Avanti SuperConductor Refrigerator

Cabinet Installation Guidelines

	This guide applies to the following models:			
SHP1700W	SHP1702SS	SHP40-110V	SHP2402W	SBCA017G
SHP1701B	SHP1712SDC	SHP40- 220V	SHP2403B	SHP2501B

These units are designed, built and performance tested for free standing installation. However, if the unit is to be installed inside a cabinet, provisions must be made for proper ventilation. Failure to do so will result in poor cooling performance, dust build up on the components and dramatically shorten the life of the product. **It may also void the warranty.** Below are the guidelines for creating proper ventilation:

Ventilation basics - While the unit is cooling (removing the heat) from its interior, the removed heat is being dissipated through the condenser coil at the rear of the refrigerator. This heat must be removed with proper air circulation and exhausted to the outside of the cabinet enclosure. If this is not done, excessive heat will build up inside the cabinet enclosure and prevent the unit from maintaining proper cooling, increase power consumption and overheat the electrical components.

If the unit is to be put in a cabinet, it should not have a door on the front and the back should be completely open with a minimum of 4" of clearance between the back of the unit and the wall with no restrictions for the heated air to rise from the back. If there is no alternative to having a door on the cabinet, the door should be ventilated with louvers or openings (equal to a minimum of 33 square inches/213 square centimeters) that allow for intake air flow. More than 33 square inches is always better.

As a last resort if the unit is installed in an enclosure with a solid door, provisions must be made for ventilation as described below:

- A. Fresh air intake path. To maintain ventilation there needs to be fresh air intake to cool down the condenser coil.
- B. Hot air exhaust path. The hot air around the condenser coils need to be removed by intake air and have a free path to exhaust to the outside of the enclosure.

Recommended cutouts and clearances for proper ventilation of cabinet enclosure (See Diagram):

A. Fresh air intake path (A on Diagram)

The intake vents must have a minimum open area of 33 square inches (213cm2). More than 33 square inches is always better. The intake area can be accomplished in the following ways:

- A cutout opening in the toe kick panel. In the case of a rectangle cutout opening the recommended dimensions are 2 3/4" x 12".
- A series of slots in the toe kick panel
- A grill in the toe kick panel
- B. There must also be an opening on the shelf on which the refrigerator sits (B on Diagram). The recommended minimum cutout for the bottom shelf opening is $2 \% \times 12$ " (7cm x 30.5cm) just underneath the vents on the bottom of the unit.

C. Heated exhaust air path (C on Diagram)

Option 1: Have a completely open back with a minimum of 4" between the back of the unit and the wall The cabinet needs to have a minimum of 2" of clearance from the wall with no restrictions for the heated air to rise from the back.

Option 2: If an open back is not possible an exhaust ventilation opening with a minimum of 33 square inches must be created on the top. A minimum of 4" must be maintained between the back of the unit and the back wall of the cabinet. A formed grill, cutout opening or a series of slots on top of the cabinet with an area equal to 33 square inches. The location should be just above vents for the condenser coils at the top of the unit.

Additional guidelines:

A minimum clearance of 1 $\frac{1}{2}$ " (3.8cm) on both sides and 2" (5cm) on the top is required so heated exhaust air can escape from the unit vents.

The feet and leveling legs must be installed on the product to insure proper clearance and airflow at the bottom of the product.

All guidelines are based on a typical room temperature of 77F (25C) degrees.

Even with proper ventilation the product must be routinely checked and cleaned of dust build up on the vents and electrical components.

The ambient air inside the cabinet while the refrigerator is in operation should not exceed 90F (32C)

If you have any questions or would like additional information on your ventilation plans please contact Avanti Hospitality Division.

Option # 1 Open Back Installation









