



Imperial Brown’s Walk-in and The 2021 International Energy Conservation Code, chapter 4

Below table is a description of the requirements from Section C403.10.1 and C403.10.2 how Imperial Brown’s walk-in coolers meet and/or exceed these requirements.

Section C403.10.2.1 Imperial Brown is compliant with Department of Energy (DOE) Energy Policy and Conservation Act (EPCA) of 1975, as amended, established the Energy Conservation Program for Certain Industrial Equipment (42 U.S.C. 6311-6317), including components of walk-in coolers and freezers (WICFs). (42 U.S.C.6311(1)(G)). This covers panels for coolers and freezers as well as nondisplay passage and freight doors for medium temp and low temp applications. These certified products may be found on the DOE web page https://www.regulations.doe.gov/certification-data/#q=Product_Group_s%3A* (go to walk-ins (W), the more options button will allow sort by mfg.)

403.10.1 &.403.10.2	Efficiency Regulation Requirements	Imperial Brown Walk-in Components
1	Automatic door closers are required for hinged doors that measure 3’-9” wide and 7’-0” high or smaller.	Door closers are a standard feature on our walk-ins
2	Strip doors, spring hinged doors, or other method of minimizing infiltration when doors are open.	Spring hinges are standard hardware on Imperial Brown walk-ins. Additional protection is available with option strip curtains or vinyl doors.
3	Cooler walls, ceilings, and doors shall be provided with insulation having a thermal resistance of not less than R-25, Freezer walls, ceilings, and doors shall not less than R-32	Imperial Brown walk-ins use polyurethane foam and meet or exceed these requirements based on industry standard ASTM C-518 testing.
4	The floor of walk-in freezers shall be provided with insulation having a thermal resistance of not less than R-28	Imperial Brown walk-ins use polyurethane foam and meet or exceed these requirements based on industry standard ASTM C-518 testing
5	Transparent reach-in doors for and windows in opaque walk-in freezer doors shall be provided with triple pane glass having the interstitial spaces filled with inert gas or provided with heat-reflective treated glass.	All glass reach-in doors and glass view windows supplied by Imperial Brown meet or exceed these requirements.

6	Transparent reach-in doors for and windows in opaque walk-in cooler doors shall be double-pane heat-reflective treated glass having the interstitial space gas filled.	All glass reach-in doors and glass view windows supplied by Imperial Brown meet or exceed these requirements.
7	Evaporator fan motors that are less than 1 hp and less than 460 volts shall be electronically commutate motors or 3 phase motors.	All evaporator fan motors are electronically commutated.
8	Condenser fan motors that are less than 1 hp in capacity shall be of the electronically commutated or permanent split capacitor-type or shall be 3 phase motors.	Imperial Brown supplies EC or PSC motors as required. These high efficiency motors provide considerable energy savings by emitting less heat and use less electricity to start up.
9	Anti-sweat heaters that are not provided with anti-seat heater controls shall have a total power draw of less than 7.1 watts per square foot of opening for walk-in freezers and not greater than 3.0 watts per square foot of opening for walk-in coolers.	All door and window anti-sweat heaters draw less power than the maximum allowed without controllers. Anti-sweat controllers are not required on Imperial Brown walk-in coolers and freezers but are available as an option for additional energy savings.
10	Antisweat heater controls shall be capable of reducing the energy use of the antisweat heater as a function of the relative humidity in the air outside the door or to the condensation on the inner glass plane.	Not applicable.
11	Light sources have an efficacy of not less than 40 lumens per watt, including any ballast losses or shall be provided with a device that automatically turns the lights off within 15 minutes of when the walk-in cooler or walk-in freezer was last occupied.	LED lights are standard on Imperial Brown walk-ins. All interior lights have a light output higher than 40 lumens per watt. Timers and occupancy sensors to turn off lights are available for added energy savings.
NOTE: The requirements and solutions on this sheet refer to walk-in coolers and freezer that are less than 3,000 square feet.		

11/24/2021