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## BIM vs. CAD – What's The Difference?

**Building Information Modeling, or BIM**, uses an integrated workflow on a construction project, from the design phase through completion. It can be the construction of any structure, such as a building, house, bridge, or anything that involves the use of building materials.



Each BIM model has individual components (BIM objects) that are 3D and 4D geometric representations of individual parts of the project (e.g., building materials and structural pieces). For our purposes, we provide the geometry and data of valves, letting designers see how valves will interact with the real world.

On the other hand, **computer-aided design, or CAD**, is computer-based software and automated technology that replaces manual drafting and assists with a manufacturer's product design.

Aside from its use in designing manufactured products, CAD is also an



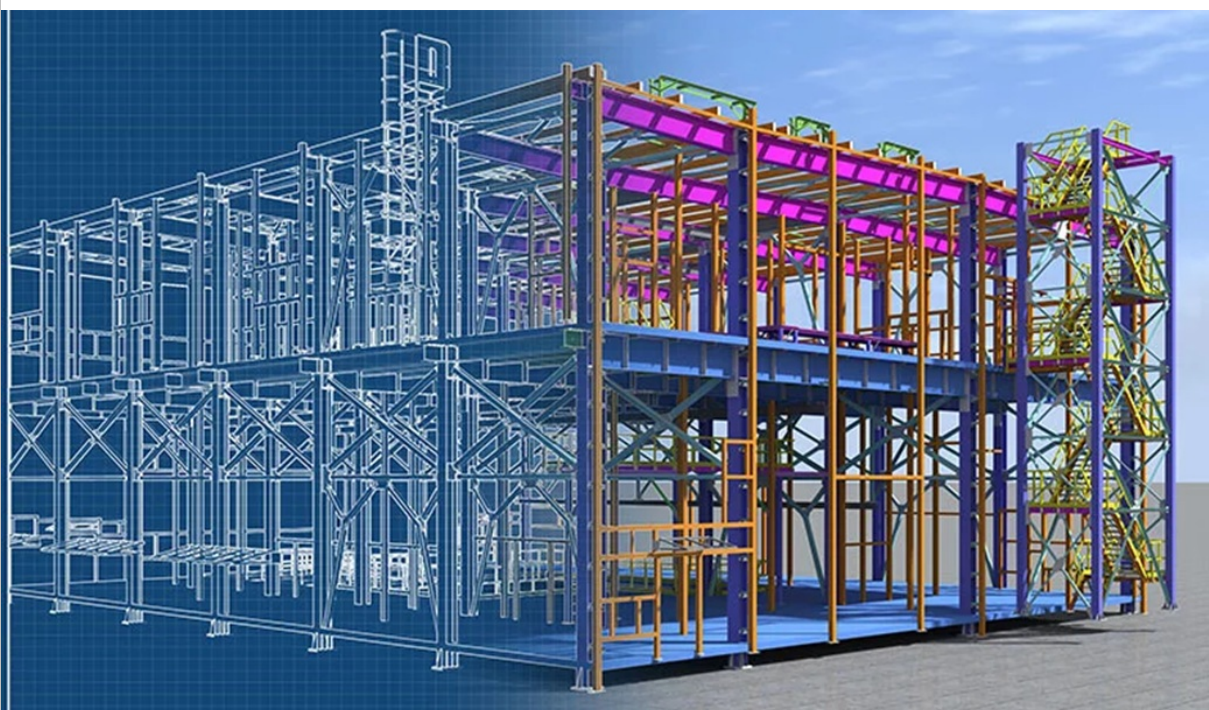
integral part of the building design process when used with BIM and serves as a sophisticated drafting tool to create lines and arcs in buildings and other structural designs.

**So what's the difference?** Simply put, BIM allows designers to place actual building elements into a design model, which can appear in ALL views. It looks deeper into the relationships between building components to search for possible conflicts.

When used in building design, CAD is primarily for drawing floor plans and layouts of sections of the structure. Architects also use it extensively for drafting design plans, sections of buildings, and elevations, and for client walkthroughs.

Designers use CAD software to create the 2D and 3D drawings for parts of a structure and for manufactured parts (i.e., valves, piping systems, electrical components, etc.). BIM combines all of that to create the building design and a comprehensive model of the structure, which ultimately streamlines the architectural drafting and design process.

Though CAD is typically used in the BIM method, BIM is the big-picture process. It works by using intelligent insights for the development of the physical features of a building or other structure, and it makes CAD more intuitive and dynamic by combining required project information into the various components of a building's design.



Milwaukee Valve continues to beef up its online tools, utilizing 2D & 3D and BIM content to provide more functionality, more content and easier digital product downloads to create a better digital customer experience.

This digital online catalog makes it easier for customers to download the digital models they need into their CAD or BIM design software. Because of the variety of customers and industries that they serve, Milwaukee Valve needed a versatile solution that would provide easy-to-access files for both CAD and BIM users. The 3D part catalog now features 150+ CAD and BIM formats, including Autodesk REVIT®.

The option of both high and low-level of part details allows Milwaukee Valve to deliver BIM-friendly downloads to engineers and contractors. These simplified digital renderings contain the accurate part number and metadata the contractor needs, without having to build the part with their BIM software.

For more information and to sample the easy-to-use interface, visit the [2D & 3D File Page](#) at [www.MilwaukeeValve.com](http://www.MilwaukeeValve.com) or contact your Milwaukee Valve sales representative or customer service contact.



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[www.milwaukeevalve.com](http://www.milwaukeevalve.com)  
262.432.2700



**HAMMOND VALVE**

[www.hammondvalve.com](http://www.hammondvalve.com)  
262.432.2702

16550 West Stratton Drive, New Berlin, WI 53151

