

Water Damage Restoration

Quick Reference Guide

Category of Water

The categories of water refer to the range of contamination in water.

Time and temperature can affect or retard the amplification of contaminants, thereby affecting its category.

Category 1: Originates from a sanitary water source and does not pose substantial risk from dermal, ingestion, or inhalation exposure. Examples: Broken water supply lines; broken toilet tanks, and toilet bowls that do not contain contaminants or additives.

Category 3: Grossly contaminated and can cause significant adverse reactions to humans if contacted or consumed. Examples: Sewage and wasteline backflows that originate from beyond any trap.

Category 2: Contains significant contamination and has the potential to cause discomfort or sickness if contacted or consumed by humans. Examples: Discharge from dishwashers and overflows from toilet bowls on the room side of the trap with some urine but no feces.

Regulated, Hazardous Materials and Mold: If a regulated or hazardous material is part of a water damage restoration project, then a specialized expert may be necessary to assist in damage assessment. Qualified persons shall abate regulated materials, or should remediate mold prior to restorative drying.

Class of Water Intrusion

Classification of the estimated evaporation load.

Class 1: Least amount of water absorption and evaporation load: Water intrusion where wet, porous materials represent less than ~5% of the combined floor, wall and ceiling surface area in the space.

Class 3: (Greatest amount of water absorption and evaporation load): Water intrusion where wet, porous materials represent more than ~40% of the combined floor, wall and ceiling surface area in the space.

Class 2: Significant amount of water absorption and evaporation load: Water intrusion where wet, porous materials represent ~5% to ~40% of the combined floor, wall and ceiling surface area in the space.

Class 4: Deeply held or bound water: Water intrusion that involves a significant amount of water absorption into low evaporation materials or low evaporation assemblies. Drying may require special methods, longer drying times, or substantial water vapor pressure differentials.

Air Mover Calculations

Square Foot Method

Upon initiating the restorative drying effort, restorers should install one airmover in each affected room. In addition, add one airmover:

- for every 50-70 SF of affected wet floor in each room (to address floors and lower wall surfaces up to approximately 2 feet),
- for every 100-150 SF of affected wet ceiling and wall areas above approximately 2 feet, and
- for each wall inset and offset greater than 18 inches.

Linear Foot Method

In circumstances where water migration has primarily affected lower wall sections and limited flooring (e.g., less than 2 feet of migration out into the room or area), restorers should install a total of one airmover for each 14 affected linear foot of wall. This calculation is independent of the above SF calculation, and is not meant to be used in the same room or area.

Initial Dehumidification Calculations

Initial Dehumidification Factors for Simple Calculation

Type of Dehumidifier*	Class 1	Class 2	Class 3	Class 4
Conventional Refrigerant	100	40	30	N/A
Low Grain Refrigerant (LGR)	100	50	40	40
Desiccant	1 ACH	2 ACH	3 ACH	3 ACH

Conventional or Low Grain Refrigerant

1. Cubic feet / Class Factor from chart = Daily pints required at AHAM
2. Daily pints required at AHAM ÷ Dehumidifier AHAM rate = Number of dehumidifiers required initially

Desiccant Dehumidifier

1. Cubic feet X Class Factor(ACH) ÷ 60 = CFM Required

CF= Cubic Feet (ft³) = L X W X H

ACH= Air Changes per Hour

CFM= Cubic Feet per Minute