BAR FRIDGES NZ BUILDING IN BIBLE

Building fridges into cabinetry is not always a simple thing to do. We explain all the relevant details in order to ensure you install your fridge correctly to get the best possible performance from your bar fridge.

FRONT VENTING COMPRESSOR UNITS

These units have a 'grill' at the front and 99% of the time the application is under a bench. Because they vent through the front grill you can have 'minimal room' around the fridge, meaning the install will look much neater and seamless. 10mm is the required minimum around the sides and top, these type units have a fan in the rear section that draws room temperature air in one side and blows hot air out the other.

Ensure from your supplier that the unit can be fully built in, there are many units on the market that claim to be 100% front venting, yet most are only 'semi front venting' and still need more room for breathing, especially in outdoor areas. Just because it has a vent at the front, that doesn't mean it will work when built in as pictured.





NON-FRONT VENTING COMPRESSOR UNITS

These do not breathe from the front so it is vital that adequate space is allowed around the units to ensure air can circulate around them. When installed correctly, these units operate very efficiently as the cooling mechanism (compressor) works very well. In most cases, gaps at sides and top will be sufficient. However, any other additional venting that can be done at the will help significantly.

It is important to create what we call a 'chimney' effect, that is having two points of air flow, AIR IN and AIR OUT.

Typically, you will need a minimum of 20-50mm around the units and 100mm at rear (exact allowance will depend on the model). This can be less if you are able to provide an 'exit point' for air at the rear of the fridge, this could be the rear, the side or even the top of fridge. By having air IN and air OUT you will create the effect you need to expel the unwanted hot air that builds up during normal operation. Installing your fridge correctly will protect your compressor and therefore increase the life span of the product.



Simply allow a gap as pictured, with 20-30mm around the left/right/top and 100mm at the rear.



INTEGRATING INTO A CABINET WITH A DOOR IN FRONT OF THE FRIDGE

Front Venting Compressor Units

You will need to make sure the front grill area can still breathe. A general under bench unit could actually sit at ground level and the cabinet door can be fitted in front, however the grill becomes part integrated into your skirting (the part that is generally under your door with cabinetry), see diagram as an example. Another way is to add a GRILL to the cabinet door that mirrors the grill size of fridge, hence allowing air to flow in/out just as it would in a normal open cavity.



Compressor & Non-Compressor units

It is equally vital for all compressor and non-compressor units with a door in front of them to be correctly installed. Even without a door in front, the installation below is crucial for a non-compressor unit.

The diagram below gives you an idea of different ways to vent these in order to ensure we create the 'chimney effect' to allow hot air that has built up to disburse. Important things to note here are that each 'actual vent', needs 200cm2 of size, so 20cm x 10cm = 200cm2 as a minimum.

In instances where the fridge needs to vent in rear floor area (example A, B, E and F), the gap needs to be clear for up to 8-10cm of the 'depth' of fridge. So the feet stop about where hole starts but it's clear under the rear part of fridge. This is because units have all the working parts in rear 10cm of the fridge, all the heat is built up right there. In the example of A, B, E and F, see how the platform is 'shorter than fridge' so that air can rise and flow through the rear.

