

# AQUASAFE™ INSPECTION CHECKLIST

## Residential Fire Safety Systems

Date \_\_\_\_\_

Project name \_\_\_\_\_

Project number \_\_\_\_\_

Project address \_\_\_\_\_

Installing company name \_\_\_\_\_

Installing company Alliance member ID \_\_\_\_\_

Installing contractor name \_\_\_\_\_

Inspector name \_\_\_\_\_

### AquaSAFE Rough Inspection Checklist

The following checklist is a guideline only and is not intended to replace National Fire Protection Association (NFPA) 13D and/or P2904 of the International Residential Code (IRC).

#### Plans

Does the installer have an AquaSAFE installer card?

☐ Yes ☐ No

Does the installer have a copy of the approved set of plans on the job?

☐ Yes ☐ No

Do the plans match the actual construction?

☐ Yes ☐ No

If no, mark the changes and send to Uponor Construction Services at [design.services@uponor.com](mailto:design.services@uponor.com) or call 888.594.7726.

### Mechanical Room/Water Supply

Does the underground pipe material and diameter from the street match the plans?

☐ Yes ☐ No

Does the pressure-gauge reading on the incoming water supply match the plans? Be sure to take into consideration pressure-reducing valves (PRVs).

☐ Yes ☐ No

Does the water meter size match the plans?

☐ Yes ☐ No

Does the main water source have devices, such as valves, softeners or filters that are not shown on the plans?

☐ Yes ☐ No

If yes, does the system have an automatic bypass loop or some other accommodation for the flow-restrictive devices?

☐ Yes ☐ No

If no, contact Uponor Construction Services at [design.services@uponor.com](mailto:design.services@uponor.com) or call 888.594.7726.

Is this a well system?

☐ Yes ☐ No

If yes, does the well have proper storage? (See well log report.)

☐ Yes ☐ No

Is the mechanical room sprinkler away from heat sources?

☐ Yes ☐ No

Is the crosslinked polyethylene (PEX) tubing in the mechanical room protected by a 30-minute fire-rated material, installed in accordance with Uponor's exposed listing, or is the tubing approved for exposed installation in fire sprinkler systems?

☐ Yes ☐ No

### Obstructions

Are sprinklers spaced appropriately to avoid obstructions?

☐ Yes ☐ No

If no, list obstructions below. (Refer to NFPA 13D, sprinkler technical bulletins or the system designer to make corrections prior to rough inspection.)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

## Special Considerations

Are there any unprotected bathrooms?

☐ Yes ☐ No

If yes, are they less than 55 square feet in size?

☐ Yes ☐ No

Are there any unprotected closets?

☐ Yes ☐ No

If yes, are they less than 24 square feet and the walls of noncombustible material (½" sheet rock)?

☐ Yes ☐ No

Are sprinklers located near heat sources the proper temperature rating in accordance with NFPA 13D?

☐ Yes ☐ No

If local code requires sprinkler coverage in unheated areas, are those sprinklers adequately insulated to prevent exposure to freezing temperatures (e.g., dry sidewall or pendent sprinkler)?

☐ Yes ☐ No

If there are fuel-fired appliances in the attic, is sprinkler protection provided?

☐ Yes ☐ No

If yes, see detail page for installation instructions.

## Tubing and Fittings

Does the tubing print stream have UL 1821 for residential fire sprinklers?

☐ Yes ☐ No

Is the tubing supported 32" horizontally, 4' vertically and every 6' when attached to the top of trusses to prevent lateral movement?

☐ Yes ☐ No

Is all PEX tubing protected by a 30-minute fire barrier (½" sheet rock), or installed in accordance with Uponor's exposed listing requirements?

☐ Yes ☐ No

Is there at least one plumbing fixture per floor tied into the fire sprinkler loop to ensure adequate circulation?

☐ Yes ☐ No

Is the tubing installed below or behind insulation to meet local code requirements and/or manufacturer recommendations?

☐ Yes ☐ No

Does the length of the installed tubing exceed the length shown on the plans by more than 20%?

☐ Yes ☐ No

If yes, contact Uponor Construction Services at [design.services@uponor.com](mailto:design.services@uponor.com) or 888.594.7726.

Are there additional fittings not shown on the plans?

☐ Yes ☐ No

If yes, note that additional fittings may have altered system performance and hydraulic calculations should be verified prior to rough inspection.

Are all fittings within the sprinkler loop or grid UL-listed for use in residential fire sprinkler systems?

☐ Yes ☐ No

## Sprinkler Spacing and Positioning

Are the sprinklers spaced in a manner not exceeding the spacing indicated on the plans (spacing between heads and to walls)?

☐ Yes ☐ No

Are sprinklers at least 8' apart to avoid cold soldering?

☐ Yes ☐ No

Are all sprinklers spaced at least 4" away from walls?

☐ Yes ☐ No

Are pendent sprinkler deflectors positioned 1" to 4" from the ceiling (unless noted otherwise on the plans)?

☐ Yes ☐ No

For vaulted ceilings, is at least one sprinkler within 3' from the peak?

☐ Yes ☐ No

For vaulted ceilings, is the sprinkler's deflector parallel to the ceiling?

☐ Yes ☐ No

## Testing

Were all flow-restrictive devices installed in the system prior to flow testing (i.e., backflow preventers, PRVs, water treatment, etc.)?

☐ Yes ☐ No

Are all these flow-restrictive devices shown on the plans (i.e., backflow preventers, PRVs, water treatment, etc.)?

☐ Yes ☐ No

Did the sprinkler meet the required flow during the field flow test?

☐ Yes ☐ No

Is the proper orifice verified for the flow test?

☐ Yes ☐ No

For well systems, did the pump start automatically upon sprinkler activation, and was the required amount of flow present?

☐ Yes ☐ No

Does the system have a water-flow alarm?

☐ Yes ☐ No

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If yes, was the inspector's drain-and-test connection activated to successfully verify operation of the alarm and/or any other devices attached to the water-flow alarm?

☐ Yes ☐ No

Did the installer complete and sign the AquaSAFE Flow Test Verification Form?

☐ Yes ☐ No

## AquaSAFE Final Inspection Checklist

The following checklist is a guideline only and is not intended to replace NFPA 13D and/or P2904 of the IRC.

### Plans

Does the installer have a copy of the approved set of plans on the job or as-builds reflecting changes from the rough inspection?

☐ Yes ☐ No

Were there any outstanding issues from the rough inspection?

☐ Yes ☐ No

If yes, were they corrected?

☐ Yes ☐ No

### Mechanical Room/Water Supply

Is warning signage with homeowner manual installed at the main shutoff valve or approved location by the authority having jurisdiction (AHJ)?

☐ Yes ☐ No

Are there any new devices, such as valves, softeners, filters or irrigations systems added to the main water source since rough inspection that are not reflected on the plans or the as-builds?

☐ Yes ☐ No

If yes, does the system have an automatic bypass loop or some other accommodation for the flow-restrictive devices?

☐ Yes ☐ No

Is a sprinkler cabinet required?

☐ Yes ☐ No

If yes, does the cabinet contain the number of spare sprinklers required by the AHJ?

☐ Yes ☐ No

### Sprinklers

Were all sprinklers inspected to ensure they have not been painted, damaged or otherwise hindered from operation?

☐ Yes ☐ No

Where a pump is required to provide water to the system, was a flow test performed from the most hydraulically remote head or was the inspector's test-and-drain connection activated to ensure the pump turns on automatically?

☐ Yes ☐ No

Are all protective caps removed?

☐ Yes ☐ No

Are all cover plates and/or escutcheons properly installed?

☐ Yes ☐ No

### Final Flow Test

Was a complete and successful flow test conducted at rough inspection?

☐ Yes ☐ No

If no, refer to the following questions.

Are all required valves for the local jurisdiction (e.g., PRVs, check valves) installed for the flow test?

☐ Yes ☐ No

Did the sprinkler meet the required flow during the field flow test?

☐ Yes ☐ No

Is the proper orifice verified for the flow test?

☐ Yes ☐ No

For well systems, did the pump start automatically upon sprinkler activation, and was the required amount of flow present?

☐ Yes ☐ No

Does the system have a water-flow alarm?

☐ Yes ☐ No

If yes, was the inspector's drain-and-test connection activated to successfully verify operation of the alarm and/or any other devices attached to the water-flow alarm?

☐ Yes ☐ No

Did the installer complete and sign the AquaSAFE Flow Test Verification Form?

☐ Yes ☐ No

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