—part of a multi-departmental series on City services & permitting

The SFD Engineering Inspection Process for New and Remodeled Buildings

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The Seattle Fire Department (SFD) provides inspections to ensure buildings under construction and those being remodeled are in compliance with the Seattle Fire Code seattle.gov/fire/firecode. Our inspectors also check that key safety systems such as fire alarms and fire sprinklers are designed correctly and work properly at the time the building is occupied.

When Am I Ready for the Inspection?

For all inspections, work must be complete, pretested and ready.

If your project required an electrical, mechanical or other trade permit from the Seattle Department of Construction and Inspections (SDCI), your permit must be signed off by SDCI before you call for an SFD inspection.

There are additional criteria that determine your readiness for specific types of inspections.

Fire Alarm Inspection

The SDCI fire alarm permit (low voltage electrical permit) must have a "partial pass" with comments "okay for SFD testing" or a "completed" status. The same is required for SDCI permits for any interfaced components or systems e.g. heat trace, BDA/DAS, Central Station Monitoring whether AES radio or cell communicator. The site must be considered "Final Clean", including but not limited to all carpeting, ceiling tile, drywall and doors in place to conduct alarm audibility tests. Acceptance test forms, inventory information and certain commissioning documents must be uploaded for SFD in www.thecomplianceengine.com using the Fire Alarm Acceptance Test template. If the project includes elevators, dampers, or smoke control systems, associated permits must be signed off by SDCI prior to the SFD inspection. In addition, the SFD inspector will also

require TCE Acceptance Test forms for dampers and smoke control systems starting January 1, 2025, to obtain your final sign off on your fire alarm system. During the inspection, the FA-1 certificate holder will be required to confirm Central Station Monitoring notification.

Acceptance Test forms are not required in TCE for tenant improvements that modify existing systems, or for TCOs. See our Acceptance Test Form Information Sheet.

Fire Alarm Panel Replacements

Fire alarm panel replacements have different inspection pre-conditions and requirements than new systems or tenant improvements. Please see our <u>Fire Alarm Panel</u> Replacement Information Sheet.

Range Hoods and Suppression/Alternative Extinguishing Systems Inspection

Equipment protected by the hood or suppression system must be on site, installed and operable (gas and power). For hood systems, before the inspector arrives, ensure there is a placard mounted to the hood specifying equipment that is protected by the hood, from left to right, and provide a mounted K class extinguisher near the hood. Please ensure the following are available for your inspector: Plan set or As-Built drawings, and either an SDCI mechanical permit (-ME) for Type 1 hood, or SDCI alternative extinguishing suppression system permit (-FS). If the suppression system is monitored by the fire alarm system, then you will need technicians with both a fire alarm FA-1 certification and a range hood E-3 or E-4 certification present at the time of inspection to test the newly installed system. Ensure your Acceptance Test report including inventory and certain commissioning documents are completed in

www.thecomplianceengine.com.

"Underground" or Fire Water Supply Connection to City Water Main—Inspection Prior to Cover Inspection

Before you cover the pipes connecting the building's fire water supply to the City's water main, you must receive an "underground cover" inspection from SFD. All tie rodding, etc. must be complete and coated with



bituminous or other acceptable corrosion retarding material. Inspection of thrust blocks may occur during or after pouring. The depth and width of the block must be exposed for measurement. See also SFD Administrative Rule 9.03 Table A: http://www.seattle.gov/fire/business-services/fire-code-and-fire-safety-

documents#administrativerules. See also 2021 Seattle Fire Code 903.3.5 (water supplies) and 903.3.5.4 (installation requirements). This inspection may be combined with "underground" flush and/or flow tests in many circumstances, discuss with your inspector.

"Underground " or Fire Water Supply Connection to the City Water Main—Hydrostatic Flow Test

Underground piping and connections between the building and the City's watermain may be covered if cover inspection has occurred, however, pressure drops must be within allowable limits. Hydrostatic flow inspection must occur prior to connection with the building or the City. If a City check valve is present, a "frying pan" must be installed. See also SFD Administrative Rule 9.03 Table A for additional clarification. May be combined with "underground" flush and/or flow tests in many but not all circumstances, discuss with your inspector.

"Underground" or Fire Water Supply Connection to City Water Main—Flush Inspection

Inspection must occur prior to connecting with the building system. See also SFD Administrative Rule 9.03 Table A for additional clarification: http://www.seattle.gov/fire/business-services/fire-code-and-fire-safety-documents#administrativerules. May be combined with "underground" flush and/or flow tests in many circumstances, discuss with your inspector.

Please be aware that a **Contractor's Materials and Test Certificate for Underground Piping** must be provided to your SFD inspector prior to receiving final SFD sign off.
See: http://www.seattle.gov/fire/business-services/construction-

<u>inspections#additionalinspectionprerequisitesforcertainins</u> <u>pections</u>.

Sprinkler Cover Inspection

Cover inspections must occur prior to installation of drywall or tiles that would interfere with visual access. Any time a sprinkler head is changed or moved, you must have an inspection.

Sprinkler Final Inspection

A Contractor's Materials and Test Certificate for Aboveground Piping must be provided to your SFD inspector prior to receiving final SFD sign off. See example here: http://www.seattle.gov/fire/business-services/construction-inspections#additionalinspectionprerequisitesforcertaininspections.

Emergency Responder Radio Coverage Systems (BDA/DAS)
Functional Verification Inspection

SFD provides a mandatory functional verification of the system using our public safety portable radios. Contractors must submit commissioning or "acceptance test" results to SFD at least 24 hours prior to the SFD inspection through our third party vendor www.thecomplianceengine.com. To create an account to enter test results please visit https://www1.thecomplianceengine.com/company/register.

How Do I Request an Inspection?

Regular Inspections

Most inspections are conducted during normal business hours. Request an inspection by visiting our website and filling out the form online: http://www.seattle.gov/fire/business-services/construction-inspections.

Overtime Inspections

If you would like an inspection in the early morning hours, evenings or weekends, use the online inspection request form and select the overtime option when you provide your requested inspection times:

http://www.seattle.gov/fire/business-services/constructioninspections. There is an additional charge for overtime inspections based on the actual labor cost to SFD for the overtime hours.

Please see our <u>Best Practices for Scheduling an Inspection</u> to avoid common mistakes and allow us to schedule you as quickly as possible.

What Information Do I Need to Have When Requesting an Inspection?

We need information about the financially responsible party (to bill for inspection fees if not already paid with your SDCI permit) as well as the SFD certified technician who will be present for the inspection. You will also need to provide information about the type of inspection, the address, and the number of devices to be tested.

How Far in Advance Should I Request My Inspection?

We are generally scheduling one to two weeks in advance for regular time inspections due to the availability of inspectors. Overtime inspections are currently scheduling about two to three days in advance. If you follow the procedures outlined in this client assistance memo, you can help avoid delays to your inspection.

Must I be Present When the Inspector Comes? Do I Need Approved Plans On Site?

Yes. A representative who is capable of performing the required tests, capable of providing access to inspection areas, and certified by the Seattle Fire Department must be present. This person must:

- Present their certification card to the inspector for verification.
- Have a copy of the approved plans and/or other documentation as explained in the section below on Preconditions/Failed and Missed Inspections.

How Can I Talk to My Inspector?

You can leave a message by calling (206) 386-1443. Inspectors will return calls when in the office.

What Do I Do If I Have a Question When an Inspector is Not Available?

The Lieutenant of Engineering is available during the day to answer specific questions related to your field inspections. Please email us at SFD_FMO_Engineering@seattle.gov. related questions, but please direct field inspection.

Will I be Billed for a Failed or Missed Engineering Inspection? What are Inspection Preconditions?

Fees for most SFD construction inspections include a repeat inspection at no charge if the system does not pass the first inspection. However, if the contractor's lack of preparation is the reason for the failed inspection, the Seattle Municipal Code provides the Seattle Fire Department with the ability to recover the costs the department incurred in providing that inspection. In 2025, the fee is \$373 per hour, including time spent by inspectors preparing for the inspection, travelling, and at the job site. If the following items are not completed with documentation available at the jobsite at the time the SFD inspection is scheduled to begin, the responsible party will be charged a failed inspection fee:

1. All required personnel, including those with relevant certification, and equipment are onsite within 20

- minutes of the inspection time. For kitchen hood suppression system, appliances must be installed and operable.
- Printed stamped/approved set of fire system plans (sprinkler, alarm, as-builts, etc.) are available for inspector. Exception: SFD plan review is not required for fire alarm or sprinkler projects with less than 7 devices, DAS, or Pre-Engineered Kitchen Hood systems permitted on the -ME permit type. If no SFD plan review occurred, contractor will not have an SFDapproved plan set, and must have system manufacturer documentation on site.
- 3. Fire alarm inspections only: "Completed" status, or "Partial pass" status plus SDCI comments OK for SFD testing, on the SDCI fire alarm permit (low voltage electrical permit) and for any interfaced components or systems e.g. heat trace, BDA/DAS, Central Station Monitoring whether AES radio or cell communicator. Exception: SDCI "partial pass" rather than "complete" may be acceptable for TCO. Discuss with the SFD Lt when scheduling.
- Fire alarm inspections only: "Completed" status for SDCI conveyance permit, if applicable. See also additional information for smoke control.
- 5. Sprinkler piping is not covered by dry wall or ceiling tiles, and is visible for the inspector, if applicable.
- 6. Underground sprinkler supply line is not covered and is visible for the inspector, if applicable.
- 7. All required pre-testing is completed. Inspector is looking for a good faith effort to fully pre-test the system.

At this time, SFD is not failing inspections if Acceptance Tests are not available in The Compliance Engine. However, missing or incomplete Acceptance Tests on the Field Notes will be noted as a required correction on the inspector Field Notes, for Fire Alarm, DAS, and Range Hood systems. See TCE Acceptance Test FAQ

Item 2 must be printed and available for the inspector on site.

How Do I Cancel an Inspection? Are There Fees if I Don't Cancel My Inspection Timely?

To cancel an inspection, email us with the subject line "Cancel Inspection" and include the inspection date, time, location, and type in the body of the email. Send the email

to: SFD_FMO_Engineering@seattle.gov for regular and overtime inspections.

You will be charged a fee if an inspection is cancelled without sufficient notice. Fees and timelines are as follows:

- Regular inspections Cancel with at least 24 hours notice to avoid a late cancellation fee of \$373.
- Overtime inspections Cancel by 9 a.m. on the business day prior to the inspection to avoid a late cancellation fee corresponding to the labor costs incurred by the City.

What Do I Do if I Do Not Understand the Required Corrections?

You may contact your assigned inspector directly or at (206) 386-1443 for any explanation or clarification that may be necessary.

When Can I Occupy or Use My Structure?

Occupancy and use of the structure are permitted only after approval of SDCI which takes the form of a Certificate of Occupancy. You are in violation if you occupy the premises prior to obtaining this approval.

In some cases a temporary certificate of occupancy may also be approved prior to the issue of the full Certificate of Occupancy - please see https://www.seattle.gov/fire/business-services/construction-inspections for information on temporary certificates of occupancy. Individuals who are non construction workers are permitted to enter the building prior to the building receiving a Temporary Certificate of Occupancy when permitted by the General Contractor. The General Contractor is responsible to provide safety training to authorized individuals and to ensure they are properly equipped with all personal protection equipment required for the construction site by Washington State Labor & Industry regulations. All such individuals touring the building are required to be escorted by the General Contractor or their designee.

People preparing the building for occupancy do not require an escort when permitted by the General Contractor. In occupancies required to be provided with automatic sprinklers, storage or accumulation of combustible material not associated with building construction is prohibited in the building before the sprinkler system is approved.

See also information on Temporary Certificates of

Occupancy here: https://www.seattle.gov/fire/business-services/construction-inspections.

When Can I Request Approval to Occupy My Building?

When the fire protection systems are approved and inspected and the exit ways are completed.

What Are the Fees For an Inspection?

Please see the fee information provided on our website: http://www.seattle.gov/fire/inspections.

If I Contract With a Builder For the Construction, Who is Responsible To Call for Inspections and Final Occupancy Approval?

The legal owner is responsible to call for inspections and approvals. If you want your builder to assume this responsibility, this should be specified within your contract. Check your permit and make sure final approval to occupy has been given prior to moving into the building. Normally, the installing company schedules the inspection appointment for their installation.

Where Can I Find More Information about Seattle Public Utilities (SPU) Water Service Requirements?

To schedule an SPU inspection for underground cover or backflow assemblies, call (206) 684-5803, from 8:00 to 9:00 a.m., or after 9:00 a.m. call (206) 684-3333.

SPU requires inspections for water service piping used for fire protection and domestic water. Find information regarding underground cover, backflow requirements, and cross connections. https://www.seattle.gov/utilities/construction-resources/water

You may also reference the following ordinances and code sections:

Seattle Municipal Code (Cross Connections): SMC 21.04.070 Cross-Connections: https://
library.municode.com/wa/seattle/codes/
municipal_code?
nodeld=TIT21UT_SUBTITLE_IWA_CH21.04WARARE_21.0
4.070CRNN

Washington Administrative Code (Cross Connections): WAC 246-290-490: http://apps.leg.wa.gov/wac/default.aspx?cite=246-290-490