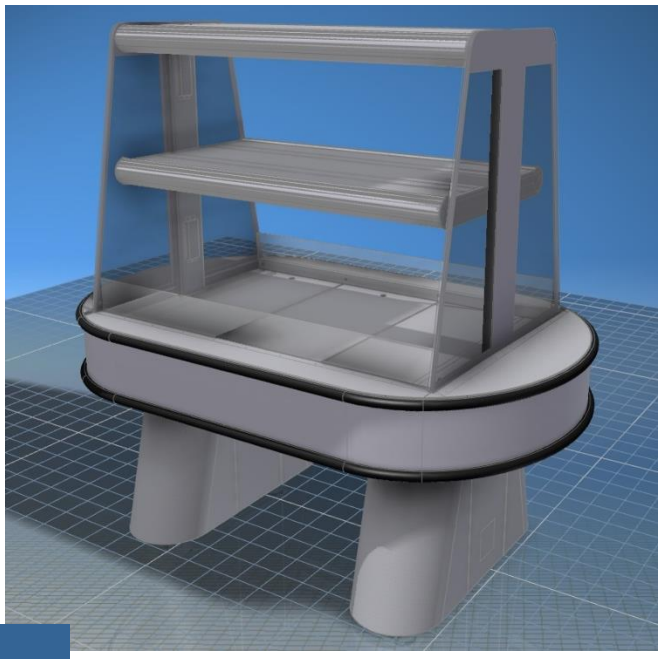
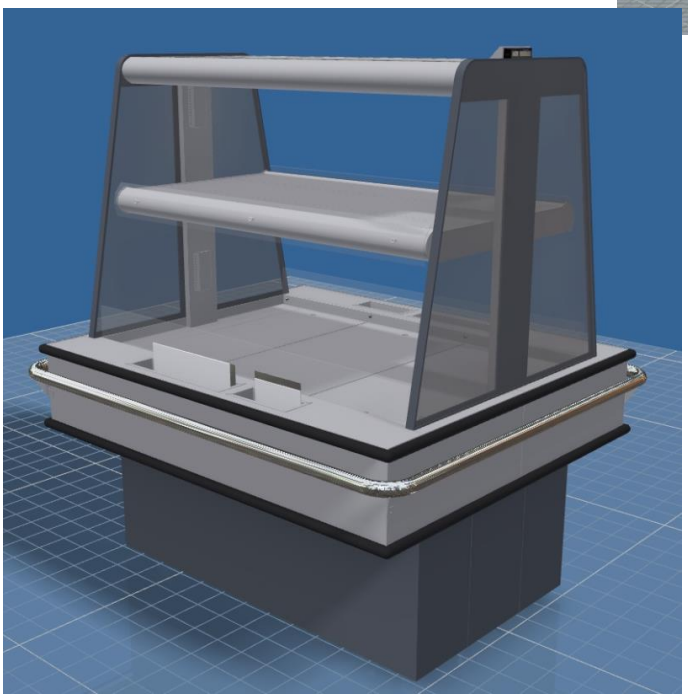
INSTALLATION MANUAL

MIC Hot Foods Cases

Reference: MAN0160





HUSSMANN®
A Panasonic Company

September 2020 Rev: A

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Important Warranty Information

NOTE:
The information in this manual is for **"Qualified Persons Only"**.
It is ***NOT*** an Installation Guide for *"NON Qualified Persons"*.

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To obtain warranty information or other support please contact your nearest Service Provider.

Company:

Contact Name:

Phone:

Email:

Make sure you include the following:

- Customer site location.
- Cabinet model & serial number of product.
- Reason for warranty.

Hussmann direct support.

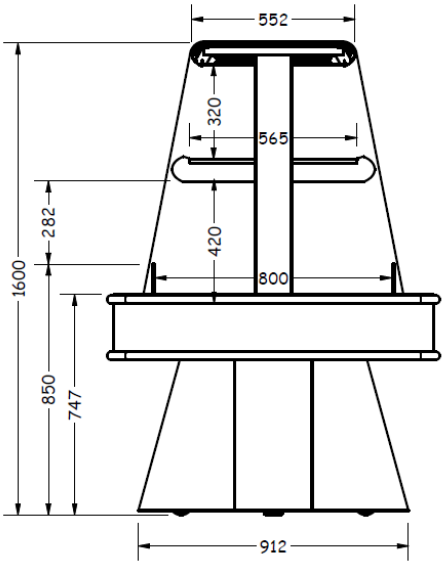
Australia:	**Hussmann Customer Service**
	Email: support.au@hussmann.com
New Zealand:	McAlpine Hussmann Ltd
	Email: taurangasales@hussmann.com
	Phone: +64 7 578 0965

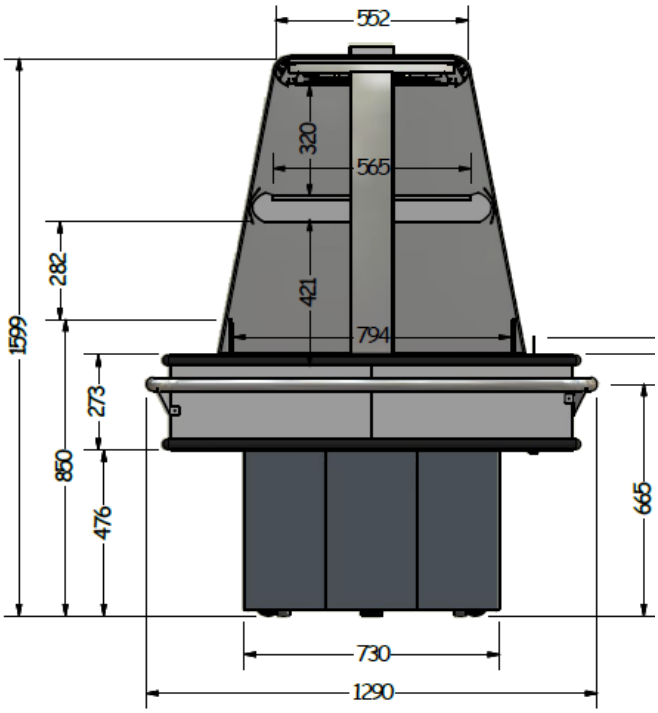
A check should also be made to ensure that all loose parts listed on the outside packaging are present and undamaged.

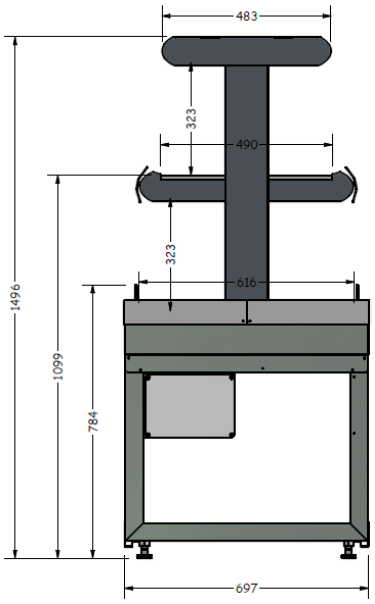
Pre-installation

Case Services Dimensions

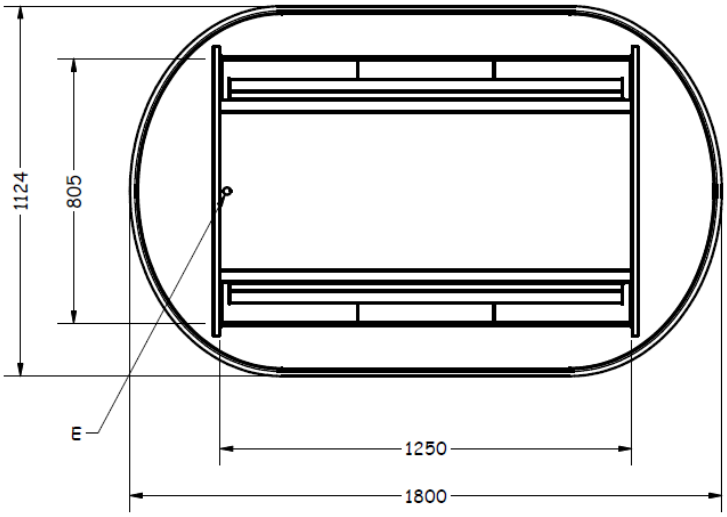
MIC - section

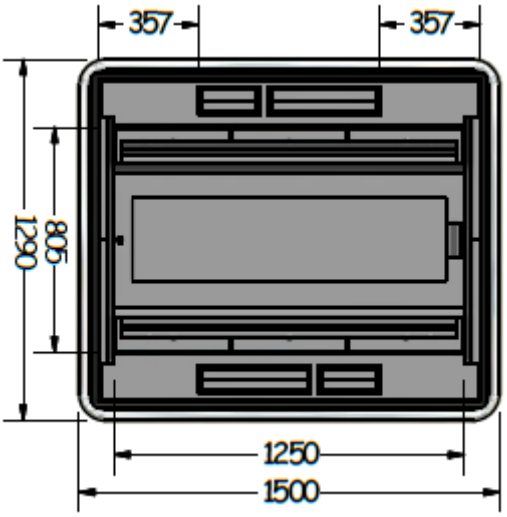


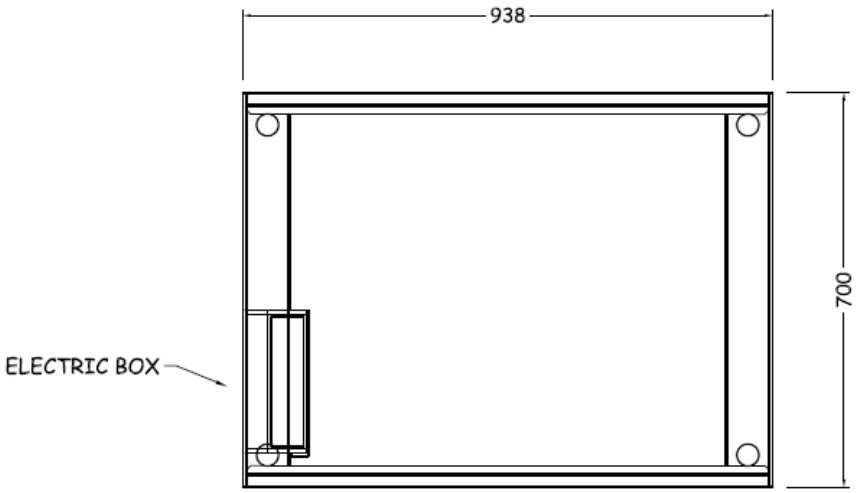




MIC – Footprint







NOTE: This information is a reference only. Always refer to the latest Product Engineering Data sheet.

Operating Environment

MIC Self Service Hot Food Display Cabinets have been designed to operate in the following conditions:

Class:	Hot Food	Product temperature	+65°C to +75°C
		Ambient Temperature	16°C to 28°C
		Max cross draft	0.2 metres per second

NOTE: Food Safety standards require a 60°C minimum product temperature for heated food.

To allow for variations in ambient conditions, we have raised this to 65°C inside this MIC hot foods case.

IMPORTANT! The purpose of the case temperature reading is not to directly measure the temperature of the food being displayed. The intention is that an operator is able to monitor the internal air temperature of the equipment and adjust the level required to maintain the stored food above 60°C."

Handling and Transporting cases

Case dimensions can be found in the product engineering data sheets.

(This manual is a guide only. Always refer to the latest case information available from Hussmann Customer Service)

Always ensure that the moving device is of a suitable type and has sufficient lifting capacity for the case weight and dimension. Always lift cases from the underside.

Refer to and follow the manual handling policies of your Company when moving cases.

CAUTION:
Care must be taken to avoid damage to drainage outlets and electrical equipment mounted under or at the rear of cases.

Receiving Cabinets

Cabinets will always be dispatched in good condition. Always inspect the cabinet and packaged accessories for damage as soon as they are received. Note any damage on the carrier's consignment note prior to signing.

Prior to installation, cabinets must be stored protected from direct sunlight, inclement weather and at temperatures and humidity within 0°C to +45°C and 30% to 80% RH

For concealed damage that is found later, notify Hussmann in the relevant country within 3 working days. Any issues will be addressed and rectified as applicable.

Installation



NOTE:
Information in this manual is to be followed in conjunction with specifications, work practices and regulations of the customer, installing company and relevant industry.

Unwrap the case and remove the transport braces.
Lift up case using a fork hoist and remove shipping base.

Case weight:

- 1800mm case = TBC
- 1500mm case = TBC
- 938mm case = TBC

Positioning and Levelling

CAUTION:
Ensure the lifting capacity of the trolley, etc is sufficient for the case. Refer to the product engineering data tables at the front of this manual for case weights and Risk Analysis (page 21).

Installed Position

Cabinets should be sited so that external influences are minimized. Situations to avoid are:

Air draughts from:

- Air conditioning,
- Ventilation,
- Entranceways,

Mechanical damage:

- Shopping trolleys,
- Forklift trucks,
- Pallet jacks,
- Floor polishers,

To position cases (general):

1. If the plinth/floor surface is not level, determine the highest point, and position the case allocated to this position first.

2. Snap a chalk line on the floor to use as a guide for positioning the front of the cases in the line-up. Determine the position of the case and choose a part of the case that will relate to the chalk line.

3. Adjust the case height using the adjustable feet (if fitted) or metal shims (do **NOT** use **timber**) to ensure the case is level to **within +/- 1.5mm** from front to back and side to side and chassis of case is **NOT twisted**. Maximum 30mm adjustment.



NOTE:
The MIC cases have a mid-level bumper designed to stop damage from shopping carts and floor cleaning appliances. If the case is in an area that has other traffic that may cause damage to the case, consider using appropriate additional protection



NOTE:
It is important that all cases are level for correct operation.



All MIC cases have foot bolt adjustment at each end. There is a plastic cap that sits over the metal bolt and allows the foot bolt to be adjusted with minimal case movement while turning the bolt. It also protects the floor surface from scratching as the bolt is turned.

Electrical Connections

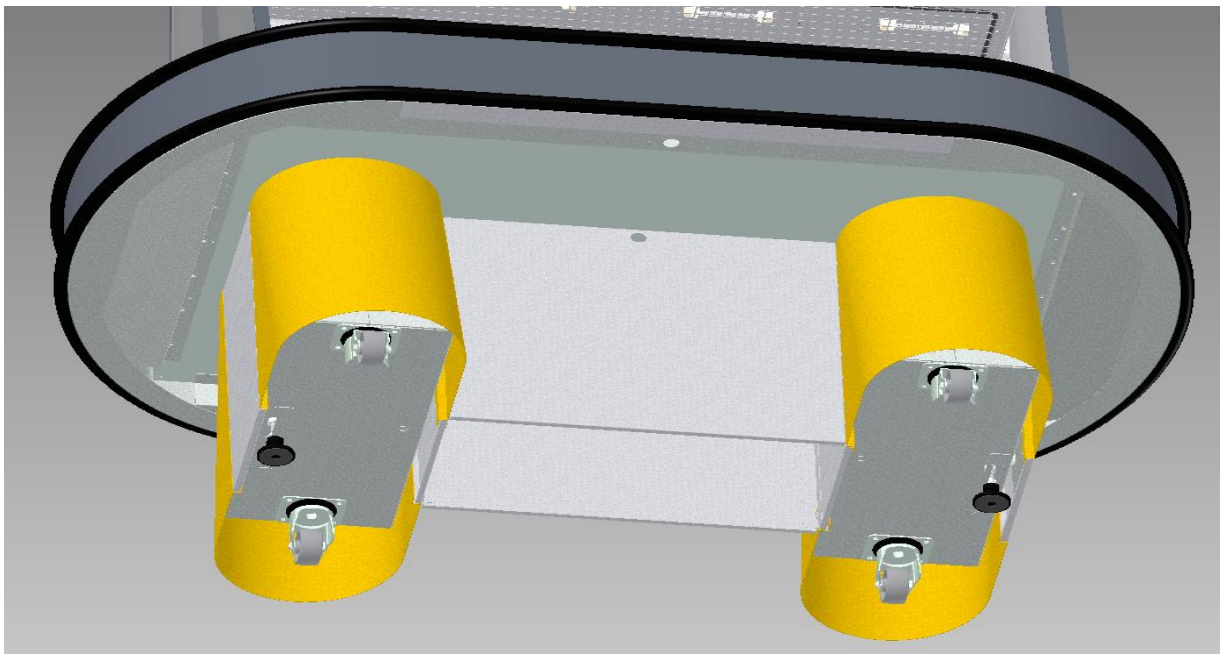
Connection of the electrical supply shall be undertaken by ***qualified persons only***.

1. MIC cases require a 3-phase supply with minimum cable size of 10A per phase.
2. The case will be prewired with exit either through the base or the top of the case (determined as requested at ordering).
3. Connect appropriate plug for connection (plug not supplied).

CAUTION:
Ensure all cables attached to the electrical enclosure do not catch or have potential for wear when the electrical enclosure is accessed and refitted.

Attaching Pedestal covers

(This should be done after final Installation of Electrical and Drainage (if applicable) connections)



Installing a Waste Drain

MIC cases do not have a waste drain.

NOTE:
See Cleaning instructions for details regarding volume of cleaning solutions that should be used in this case.

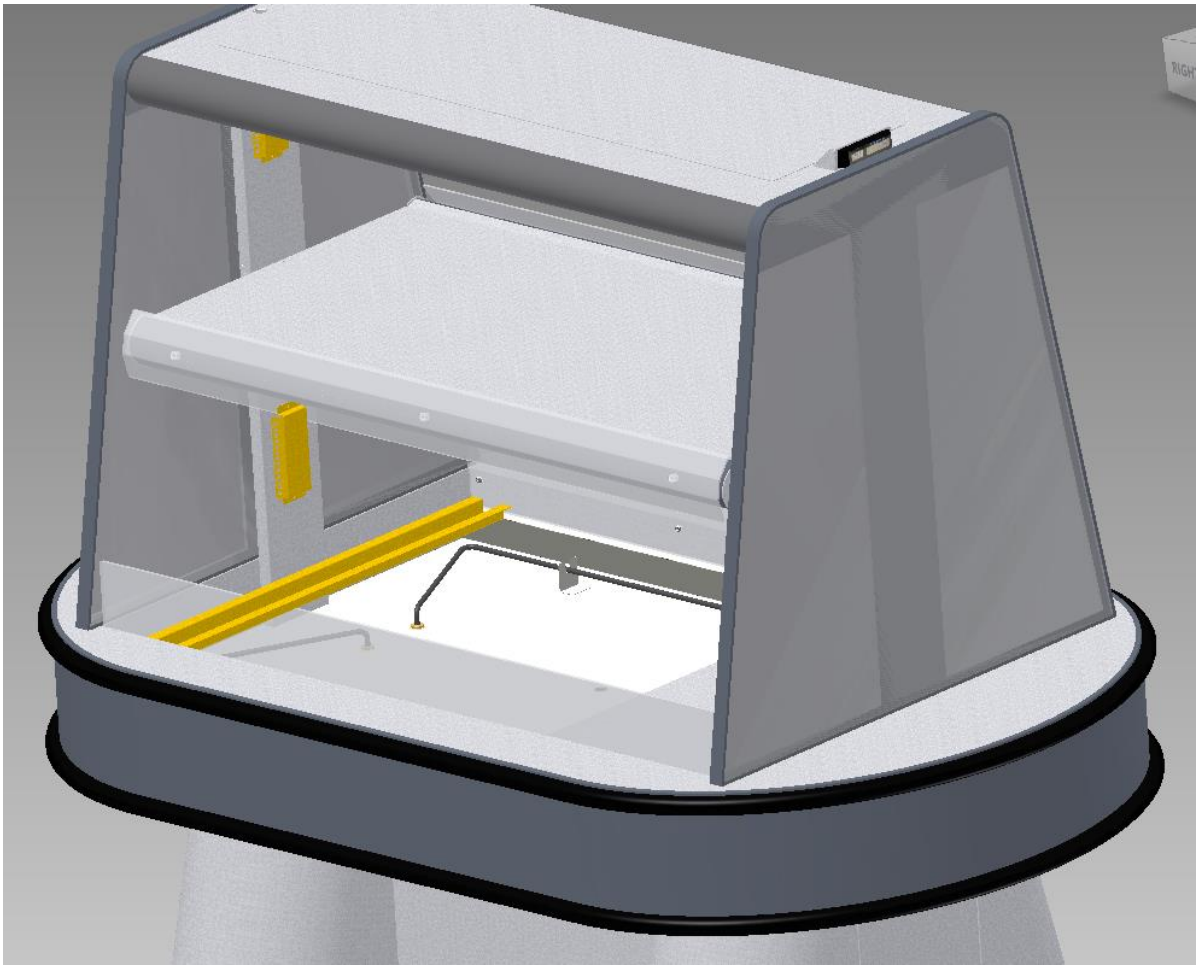
Thermostat Sensor Probes

Each product level has a thermostat that monitors heating required in the case.

Thermostat probes are located at the end of each level - see highlighted probe covers below.

In the case of a probe failure:

1. disconnect the probe lead from the thermostat in the electrical enclosure.
2. Detach the probe from the bracket under the cover inside the case.
3. Connect the new probe to the old probe so it can be pulled through the cable duct.
4. Reattach the new probe exactly as the old probe was fitted.



CAUTION:
Do not walk or sit on cases.

Mounting fixtures

Shelves are fixed in position to ensure correct product temperatures are maintained.

Any aftermarket additions to the case should be of a type approved by Hussmann.

NOTE:
Changing the shelf configurations will compromise case performance.

Commissioning

Cleaning case

- Remove the PVC protective coating on stainless steel, where applicable
- Remove any residue, silicon or tape marks with a cloth moistened with rubbing alcohol
- Remove all debris from in and around the case
- Wipe case with a clean, damp cloth, if necessary

Starting up

- Check supply power is ready and correct voltage. (by Licensed Person)
- Confirm correct operation of RCD (if fitted) (by Licensed Person)
- Turn case power on

Start up checks – by qualified persons only

- Check that all lights (and light RCDs, if installed) are working correctly.
- Check the heating elements are all working, ensuring the thermostats are cycling the elements after no more than one hour.



NOTE:
Controllers are reading air temperature in their location to keep product above 60°C and below 80°C.

Please see PED sheet for controller setting table. Refer Code F1 for air temperature settings

Decommissioning

Plan and risk assess the decommissioning process to include the following:

- Isolate the case from electrical systems. Disconnection is to be undertaken by qualified persons only.
- Removal of the case is to be in the reverse order of installation listed previously.

Disposal

Case disposal is to be carried out by the following:



Metal components should be removed and recycled

- The remaining parts should be disposed of by commercial waste management.



NOTE:
Please be aware that the foam-insulated panels incorporate cyclo-pentane as the blowing agent and will require the cabinet insulated structure to be disposed of in accordance with local authority guidelines.

Troubleshooting

Issue	Possible reason	Remedial action
Lights are not working	Power supply failure	Check input voltage (240V) and output voltage (24V DC ±5%) Replace power driver if output voltage does not match specification.
	LED luminaire failure Lamp failed	Call technician to check and replace in necessary
	Thermal overload blown	This will only happen in extraordinary circumstances. When the overload blows, the case lighting and heating will shut down
Product temperatures below 60°C	Heating element failure	Check element is circuit is intact. This can be done in the electrical enclosure. Check across element neutrals and connection 1 on the relevant digital controller. Replace element if faulty
	Controller sensor failure	Relevant controller will display" E1". Replace the sensor
	Thermal overload blown	This will only happen in extraordinary circumstances. When the overload blows, the case lighting and heating will shut down. Replace overload (104°C) behind senor cover above the top shelf
	Controller failure	There is no display on a controller. Replace the controller
	Product Temperature Measurement	When checking temperature of product, an approved thermometer must be used. Requirements for temperature checking are in Food Safety Standards 3.2.2

NOTE:
Any remedial action shall be carried out by a suitably qualified person only.

Risk Analysis

Hazard	Control Measures
Electrical - electrical connections in cases	Electrically isolate cases before work begins. Must be carried out by a service provider. Staff training.
Electrical - Replacement of electrical components	Request a service call. **Electrically isolate cases before works. The switch on the case is not an isolation switch.**
Ergonomic - Moving/ positioning/ adjusting cases	Staff must be trained in the correct procedures for setting up cases and ergonomic practices. PPE must be worn
Falling - Connecting sensor probe wiring during installation	Use of barriers & fall arrest systems as appropriate & in accordance with State & Territory Legislation. Safe working at heights
Electrical - Potential for electric shock when cleaning electrical fittings and components	Electrically isolate cases before work is carried out. Staff training, RCD. Keep electrical connections dry at all times.
Falling - Climbing on shelves	Staff must be trained in OH&S procedures. MUST not climb on shelves or cases.
Crushing - Hands or fingers may become pinched or crushed during the positioning of base trays, shelves & stock	Staff must be trained in the correct procedures for setting up cases and ergonomic practices
Cuts and stabbing - Potential for cuts caused by damaged or missing parts	Visual Inspection and regular maintenance. Request service call when necessary. PPE must be worn when handling broken or damaged parts.
Ergonomic - Stretching during the cleaning of the case and positioning of stock and shelves leading to strains and sprains	Staff must be trained in the correct procedures for cleaning cases & ergonomic practices. Cleaning tools which reduce the need for stretching should be used.
Slipping - Surfaces may become slippery due to spillage from the case during operation or cleaning	Visual Inspection. Appropriate remedial action.
Crushing - Fingers, hands or body between doors	Operators to always open and close doors using handles provided, ensuring the area is clear of other persons.
Cuts - Glass breakage	Protect glass as appropriate for the area the case is installed in. if glass breakage should occur cordon the area and clean as soon as possible. Contact Hussmann for replacement parts.