



## Designing 'solutions'

**I**n summary, it must be said that airconditioning design is a lot about designing 'solutions' to specific situations rather than trying to fit available products to situations.

In other words, what the user of airconditioning needs is a 'customised cooling solution', not just boxes that are connected together to make a cooling machine.

### Customised solutions

A whole range of airconditioning equipment is available for use, but what would suit a particular application and what would not is a decision that only experienced airconditioning designers can take effectively.

When you embark on designing airconditioning design therefore, make sure you take the services of experienced professionals who have spent years in the field. This experience helps in significantly improving design, offering long-term, efficient, reliable solutions that are customised to each cooling need.

In commercial applications – showrooms, offices, banks, clinics and restaurants, or hotels, airports, hospitals and multiplexes – customised cooling solutions actually help 'grow' the user's business. It always helps if the AC provider understands the dynamics of each business and the different demands each makes on its airconditioning system. Such an understanding helps make the design more efficient, cost-effective and inexpensive in the long run, saving the user substantially on his power and maintenance bills.



## Energy-efficient equipment and design

Efficient design also means choice of state-of-the-art energy-efficient machines to ensure that the user benefits from improvements in technology.

However, choosing the right equipment alone does not guarantee efficiency. It is also essential to understand the dynamics of these machines and design systems around these components, so that their inherent efficiencies are enhanced rather than suppressed by faulty design. Only then will the use of costlier high-efficiency machines be justified by efficient day-to-day operation.

## Proper air distribution

Finally, it would make sense to spend some time and energy on proper air distribution design and fabrication.

Ordinary site-manufactured ducts can throw away all the advantages of efficient cooling machines through leaks and other defects. Computer-designed and machine-made ducts are available today that faithfully transfer cooled air without losses, thus enhancing the efficiency of the overall airconditioning system. Similarly, machine-made diffusers and grilles enhance the effectiveness of air-flow and overall efficiency.