

WAC 51-11C-40338 Section C403.3.8—Hydronic coils.

C403.3.8 Hydronic coil selection. Hydronic coils shall comply with Sections C403.3.8.1 and C403.3.8.2.

EXCEPTION: Replacement coils within existing equipment.

C403.3.8.1 Chilled-water coil selection. Chilled-water cooling coils shall be selected to provide a 15°F or higher temperature difference between leaving and entering water temperatures and a minimum of 57°F leaving water temperature at design conditions.

EXCEPTIONS:

1. Chilled-water cooling coils that have an airside pressure drop exceeding 0.70 in. of water when rated at 500 fpm face velocity and dry conditions (no condensation).
2. Individual fan-cooling units with a design supply airflow rate \leq 5000 cfm.
3. Constant-air-volume systems.
4. Coils selected at the maximum temperature difference allowed by the cooling plant equipment manufacturer's approved operating conditions.
5. Passive coils (no mechanically supplied airflow).
6. Coils with design entering chilled-water temperature \geq 50°F (10°C).
7. Coils with design entering air dry-bulb temperature \leq 65°F (18°C).

C403.3.8.2 Hot-water coil selection. Hot-water heating coils shall be selected to provide a maximum 20°F temperature difference between leaving and entering water temperatures and a maximum of 118°F (48°C) entering water temperature at design conditions.

EXCEPTIONS:

1. Hot-water heating systems which utilize heat pumps as the primary source.
2. Individual terminal fan units with a design supply airflow rate \leq 1500 cfm are exempt from the 20°F maximum temperature difference between leaving and entering water temperature requirement.
3. Passive coils (no mechanically supplied airflow).
4. Coils with design leaving air temperature \geq 95°F (35°C).

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapters 19.27A and 19.27 RCW. WSR 22-14-091, 23-12-101, and 23-20-021, § 51-11C-40338, filed 7/1/22, 6/7/23, and 9/25/23, effective 3/15/24.]