WILLIAMS REFRIGERATION

BLAST CHILLERS AND FREEZERS

REACH-IN AND ROLL-IN BLAST CHILLERS, BLAST FREEZERS AND BLAST CHILLER/FREEZERS

WWW.WILLIAMS-REFRIGERATION.CO.UK

Blast chillers and freezers from Williams: a comprehensive range making food safety as easy as 1-2-3

From 10kg compact cabinets to 320+kg modular roll-in systems, Williams has developed a model to suit every application. And operating them is simple, thanks to the Williams Easy Blast (WEB) controller.

Williams Refrigeration is a leading manufacturer of commercial refrigeration with a global reputation for delivering excellence.

Our extensive product range includes high performance, energy efficient and environment friendly refrigerated cabinets and counters, blast chillers, coldrooms, backbar and specialist bakery equipment.

Our customer commitment helps you meet the demands of food safety and energy efficiency legislation. Our competitive pricing, professional advice, innovative design and after sales service support attracts customers from all sectors of the market – including many of the world's leading hospitality and retail organisations.

Williams 'right first time' philosophy means that its products provide years of trouble-free operation and are easy to service and maintain.

Greenlogic:
Through the Greenlogic initiative, Williams is committed to supplying the most energy efficient and sustainable commercial refrigeration in today's market. For more information visit www.greenlogic.info

BLAST CHILLERS AND FREEZERS

Williams' Blast Chillers and Blast Freezers are the perfect choice for caterers in every sector who cook and then chill food e.g. Hospitals, pubs, airlines, schools, and event caterers.

Ranging from the compact WBC10 (10kg capacity) to the mighty WMBC320 (320kg capacity) Williams has a blast chiller to suit any space.

All Williams blast chillers have advanced air flow, and easy to use controls making HACCP compliance as easy as 1,2,3.

✓ Standard - Not available o Optional extra	Reach In		Roll In		
	Chiller	Chiller Freezer	Chiller	Freezer	Chiller Freezer
Stainless exterior & interior	✓	✓	✓	✓	✓
Left hand hung door	o	o	o	o	o
White PVC coated exterior / stainless steel interior	-	-	o	o	o
Automatic switch to storage mode	✓	✓	✓	✓	✓
Adjustable legs	o	o	-	-	-
Core food temperature probe	✓	✓	✓	✓	✓
Hard / Soft chill or Store mode	✓	✓	✓	✓	✓
1/1 GN Pans	o	o	-	-	-
1/1 GN Shelves	o	o	-	-	-
2/1 GN trolley	-	-	o	o	o
Thermal printer for HACCP compliance	o	o	✓	✓	✓
Roll-Through	-	-	o	o	o
Internal protective bumper bars	-	-	✓	✓	✓
Door mullion heaters	✓	✓	✓	✓	✓
POD type refrigeration system	-	-	o	o	o
90mm insulated floor / external ramp	-	-	o	✓	✓
Internal light	-	-	o	o	o
Williams Easy Blast controller	✓	✓	✓	✓	✓
AirSmart airflow design	✓	✓	✓	✓	✓
High density polyurethane insulation	✓	✓	✓	✓	✓
Automatic defrost	✓	✓	✓	✓	✓

*Not available on WBCF50 or WBC50

SCAN HERE
FOR MORE INFORMATION

COOK CHILL – A REFRESHER

WHY DO YOU NEED A BLAST CHILLER?

If you cook and then chill food, its temperature needs to be reduced safely from 70°C to 3°C within 90 minutes. If you are freezing cooked food, the temperature needs to go from 70°C to -18°C in no more than 240 minutes. Otherwise you are breaking the law. Worse, you are putting your customers at risk.

This is because bacteria grows most aggressively between 5°C and 63°C – so the food needs to get past this 'danger zone' as quickly as possible.

It's no good putting hot food into a refrigerator or freezer – it won't cool fast enough and the resulting rise in cabinet temperature will endanger other food being stored there, overworking the refrigeration system.

The only safe way to comply with the food safety regulations governing the chilling or freezing of cooked food is to use a blast chiller or blast freezer.

WHAT IS A BLAST CHILLER OR BLAST FREEZER?

A blast chiller or blast freezer uses powerful fans to blast cooled air onto the hot food, quickly reducing temperature.

This eliminates the risk of slow cooling in the bacteria growth 'danger zone'.

The best models automatically control the blast chill/freeze process to preserve food quality in terms of appearance, taste, texture, aroma and nutritional values.

These days there are models to suit small and large establishments, ranging from undercounter blast units to large roll-ins. Furthermore, most equipment has been specifically designed to be easy to use, for example, Williams' units use a simple 1-2-3 controller.

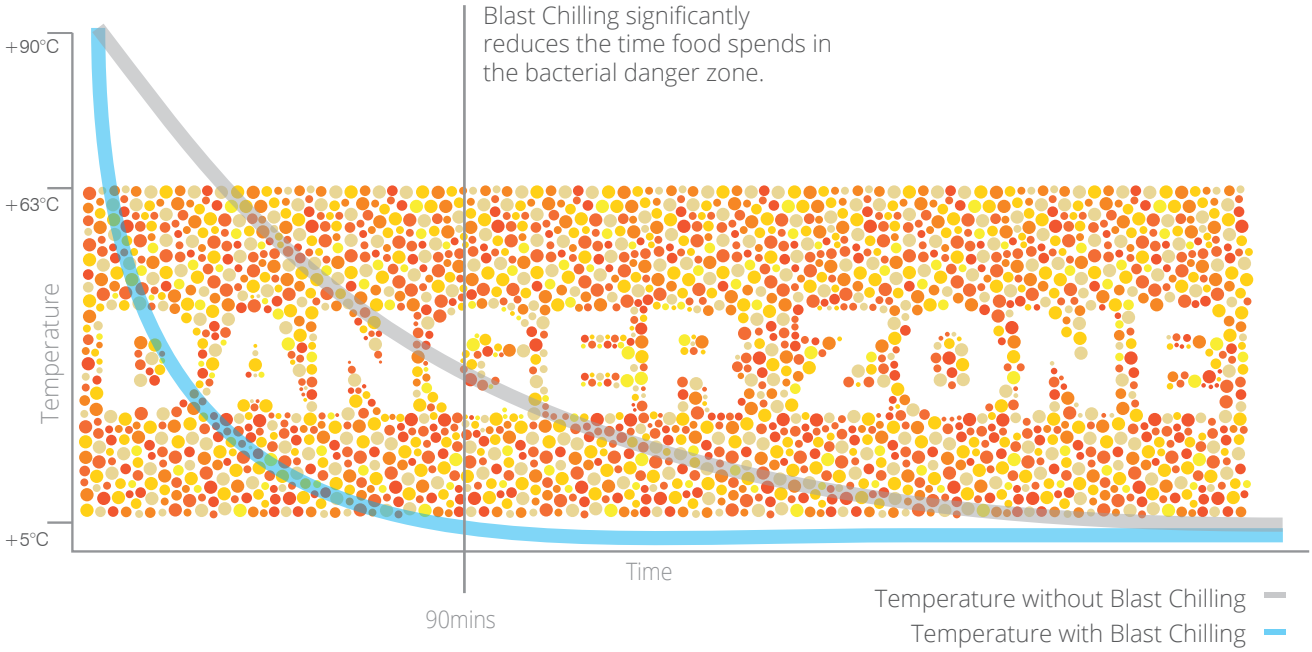
Once the blast chill/freeze cycle is complete, Williams blast chillers and blast freezers automatically switch to storage mode, so food can safely be left until you are ready to move it.

Alongside blast chillers and blast freezers, Williams offers combined blast chiller freezers that can switch between the two processes.

BLAST CHILL FREEZE ADVICE:

SPACE FOOD EVENLY...

When loading food into the blast chiller or freezer, space it evenly on the tray and space the trays evenly through the cabinet. This will help ensure food is uniformly chilled.



SAVE ON COSTS WHILE INCREASING KITCHEN EFFICIENCY

Cook chill isn't just about food safety. Preparing food in advance – sometimes days in advance – means you can reduce costs and even out the peaks and troughs of the kitchen workload. Is Sunday lunch your busiest service? Prepare the food on Thursday afternoon, or whenever business is quiet. Making more productive use of time, and cooking food in advance, allows you to expand your menu options.

A blast chiller or blast freezer can reduce labour costs by keeping chefs occupied profitably while it's quiet. This will allow caterers to improve on presentation and attend to customers during service periods. Plus a blast chiller or freezer can reduce food wastage, since food that's not required can be left in chilled or frozen storage.

HARD OR SOFT CHILL?

Williams Blast Chillers offer the option of soft or hard chill. Soft chilling is a gentler process that ensures delicate products, such as fish, fruit and vegetables, do not develop ice crystals.

Hard chilling is suitable for denser foods such as meat, casseroles and lasagne. Here, the air flow drops below freezing to maintain safety while ensuring the product stays in prime condition.

WHO USES BLAST CHILLERS OR BLAST FREEZERS?

Caterers in every sector who cook then chill food should use a blast chiller. Establishments include hospitals, pubs, airlines, schools, banqueting and event caterers, conference venues, prisons, restaurants and hotels. Thanks to the huge range of sizes now available, there is a model for every application and site.

BLAST CHILL AND BLAST FREEZE CAN HELP YOU TO:

- Guarantee food safety and HACCP compliance
- Preserve the quality of food
- Reduce food wastage
- Expand your menu
- Reduce labour costs
- Improve kitchen efficiency and productivity
- Increase profitability

BLAST CHILL FREEZE ADVICE:

KEEP IT CLOSED...

Once the blast cycle has started, do not open the door, for example to add more trays of product. The food already in the unit will be subjected to warm air, while the food that is added won't get the full blast cycle. Either way, food safety will be compromised.

WILLIAMS: BLAST CHILLING MADE SIMPLE

Williams has been building blast chillers, blast freezers and combined blast chiller freezers for over 40 years.

We have developed a market-leading range that offers exceptional performance, energy saving features and are the easiest to operate on the market.

Advanced design features, such as our AirSmart airflow system, guarantee food quality through even and consistent chilling. There are now thousands of our units in use by leading institutions, hotels, restaurants and chains around the globe.

AS SIMPLE AS 1-2-3...

The Williams Easy Blast's (WEB) innovative design makes it the simplest to operate on the market.

Control buttons

1. Press once to select cycle Blast Chill or Blast Freeze cycle. Press a second time to select Hard or Soft Chill (or Blast Freeze on Blast Freezers)

2. Press to select time options: 90 or 240 minutes. Or choose the food probe option (depending on the size of load and product)

3. Press to start the Blast Chill or Blast Freeze cycle

✗ If you have made a mistake press and start again.

During the Blast Chill / Freeze cycle the cabinet temperature will be shown throughout the process.

Food probe control*

1. Press to select Blast Chill or Blast Freeze cycle. Press again to select Hard or Soft or Blast Freeze cycle

2. Press to select food probe and ensure its placed in the centre of the products requiring chilling

3. Press to start cycle

*not recommended for freezing.

Once the cycle is complete the blast chiller, chiller freezer or freezer will go through an auto defrost and automatically switch to storage mode. The food will be kept at a safe temperature of +3°C or -18°C until you are ready to transfer the load to the correct storage cabinet / coldroom / freezer room.

HACCP

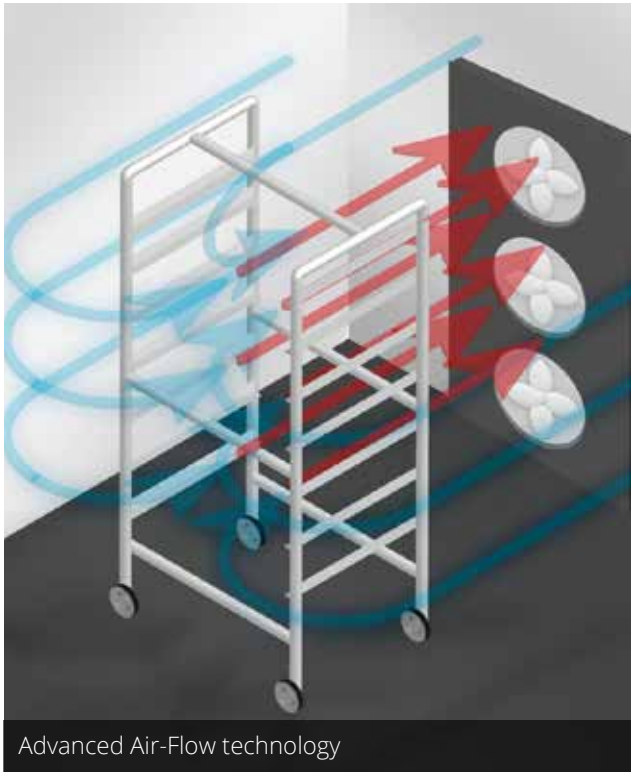
With a Williams blast chiller, HACCP is made easy. Our blast chillers, freezers and chiller freezers offer a variety of options for data logging to meet your HACCP requirements.

LET'S MAKE LIFE EASIER...

Williams blast chillers, freezers and chiller freezers are designed to make life easy. For example, whereas many conventional models can only start to chill food from *70°C, our units can accommodate it straight from the oven at 90C (if ambient is less than 35°C) - and still cool it to 3°C/-18°C within the required 90/240 minutes. This increases productivity within the kitchen as chefs are able to get on with other jobs.

Then there's our self diagnostics, which mean service engineers can quickly find a fault and correct it. When it's time to call the engineer to clean the condenser, our blast chillers, freezers and chiller freezers remind you by flashing the red condenser light.

For optimum operating efficiency, all Williams models automatically switch to defrost at the end of each cycle. To ensure staff are aware when the blast cycle finishes, an audible alarm sounds.



Advanced Air-Flow technology

Food Probe

MAINTAINING FOOD QUALITY

The unique AirSmart advanced airflow design chills the food inside from three different directions. Powerful, energy efficient fans and the equalised air pressure chamber ensure the air flows evenly and gently over all the products, throughout the chamber.

Chilling or freezing is uniform and the product stays in perfect condition: The airflow eliminates the risk of dehydration, skinning or damage so that food maintains its taste, texture, aroma, appearance and nutritional value.

Even delicate foods, such as gateaux, are protected, with not a single chocolate flake ruffled.

GREENLOGIC – ENERGY SAVING SOLUTIONS

Our latest generation of blast chillers, freezers and chiller freezers have been developed under Williams' Greenlogic initiative - designed to offer the most sustainable, energy-efficient and 'greenest' models on the market.

Our new range of reach-in blast chillers feature natural hydrocarbon refrigerant, precision injected high density 75mm polyurethane insulation and an energy saving self-regulated condensate vaporisation system. The range has BREEAM accreditation.

Our food-probe driven cycles can help operators minimise energy use, by stopping the blast chill cycle as soon as the food reaches the correct temperature, rather than waiting for the full 90 minutes.

For modular reach-in units we have developed an optional Storage Mode Pod. This takes over from the main blast chill or freeze refrigeration system when the blast cycle ends and minimises energy use for as long as the unit is in storage mode. It is especially useful for sites that blast chill or freeze over night or at weekends, when the storage mode may be in operation for long periods.

ENERGY SAVING TIP:

USE A FOOD PROBE...

Using a food probe to control the blast chill cycle can save energy. To ensure the most accurate temperature readings, position the probe in the middle of the tray on the middle shelf, in the densest part of the food.

REACH-IN

Blast chiller and chiller freezer cabinets

Specifically developed for small to medium sized catering operations, our reach-in blast chiller and freezer cabinets and counters are ideal for pubs, restaurants, smaller hotels, care homes and schools.

With capacities from 10kg to 50kg, our new range has the flexibility to meet your needs, delivering reliable performance in ambients up to 43°C.

Our cabinets feature sleek energy-saving self-closing doors, whilst the integral door handles allow for an effortless grab with an easy to clean design.

For ease of cleaning and hygiene, construction is stainless steel throughout and interiors have radiused corners, fully removable trayslides / racking as well as magnetic, balloon door gaskets.

Standard features include the unique and simple to operate WEB controller, non-marking swivel castors with brakes for easy positioning, and precision injected, high density 75mm polyurethane insulation.

Self diagnostics and the easy to access integral refrigeration system simplify service and maintenance.

All models in our reach-in range will accept the maximum product weight in both chill and blast freeze mode of operation.

Operating the blast chill cycle with a food probe ensures perfect temperature control every time. There is a choice of hard, soft, store and core food temperature probe controlled cycles with an audible alarm indicating the end of the cycle.

Options include a left hand hung door, stainless steel back, 1/1 GN shelves, marine-specification versions, US-specification versions, and adjustable legs in place of castors.

BLAST CHILL FREEZE ADVICE:

BEFORE YOU BEGIN...

Ensure that the blast chiller or freezer is switched on and is at the correct temperature (3°C for chilling and -18°C for freezing) before hot food is loaded, otherwise the refrigeration system will be over-worked and the cycle may not complete in time.

FEATURES AND BENEFITS

POWERFUL CHILLER
Chills +90°C to +3°C in 90 mins

POWERFUL FREEZER
Freezes +90°C to -18°C in 240 mins

EASY TO USE
Williams Easy Blast (WEB) simple to operate 1-2-3 controller

TOUGH AND DURABLE
Designed to operate efficiently up to a 43°C ambient

HIGH PERFORMANCE
Up to 75mm polyurethane insulation for excellent thermal efficiency

GASTRONORM COMPATIBLE
Accommodates 1/1Gastronorm pans or shelves

SELF CLOSING DOORS
Self closing doors with full integral door handle

DESIGNED FOR FLEXIBILITY
Sizes available from 10-50kg capacity to suit the size of your operation

FOOD PROBE SAFE STORAGE FEATURE
Convenient and safe storage when food probe is not in use

ROLL-IN WTBC70

BLAST CHILLERS DESIGNED TO ACCEPT RATIONAL OR LAINOX 1/1 TROLLEYS

Specifically designed to accommodate Rational or Lainox 1/1 GN combi oven trolleys, the WTBC70 can blast chill up to 70kg worth of food from +90°C to +3° in 90 minutes.

Similar to our reach-in models, this unit features sleek aesthetics and the same cool technology, including the Williams Easy Blast (WEB) controller and the AirSmart airflow system for even and consistent chilling.

For easy cleaning and maintenance, the unit includes the same easy grab door handle designed to eliminate potential dirt traps. The refrigeration system is also easy to access with removable panels either side, providing easy maintenance.

The WTBC70 is available with a remote refrigeration system. This is a great option for kitchens with limited ventilation, low ceilings, or high heat levels. The condenser and compressor will be placed outside the kitchen, helping the unit to run more efficiently and produce less heat.

Once the cycle has finished, the unit automatically switches to storage mode at 3°C ensuring the food can be safely stored after completion. Automatic defrost will also begin at this time.

Standard features include energy saving self-closing doors, precision injected, high density polyurethane insulation and the core food temperature probe.

ROLL-IN

Modular blast chiller, freezer and chiller freezer units

Delivering the performance demanded by larger catering operations, Williams modular blast chillers, freezers and chiller freezers are available in capacities from 90kg to 320kg, with even larger systems available to order.

The range offers the flexibility to meet the needs of every sector including hospitals, large hotels, banqueting and event caterers, conference venues, CPUs, universities, bakeries and contract caterers.

Robust construction ensures a long service life while a variety of finishes, including stainless steel and white PVC coated galvanised steel, offers a choice to suit all budgets.

Williams Roll-In modular units are designed to accommodate 2/1GN trays or combi trolleys.

The 90mm ODP zero insulation delivers excellent thermal efficiency.

It combines with the large diameter, high-velocity, energy-efficient 4-pole fans and the powerful, large-surface evaporator to give superior performance, even in ambients of 43°C.

Accessibility is built in for faster maintenance and servicing and the fans are easy to remove for inspection.

Commissioning is simpler, too, thanks to the easy-to-access expansion valve for superheat adjustment during installation.

The latest defrost heaters reduce the defrost cycle time to maximise operational efficiency and minimises turnaround time.

Options include the energy efficient Storage Mode Pod, insulated floors, internal lighting and pass-through models enabling quick transfer into cold storage facilities.

BLAST CHILL FREEZE ADVICE:

DON'T COVER FOOD...

Don't cover food in trays in the blast chiller or freezer, it will compromise the efficiency of the blast cycle. Williams' AirSmart technology will protect even delicate food, so there is no need to cover it.

FEATURES AND BENEFITS

POWERFUL CHILLER / FREEZER
Chills +90°C to +3°C in 90 mins. Freezes +90°C to -18°C in 240 mins

ADVANCED AIRFLOW
Advanced airflow design for uniform chilling

EASY TO USE
Williams Easy Blast (WEB) - the simplest to use controller on the market

TOUGH AND DURABLE
Designed to operate efficiently up to a 43°C ambient

HIGH PERFORMANCE
90mm polyurethane insulation for excellent thermal efficiency

GASTRONORM COMPATIBLE
Accommodates 2/1 gastronorm trolleys

WIDE ENTRY
Wide entry models designed to accommodate gastronorm 2/1 and Combi Trolleys

DESIGNED FOR FLEXIBILITY
Sizes available from 90-320kg capacity to suit the size of your operation

TECHNICAL DATA

Reach-In Blast Chillers

Model	Width	Depth	Height	Temp °C	Running Amps	Capacity
WBC10	707	805	887	*+90 to +3° in 90 mins	4.05	10kg
WBC20	707	805	1274	*+90 to +3° in 90 mins	5.2	20kg
WBC30	707	805	1720	*+90 to +3° in 90 mins	12	30kg
WBC40	707	805	1720	*+90 to +3° in 90 mins	12.4	40kg
WBC50	707	805	1880	*+90 to +3° in 90 mins	5.8	50kg

Reach-In Blast Chiller Freezers

Model	Width	Depth	Height	Temp °C	Running Amps	Capacity
WBCF10	707	805	887	*+90 to +3° in 90 mins *+90 to -18° in 240 mins	4.05	10kg
WBCF20	707	805	1274	*+90 to +3° in 90 mins *+90 to -18° in 240 mins	5.2	20kg
WBCF30	707	805	1720	*+90 to +3° in 90 mins *+90 to -18° in 240 mins	12	30kg
WBCF40	707	805	1720	*+90 to +3° in 90 mins *+90 to -18° in 240 mins	12.4	40kg
WBCF50	707	805	1880	*+90 to +3° in 90 mins *+90 to -18° in 240 mins	5.8	50kg

Note:
WBC/F 10 & 20 - 13 amp plug
WBC/F 30 & 40 - 16 amp hard wire
WBC/F 50 - 16 amp 3 phase and requires connection to a main drain
WTBC70 - 16 amp 3 phase and requires connection to a main drain

*The maximum product entry temperature is dependent on ambient conditions.
For ambient <35°C product entry of no higher than 90°C is permitted.
For ambients >35°C up to 43°C product entry temperature must be a maximum of <70°C.

TECHNICAL DATA

Roll-In Blast Chiller Cabinet

Model	Width	Depth	Height	Temp °C	Running Amps	Capacity
WTBC70	990	882	2300	+90°C to +3°C in 90 mins	8.7	70kg

Roll-In Blast Chillers

Model	Width	Depth	Height	Temp °C	Running Amps	Capacity
WMBC90	1470	1250	2295	+90 to +3° in 90 mins	4.3	90kg
WMBC120	1470	1250	2295	+90 to +3° in 90 mins	4.3	120kg
WMBC160	1470	1250	2295	+90 to +3° in 90 mins	5.2	160kg
WMBC200	1470	1250	2295	+90 to +3° in 90 mins	5.2	200kg
WMBC240	1470	2350	2295	+90 to +3° in 90 mins	7.7	240kg
WMBC320	1470	2350	2295	+90 to +3° in 90 mins	7.7	320kg

Roll-In Blast Chiller Freezers

Model	Width	Depth	Height	Temp °C	Running Amps	Capacity
WMBCF90	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	4.3	90kg
WMBCF120	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	4.3	120kg
WMBCF160	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	5.2	160kg
WMBCF200	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	5.2	200kg
WMBCF240	1470	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	7.7	240kg
WMBCF320	1470	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins	7.7	320kg

Roll-In Blast Freezer

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBF100	1470	1250	2385	+90 to -18° in 240 mins		6.0	100kg
WMBF200	1470	2350	2385	+90 to -18° in 240 mins		8.1	200kg

Note:
Technical data for Combi (wide enty) Roll-In models is the same as standard models except additional 200mm to their width. They will accommodate Combi trolleys. Reduction time depends on product type. Please enquire on application.

Condensing unit not included with product. Separate panel and power supply required. Unit requires connection to main drain.
All dimensions are in mm unless otherwise stated.

Full Technical Details can be found at www.williams-refrigeration.co.uk/info-centre.

www.williams-refrigeration.co.uk

Installation of all Williams products requires adequate ventilation.

Williams reserves the right to modify the design, materials and finish in accordance with its progressive development policy

Williams Refrigeration
Bryggen Road
North Lynn Industrial Estate
King's Lynn
Norfolk PE30 2HZ
T +44 (0) 1553 817 000
F +44 (0) 1553 817 111
E info@williams-refrigeration.co.uk