



Armstrong®

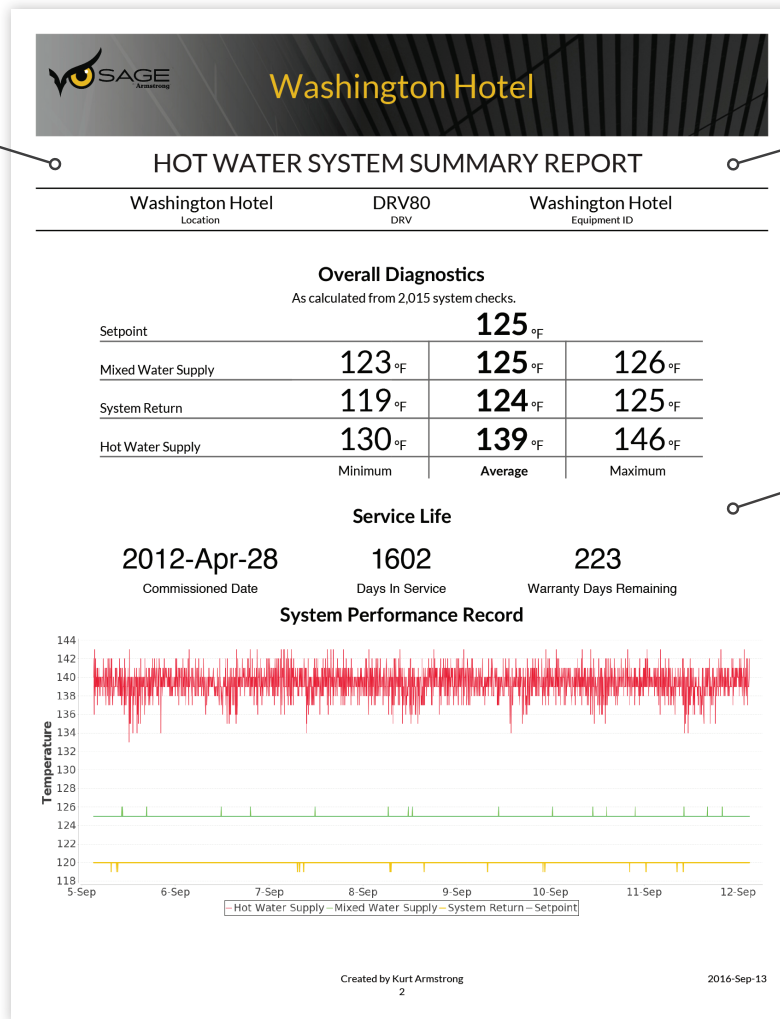
SMART HOT WATER SYSTEM MONITORING & DOCUMENTATION



DOCUMENTATION & RECORDKEEPING

Establish documentation and maintain records.

ASHRAE Standard 188-2015



CONTROL LIMITS

Establish limits within which a chemical or physical parameter must be monitored and maintained.

ASHRAE Standard 188-2015

SAGE™

Simple, effective monitoring, logging and remote alerting of key temperature control components of a hot water system safety risk management plan, for a modest monthly fee.

1. **Dashboard Monitoring** – In real time.
2. **Secure Remote Programming** – You are in control.
3. **Multi-location View** – All properties simultaneously or filtered.
4. **Temperature and System Diagnostic Alerts** – In real time.
5. **Digital Documentation and Recordkeeping** – For as long as you want to retain it.

THE BRAIN® AND SAGE™

SAGE™ works seamlessly with The Brain® as it analyzes data to track behavior and performance as an integral component of a hot water system operation protocol which complies with a Standard of Care.

MONITORING
Establish a system for monitoring the parameters associated with the control limits established in 6.1.3.

ASHRAE Standard 188-2015



STANDARDS OF CARE

A Standard of Care is defined as acknowledged applicable laws, standards and guidelines.

OSHA (1998), Joint Commission Environment of Care (2001), ASHRAE Guideline 12-2000, ASHRAE Standard 188-2015 and VA Directive 1061 (2014) are Standards of Care which include critical recommendations for establishing and monitoring hot water system temperature control limits.

REDUCING THE RISK

Following a Standard of Care can minimize the risk of scald injury, Legionella-related illness and the associated litigation.

“Former guests of the Las Vegas Aria Resort & Casino can’t seek punitive damages in a case alleging they contracted Legionnaires’ disease from the hotel’s water system, because management took adequate water safety steps, a Nevada federal judge ruled Monday.” (*Law 360 Legal News Service, 2015.*)

“In 2014 ASHRAE came out with consensus guidelines, it’s actually a standard that is directed at primary prevention of Legionella growth and transmission in building water-systems. It calls for building-owners and managers to assess the water systems in their building, figure out where there are vulnerabilities, and come up with plans to monitor those.” (*Laura Cooley, M.D., M.P.H. medical epidemiologist, Centers for Disease Control and Prevention.*)

ASHRAE

Guideline 12-2000

4.1.6 **RECOMMENDED TREATMENT:** Hot water stored above 140°F (60°C), minimum recirculated return 124°F (51°C).

Standard 188-2015 Legionellosis: Risk Management for Building Water Systems

6.1.3 **CONTROL LIMITS:** Establish limits within which a chemical or physical parameter must be monitored and maintained.

6.1.4 **MONITORING:** Establish a system for monitoring the parameters associated with the control limits established in 6.1.3.

6.1.7 **DOCUMENTATION AND RECORDKEEPING:** Establish documentation and maintain records.



INTELLIGENT SOLUTIONS IN STEAM, AIR AND HOT WATER

Armstrong International

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