

PROJECT EXPERIENCE PROFILE

Project:

Shower Malfunction in New Apartment

Client:

Motorists Insurance Company

Location:

Columbus, Ohio



PROJECT FEATURES

CTL Engineering was recently confronted with a request to investigate a mysterious malfunction of a bathroom shower. An apartment maintenance worker discovered extensive water, mold and mildew damage in an unoccupied apartment during a routine inspection. Further inspection revealed that the shower was running in the master bathroom. The shower handle was turned on and in the hot water setting so the maintenance worker immediately turned it off. The humidity created by the constantly running shower caused damage throughout the unit. The repair costs were going to be substantial.

The apartment building had been built about 8 months prior but the apartment had never been rented nor had anyone even entered the apartment since the final construction inspection. It is not known how long the water had been running but a review of the water usage indicated the shower was probably running for months. There was no indication of a break-in in the apartment so vandalism was ruled out. The insurance company for the apartment complex requested CTL Engineering to try to determine why the shower had apparently started running on its own.

The CTL Engineering investigation revealed that the plumbing contractor did not properly install the shower control handle. The temperature control safety feature was not set but this should not have caused the shower to turn on by itself. The cause of the problem was finally revealed when the showerhead was removed and examined. The plastic screen inside the showerhead was plugged by debris from the installation of the plumbing lines (i.e., metal and plastic turnings, dirt, solder, etc.). The plugged screen had broken, allowing water to flow through the showerhead.

It was concluded that the plumber had probably turned the shower on to flush the lines and adjust the temperature control on the handle. The screen in the showerhead became blocked, stopping water flow. The plumber apparently forgot the shower handle was still in the on position and never finished the installation and adjustments. Later, the constant water pressure in the showerhead broke the plastic screen, allowing water to flow again.

When faced with the results of the investigation, the plumbing contractor admitted liability and agreed to pay for the repairs.

