To optimize the performance of walk-in coolers and freezers, a new federal law prescribes a series of measures to improve their efficiency. To be compliant with the law, the checklist below lists those measures that should be followed for equipment manufactured after Jan. 1, 2009.

The federal regulation only applies to walk-in coolers and freezers that have a total chilled storage area of less than 3,000 square feet. Regulated coolers also must achieve temperatures above 32 degrees Fahrenheit and regulated freezers must achieve temperatures at or below 32 degrees. The regulation does not apply to products that are designed and marketed exclusively for medical, scientific or research purposes. It also does not apply to units manufactured prior to Jan. 1, 2009, but equipment owners interested in boosting the efficiency of their existing walk-ins can use the checklist to identify opportunities to make energy-saving improvements.

**DESIGN STANDARDS:**

**Doors**
- Automatic door closers that firmly close all walk-in doors if they are within one inch of the closed position. This requirement does not apply to doors wider than 3 feet 9 inches or taller than 7 feet.
- Strip doors, spring-hinged doors or other measures to minimize air infiltration when doors are open.

**Insulation**
- Insulation of walls, ceiling and doors of at least R-25 for coolers and R-32 for freezers.
- Floor insulation of at least R-28 for freezers.

**Motors**
- For evaporator fan motors under one horsepower and less than 460 volts, use either electronically commutated motors (brushless direct current motors) or three-phase motors.
- For condenser fan motors under one horsepower, use either electronically commutated motors, permanent split capacitor-type motors or three-phase motors.

**Lighting**
- Lighting with an efficiency of 40 lumens per watt or more, including ballast losses or occupancy sensors that turn lights off within 15 minutes if the walk-in is unoccupied.

**Glass**
- For coolers, use double-pane with heat-reflective treated glass and gas fill or triple-pane with either heat-reflective treated glass or gas fill.
- For freezers, use triple-pane with either heat-reflective treated glass or gas fill.

**Anti-sweat Heater on Transparent Reach-in Doors**
- Walk-ins with anti-sweat heaters on transparent reach-in doors, but without anti-sweat heat controls, must have a total door rail, glass and frame heater power draw of no more than 7.1 watts per square foot of door opening for freezers and 3.0 watts per square foot of door opening for coolers.
- Anti-sweat heat controls on walk-ins with anti-sweat heaters on transparent reach-in doors and a total door rail, glass and frame heater power draw of more than 7.1 watts per square foot of door opening for freezers, and 3.0 watts per square foot of door opening for coolers — must reduce the units energy use in an amount corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.