

Restoring Indoor Air Quality After Flooding

Cleaning and Remediation for Flood-Contaminated HVAC Systems



Correct remediation methods avoid cross-contamination, if not done this way mould regrowth can occur within 48-72 hours

The first thing to do with an HVAC system in the aftermath of a flood is to keep it turned off to prevent the spread of mould in the building. Then have the system cleaned as soon as possible.

All Air Handling Systems should be cleaned in accordance with Workplace Health and Safety Act of 2011 and Australian standard 3666.2 of 2011 and in accordance with IICRC Standard S520



After flood waters have receded, HVAC system components become contaminated, even parts of the system not submerged. Dirt and debris deposited in the system and moisture collected on HVAC components may contaminate the whole system with bacteria and fungi. All components of the system should be inspected, cleaned and disinfected to prevent mould outbreak.

Remediation Steps in accordance with CDC Guidelines and ASHRAE Standards

01 Isolate the System

Use temporary walls, and vapour-retarding barriers to isolate areas where HVAC systems will be cleaned and remediated. Use blowers equipped with HEPA filters to exhaust the area.

02 Take Precautions

Workers must wear approved respirators to protect against airborne microorganisms, following the Occupational Safety and Health Administration standards for worker respiratory protection.

03 Begin Remediation

Remove Flood contaminated components within the HVAC system and discard. Contaminated HVAC filter media should also be discarded. HVAC system components are ready to be cleaned with a HEPA-filtered vacuum to remove dirt, debris and microorganisms, maintaining static pressure inside the isolated area of ductwork.



06 Test and Resume

Before restarting the system, it should be operated continuously at a comfortable temperature for 48 to 72 hours then be reassessed. HVAC filters used during this flush-out process should be replaced prior to reoccupying the building.

05 Disinfect

HVAC system component surfaces should be disinfected with a Bioactive Surface Treatment while the HVAC system is powered down. The disinfection process can also include sealing the supply duct lining with a fungicidal coating.

04 Deep Cleaning

Removing debris will require mechanically cleaning the surfaces of HVAC system components with a steam or a high-pressure washer before using disinfectant.