



TCR 29 – Electric Water Heater Efficiency

Resolution Summary:

New requirements have been added to reward commercial electric water heaters (heaters that have heating capacities greater than or equal to 12kW).

Effective date:

April 23, 2019

Applicable to the following property types:

- Office (01.05.05)
- Universal (01.05.05)
- Light Industrial / Open Air Retail (01.05.03)
- Enclosed Shopping Centre (01.05.05)

New question wording (changes are marked in red):

| 01.05.05 | Is 75% of the domestic water heating equipment efficient? | |
|-------------------------------------|--|-------|
| Explanation & Evaluation | <p>Description: Using energy efficient water heaters reduce energy associated with heating domestic hot water.</p> <p>Requirements: Efficient domestic water equipment must be compliant with ENERGY STAR or equivalent. Electric water heaters must be certified by the Air Conditioning, Heating, and Refrigeration Institute (AHRI). 75% of the total capacity must be considered efficient.</p> <p>Additional Information: Examples of ENERGY STAR-compliant water heating equipment include (but are not limited to) condensing, tankless and solar water heaters. ENERGY STAR rated equipment use energy effectively while minimizing fuel consumption.</p> <p>If no AHRI certification is available for electric water heaters, it must have standby losses in percentage per hour (%/hr) less than or equal to $[0.3 + 27/V]$ where V is water heater volume in gallons. For example, to be eligible, an electric water heater with a nominal volume of 50 gallons and a measured volume of 47.5 gallons must have standby losses that are no greater than 0.87%/hr (since $0.3 + 27/47.5 = 0.87$).</p> <p>For all innovation questions, if you are unable to answer “Yes”, select “Not Applicable” instead. No points will be lost.</p> <p>Reference: ENERGY STAR-compliant equipment AHRI certification directory</p> | |
| Scoring | Yes | 24/24 |
| | N/A | 0/0 |