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omputer Aided Design

Computer Aided Design (CAD) is the term used to describe a range of computer based tools that assist architects, engineers, space planners and other professionals in drafting, design, image or plan production or maintenance.

CAD systems can produce two or three dimensional imagery, can produce computer generated imagery and simulations and can store significant amounts of technical and other data related to the image produced.

This powerful tool can assist facility managers in many day to day tasks such as occupation planning, layout planning and scenario modelling, the tracking of maintenance issues and cabling control or the design and build of new facilities.

There are several different types of CAD, each of which require the operator to think differently about how they will use the tool to design their virtual components in a different manner.

The introduction of CAD systems from the mid 1980s led to a massive reduction in drawing office requirements for drafting tables and plan storage with one CAD operator replacing several draughtsmen using traditional methods. Architects, engineers and facility managers are often able to carry out their own drawing activities without the need for a draughtsman or specialist CAD operator at all. Low cost and even freeware drawing packages are now widely available enabling simple drawing exercises to be carried out quickly and easily.

As well as design, facilities CAD systems are now commonly used to track and maintain floor plans, building and property information, space characteristics and usage, employee and occupancy data, workplace assets such as furniture and equipment, business continuity and safety information as well as cabling, LAN and telecommunications records.

Meanwhile high end specialist packages have become increasingly integrated with other systems as part of a broader Computer Aided Facility Management or CAFM system. These systems provide facility managers with a range of tools to track and report on facilities information and to increase the effectiveness of their management operation.

By integrating with maintenance schedules, HR databases, finance systems and asset registers the FM is able to manage internal chargebacks, model occupation scenarios, identify maintenance trends, control budgets and produce better quality management information.

The British Institute of Facilities Management (BIFM) has produced a Good Practice Guide to Selecting FM Software which is available from their website www.bifm.org.uk