

COLD AND FREEZER ROOMS

(POLYSTYRENE PANELS)

CONSTRUCTION

The CONCORD pre-fabricated panel forms the basis of the entire cold storage system . This system is frameless , free standing , self supporting and completely flexible .

There is virtually no limit to the size of room , except those imposed by transport , site or economic considerations . Odd shaped rooms with multiple angles or insets for fitting around columns etc. can also be supplied .
Standard width of panels is 1235mm .

CLADDING

A variety of claddings are available

- 1) Stressed 0.6mm White Chromadek with plastic coating for removal after installation . The Chromadek cladding is impervious to most bacteria , fruit juices , blood and almost all substances .
The hygiene factor being vital in this type of application .
- 2) Stressed 0.6mm Galvanised sheet
- 3) 0.7mm #304 Satintone No.4 Stainless Steel
- 4) Combinations of any of the above mentioned cladding , inside or out .
- 5) Other metal combinations available on request .

INSULATION MATERIAL

DENSITY - The metal skins are permanently bonded to the polystyrene core using a thermosetting glue . The core material is 16kg/m³ density for walls and ceilings , 24kg/m³ density for floors .

THERMAL CONDUCTIVITY - "K" FACTOR

A) High strength 0.033 W/m.K (Watt per metre Kelvin) at 10°C

B) Polyurethane density 43kg/m³ foamed under high pressure to ensure thermal efficiency and structural strength .

DOORS

Doors can be hinged or sliding , either with or without sill and are fabricated from any of the above cladding . All doors and door frames are foam injected under high pressure for structural strength and thermal efficiency . Doors are supplied with internal safety release handles . Freezer stores operating below 0°C are supplied with pressure release valves and have heater elements fitted into the door frames to eliminate condensation .

- A) **HINGED DOORS** : Hinged doors are supplied with heavy duty imported offset self-rising strap hinges , locks and handles .
- B) **SLIDING DOORS** : Door tracks and track holders are manufactured from heavy gauge material for strength .
The nylon rollers are set in sealed bearings with horizontal and vertical adjustments .
The lower guide assembly is manufactured from heavy gauge material with nylon guides .
Sliding arrangements are constructed so that the door drops down and into the frame .
When closed this creates a tight seal .
Sliding doors can be manufactured to accommodate a wide range of openings .

DOOR GASKETS

Hinged and sliding doors are fitted with double rubber balloon type gaskets secured by a channel section , screwed to the door or the frame for easy cleaning and replacement .

FLOORS

PRE-FABRICATED FLOOR PANELS - Manufactured similar to wall panels , but re-inforced with 6.4mm tempered masonite
Optional extra : 1.6mm Aluminium checker plate

INSITU FLOORS : In the instances of high and continuous wear , the insitu type floor conforms to the hygiene standards of the Department of Veterinary Services and Abattoir Commission . The insitu floor is installed with an under floor vapour barrier comprised of 150 micron thick membrane . Over this membrane a single layer of polystyrene or urethane (depending on temperature requirements) will be placed with tight butt joints . The insulation will be covered again with a vapour membrane , ready for re-inforced concrete wearing slab , with grano or other finishes .
(concrete floor by others)

USING EXISTING FLOOR : Above 5°C chiller rooms , installed on the ground floor with no basements , are un-insulated unless specified .

VAPOUR SEALING

This is the most important feature of an efficient cold store . The vapour barrier prevents the ingress of water vapour from the warm side to the cold . The sandwich panel construction leaves only the joints as possible water vapour entry points . The aluminium cover moulds combined with special non-hardening mastic gives a vapour seal that is effective and stays even during movement of room panels caused by temperature variation .

JOINTS

All panels are pre-fabricated with the necessary joints , spline groove , mitred corners and step edges , ready for erection .

HANGING RAIL SYSTEM FOR THE SUSPENSION OF MEAT CARCASSES

(MEAT RAILS) Galvanised running rail system is standard for CONCORD cold stores . The main bearing support stanchions are fitted into the panels during manufacturing , allowing more space and easier cleaning .

SITE FACILITIES REQUIREMENTS

- 1) An electrical power outlet suitable within 10mts of our working area on a continuous basis .
- 2) Sufficient area for the storage of panels and components during installation .

SPECIAL NOTE

The base floor must be levelled to our requirements . The base slab presented to us must have a smooth surface overall and level on wall line 5mm in 3mts . Concord Refrigeration Manufacturers shall give their approval as to the standard of the concrete surface for panel erection .



REFRIGERATION (PTY) LTD

WE RESERVE THE RIGHT TO CONTINUALLY IMPROVE OUR PRODUCT , SPECIFICATIONS AND DESIGN . WE ARE ALSO NOT LIABLE TO UPGRADE PREVIOUSLY SOLD EQUIPMENT TO NEW SPECIFICATIONS .

PHONE : (031) 4622323 FAX : (031) 4622383
E-MAIL ADDRESS : sales@concordrefrigeration.co.za
WEBSITE : www.concordrefrigeration.co.za