

**Guide to getting value from your  
air-conditioning system**

**[value]**

A guide for installers, specifiers, contractors and architects

**March 2010**

# Guide to getting value from your air-conditioning system

There is no doubt that a properly installed air-conditioning system will add value to any environment. Whether it's within the home, at schools and universities or in office blocks, air-conditioning is a key component for comfortable modern living.

In the workplace, for example, studies have shown that, on average, work performance decreases by 2% per degree C° increase when the temperature is above 25C.

But how do you know you're getting the most out of your system? After all, the value of your system is not guaranteed unless proper consideration is given to the most appropriate air-conditioning system and how it is installed and operated.

So here are a few helpful tips to help you make sure you get the most value out of your air-conditioning system. If this is the first time you have considered this issue, we hope it will serve as a useful guide to ensure your air-conditioning system lasts as long as possible. If you are an experienced HVAC practitioner, hopefully you will appreciate having a checklist to make sure you are achieving the best value for your customers.

## 1. Which system should I buy?

Choosing the right air-conditioning system isn't easy. They come in many different sizes, shapes and forms and making sure you have the right one for your location will take careful consideration. You may in fact devalue your air-conditioning system in the long term if you select a system that isn't tailored to the location it is placed.

## 2. How much should I spend?

Whatever your air-conditioning requirements, costs will be an issue. And although you will want to save as much money as possible, cheapest is not always best solution. There are many different brands of air-conditioning products in the UK market place, all with a varying degree of quality. Insist that the brand you choose is of sound and reliable construction and is supplied by a reputable manufacturer. Ideally, you should be aiming to 'fit it and forget it.'

So if you're relying on your air-conditioning system for regular use under high capacity, you should look to spend a bit more to ensure you buy a reliable and efficient system.

### 3. What size system do I need?

To answer this question, consider how the system will be used in the future. You should calculate the size of the location where it will be placed and how much energy it will require to power it. A low-capacity system, for example, will devalue a lot faster if it is powering a room that puts it under full capacity for long periods.

Quite simply, it is advisable that all load calculation for heating and cooling are calculated having recognised the correct thermal properties of the building. Check that the system you install will satisfy both heating and cooling requirements if a secondary source is not available.

Will there be any ventilation applied to the space? If so, how much? And what impact will this have on the load calculations. Remember, it is a legal requirement to have a fresh air supply to many commercial environments.

Most brands will offer differing capacities to those of others. Therefore, use the following checklist to make sure you are getting value for money:

Make sure the equipment has been selected based upon the correct operating conditions

Make a simple calculation to determine the cost per kW of cooling capacity

Check the energy labelling ratings to make sure they are A/A rated.

### 4. How should I get my system installed?

When it comes to ordering your system, you'll want to buy equipment that is readily available for delivery and meets the engineer's exact requirements to ensure the quickest and easiest installation.

You'll also want to have peace of mind that you can 'fit it and forget it' at least until it's time to carry out routine maintenance work. To increase the chances of this happening, you're better off buying from a well-known and trusted air-conditioning brand. Should there ever be a problem with the equipment, you'll want to have access to post-sales technical support and a full and speedy response to the supply of spare parts.

Of course, this will add even greater value to the air-conditioning system as there will be a direct impact upon reliability. This is covered in detail in the FG Eurofred download available at [www.fgeurofred.co.uk/reliability](http://www.fgeurofred.co.uk/reliability).

If you have worked in the industry for some time, you probably knew all that. If so, we hope it confirmed that you are following best practice. If, however, we have pointed out something that you had not considered before, we hope we have helped you to offer your customers greater value in the long term.

If you would like to know more about how **FG Eurofred** and **Fujitsu** can help you achieve greater value from your air-conditioning system, please contact us on **020 8731 3442**.