



# CITY OF SAN ANTONIO

DEVELOPMENT SERVICES AND FIRE DEPARTMENT  
PO BOX 839966 SAN ANTONIO TEXAS 78283-3966



TO: Development Services and Fire Department Customers

SUBJECT: **INFORMATION BULLETIN 140**  
Hydraulic Calculation Requirements for Automatic Fire Sprinkler System  
Modifications

DATE: January 2, 2008/*Revised August 1, 2014*

CREATED BY: Development Services and San Antonio Fire Department

---

## **Purpose:**

As a customer service initiative, the Development Services Department (DSD) and the San Antonio Fire Department (SAFD) created this **revised** bulletin to update Information Bulletin (IB) 140 regarding modifications to existing fire sprinkler systems that cannot utilize IB 109 - Fire Sprinkler Modifications Involving Twenty (20) Heads or Less. This bulletin has been updated to incorporate the department's new format for Information Bulletins.

SAFD and DSD require that all water based fire protection system plans be reviewed for code compliance for all such permit applications related to the installation, rehabilitation, or modification of any system.

## **Scope:**

The following is a projected path that the fire sprinkler contractor (FSC) and the City of San Antonio (COSA) staff are to utilize when applying this policy.

### Procedures:

1. FSC shall complete a Fire Sprinkler Permit Application ([IB 107](#)) and include plans and associated submittal information to review the project per the checklist included in the application.
2. If work needs to begin, a Fast Track Permit ([IB 108](#)) may be requested through the DSD permit counter.
3. Hydraulic calculations, performed in accordance with the applicable NFPA codes, are required to be submitted for review in accordance with IB 107, if any of the following situations or scenarios pertain to the project:
  - a. The type of heads being affected are extended coverage or residential.
  - b. The occupancy hazard classification is changed to a more hazardous classification (e.g. Light to Ordinary, Ordinary Hazard Group 1 to Ordinary Hazard Group 2,

- Ordinary Hazard to Rack Storage) than the system was originally designed for.
- c. The storage commodity classification and/or configuration changed to a more hazardous classification (e.g. Class I to Class IV or Class IV to Plastics).
  - d. The first tenant finish-out of a shell building that affects the existing sprinkler system.
  - e. The addition to a building and/or fire sprinkler system.
  - f. Any two sprinkler heads are being connected to a single outlet. Exception: If it is demonstrated that the extent of the modification is minor and does not exceed the system capacity, hydraulic calculations may not be required. This will be determined by COSA Sprinkler Plan Reviewer.
  - g. More than 100 sprinkler heads are being relocated with one sprinkler head per outlet.
  - h. The changes being made are in the original most remote and/or most demanding area previously calculated.

Please be aware that these projects are required to be permitted per IB 107 which includes a copy of current flow test and current fire pump test results, as applicable.

We hope that this customer service initiative will help you identify and address hydraulic calculation requirements for modifications prior to submitting for fire sprinkler permit review to assist with your project and meeting your schedule.

Should you have any questions regarding the process, please contact the Fire Protection Specialist- Sprinkler Plan Review at 210-207-8160.

**Summary:**

This Information Bulletin is for informational purposes only.

**Prepared by:** Christopher Monestier, Assistant Fire Chief/Deputy Fire Marshal

**Reviewed by:** Christopher Monestier, Assistant Fire Chief/Deputy Fire Marshal

**Authorized by:** Carl Wedige, Deputy Fire Chief/Fire Marshal  
Roderick Sanchez, AICP, CBO, Development Services Director