Design Excellence : Cool Technology

POD Refrigeration

Williams - POD Refrigeration System

WILLIAMS POD REFRIGERATION SYSTEM

The Williams POD Refrigeration System has been designed with maximum use of cold storage space and ease of servicing in mind - features which help our customers get even more value for money from their cold storage because;

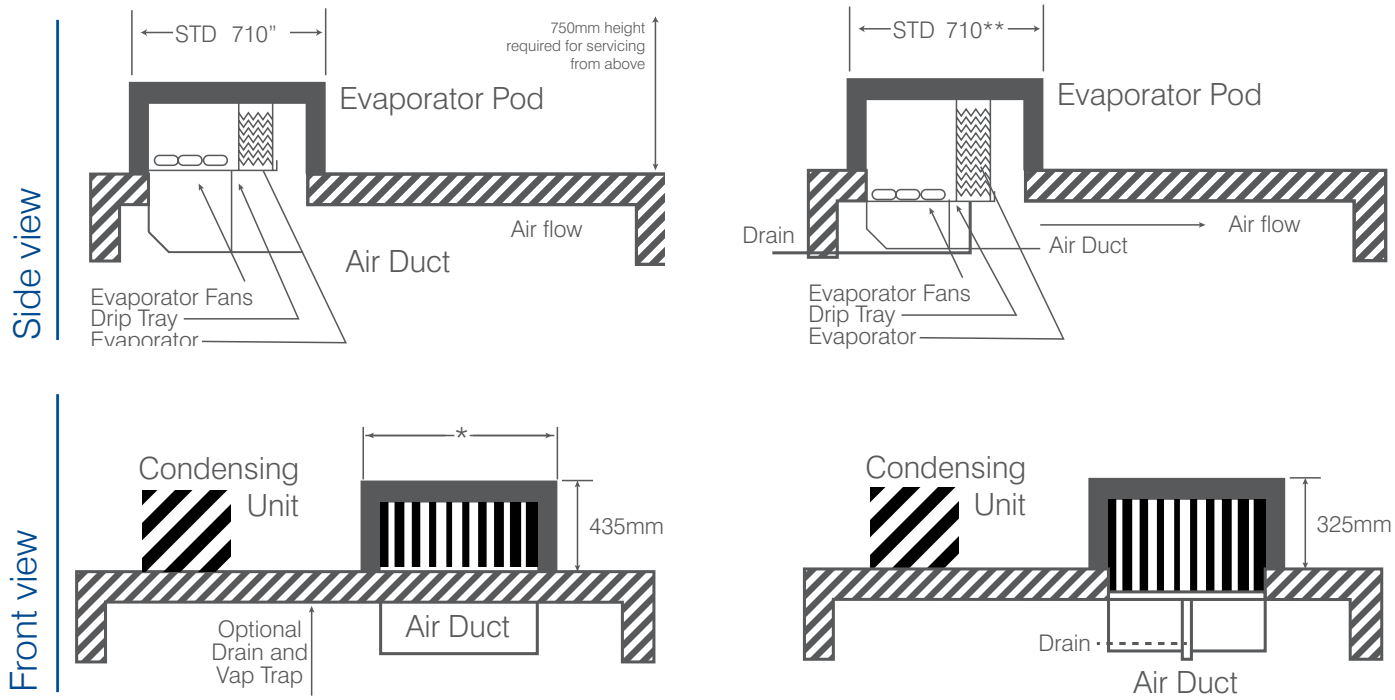
- Servicing can be undertaken from outside the room and the whole refrigeration system can be removed and changed without any disturbance of the rooms contents.
- The evaporator is above roof height - therefore there is no need to install drain heaters since the drain is positioned outside the room.
- Electrical defrost heaters (where required) can be used with minimal effect on the air temperature inside the room. Warm air supply rises and remains inside the pod.
- The pod is assembled separately, so all necessary connections are made at the factory and the whole system can be tested before shipping. This is less costly than on site testing and means that installation can be carried out quickly.
- There are two pod systems available referred to as Type A and Type B.
- Type A is the standard system and can be used in most applications where ceiling height is not a consideration in design. Type A Systems can be used complete with installed condensing units or they can be supplied for connection to a remote condensing unit.
- Type B systems are specially designed for low ceiling where,in order to maximise the space inside the coldroom, it is necessary to minimise the dead space above the coldroom roof. Type B systems are suitable for remote condensing unit installation only.

Type A -Roof mounted POD Systems

Suitable for remote installation or pre-installed condensing unit

Type B - Roof mounted low height POD Systems

Suitable for remote condensing unit only



* Size will vary according to pod selected and useage **Freezer pod will increase by 80mm

Modular cold storage - Typical installations

Williams Roof POD System (Type A POD system)

This drawing illustrates the Williams POD system installed in a situation where the height of the system is not a constraint on the design of the room.

The pod resides outside the coldroom enabling the selection of the lowest internal height of 2000mm

This is the most economic and efficient type of installation.

Williams pre-installed roof POD system.

No wasted space inside the room.

Servicing can be undertaken from outside the room, the whole refrigeration system being removed without disturbing the contents of the room.

The evaporator is above the roof height therefore the drain is outside the room and no drain heaters is required

Electric Vaporisers can be used on smaller rooms. The room temperature is not affected by electric defrost heaters, the heat rises and remains in the pod.

The system is factory installed and tested on site reducing involvement and on site costs.

Traditional installation

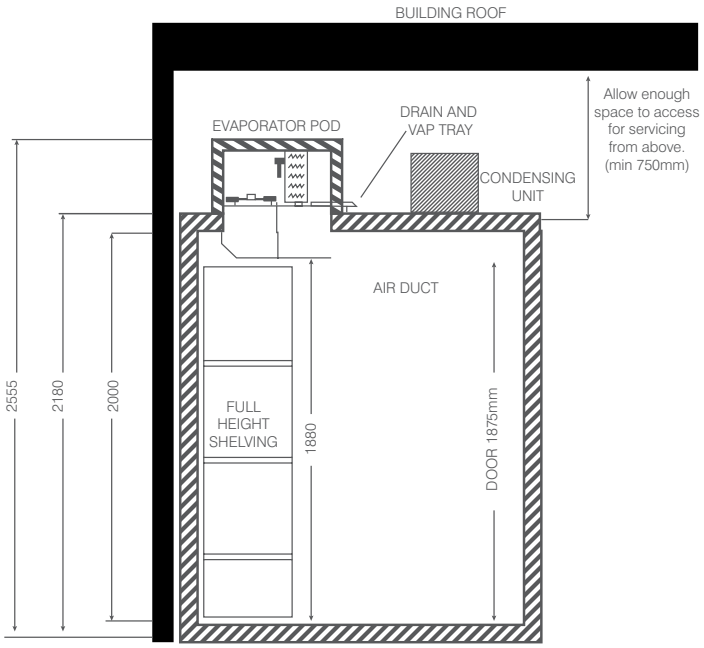
The volume taken by the evaporator hung from the ceiling is wasted space which cannot be used. This space increases the running costs and the initial purchase price.

The drain line must be run from the position of the evaporator to a convenient place taking up valuable space.

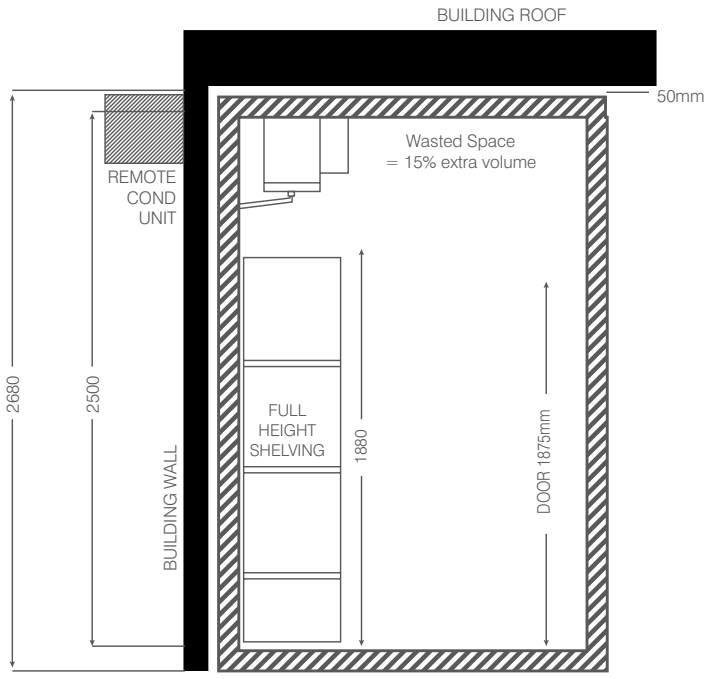
The drain line is inside the room and requires heating if the temperature is below 0°C. It is also prone to damage.

The temperature of the room is affected by the defrost heaters as they are inside the room (storage area).

Williams installation



Traditional installation



Note: All measurments in mm

Low ceiling Height

Figure 1 Type B Low POD System

Low ceilings can be a problem in some buildings. The answer is the Williams Low POD System giving almost all the advantages of a pod system.

The drain is inside the room, however it is at roof level taking up the minimum of space.

As there is insufficient space for a condensing unit and a standard POD system, remote siting of the condensing unit is necessary and the pod is designed so that servicing can be carried out from inside the room.

Factory tested installation does not have to be sacrificed with the low pod system. it can be supplied completely pre-installed leaving on the tubing and wiring between condensing unit and POD to be done on site.

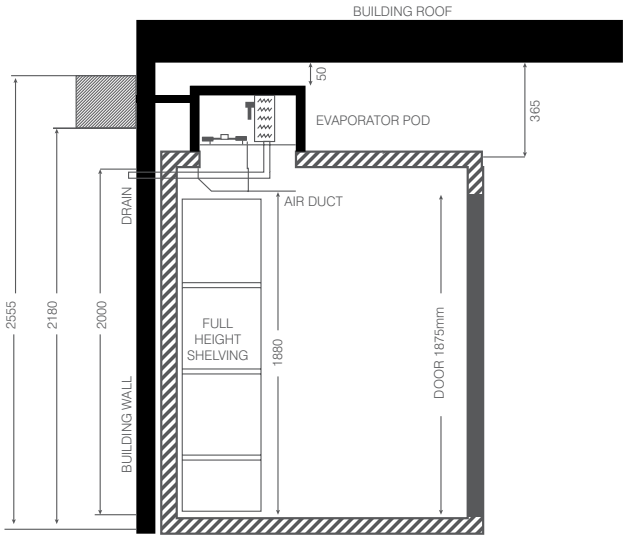


Fig1

Very Low Ceiling Height

Figure 2 WHU system

The WHU evaporator is the traditional style installation of internally hung cooler and is available for smaller rooms

When height is a considerable problem and there is insufficient room for a low pod system, the WHU or NSC system is available.

The WHU system is available for smaller rooms, and the NSC system for larger rooms.

The overall coldroom dimensions are the same as those permitted with the POD system but the absence of any roof mounted equipment or POD means that this type of installation is suitable where the ceiling is very low.

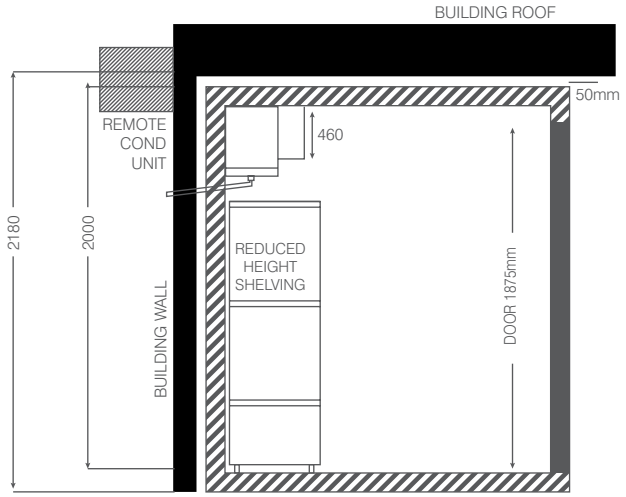


Fig2

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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

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