Public Review Draft

Proposed Addendum h to Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings
Except Low-Rise Residential Buildings

First Public Review (August 2021)
(Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum adds a new provision to include leak detection devices in the plumbing system of buildings. These devices include sensor inputs such as transducers to continuously monitor the water distribution system dynamics and identify and report abnormal system states, including leaks. These devices are installed on a main water line and they can detect overfill situations, valves left on, drip leaks, and freezing water in lines using transducers that measure events using pressure waves. The benefit is that leaks can be prevented or mitigated, saving water and minimizing building damage, effectively increasing the resiliency of the building.

Cost impacts are in the $300-$600 range per unit. The requirement would be enforced by verifying the installation of the device. LEED has approved a Water Leak Detection and Monitoring pilot credit for these devices.

[Note to Reviewers: This addendum makes proposed changes to the standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum h to 189.1-2020

Insert new section 6.3.5.2 as follows; renumber subsequent sections:

6.3.5.2 Leak detection. An electronic device capable of using flow, acoustic, or pressure data to detect a leak or unusual flow condition and communicating an alert shall be installed in the building project water supply and, where submeters are required per Table 6.3.5.1B, in distribution systems.