



Kailashi Refrigeration

Your's Service Partner....

WALK-IN COLD ROOMS



Dairy Refrigeration | Ice Bank Tank | Cold Chain Solution | Cold Storage
Ice Plants | Frozen Plants & Machinery | Chilling Plants | Spares & Plant Maintenance

KAILASHI WALK IN COLD ROOMS

Kailashi walk in cold rooms are designed to store for long term duration of large quantity of product like :- vegetables, dairy products, meat products or other products which required cooling effect for storage at a temperature between +2°C to +8°C and -18°C to -25°C or as per required duty.

Key Features :-

These cold rooms are constructed out of RPUF Pre-fabricated and modular complete with floor and Ceiling panels, can be mounted on a flat, solid concrete Base. The cold room equipped with two completely independent Refrigeration system. One of these will remain as standby

Each Refrigeration System are Provided with:

- Condensing unit
- Refrigeration unit
- Pipe work
- Evaporator unit
- Electronic controls
- Control instrument

There is manual & automatic switchover to the standby system by programmable microprocessor based controller.

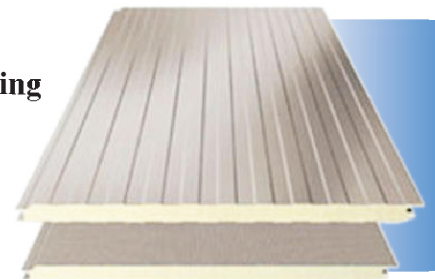
Internal Temperature

Range -1 +2°C to +8°C adjustable Range -2 -18°C to -25°C adjustable.

PANELS : wall and ceiling panel internal skins have two options are made of stainless steel, grade 304 or pre painted galvanized steel having minimum thickness 22SWG each.

OUTER PANELS : Pre painted galvanized steel panels, double wall having minimum thickness 22SWG each.

Panels fully insulated and without internal structure members or stiffeners between the skins.



Tongued and grooved joints between panels designed to minimize cold-bridging. Gaskets resistant to damage from oil, fats, water and detergents. After assembly, all joints mastic sealed on the interior side to ensure air -tightness. Ceiling panels with an overall length of 6 meters or less and self-supporting.

Modular panel + easily assembled and disassembled. Double action cam-lock assembly/panel interlocking, for perfect seal. No screws or panel cover strips. Have airtight seals between condensing unit and wall.

Have airtight seals around all pipe and cable penetrations through wall and/or ceiling panels.

INSULATION : CFC -free urethane foam core bonded sandwiched between to galvanize steel sheets.

- Minimum thickness: 100 mm Density: not less than 40 kg/m³
- Thermal conductivity of 0.17 w/m²k or better for hot zone climate
- Thermal insulation foaming agents: CFC free gas in compliance with limitations and deadlines of Montreal Protocol, on the elimination of ozone-depleting chemicals.

FLOORING

1st layer: - 75 mm (optional) thick cement concrete

2nd layer: - RPUF/ Extruded polystyrene slabs laid with the joints staggered to

Achieve a 'U' value of 0.17 W/m. K or better. 250 micron polythene

Vapor barrier. Reinforced granolithic concrete topping trowel led

SMOOTH.

3rd layer: - of 6mm thick non-slip finish Aluminum checker plate. The floor capable

To Support load of 1500 kg/m². Concrete floors designed and

Constructed to allow Shallow ramped access entry to cold room or

Freezer room.

DOOR

The door have:

1. Heavy duty lock – lockable with 100% fail -save provision for opening from inside.
2. The door is self-closing type with PVC curtains on the door way.
3. Door is flush type with kick plate at bottom and fitted with door closer.
4. Seal closer mechanism which cushions the closing movement of the door, shuts the door silently and keeps it seal-closed preventing loss of the cooling.



LIGHTING

Internal ceiling-mounted low energy fluorescent or LED luminaries with an external switch.

REFRIGERATION SYSTEM

Dual refrigeration system (100% standby)

Cooled refrigeration units, preferably Mono-block type automating defrosting CFC-free refrigeration.

Tropicalized units suitable for ambient temperature up to 45deg C.

In case of a split system, the condensing Unit mounted in a weather proof enclosure with proper canopy so as to get protection from rain and hard weather and prevent any vandalism or injury to people upon accidental access.

CONDENSING UNIT (S) TO COMPRISE COMPRESSOR WITH:

- a) Forced air condenser,
- b) Liquid level glass,
- c) liquid receiver to carry full charge,
- d) filter /dryer with solder connections,
- e) isolating stop valves.
- f) Fitted with high and low pressure cut-outs,
- g) Time-operated defrost control
- h) With run hour meter.
- i) Where cold climate freeze prevention is specified provide a low temperature protection system to prevent the temperature protection system to prevent the temperature of the cold room dropping below Set points.





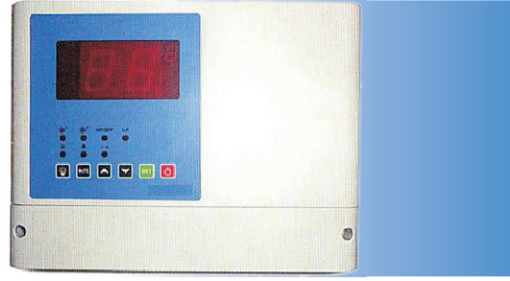
TEMPERATURE CONTROL

Room temperature controller by a digital thermostat within the tolerances is accurate to $\pm 0.5 \pm 0.5^\circ$

Alarm & Buzzer

Alarm sounders will be located adjacent to the cold room. Buzzer system Visual indicator along with buzzer alarm system is provided to alert the user in the Following events:

- a) Power failure alarm
- b) High pressure (dirty condenser) alarm
- c) Open door alarm
- d) Probe failure
- e) Person locked in cold room



SHELVES (OPTIONAL)

Cold room is fitted with locally made/manufactured, running height adjustable perforated shelves (slotted shelves will be preferred) Approx. size of shelf will be 600 mm wide at 600 mm spacing.

POSITIVE TEMPERATURE APPLICATION

MODEL EVAPORATOR	MODEL CONDENSER	GAS	EVAPORATOR COOLING CAPACITY KW	COMPRESSOR INPUT POWER KW	TOTAL INPUT POWER KW	PHASE	EVAPORATOR			CONDENSING UNIT		
							LENGTH	DEPTH	HEIGHT	LENGTH	DEPTH	HEIGHT
KREVP1P003P	KRCON1P156KWP	R22	3	1.31	1.56	1 Ø	1050	372	425	975	400	690
KREVP3P003P	KRCON3P143KWP	R22	3	1.18	1.43	3 Ø	1050	372	425	975	400	690
KREVP3P003P	KRCON3P151KWP	R404A	3	1.25	1.51	3 Ø	1050	372	425	975	400	690
KREVP3P054P	KRCON3P267KWP	R22	5.4	2.29	2.67	3 Ø	1150	420	490	975	400	820
KREVP3P057P	KRCON3P317KWP	R404A	5.7	2.37	3.17	3 Ø	1150	420	490	975	400	820
KREVP3P078P	KRCON3P567KWP	R404A	7.8	4.89	5.67	3 Ø	1610	420	490	1100	410	900
KREVP3P129P	KRCON3P666KWP	R404A	12.9	5.76	6.66	3 Ø	2065	420	540	975	400	820

FOR POSITIVE TEMPERATURE APPLICATION 0°C ROOM TEMPERATURE, OAT 35°C

NEGATIVE TEMPERATURE APPLICATION

MODEL EVAPORATOR	MODEL CONDENSER	GAS	EVAPORATOR COOLING CAPACITY KW	COMPRESSOR INPUT POWER KW	TOTAL INPUT POWER KW	PHASE	EVAPORATOR			CONDENSING UNIT		
							LENGTH	DEPTH	HEIGHT	LENGTH	DEPTH	HEIGHT
KREVP3P019N	KRCON3P192KWN	R404A	1.9	1.92	2.35	3 Ø	1151	372	425	975	400	820
KREVP3P251N	KRCON3P201KWN	R404A	2.51	2.01	2.56	3 Ø	1151	420	490	975	400	820
KREVP1P251N	KRCON3P293KWN	R404A	2.51	2.93	3.49	1 Ø	1151	420	490	944	457	720
KREVP3P381N	KRCON3P345KWN	R404A	3.81	3.45	4.3	3 Ø	1151	436	540	1060	700	1100
KREVP3P601N	KRCON3P424KWN	R404A	6.01	4.24	5.1	3 Ø	1610	420	490	1060	700	1100
KREVP3P721N	KRCON3P748KWN	R404A	7.21*	7.48	9.58	3 Ø	1570	555	770	1450	1000	860
KREVP3P721N	KRCON3P562KWN	R404A	7.21*	5.62	6.79	3 Ø	1570	555	770	1060	700	1274

FOR NEGATIVE TEMPERATURE APPLICATION -18°C ROOM TEMPERATURE, OAT 35°C,* -22°C ROOM TEMPERATURE.

APPLICATIONS :

- ♦ Fruits Storage
- ♦ Dairy Product Storage
- ♦ Ice Cream Plants
- ♦ Vegetable Storage
- ♦ Dairy Plants
- ♦ Blast Freeze
- ♦ Spices Storage
- ♦ Meat Plants
- ♦ Deep Freeze