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# SITE ASSEMBLY INSTRUCTIONS FOR MODULAR RUBY

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## IMPORTANT INFORMATION (PLEASE RETAIN THIS DOCUMENT)

This Manual covers the installation requirements for the following Williams Refrigeration products:

RMR1T  
RMR2T  
RMR3T

Please read this Manual carefully before installation.

Provided the instructions in this Manual are read and implemented correctly, the optimum performance and reliability of your equipment should be maintained.

We assume the installer, user and service provider are appropriately trained, skilled and competent to properly and safely carry out the work, and will use the necessary safety equipment, and take the necessary precautions required of their intended work.

General Regulations  
Declaration of Conformity:



Williams Refrigeration declares that all products manufactured by Williams Refrigeration comply with the above directives applicable to those products, and those products are therefore declared to be in conformity with the provisions of the above legislation.

Install Date.: .....

Serial No.: .....



## IMPORTANT SAFETY INFORMATION

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**Warning:**

Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.



**Warning:**

Do not use electrical appliances inside the food storage compartments of this appliance.



**Warning:**

Keep ventilation openings of the appliance enclosure or the structure of built in equipment, clear of obstruction.



**Warning:**

Do not use mechanical devices or other means to accelerate the defrosting process.



**Warning:**

Do not damage the refrigerant circuit, i.e. pipe work or components.

## ELECTRICAL



The appliance must be disconnected from its power source during cleaning; when maintenance and the replacement of parts is required, the equipment must be safely disconnected and isolated from the power supply using a lock-off system at the isolation device.



It is advised that the electrical supply to the equipment is protected by an appropriately selected Residual Current Device (RCD) with a rating no greater than 30mA.



If the supply cord is damaged, it must be replaced by a service engineer or other qualified person. Only the supply cord supplied by Williams Refrigeration must be used.



Fixed wiring appliances (those not supplied with a plug) shall incorporate a switch disconnector to meet the specification of IEC 60947; this is to be installed within the fixed wiring installation in accordance to the local wiring rules / regulation to provide all pole disconnection of the power supply.

# INSTALLATION

## ELECTRICAL INSTALLATION

Commercial kitchens and foodservice areas are environments where electrical appliances and equipment may be located close to liquids, or operate in and around damp conditions, or where restricted movement for installation and service is evident; therefore Williams Refrigeration recommend that this equipment be protected by an appropriately selected RCD with a rating no greater than 30 mA.

If the equipment is required to be fixed wired, a switch disconnector / isolator to the specification of IEC 60947 should be installed in the fixed wiring of the installation to provide a suitable all pole disconnection of the power supply.

Only qualified, skilled and competent persons (i.e. an electrician) are to carry out required electrical installation work. The equipment must be installed in accordance with local wiring Regulations; safe systems of work must be adhered to at all times during the installation process. Refer to the equipment dataplate and wiring diagram for confirmation of the electrical power supply requirements.

This equipment must be correctly earthed.

Supplementary protective equipotential bonding of the equipment may also be necessary, and if it is required, a skilled, qualified and competent electrician should install this in accordance to local wiring Regulations.

On completion of the electrical installation, electrical safety tests (such as earth continuity and insulation resistance) must be carried out and documented by a qualified, skilled and competent electrician prior to powering up the equipment for commissioning purposes.

## REMOTE CONDENSING UNIT

If a remote condensing unit is required it must be installed in accordance with local wiring Regulations; safe systems of work must be adhered to at all times during the installation process.

An appropriately selected RCD with a rating no greater than 30 mA is recommended to protect the remote condensing unit as the refrigeration system pipework is common with the refrigeration equipment.

A switch disconnector / isolator to the specification of IEC 60947 should be installed in the fixed wiring of the installation to provide a suitable all pole disconnection of the power supply.

The equipment must be correctly earthed.

Supplementary protective equipotential bonding of the equipment may also be necessary, and if it is required, a skilled, qualified and competent electrician should install this in accordance to local wiring Regulations.

Refer to the manufacturer's technical specification information when determining the electrical supply requirement for the condensing unit.

## GENERAL INSTALLATION

Installers should ensure they are appropriately trained and competent in understanding general safety risks associated to undertaking the installation. These include assessing and recognising risk such as;

- Use of correct (electrical) tools
- PPE
- Working at height;
  - Ladders
  - Scaffold and edge protection
- Lone working
- Permit to work requirements
- Manual handling;
  - Safe lifting and load bearing storage and positioning of units
- Caution to outside locations and weather conditions;
  - High wind, rain and snow and direct sunlight
  - Risks associated to animal and vermin intrusion

## REMOVAL OF REDUNDANT APPLIANCES

Refrigeration appliances contain refrigerant and gases in their insulation and must be disposed of professionally by a licensed waste management contractor.

Please ensure that old or redundant refrigeration appliances are disposed of safely and legally.

### UNPACKING

This is to be carried out by the installer, who will remove all interior and exterior packaging and accessories.

**NOTE TO THE INSTALLER:** Stainless steel panels and doors are protected with plastic film when shipped. Prior to assembly, remove the film from any surfaces to be joined together and thoroughly clean the surfaces this exposed to remove any residue adhesive. A small amount of white spirit is suitable for this purpose. Once assembly is complete you may remove the remainder of the protective film and clean away any adhesive.

### VENTILATION

The chosen site should permit ventilation around the walls and ceiling, with a free circulation gap of 3cm around the sides. There should also be adequate ventilation for the refrigeration unit.

### ROUTINE MAINTENANCE

**Safely disconnect the appliance from the power supply before cleaning, servicing or undertaking general maintenance.**

This appliance must be maintained at regular intervals. The frequency of maintenance will depend upon your specific use and location. The maximum service interval should be 12 months.

Service and maintenance should only be undertaken by suitably qualified, trained and competent engineers.

### BREAKDOWN

You must immediately report any damage or defect arising with the appliance. Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact Williams Refrigeration or your appointed Service Provider.

In the event of a breakdown, please contact Williams Refrigeration or your Service Provider

When calling, please advise model and serial number. This information can be found on the data plate inside the appliance. Please ensure that all redundant parts are disposed of safely and legally.

# INSTALLATION FOR A RMR1T - ROLL IN MODULAR RUBY

## INSTALLATION

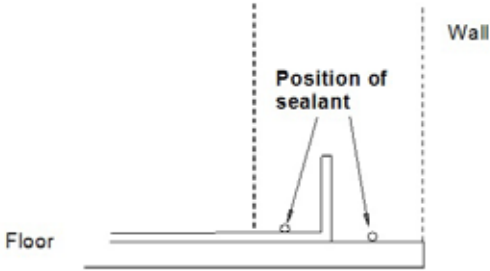
### Site Preparation

Please ensure that the floor area is clean and level.

Lay the insulated floor or floor tray if supplied.

### Models with a 15mm floor

Put beads of food safe silicone sealant around the floor as shown before assembling the wall panels.

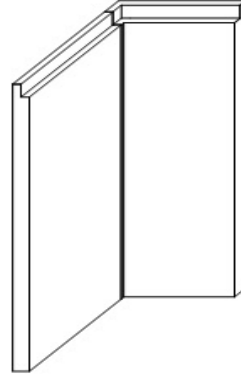


Starting at a rear corner build the wall panels together as per the Panel Assembly Instructions. See figures 1-4.

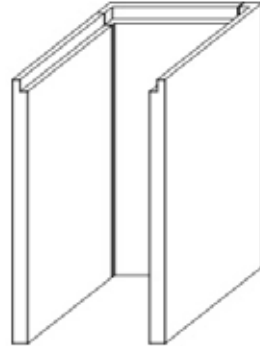
**FIG 1.**



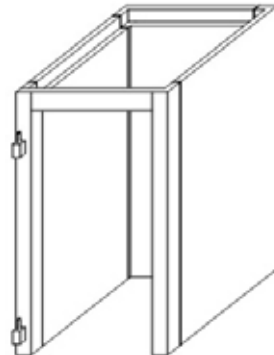
**FIG 2.**



**FIG 3.**



**FIG 4.**

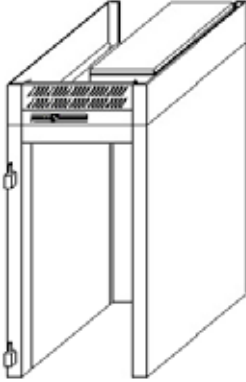


Ensure all the walls and jambs have been located and camlocked together before lowering the roof section onto them.

**Please note that the roof is very heavy.**

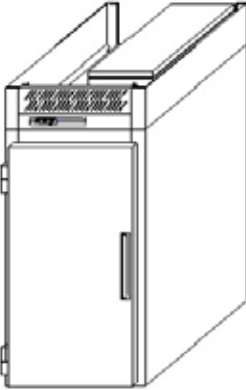
See figure 5.

**FIG 5.**



Fit the floor angle if supplied and then fit the door onto the door jamb by lowering vertically onto the hinges. See figure 6.

**FIG 6.**



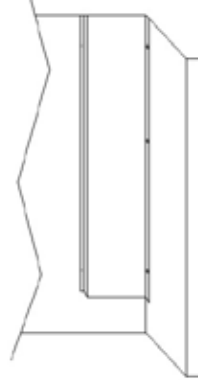
Connect the door heater if provided.

**IMPORTANT: electrical connection of the heater must only be carried out by a qualified, skilled and competent electrician. For further information, refer to the equipment wiring diagram.**

### FOR THAW MODELS

Fit the duct to the rear wall, right hand side wall and roof inner with the screws provided in the pre-punched holes. See figure 7.

**FIG 7.**



# INSTALLATION FOR A RMR2T - ROLL IN MODULAR RUBY

## INSTALLATION

### Site Preparation

Please ensure that the floor area is clean and level.

Lay the insulated floor or floor tray if supplied.

FIG 2.

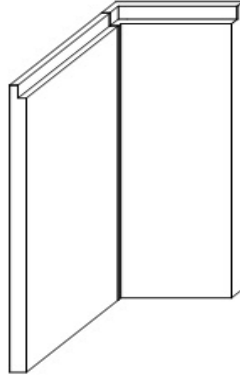


FIG 3.

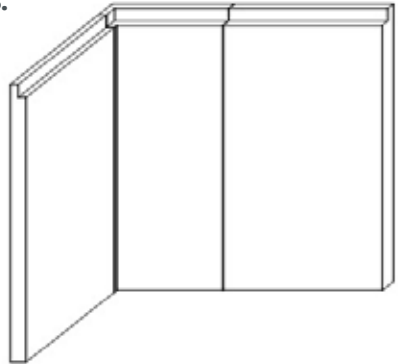
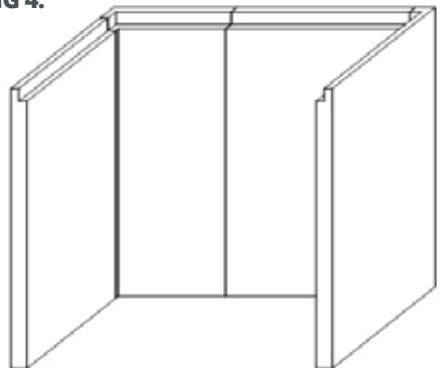
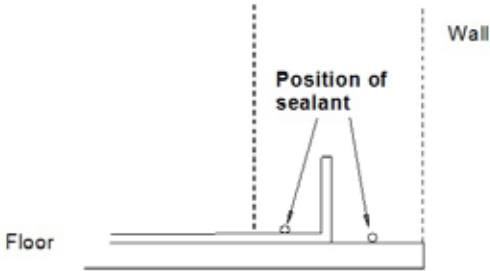


FIG 4.



### Models with a 15mm floor

Put beads of food safe silicone sealant around the floor as shown before assembling the wall panels.

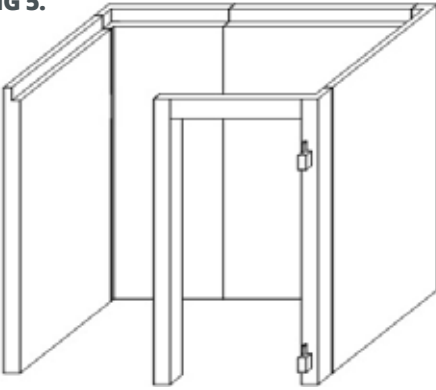


Starting at a rear corner build the wall panels together as per the Panel Assembly Instructions. See figures 1-6.

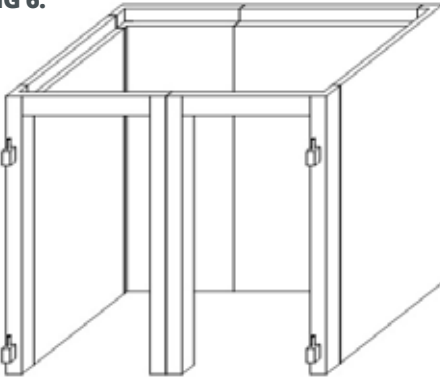
FIG 1.



**FIG 5.**



**FIG 6.**

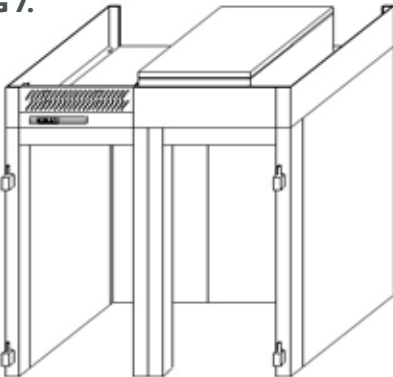


Ensure all the walls and jambs have been located and camlocked together before lowering the roof section onto them.

**Please note that the roof is very heavy.**

See figure 7.

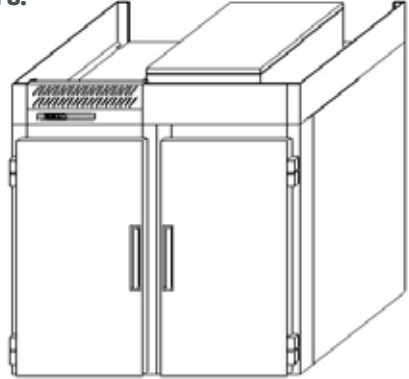
**FIG 7.**



Fit the roof angle to the jambs and roof using the screws provided. See 'Fitting Roof Angle and Floor Plate'.

Fit the floor angle if supplied and then fit the doors onto the door jamb by lowering vertically onto the hinges. See figure 8.

**FIG 8.**



Connect the door heaters if provided.

**IMPORTANT: electrical connection of the heater must only be carried out by a qualified, skilled and competent electrician. For further information, refer to the equipment wiring diagram.**

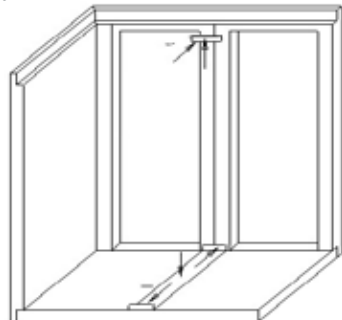
### **FITTING ROOF ANGLE AND FLOOR TIE PLATE**

Screw the roof angle to the roof and jambs as indicated using the M5 screws supplied. See figure 9 (rooms with floors) or figure 10 (floorless rooms).

Screw the floor tie plate to the floor and jambs as indicated using the 8 x 1/2 screws supplied. See figure 9.

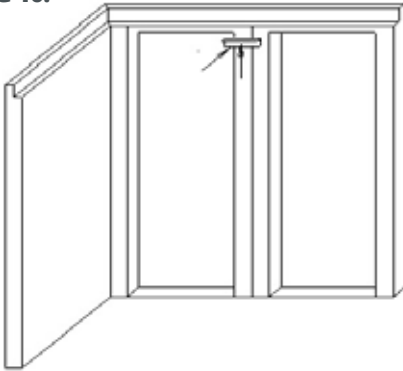
**Please note that the floor tie plate is only supplied with rooms with floors. Floorless have either floor angle or floor tray.**

**FIG 9.**





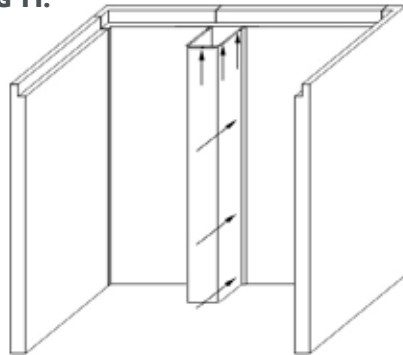
**FIG 10.**



### FOR THAW MODELS

Using the screws provided, fit the air duct in the pre punched holes to the centre of the back wall and roof. See figure 11.

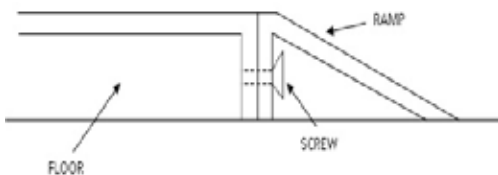
**FIG 11.**



### FITTING RAMPS

Fit the ramp to the front of the room with the screws provided. See figure 12. Insert the screws into the front face of the floor through the pre-punched holes, do not screw in all completely, i.e. leave them protruding by approximately 3mm. Hook the ramp over the screws. The ramp is intended to be removable for ease of cleaning.

**FIG 12.**

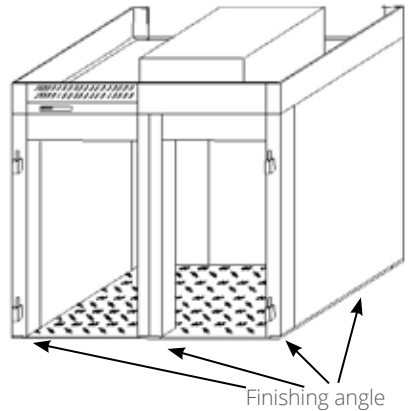


### FITTING FINISHING ANGLE (15MM FLOOR)

Fit finishing angle with screws provided. See figure 13.



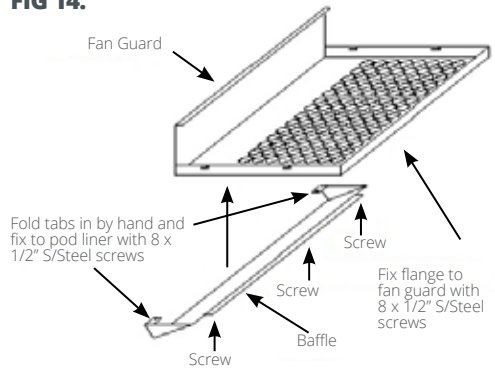
**FIG 13.**



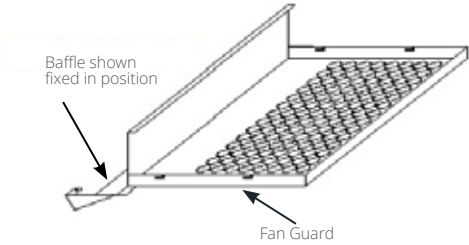
### FITTING THE AIR BAFFLE

Fit the air baffle to the two fan pods. See figure 14 & 15.

**FIG 14.**



**FIG 15.**

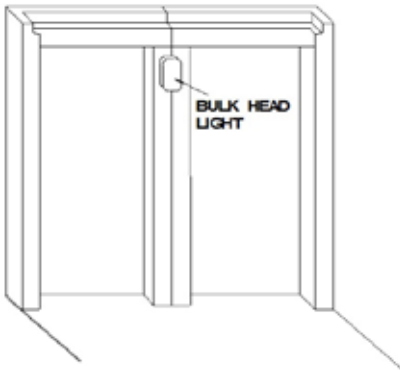


**BULK HEAD LIGHT (OPTIONAL)**

Secure the bulk head light to the back of the door jamb legs with the screws provided. See figure 16.

**IMPORTANT: electrical connection of the bulk head light must only be carried out by a qualified, skilled and competent electrician. For further information, refer to the equipment wiring diagram.**

**FIG 16.**



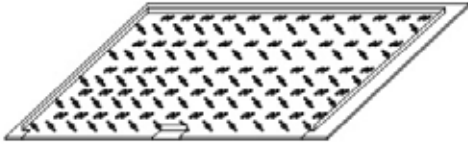
# INSTALLATION FOR A RMR3T - ROLL IN MODULAR RUBY

## INSTALLATION

### Site Preparation

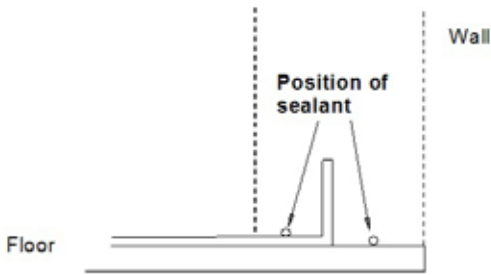
Please ensure that the floor area is clean and level.

Lay the insulated floor or floor tray if supplied.



### Models with a 15mm floor

Put beads of food safe silicone sealant around the floor as shown before assembling the wall panels.

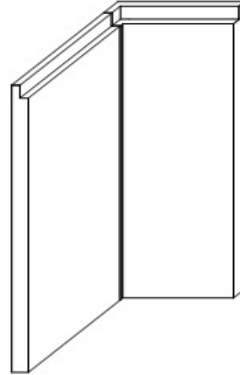


Starting at a rear corner build the wall panels together as per the Panel Assembly Instructions. See figures 1-8.

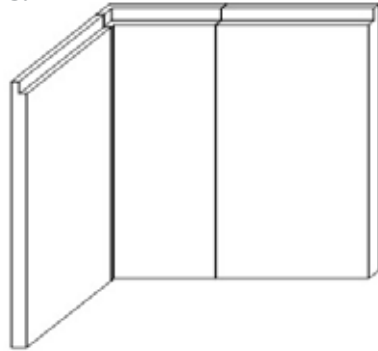
**FIG 1.**



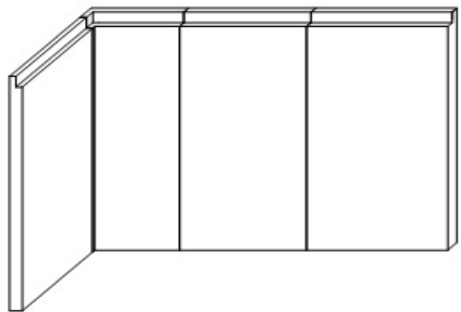
**FIG 2.**



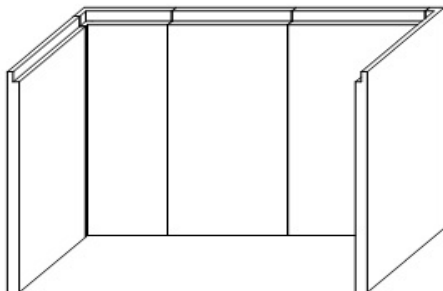
**FIG 3.**



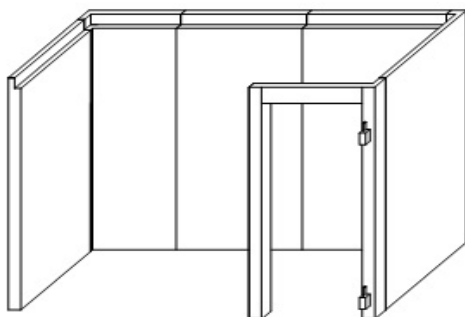
**FIG 4.**



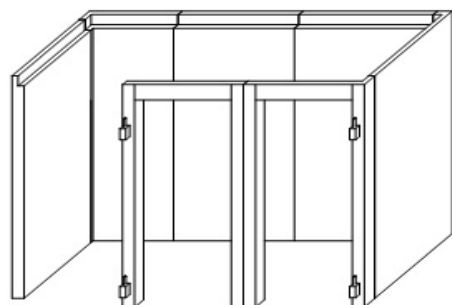
**FIG 5.**



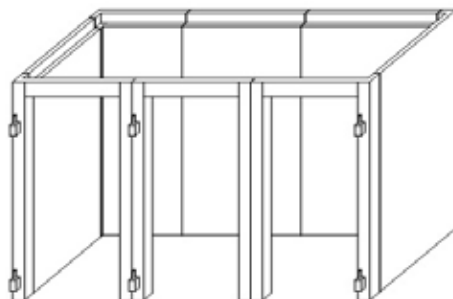
**FIG 6.**



**FIG 7.**



**FIG 8.**

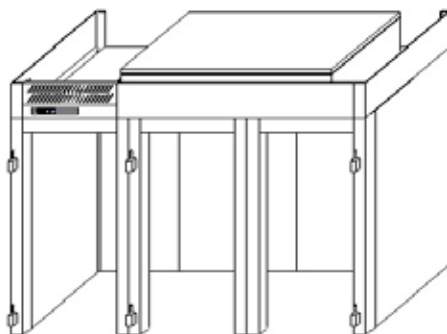


Ensure all the walls and jambs have been located and camlocked together before lowering the roof section onto them.

**Please note that the roof is very heavy.**

See figure 9.

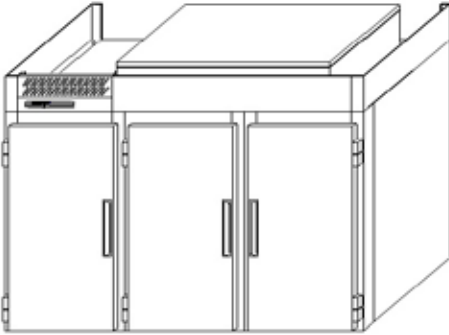
**FIG 9.**



Fit the roof angle to the walls, jambs and roof using the screws provided. See 'Fitting Roof Angle and Floor Plate'.

Fit the floor angle if supplied and then fit the doors onto the door jambs by lowering vertically onto the hinges. See figure 10.

FIG 10.



Connect the door heaters if provided.

**IMPORTANT: electrical connection of the heater must be carried out by a qualified, skilled and competent electrician. For further information, refer to the equipment wiring diagram.**

### FITTING ROOF ANGLE AND FLOOR TIE PLATE

Screw the roof angle to the roof and jambs as indicated using the M5 screws supplied. See figure 11 (rooms with floors) or figure 12 (floorless rooms).

Screw the floor tie plate to the floor and jambs as indicated using the 8 x 1/2 screws supplied. See figure 11.

**Please note that the floor tie plate is only supplied with rooms with floors. Floorless have either floor angle or floor tray.**

FIG 11.

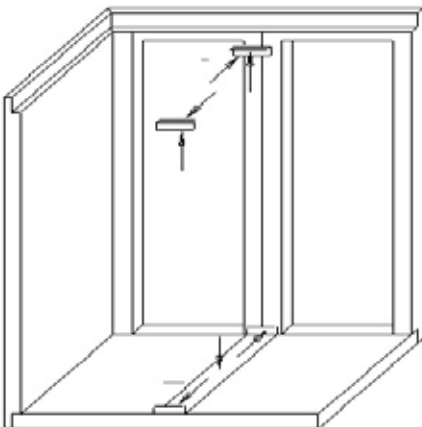
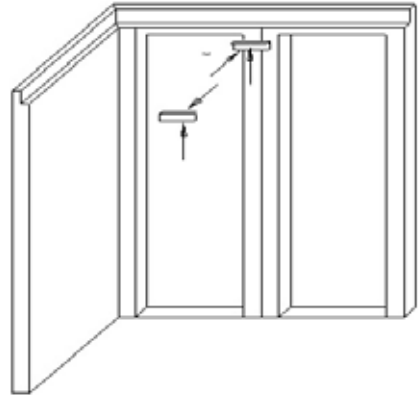


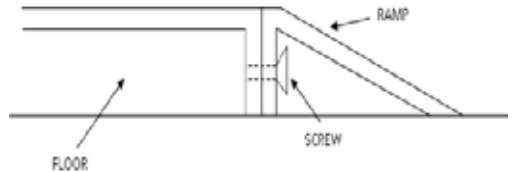
FIG 12.



### FITTING RAMPS

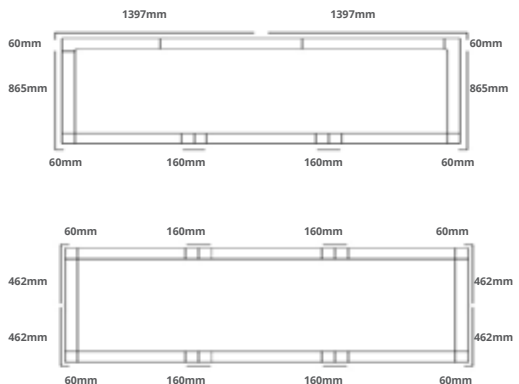
Fit the ramp to the front of the room with the screws provided. See figure 13. Insert the screws into the front face of the floor through the pre-punched holes, do not screw in all the way, leave them protruding by approximately 3mm. Hook the ramp over the screws. The ramp is intended to be removable for ease of cleaning.

FIG 13.

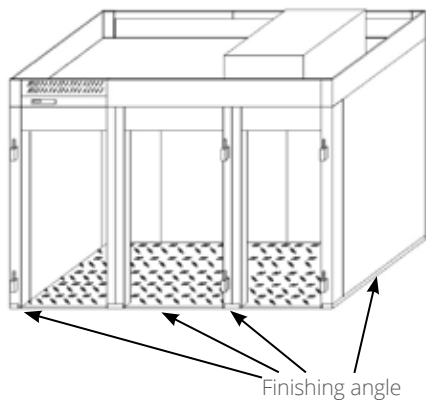


### FITTING FINISHING ANGLE (15MM FLOOR)

Fit finishing angle with screws provided. See figure 14.



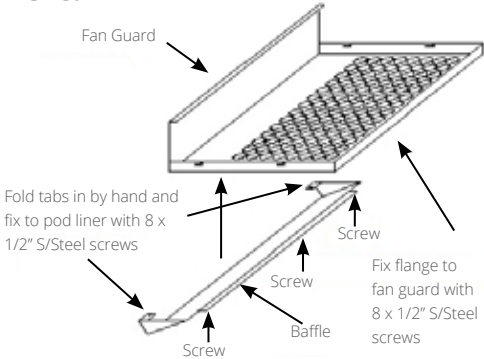
**FIG 14.**



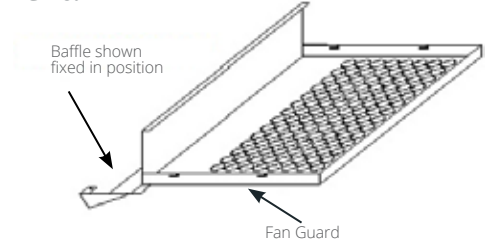
**FITTING THE AIR BAFFLE**

Fit the air baffle to the two fan pods. See figure 15 & 16.

**FIG 15.**



**FIG 16.**

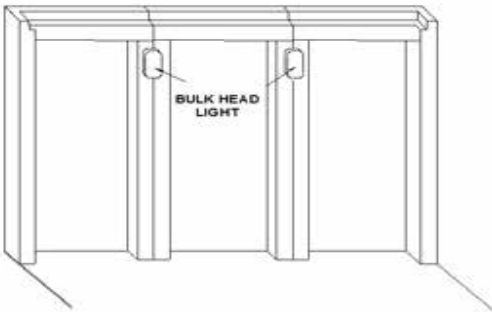


**BULK HEAD LIGHT**

Secure the bulk head light to the back of the door jamb legs with the screws provided. See figure 17.

**IMPORTANT:** electrical connection of the bulk head light must only be carried out by a qualified, skilled and competent electrician. For further information, refer to the equipment wiring diagram.

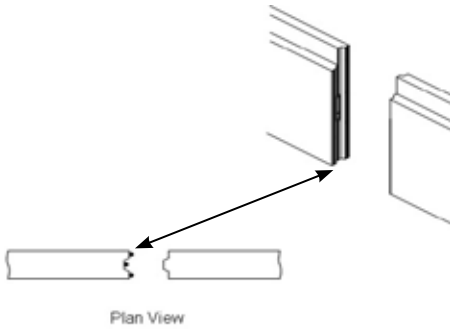
**FIG 17.**



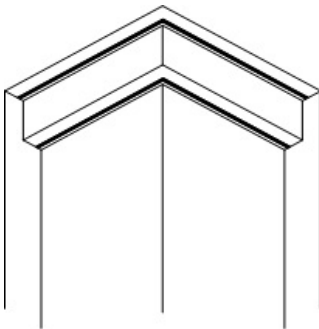
# PANEL ASSEMBLY

## PANEL ASSEMBLY

Apply mastic or equivalent to the **shaded areas** before locking the wall panels together.



Apply mastic or equivalent to the **shaded areas** before fitting the roof and floor.



Insert the key provided into the holes in the wall panels and turn clockwise to lock the panels together.



After complete assembly, seal all joints using silicone sealer. Then fit the hole plugs provided into the lock holes.

## FINISHING

To complete the installation, cap all the camlock keyholes with the plastic plugs provided. Do not cap the holes until you are satisfied that all the locks have been fully activated and the Ruby installation is complete and no adjustments are required.

Once the plugs have been inserted it is difficult to remove them without damaging the surface of the panels.

Ensure all the protective plastic has been removed from the surfaces of the panels.

## CARE OF YOUR MODULAR RUBY

Keep the Ruby clean. Plastic coated galvanised steel can be cleaned with warm soapy water and a soft cloth. Never use abrasives or chemical cleaners.

Stainless steel panels and doors should be cleaned as above and wiped with the grain in the metal to preserve their appearance. Twice a year use a good stainless steel polish to add lustre.

For full cleaning instructions, please refer to your Operation Manual.

Make sure that the door snubber operates properly and regularly check that the gasket has not become damaged. Damaged gaskets should be replaced immediately.

Regularly check that the emergency door opening device operates properly.

Do not block the air duct to the evaporator unit and make sure that the refrigeration unit is exposed to sufficient ventilation.



## Design Excellence : Cool Technology

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[www.williams-refrigeration.com](http://www.williams-refrigeration.com)

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Registered in England & Wales under Registered Number  
3872673. Registered Office Address - Bryggen Road,  
North Lynn Industrial Estate, King's Lynn, Norfolk, PE30 2HZ

