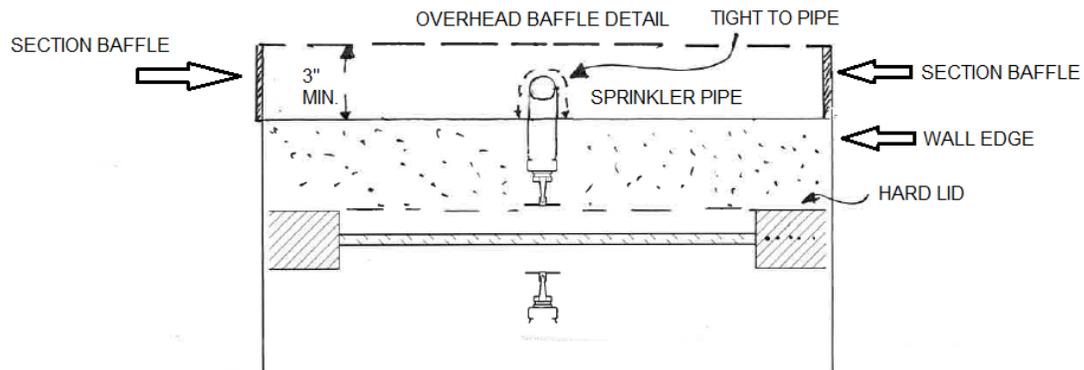
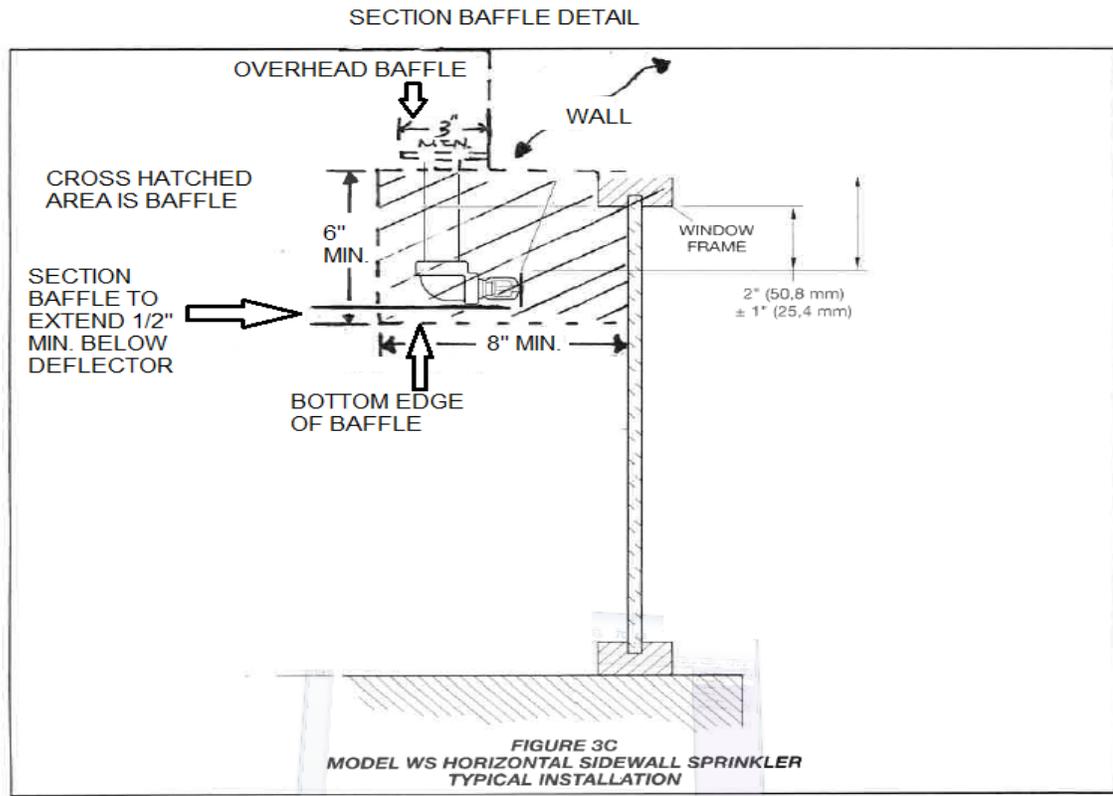
California Fire Code

California Building Code

National Fire Protection Association (NFPA) 13 – Automatic Sprinkler Systems (2016 ed. With California Amendments)

TFP620 (Latest Listing)

BAFFLE INSTALLATION DETAILS (WHERE NECESSARY)



NOTE: ALL BAFFLE INSTALLATION DETAILS NOT SPECIFICALLY ADDRESSED IN THESE DRAWINGS SHALL BE PER THE MANUFACTURER'S INSTRUCTIONS OR NFPA 13, CHAPTER 8, AS APPLICABLE.