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INSTALL
WET CHEMICAL KITCHEN HOOD SUPPRESSION SYSTEM
INSPECTION CHECKLIST

This is an internal document that provides SFD Inspectors the expectations and procedures for how the Seattle Fire Marshal's Office will conduct an acceptance test of a commercial wet chemical kitchen hood system. For new buildings with a new fire alarm and a new range hood, this inspection occurs during the larger set of inspections/tests that occur as part of the fire final/integrated testing. 2021 IFC 606.2 has requirements for Type 1 hoods.

SECTION 1: GENERAL

Permitting

☐ SDCI Permit(s) is active and has the following status:

- Mechanical –ME: Status = "Issued".
- Occasionally, SDCI will allow hoods to be submitted on –CN or –PH plans and no –ME permit is issued. In this case, the –CN or –PH permit should have status = issued.
- SDCI may use an –FS permit. This is not standard but we will proceed with whichever permit type SDCI issued. –FS permits receive SFD Plan Review, which means there is a requirement for SFD-approved plans on site.
- If there is a permit for the hood, and it is not yet in issued status, do not inspect, the customer has been working without a permit (okay to fail).

Customer-Provided Documentation (Paper or Electronic, See Notes)

☐ SFD approved plans – not required at this time for UL-300 pre-engineered kitchen hood suppression systems. If plans were submitted to SFD Plan Review under the –FS permit, then SFD approved plans shall be on site.

☐ Owner's Manual/Manufacturer Guide – "manufacturer's design, installation, and maintenance manual or the owner's manual shall be stored on site", 2021 NFPA 17A 7.4.10.4.

☐ Photo of appliances protected – uploaded to TCE (verify by review of TCE Acceptance Form)

☐ Diagram of Appliances and Nozzles – uploaded to TCE (verify by review of TCE Acceptance Form) 2021 NFPA 17A 7.3

- If not available, still do visual and functional inspections, but will require a re-inspection on site to verify the installation is per the diagram.
- Provide quick visual review if the type of appliances has changed vs SDCI plans. Example: regular cookline changed to solid fuel. If this occurs, do not inspect, but refer back to SDCI for permit update. Okay to inspect if protect appliances have changed positions under the hood.

☐ TCE Wet Hood System Acceptance form

- Available in paper or viewable on customer-provided laptop or tablet.
- Don't "fail" inspection for missing TCE Acceptance form, instead note as correction on the field notes.
- TCE should have one acceptance form per Type 1 hood, regardless if they are interconnected.
- Example: 3 interconnected hoods will have 3 manual pulls and 3 TCE reports.

Other Customer Requirements for Inspection

☐ Equipment protected by the hood or suppression system must be on site, installed and operable (gas and power).

☐ Good faith pre-testing must be complete. See Failed and Missed Inspection policy.

☐ E-4KH or E-4Combo certified tech on site, with knowledge and training of project to answer SFD inspector questions and activate system as directed to allow SFD Inspector to witness function. (As of 7/2025, some E-3 and E-4 certs are

also acceptable, call Certification unit if questions.) Must also have a FA-1 tech on site if the hood system is interfaced to the fire alarm.

SFD Equipment and Forms Required

☐ Green Folder

☐ Form - SFD Inspector Field Notes

☐ Form - SFD Inspection Agreement to charge the failed inspection if needed

☐ Form - OT Billing form, in case needed

☐ Form - Blank TCE Acceptance forms for Range Hood in case needed

☐ Printed, filled out TCE Acceptance form. If available in TCE will be placed on inspector chair by the MSA the day before

☐ PPE – appropriate for job site

SECTION 2: BUILDING FIRE ALARM SYSTEM

	Pass	Fail	N/A
1. In buildings that are equipped with an existing fire alarm system, the suppression system shall be interconnected with fire alarm system. Where a new suppression system is being installed and connected to a fire alarm, an FA-1 tech needs to be on-site.	☐	☐	☐
2. If there is a new fire alarm system, range hood must be tested after the fire alarm is installed (fire alarm does not need final OK yet).	☐	☐	☐
3. In buildings without a fire alarm system, a visible indicator shall be provided at the control head when the system is activated.	☐	☐	☐

SECTION 3: PORTABLE FIRE EXTINGUISHER

	Pass	Fail	N/A
Class K-rated PFE - Class K-rated Portable Fire Extinguisher(s) are required and shall comply with the following:			
• Located no more than 30’ distance of travel from cooking equipment.	☐	☐	☐
• Located along the path of egress.	☐	☐	☐
• Placed in a conspicuous location	☐	☐	☐
• Properly mounted with the top not more than 5 feet above the floor and the bottom at least 4 inches above the floor	☐	☐	☐
• Properly tagged	☐	☐	☐

SECTION 4: VISUAL INSPECTIONS

Manual Actuator – At least one Manual Actuator shall be provided for each Type 1 hood	Pass	Fail	N/A
• Located in an accessible, unobstructed location in a path of egress.	☐	☐	☐
• Located a minimum of 10' feet to a max of 20' from the system.	☐	☐	☐
• Height not more than 48 inches and not less than 42 inches above the floor.	☐	☐	☐
• Provided with markings for operating and ID's which hood system if more than one.	☐	☐	☐

Cooking Equipment/Appliances	Pass	Fail	N/A
• **Type & Location -** same type and location as shown on plans/diagrams.	☐	☐	☐
• **Fryer Spacing –**at least a 16-inch space between the fryer and surface flames from adjacent cooking equipment. Exception: Where a steel or tempered glass baffle plate is installed at a minimum 8-inches in height between the fryer and surface flames of the adjacent appliance.	☐	☐	☐
• **Tethering Devices** - Movable gas cooking equipment shall have approved tethering device, quick-disconnect, flexible gas lines.	☐	☐	☐
• **Equipment Spacing –** The hood must overhang or extend a horizontal distance not less than 6- inches beyond the outer edges of the cooking surfaces.	☐	☐	☐

Nozzles	Pass	Fail	N/A
• **As Per Plans –**nozzles are the type plans/diagrams and marked for identification.	☐	☐	☐
• **Obstructions -** No obstructions such as shelves, that may impede the discharge.	☐	☐	☐

Agent Tanks	Pass	Fail	N/A
• Tanks provided on site are the same model as indicated on plans/diagrams.	☐	☐	☐
• Quantity of tanks match installation plans/diagrams.	☐	☐	☐
• Tanks are labeled UL300.	☐	☐	☐
• Tanks are fastened securely to their mounting brackets.	☐	☐	☐

Control Heads – Verify Control Heads comply with the following:	Pass	Fail	N/A
• Same model as indicated on installation plans/diagrams.	☐	☐	☐
• Located in a location free from damage, high temperatures, and accessible.	☐	☐	☐
• Provided with a visual indicator to show that the system is in a ready condition or is in need of recharging.	☐	☐	☐

	Pass	Fail	N/A
Grease Filters - Present, okay if not yet installed while inspector is on site.	☐	☐	☐

SECTION 5: FUNCTIONAL / DISCHARGE TESTS

Part 1 – Manual Functional Test	Pass	Fail	N/A
1. If there is a Fire Alarm system in the building, an SFD certified fire alarm technician shall be present. Verify panel is in test (avoid false alarms).	☐	☐	☐
2. Verify that the equipment under the hood is on and power/gas is being supplied.	☐	☐	☐
3. Balloons or caps shall be placed on all discharge nozzles to indicate that the lines are clear, and air can move freely through the lines. A test gas cylinder is available and connected to the system.	☐	☐	☐
4. Initiate the test by having a member of the kitchen staff or the contractor pull or push	☐	☐	☐

the manual actuator (pull station) to the system.

5.	**Gas Flow -** If balloons were used, all of the balloons shall inflate but may inflate at different volumes depending on the flow rates of the nozzles. If caps were placed, all of the caps shall pop off.	☐	☐	☐
6.	**Fire Alarm Activation -** If the building is equipped with a fire alarm system, did the activation of the system activate local notification device and activate an alarm signal (clearly illustrating the type and location of alarm) at the fire alarm panel?	☐	☐	☐
7.	**Visual Indicator -** Did the visual indicator <u>on the control head</u> illustrate that the system has operated? Must be yes regardless if the UL-300 system is connected to a fire alarm or not.	☐	☐	☐
8.	**Power & Fuel Shutdown -** Did the activation of the system shut down power and gaseous fuel supply to <u>ALL</u> equipment protected under the hood as well as any lighting incorporated in the hood system (exception: lighting in explosion-proof glass does not have to shut off)?	☐	☐	☐
9.	**Make Up Air Shutdown -** Did the makeup air for the hood shut down when the system activated?	☐	☐	☐
10.	**Exhaust Fan Turns on When Appliances Turn On -** Did the activation of the exhaust system occur when the appliances were turned on?	☐	☐	☐
11.	**Exhaust Fan Continues During and After Activation -** Did the exhaust fan continue to operate during and after the suppression system discharge, or as described in the manufacturer's manual?	☐	☐	☐

Part 2 – Automatic Functional/Discharge Test:

Technician resets the system and then SFD inspector witnesses the automatic functioning as follows:

		Pass	Fail	N/A
12.	**Activate Fusible Link/Heat Probe - Initiate the automatic functional test by having the contractor activate the terminal link, or activate the heat probe.**			
13.	**Power & Fuel Shutdown** - Did the activation of the system shut down power and gas supply to <u>all</u> equipment protected under the hood and the makeup air supplying the hood?	☐	☐	☐
14.	**Exhaust Fan –** Did the activation of the exhaust system occur when the appliances were turned on and continue to operate during and after the suppression system discharge?	☐	☐	☐
15.	**Verify Test Link is Replaced with Appropriate Temperature Fusible Link –** This is done by visual verification the test link has been replaced with the appropriate temperature fusible link per installation plans after the functional test is complete. (Compare temp stamped on link to temps specified in TCE form, inventory section.)	☐	☐	☐

SECTION 6: SIGNAGE, TAGGING & DOCUMENTATION

		Pass	Fail	N/A
1.	**Appliance Signage –** Signage shall be provided on the exhaust hood or system cabinet, indicating the type and arrangement of cooking appliances protected by the automatic fire-extinguishing system. Signage shall be professionally printed and indicate appliances from left to right, be durable, and the size, color, and lettering that allows it to be legible from where an inspector may be standing to view the sign. SFC 904.13	☐	☐	☐
2.	**White Tagged –** A white tag consistent with Ad Rule 9.02 has been affixed on the agent supply tank or pull device. If not yet white tagged, because the tech (correctly) waited for SFD acceptance, ask them to tag it now. If tech does not have tag with them, inspector to	☐	☐	☐

use discretion about providing final OK now and directing contractor to send photo of white tag by end of next day.

	Pass	Fail	N/A
3. Documentation – Manufacturer documentation of the system has been stored on site to be available to the responsible party and the fire department (SFD prefers paper version but electronic versions are allowed under the code).	☐	☐	☐
4. Acceptance Form - TCE			
a. Ensure inventory, document upload, contact, and test information sections are completed and accurate. Mark any needed corrections. Advise contractor to take photo of marked up copy, retain your original.	☐	☐	☐
5. Field Notes			
a. Do not check "Final OK" until the system has passed interface testing with the Fire Alarm. See Section 2 of this checklist.	☐	☐	☐
b. In the middle section of the Field Notes, clearly state components/areas of building tested in your current inspection.	☐	☐	☐
c. In the Corrections Needed section, list outstanding corrections and remaining inspection requirements.	☐	☐	☐
d. If changes are needed to the TCE form, attach sticker with instructions to contractor on how to resubmit a corrected form.	☐	☐	☐
e. If everything is signed off, and you are accepting a new system, mark "Final OK" on the field notes, and also write on the TCE form "system accepted" to help our Permit Tech know they can accept this in TCE on your behalf.	☐	☐	☐

6. SFD Fees and Forms

a. No billing needed for regular inspection costs – kitchen hoods billing occurs through Accela.
b. If needed, use Service Agreement to bill for failed inspection– see Failed and Missed Inspections policy.
c. If performing the inspection on overtime, fill out the Overtime Inspection billing agreement form. Provide original to responsible party, place copy in tray on Lieutenant's desk.