



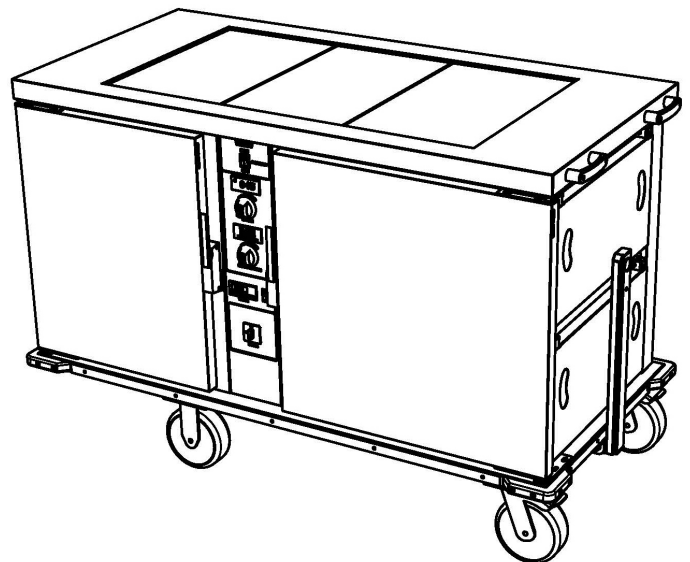
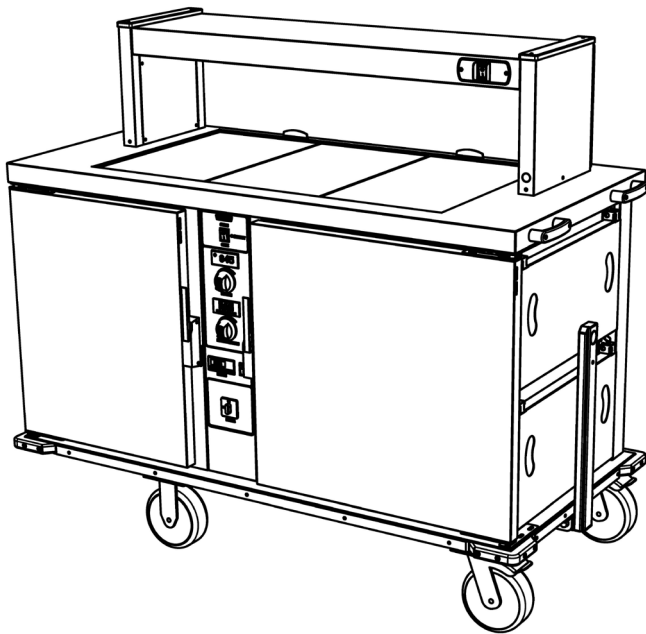
# PRO serve

Education Range

Models:

**P2GGE, P2GRE, P1GE.**

**P2GGENG, P2GRENG, P1GENG**



## Operating & Service Manual





To ensure the best results from this unit please take the time to read and follow all safety, installation and maintenance guidelines carefully before proceeding to install. Keep this manual in a safe place for future consultation.



**Prior to ANY service calls please:** Consult manual for basic fault-finding advice and information required to place the call. Check warranty/maintenance terms and conditions.



These appliances are marked in compliance with the relevant regulations.  
Voltage stated on unit data plate.



**Warning!** Please pay attention to sections of the manual displaying this symbol.



**Warning!** Depending on your unit model, this unit's system may be charged with a flammable refrigerant (R290).

---

**The appliance must only be used for the purpose it was designed for and may become unsafe if used for any other purpose. Operators should be trained. The room where this trolley is used must be dry, clean with temperatures between 16°C and 25°C and with a maximum relative humidity of 60%. This unit is for indoor use only and has an IPX4 rating.**

**Do not install units in draughty conditions where the air movement is greater than 0.2mtr/sec. (e.g. near doors, windows, air conditioning units or fans)  
Should conditions exceed the above, the units may not maintain food temperatures at the required levels. E & R Moffat cannot accept responsibility for the performance of the units being used in extreme conditions.**



**Warning!** Do not attempt to use a hose or water jet to clean this unit. or cleaning instructions, refer to section 9.



**Warning!** The serving display area and heated compartments exceeds 60°C. Care must be taken when loading food.



**Warning!** Do not cover or block any internal or external air vents.



**Warning!** Always switch the unit off when not in use, before moving and before cleaning or maintenance procedures.



**Warning!** Pay particular attention to the method of operation and care required for the proper use of electrical power connections, plugs, and sockets.

# Contents

		Page
1	<b>General electrical safety</b>	<b>4 / 5 / 6</b>
2	<b>Electrical specification</b>	<b>7</b>
3	<b>Installation</b>	<b>8</b>
4	<b>Manoeuvre mobile units</b>	<b>9</b>
5	<b>Operation : Setting oven time and temperature / hot top</b>	<b>10</b>
	<b>Control Panel : model P2GGE</b>	<b>11</b>
	<b>Control Panel : model P2GRE</b>	<b>12</b>
	<b>Control Panel : model P1GE</b>	<b>13</b>
6	<b>Operation Food service</b>	<b>14</b>
7	<b>Food Safety Guide</b>	<b>15</b>
8	<b>Oven Application : Cooking Guidelines</b>	<b>16 / 17 / 18</b>
	<b>Oven Application : Food packs and loading oven</b>	<b>19</b>
	<b>Oven application : Recommended use of the oven</b>	<b>20</b>
	<b>Oven application : Food Regeneration Guide</b>	<b>21</b>
9	<b>Fridge Controls</b>	<b>22 / 23</b>
10	<b>Optional Gantry : Quartz heat lamps</b>	<b>24</b>
11	<b>Optional tray-slide, end shelves and waste bag holder</b>	<b>25 / 26</b>
12	<b>Optional towing system</b>	<b>27 / 28</b>
13	<b>Optional; cassette and transfer dolly system</b>	<b>29 / 30</b>
14	<b>Cleaning</b>	<b>31</b>

# 1: General Electrical Safety

## Electrical Requirements

### Supply Configuration

- All units are configured for either single-phase or three phase supply operation.
- Exceptions to standard specification must be specified or requested before placing an order.

### Purchaser Responsibilities

It is the purchaser responsibility to outline any particular site requirements such as alternative.

- Electrical supply type or Phase requirements
- Cable type and length
- Control requirements Failure to provide this information may result in delays or incorrect configuration.

### Factory Fitted Cables

- Units rated 2.9 kW or less: Supplied with a 2-metre, 13 amp supply cable and plug as standard.
- Units rated above 2.9 kW: Fitted with a suitable commando plug and cable, specified at the time of order.

### Cable Type

- H07RN-F cable is supplied as standard across all units.

### Electrical Load Considerations

- Electrical diversity does not apply. As this is a non-domestic installation, the electrical system must support all appliances and socket-outlets operating simultaneously at full load.

## RCD Protection

To enhance electrical safety, the use of supplementary protection with all appliances is strongly recommended. This includes the use of a Residual Current Device (RCD).

### Why Use an RCD?

- An RCD is designed to reduce the risk of electric shock. While it can greatly reduce the likelihood of injury, it does not eliminate the danger completely. A severe or even fatal electric shock can still occur.
- Therefore, an RCD should be considered a supplementary safety measure, not a substitute for safe installation and use of electrical equipment.

### Where Should the RCD Be Installed?

- Within the main switchboard, providing continuous protection to the entire electrical supply.
- Alternative Options (if installation in the switchboard is not feasible):  
Use an RCD-protected socket outlet. Or use a plug-in RCD adaptor.

### Recommended RCD Settings

- To minimize the risk of electric shock, the RCD should have a tripping current not exceeding 30mA.
- RCDs with higher tripping currents are generally used for fire protection, not personal safety.

# 1: General Electrical Safety

## UK 13 Amp ~230V Plugs – Safety Guideline

Electric plugs may appear simple in structure and wiring, but incorrect use can lead to serious electrical hazards. Occupational accidents caused by improper use of plugs – such as electric shock, burns, fire, or explosions – are not uncommon. These can result in:

- Equipment damage
- Property loss
- Production downtime
- Most seriously, injury or death



To ensure safety, follow these essential guidelines:

### General Safety

- Ensure all plugs meet British Standard BS 1363.
- If in doubt, consult a qualified electrical engineer, technician, or registered electrical worker.

### Usage and Handling

- Do not overload sockets.
- Always switch off power before inserting or removing a plug.
- Do not use plugs that are a loose or slack fit in the socket – this can cause overheating and fire risk.
- Do not splash sockets or plugs with water or other liquids.
- Always handle plugs with care, never pull the plug out by the cable.
- Avoid placing strain on the cable or allowing it to hang unsupported.

Inspection and Maintenance - Regularly inspect the plug, cable, and socket for:

- Cracks or physical damage.
- Signs of overheating (e.g., burn marks or discolouration)
- Loose or damaged connection pins must be straight and firmly attached.
- Plugs and sockets should be clean, free from dirt, oil, or grease and kept dry at all times.

### Best Practice

- Check cables and plugs regularly as part of routine maintenance.
- Ensure that the cable is securely fastened within the plug and that there are no visible wires exposed.
- Inspect the cable for any cuts, or damaged.
- Cables must not be temporarily repaired or re-joined if damaged.
- Replace any damaged plug or cable immediately.
- If the cord is damaged, it must be replaced by the manufacturer, service agent or suitably qualified person.
- Ensure the electrical system is protected by a Residual Current Device (RCD) where appropriate.

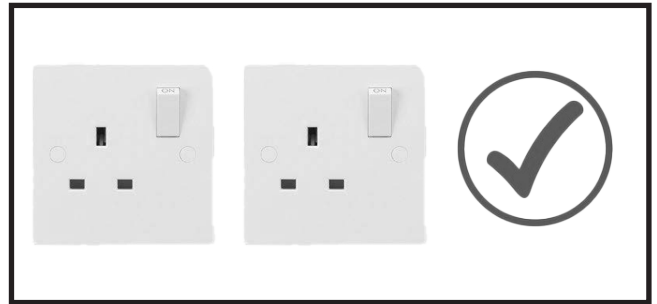
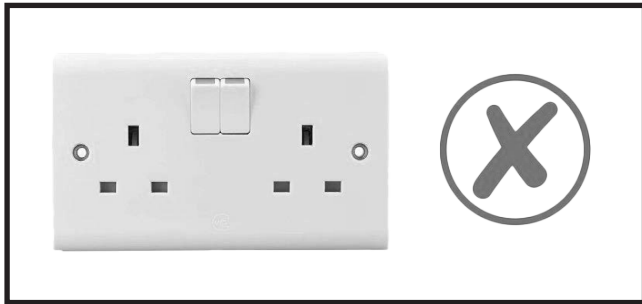


**Warning!** Power cables and plugs on mobile units are frequently damaged when the plugs are left connected to wall sockets while the mobile unit is being moved. This accidental practice poses a significant safety risk and should be emphasized by the duty holder as a potential safety concern.

# 1: General Electrical Safety



**Warning!** Multiple units must not be connected to a double 13amp power socket, each unit should be connected to a separate 13amp power socket. Additionally any Moffat appliances fitted with 2 x 13amp plugs must also be connected to two separate 13amp power sockets. Do not connect two 13amp plugs to a 13amp double socket.



## Power Extensions and Cables – Safety Guidelines

Power extension leads are not recommended. If they must be used, extreme care should be taken to ensure safe operation.

### General Warnings

- Avoid using power extensions whenever possible.
- Never plug more than one appliance into a multi-way adapter or multi-way extension.
- Only use extension leads that were bought ready-assembled by a reputable manufacturer.

### What NOT to Do

- Do not cross walkways or pathways with extension leads – cables may become damaged if stepped on.
- Do not allow the cable to become: Over-taut Over-stretched or Continuously bent.
- Do not allow cables to become tangled.
- Do not use any extension lead longer than 15 metres.
- Do not use leads or connectors that are damaged or improperly insulated.

### Safe Use Guidelines

- Position cables carefully to prevent tripping hazards, cable strain or damage.
- Only use extension leads fitted with properly insulated plugs, and a correctly rated fuse in the plug.
- When using a cable drum extension, always fully unwind the cable to prevent heat build-up and overheating.
- Regular check and Inspect extension leads before each use for cuts, wear, or exposed wires.
- Regular check for signs of overheating.



**A mains cable, type H07RN-F, is supplied conforming to code designation 60245 IEC 57.**

# 2: Electrical Specification



**Warning ! This appliance must be earthed and damaged cables must be replaced by a suitably qualified person!**

	1 Phase Cable	3 Phase Cable
Live (L1)	Brown	Brown
L2	X	Black
L3	X	Grey
Neutral	Blue	Blue
Earth	Yellow & Green (Striped)	Yellow & Green (Striped)

	Rating : Cook mode(kw)	Rating : Serve mode(kw)	Supply Voltage	Amps per phase
<b>P2GGE13</b>	5.4	3.0	230	2 x 13amp 1PH
<b>P2GGE32</b>	5.4	3.0	230	1 x 32amp 1PH
<b>P2GGE163</b>	5.4	3.0	400	1 x 16amp 3PH
<b>P2GGE323</b>	5.4	3.0	400	1 x 32amp 3PH
<b>P2GRE13</b>	2.7	2.5	230	1 x 13amp 1PH
<b>P2GRE32</b>	2.7	2.5	230	1 x 13amp 1PH
<b>P1GRE163</b>	2.7	2.5	400	1 x 16amp 3PH
<b>P1GRE323</b>	2.7	2.5	400	1 x 32amp 3PH
<b>P1GE13</b>	2.7	1.7	230	1 x 13amp 1PH
<b>P2GE16</b>	2.7	1.7	230	1 x 16amp 1PH
<b>P1GE163</b>	2.7	1.7	400	1 x 16amp 3PH
<b>P1GE323</b>	2.7	1.7	400	1 x 32amp 3PH
	<b>Models with no gantry</b>			
<b>P2GGENG13</b>	5.4	2.34	230	2 x 13amp 1PH
<b>P2GGENG32</b>	5.4	2.34	230	1 x 32amp 1PH
<b>P2GGENG163</b>	5.4	2.34	400	1 x 16amp 3PH
<b>P2GGENG323</b>	5.4	2.34	400	1 x 32amp 3PH
<b>P2GRENG13</b>	2.7	1.84	230	1 x 13amp 1PH
<b>P2GRENG32</b>	2.7	1.84	230	1 x 13amp 1PH
<b>P1GRENG163</b>	2.7	1.84	400	1 x 16amp 3PH
<b>P1GRENG323</b>	2.7	1.84	400	1 x 32amp 3PH
<b>P1GENG13</b>	2.7	1.26	230	1 x 13amp 1PH
<b>P2GENG16</b>	2.7	1.26	230	1 x 16amp 1PH
<b>P1GENG163</b>	2.7	1.26	400	1 x 16amp 3PH
<b>P1GENG323</b>	2.7	1.26	400	1 x 32amp 3PH

# 3: General Installation



## Commissioning

- Carefully remove all packaging and plastic coatings from the appliance and dispose in a responsible manner.
- Check for damage. Please note that in compliance with E&R Moffat warrant conditions, any defects must be reported within 3 days of delivery.
- Assemble all parts, shelves and shelf hangers etc.
- Place the appliance in its intended location - on a flat, level surface and apply trolley brakes.
- Always ensure unit is clean before operation.
- Ensure all switches are in the OFF position.
- Connect the mains input plug to the socket outlet.
- Turn on and check the unit is functioning correctly.

## Positioning and Securing the Equipment

- To ensure optimal performance and prevent damage, always maintain the equipment in a vertical orientation.
- When placing in position ensure there is adequate access.
- Ensure that the unit is installed on a flat even surface.
- Before installing, it is recommended that the area is swept clean.
- Once positioned, engage the brakes on mobile units to prevent any unintentional movement.
- Mobile units can simply be butted up together to form a food service line.



### **Warning!** Using the Wheel Brakes on Mobile Appliances

To keep the unit stable after placing it in the desired location, use the brakes.

The brakes are located as part of the wheel arrangement normally two brakes are fitted.

Simply press down on the foot pedal with your foot to simultaneously lock both the wheel and the caster's swivel mechanism. This action prevents the unit from moving in any direction. To release the lock, flip the same pedal up again with your foot, which disengages the brake and allows the caster to rotate freely

Using the wheel brakes helps secure the unit, reducing the risk of accidents or damage.

# 4: Manoeuvring Mobile Units

## Moving the Unit

- **Disconnect power:** Unplug the power cord from the wall socket before moving the unit. This is essential to avoid electrical hazards.
- **Secure the Power Cord:** Properly store or secure the power cord to prevent it from being damaged or becoming a tripping hazard during transport.
- **Avoid Obstacles:** The unit is not designed to be moved over ledges, steps, or other obstacles. Always move the unit over flat, even surfaces.
- **Protect the Power Cord:** Ensure that the wheels do not roll over or come into contact with the power cord. This could damage the cord and create a safety risk.

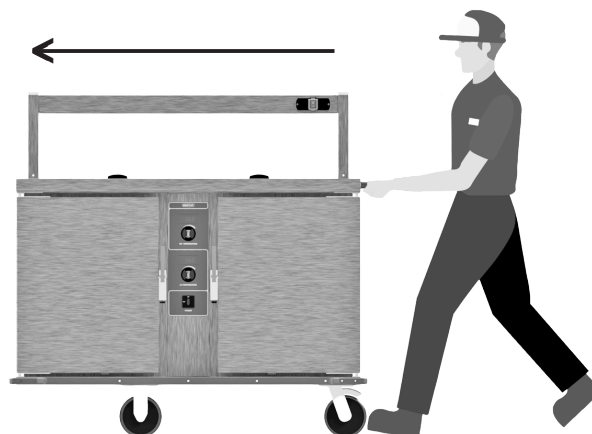
By following these instructions, you can safely and easily move the unit without causing harm to yourself or the equipment.

## Manoeuvring Trolley



**Warning ! Always ensure appliance has been unplugged and cable coiled safely.  
Push the trolley where possible, avoid pulling.  
Avoid collisions, and be vigilant when negotiating lifts and doorways.**

- Higher push forces and neutral body postures are assumed when pushing, as opposed to pulling. Pulling can limit the direction of travel vision, can twist the back and neck and require high forces at the shoulder.
- Pulling increases the risk of foot and ankle injury from the trolley riding up during transfers.
- Proper footwear should be worn.
- To ensure a good grip stand with the legs at shoulder width. Stagger legs to get the trolley in motion.



Model	Push (N) on hard carpet	Maintain (N) on hard carpet	Minimum Area Circle
All P1 Models	60	30	1.6
All P2 Models	80	40	1.6

# 5: Operation : Setting Oven Controls

---



**Warning ! The appliance must be connected to the correct power supply, with the correct rating for the appliance. This information should be found on the data badge on the unit. If in doubt, speak to a qualified electrician.**

**Do not attempt connection to any other power supply which differs from the data badge.**

---

1. Plug in appliance and establish power.
2. Ensure the three way switch is set in the **"standby"** position,
3. Switch the unit on at the isolator / main switch,  
Note: Double oven models have separate controls for each oven left and right,
4. The temperature can be adjusted between 50°C and 200°C.  
Turning the temperature control right will increase the temperature.  
Turning the control left will decrease the temperature.
5. To set the control temperature turn the knob until the preferred temperature setting is displayed, then simply **press** in the control knob and release.
6. The timer can be set to any time limit from infinity to 999min  
Turning the time control right will increase the time setting  
Turning the control left will decrease the time setting.  
  
The control can be turned left until **"inf"** is displayed  
**"inf"** indicates infinity setting (oven is always on)
7. Set the three way switch to the bottom position **"cook"**
8. Depress the Time control knob to set the time and start the countdown.
9. At the end of the cook cycle an audible alarm will sound, and **END** will be displayed.  
To stop the alarm, press and release the time knob.  
To stop the cooking, press and hold the time knob for 3 seconds
10. The food is now ready for service.
11. Set the three way switch to the Top position **"Serve"**  
The oven will automatically switch from cook to keep hot (90°C)  
The heat lamps will illuminate and the Hot top will heat up. Ready for service.

The correct serving temperature is dependent on the food type, and quantity Flat bases dishes are recommended to allow best heat transfer. The Hot Top & Gantry are both controlled by green neon on/off switches.

- Allow 15 minutes to reach serving temperature
- Dishes with 'precooked' food can now be placed on the serving top.
- When serving is complete all switches should be turned off.
- To maintain the life clean regularly with a damp cloth.

# 5: Operation : Food Service

## Neo Ceram Hot Top

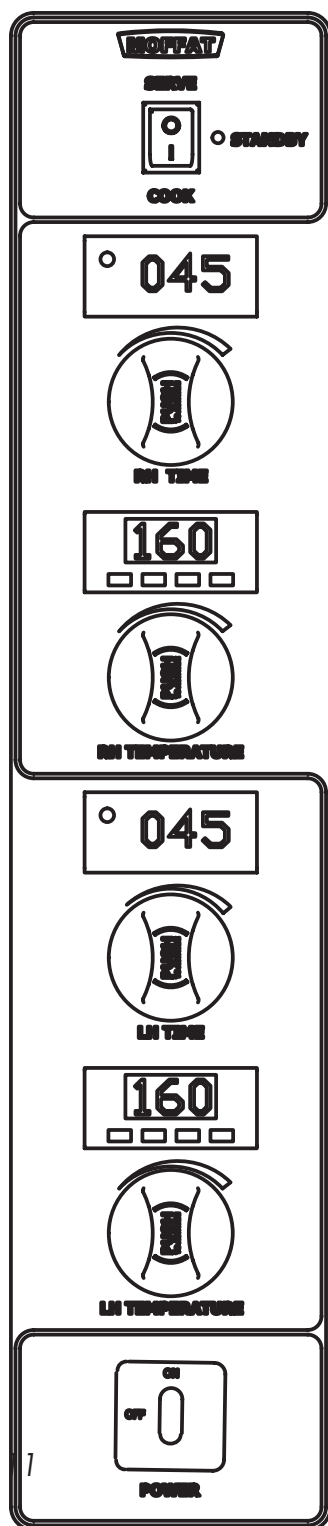
Hot Tops are designed to keep pre-cooked food at serving temperature and are suitable for the display of most types of hot foods. They are fitted with easy to clean Neo-Ceram thermo panels. The self-regulated surface temperature is controlled at around 90°.



**Warning ! Hot Tops are not designed to heat up cold food.**

## 5: Controls

### Control Panel



### Models: P2GGE & P2GGENG

Three way switch

- Top position: Hot Top, Heat Lamps and Oven Keep Hot.
- Middle position: Standby
- Bottom position : Cook

---

Right Hand Oven Countdown Time Display

Right Hand Oven Time Control Knob

Right Hand Oven Temperature Display

Right Hand Oven Temperature Control Knob

---

Left Hand Oven Countdown Time Display

Left Hand Oven Time Control Knob

Left Hand Oven Temperature Display

Left Hand Oven Temperature Control Knob

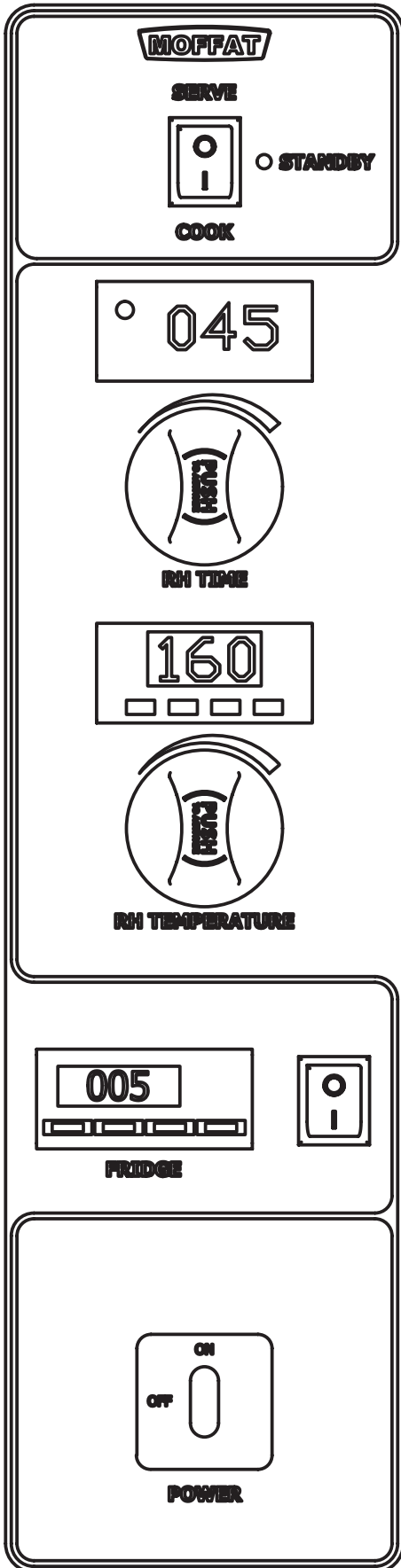
---

Power On / Off Isolator



# 5: Controls

## Control Panel



## Models: P2GRE & P2GRENG

Three way switch

- Top position is Serve: Hot Top, Heat Lamps and Oven Keep Hot.
- Middle position is Standby
- Bottom position is Cook: Oven only on full power

---

Right Hand Oven Countdown Time Display

Right Hand Oven Time Control Knob

Right Hand Oven Temperature Display

Right Hand Oven Temperature Control Knob

---

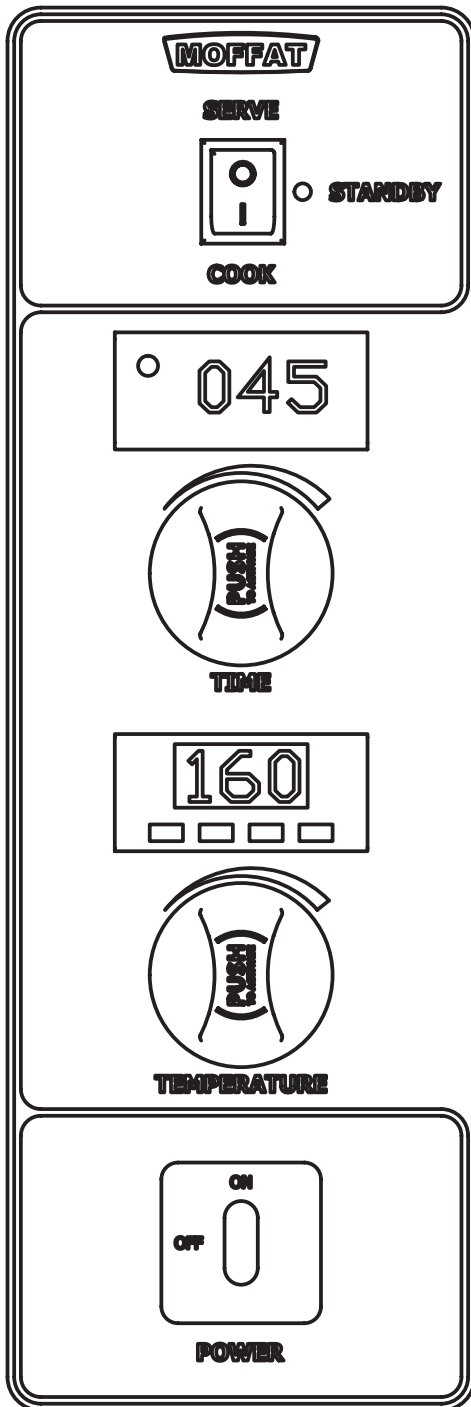
Left Hand Fridge Temperature Display

---

Power On / Off Isolator

# 5: Controls

## Control Panel



## Models: P1GE & P1GENG

Three way switch

- Top position: Hot Top, Heat Lamps and Oven Keep Hot.
- Middle position: Standby
- Bottom position : Cook

---

Oven Countdown Time Display

Oven Time Control Knob

Oven Temperature Display

Oven Temperature Control Knob

---

Power On / Off Isolator



**Warning ! Never reach into the back of the oven. Instead pull the grid to approximately one third of the way out for ease of access to the containers at the back of the oven.**



**These units will remain hot for a long period of time after use**

# 6: Operation : Food Service

## Operating Procedure

- Wheel the trolley to a suitable area ensuring that doors and passageways are not blocked.
- Apply the brakes on the trolley and connect to the power supply and switch the trolley on.
- Ensure the serving functions have been selected.

## Food Service And Temperature Check

### Open The Oven Safely

- Stand to the side and partially open the oven door to allow steam to escape.  
Caution: The inner surface of the oven door will be very hot—avoid direct contact.

### Remove Food Safely

- Wear heat-resistant gloves to remove containers from the oven. Never reach into the back of the oven. Only remove the items required, i.e. one of each product.
- For easier access, pull the oven grid out about one-third of the way to reach containers at the back.

### Prepare For Temperature Checking And Serving

- Place the containers on to the top plate above the oven.
- If fitted (optional) Ensure the temperature probe is connected to the socket on the trolley. Alternatively use a calibrated hand held temperature probe. Sanitize using an antiseptic wipe before use.
- Remove any lids from the containers.  
Remember the products are HOT, open the lid away from you to allow the steam to escape safely.
- Place all hot food products on the top plate.  
Decant any liquids, i.e. custard, soups and gravy, into flasks or jugs. This will help to reduce spillage.
- Cold products can either be served directly from the cold compartment or placed on the lateral shelves.

### Check Food Temperature

- Insert the probe into the centre of the food item. Avoid stretching or straining the probe cable if applicable.
- The food temperature will appear on the display.

### Verify Safe Temperature

- Confirm the food has reached the required reheating temperature: for reheating chilled or frozen.
- If the correct temperature is achieved, the food is ready for service.

### Post-Use Cleaning

- Clean the probe with an antiseptic wipe before storing.
- Turn trolley off – including all oven cycles and options. Disconnect the trolley from the power supply.
- Place all containers and excess food into the oven compartment for safety during transport.

# 7: Food Safety Guide:

## Specific Food Temperature Guide

### Cooking/Reheating:

Raw food must reach a minimum core temperature of 75°C for at least two minutes to kill bacteria. In Scotland, food businesses if reheating, must be raised to a minimum of 82°C.

### Hot Holding:

Once cooked, food must be kept at a minimum temperature of 63°C.

### Chilling:

Perishable foods must be stored at 8°C or below. In Scotland, food must be kept cold at or below 5°C.

### Cooling:

Foods should be cooled as quickly as possible to below 8°C, aiming to achieve this within 90 minutes.

Cooked and chilled foods that are to be eaten cold or at room temperature, should be consumed within 30 minutes of removal from the fridge.

### The Danger Zone:

Food should not be left in the "danger zone" (8°C to 63°C) for extended periods, as this allows harmful bacteria to multiply.

### Cooking Temperatures:

Standard advice is to cook food until it has reached a core temperature of 70°C for 2 minutes.

The other time and temperature combinations are:

60°C for 45 minutes

65°C for 10 minutes

70°C for 2 minutes

75°C for 30 seconds

80°C for 6 seconds

Cooking food at the correct temperature and length of time will ensure that any harmful bacteria are killed.

### Keeping food hot

Hot food when held must be kept at 63°C or above. You can keep it below 63°C for up to two hours. If it has not been used within two hours, you should either:

- Cool the food as quickly as possible to a temperature of 8°C
- Throw it away

### Fresh cooking

Key meats to focus on cooking thoroughly include poultry, pork, and minced meat products. You can use a food thermometer to check the core temperature, but you can also look for visual cues: The food should be steaming hot all the way through. The juices should run clear, not pink or red. For poultry, pork, and minced meats, there should be no pink meat visible in the centre.

### Killing Bacteria:

These temperatures are critical for destroying harmful bacteria that can cause food poisoning.

# 8: Oven Application

These units are basically multi fan convection ovens and can be used in a traditional way to cook fresh food. They are also designed and used extensively for re-heating chilled and frozen bulk food. Depending on food supplied, the info would normally be displayed on the container, cook times and whether the lid should be removed etc.

Prepared Meat & Veg dishes that are pre-cooked but then chilled can be reheated and crisped in the oven.

## **Cook Fresh / Baking / Roasting (Traditional application)**

1. Use the oven pre-heated or cold in a traditional manner for fan assisted ovens  
It is recommended to always pre -heat oven when re-heating frozen food.
2. Set the temperature controller as required.
3. Set the time controller as required.
4. Load the food, evenly spaced into the oven to give a good airflow throughout the oven.
5. Start the cook cycle. Oven will now control temperature for the set number of minutes.
6. At the end of the time, the display will flash end and the internal buzzer will sound. The food is now ready for testing and service.

## **Bake off (Frozen bakery products application)**

1. Pre-heat the oven at the cook temperature for 25 to 30 minutes..
2. Set the temperature controller as required.  
Recommended settings are 200°C.
3. Set the time controller as required.  
Recommended settings are 15 to 30 minutes
4. Lightly grease a baking tray or line with baking paper. Arrange product on the tray, ensuring enough space for even heating. Place the tray in the preheated oven. .
5. Start the cook cycle. Oven will now control temperature for the set number of minutes. Bake for the recommended time until the pastry is puffed up, a deep golden brown, and the filling is piping hot
6. At the end of the time, the display will flash end and the internal buzzer will sound. The food is now ready for testing and service.

### **Benefits of "Bake Off"**

Efficiency:

large quantities can be cooked and held in a semi-finished state before being fully baked for immediate service.

Freshness:

Customers receive a freshly baked product, rather than a product that has been sitting for a long time.

The oven creates a desirable golden-brown crust and perfectly cooked interior, while preserving the moisture.

# 8: Oven Application

## Re-heating pre-cooked chilled food (cook chill application)

1. Use the oven pre-heated or from a cold start.  
Pre-heating allows a shorter cook time.
2. Set the temperature controller as required.  
Recommended settings are 140°C to 160°C depending on food load and density.
3. Set the time controller as required.  
Recommended settings are 60 to 70 minutes depending on food load and density.
4. Load the food, evenly spaced into the oven to give a good airflow throughout the oven.
5. Start the cook cycle. Oven will now control temperature for the set number of minutes.
6. At the end of the time, the display will flash end and the internal buzzer will sound. The food is now ready for testing and service.

## Re-heating pre-cooked frozen food (cook freeze application)

1. Pre-heat the oven at the cook temperature for 20 minutes.
2. Set the temperature controller as required.  
Recommended settings are 170°C to 190°C depending on food load and density.
3. Set the time controller as required.  
Recommended settings are 90 to 100 minutes depending on food load and density.
4. Load the food, evenly spaced into the oven to give a good airflow throughout the oven.
5. Start the cook cycle. Oven will now control temperature for the set number of minutes.
6. At the end of the time, the display will flash end and the internal buzzer will sound. The food is now ready for testing and service.

## Examples of Pre-done Foods to Bake Off

Frozen or Chilled Pastries:

Many desserts, like croissants or pies, are partially or fully prepared and then frozen. A bake-off process finishes them to golden-brown perfection.

Breads:

Bread dough can be formed and proofed, then baked off at the last minute, so you can serve warm, fresh bread.

# 8: Oven Application

## Roasting Cooking Method

Roasting is dry-heat cooking in which you use an oven at high temperatures, typically between 150°C to 200°C). The steps include preheating the oven, seasoning the food, placing it on a roasting rack in a roasting pan, and cooking until the desired results. Foods best suited for roasting include whole poultry, vegetables like potatoes and carrots, and fruits like apples for desserts.

## Baking Cooking Method

Baking is a preferable process of preparing food utilising controlled heat in an oven. Typically, the oven is pre-heated before baking begins; prepare baking dishes and pans; one mixes ingredients well enough before putting them into the oven along with the ready batter or raw food; afterwards, you let it bake until fully cooked.

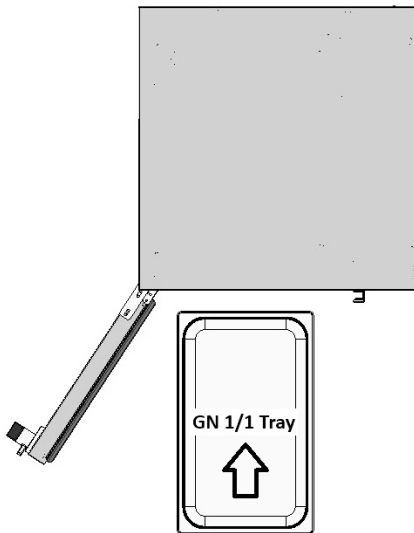
## Oven Configuration

These models have the oven in a Portrait configuration.

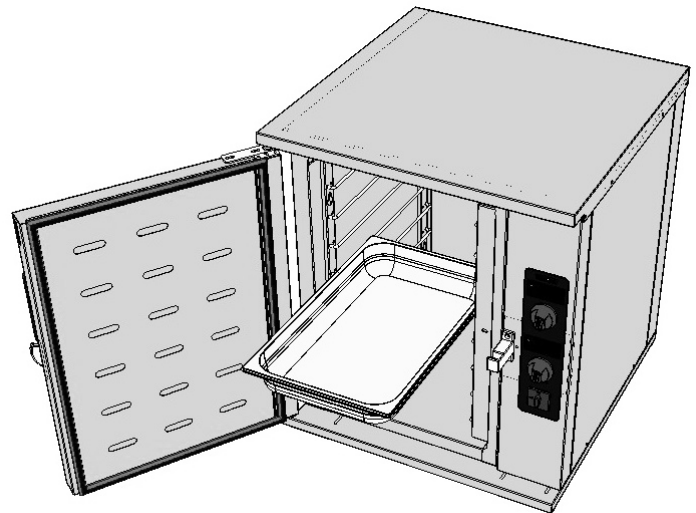
Other Moffat ranges have the oven set in a landscape orientation.

---

### Portrait Orientation

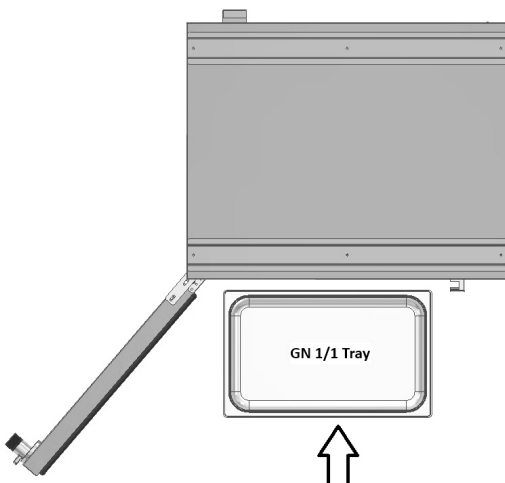


Fits Oven in a Portrait configuration

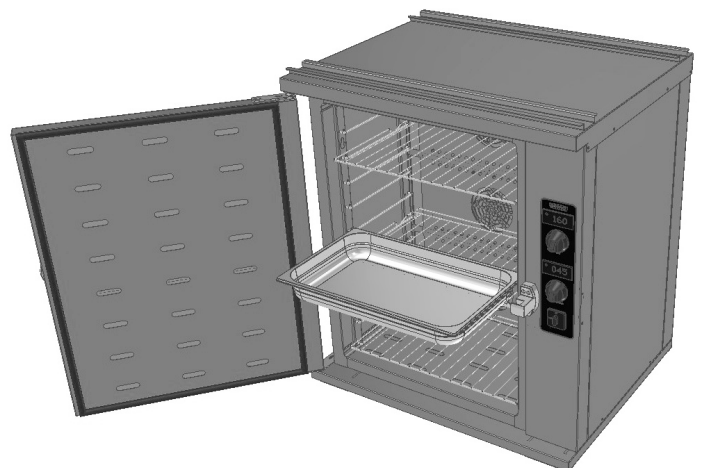


---

### Landscape Orientation



Fits Oven In a Landscape configuration



# 8: Oven Application

## Using Gastronorm Pans or Pre-cooked and filled Foil or Plastic Food Containers

### Tempering Frozen Foods:

Whenever possible, allow frozen food to temper before cooking or regeneration. This can be done by placing the items on the top plate while organizing the food for loading into the oven.

Tempering involves raising the temperature of frozen meat or fish to a semi-frozen state—just below 0°C. This process significantly reduces overall cooking or regeneration time.

### Pan Selection and Preparation

Use shallow pans to ensure even and efficient heating.

For soups and cereals, use 100 mm deep pans, but only fill them to a depth of 50 mm to allow for better heat distribution.

Always spray pans with pure vegetable cooking spray to prevent sticking and aid in clean-up. Place only the established number of portions per pan

<b>PAN SIZE</b>	<b>PORTIONS</b>
Full size (GN 1/1)	15 large or 30 small
Half size (GN 1/2)	7 large or 15 small
Third size (GN 1/3)	5 large or 10 small
Quarter size (GN 1/4)	4 large or 8 small

Spread the food evenly in the pan and ensure food is moist.

Cover pans, except the ones that require browning or crisping. Double check lid on or lid off !!

If using aluminium foil, ensure that it is not perforated. Wrap tightly under the edges of the pans.

If using stainless steel lids, ensure that they fit tightly.

If applicable label the pans as directed.

### Loading Instructions

Ensure the vehicle is secure:

- Engage the brakes.
- Confirm the refrigeration unit is operating correctly.

Food preparation checklist:

- Verify all required food items are present.
- Ensure all pans that require lids are properly covered.
- Inspect aluminium foil coverings — replace any that are torn or damaged.

Oven loading guidelines:

- Only place food that needs to be cooked or reheated into the ovens.
- Close oven doors firmly.
- Do not reopen the oven doors during the cooking cycle, especially when regenerating frozen food.

# 8: Oven Application

## Recommended use of the oven



Some plastic food packs / trays can melt in temperatures above 140°C. When using this type of container, the cook temperatures must not be set above 140°C, additionally a longer cook time should be allowed to compensate for the lower cook temp, approximately 10 minutes should be added to the standard time.



Recommended that the top zone is used if reduced load is required. Avoid using lower shelves when possible.

Food types can be grouped into three categories: high density, medium density, and low density.

High-density foods generally take much longer to reheat than low-density foods. Reheating time depends on several factors, including the specific type of food, its composition (particularly water and fat content), initial temperature, shape, size, and the reheating method used.

However, when comparing foods of the same mass, high-density foods typically require significantly more time to reheat than low-density foods—often more than double the reheating time. Medium-density foods fall between these two extremes, usually taking around one-third longer to reheat than low-density foods.

### High density types

Main Entrées Roast meats chipped and jacket potatoes,  
Battered fish,  
Starches (potatoes, rice)  
French fries, mashed potatoes, home fries, potato wedges and hash browns.

### Medium density types

Soups gravy & sauces. Sausages,  
Breaded chicken, meatballs.  
Small portions, small servings, finger foods, mini fillets, slices, etc.  
Scrambled eggs, soups.

### low density types

Puree foods. Omelettes,  
Hot Desserts.  
Vegetables: carrots, green beans, mixed vegetables, etc.

Chilled Food  
Suggested time 60-70 minutes.  
@ 140°C to 160°C

Frozen Food  
Suggested time 90-100 minutes.  
@ 170°C to 190°C

# 8: Regeneration Guide

## Tips for Proper Food Regeneration

Larger portions are best place in the top half smaller portions in the power half of the oven.

- **Avoid Sudden High Temperatures**  
Avoid exposing food to sudden temperature spikes above 75 °C, as this can overcook or burn it, compromising its original taste and texture. Always respect the cold chain to preserve the food's sensory qualities.
- **Check Core Temperature**  
Always use a probe thermometer to monitor the internal temperature of food. Even if the outside appears ready, the inside might still be cold.
- **Maintain Proper Humidity Levels**  
The right level of humidity helps preserve moisture and texture during regeneration. This is essential for preventing food from drying out.
- **Balance Temperature and Time**  
Regeneration should be a controlled process. Most dishes require lids on to maintain moisture, remove the lids of fried types or product that requires gratination or a crisp finish.
- **Plan Ahead**  
Aim to achieve regeneration time within two hours if possible to avoid deterioration in quality.  
Schedule early enough to allow food to rest at serving temperature without cooling down. "Keep hot mode".

## Recommended use of the oven

<b>High density types</b>	Lasagne's and Macaroni. Tuna bakes and fish pies. Cottage and Shepherds Pies. Battered fish. Jacket Potatoes. French fries, Sautéed potatoes Baked Pasta and Bolognese dishes.	Lid off Lid off Lid off Lid off Lid off Lid off Lid on	Place in a shallow tray Place in a shallow tray Place in a shallow tray
<b>Medium density types</b>	Braised meats and Sausages in Gravy dishes. Casseroles and Meat balls. Chilli, Curries & Korma's. Meatloaf and Stuffing's. Roast, Sauté & Chipped potatoes. Rice. Mashed Potatoes.  Sauces and Gravies. Broths, Cream and Noodles, type Soups.	Lid on Lid on Lid on Lid on Lid on Lid on Lid on  Lid on Lid on	
<b>low density types</b>	Omelettes Mixed Veg, Carrots. Peas, and Green beans. Sprouts, Broccoli. Turnip, Squash. Corn, Cauliflower, Beets.	Lid on Lid on Lid on Lid on	Ensure moisture is present Ensure moisture is present Ensure moisture is present Ensure moisture is present

# 9: Fridge Models: P2GRE & P2GRENG

Refrigerated units designed to keep pre-chilled food at a regulated serving temperature and are suitable for the holding and transporting most types of cold food.

Designed to provide a chilled condition maintaining a safe and compliant temperature within.

Being a mobile chilled compartment designed for daily service, It must be cleaned and any condensate manually wiped out after each service, there are no unhygienic drip trays or need for on-site drainage connections.



**Warning ! The controlled air temperature is factory set to operate between 2°C and 5°C.  
Product should already be 5° or below before loaded into the display  
These units are not designed to chill down hot food**



The Display unit is controlled by a green neon on/off switch and a digital control.

- Connect power and switch on at mains socket.
- Switch isolator switch on.
- Digital illuminates and controls the display temperature.
- Allow 30 mins for the display too cool down before loading product.
- The controlled air temperature is factory set to operate between 2° and 5°
- Defrost is factory set to operate automatically when required
- When serving is complete all switches should be turned off.



**Warning ! Refrigerated cupboards are design for daily short period use.  
Holding food chilled when being transported to a hospital ward and served.**

**Condensation builds up inside during and especially after service when the trolley is switched off.**

**Any water pooled in the base of the cupboard after services should be wiped up before moving or traveling back to the kitchen, and checked and wiped clean again before the next service.**

**If this is not followed methodically water could spill out onto corridor floors during transport causing a slip hazard.**

# 9: Fridge Models: P2GRE & P2GRENG



To ensure the satisfactory operation and optimum efficiency of this unit, it is imperative that the ambient room conditions where the units are being used do not exceed a room temperature of 25°C or exceed a relative room humidity of 60%.

Should conditions exceed the above, the display units may not maintain food temperatures at the required levels. E & R Moffat cannot accept responsibility for the performance of the units being used in extreme conditions.



Do not install units where there is high radiated heat, e.g. direct sunlight, room heaters, or bright spot lights. Do not install units in draughty conditions where the air movement is greater than 0.2mtr/sec. (e.g. near doors, windows, air conditioning units or fans]

**NOTE: Model P2GRE and P2GRENG includes a built-in power sharing system.**

During Cooking:

- Power to the serving top hot plates and gantry lights (if fitted) is disabled.
- The gantry and hot top are only operational when the control switch is set to the Service position.
- Power is intelligently shared between the oven and fridge, automatically adjusting based on demand.

Fridge Operation:

- Switch on the fridge compartment at least 30 minutes before cooking to allow for proper pre-chilling.
- This pre-chill period ensures the fridge reaches the correct temperature before food is loaded.
- Keep the fridge door closed as much as possible during operation to maintain temperature efficiency.

# 10: Models With A Gantry

## Quartz Lamp Replacement



Ensure appliance is disconnected from mains before servicing.

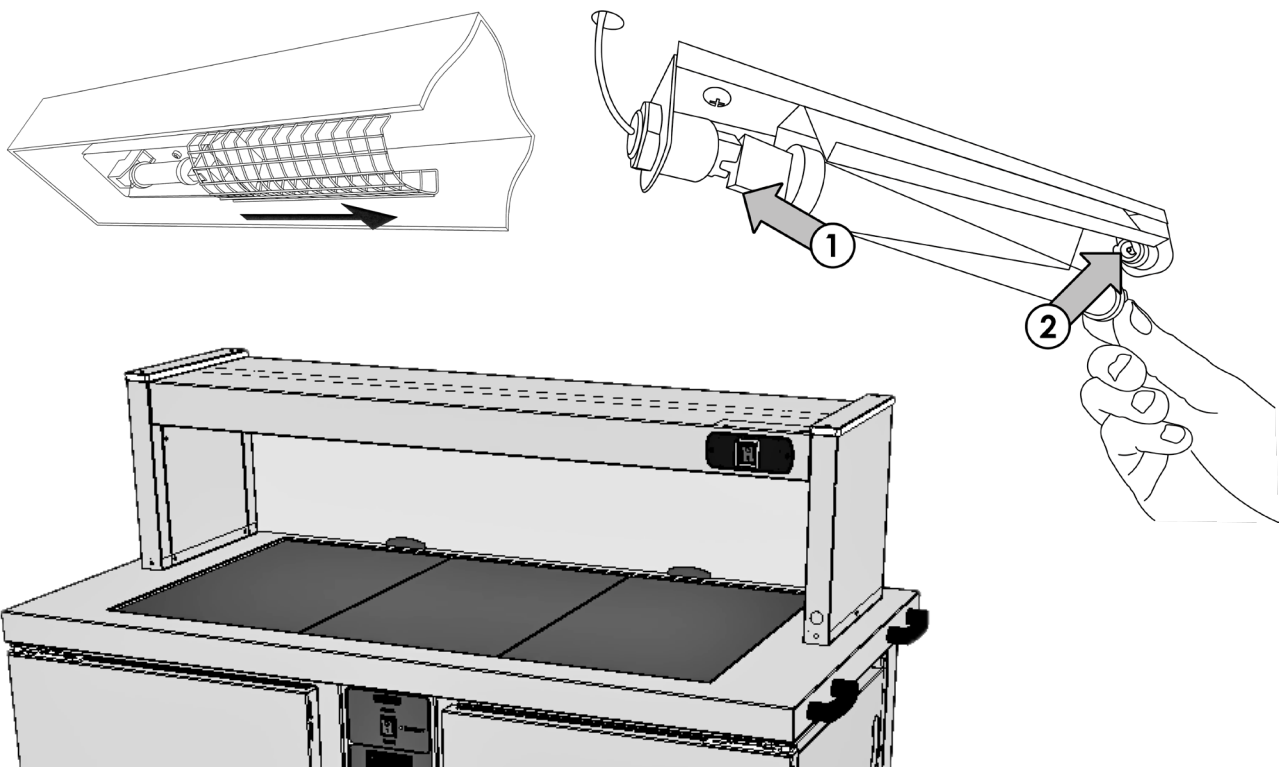
Lamps should not be touched with bare hands, as this may cause premature failure. If lamp is touched, wipe clean with a cloth and alcohol prior to use.

Replacement quartz lamps must never exceed the loading specified.

Wear safety glasses. Don't touch hot halogen bulbs.

Only use replacement bulbs that match the wattage and design of the fixture.

1. Isolate appliance from power supply and allow cooling down before commencing lamp replacement.
2. Carefully slide mesh guard to one side until it clears the bulb area.
3. Remove faulty lamp by pushing to one side then pull down. Hold the insulated end of the new lamp (Any end).
4. At a slight angle, slot the end of the new lamp into one of the Housing
5. Push against the sprung contact & hold it there.
6. Raise the opposite end of the lamp into the other end of the Lamp.



# 11: Optional Tray-slide & End Shelves

## Folding Tray-slide & End Shelves

Please ensure care is taken when operating the tray-slide and end shelves. Please lift / lower using the hand grab cut outs provided and take care not trap the mains cable.

Tray-slide and end shelves should always be lowered when moving the trolley.

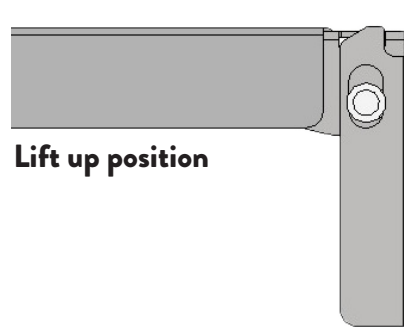
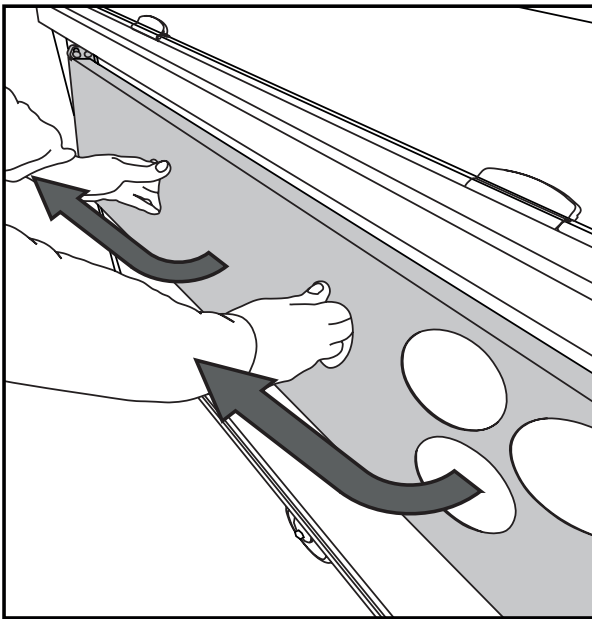
### Lift & Lock

#### To lift up in to position:

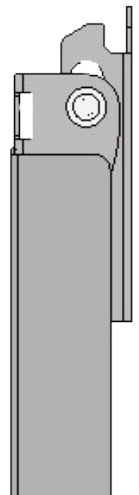
Simply swing outwards and upwards allowing the hinge system to fall and lock into position.

#### To fold down:

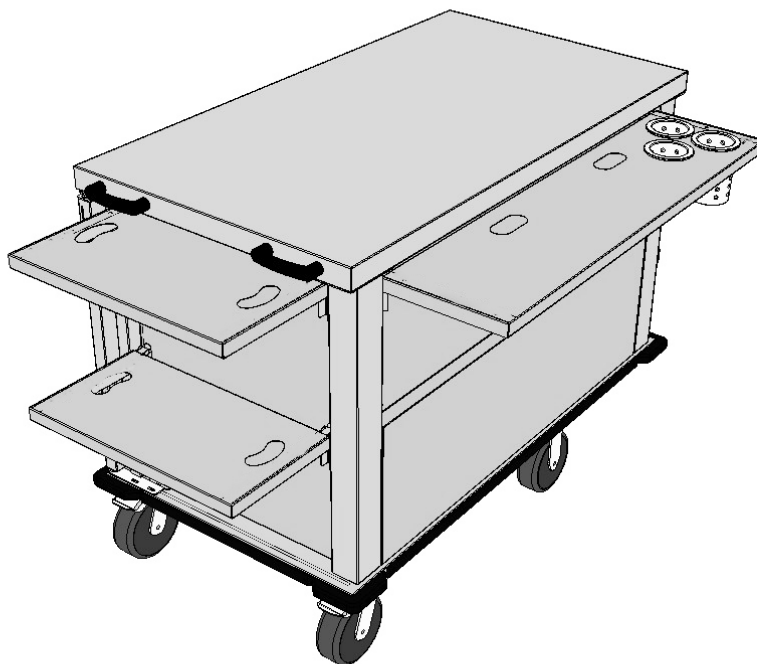
Lift upwards and outwards slightly and gently lower into the folded down position.



**Lift & Lock**



**Fold down position**



# 11: Optional Flip Up Waste Bag Holder

## Fold away waste bag holder

The fold away optional waste bag holder is lifted up into position in the same way the standard end shelves lock into place.

A flip up frame holds the waste bag in place.

## Lift & Lock

### To lift up in to position:

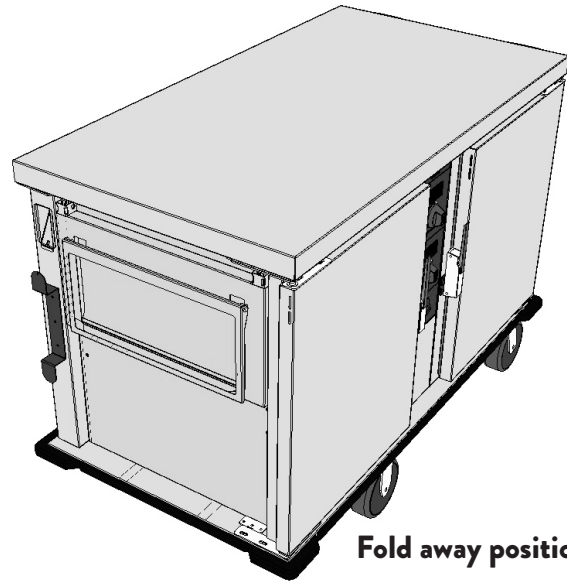
Simply swing outwards and upwards allowing the hinge system to fall and lock into position.

### To fold down:

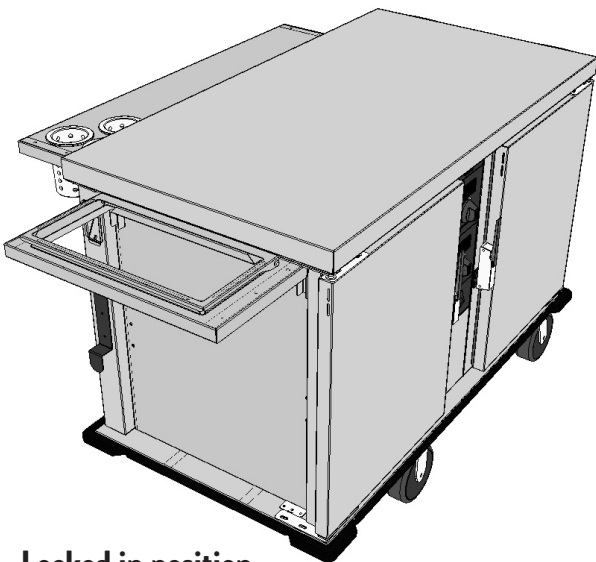
Lift upwards and outwards slightly and gently lower into the folded down position

## Waste Bag

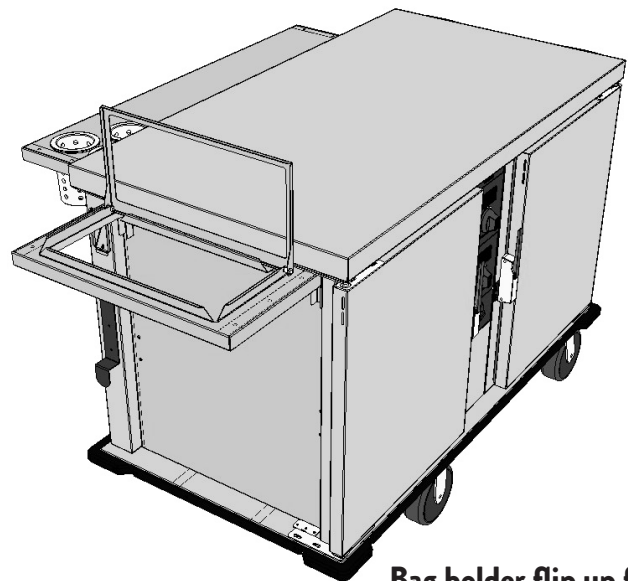
Flip up the top frame and fit waste bag around the aperture, fold down top frame to hold bag in place.



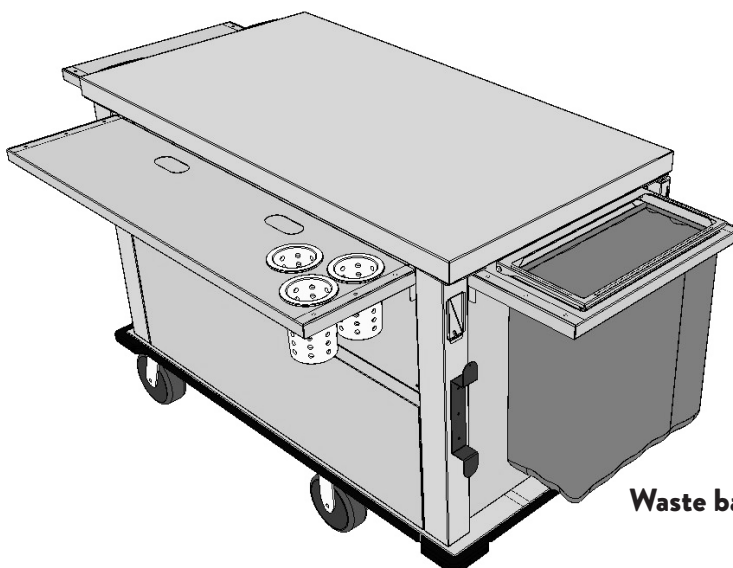
Fold away position



Locked in position



Bag holder flip up frame



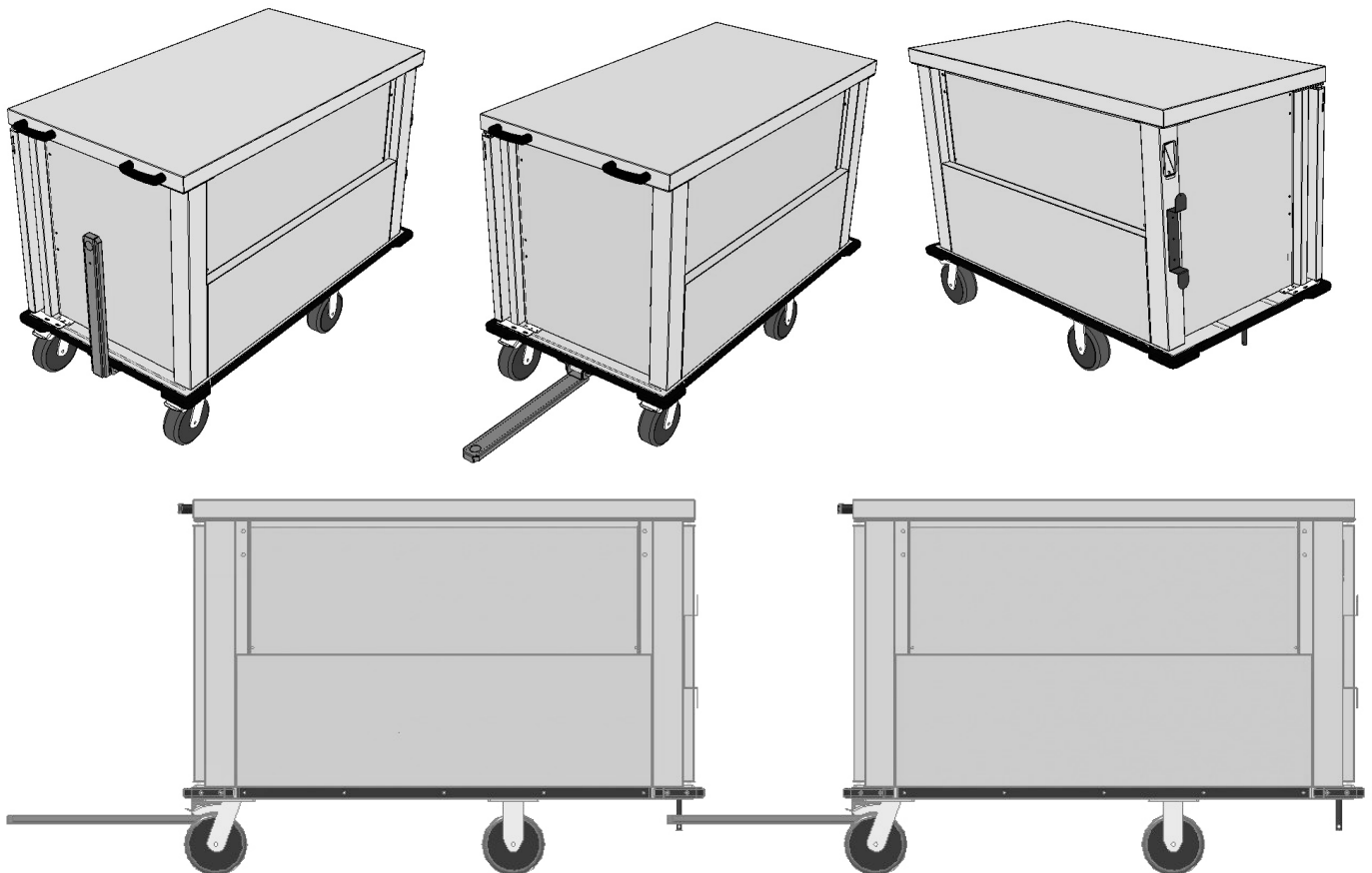
Waste bag in position

# 12: Optional Towing Attachments

## Trolley and Cassette Dolly Towing Instructions

Trolleys can be equipped with a tow bar. The towing attachment is designed for use with a towing hitch and allows for towing up to two trolleys at a time, at a maximum speed of 7 km/h (4 mph).

The optional cassette transfer module dolly can also be fitted with a tow bar. Its towing attachment is designed for use with a towing hitch pin and allows for towing up to four trolleys or dollies at a time, also at a maximum speed of 7 km/h (4 mph).



The optional cassette system transfer dolly can also be configured for towing.

It shares the same design as the main food trolley system.

Up to **four** cassette transfer dollies may be towed simultaneously, at a maximum speed of 7 km/h (4 mph).



**Warning !** Never tow more than **Two** Trolleys or **Four** cassette Dollies at a time.

Never tow more than 2 Dollies manually.

Only tow Trolleys using a power driven tow truck or hand tug.

### Towing Safety Guidelines

- Take extra care in areas with patients or pedestrians.
- Check the floor is flat and even.
- Ensure doors are securely closed and loose or unsecured items have been removed from the top.
- The power cable must be properly stored to avoid snagged during transport.
- Double check towing arm is correctly positioned and secured and the safety pin is in place.
- Slow down when turning corners or moving on inclines.

# 12: Optional Towing Attachments

## Coupling Procedure

Prepare the Trolley:

- Ensure the folding tray-slide and end shelves are in the down position.
- Remove any loose items from the trolley.
- Confirm all doors are properly closed and the power cable is securely stored.

Check Environment:

- Ensure the floor is flat and even.
- Release the brakes on the trolley castors.

Connect to Towing Hitch:

- Align the front of the trolley with the rear of the towing hitch.
- Carefully lower the tow arm ring onto the towing pin of the hitch.
- Secure the safety pin on the towing hitch.

Connecting a Second Trolley (if required):

- Align the front of the second trolley with the rear of the first.
- Gently push the second trolley forward and connect its tow arm ring to the rear towing pin of the first trolley.
- Insert the safety pin to secure the connection.

Note: The spring mechanism holds the tow bar up against the hitch during travel.

## Uncoupling Procedure

Ensure a Safe Environment:

- If there is more than one trolley always commence from the last one being towed
- Make sure the floor is flat and even.

Disconnect the Tow Bar:

- Remove the safety pin from the connection.
- Press down on the tow bar and gently roll the second trolley backwards.
- Allow the tow bar to spring up into its resting position.

Uncouple a second Trolley:

- Repeat the above process to uncouple the next trolley in line.



### Warning!

Do Not:

- Tow more than two trolleys at one time.
- Uncouple trolleys on uneven floors or inclines.
- Exceed the maximum speed of 7 km/h (4 mph).
- Tow the trolley outdoors or over rough/uneven surfaces, including expansion joints.

# 13: Optional Cassette & Transfer Dollies

The Dolly Transfer System is an innovative solution for decentralized food service. Prepared meals are loaded onto racks with integrated transfer dollies in the kitchen, stored in a cold room, and transported with insulated covers for distribution. This streamlined process enables pre-loading, efficient transport, and direct delivery to service points—enhancing operational flexibility while reducing labour and maintenance costs.

## How It Works

1. Preparation:  
Meals are prepared in the kitchen and loaded onto specialized food service racks.
2. Loading & Insulation:  
The racks are placed onto mobile transfer dollies and fitted with insulated covers to maintain temperature

**Caution:** The cassette must be loaded in the correct orientation, where the rear of the cassette is facing the rear of the oven or fridge allowing the shelves to be pulled out and accessed later at food serve point.

3. Transport:  
The transfer dollies are moved to each ward’s satellite kitchen or designated food service point.
4. Service:  
At the point of service, the racks are transferred directly from the dollies into the Transport trolley oven and refrigerator units for reheating or chilled holding, ready for meal distribution.

### MODEL - V3D

**Two portrait cassettes for double oven trolleys.  
Insulated cover shown on one of the cassettes.**



### MODEL - V4D

**One Portrait cassette for fridge shown with an insulated cover  
One landscape cassette for oven shown without the cover**

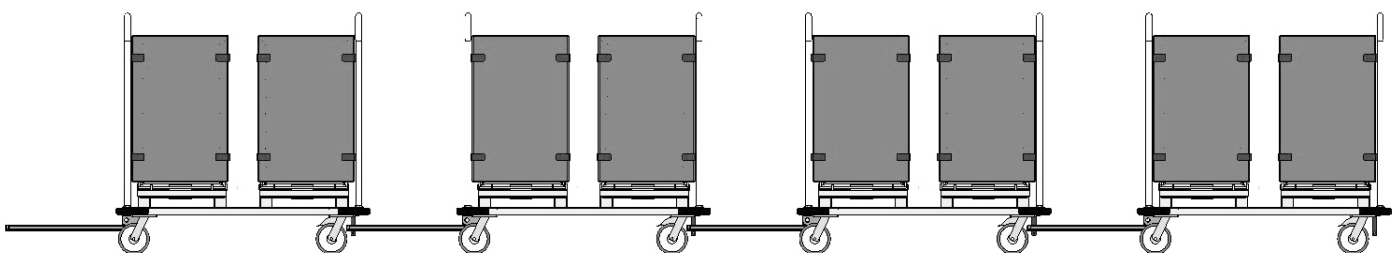


# 13: Optional Cassette & Transfer Dollies

Transferring the Cassette to the main food service trolley

1. Secure the main food service trolley Trolley:  
Apply the brakes on the main food service trolley before loading the cassette.
2. Open the Compartment:  
Fully open and fold back the door of the oven or fridge compartment.
3. Align the Dolly:  
Push the dolly into position, aligning it precisely with the open compartment. Double-check that the cassette is properly aligned with the chamber. Apply the brakes on the dolly's casters.
4. Release the Cassette:  
Press the foot pedal to unlock the cassette from the dolly. And carefully push the cassette module towards the chamber.
5. Take an ergonomic stance: bend your knees, keep your arms at a 90° angle, and place your hands on each side of the cassette.
6. Transfer the Cassette  
Gently push the cassette fully into the oven or fridge chamber.
7. Remove the Dolly  
Release the brakes on the dolly and slowly pull it away from the trolley.  
Important: Do not use your hands to release the brakes—always use the pedal.
8. Close the Door  
Close the door firmly, pressing in the middle near the handle. Do not pull the door closed using the handle.

Repeat the same procedure for the second cassette.



**Warning !** Never tow more than **four** cassette dollies at a time.

# 14: Cleaning

Food oven and display models should be emptied and cleaned on a daily basis. It is essential that only trained personnel, who are suitable for carrying out cleaning procedures, perform these tasks.



**Prior to cleaning the unit, please ensure that it is disconnected from the electric supply and allowed to cool down. Additionally, remove all food and packaging from the unit.**

1. Disconnect from mains and wait until appliance has cooled.
2. Wipe clean using hot, soapy water and soft, non-abrasive cloth. Ensure that the stainless steel is wiped in straight strokes following the grain of the material.
3. After wiping the surface, make sure to dry it thoroughly using a clean cloth. Avoid using scouring pads or any abrasive cleaners. For a more thorough cleaning, remove any accessories to access the internal areas. After cleaning, ensure that all fixings are properly replaced.
4. Chilled sections should be wiped clean after each service.
5. Finish by carefully drying with a soft dry cloth or Kitchen Towels.



**Do not use a water jet or pressure spray to clean this appliance.**

**Do not use scouring pads or abrasive cleaners of any type.**

**Do not use Solvents, bleach, Caustic Cleaners or biological powders on any surface.**

**It is important to prevent excess water from pooling on the glass shelf base.**



Special care should be exercised when working around electrical parts, and excessive use of water should be avoided.



**E&R Moffat Ltd cannot assume responsibility for any malfunctions or damages that may occur if the aforementioned cleaning procedures are not followed diligently. It is crucial to adhere to these cleaning procedures to ensure the proper functioning and longevity of the equipment.**

**Thank you for choosing  
E&R Moffat!**

