

Potential Pitfalls to Avoid

- There are three key things to keep in mind when specifying food display cases that will help minimize problems with the installation & operation of the cases.

**Clearance
Environment
Application**



Structural Concepts Corporation

Clearance



- **Clearance involves both the depth and the overall height** of the display case.
- **Be aware of door and elevator openings.** Check the dimensions of the display case you are considering to be sure that it will fit through all of the doors necessary to get it to the location where it will operate. Also, for urban locations, be sure to consider potential constraints with elevator sizes.
- All Structural Concepts Harmony & Reveal models & most Oasis models are designed to fit through standard 36" door openings (after the case is removed from the shipping skid).
- If the display case will be used within counters supplied by others, it's best to **plan a ½" gap** on each side between the millwork counters and the case. Material stack-up and manufacturing tolerances can result in the final dimensions of the case being slightly different than published engineered dimensions.

Structural Concepts Corporation

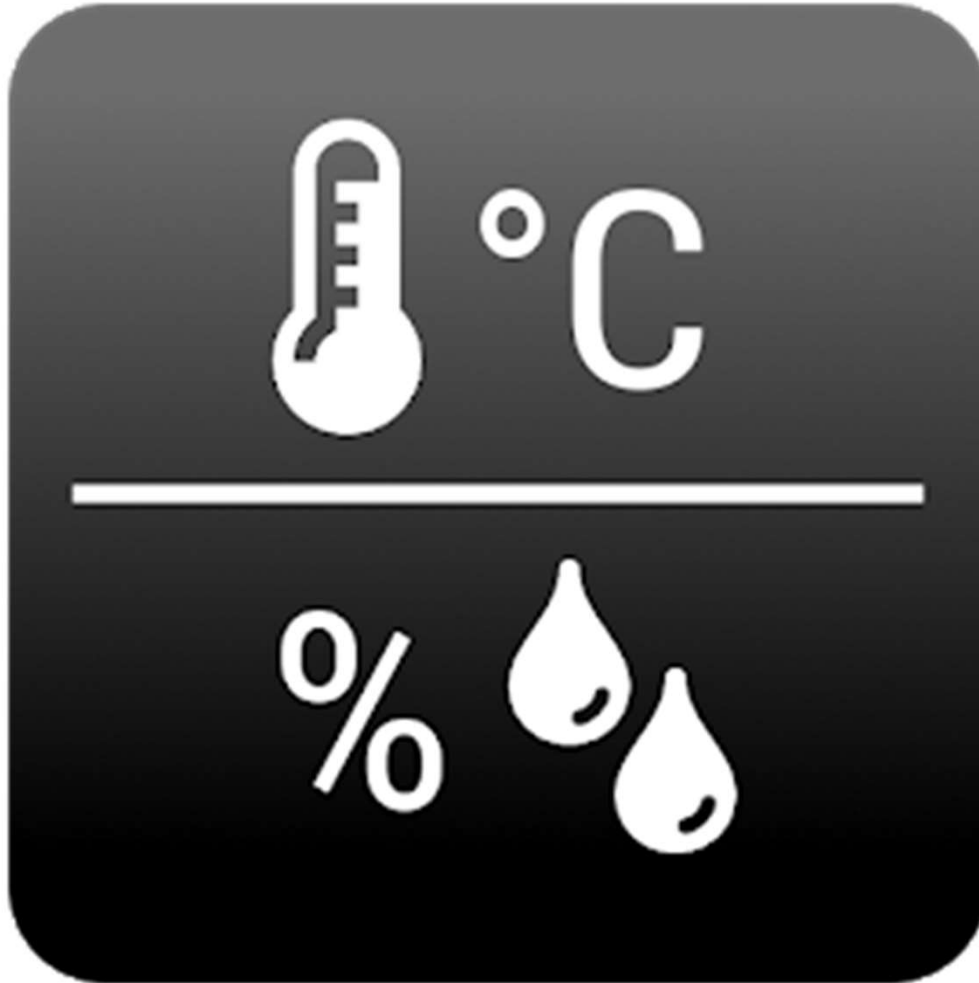
Clearance Cont'd



- **Be aware of compressor airflow requirements.** Structural Concepts specification sheets show the direction of the compressor air flow for each model. It is critical that air intake and discharge openings not be blocked.
- **Some food display cases also require clearance on the sides, top and back for compressor ventilation.** In these situations, space will need to be planned for between each case, between the back of the case and a wall and between the top of the case and a ceiling or soffit.
- Generally, **4" to 6" space on the sides** (between units), top and back is acceptable. Keep in mind, however, that the case-to-case space is not required when a case-to-case "joiner kit" option is specified. Also, the 4"-6" space parameters are not required for all types of display cases. It's best to closely review the model specification sheets for details.

Structural Concepts Corporation

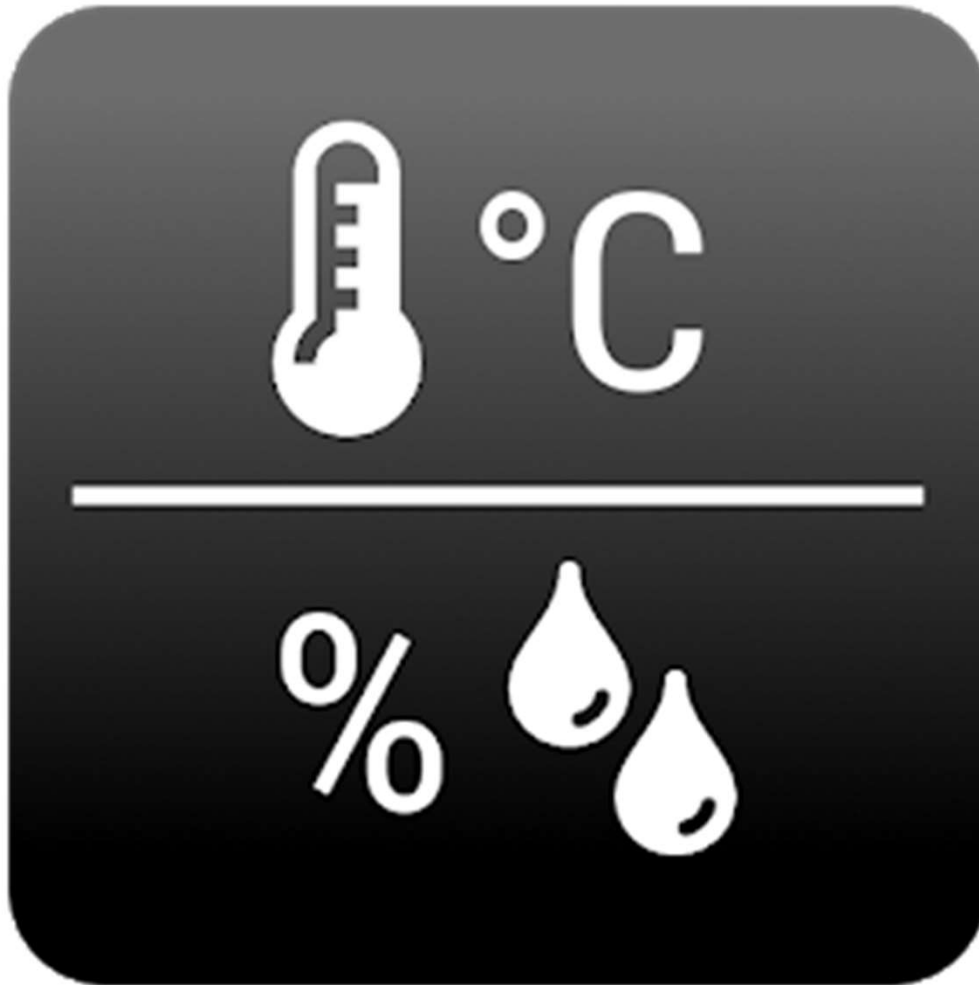
Environment



- Ambient conditions of 75°F and 55% relative humidity
- Breeze-E for higher conditions (80°F and 55% humidity)
- Be aware of energy management systems and smart thermostats

Structural Concepts Corporation

Environment Cont'd



- **Quick Tip...** if a customer calls on Monday morning and says there is water on the floor from the display case, a reason could be the energy management system.
- Avoid placing food display cases in locations near exterior doors, HVAC ceiling vents or where the display will be exposed to direct sunlight.
- Display cases should be connected to a dedicated electrical circuit. Sharing a circuit with other pieces of equipment will create interference that will affect the performance of each piece.
- **GFI circuits are strongly recommended- not receptacles.**

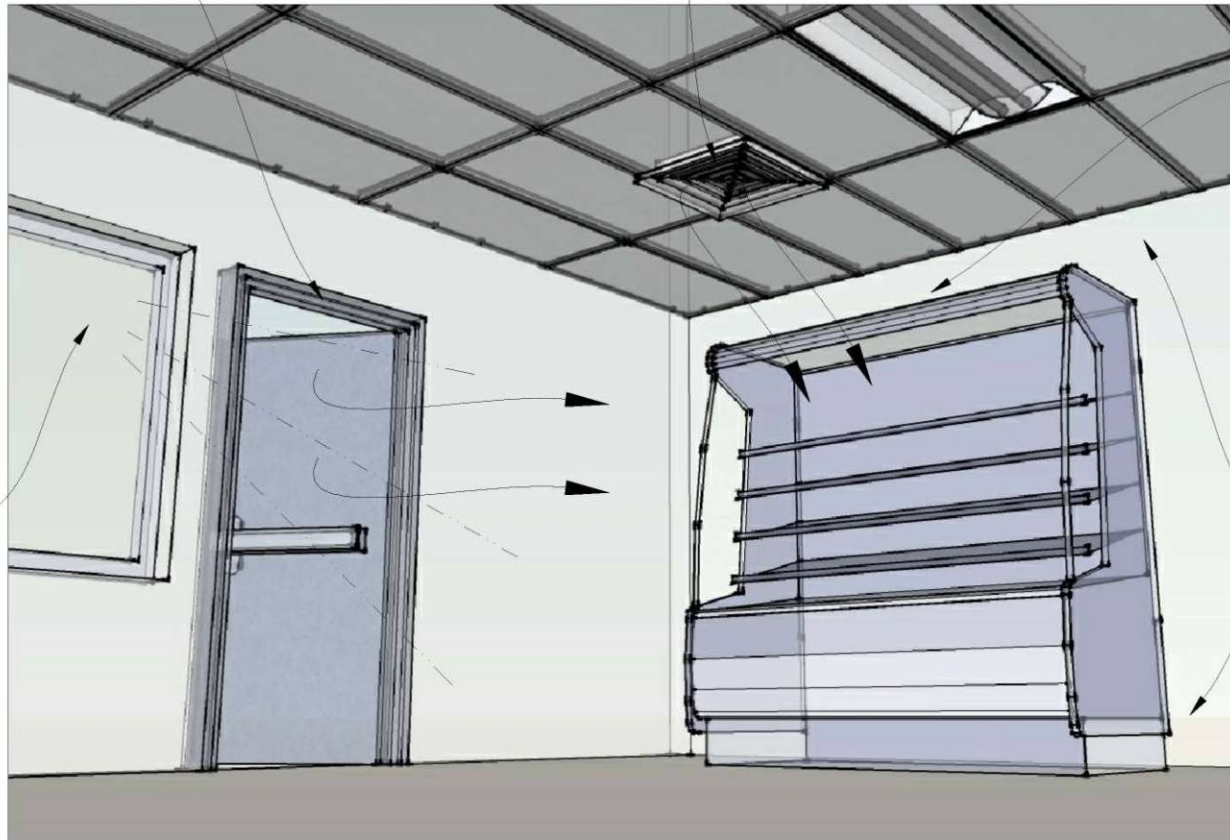
Remember the 5/10/15 Rule

Remain **15'** away from exterior door opening that is positioned directly toward the front of the display.

Remain **10'** from HVAC vents blowing air directly toward the open front of the display.

The display should be level in all directions.

Do not position the display within **5'** of window with direct sunlight.



Minimum 4" clearance to walls & ceilings. Some models can be positioned right to wall & ceiling. Refer to manufacturer's spec sheets.

Structural Concepts Corporation

Application

Be sure to consider where the unit will be installed and the ambience of that area.

Is the location noise sensitive?

Is this the correct area for use of a food display case?

Example: A lounge or quiet meeting facility are areas sensitive to noise.

No matter how quiet the food display case is, it will still sound LOUD!

In situations like these, the best suggestion is a remote refrigeration system.



Remote refrigeration option includes evaporator coil, fans, expansion valve (TXV), controller/thermostat & solenoid valve.

Structural Concepts Corporation

Application Cont'd

- **Be aware that customers sometimes want a display case to do something it is not designed to do.**
- Refrigerated display cases are not designed to pull down warm product to the proper refrigerated temperatures. They are meant to keep cold product cold. Food should be chilled before being placed in the food display case.
- Refrigerated open front air screen cases cannot display open (unpackaged) foods, raw meat or seafood items. These cases are intended for self-selection and sanitation guidelines do not allow for unpackaged foods to be handled by customers.
 - Exception: Box and CO models are approved for unpackaged food in bins.
- Nearly all food display cases operate with “forced air” refrigeration. This means that cold air is continuously circulating inside the display. This has a tendency to dry out exposed food surfaces that are left in the display for multiple days.
- Food display cases with gravity coils (rather than forced air) are designed for raw meat and seafood products. These types of display cases do not “circulate” air and therefore don’t dry out product.

Refrigerated Air Screen Do's & Don'ts

DO

- Refrigerate all freshly made food before displaying it in the display case.
- Adjust interior shelving to accommodate a variety of product shapes & sizes.
- Clean the condenser coil monthly (or specify the Clean Sweep automatic condenser coil cleaner option).
- Display similar products together to create a display that looks full & fresh.
- Keep all food packages behind the internal refrigeration air curtain. Disruptions to the air curtain will affect product temperatures.
- Clean all interior and exterior surfaces with warm soapy water.
- Specify Black interior color and lighted shelves to draw attention to the foods on display.
- Customize your display with exterior colors and finishes that compliment each location's décor.

DON'T

- Place case near an air conditioning vent. Stay at least 10' away or use a diffuser.
- Position case tight against a wall or ceiling soffit. Stay at least 6" away for ventilation.
- Block compressor air intake and discharge openings.
- Position the case near an entrance door. Minimum distance from door is 15-20'.
- Display packages over the front air return grill. This restricts the circulation of cold air.
- Display foods with ingredients vulnerable to freezing along the rear of the shelves. This is where the coldest air is discharged (in the 20°'s).
- Display more than 150 pounds per shelf. Additional weight will cause deflection in the shelves.
- Display unpackaged foods in the case. The air screen's front is designed for customer self-selection of packaged foods.