Building
Performance
Institute, Inc.

Building Analyst Professional Standard

Interim Guidance on Water Heaters and Marginal Depressurization with No Spillage

This information applies to all natural draft water heaters that pass the spillage test under worst case conditions and have passed a visual combustion venting system inspection but are in houses with mechanical room depressurization between -2 and -5 Pascals.

If the combustion appliance zone (CAZ) testing indicates readings in the specified pascal range (between -2 and -5 Pa), remediation is required. In homes where these conditions exist, the following remedies must be included in the work scope. Acceptable remedies are:

- Provide a spill switch to interrupt fuel supply if spillage occurs

  or

- Provide a spill alarm on the water heater and install an additional CO alarm in the mechanical room.

Additionally, we recommend, but do not require, power vent and direct vent upgrades or isolation from pressure sources and additional combustion air.

This interim standard only applies to the specified pascal range (between -2 and -5 Pa) under worst case conditions. If the CAZ depressurization has exceeded this Pascal range, please refer to page 13 of the BPI Building Analyst Professional standard, which states:

“When CAZ depressurization limits are exceeded under worst-case conditions according to the CAZ Depressurization Limit table, make up air must be provided or other modifications to the building shell or exhaust appliances must be included in the work scope to bring the depressurization within acceptable limits.”

Please refer to the CAZ Depressurization Limits table on page 14 of BPI Building Analyst Professional standard.

This interim guidance is subject to review in the standards maintenance process.

Questions or comments regarding this interim guidance should be directed to the BPI Standards Dept. at standards@bpi.org.