

# COLD ROOM USER GUIDE

energy carbon  
**cost saving**  
efficiency cold  
rooms **value**  
heat recovery  
integration  
**cool** heat  
temperature  
specialists

Best practice standards

*The purpose of this quick guide is to detail to staff the correct procedures by which to manage their work in coldroom refrigeration on site.*

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# An **introduction** to commercial **coldrooms**

**A commercial refrigeration system works in exactly the same manner as your domestic refrigerator but on a larger scale.**

The points noted within this user guide can be reflected in your own home environment.

For example, you would not leave your fridge door open for long periods whilst being busy in the kitchen and the same applies to your commercial coldroom!

Coldrooms are designed to operate with regular use in an efficient and reliable manner. If the points noted within this user guide are not put into practice your site will experience problems

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# Coldroom User Guide **instructions**

**Please work through the user guide and answer the questions on the left hand pages. On completion you will have gained a basic understanding of best practice coldroom use.**

# What are the operational temperatures?

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Please select the temperature below

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## *Temperature 1*

<b>-21</b>	SELECT	<b>+5</b>	SELECT
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## *Temperature 2*

<b>+1</b>	SELECT	<b>-18</b>	SELECT
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## *Temperature 3*

<b>-2</b>	SELECT	<b>+8</b>	SELECT
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# What you have

Your current configuration on site is similar to the example shown below, walk in freezer coldroom (1), walk in chiller coldroom (2) and a walk in cellar coldroom (3).



# What should you do when accepting deliveries?

.....  
Please select your option below  
.....

## ***Leave coldroom turned on?***

**YES**  **NO**

.....

## ***Close doors when possible?***

**YES**  **NO**

# Taking Food Deliveries

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When taking food deliveries that are going to take a while to move from delivery point and load into coldroom it is good practice to turn the coldroom off at the control panel to stop the refrigeration cycle. This will stop the refrigeration effect and reduce the possibility of the internal evaporator freezing as shown below.

It is commonly found that when food deliveries are taking place, coldroom doors are left wide open and strip curtains are removed. This allows the warm air from the kitchen to escape to the coldest point which is the coldroom.

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**Warm air entering the coldroom will cause the room to rise in temperature and this will cause an ice build up on the evaporator coil & ceiling. This will require an engineer to visit site and clear the ice from the evaporator. This is classed as customer mis-use and is not covered under warranty.**

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**Heavy snow on the roof indicates moisture ingress, typically caused by the door being left open for prolonged periods of time with coldstore switched on.**

# Maintaining good airflow in the cold room is vital

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Please answer the questions below

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***Should the evaporator air flow be kept clear?***

**YES**

SELECT

**NO**

SELECT

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***Should product be stacked to allow access?***

**YES**

SELECT

**NO**

SELECT



# *Placement of food within your coldstore*

When stocking your coldrooms, it is good practice to keep the location of the evaporator that cools the coldroom clear from blockages and 'overstacking'. When this blocking of air flow takes place it restricts the evaporator thus causing a similar situation as when taking food delivery i.e. the evaporator coil will ice up. This will again require a call out by the refrigeration contractor which will not be covered under warranty and is chargeable.



The picture to the left shows the overstacking detail, and in the top right hand corner you can see the beginning of the ice build up due to the air flow restriction caused by the stock being positioned in front of the evaporator.

# Avoid allowing warm air into the cold rooms

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Please answer the questions below

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***Is it important that the doors are closed whenever possible?***

**YES**

SELECT

**NO**

SELECT

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***Should strip curtains be removed to allow access for working?***

**YES**

SELECT

**NO**

SELECT

# General Operation

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It is good practice that when coldrooms are in operation that the doors are kept closed at all times, even when entering the coldstore to collect stock. The inner release mechanism makes it easy for the door to be opened from inside.

It is also important to keep strip curtains in position at all times, as these prevent warm air entering into the coldrooms from a hot kitchen or working corridor.

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**Remember strip curtains are there for a reason, they reduce the amount of warm air entering the cold room when in operational use and prevent high temperature issues.**

# Checking the temperature will reduce maintenance issues

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Please answer the questions below

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***If high temperature is noticed should this be reported immediately?***

**YES**

SELECT

**NO**

SELECT

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***Is it easier to correct a high temperature fault if it is reported early?***

**YES**

SELECT

**NO**

SELECT

# Monitoring

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It is important that when a coldroom is noticed to be operating at a high temperature that a call is immediately placed and logged to the correct individual or company. This will enable a swift and prompt action to prevent any further damage and to enable the coldroom to be returned to the correct operating temperature as soon as possible

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The picture shows a freezer coldroom at  $-8.9^{\circ}\text{C}$ , action is immediately required.

# Maintaining best practice safety standards are essential

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Please answer the questions below

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***Is it important to take care when working within a coldroom?***

**YES**

SELECT

**NO**

SELECT

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***Should hazards be reported and dealt with immediately?***

**YES**

SELECT

**NO**

SELECT

---

***How frequently should manual food temperature checks be carried out and logged during normal operational hours?***

**4 hours**

SELECT

**12 hours**

SELECT

# Health and Safety

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In certain circumstances faulty equipment can cause health and safety issues and it is important to notify the correct person immediately to ensure that the risk to staff is minimised and rectified with the most upmost urgency.

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Typical health and safety risks associated with component breakdown or site misuse:

## ***1. Leaking drain within coldroom***

This can cause ice build up on the floor of the coldstore causing a slippery, wet surface to walk on. This imposes a high risk to staff working in and out of the coldstore.

## ***2. Defrost of coil by site personnel***

It is not good practice to de-ice an evaporator with a sharp object, this can result in pipe work fracture/piercing resulting in a refrigerant gas leak or injury to the individual. In a confined space refrigerants can cause nausea and ill health. Therefore under no circumstances should an attempt be made to remove ice from a frozen evaporator.

***\*\*\*Should an evaporator be iced up please notify the client as soon as possible for advice and action\*\*\****

## ***3. Lifting of the coldroom floor***

Should a floor begin to lift at any area within the coldroom it is important to notify the supplier immediately in order to rectify the problem as soon as possible. This will prevent the risk of trips and falls resulting in an injury to staff on site.

## ***4. HACCP Food Safety Standards***

To comply with HACCP Food Safety Standards, the operating temperature of all food service refrigeration systems should be checked, logged and recorded throughout each 24 hour period.

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***Thank you for completing all the questions***

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***You have now gained an understanding of coldroom operation and use, this should enable your site to experience fewer problems and gain increased operational efficiency.***