

Storers Cold Room Specification



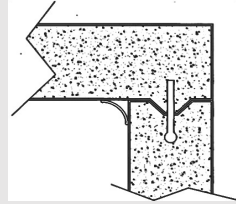
Keeping our
Customers Ahead
of the Curve with
Future Proofed &
Energy Efficient
Cold Storage
Solutions

The Storers Design Promise

- All Installations Exclusively by Directly Employed Storers Engineers
- Market Leading Engineering Ambient Design Condition of 43°C
- Coldrooms Custom Manufactured to the Nearest 50mm
- Designed and Built in Compliance with BS16855-2
- Low Noise Condenser Design (33dba at 10m)
- Future Compliant Low GWP Refrigerants
- A Five Year Box (Fabric) Warranty

Construction

Our cold rooms are constructed modularly with each 80mm panel securely locking together by our cam lock system. The cam locks are secured in place when the panels are foam injected in house ensuring a fully bonded panel.



Panel edges are precision box formed for strength with dovetail joints ensuring a durable and efficient joint. The coving system is made by Storers and supplied as standard. It is totally sealed and gives an easy clean and food safe finish.

Storers standard panel width is 1200mm. We then can build to the nearest 50mm due to our flexible manufacturing process. This prevents the need for 'cut and shuts', which some other manufacturers have to do to adapt different sized cold rooms.

Storers always have a true panel with cam lock and dovetail joints. 80mm urethane panel (GWP-1). All insulated floor panels are lined with marine ply and bonded with an aluminium checker plate finish.

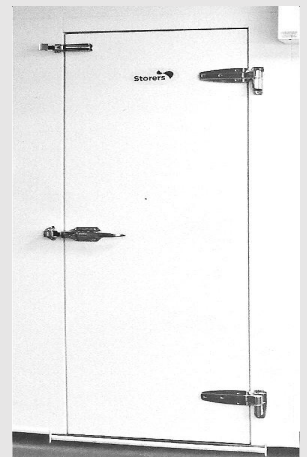
Panels

Door Type & Construction

All Storer cold rooms have a fully rebated door. This allows for great insulation, which cannot be achieved by slab or semi rebated doors. The fully rebated door system has a self-closing ram, which will close the door behind staff with a potential energy saving in excess of 30%. This ram can only be used on fully rebated doors.

Doors are also fitted with an internal release.

Doors are based on a standard 1200mm panel and can have the following openings: 600mm, 650mm, 700mm, 750mm, 800mm and 900mm. Door heaters are installed on all cold rooms that operate below zero. We install the heaters within the panel which helps prevent them becoming damaged and delivers more efficient heat transfer. This system is low voltage. Door gaskets are push in type and can be easily replaced.



Panel Specification

The outer construction of the modular panels is 0.6mm galvanised steel with 200 microns of food safe white plastic bonded onto outer panels.

Fire retardant to BS476, BS4735

Insulated CFC free fire resistant polyurethane injected modular panels giving a total wall thickness of not greater than 80mm and U value not worse than 0.22W/MK. Density 42KG/M³. A roof loading span of 3M (8.64KN/M²).

Chiller Application -5 to +2°C

Freezer Application -21 to -18°C

Temperature Application

Additional Specification Detail

LED sealed light fitting as standard

Remote condensing units in weather proof grey metal housing

All joints silicone sealed

Flooring is non-slip aluminium checker plate

Digital temperature display

On/Off switch house is located in a white food safe control panel

All Storers outside coldrooms have a PVC tailored roof cover that is purpose made to seal the entire area in one continuous sheet.

Base Fabric – 1100 D/TEX high tenacity polyester

Coating – flexible plasticised PVC to both sides

Tensile Strength – warp 2000, weft 1500 BS3224/5A

Tear Strength – BS3424/9B

Cold Crack – BS3424/10-25C

Colour – Brown (RAL8004) or Green (RAL6003) PVC

A maintenance free cover system, designed to last the lifetime of the coldroom. In the event of damage, a new sheet can simply be fitted with no disturbance to the thermal integrity of the coldroom.

Additional Specification Detail for Externally Sited Coldrooms

Refrigerant Selection

All Storers equipment is now supplied with R449a. A 64% carbon reduction in GWP of R404a and ensuring Storers clients are future compliant to EU F-Gas Regulation 517/2014.

In addition, testing has demonstrated direct energy consumption savings up to 10% in comparison to R404a and a potential reduction of up to 10% in refrigerant charge size.

Electronic control panel complete with digital read out of temperature, auto time defrost, fan delay unit, defrost auto termination, on/off isolation and electrical contactors for refrigeration equipment. High/low temperature alarms are fitted as standard.

Control Panel

Chiller Application

A ceiling mounted multi fan evaporator is used complete with electric defrost and fan delay. An hermetic condensing unit is used complete with sight glass drier, metal unit housing, low and high pressure switch and local isolator switch.

A ceiling mounted multi fan evaporator is used complete with electric defrost and fan delay. An hermetic condensing unit is used complete with sight glass drier, solenoid valve for gas pump down, low and high pressure switch, local isolator switch and metal unit house.

Deep Freeze Application

Additional Options

- Chart Recorders
- Lighting Delay
- Personal Alarms
- Heat Recovery Options

Refrigerant Selection & Carbon Reduction

HFC refrigerants are one of the biggest contributors to Greenhouse Gas Emissions (GHG's). The typical refrigerant selection today is R404a. With a Global Warming Potential (GWP) of 3922 this is a very high emitter of GHG's. Storers use R449a, with a GWP of 1397 this is a 64% reduction on harmful GHG's. We also pride ourselves on making the potentially complex impact of F-Gas Phasedown Regulations a simple message for compliance for our customers. With Storers we will keep you compliant with reduced environmental impact solutions.

Refrigeration is a process of extracting heat. The process produces a high grade quality of heat. Why have it disrupting your operation or worse why waste it? We are happy to talk through the options we provide on heat recovery systems and navigate you through the Total Cost of Ownership profile metrics to understand how much money and carbon you could be saving through the operational life cycle of equipment.

Heat Recovery



Accreditation Credits

BREEAM accreditation adds sustainable value to your building and credit ratings. Storers have worked in conjunction with BREEAM to identify a number of areas within cold room specification choices with quantified value to BREEAM credits. Many of these areas put Storers ahead of our competition on sustainability and ensuring the most energy efficient options to our clients. We are here to help you understand the benefits of BREEAM accreditation to your business.

Want to know why our customers choose Storers?

Give us a call on 0115 9200 329 to discuss your next project
www.storersltd.com