

turbofan[®]

Turbofan Convection Oven

30 Series

E33D5

Installation Manual



When indicated
on the product

June 2024
249552-1
Version 2.0



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General information

The drawings and diagrams in this manual are representative only and not to scale. They supplement the written instructions and specifications that they refer to.

Copyright

❗ IMPORTANT

The reproduction or copying of any part of this manual by any means whatsoever is strictly forbidden unless authorised previously in writing by Moffat Limited.

Warranty requirements

❗ IMPORTANT

Installations must be carried out by a certified or licensed service person only. Failure to comply will void any written or implied warranty.

❗ IMPORTANT

Unauthorised alterations to the oven may void warranties and approvals.

Intended use and restrictions

❗ IMPORTANT

This appliance is designed and engineered for commercial use only. It is not intended to be used in residential, outdoor, or marine environments.

- This oven must not be used by minors or adults with limited physical, sensory, or mental abilities.
- This oven must only be used by operators who are adequately trained in the purpose, limitations, and hazards of its operation. To avoid the risk of accidents or damage, operators should be regularly trained.

Product disposal



This symbol on the oven indicates that this oven should not be treated as domestic or regular commercial waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and human health. For further information on the recycling of this oven, contact your local city office or your waste disposal service.

- ☑ The oven is built with common electrical, electromechanical, and electronic parts. No batteries are used.
- ☑ The owner and operator are responsible for the proper and safe disposal of the oven.

Safety information

Read the safety messages in this manual and follow the instructions carefully. Review them frequently.

Safety messages cannot cover every potential cause of injury or equipment damage but can highlight common causes of hazards. Read and understand all instructions in this manual prior to installing or servicing the oven and seek advice before operating the oven in a manner other than that described in this manual. Consult your authorised service technician before performing maintenance.

- Ensure that you and all operators of this appliance understand every safety message.
- Know and observe all safety rules that may apply to your work situation and your work site.
- Replace the user manuals and safety labels immediately if they are missing or damaged.

Recognize safety information



Safety alert symbol.

When you see this symbol in the manual or on the oven, pay special attention to the instructions.



Read the instructions before using the oven.



Risk of electric shock.



Risk of burns—hot surface.



Equipotential bonding terminal—must be connected to equipotential bonding system.



Risk of burns—hot liquid products above height level.

This manual uses the following safety symbols to indicate the level of caution required when using the oven.

⚠ DANGER

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information considered important, but not hazard-related (for example, messages relating to property damage).

General safety

⚠ WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operation, and maintenance instructions thoroughly before installing or servicing this oven.

⚠ DANGER

Fire hazard. Do not use gasoline or other flammable substances in the vicinity of this oven. Do not spray aerosols in the vicinity of this oven while it is in operation.

⚠ WARNING

Fire hazard. The oven operator shall take great care to use the oven safely and guard against risk of fire. The oven must not be left unattended during use.

NOTICE

The oven shall be regularly inspected by a competent service person to ensure that it is in safe and correct order for operation.

Product registration

Protect your original manufacturer's warranty, register online:

Warranty

Moffat warrants all equipment supplied by Moffat against defects in material and workmanship for a period of 12 months from the date of purchase.

Conditions

This warranty is subject to the following conditions:

- The warranty period is not renewed or extended as a result of a warranty repair or replacement.
- The warranty is not transferable and is only offered to the original buyer.
- The warranty does not extend to any products that have been completely or partially disassembled or that have had unauthorized alterations and modifications made to the product, including missing parts.
- The warranty terms cannot be amended except in writing by an authorised representative of Moffat.
- The warranty is only applied to products purchased from Moffat or an authorized Moffat distributor.

- Any warranty claim must meet the requirements set out below. See in How to make a warranty claim for more information.
- Warranty work must be performed by Moffat or by a Moffat authorised service provider.

This warranty does not cover normal or scheduled maintenance of the product, nor does it cover the replacement of consumable items such as glass, ceramics, globes, seals, belts, water filters, and fuses or the resetting of the safety devices such as circuit breakers and clearing of drains.

Exclusions

This warranty will not apply to a defect or fault to the extent to which it arises from:

- Improper installation or commissioning of the product.
- Operation, use or maintenance of the product otherwise than in accordance with the instructions provided by Moffat.
- Use of chemicals other than those recommended by Moffat.
- Accidental damage, misuse, negligence or any other failure to take reasonable care.
- Use of the product for a purpose or in environmental conditions outside those specified by Moffat.
- Damage caused through blocked drains and the clearance of blockages.
- Damage caused by and clearance of blockages to pilots, injectors and burners.
- Damage arising from corrosion and/or lime scale.
- Parts or items not supplied by Moffat or a Moffat authorised service provider.
- Damage caused by rodents or insects.

How to make a warranty claim

If a product fails within the warranty period, immediately stop using the product and store in a safe, dry environment and contact Moffat as soon as possible. To make a claim under this warranty, contact Moffat during the warranty period by telephone. Alternatively, a warranty claim may be submitted in writing to the customer care address specified in this manual. See Moffat Customer Care for more information.

Moffat warranty fulfillment

For all valid claims under this warranty, Moffat will, at its option: (i) repair the product; (ii) replace the product with a product this is at least equivalent to the original product in function and quality; or (iii) refund the purchase price. When a product or component is replaced or refunded, any replaced item becomes Moffat's property.

Before providing any warranty service, Moffat may require provision of proof of purchase or require responses to questions designed to assist with diagnosing potential faults. All requests must be responded to promptly at the buyer's expense.

Moffat will require the buyer to provide the buyer's credit card details before providing any warranty service. The buyer authorizes Moffat to charge the buyer's credit card for:

- the cost of repairs carried out by Moffat (including labor costs and the costs of parts) which are not covered by this warranty (including where the exclusions listed above are applicable) or not required to be carried out pursuant to the Consumer Guarantees Act 1993 (if applicable); and
- the additional fees payable by the buyer under this warranty, as set out below. See Costs of obtaining warranty service below.

Costs of obtaining warranty service

Additional fees will be payable for:

- Service outside the normal working hours or on public holidays.
- Service outside Moffat's service area (that is, for distances that are greater than a 200 km round trip from Moffat service center or Moffat Nominated Service Provider).
- Additional costs of the warranty repair such as accommodation, cost of transport (such as, flights, ferries, and so on), site inductions, and freight.
- Poor access and waiting time.

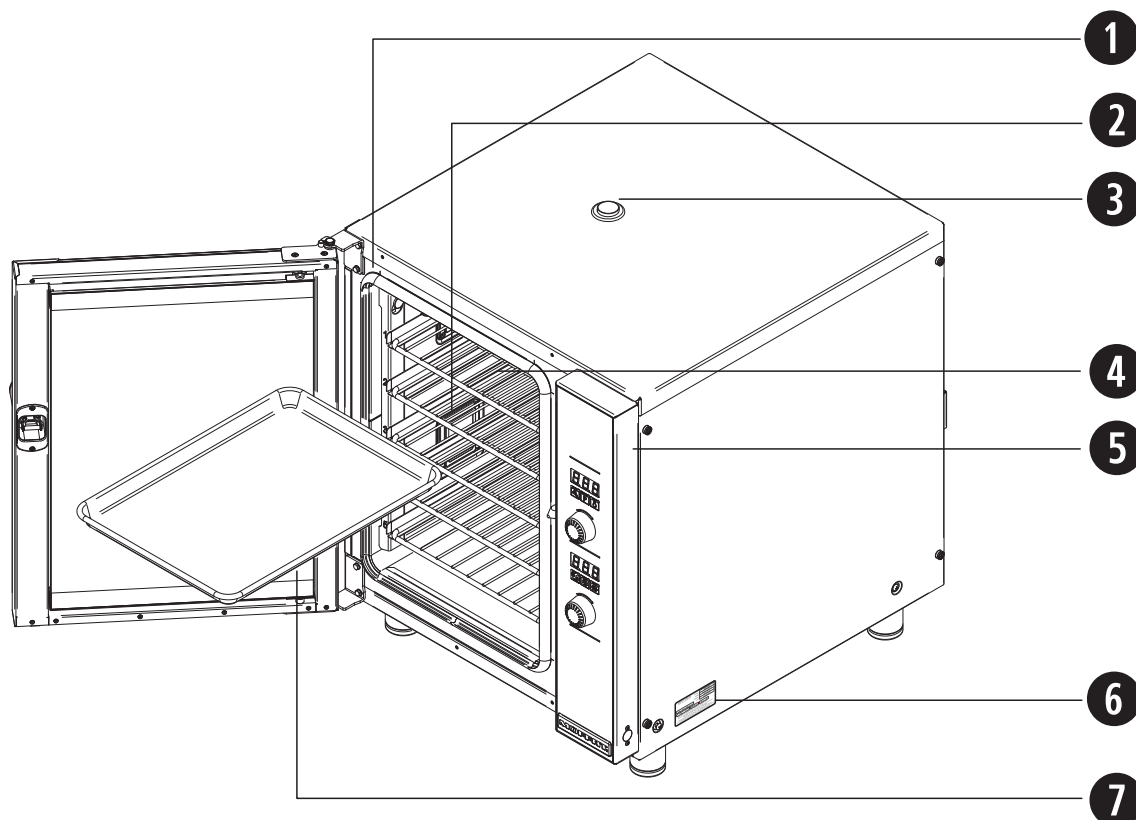
The current rates for any additional fees can be obtained from Moffat.

Where it is possible to do so, Moffat will provide the buyer an estimate of such costs prior to the costs being incurred by Moffat. The buyer

acknowledges that the estimates may be given by Moffat in stages. For example, Moffat may incur travel costs to attend a location before then assessing a product and giving the buyer an estimate of the costs to repair that product. The buyer must notify Moffat immediately should further discussion or clarification be required prior to the costs being incurred by Moffat.

SPECIFICATIONS

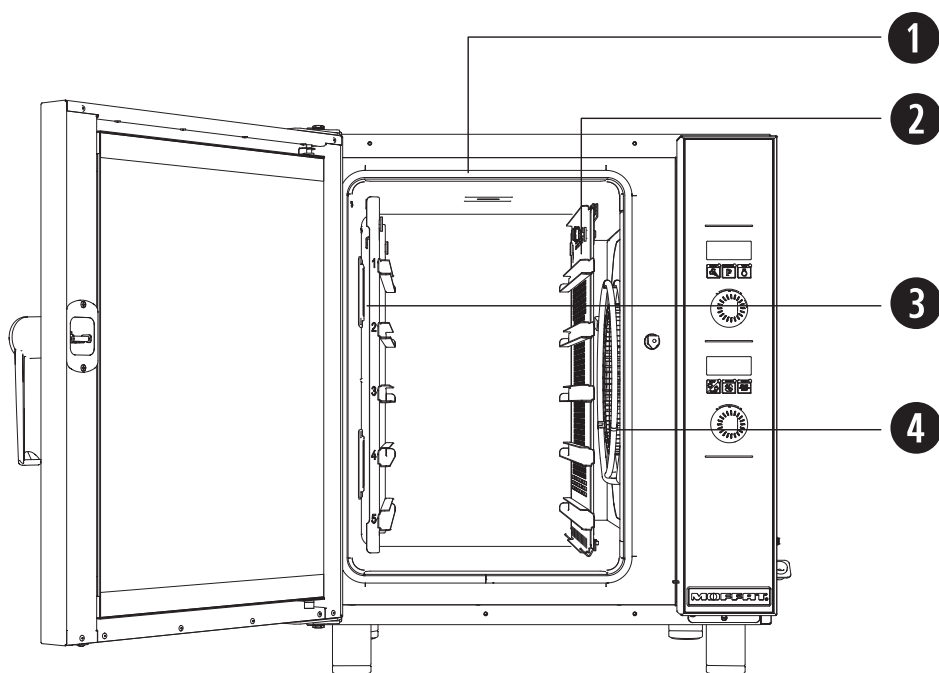
Overview



- 1 Door seal
- 3 Vent
- 5 Controller
- 7 Tray

- 2 Lamp
- 4 Wire rack
- 6 Rating plate

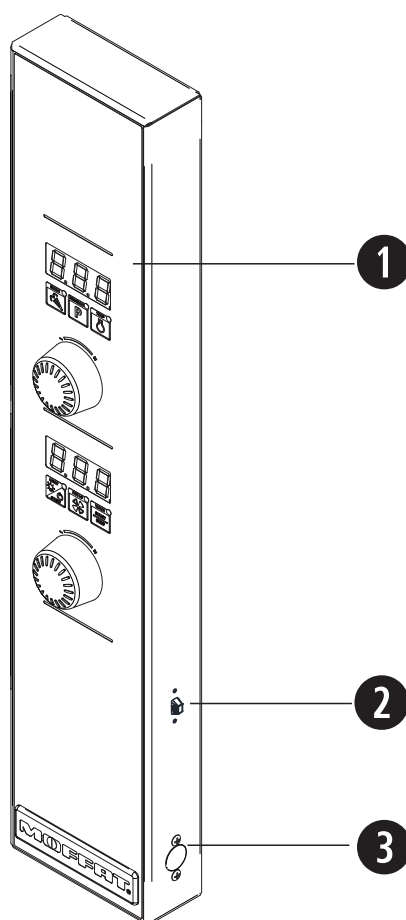
Inside your oven



- 1 Door seal
- 3 Lamp

- 2 Rack
- 4 Heating element

Controller



- 1 Control panel
- 3 Core temperature probe port

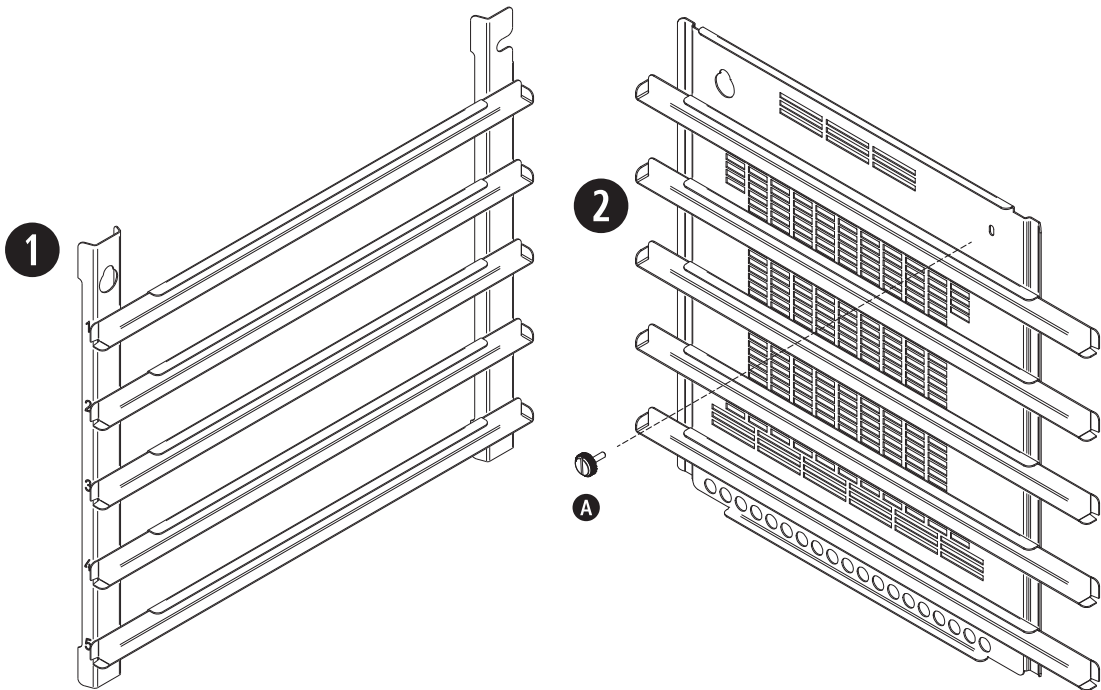
- 2 USB port

Accessories

Main accessories

Supplied accessories (fitted)


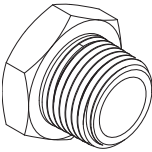
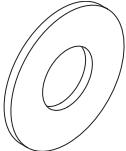
These accessories are supplied fitted with your oven, depending on your oven model and region.



	PART NO.	DESCRIPTION	QUANTITY
1	237109	Side Rack LH 5 Tray (1/1 GN)	1
	238727	Side Rack LH 4 Tray (Half US Pan)	1
2	237015	Side Rack RH 5 Tray (1/1 GN)	1
	238728	Side Rack RH 4 Tray (Half US Pan)	1

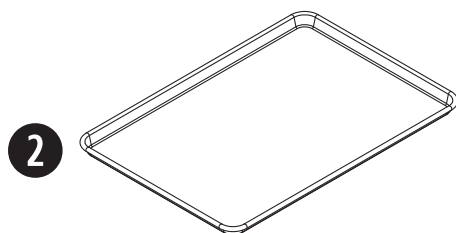
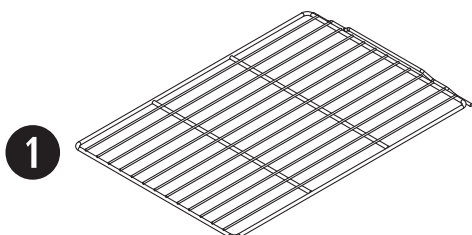
Supplied accessories (unfitted)

These accessories are supplied unfitted with your oven. See [Assembling the oven on page 17](#).

	PART NO.	DESCRIPTION	QUANTITY
	232379	Adjustable Leg 3 inches (76 mm)	4
	232380	Foot O-ring	4
	025922	$\frac{3}{4}$ inch GHT Adapter	1
	021527	Washer	1

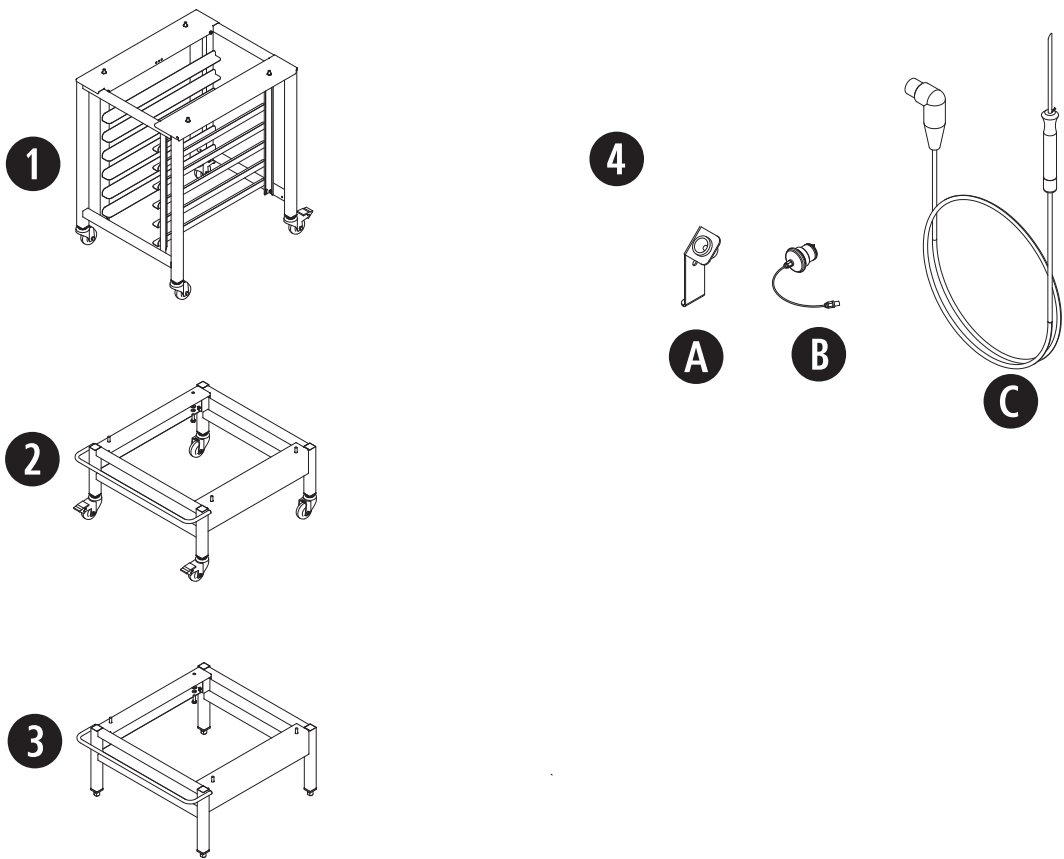
Supplied accessories (optional)

These accessories may be optionally supplied, unfitted, with your oven.



	PART NO.	DESCRIPTION	QUANTITY
1	236057	Oven Rack	5
2	—	Oven Tray	5

Accessories (add-on)



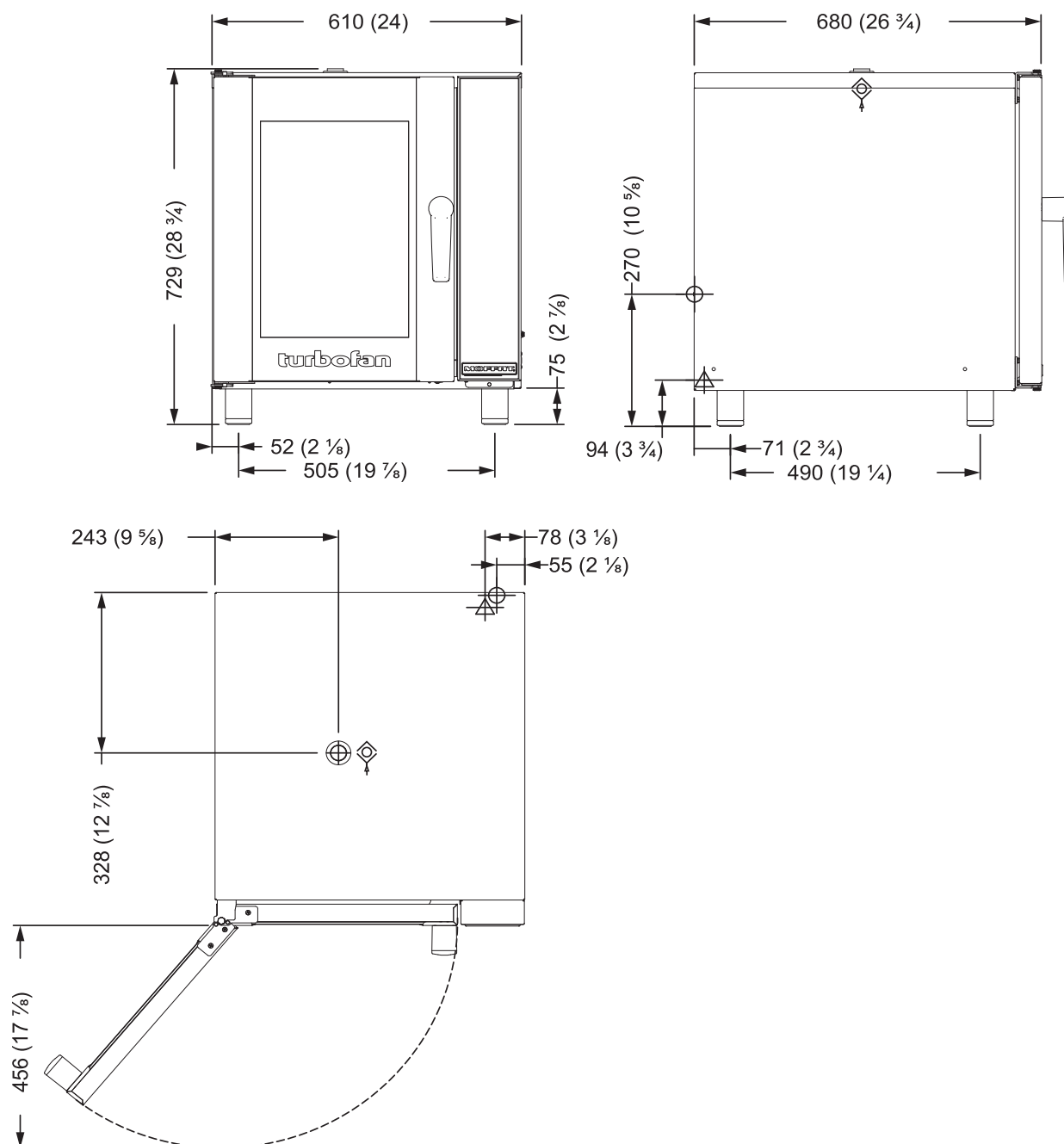
	PART NO.	DESCRIPTION
1	—	SK33 Stand
2	—	DSKE33C Double Stacking kit - Fitted With Castors
3	—	DSKE33 Double Stacking kit - Fitted With Adjustable Feet
4	236060	Core Temperature Probe Kit

Dimensions

☒ All dimensions are in mm (inches).

⬮ Air vent

⚡ Electrical supply entry point



Product information

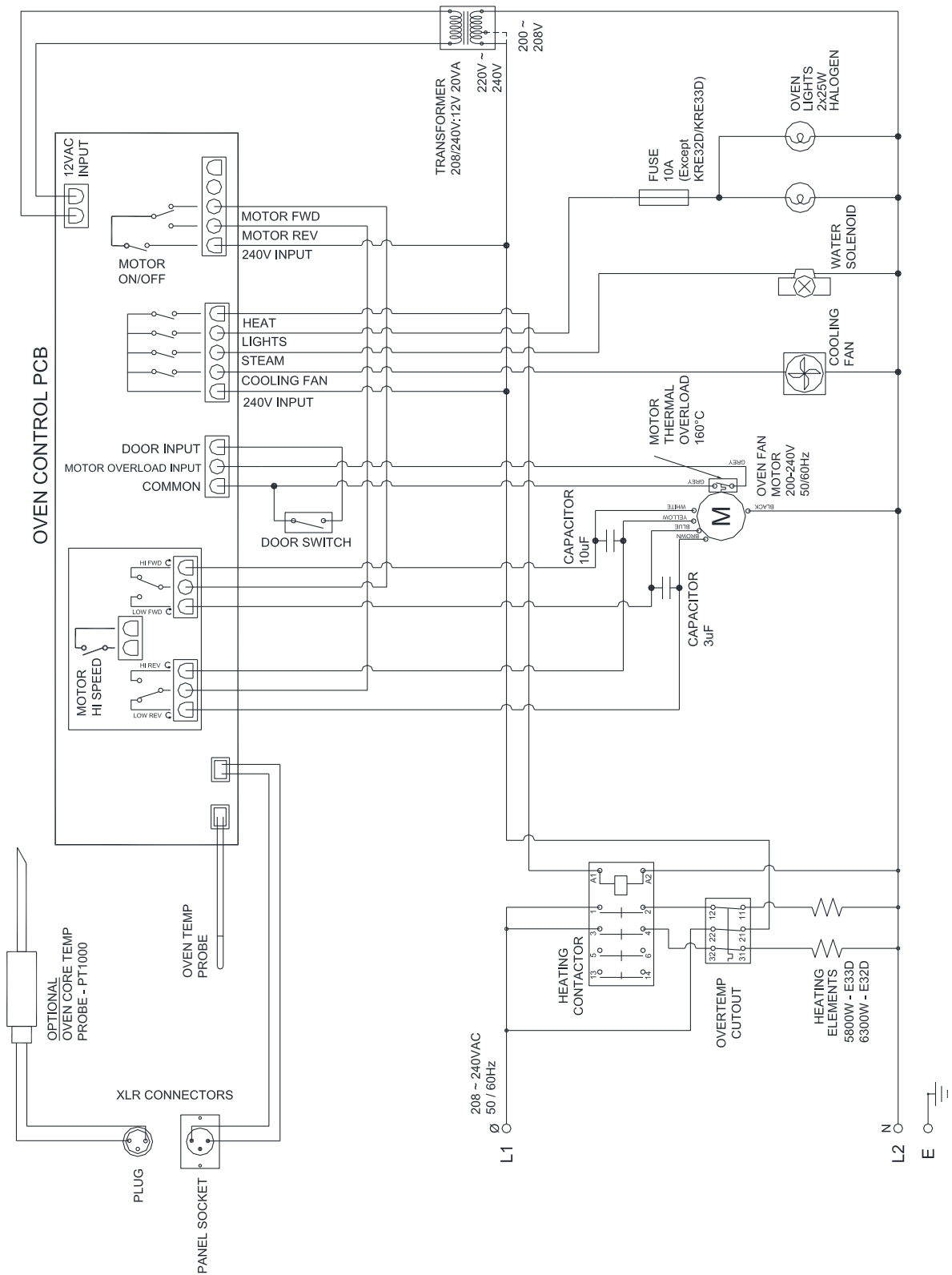
OVEN POWER	220 V, 50/60 Hz, 6.0 kW 230-240 V, 50/60 Hz, 6.0 kW
OVEN TRAY	5 shelves
TRAY CAPACITY	1/1 GN pan capacity 13 x 18 inches bun pan capacity 12 x 20 inches steam pan capacity
TRAY SPACING	85 mm (3 1⁄3 inches)
NET WEIGHT	56.2 kg

Supply requirements

Water supply

MAXIMUM WATER INLET PRESSURE	80 psi (550 kPa)
CONNECTION SIZE	¾ inch BSP male (with ¾ inch GHT adaptor included)
WATER QUALITY	
HARDNESS	60-90 ppm
PH	Greater than 7.5
CHLORIDES	Less than 30 mm

Electrical schematic



INSTALLATION & SETUP

Your oven is designed to provide years of satisfactory service, and correct installation is essential for the best performance, efficiency, and trouble-free operation. It is of utmost importance that this oven is installed correctly and that operation is correct before use.

⚠ WARNING

Installations must be carried out by qualified service persons only. Failure to install equipment to the relevant codes and the manufacturer's specifications in this manual will void the warranty.

⚠ WARNING

Components that are paint-sealed during manufacture shall only be adjusted by an authorised service technician. They shall not be adjusted by the installer.

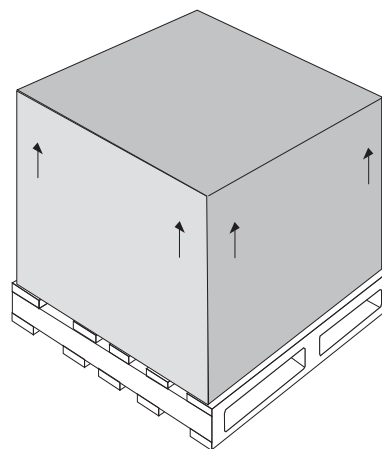
⚠ WARNING

The oven installation must conform to national installation codes and local and national codes for fire safety.

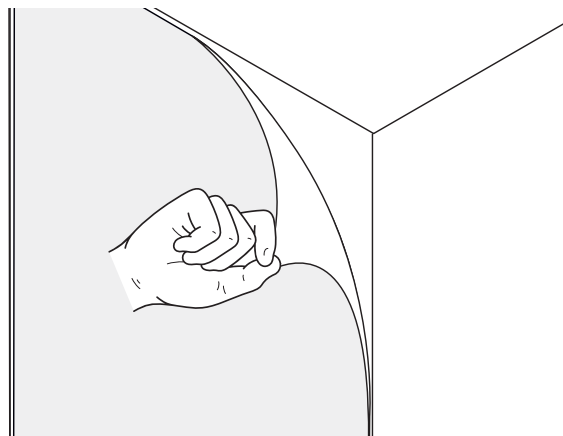
Australia and New Zealand
AS/NZS 3000 Wiring Rules

United Kingdom
BS 6173 Installation of Catering Appliances.
BS 5440 1 & 2 Installation Flueing & Ventilation.
BS 7671 Requirements for Electrical Installation.

Unpacking the oven



1. Carefully remove all packaging and transit protection from the oven, including all protective plastic coating from the exterior stainless steel panels.
 ☑ Do not discard the carton and other packaging material until you have inspected the appliance for transit damage and have tested it for proper operation.
2. Remove the protective film from the stainless steel panels, taking care not to scratch the surface if using a blade or shim.

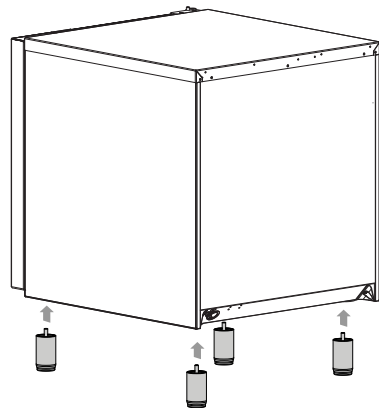


3. Check equipment and parts for damage. Report any damage immediately to carrier and distributor.
4. Check that the supply specifications on the rating plate are correct for your location and installation requirements.

5. Check that the correct accessories have been supplied with the product. See [Accessories on page 9](#).

Assembling the oven

Fit the legs



Positioning the oven

⚠ CAUTION

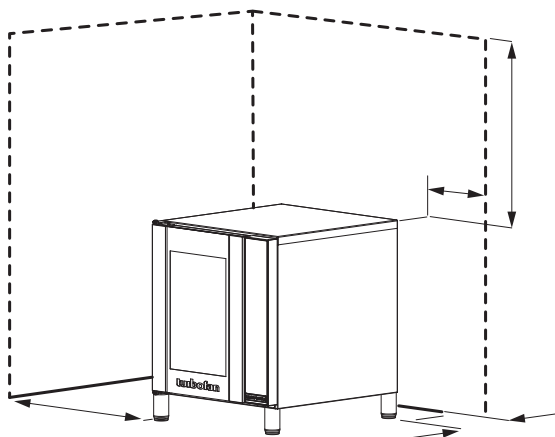
Position the oven so that the control panel and oven cooking area is easily reachable for loading and unloading.

NOTICE

Do not place the oven close to a heat source. A minimum distance of 300 mm (12 inches) from the appliance sides and the heat source is required.

⚠ WARNING

Do not block or obstruct the vent at the top of the oven.



Position the oven with the following minimum clearances:

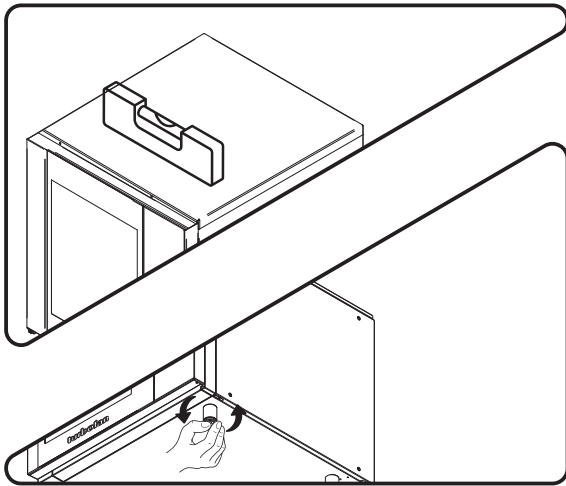
TOP	200 mm (8 inches)
LEFT	50 mm (2 inches)*
RIGHT	75 mm (3 inches)*†
REAR	50 mm (2 inches)
FRONT (RECOMMENDED)	600 mm (23 inches)*

* Door-side clearance. If the oven is fitted with a right-hand side door (RMD), swap the left- and right-hand side clearances.

† Fixed installations require at least 500 mm (20 inches) clearance on right-hand side of the oven for service access.

Levelling the oven

Correctly locate the oven into its final operating position and, using a spirit level, adjust the oven feet so that the oven is level and at the correct height.



Connecting the water supply (if required)

To activate steam-assisted cooking or baking for this oven it must be permanently connected to the mains water supply.

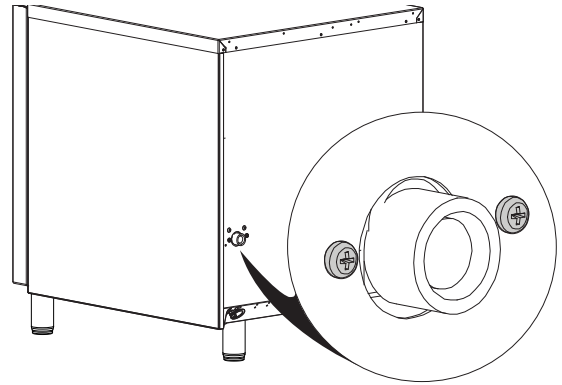
NOTICE

Water connection shall be installed in accordance with local water regulations in force and the applicable standard or code (for example, PCA in Australia, EN 1717 in UK / IE, and so on).

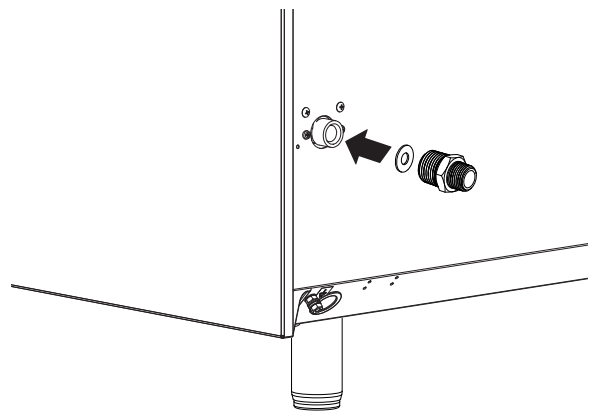
NOTICE

The water supply shall meet the requirements for use in Convection Oven systems. See [Supply requirements on page 14](#).

1. Tighten the two screws securing the water connection at the rear of oven.
 - ☑ The securing screws are unfastened during manufacture to prevent damage to the water connection during transit.



2. (North America / Canada / Mexico only) Fit the supplied $\frac{3}{4}$ inch GHT adapter and washer to the water inlet.



3. Connect a cold water supply (R $\frac{3}{4}$ inch connector) to the water connection on the oven.
4. Turn on the water supply and check for leaks.

Connecting the electrical supply

⚠ WARNING

The oven must be earthed (grounded).

⚠ WARNING

If the power supply cord is damaged, it must be replaced by a suitably qualified person in order to avoid a hazard.

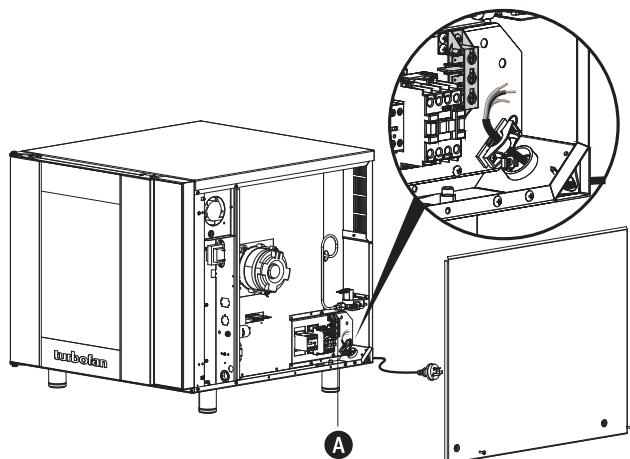
⚠ WARNING

An isolation switch must be mounted adjacent to, but not behind the oven and must be readily accessible to the operator. This switch must be clearly marked and readily accessible in case of fire.

NOTICE

Each oven should be connected to an adequately protected power supply with an appropriate power cord.

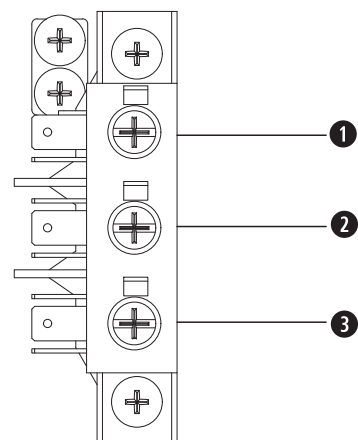
- ☑ Check that the electricity supply is correct as shown on the oven's rating plate.
- ☑ RCD (Residual Current Device) / GFCI (Ground-Fault Circuit Interrupter) protection of the power supply to this appliance is recommended.



1. Remove oven right hand side panel.
2. Bring the supply cable through the compression gland at the back of oven.
3. Connect the mains supply to the appropriately marked terminals on the terminal block (A).
4. Connect supply plug to mains outlet.

5. Turn on the mains supply and ensure that the controller is powered-up.

Terminal block wiring connection



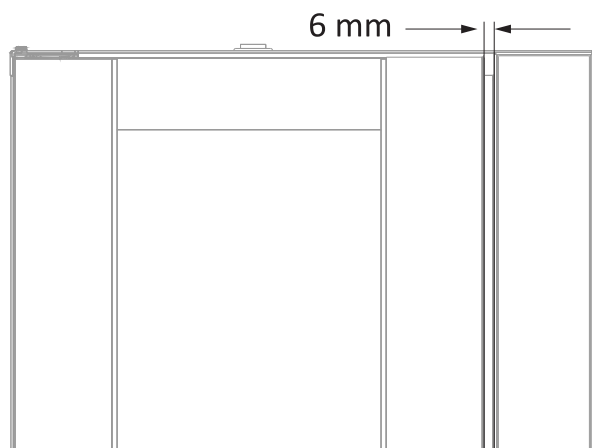
- | | | | |
|---|--------------|---|----|
| 1 | Earth/Ground | 2 | L2 |
| 3 | L1 | | |

Adjustment and calibration

Adjusting the door

Align the door with the chassis

- ☑ A correctly aligned door has a nominal gap of 6mm from the edge of the door to the side of the control panel.



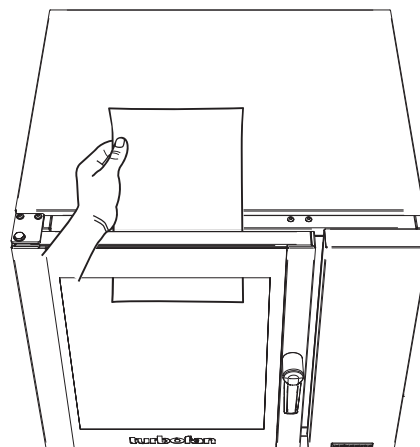
1. Loosen the screws from the upper and lower hinge plates.
2. Adjust the position of the door horizontally and vertically until it is correctly aligned.
3. Fasten the screws at the hinge plates and ensure that the door closes correctly.

Adjust the door catch

To check that the door seals correctly when it is closed:

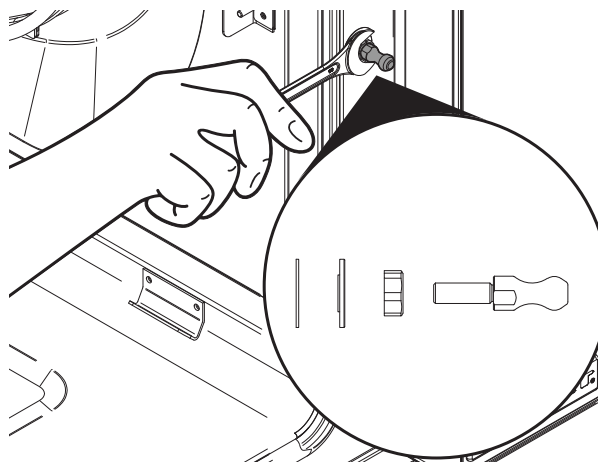
1. Place a sheet of paper between the door and the seal.
2. Close the door on the paper and attempt to withdraw the paper by firmly tugging on the paper.

The paper should just pull out with some resistance but without tearing.



To adjust the door catch:

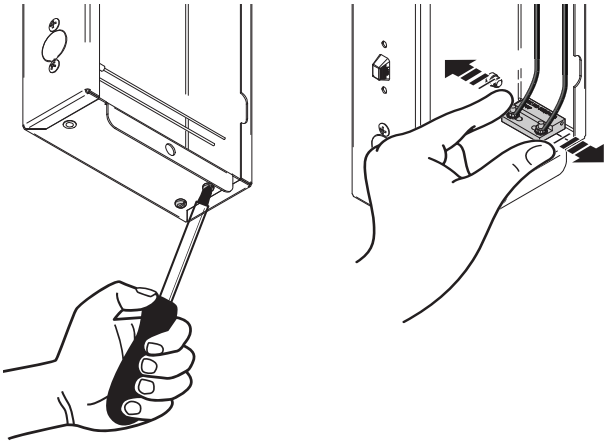
- If the paper withdraws easily, screw the door catch in by a $\frac{1}{2}$ turn and repeat the test above until the door is adjusted correctly.
- If the paper cannot be withdrawn and the door springs open, screw the door catch out by a $\frac{1}{2}$ turn and repeat the test above until adjusted correctly.



Adjusting the door reed switch

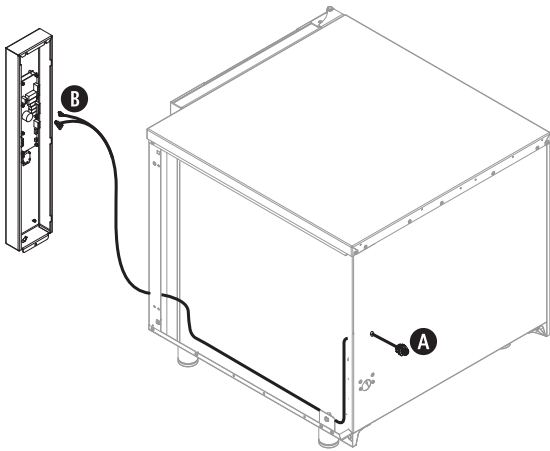
To adjust door reed switch position:

1. Slacken the two screws securing the reed switch to the bottom of the control panel.
2. Adjust the reed switch position.
3. Open and close the oven door and check that the reed switch operates correctly.

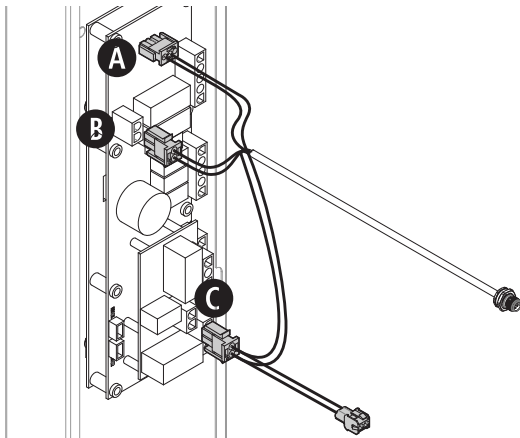


Installing the ventless hood

Connect the communication harness to the controller



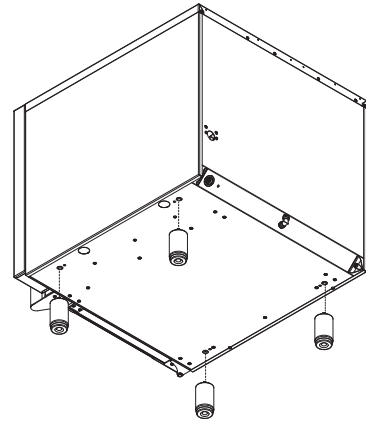
1. Remove the side panel.
2. Feed the 8-pin plug (B) through the cable bush in the heat block plate and fix it to the back panel, tightening the nut from the outside.
3. Remove the control panel and fit the hood harness plugs to the control board.



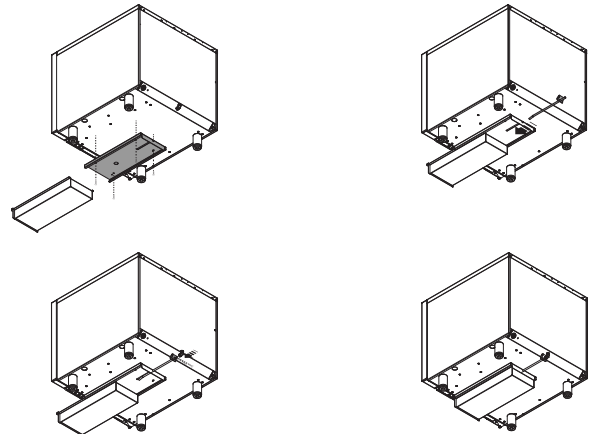
- Fit the 3-way harness plug to the hood power socket (A).
 - Unplug the 2-way plug with the yellow wires from the board and fit the 2-way harness plug with the yellow wires in this socket (B).
 - Fit the other 2-way harness plug into the COM ID3 socket (C).
4. Refit the control panel, checking that no wires are pinched between the oven and the control panel.
 5. Refit the side panel.

Fit the hood to the oven

1. Fit the 100 mm adjustable Legs supplied in the kit to the oven. Discard the smaller 75 mm adjustable legs supplied with the oven.

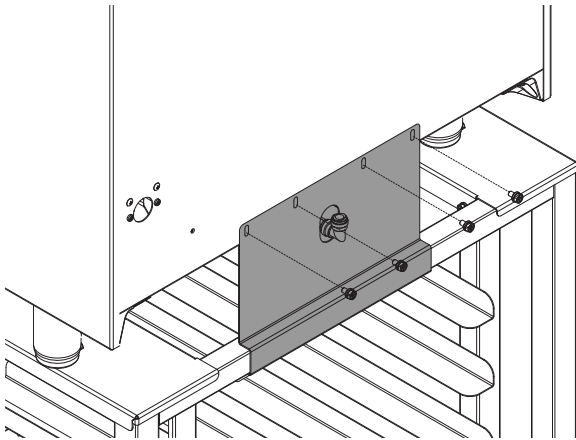


2. Fit the condensate pan and drain pipe.

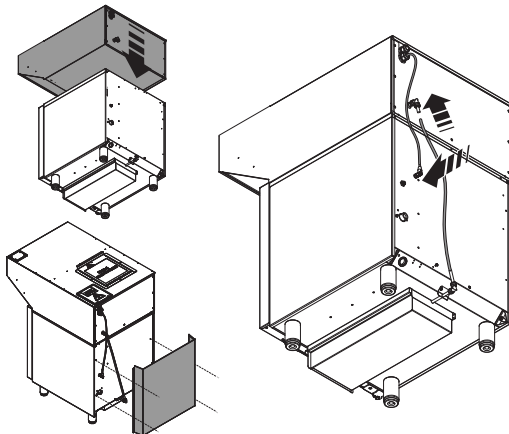


- a. Securely screw the condensate pan runner plate to the 4 holes in the bottom of the oven using the supplied 8 x 3/8 screws.
- b. Fit the stainless steel drain tube into the condensate pan runner plate and screw to the rear of the oven using the supplied 8 x 3/8 screws.
- c. Fit the pan into the pan runner to check that it slides freely and doesn't hit the drain tube wand.

3. If using with a stand, fit the oven to the stand and hook the rear strapping plate over the rear rail of the stand and screw the strapping plate to the oven rear.



4. Fit the hood to the oven.



- a. Fit the hood to the top of the oven. Refer to the VH Series Hood Installation and Operation Manual for more information.
- b. Connect the condensate drain tube supplied with the hood.
 - a. Cut a length of tube 65 mm ($2 \frac{5}{16}$ inches) and insert into the hood quick-connect fitting. Ensure that the tube is pushed in all the way, about 17 mm ($\frac{43}{64}$ inches).
 - b. Connect the connector elbow.
 - c. Cut a length of tube to run down to the connector elbow on the drain tube wand.
 - ⚠ Do not cut the tube too short. Leave the tube long enough to allow for a bit of slack.

COMMISSIONING

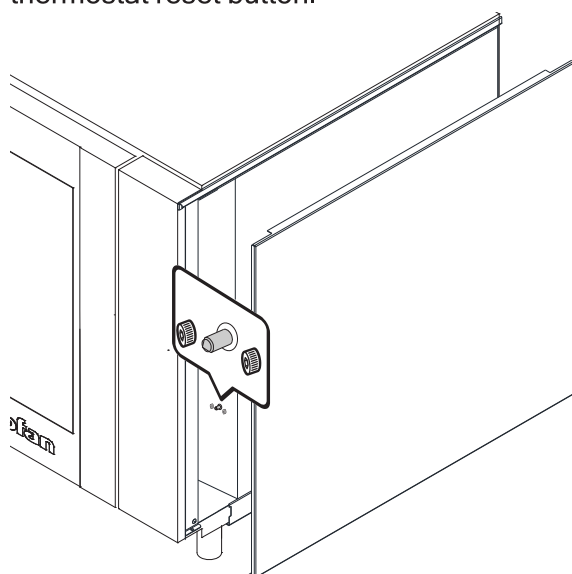
First use

⚠ CAUTION

Ensure that all packaging material has been removed from inside the Convection Oven oven before using it for the first time.

Before using your new oven, operate the oven for about one hour at 200 °C (400 °F) to remove any fumes or odours which may be present.

- ☑ If the oven does not start on initial start-up, check that the overtemp thermostat has not tripped during transit. Remove the side panel on the controller-side of the oven and press the overtemperature thermostat reset button.



Commissioning checklist

Before leaving the new installation, check that the oven functions in accordance with the operating instructions specified in the Use and Care manual. Complete the following checklist.

☑ If the appliance does not operate correctly, turn off the oven, disconnect the power supply at the mains and contact the supplier of this appliance.

DATE

INSTALLER

Send a copy of this completed form to techservices@moffat.co.nz within 10 days.

Pre-installation

- ☐ Delivered intact with all parts and accessories.
- ☐ No noticeable damage to the interior or exterior of the oven.

Installation

- Positioning and fitting
 - ☐ Adequate separation and/or isolation from other appliances and/or heat sources.
 - ☐ Adequate ventilation in installation area.
 - ☐ Correct door alignment including seals and hinges.
 - ☐ The oven is level with respect to the floor.
- Electrical connection
 - ☐ Adequate supply voltage.
 - ☐ Correctly grounded outlet.
 - ☐ Correct current draw and loading.
- Water connection
 - ☐ Adequate water supply pressure.
 - ☐ Water supply quality meets requirements.
 - ☐ Correctly sized water connector.

Operation

- Functionality
 - ☐ The oven lights work.
 - ☐ Thermostat functions correctly.
 - ☐ Check that the oven stops heating when it reaches the set temperature.
 - ☐ The oven controller operates correctly.
 - ☐ The door sensors function correctly.
 - ☐ Open the oven door and ensure that the controller displays *door*; close the door and ensure that the controller returns to normal operation.
 - ☐ With the oven operating at a set temperature, open the door and check that the oven stops heating and the heating fan is off.
 - ☐ The oven heats to the set temperature.
 - ☐ Check that the oven set temperature matches the actual temperature.
 - ☐ The heating fan operates correctly.
 - ☐ The oven door seals correctly.
 - ☐ The oven door is correctly aligned.
- Operator training
 - ☐ The operator has been instructed in correct operation and safe shutdown of the oven.

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