

# AQUASAFE™ CHECKLIST FOR EXISTING STRUCTURES

## Residential Fire Safety Systems

Date \_\_\_\_\_

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

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

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

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

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

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

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

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

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

### Checklist Overview

- 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) or any local code/ordinances that govern the installation or inspection of fire protection systems.
- Occupants of a home with an AquaSAFE™ multipurpose fire sprinkler system should know basic maintenance information, including keeping the control valve open, not hanging items from sprinklers, and ensuring the sprinklers are not painted or obstructed. It is also important to know the function and location of the main control valve.
- The building owner or manager should understand the sprinkler system operation and conduct periodic inspections and tests to ensure the system is in good working condition.
- Be sure to keep a copy of the plans and hydraulic calculations near the system shutoff valve.

### Inspections and Tests

- Monthly inspect all valves to ensure they are open.
- Monthly inspect tanks and other stored water sources, if present, to confirm they are full.
- Monthly test pumps, if present, to ensure they operate properly and do not trip circuit breakers when starting.
- For multipurpose systems: Open multiple cold-water fixtures connected to the system until pump activation to satisfy the demand.
- For standalone systems: Open the test connection until pump activation to verify activation.

- Test all water-flow devices, when provided, every six (6) months, including monitoring services.  
**IMPORTANT!** Be sure to notify the monitoring service to ensure the fire department is not called due to testing.
- Visually inspect all sprinklers to ensure they are not obstructed, damaged, corroded, covered with foreign materials, field painted, showing signs of leakage or loss of fluid in the glass bulb, and that decorations are not attached to them.
- Verify obstructions, such as ceiling fans or ceiling-mounted light fixtures, have not been added within three (3) feet of a ceiling-mounted sprinkler or within five (5) feet of a wall-mounted sprinkler. Take measurements from the center of the sprinkler to the center of the fixture.
- Verify all cover plates and/or escutcheons are properly installed and are not missing, damaged, or painted.
- Annually, fully open the test connection downstream of any pressure-reducing or pressure-regulating valve (PRV), and ensure the pressure gauge reads a reasonable value.
  - For multipurpose systems, any plumbing fixture connected to the system can act as a test connection.
  - For systems with a PRV bypass for a water softener or filtration system, exercise the PRV (close the bypass and flow water through the PRV) to make sure it is set at the correct pressure listed on the warning tag and to verify it is mechanically sound.
- Inspect systems when there is a change in ownership by individuals knowledgeable and trained in such systems.

## Maintenance

- Properly maintain the sprinkler system in accordance with NFPA 13D and Uponor AquaSAFE instructions.
  - Replace any sprinkler that is operated, damaged, corroded, covered with foreign materials, experiences loss of fluid in the glass bulb, or shows signs of leakage. Ensure the replacement is a new listed sprinkler having the same performance characteristics as the original equipment.
  - When replacing residential sprinklers manufactured prior to 2003 that are no longer available, refer to NFPA 13D.
  - Replace any sprinkler removed from its fitting with a new sprinkler. **IMPORTANT!** Any sprinkler removed from its fitting cannot be reused.
  - Do not paint sprinklers. Only paint applied by the manufacturer is acceptable.
  - Replace any sprinklers that have been painted outside of the factory with a new listed sprinkler.
  - When making home improvements or painting in the dwelling unit, ensure the sprinklers are not painted or obstructed either at the time of installation or during subsequent redecoration. This is as important for the cover plates of concealed sprinklers as it is to the sprinklers themselves. Special paint is used for cover plates and can only be applied by the manufacturer. Applying paint to cover plates outside the factory can cause the sprinkler to malfunction and possibly not operate during a fire. When painting is occurring in the vicinity of sprinklers, cover the sprinklers with a bag. Remove the bag immediately after finishing painting. For concealed sprinklers, remove (unscrew) the cover plates and protect the sprinklers from paint and overspray with a bag. After finishing painting, remove the bag(s) and replace the cover plates.
  - Verify wet-pipe systems are maintained above 40°F (4.4°C), including areas that require insulation to maintain the system above 40°F (4.4°C).
  - Ensure warning signage and the homeowner manual are near the main shutoff valve or approved location by the authority having jurisdiction (AHJ).
  - Check for any new devices, such as valves, softeners, filters, or irrigation systems, which were added to the main water source since rough inspection that are not reflected on the plans or the as-builds.
- If new devices are present, does the system have an automatic bypass loop or some other accommodation for the flow-restrictive devices?

## Sprinklers and Escutcheons

- Replace any sprinkler that is operated, damaged, corroded, covered with foreign materials, experiences loss of fluid in the glass bulb, or shows signs of leakage. Replace with a new listed sprinkler having the same performance characteristics as the original equipment.
- Replace any missing or damaged escutcheons or cover plates for recessed, flush, and concealed sprinklers with their listed escutcheon or cover plate.
- If an escutcheon or cover plate needs to be replaced that is no longer commercially available, replace the sprinkler.

## Pipe and Fittings

- Annually inspect system pipe and fittings from the floor level.
- Visually inspect pipe and fittings for signs of damage, leakage, or corrosion.
- Pipe and fittings installed in concealed spaces such as above ceilings or behind walls are not required to be inspected.

## Hangers, Braces, and Supports

- Annually inspect system pipe hangers, braces, and supports from the floor level.
- Replace any damaged hangers, braces, or supports, and refasten anything that is loose or unattached.
- Hangers, braces, and supports installed in concealed spaces, such as above ceilings or behind walls, do not require inspection.

## Homeowner Dos

- Keep sprinklers clean and free of obstructions.
- Ensure the red warning tag is in place near the system shutoff valve.
- Keep a copy of the sprinkler system plans and hydraulic calculations near the system shutoff valve.
- If a sprinkler requires replacement due to activation or accidental damage, ensure the system is repaired by a qualified Uponor AquaSAFE fire sprinkler installer immediately. Spare sprinklers are available for this purpose.
- Notify Uponor Construction Services or the AquaSAFE installer before making any renovations to the home (e.g., adding rooms, adding walls, making changes to the ceiling, etc.).
- Use only Uponor components for repairs or maintenance on the system. For sprinklers, specifically, it is acceptable to use another manufacturer's product if an Uponor sprinkler is not available.
- Note that piping is installed in the ceiling and may be installed in the walls. Avoid damaging the piping and compromising the system by checking with your installer before drilling or puncturing holes in the ceiling or walls.
- Ensure the system is always connected to a reliable water supply when the home is occupied.

## Homeowner Don'ts

- Do not paint sprinkler heads or cover plates on concealed heads.
- When making home improvements, ensure the sprinklers are not painted or obstructed either at the time of installation or during subsequent redecoration. This is as important for the cover plates of concealed sprinklers as it is to the sprinklers themselves. Special paint is used for cover plates and can only be applied by the manufacturer. Applying paint to cover plates outside of the factory can cause the sprinkler to malfunction and possibly not operate during a fire. When painting is occurring in the vicinity of sprinklers, cover the sprinklers with a bag. After finishing home improvements, immediately remove the bag(s). For concealed-type sprinklers, remove (unscrew) the cover plates and protect the sprinklers from paint and overspray with a bag. After finishing painting, remove the bag(s) and replace the cover plates.
- Do not shut off the system and leave the home unattended.
- Do not renovate the home without obtaining a new design from Uponor Construction Services or the AquaSAFE installer.
- Do not disturb or remove any attic insulation that may be protecting the Uponor AquaPEX® piping. Because AquaSAFE is a water-based system, it is important to ensure the water in the system is not allowed to freeze.
- Do not strike, obstruct, or hang anything from the sprinklers.
- Do not remove damaged or activated sprinkler heads. Call the Uponor AquaSAFE installer to repair or replace the sprinklers. A trained Uponor AquaSAFE installer must repair or install sprinkler heads to maintain the warranty.
- Do not add water softeners, underground lawn sprinkler systems, or any other plumbing fixtures without contacting Uponor Construction Services or the AquaSAFE installer. This will ensure the fire sprinkler system is not compromised.

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