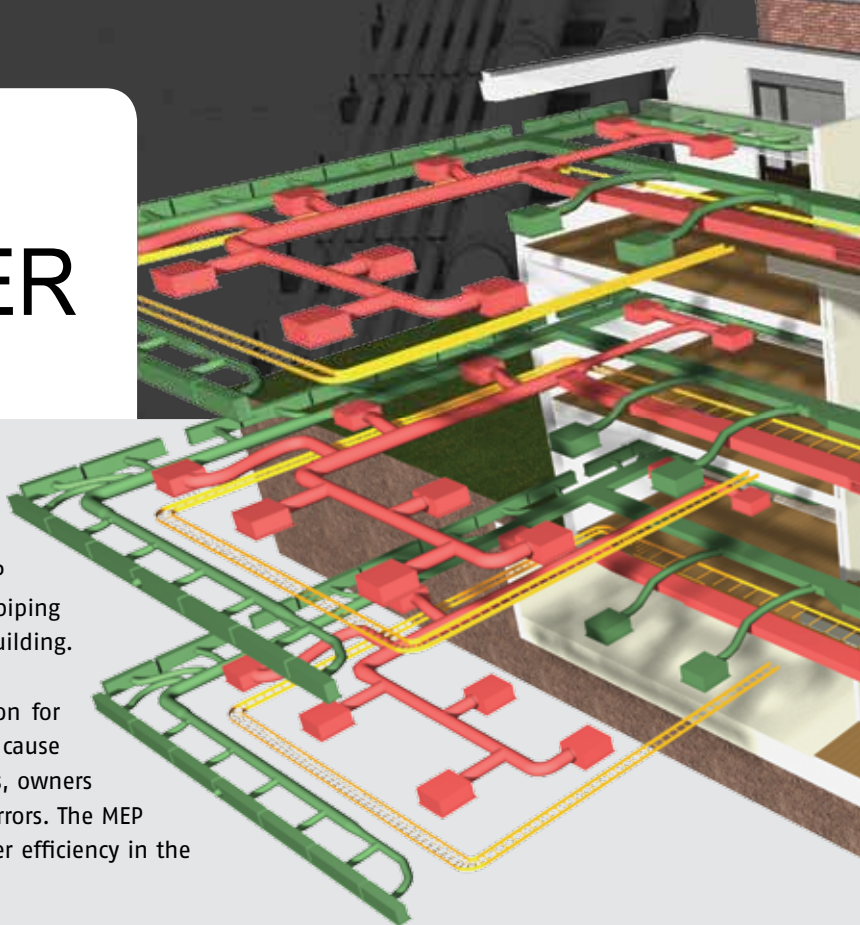## GRAPHISOFT®
MEP MODELER

MEP for Architects

The MEP (Mechanical/Electrical/Plumbing) Modeler is an add-on to ArchiCAD® 15. Architectural practices and architectural departments of firms using ArchiCAD can use the GRAPHISOFT MEP Modeler™ to create, edit or import 3D MEP networks (ductwork, piping and cable tray) and coordinate them with the ArchiCAD Virtual Building. The MEP Modeler uses familiar tools and interface.

Poor coordination between trades is perhaps the biggest reason for budget and time overruns in buildings. These problems regularly cause as much as a 2-4% cost overrun on a total project budget. Thus, owners and architects are looking to dramatically reduce coordination errors. The MEP Modeler is the best solution for architects to help achieve greater efficiency in the building process.
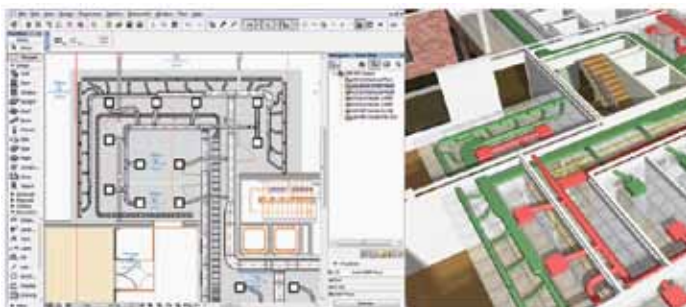
Main workflows for the MEP Modeler

BIM Workflow

- Where the MEP engineer can provide 3D data, architects are able to import the consultant's MEP model into ArchiCAD using the IFC format. In addition to this generic IFC interface, the MEP Modeler package provides an improved connection with AutoCAD MEP 2008/09/10 and with Revit MEP 2010/2011/2012 via the IFC format, using an export plug-in called ArchiCAD Connection.
- If the MEP Engineer provides 2D data, using the MEP Modeler it is very easy to model and visualize the designed MEP systems in 3D and eliminate possible collisions.

2D Workflow

- Based on 2D documentation received from engineers, architects can use the powerful built-in tools to create and edit the MEP model within ArchiCAD.
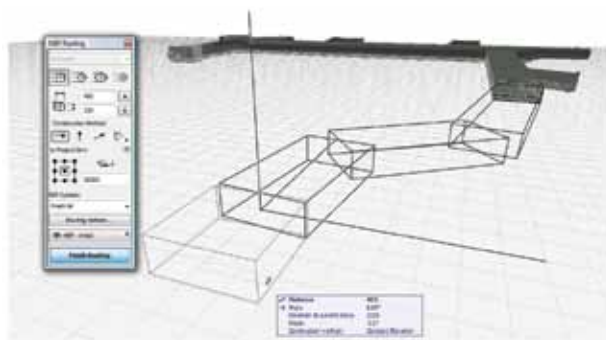
MEP Systems

The GRAPHISOFT MEP Modeler uses MEP systems to represent a group of MEP elements that are handled together, making the creation and editing of MEP elements much more efficient and consistent. When new elements are added to an existing MEP system, they will automatically take on the appropriate connection parameters: shape, diameter, and width and height values.

Smart MEP Routing

The MEP Routing function enables designers to create connected MEP elements with a series of mouse-clicks. ArchiCAD's smart cursor and temporary guidelines provide further help in creating MEP systems from scratch, quickly and easily. Routing is available in the floor plan and the 3D window.
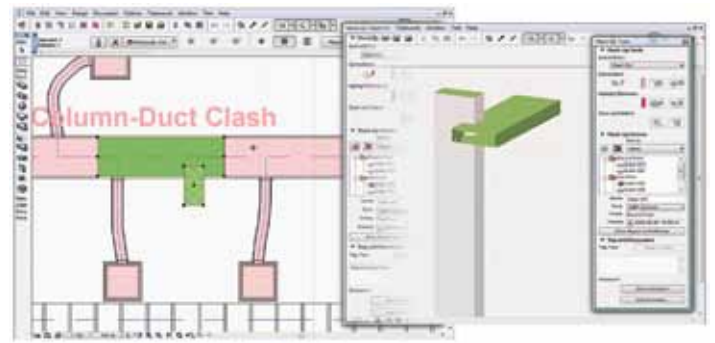
Automated Collision Detection

The GRAPHISOFT MEP Modeler provides a fully-automated routine to identify and visualize conflicts between the architectural design and the engineering design of the MEP networks.

Collision detection of MEP systems against the building model and among the elements of the MEP systems ensures fast and precise feedback for the architect, and streamlines coordination with the building engineering teams. MEP collision detection identifies the exact location of discrepancies on the floor plans and the 3D views. All collision entries are automatically added to ArchiCAD's Mark Up Palette, providing easy ID access to all identified collision entries.

Designers can quickly evaluate these entries and identify their location in the design with a single click. Discussions can be conducted by members of the extended design team to evaluate alternative solutions, using ArchiCAD's Mark-Up tools.

Collaboration with Engineers

MEP systems can be directly imported into ArchiCAD from Autodesk AutoCAD MEP 2008/09/10 and Revit MEP 2010/2011/2012 applications. All AutoCAD MEP systems are identified and automatically converted to native ArchiCAD MEP elements.

The ArchiCAD Connection plug-in can be freely installed with the Autodesk AutoCAD MEP 2008/09/10 and Revit MEP 2010/2011/2012 applications. Engineers using AutoCAD MEP or Revit MEP can then export their MEP design using the ArchiCAD Connection plug-in, and architects using ArchiCAD can import the MEP design database as intelligent ArchiCAD MEP elements.

FOR GRAPHISOFT ARCHICAD 15

The GRAPHISOFT MEP Modeler runs on both MAC and Windows.
Software and hardware requirements correspond to those of ArchiCAD 15.

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For more details,
contact any GRAPHISOFT
office, or visit:
www.GRAPHISOFT.com