



**SPECIFICATION, INSTALLATION
& OPERATION MANUAL**
(READ ALL INSTRUCTIONS BEFORE USE)

Models:

SPNOR.PLUS.5 | SPNOR.PLUS.10 | SPNOR.PLUS.15

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1.1 Your New Normann Product

Thank you for choosing this quality Giorik product.

All Giorik products are designed and manufactured to meet the needs of food service professionals. By caring for and maintaining this new Giorik product in accordance with these instructions, will provide many years of reliable service.

Stoddart is a wholly Australian owned company, which manufactures and/or distributes a comprehensive range of food service equipment for kitchens, food preparation and presentation. Stoddart products are manufactured and engineered to provide excellent results whilst offering value-for-money, ease-of-use and reliability.

Carefully read this instruction booklet, as it contains important advice for safe installation, operation and maintenance. Keep this booklet on hand in a safe place for future reference by other operators or users.

Disclaimer

The manufacturer/distributor cannot be held responsible or liable for any injuries or damages of any kind that occur to persons, units or others, due to abuse and misuse of this unit in regards to installation, removal, operation, servicing or maintenance, or lack of conformity with the instructions indicated in this documentation.

All units made by the manufacturer/distributor are delivered assembled, where possible, and ready to install. Any installation, removal, servicing, maintenance and access or removal of any parts, panels or safety barriers that is not permitted, does not comply in accordance to this documentation, or not performed by a **TRAINED AND AUTHORISED SPECIALIST** will result in the **IMMEDIATE LOSS OF THE WARRANTY.**

The manufacturer/distributor cannot be held responsible or liable for any unauthorised modifications or repairs. All modifications or repairs must be approved by the manufacturer/distributor in writing before initiating. All modifications or repairs performed to this unit must be performed at all times by a **TRAINED AND AUTHORISED SPECIALIST.**

**Stoddart design, manufacture & distribute Food Service Equipment (appliances) exclusively for the commercial market.
This appliance is not designed nor intended for household or domestic use and must not be used for this purpose.**

This product is intended for commercial use, and in line with Australian electrical safety standards the following warnings are provided:

- This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the product by a person responsible for their safety. Children should be supervised to ensure that they do not play with the product
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard



Warranty & Registration

1.2 Australia and New Zealand Warranty

1.2.1 Warranty Period

All Stoddart manufactured and distributed products are covered by Stoddart's standard Australia and New Zealand Product Warranty (minimum 12 month on-site parts and labour, terms and conditions apply). Further to this standard warranty, certain products have access to an extended warranty. Full terms, conditions and exclusions can be found using the below Link/QR code.

1.2.2 Warranty Registration

To register your new product, Follow the below Link/QR code.



Australia
[CLICK HERE](#)



New Zealand
[CLICK HERE](#)

1.3 General Precautions

When using any electrical unit, safety precautions must always be observed.

- All units **MUST** be installed according to the procedures stated in the installation section of this manual
- In the case of new personnel, training is to be provided before operating the equipment
- **DO NOT** use this unit for any other purpose than its intended use
- **DO NOT** store explosive substances such as aerosol cans with a flammable propellant in or near this unit
- Keep fingers out of “pinch point” areas
- Unit is not waterproof **DO NOT** use jet sprays, hoses or pour water over/on the exterior of the unit
- Only use this unit with voltage specified on the rating label
- **DO NOT** remove any cover panels that may be on the unit
- **DO NOT** use sharp objects to activate controls
- If any fault is detected, refer to troubleshooting
- The manufacturer declines any liability for damages to persons and/or things due to an improper/wrong and/or unreasonable use of the machine
- Only specifically trained/qualified Technicians (Stoddart, one of our service agents, or a similarly qualified persons) should carry out any and all repairs, maintenance and services

1.4 Warnings

1.4.1 Symbol Description

This manual describes situations and activities that require levels of attention and precaution indicated by the symbols listed below: Throughout the text, symbols with safety warnings briefly highlight the types of hazards. The drawings and diagrams in the manual supplement the information but are not intended to be a detailed representation of the machine supplied.

Icon	On the machine	In the manual
	not present	DANGER: immediate risk that can cause immediate death or severe and permanent damage to health if not prevented. CAUTION: possible risk that can cause death or serious damage to health if not prevented. WARNING: possible risk that can cause minor damage if not prevented.
	This symbol indicates that the marked surfaces may be very hot or very cold and should be touched with caution, using personal protective equipment (PPE), such as gloves.	This symbol indicates that the marked operations may involve thermal hazards such as burns or cold burns. Operations must be carried out: • With caution • Wearing personal protective equipment (PPE) e.g. gloves.
	If present, this symbol is placed on the refrigeration unit and indicates gas flammability.	This symbol indicates that the marked operations may cause fire and/or explosions. Operations must be carried out: • With caution • Wearing personal protective equipment (PPE) such as gloves.
	The symbol indicates that the marked guards prevent contact with high-voltage parts. Do not remove or modify these guards: risk of electrocution.	This symbol indicates that the marked operations may involve electrical hazards such as electrocution. Operations must be carried out: • With caution • Wearing personal protective equipment (PPE) such as gloves.
	not present	The symbol indicates that you should read the manual carefully before installing, operating or servicing the machine.

1.4.2 Safety Warnings

-  **DANGER**
Failure to comply with the following requirements may result in damage, serious injury or death and will invalidate the warranty.
-  **DANGER**
The manufacturer is not responsible for operations performed on the machine without following the instructions provided in this manual. Non-compliant installation or maintenance may cause damage, injury or fatal accidents.
-  **DANGER**
Unauthorised and non-conforming interventions, modifications and tampering may result in damage, serious injury or death and will invalidate the warranty.
-  **DANGER**
Before installing or servicing the machine, read this manual carefully and keep it for future reference.
-  **DANGER**
Installation and special maintenance must
- be carried out by specialised and authorised technical personnel with adequate knowledge of refrigeration and electrical systems
 - in compliance with the regulations in force in the country of use, including work safety regulations.
-  **DANGER**
During installation, it is mandatory to use Personal Protective Equipment (PPE). The employer, workplace manager or service technician is responsible for identifying and choosing adequate PPE. Below is the main list of PPE to be used in various situations:

-  **DANGER**
Fire hazard and flammable materials. If the machine uses R290 coolant, take all precautions to prevent risks related to gas flammability
-  **CAUTION**
Check that the voltage and frequency correspond to what is indicated on the rating plate, then connect the machine to the mains.
-  **DANGER**
The maximum inlet water temperature is 16°C.
-  **DANGER**
The water circuit pressure ranges between 1000 kPa and 150 kPa.
-  **DANGER**
Disconnect the machine from the mains (turn the main switch to OFF and remove the plug) before cleaning or servicing the machine.
-  **DANGER RISK OF EXPLOSION**
This machine is not designed to be installed in explosive atmospheres.
-  **DANGER RISK OF FIRE AND EXPLOSION**
Do not store explosive substances, such as pressurised containers with flammable propellants, inside this machine.
-  **IMPORTANT**
Before installation, check:
- That the rooms are suitable for preparing the food
 - That the systems comply with the regulations in force in the country of use and with what is indicated on the data plate
 - That the machine is connected to a high sensitivity (30 mA) differential thermal magnetic circuit breaker
 - That there is a water connection point near the machine
 - That an earthed socket complying with those used in the machine's country is provided near the equipment
 - That the machine's supporting surface is flat, especially if it is equipped with wheels
-  **DANGER**
During machine installation:
- Transiting or standing near the work area is not permitted to unauthorised persons
 - Use Personal Protective Equipment (e.g. gloves, accident-prevention shoes, etc.)
 - Comply with the rules relating to safety at work (e.g. do not touch electrical parts with wet or bare hands)
-  **CAUTION THE USE OF ORIGINAL SPARE PARTS IS RECOMMENDED.**
The manufacturer declines all responsibility for the use of non-original spare parts.
-  **DANGER**
As the packaging material is potentially dangerous, it must be kept out of the reach of children or animals and disposed of correctly in compliance with local regulations.
-  **DANGER**
The machine is delivered only after it has passed visual, electrical and functional tests.
-  **CAUTION**
The installation room must have a minimum illumination of 150 lux.
-  **DANGER**
IPX4 protection rating: the machine is protected against splashing water from all directions. This means that it can withstand water hitting it from any angle. However, it is not designed to be submerged in water.
-  **DANGER CLASS I:**
it is mandatory to connect the device to the protective conductor (earth – yellow/green) of the fixed electrical installation.

1.4.3 Safety Warnings For Use

Failure to comply with the following requirements may result in damage, serious injury or death and will invalidate the warranty.

 **DANGER**
Using and cleaning the machine in ways other than what is set out in this manual is considered improper and may cause damage, serious injury or fatal accidents. This would invalidate the warranty and release the manufacturer from any liability.

 **IMPORTANT**
This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the product by a person responsible for their safety. Children should be supervised to ensure that they do not play with the product.

 **DANGER**
Children must not play with the machine. Children must not carry out cleaning and maintenance without supervision.

 **DANGER**
Risk of fire and flammable materials If the machine uses R290 coolant, take all precautions to prevent hazards related to gas flammability.

 **DANGER**
Risk of fire and flammable materials If the machine uses R290 coolant, take all precautions to prevent hazards related to this gas.

 **DANGER**
Do not tamper with or remove installed safety devices (protective grilles, warning stickers, etc.).
The manufacturer declines all responsibility in the event of non-compliance with these requirements.

 **CAUTION**
Do not insert screwdrivers or other objects between the guards (fans, evaporators, etc.).
To ensure correct operation of the compressor and evaporator unit, do not obstruct the ventilation openings.

 **WARNING!**
Maximum load: 5 kg per shelf.

 **DANGER**
Personal protective equipment (PPE) must be worn during use. The employer or the workplace manager is responsible for identifying and choosing adequate PPE. The selected PPE must be worn by the operators.
During ordinary use, gloves protect the hands from contact with the cold tray.

 **CAUTION**
Keep all ventilation openings of the machine enclosure or integration structure clear of obstructions.

 **CAUTION**
Do not use mechanical devices or other methods to accelerate defrosting, except those recommended by the manufacturer.

 **CAUTION**
Do not damage the coolant circuit.

 **CAUTION**
Do not use electrical appliances inside food storage compartments unless approved and authorised by the manufacturer.

1.4.4 Personal Protective Equipment (PPE)

The following table lists the main personal protective equipment to be used during the various stages of the machine's life cycle.



Task	Safety Footwear	Gloves	Glasses	Hard Hat
Transport	●	○	---	●
Handling	●	○	---	●
Unpacking	●	○	---	---
Installation	●	○	●	---
Normal use	●	●*	○	---
Routine cleaning	●	●*	○	---
Heavy cleaning	●	●*	○	---
Maintenance	●	○	---	---
Scrapping	●	○	---	---

Legend

●	PPE Required
○	PPE available or to be used if necessary
---	PPE Not Required

* Gloves must be used for exposure to high temperatures and suitable for contact with corrosive substances.

1.5 Correct Use of the Machine

This machine is classified as an agri-food machine (EC Regulation No. 1935/2004), intended for food processing in industrial and professional kitchens. It is not suitable for storing and processing pharmaceutical, chemical or any other non-food products.

Specifically:

- Blast chillers (+90/+3°C | 194/37°F) (+90/-18°C | 194/0°F): devices suitable for rapidly lowering the temperature of food to preserve its organoleptic properties.

These machines are intended for commercial use e.g. in the kitchens of restaurants, canteens, hospitals and commercial enterprises such as bakeries and butcher shops, but not for mass production of foodstuffs.

Before starting and using the machine, clean the interior surfaces thoroughly. Follow these guidelines to get the best performance from the machine:

- Do not put hot food, uncovered liquids, live animals, various objects or corrosive products inside
- Wrap or protect food, especially if it contains flavourings or spices
- Arrange food without obstructing air circulation and do not cover grills with paper, cardboard, cutting boards, etc.
- Do not open doors frequently and for a prolonged time
- After opening and closing the door, wait a few moments before opening it again
- Maximum load per tray or grill: 20 kg (GN 1/1) or 35 kg (GN 2/1).

These refrigeration machines include precautions to guarantee users' health and safety. They have no dangerous edges, sharp surfaces or elements protruding from the overall dimensions.



CAUTION

Machine stability is guaranteed even with the door open. Hanging from doors is forbidden.



CAUTION

During machine use, the installation room must have a minimum illumination of 150 lux.



1.0 Introduction

1.6 Reasonably Foreseeable Misuse of The Machine

**DANGER**

Any use other than that indicated in this manual is considered incorrect and may harm users and damage the machine.

Examples of reasonably foreseeable misuse:

- Lack of maintenance, cleaning and periodic machine checks
- Structural modifications or alterations to the operating logic
- Tampering with guards or safety devices
- Installers, operators, specialised personnel and maintenance personnel who fail to use personal protective equipment (PPE)
- Using unsuitable accessories (e.g. unsuitable equipment or ladders)
- Storing combustible, flammable, non-compatible or non-machining-related materials in the machine's vicinity
- Incorrect installation of the machine
- Inserting incompatible objects or materials that may damage the machine, put people in danger or pollute the environment
- Climbing on the machine or hanging on the doors
- Not complying with the instructions related to the intended use of the machine
- Leaving doors or drawers open or partially open due to forgetfulness or negligence
- Placing foodstuffs in such a way as to obstruct air circulation or prevent the doors and drawers from closing properly
- Exceed the maximum permissible load for each shelf or drawer.

1.7 Risks Associated With Using The Machine

**WARNING!**

Risks associated with wheeled displacement:

- If the machine is fitted with wheels, do not push it vigorously to prevent tipping and damage. Pay attention to uneven parts of the sliding surface.
- The equipment fitted with wheels cannot be levelled; therefore, make sure that the support surface is perfectly horizontal and flat.
- Always secure the wheels with their retainers.

**DANGER**

risks due to moving parts:

**DANGER**

Do not open more than one drawer or shelf (if any) at the same time to prevent tipping.

The only movable part of the machine is the fan, which poses no risk as it is protected by a grille secured with screws.

**DANGER**

Risks due to low/high temperatures:

Normann have applied temperature warning stickers in areas subject to low or high temperatures.

**DANGER**

Risks due to electricity:

Normann have applied temperature warning stickers in areas subject to low or high temperatures.

- Electrical risks were addressed by designing the electrical systems in compliance with the IEC EN 60335-1 standard.
- Risk zones are marked with 'High Voltage' stickers.
- The machine has a noise emission rating lower than 70 dB.

1.8 Emergency Situations

**WARNING!**

In case of fire, do not use water. Use a CO2 (carbon dioxide) fire extinguisher and quickly cool the motor compartment area.

1.9 In Case Of Machine Malfunction

- WARNING!**
If the machine does not work or shows functional or structural anomalies, disconnect it from the power supply and contact an authorised service centre. DO NOT repair the machine yourself.
- WARNING!**
Repairs must be carried out using original spare parts. The manufacturer declines all responsibility for the use of non-original spare parts. To ensure optimal operating conditions and safety, we recommend carrying out maintenance and inspection at least once a year at an authorised service centre.

1.10 Residual Risks

The machine's design and the installation of appropriate guards do not fully eliminate risks to the operator. This manual lists the required Personal Protective Equipment (PPE). During installation, sufficient space must be provided to reduce risks. To maintain these conditions, the areas around the machine must remain clean, dry, well lit and free of obstacles. Below is a list of residual risks related to the machine.

Residual risk	Description
Slipping or falling	The operator may slip due to water, oil or dirt on the floor.
Burn or abrasion	The user may, intentionally or unintentionally, touch internal machine components (such as cold trays, fins and cooling circuit tubes) without wearing protective gloves.
Electrocution	Contact with live electric parts during maintenance carried out without disconnecting the machine from the power supply.
Falling	The operator uses inappropriate tools to access the upper part of the machine.
Injuries	Specialised personnel may not properly secure the upper control panel, which may detach and fall off.
Tipping over	When handling the machine and packaging, using inappropriate lifting or handling systems or with an unbalanced load can cause hazards.
Refrigerant gas	Inhalation of refrigerant gas. The type of refrigerant is indicated on the machine's rating plate.

This machine is classified as an agri-food machine (EC Regulation No. 1935/2004), intended for food processing in industrial and professional kitchens. It is not suitable for storing and processing pharmaceutical, chemical or any other non-food products.

Specifically:

Blast chillers (+90/+3°C | 194/37°F) (+90/-18°C | 194/0°F): devices suitable for rapidly lowering the temperature of food to preserve its organoleptic properties.

Before starting and using the machine, clean the interior surfaces thoroughly. Follow these guidelines to get the best performance from the machine:

- Do not put hot food, uncovered liquids, live animals, various objects or corrosive products inside
- Wrap or protect food, especially if it contains flavourings or spices
- Arrange food without obstructing air circulation and do not cover grills with paper, cardboard, cutting boards, etc.
- Do not open doors frequently and for a prolonged time
- After opening and closing the door, wait a few moments before opening it again
- Maximum load per tray or grill: 20 kg (GN 1/1) or 35 kg (GN 2/1).

These refrigeration machines include precautions to guarantee users' health and safety. They have no dangerous edges, sharp surfaces or elements protruding from the overall dimensions

- CAUTION**
During machine use, the installation room must have a minimum illumination of 150 lux.

1.11 R290 refrigerant gas warnings

	Warning
	SYSTEM CHARGED WITH FLAMMABLE REFRIGERANT
	R290 This unit must be serviced in accordance with AS/NZS 1677:1998

The room where the machine is positioned must be larger than one cubic metre to allow gas dispersion.

propane

chemical formula: C₃H₈

Global Warming Potential (GWP) = 3.

Ozone Depletion Potential (ODP) = 0.

Safety Classification: A3. Non-toxic but extremely flammable.

The substance is regulated by the Montreal Protocol (1992 revision).

1.11.1 Hazard Identification

Do not smoke or inhale.

Gas is **highly flammable**. Keep it away from heat sources, hot surfaces, sparks, open flames or other ignition sources.



Low concentrations can cause narcotic effects with possible loss of consciousness, coordination, dizziness, headache, and nausea. High concentrations can cause asphyxiation due to the reduced oxygen content in the atmosphere. Extremely high concentrations can cause abnormal heart rhythms and even sudden death. Sprayed or splashed product can cause skin burns and serious eye injuries. It is unlikely to be dangerous by skin absorption. Repeated or prolonged contact can cause the removal of skin fat, resulting in dryness, chapping and dermatitis. Do not smoke or inhale.

1.11.2 First Aid Measures



If the person is unconscious, lie them on their side in a stable position and consult a doctor. Do not administer anything to unconscious persons. Administer artificial respiration in the event of irregular breathing or respiratory arrest. If symptoms persist, consult a doctor.

Inhalation: wear self-contained breathing apparatus to protect the injured person from further exposure. Then transport them to a warm location and keep them lying down. If necessary, administer artificial respiration, oxygen or perform cardiac massage. Seek immediate medical attention.

Contact with skin: thaw the relevant areas with water. Remove contaminated clothing as it can stick to the skin in case of frost burns. Immediately wash the affected areas with lukewarm water. Get medical attention in case of skin irritation or blistering.

Contact with eyes: check if the injured person wears contact lenses. If so, remove them, wash immediately with clean water, holding the eyelids open for at least 15 minutes. Do not apply ointments or oil. Request medical assistance.

Ingestion: do not induce vomiting. If the victim is conscious, ask them to rinse their mouth with water and drink 200-300 ml of water. Seek immediate medical attention.

Further medical treatment: Symptomatic treatment and supportive therapy when indicated. Do not administer adrenaline or similar sympathomimetic drugs following exposure due to the risk of cardiac arrhythmia with possible cardiac arrest.

Poison control centres across the country (24-hour service): **13 11 26**

1.11.2 Fire-fighting Measures



Keep persons not wearing PPE away and evacuate to safe areas.

In case of fire, always use self-contained breathing apparatus and suitable protective clothing (e.g., gloves and goggles).

Incomplete thermal decomposition causes the emission of very toxic and corrosive vapours (carbon monoxide).

Cool the motor compartment as quickly as possible.

There is a risk of explosive re-ignition. Put out all surrounding flames. If it is safe, move any combustible objects away from the fire.

What to use to extinguish fire: Alcohol resistant foam. Water spray. Carbon dioxide. Dry chemical powder. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

What NOT to use to extinguish fire: strong water jets

1.11.3 Accidental Spills

Keep persons not wearing PPE away and evacuate to safe areas. Immediately ventilate the area based on the local safety plan. Do not touch or inhale the leaked gas.

Disconnect the power cable of the equipment the gas is leaking from.

To handle gas leaks, wear suitable respiratory protective devices with an air supply, and protective gloves and goggles. Do not inhale vapours. Atmospheric concentrations must be kept to a minimum as far as is reasonably possible, below the occupational exposure limit. The vapours are heavier than air, therefore high concentrations may form near the ground where general ventilation is poor. Avoid contact with naked flames and hot surfaces, as irritating and toxic decomposition products may form, or explosions or fire in case of flammable gas (R290). The leaked gas must be disposed of in authorised and qualified centres. In case of doubts, contact local bodies. Once the emergency is over, contact technical support to repair the machine.

Minor spills: do not stop the gas from escaping.

Major leaks: contain the spilled material using sand, soil, or other absorbing material. Prevent liquid from entering drains, sewers, basements and work pits, because the vapours may create a suffocating atmosphere.

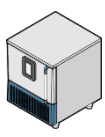
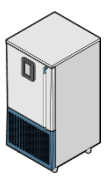
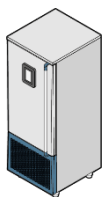
Consider that R290 gas is highly flammable.

1.11.4 Disposal

Discharging this refrigerant into the atmosphere is strictly prohibited. It must be retrieved, treated, or disposed of according to legal procedures by qualified and authorised personnel. In case of doubts, contact local bodies. The best solution is to recover and recycle the product. If this is not possible, destruction must take place in an authorised system equipped to absorb and neutralise acid gases and other toxic processing products.

2.0 Specification

2.1 Technical Data

						
Number of trays	5		10		15	
	Nortech	Nortech+	Nortech	Nortech+	Nortech	Nortech+

Technical data

Condensation	Air					
Refrigerant gas	R290					
Equipment weight	114 kg	124 kg	188 kg	198 kg	236 kg	246 kg
Electrical data						
Volts	220-240	220-240	380-420	380-420	380-420	380-420
Ph	1N	1N	3N	3N	3N	3N
Hz	50	50	50	50	50	50
Refrigeration maximum electrical absorption	1289 W / 7.06 A	1269 W / 7.59 A	2701 W / 7.04 A	2661 W / 8.1 A	3394 W / 7.96 A	3334 W / 9.55 A
Heating maximum electrical absorption	without humidity					
	-	1150 W / 6.25 A	-	2100 W / 4.3 A	-	3250 W / 6.8 A
	with humidity					
	-	1550 W / 8.15 A	-	3100 W / 9.1 A	-	4250 W / 11.6 A
Autonomous machine cooling capacity -10°C, +45°C	2069 W	2069 W	4138 W	4138 W	4822 W	4822 W

Capacity

GN 1/1 h.40 - h.65	5	5	10	10	15	15
GN 1/1 h.20	9	10	20	20	30	30
EN 60x40 cm	10	10	20	20	30	30
GN 1/1 grills	10	10	20	20	30	30
Yield per cycle (+90/+3°C)	23 kg	23 kg	45 kg	45 kg	68 kg	68 kg
Yield per cycle (+90/-18°C)	18 kg	18 kg	34 kg	34 kg	52 kg	52 kg
Yield per cycle (+65/+10°C)	25 kg	25 kg	50 kg	50 kg	75 kg	75 kg
Yield per cycle (+65/-18°C)	20 kg	20 kg	50 kg	50 kg	60 kg	60 kg

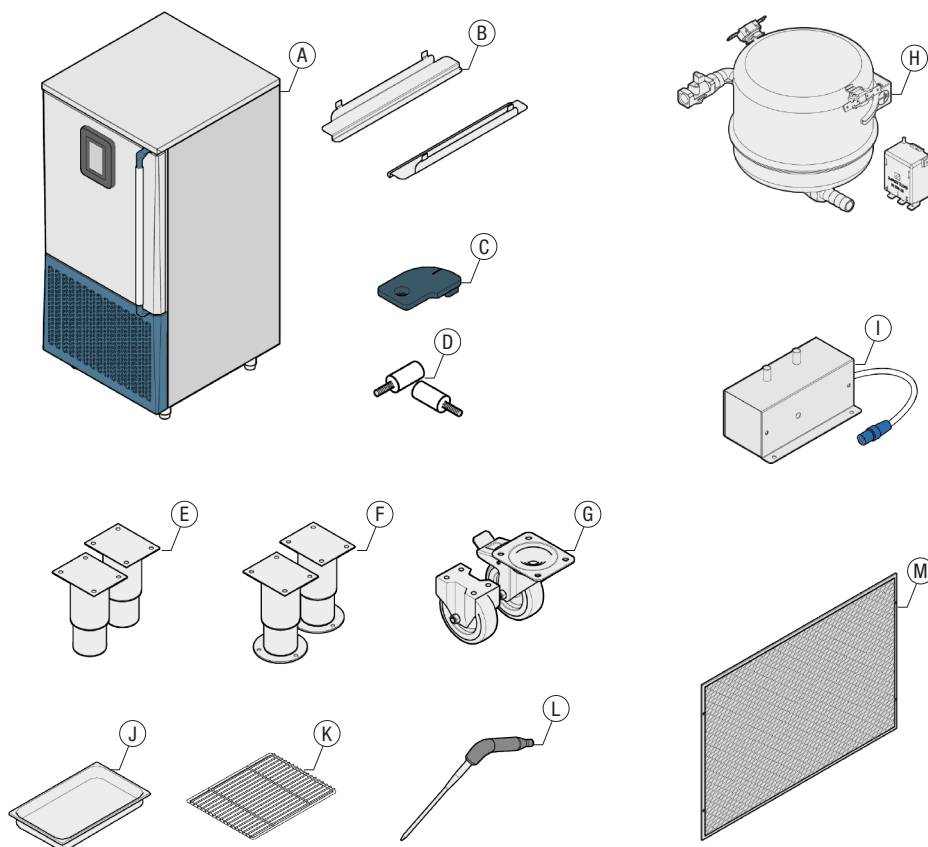
2.2 Rating Plate

1	 NORMANN EXTRAORDINARY CHILLING		10
2	Normann S.r.l. Via Guglielmo Oberdan, 69, 33074 Fontanafredda PN		11
3	Modello	Matricola: xx/YYYYY	12
4	CODICE:	Blast Chiller	13
5	Max current:(A)	Voltage:(V)	14
6	GAS TYPE:	CHARGE:(g)	15
7	Max power hot cycle: (W)	CO2 Eq: (Kg)	16
8	Max power defrost cycle: (W)	Climatic Class:	17
9	N° Produttore AEE: IT25020000016810	Blowing agent: CO2 – CO – HFO	

1. Manufacturer data
2. Equipment trade name
3. Absorbed nominal current
4. Electrical supply voltage
5. Type of coolant
6. Max power consumption during hot cycles
7. Max power consumption during defrosting cycles
8. EEE producer number
9. Country of manufacture
10. Equipment compliant with the requirements for sale and use in the European Union
11. Equipment serial ID number
12. Electrical supply frequency
13. CO2 equivalent
14. Climatic class
15. Quantity of coolant
16. WEEE Equipment
17. Blowing agent used in the foaming process

3.0 Installation

3.1 Equipment



Item	Description	Standard Components (Supplied)	Optional Installations	Accessories
A	Blast chiller	✓	---	---
B	Tray guides	✓	---	✓
C	Doorstop hook	✓	---	---
D	Spacers	✓	---	---
E	Standard Legs	✓	---	---
F	Flanges Legs	---	---	✓
G	Castors	---	---	✓
H	Humidity Generator	✓	---	---
I	Ozone generator/Sanitiser	✓	---	---
J	Trays	---	---	✓
K	Grid Rack	---	---	✓
L	Core probe (Supplied with one probe, four probe connections available)	✓	---	✓
M	Stainless steel Mesh filter - Condenser (Pre-Installed)	✓	---	---

3.2 Setting Up Information

	IMPORTANT
	To be installed only by an authorised service technician
	WARNING
	Improper installation, adjustments, alterations, service or maintenance can cause property damage, injury or death

3.2.1 Handling

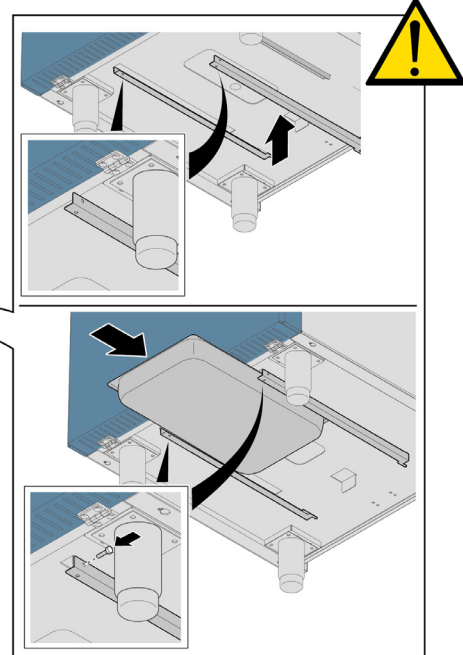
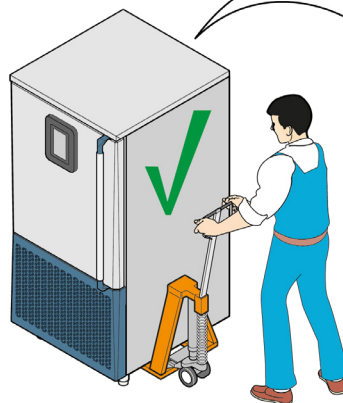
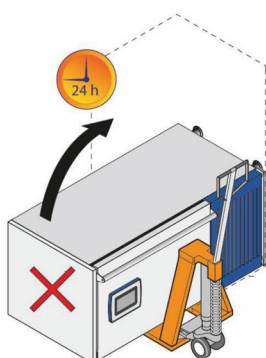
- Use suitable means to move the unit;
 - For smaller items use two people
 - For large items a fork lift, pallet trolley or similar (the forks should reach completely beneath the pallet)

Nortech Plus 5:

- The catchment tray slides cannot be removed use blocks to avoid damaging the tray slides

Nortech Plus 10 / 15:

- Before transporting the equipment, remove the catchment tray guides to avoid damaging the tray slides
- When being moved, the equipment must NEVER be turned upside down or placed on its side. If this cannot be avoided, wait 24 hours before putting it into operation. If the equipment is fitted with wheels, be careful not to push the equipment violently while moving it, to prevent it from tipping over or becoming damaged. Please also pay attention to any uneven surfaces. The equipment fitted with wheels can not be levelled, so make sure that the support surface is perfectly horizontal, flat and smooth.



3.1.2 Unpacking

- Check the unit for damage before and after unpacking. If unit is damaged, contact the distributor and manufacturer
- Should any item have physical damage, report the details to the freight company and to the agent responsible for the dispatch within 24 hours of receipt. No claims will be accepted or processed after this period
- Remove all protective plastic film, ties and packers before installing and operating
- Clean off any remaining residue from the interior/exterior of the unit using a clean cloth dampened with warm soapy water

3.3 Positioning

	IMPORTANT
	Do not install unit under a bench. Under bench installation will void warranty

3.3.1 General Information

- The blast chiller must be installed under an extraction canopy that meets AS 1668.2.
- Have a smooth, level floor which can bear the weight of the appliance at full load
- Have a room temperature between 5°C - 32°C with a maximum humidity of 70%;
- Comply with the regulations in force in terms of safety in the workplace and the systems;
- Not contain potentially explosive materials or substances;
- Be dedicated to food preparation. In addition, a gas-fired appliance requires, by law, rooms with a surface area and ventilation that are suitable for the power of the oven and that have a means of externally evacuating flue gases
- Please consult national and local standards to ensure that your unit is positioned and ventilated in accordance with any existing requirements
- Do not allow cables or other items to rest/hang over the exhaust vents
- Do not install unit under a bench

3.3.2 Spacing

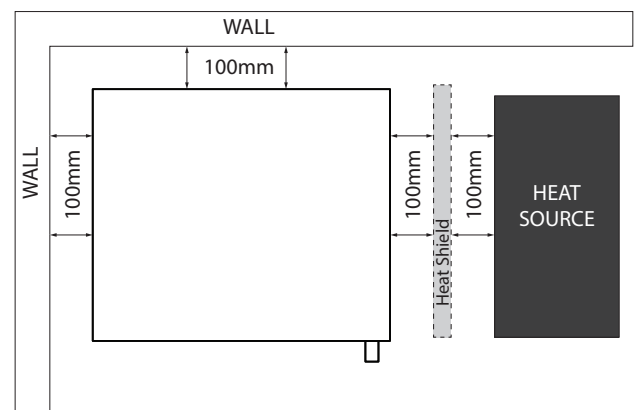
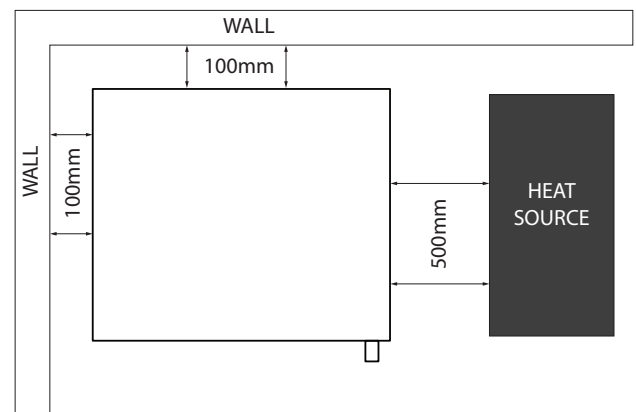
The equipment is not suitable for built-in installation; it is advisable to maintain the clearance distances indicated in the figure with respect to other equipment or walls, in order to facilitate cleaning, disconnection from the power supply at the end of service, and any non-routine maintenance. If the equipment needs to be positioned near strong heat sources, put a protective insulating panel in-between:

Service compartment Heat Source

500mm clearance from another heat source, in order to protect the oven control components and allow access to the service panel. For distances under 500mm, it is mandatory for Stoddart heat shields to be fitted (for a minimum distance of 300mm from the service compartment). Failure to adhere to minimum clearances may void the oven warranty and add service costs due to lack of access

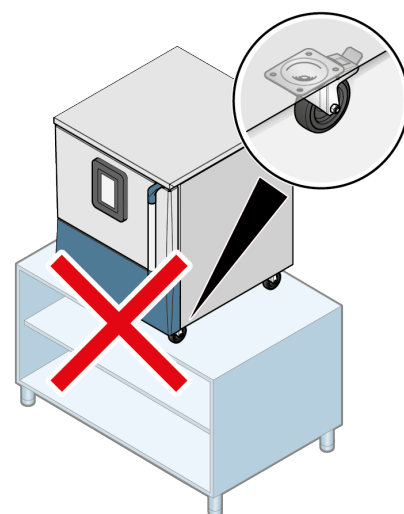
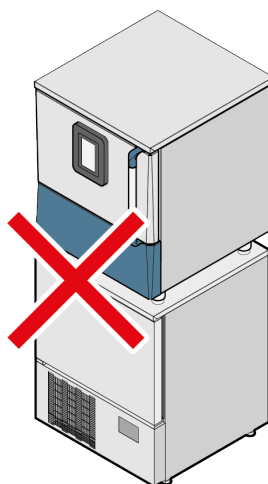
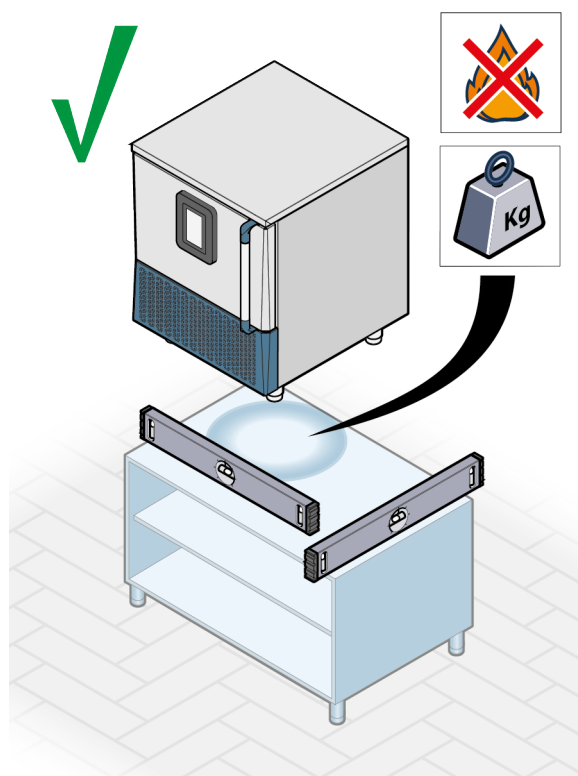
Service compartment Non-Heat Source

300mm clearance from a non-heat source to allow access to the service panel. Any distance under 300mm, will add service costs due to lack of access



3.3.3 Levelling Nortech Plus 5

- The equipment can be placed on the floor or above a structure with an adequate capacity stand for positioning the top equipment safely and stably. Do not place the equipment above or below another piece of equipment of the same or a different type.
- Using a spirit level, ensure that the blast chiller is level. Adjust the foot height to level blast chiller
- If using a stand, level the stand by adjusting the feet, then level the blast chiller



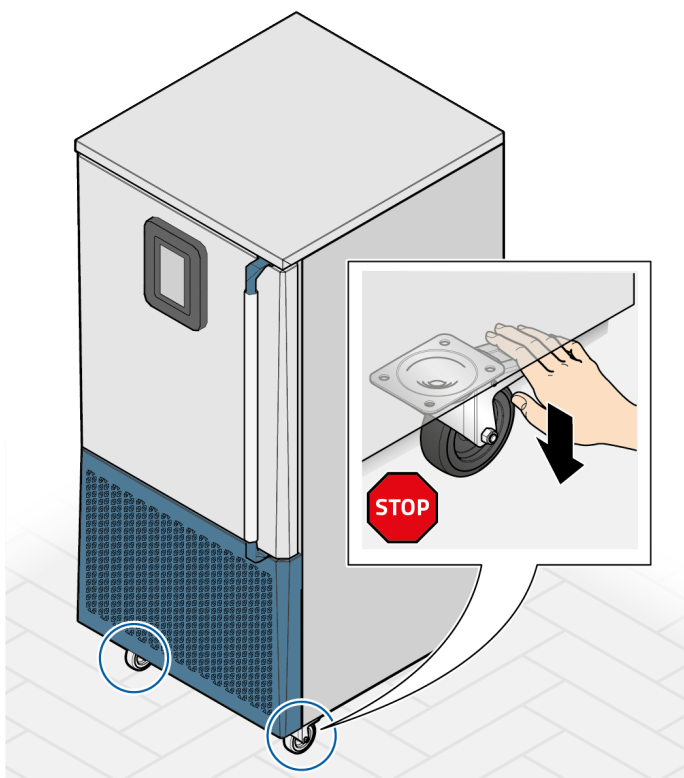
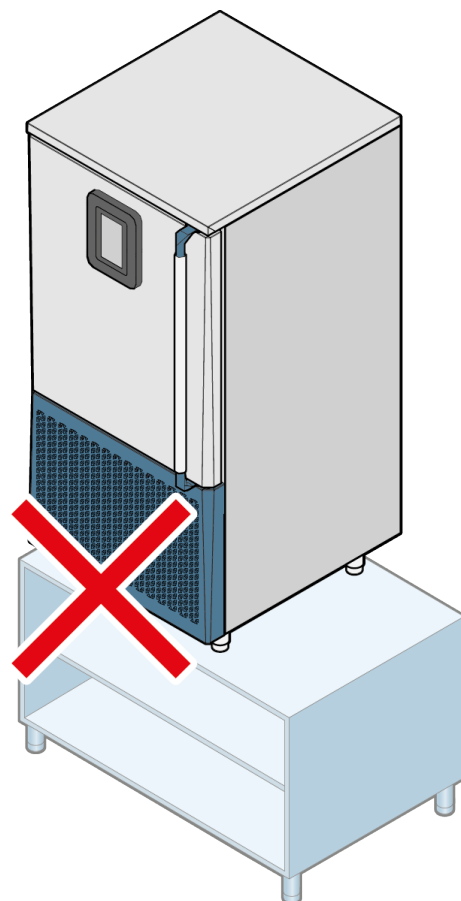
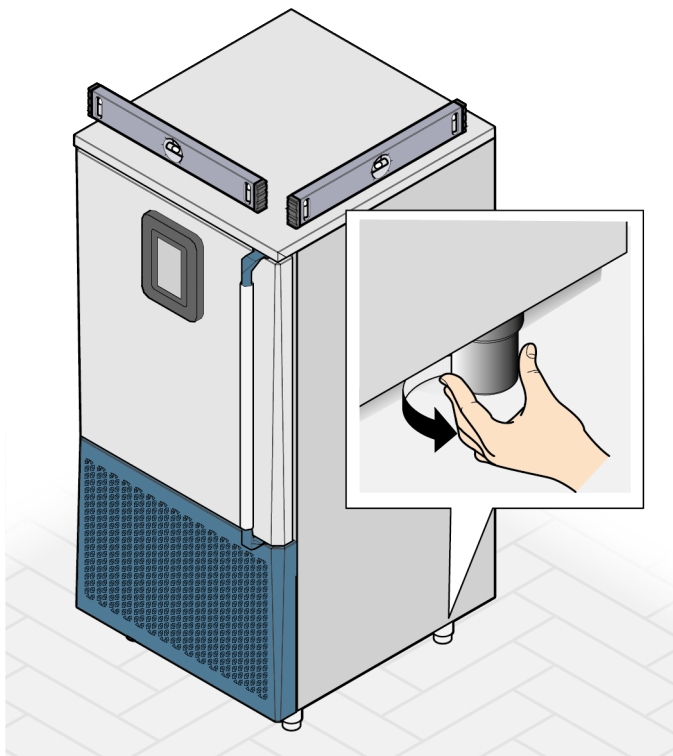


NORMANN

3.0 Installation

3.3.4 Levelling Nortech Plus 10 / 15

- The equipment must only be placed on the floor. Do not insert other accessories or equipment under or above the blast chiller
- Using a spirit level, ensure that the blast chiller is level. Adjust the foot height to level blast chiller
- When using castors ensure the castors with brakes are to the front of the unit and the brakes locked when in position



Due to continuous product research and development,
the information contained herein is subject to change without notice.

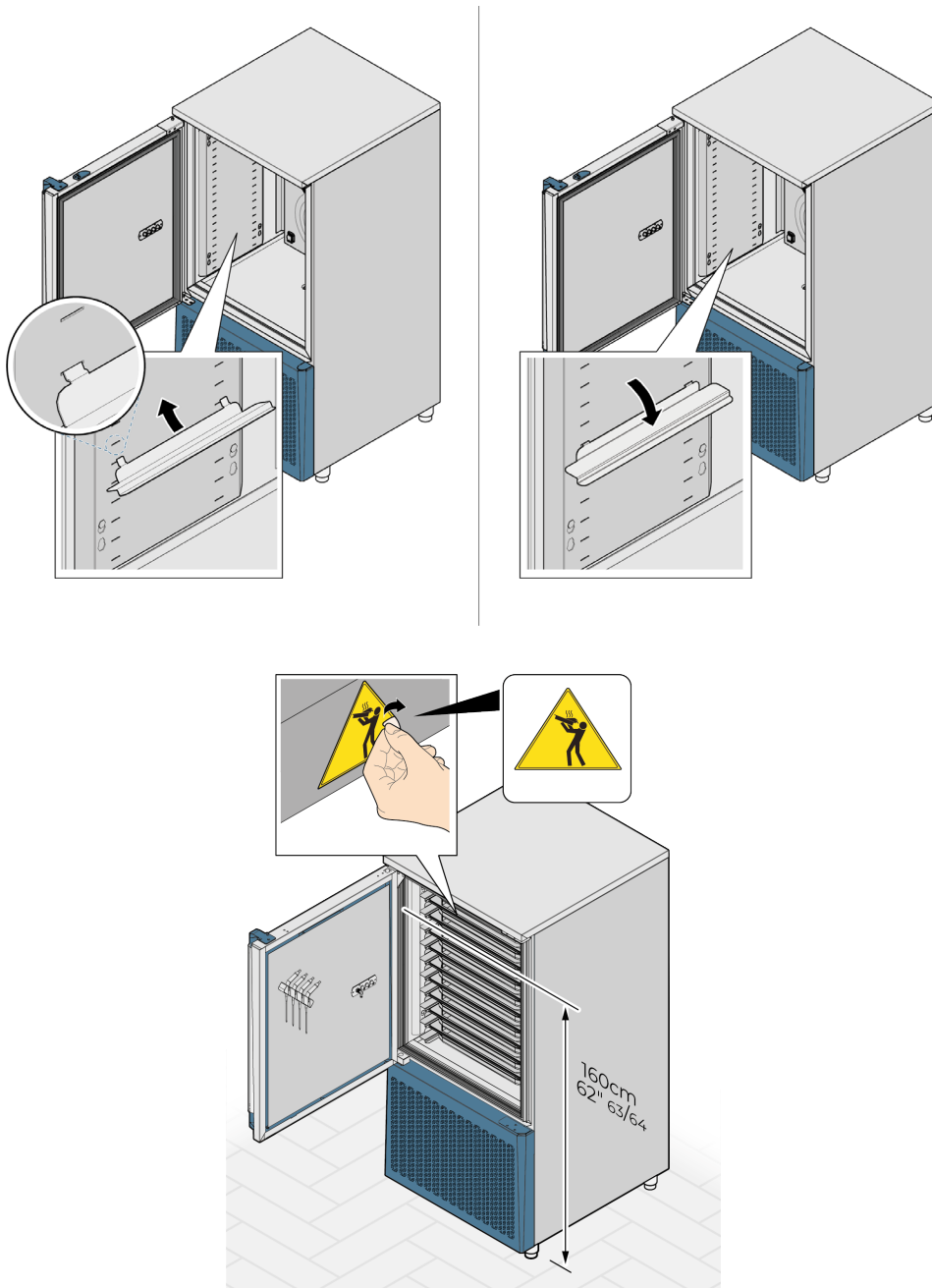
www.stoddart.com.au

www.stoddart.co.nz

3.4 Tray Slides

	WARNING For safety reasons, DO NOT position the last tray at a height above 160 cm. Any liquids which have become hot after cooking may leak when removing the tray from the equipment. If trays are installed above 160cm the yellow “RISK OF BURNS” label MUST BE applied.
---	---

- Insert the tray slides into the unit
- For safety reasons, **DO NOT** position the last tray at a height above 160 cm. If trays are installed above 160cm the yellow “RISK OF BURNS” label **MUST BE** applied.



3.5 Electrical Connection

	WARNING
	This unit must be installed in accordance with local electrical regulations/requirements. Some procedures in this manual require the power to the equipment to be turned off and isolated. Turn the power OFF at the power point and unplug the power supply lead by the plug body. If the power point is not readily accessible turn the equipment off at the isolation switch or the circuit breaker in the switchboard. Attach a yellow “CAUTION-DO NOT OPERATE” tag. This must be performed where relevant unless the procedures specify otherwise. FAILURE TO DO SO MAY RESULT IN ELECTRIC SHOCK.

Single Phase GAS Units:

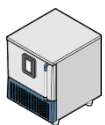
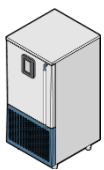
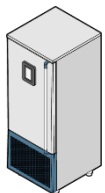
- Supplied and fitted with an appropriately rated plug and lead

Three Phase Units:

- A terminal block for on-site connection, by a licensed electrician located inside the service compartment of the unit, indicated as:
- 3Ø + N + E

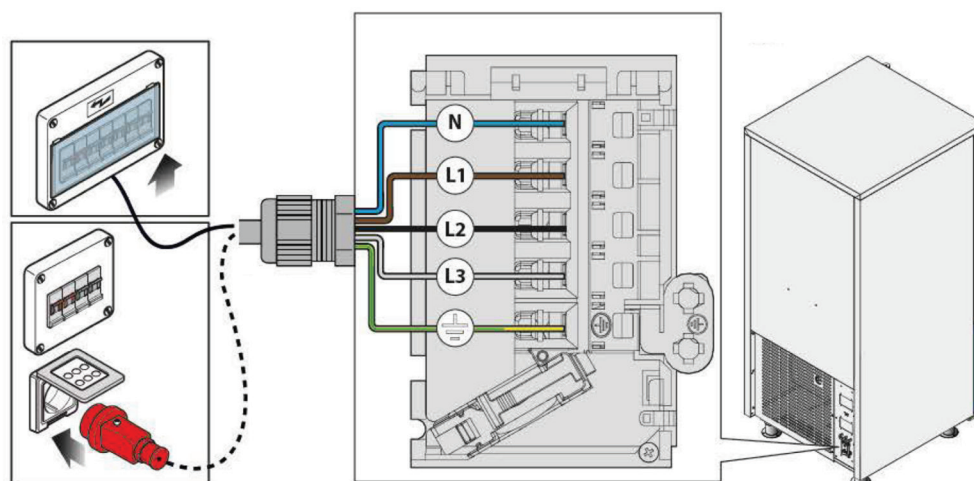
Notes:

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Please contact Stoddart for parts and we will advise how to do this in order to avoid any electrical hazard
- The power cable should be dry and/or isolated from moisture or water

						
Number of trays	5		10		15	
	Nortech	Nortech+	Nortech	Nortech+	Nortech	Nortech+
Electrical data						
Volts	220-240	220-240	380-420	380-420	380-420	380-420
Ph	1N	1N	3N	3N	3N	3N
Hz	50	50	50	50	50	50
Refrigeration maximum electrical absorption	1289 W / 7.06 A	1269 W / 7.59 A	2701 W / 7.04 A	2661 W / 8.1 A	3394 W / 7.96 A	3334 W / 9.55 A
Heating maximum electrical absorption	without humidity					
	-	1150 W / 6.25 A	-	2100 W / 4.3 A	-	3250 W / 6.8 A
	with humidity					
	-	1550 W / 8.15 A	-	3100 W / 9.1 A	-	4250 W / 11.6 A
Autonomous machine cooling capacity -10°C, +45°C	2069 W	2069 W	4138 W	4138 W	4822 W	4822 W

3.5.1 Wiring Nortech Plus 10 / 15

1. Remove service compartment cover
2. Connect electrical wiring, following the below wiring diagram
After connecting wires, use a multimeter to check:
 - There is no electrical dispersion between the phases and the earth
 - For electrical continuity between the external casing and the mains earth
3. Reinstall service compartment cover
4. Secure wiring cable by fastening the cable gland nut





3.0 Installation

3.6 Water Connection

	IMPORTANT
	This blast chiller must be installed in accordance with the Plumbing Code of Australia (PCA) and fitted with the supplied Watermarked Dual Check Valve.

3.6.1 Specification

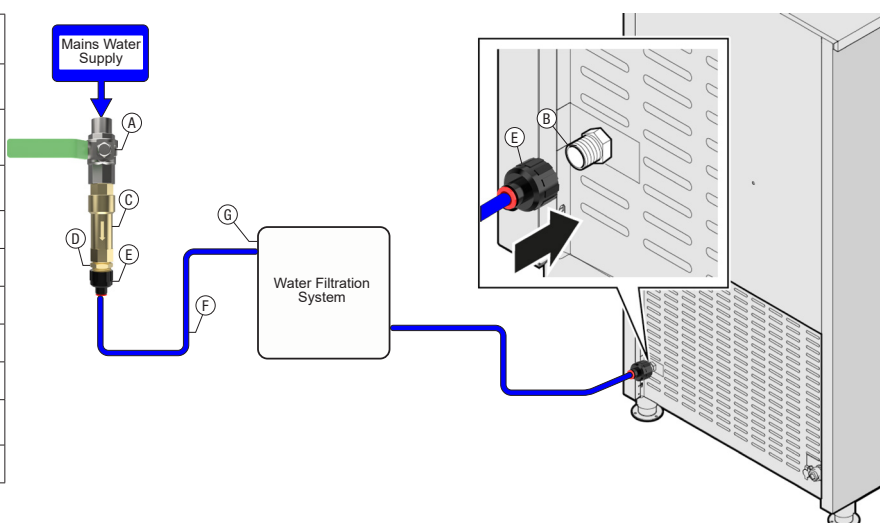
Water Connection	3/4" BSP
Water Inlet Pressure	150 - 500KPA if the incoming water pressure is below the specified minimum (150 kPa), install a pump (minimum flow rate: 300 l/h); if it is above the specified maximum (500 kPa), install a pressure limiting valve
Tempered water supply	10°C - 30°C
Water Hardness	0.9 - 1.4 (ppm)
Water Composition	Chlorides <30ppm Chloramine s 0.1 ppm (mg/L)

3.6.2 Standard Unit as Supplied

	IMPORTANT
	The watermarked water filtration system is not supplied as part of the Normann blast chiller. Refer to the 'water filtration system' installation guide for connection instructions.

Norman blast chillers are supplied with Watermarked Dual Check Valve and Watermarked fittings for connection in conjunction with the selected Watermarked filtration system (refer to page 25).

Item	Description	Qty.
Required Components for Blast Chiller:		
A	Existing Water Connection With Watermarked Isolation Ball Valve	1
Supplied Components With Blast Chiller:		
B	Blast Chiller Water Connection (pre-installed)	1
C	Watermarked Dual Check Valve	1
D	Nipple, 3/4" Male	1
E	3/4" Bsp To 3/8" Tube Connector	2
F	3m 3/8 Tube (Water)	2
Supplied Separately:		
G	Watermarked - Water Filtration System	1





IMPORTANT

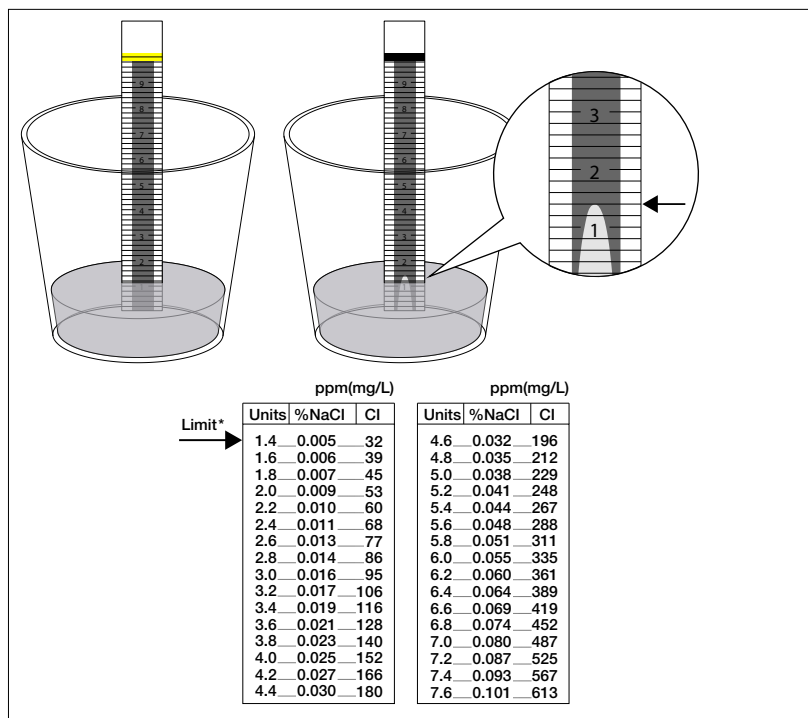
Selection of the correct water filtration system to suit local water conditions is **CRITICAL**. Failure to install the correct system according to the following guidelines may void warranty.

3.6.3 Chloride Test

1. Remove Titrator from bottle and replace bottle cap immediately
2. Insert lower end of the Titrator into water to be tested (approx 20mm of water). DO NOT allow water to touch yellow completion band at top of Titrator
3. Allow water to completely saturate the wick of Titrator. Reaction is complete when yellow band turns dark
4. Note where the white chloride peak falls on the scale. This represents the unit value
5. Refer to the table to convert the Titrator units into salt concentration

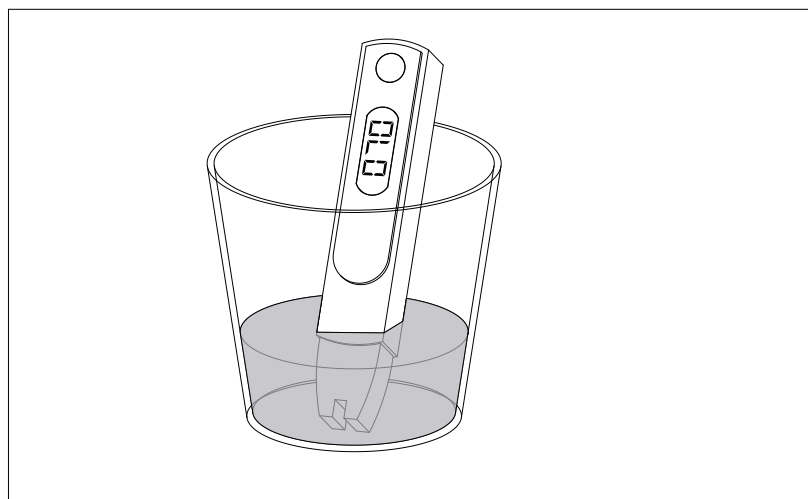
* Readings greater than 1.4 (32PPM) require a Reverse Osmosis Unit to be installed

* Readings less than 1.4 (32PPM) require the Total dissolved solids (TDS) be tested



3.6.4 Total Dissolved Solids (TDS) Test

1. Remove the cover from the TDS meter, turn on by pressing the On/Off button. The display should read 000
2. Insert lower end of the TDS meter into water to be tested (approx 20mm of water). DO NOT completely submerge
3. Wait 5-10 seconds
4. The number displayed on meter is the TDS (Total Dissolved Solids) of the water expressed in PPM (parts per million) e.g. TDS = 70PPM
 - Contact Stoddart if reading is lower than 20ppm
5. When finished, turn the TDS meter off

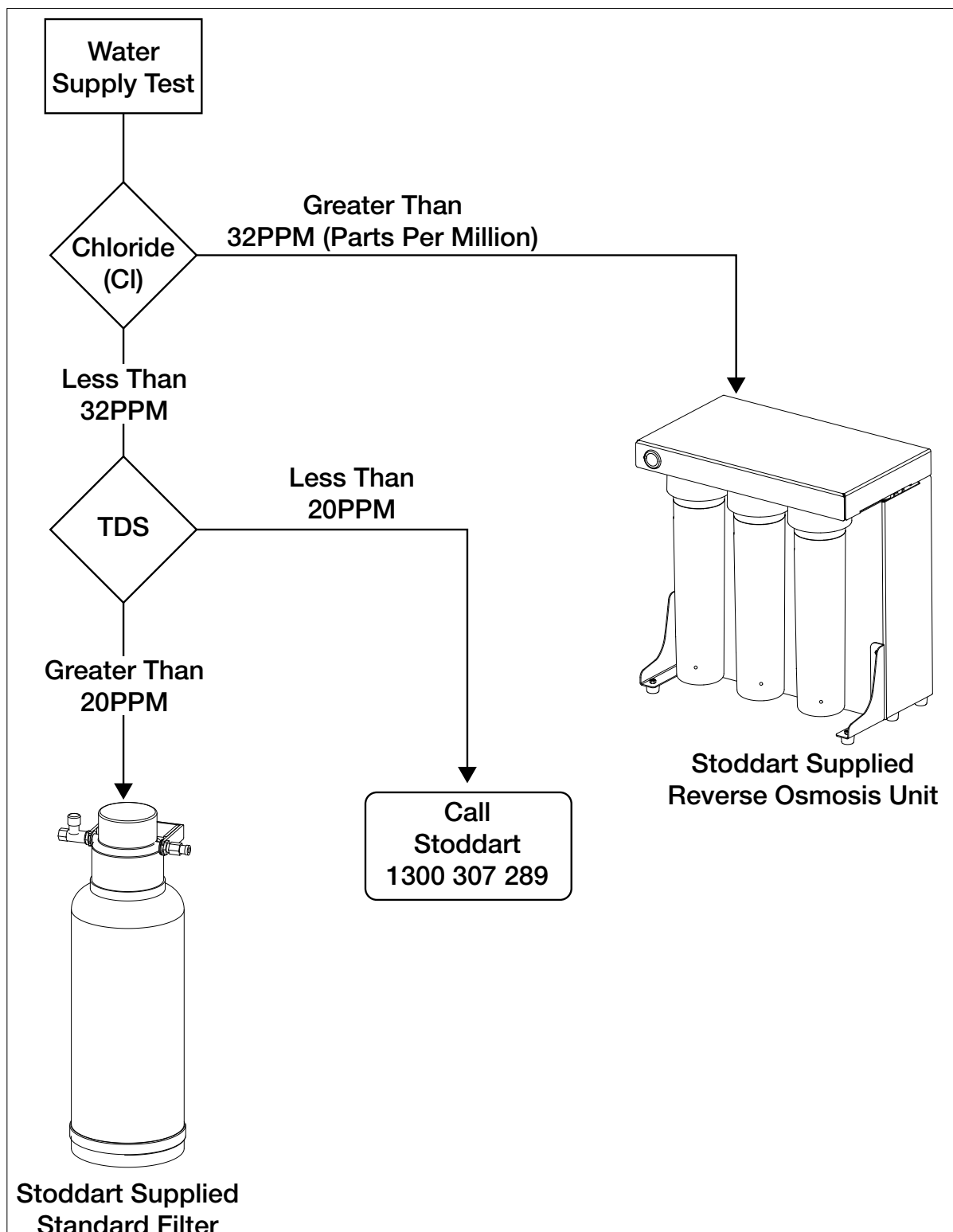




3.0 Installation

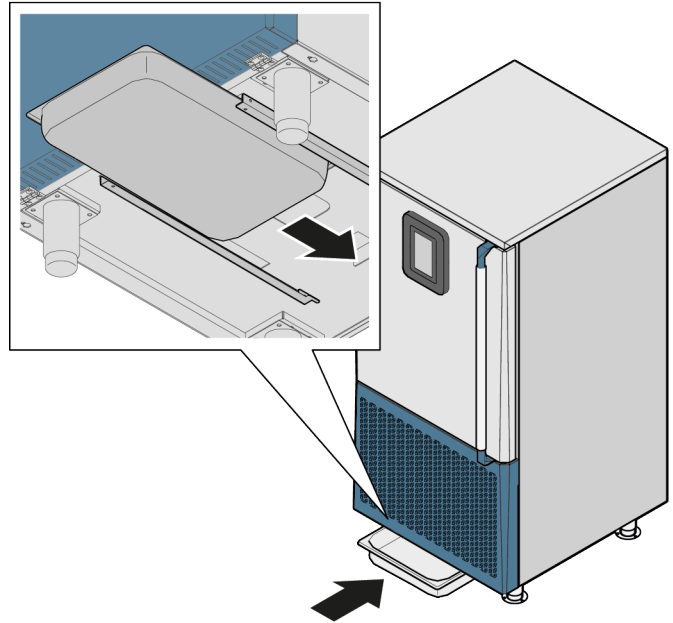
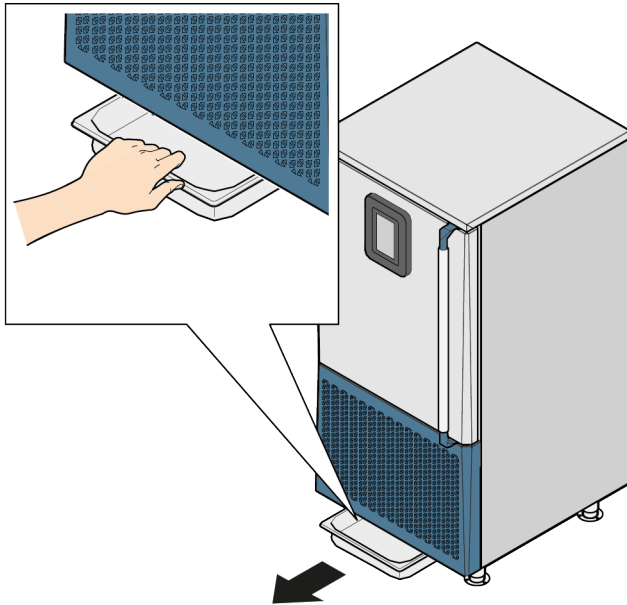
3.6.5 Filtration System Selection

- After testing the water supply quality, use the below chart to determine the water filter requirements
- Only watermarked approved filtration systems can be used



3.6.8 Drainage

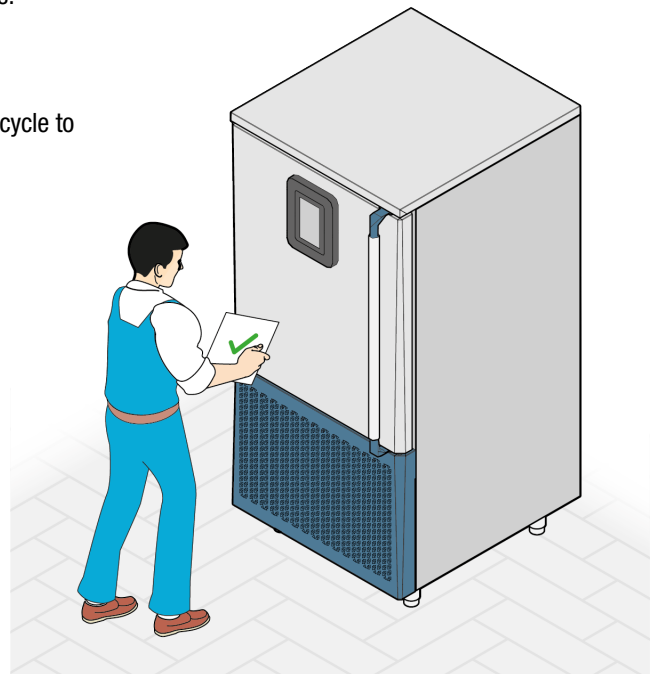
- This equipment has a tray at the bottom to collect condensate; it must be inspected and emptied regularly. The equipment has no permanent connection to a drainage pipe.



3.7 Testing

After positioning and connecting the appliance, carry out the following checks:

- Check that correct electrical connections have been made.
- Check that the absorption complies with the standards
- Check that the refrigerant system gas pressures are correct.
- Run at least one complete refrigeration and low-temperature cooking cycle to ensure that all the components work correctly



3.8 Troubleshooting

3.8.1 Troubleshooting Procedures

- If any faults/issues occur with the unit, follow the below troubleshooting procedures
- If the troubleshooting procedures do not correct the problem, contact the Stoddart Service Department

	WARNING
	Technician tasks are only to be completed by qualified service people. Check faults before calling service technician.

Problem	Possible Causes	Possible Corrective Action
Unit does not operate/start	The mains isolating switch on the wall, circuit breaker or fuses are OFF at the power board	Turn isolating switch, circuit breaker or fuses ON
	The main switch of the unit is OFF	Turn the main switch ON
	Condenser unit is OFF	Turn ON condenser unit
	Electrical wiring damaged	Contact the Stoddart service department
	Condenser unit broken	Contact the Stoddart service department
	Faulty electronic controller	Contact the Stoddart service department
	Main circuit board is hot	Contact the Stoddart service department
	Refrigeration circuit board(s) is hot	Contact the Stoddart service department
Unit is too warm	Ambient air entering the units	Door not closing / sealing
		Move unit / exhaust fan
		Open baffle
	Warm items in unit	"Pre-chill / Remove items / Wait 30min for items to chill"
	Air not circulating	Remove some items / Clear air vents / Grills
	Too many items in the unit (overloaded)	Remove some items
	Items obstructing air vents / grills	Re-position items
	Defrost cycle is ON / just finished	Wait 30min for cabinet to cool
	Evaporator coil fins blocked	Clean fins / Run defrost cycle. If problem persists contact the Stoddart service department
	Evaporator coil iced up	Contact the Stoddart service department
	Temperature probe broken / disabled	Contact the Stoddart service department
	Temperature probe damaged	Contact the Stoddart service department
	Evaporator fans not operating	Contact the Stoddart service department
	Undercharge	Contact the Stoddart service department
Unit is too cold	Faulty electronic controller	Contact the Stoddart service department
	Direct sunlight	Block sunlight, window shades
	Temperature probe broken/disabled	Contact the Stoddart service department
	Faulty electronic controller	Contact the Stoddart service department
	Continuous cycle setting ON (integral units)	Contact the Stoddart service department
	Set point temperature too low	Contact the Stoddart service department

3.8.2 Alarm Codes

Alarm Code	Blocking (prevent operation until error is cleared)	Description
E-00	✓	Parameter inconsistency error and/or base version error.
E-10	✓	Communication error between I/O base and Touch Keypad.
E-20	✓	Compressor safety device intervention.
E-30	✓	Cavity probe failure.
E-40	✓	High temperature detected by the probe integrated in the I/O board.
E-41	✓	High temperature detected by the probe integrated in the touch keyboard board.
E-50	✓	Intervention of the low-pressure switch.
E-51	-	Intervention of the low-pressure switch.
E-60	✓	Intervention of the high-pressure switch.
E-61	-	Intervention of the high-pressure switch.
E-70	✓	Evaporator probe failure.
E-90	✓	Fan support open.
E-210	-	Core probe failure.
E-230	-	Condenser probe failure.
E-250	-	Humidity probe failure.
E-290	-	Alarm for excessive temperature variation while the door is open. (*)
E-310	-	Alarm for failure to reach temperature at end of phase. (*)
E-320	-	Alarm for excessive duration of a blackout. (*)
E-330	-	Alarm for chamber temperature dropping too slowly. (*)
E-340	-	Humidity generator failure. (*)
E-350	-	Alarm for excessive temperature detected by the cavity probe. (*)
E-360	-	Alarm for excessive temperature detected by the evaporator probe. (*)

3.9 Disposal

If the appliance is no longer of use, please dispose in an environmentally correct way.

Contact a qualified service technician:

- To recover all refrigerant
- To remove the compressor or remove the oil from the compressor

The distributor / retailer can contact their local metal recycling centre to collect the remaining cabinet, shelves, etc.

There may be special requirements or conditions. Information on the disposal of refrigeration appliances can be obtained from:

- Your supplier
- Government authorities (The local council, Ministry of the Environment, etc.)



Discarded electric appliances are recyclable and should not be discarded in the domestic waste! Please actively support us in conserving resources and protecting the environment by returning this appliance to the collection centres (if available).



Dispose of packaging in accordance to applicable legal regulations.

[illegible]

Australia

Australian Business Number: 16009690251

Service / Spare Parts

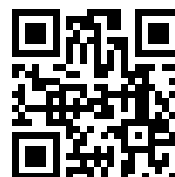
<https://customerservice.stoddart.com.au>

Sales

Tel: 1300 79 1954

Email: sales@stoddart.com.au

Web: www.stoddart.com.au



Customer
Service Portal

New Zealand

New Zealand Business Number: 6837694

Service / Spare Parts

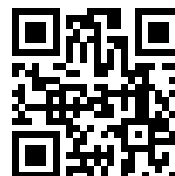
<https://customerservice.stoddart.com.au>

Sales

Tel: 0800 79 1954

Email: sales@stoddart.co.nz

Web: www.stoddart.co.nz



Customer
Service Portal