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WHAT MEP ENGINEERS NEED

This paper is a reflection on the BIM Insights session webinar 'MEP engineers: what kind of BIM content do they ask for?'. The webinar took place on May 24th 2017.

In this paper you will learn how MEP engineers use BIM content in their projects. How detailed should content be? What data should be integrated within the content?

Lennard Roozendaal, BIM consultant at BIM engineering company Peoplepower, shows how he uses MEP content in his projects for both technical and commercial purposes.

Jaap Groen
Product Marketer



Lennard Rozendaal
BIM Consultant



MEPcontent

-  Uniform Revit models
-  22,000+ MEP engineers
-  270+ manufacturers
-  500,000+ articles
-  Global
-  EMCS standard

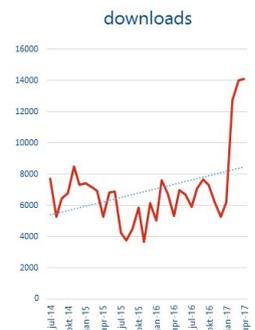
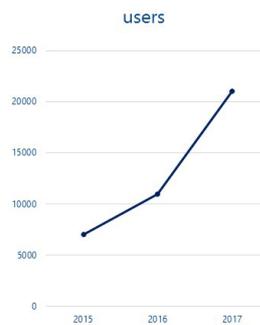
ABOUT MEPCONTENT

For those of you who are not that familiar with MEPcontent, the image above shows the key facts of the platform.

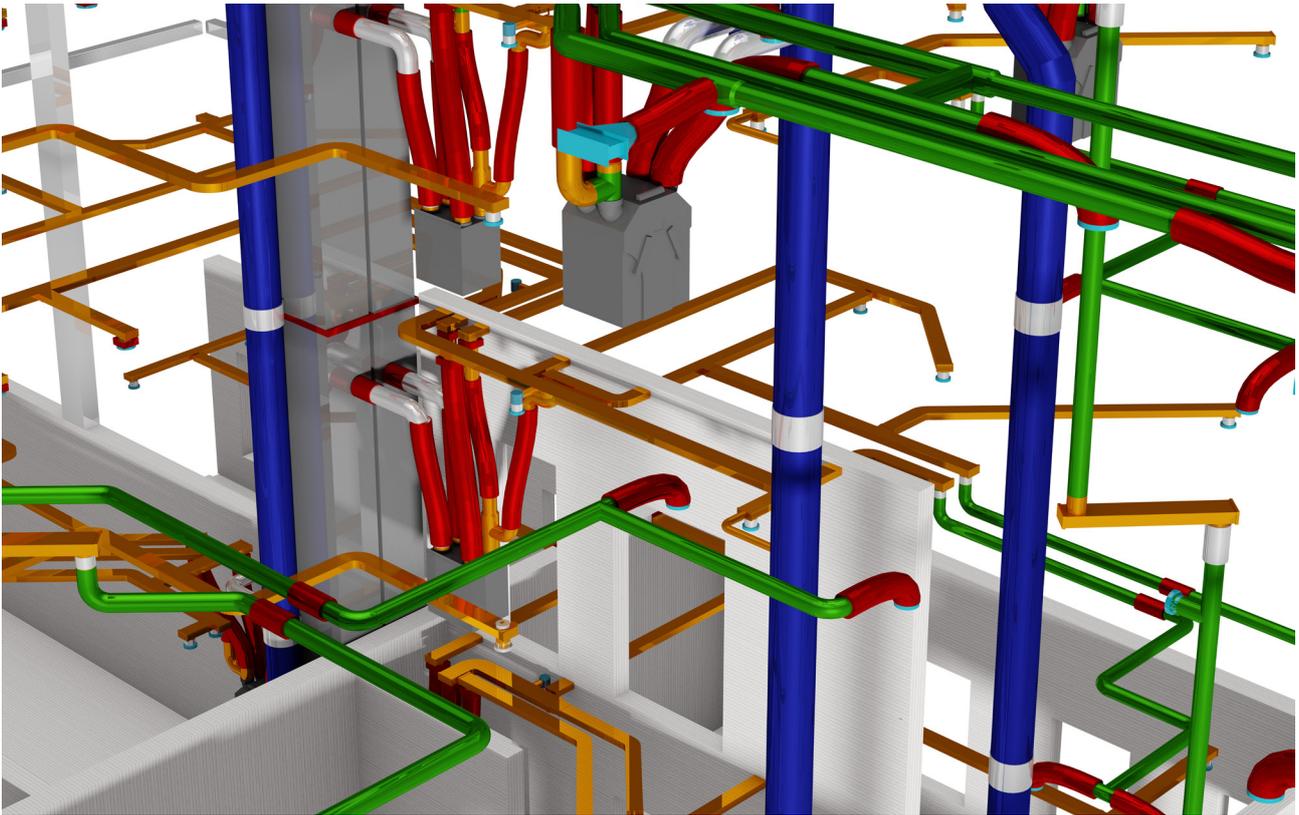
Our platform offers BIM files from all major manufacturers in MEP engineering. The content can be used in both Revit and CAD software directly and can be downloaded for free once you have created a MEPcontent account.

The powerful search engine allows users to quickly filter down to the content they need, based on keyword, category, manufacturer or file type. Lennard needs Cascade boilers from Remeha for his project.

MEPcontent



Key statistics for MEPcontent

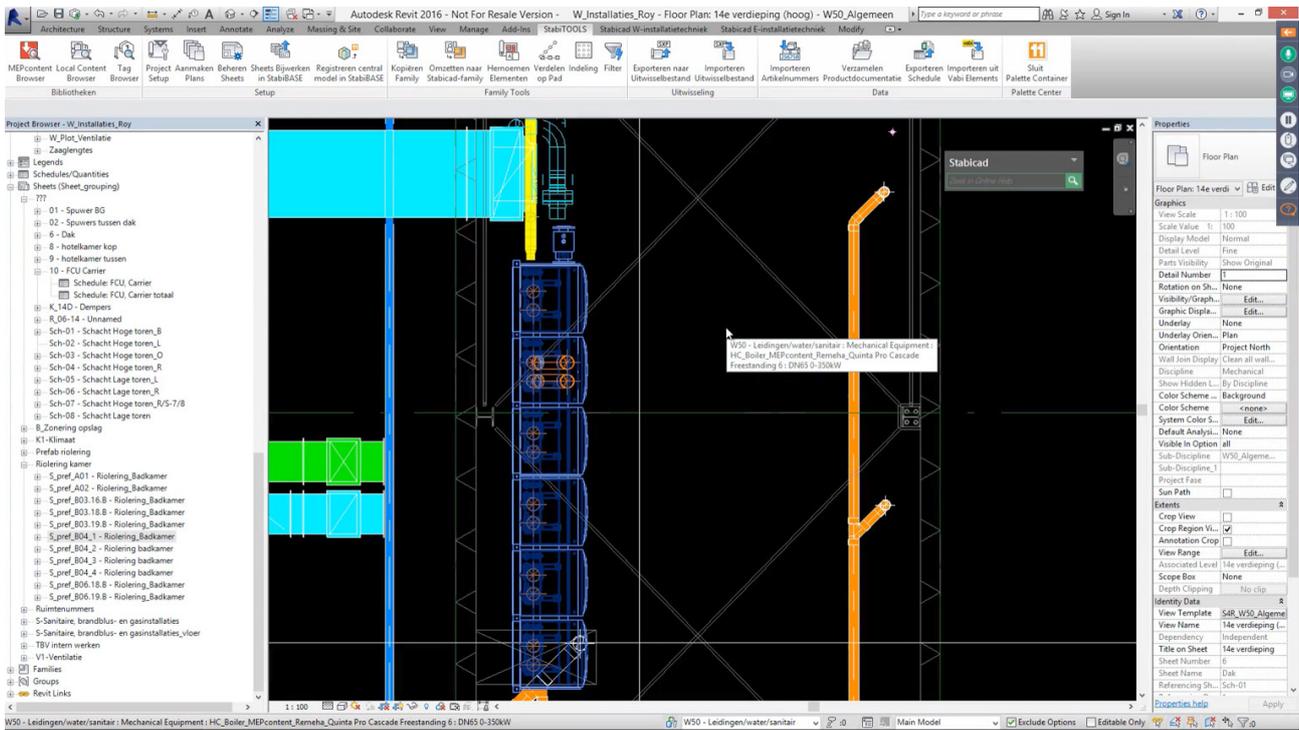


ABOUT PEOPLEPOWER



PeoplePower is expert in creating drawings and BIM models and managing this building information. PeoplePower does this for large organisations such as Shell, ABN AMRO and the University of Amsterdam.

PeoplePower works mainly in the Netherlands, but also operates internationally. More information can be found on www.peoplepower.nl



DEMO

During the webinar, Lennard showed how he uses content for ventilation systems to create a prefab set in Revit. This set helps engineers to produce and assemble the system in the factory quickly, and install the ventilation system on the construction site directly. The webinar can be found on <https://stabiplan.wistia.com/medias/xgb7u79660>

About Prefab for MEP engineers

Construction sites are becoming ever smaller, well-trained workers scarcer and safety requirements stricter. Prefab increases the predictability, consistency and repeatability, and helps installers to work more efficiently and more flexible. Installers can code prefab sets according to personal wishes and benefit from the fact that increasingly more processes are being automated, such as the generation of prefab sheets and the placing of tags. What's more, thanks to good BIM libraries such as MEPcontent.eu, engineers can rest assured that the content is always checked by the manufacturer and that it contains all the up-to-date information necessary for the (ordering) process, such as article numbers and prices. This ensures a smooth flow of information, from design and ordering to assembly at the workshop.

Bill of Material

Another benefit of using actual 3D content, equipped with manufacturer data, is that this can be used on material lists. When material lists in Revit are enriched with counts, GTIN or article numbers, these can be sent to the wholesaler or manufacturer from Revit for direct ordering. This ensures a smooth flow of information, from design and ordering to construction. In the webinar, Lennard showed how to easily create a Bill of Material in Revit, and how the companies he works for uses these lists to improve their design and order flow.



Content is everything

CONTENT IS EVERYTHING

Data is essential in the BIM process

Why? Because content is a type of representation of data that allows you to use the data in your projects and to help you with forecasting, calculating, ordering and project definition.

3D content from manufacturers provided by MEPcontent helps you to work with real-life items equipped with parameters, which can be used in projects to:

- Create BOM (Bill of Material) lists
- Create Prefab sets
- Create ordering lists
- Make reliable calculations for MEP systems

Correct and actual data allows engineers to deliver high quality BIM projects, which will not fail at the construction site.

In our library you can browse through more than 500,000 MEP products. From electrical to mechanical, heating and cooling products.

There are 500,000 products with a lot of data attached. That is our own example of Big Data relevant to engineers today. And we will continue expanding the relevant data on MEPcontent.

We focus on quality data in the MEP domain to make sure the overview of content you get is absolutely relevant. Without irrelevant things, you don't require, as a MEP specialist, such as chairs or tables.

Do you miss content?

Although we try to offer engineers a complete library for MEP projects, you might still miss specific content from a manufacturer. In this case we encourage users to contact the manufacturer and ask them to publish their products on the MEPcontent platform. The MEPcontent team is happy to help in the process of contacting the manufacturer and discuss the content creation process. Please contact us if you require any further information on info@mepcontent.eu.



BIM content requirements

- Compact content (small in size)
- Right and correct data
- Easy to use and maintain
- Deeplinks to documentation
- Complies to BIM standards
- Easy to find

BIM CONTENT REQUIREMENTS

Content. It is essential in BIM projects. Good content, which contains a lot of information, ensures that a 3D model is becoming increasingly more important in the BIM process and in the ordering process. The recently published 'National BIM Report 2016' (NBS) shows that 71% of the surveyed engineers want to receive BIM objects from manufacturers. This is because engineers want to deliver perfect models. Models and drawings contain all the necessary information that will not fail in an essential part in the BIM workflow. Therefore, good up-to-date content is required. But, what defines „good“ content?

Working with both engineers and manufacturers on a daily basis, we've defined the following requirements for 3D content for the MEP industry:

- Compact content (small in size)

Productivity and efficiency in BIM design is the number one prio for engineers. Construction projects often need to be delivered within a tight deadline, so engineers and modellers work under time pressure. MEP systems designed in a BIM should obviously be of high quality, but also delivered in a narrow time frame. Therefore, content used in BIM project should be compact and small in size, so it does not slow down the entire BIM project.

- Right and correct data

This might seem an obvious thing, but 3D content equipped with right and correct data is essential for building 3D models that are reliable and will not fail in the construction stage. Manufacturers should make sure that the available 3D content for their product is correct and matches their actual product data.

- Easy to use and maintain

Once 3D content has been created and published, the content needs to be maintained and updated. Product data from manufacturers changes and updates over time, 3D content needs to be taken in account in these updates as well. Therefore, manufactures have to establish one safe source for their product data, which can easily be synced with the data used for 3D content. This makes it easy to maintain 3D content, published in different channels.



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- Deeplinks to documentation

Content should serve stakeholders in the entire BIM cycle. Not only during the design stage, but also for ordering, installing and maintaining the actual products. Deeplinks to manufacturer documentation, wholesale databases and manuals help all stakeholders to work faster and more efficiently.

- Complies to BIM standards

BIM is developing more and more in Europe. Different standards and initiatives have emerged all over Europe. To make sure the content in your projects is always up-to-date with the latest BIM demands, we have introduced the EMCS: European MEPcontent standard.

The European MEPcontent Standard (EMCS) has been prepared by Stabiplan to provide MEP engineers throughout Europe with a clear understanding of the need for high quality and uniform content, i.e. graphical article information, like it is present on MEPcontent. The document also represents Stabiplan's vision for the future. We want to share our knowledge on MEP and content for MEP because we know that MEP is a dedicated business that deserves its own standard, and that this should be done on a European level, reflecting the current state of our industry in which boundaries between countries fade away.

- Easy to find

Engineers should be able to easily use and find content. BIM platforms such as MEPcontent help engineers to quickly find all the 3D content they need for their BIM project. MEPcontent provides the MEP engineer with all the necessary Revit families in order to optimize the BIM model to a high standard. A team of around 25 people work daily to create new content or optimize existing content. MEPcontent has been around for 15 years; the object library began 15 years ago. Over the years, this objects library has become a content platform with now more than 500,000 products for both the Electrical and Mechanical installer. MEPcontent has more than 20,000 active users across Europe. All content is in line with the current product range of known (European) manufacturers and suppliers.

Lightning fast MEP design

Designing reliable MEP systems in Revit projects is now much easier.
Use our apps to browse, design and calculate with your favorite manufacturers.

Designing reliable MEP systems in Revit gets much easier with the MEPcontent apps.
Our apps will increase your productivity by offering ease in designing with manufacturer specific content.
Download the app you need from the MEPcontent store today.

Our apps



ABB Switch Range Configurator

SANHA Product Line Placer for Revit

MEPcontent Browser

ON DEMAND TOOLS FOR MEP ENGINEERS

Shrinking budgets mean that BIM engineers have to design in a smart and efficient manner. Good software is necessary for this. But different projects require different functionalities in your software, and flexibility is becoming ever more important here as well. The 'on-demand' model, such as the system we use at home for Netflix, will increasingly penetrate the world of design software. Software, updates and support are included in a monthly payment, and consequently can be adjusted precisely to meet your needs. Specific design tools, available as apps, will appear evermore frequently. The functionality that you need at that moment, and quickly installed within your project. Advantage: you pay only when you need the app and not for all sorts of packages. In this way, installers are able to deliver the flexibility required of the market, without incurring excessive costs.

MEPcontent offers a number of apps specifically for MEP engineers. These apps can be found on store.mepcontent.eu and are connected to the 3D content available at the platform. Some are manufacturer specific, such as the SANHA Product Line Placer or ABB Switch Range Configurator. Some are more generic, such as the MEPcontent browser.



Want to join the next webinar?
mepcontent.eu/events

**HAVE ANY QUESTIONS?
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