

# Stabicad<sup>11</sup>

BIM software for the MEP engineer



**WE ARE  
BIM LIVE!**

Discover all the reasons for choosing Stabicad:

[stabiplan.com/stabicad11](http://stabiplan.com/stabicad11)

## 4 Reasons for choosing Stabicad

Stabicad ties in with the design practice of any engineer.

Stabicad 11 is the number one in design software for electrical and mechanical engineering. Regardless of the platform (Revit or AutoCAD) and the level you are working on. Stabicad provides you with the tools to participate in any conceivable BIM project; from serial residential construction right through to the most advanced utility projects.

1

### More productive engineering

Realize a high-quality installation in the shortest time possible.

2

### High-quality content

Direct link to up-to-date content and relevant manufacturer information.

3

### Integrated calculations

Modeling and calculating within one model prevents errors and duplication of work.

4

### Reliable knowledge partner

Experiences from our client base, own expertise and partners' expertise within their specific field are the basis for quality.

'Stabicad for Revit enables you to set up, dimension and calculate your model quickly; it is a highly intelligent program.'

Edgar Movsisyan, BIM-modeler for the Pontsteiger Amsterdam



Design | Build | Maintain | Operate

Consulting engineer | Installation engineer | Facility manager



Generic | Specific | Detail | Prefab

Generic: Schematic diagrams and a table of element codes.

Element code	Category	Manufacturer	Product line	Type	Comments	GTIN	Manufacturer G.N.	Manufacturer art. no.
001	Armschirm	Stal	Stal	Circulation system			871342303949	
F01	Pump	Wilo	Wilo	Circulation pump		454845240083	8713423031244	2150803
V01	Valve	Dako	Dako	DO-302		254392312764		

Specific: Detailed 3D models of components like a control cabinet and a switch.

Detail: Close-up views of electrical components and a software interface for configuring a switch range.

Prefab: 3D models of prefabricated wall recesses for electrical installation.

Generic: Schematic diagrams and a table of installation parts.

Installation part	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Installation	2	118	304	334	0	8								
P1	2	118	304	334	0	8								
C1	1	36	52	52	0	8								
C2	1	36	52	52	0	8								

Specific: 3D models of wall recesses and their installation in a room.

Detail: Software interface for configuring a switch range.

Prefab: 3D models of recess plans for wall installation, including back view, top view, and 3D view.

Stabicad integrated calculation

Ventilation: 3D model of a ventilation system with associated data tables.

Sewerage: 3D model of a sewerage system with associated data tables.

Cable calculation: Software interface for calculating cable requirements.

Sprinkler: 3D model of a sprinkler system with associated data tables.

Tap water: 3D model of a tap water system with associated data tables.

Heating & Cooling: 3D model of a heating and cooling system with associated data tables.

Stabicad Connectors

Energy: 3D model of a building with energy flow indicators.

Light: 3D model of a building with lighting layout and data tables.

StabiBASE Cloud: Software interface for cloud-based data management.

Data: Software interface for data management, featuring the MEPcontent logo and website.

ERP: Software interface for ERP integration, showing a climate schedule table.

FM & Maintenance: 3D model of a building with maintenance schedule and data tables.



**'The BIM software from Stabiplan enables us to work more efficiently with our building partners. This ultimately results in shorter lead times, transparency, clear communication and time gain.'**

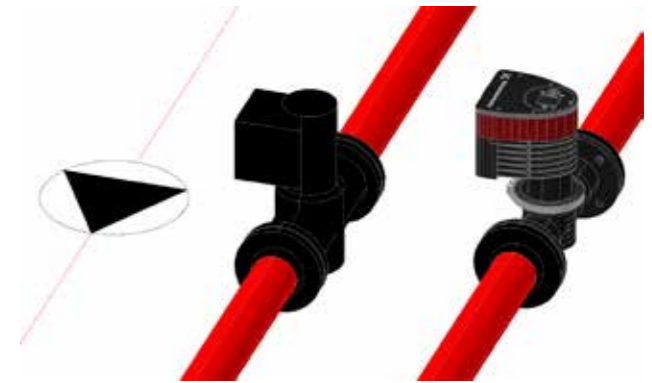
Corné Maas, Project Manager, Hoppenbrouwers



## From generic to specific

Change the model easily

In Stabicad, you can easily change your model from generic, via specific, to detailed and back again. This way, the information level of the model changes as the development phases progress. Elements are given a unique coding from the schematic diagram, so that it is clear which articles are present throughout the entire life cycle of the model.



## Nodesolver

Complex node connection

During the modeling process, the nodesolver shows various possibilities for connecting pipes and ducts, including fittings. Where Revit stops, the nodesolver goes further. All solutions can actually be made and all article information in the model is accurate. In 2D or 3D, one or several nodes; this tool solves it.



## More productive engineering

Save time with these powerful tools

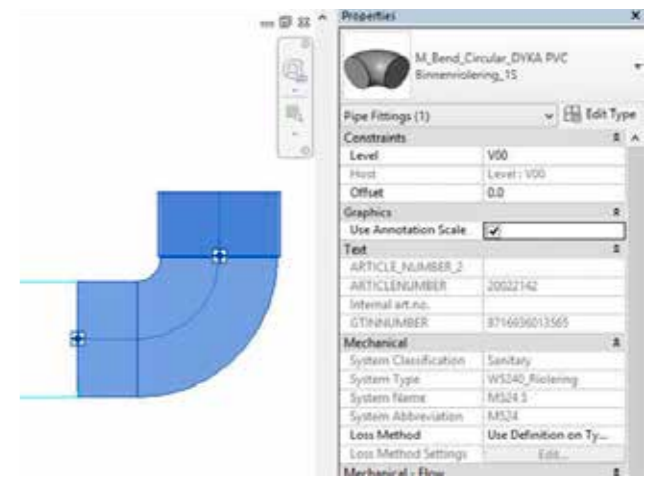
Stabicad enables engineers to keep up with the latest BIM developments thanks to the reliable performance and proven productivity tools. This is in direct response to the shorter turnaround times and higher delivery requirements for installation projects that a recovering market demands.

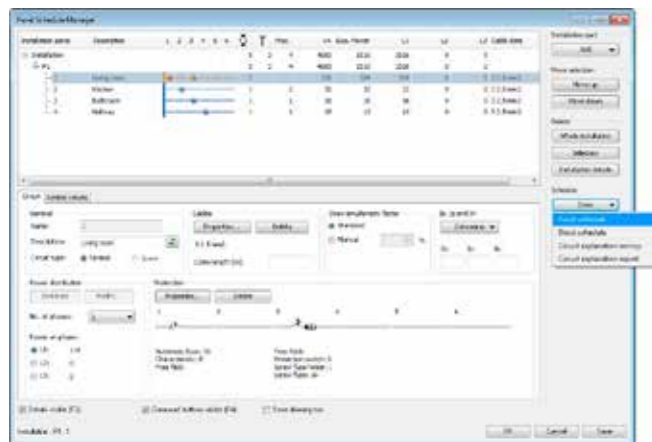
All parties involved in a building project are aware that the market has picked up again. Big challenging projects and plenty of room for innovation have an influence on the installation, the design process and maintenance. Residential construction has gained new momentum and is becoming more sophisticated thanks to high-tech facilities. The Stabicad 11 functionality prepares MEP engineers for meeting the demands that are inherent to these developments.

## Stabicad Autorouting

Fast specific modeling

With Stabicad Autorouting, specific and undefined systems such as ducts, pipes and cable ducts become dynamic. This means that when you modify the dimensions (such as diameter) of a system, the specific properties (article number, etc.) also change automatically. This enables you to draw and change quickly and easily, always with guaranteed up-to-date data from the cloud.

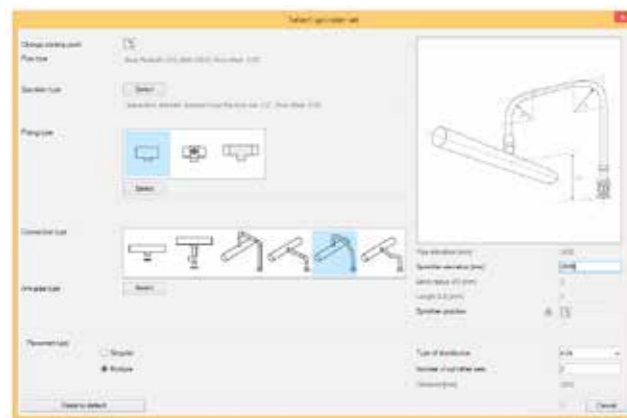




## Panel schedule manager and scheme

Manage all high and low voltage installations

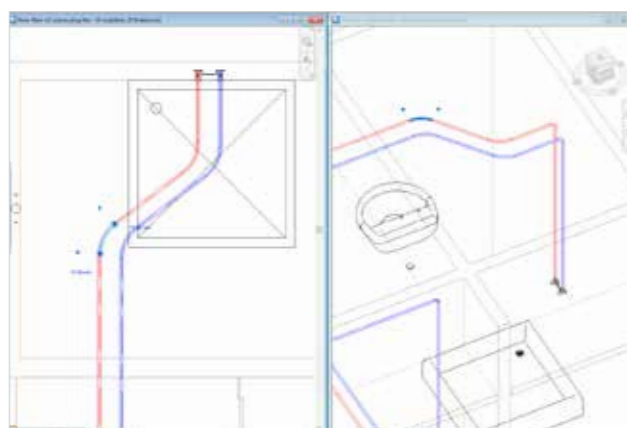
An overview of all panels, single and multi-phase groups, lighting and power groups and power distribution. The diagram will be automatically drawn and/or updated based on the installation overview. The symbols in the panel schedule have been standardized and the layout is flexible.



## Sprinkler systems

Modeling and calculation in one

Model sprinkler installations easily from the alarm valve to the sprinkler head. From the multiple placement of sprinklers with any desired connection (including sprinkler tees, flexible pipes, standard fitting work, and telescopic pipes) to the calculation of drawn systems. Content of sprinkler manufacturers is fully integrated into the software.



## Flexible pipes

As easy as drawing rigid systems

Flexibles will no longer slow down your projects. With Stabicad Flexible Pipes for water and central heating, the path of the system can be changed without affecting the other parts. Tees and reducers are automatically placed and the bend radius can be overridden to smoothen the path of the system. The total pipe length can be calculated and reported with a schedule.



Create your free account now at [mepcontent.com](http://mepcontent.com)

**MEPcontent**  
The BIM library for MEP engineers

## MEPcontent

The largest BIM library for MEP engineers

To achieve technically accurate models and drawings, it is crucial to have up-to-date 3D content. Content that complies with the European MEPcontent Standard (EMCS), to ensure that a Revit project contains uniform and accurate information. MEPcontent offers you an online platform that meets this need. This applies to both electrical and mechanical engineering for use in Revit and AutoCAD, and, of course, is in line with the manufacturers' and suppliers' product lines. Your free MEPcontent account gives you direct access to more than 500,000 articles. Stabicad users who subscribe to MEPcontent, also benefit from unlimited access to all manufacturer-specific parametric data for complete product lines.

Read more success stories at [stabiplan.com/bimlive](http://stabiplan.com/bimlive)

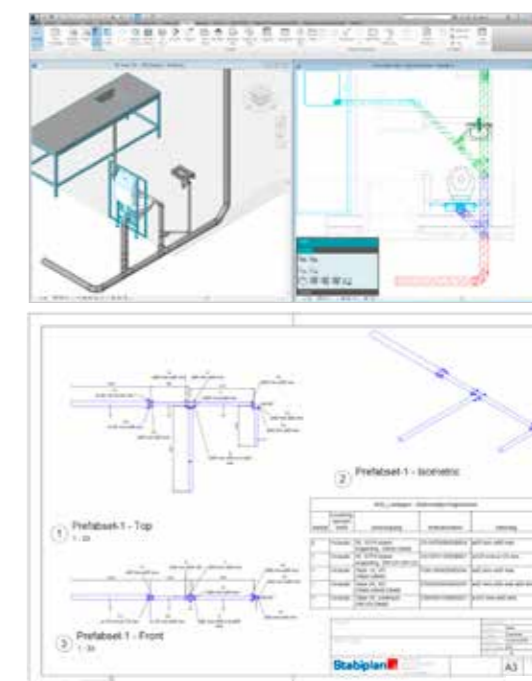
## Optimum workflow thanks to prefab in BIM



Serial residential construction is the core business of Bremán Zuid.

They have been using Stabicad for more than 20 years now for designing sewers, mechanical ventilation, gas and central heating. To achieve an optimum workflow, Stabicad for Revit is also used for prefab and calculation.

Alwin Vos is 3D BIM engineer/work planner at Bremán Zuid: "You really save time in BIM as soon as you extract the prefab drawings from your Revit model. This way, they are generated directly from the installation and it is no longer necessary for us to work with the Exchange function. As we frequently work with prototype houses and have a lot of basic prefab drawings/order lists from previous projects, the transition from AutoCAD to Revit is somewhat slower than we would like. The prefab functionality in Revit is, in any case, certainly a step forward. We order products directly from within the model. Installations and serial residential construction are relatively transparent in terms of calculations. Nevertheless, it is great to be able to show the client that the model is accurate. We use the Stabicad integrated air duct calculations for this purpose."

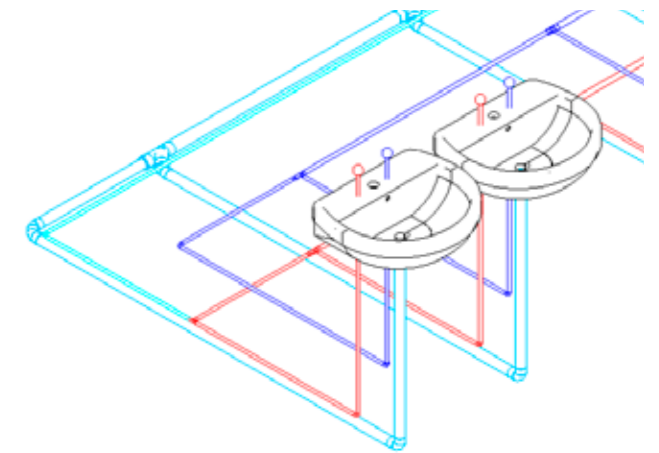




## Calculate all piping systems

with the Stabicad calculation modules

Stabicad offers calculation functionality for Ventilation, Sprinkler, Heating & Cooling, Tap water, Gas and Sewerage. All pipe systems in a building can therefore be integrated, calculated and monitored in the BIM model. This is always based on local and/or European standards and norms. In addition to the integrated calculations, there are also links to BINK Software, VABI Elements and Dialux, to name but a few.



## Dimensioning, controlling and reporting

in each phase of the project

The required diameters are determined during the concept phase based on calculation parameters such as the flow rate or the maximum permissible speed. Pressure losses are calculated with the controlling calculation. The results of the calculation are presented in a clearly arranged report. The detailed reports can be exported to various file formats.

**Air calculation output**

Project name: 12345  
 Calculation type: Ventilation flow calculation  
 Project location: 12345  
 Project start: 2023-01-01  
 Project end: 2023-12-31

Table for air handling unit

Section no.	Description	V (m³/s)	Q (kW)	L (m)	Dimension (mm)	n (1/s)	ΔP duct (Pa/m)	Σ ΔP (Pa)	Σ ΔP (Pa)	Σ ΔP (Pa)	Control pressure (Pa)
1	Supply 12345 (constant temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
2	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
3	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
4	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
5	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
6	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
7	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
8	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
9	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
10	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
11	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
12	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
13	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
14	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
15	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
16	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
17	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
18	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
19	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00
20	Supply 12345 (variable temperature)	0.000000	0.000000	0.000000	1000	0.00	0.00	0.00	0.00	0.00	0.00

## Integrated calculations

Calculate and draw in the same model to prevent errors and duplication

In times of increasingly strict demands and control on EPCs and sustainability, the complete calculation of buildings is a key resource for realizing healthy renovations and new building developments. Technical, physical and financial feasibility can always be checked further before the construction actually begins. Hence the importance of standardized pipe calculations. The strength of integrated calculations in BIM is the fast and reliable calculation of installations for dimensioning, monitoring and comparing alternatives. In one model, in one program. This is significantly time-saving and prevents errors. The detailed reports can be submitted to an inspection authority. This way, you can always show which calculations the design is based on.

## Interactive calculation overview

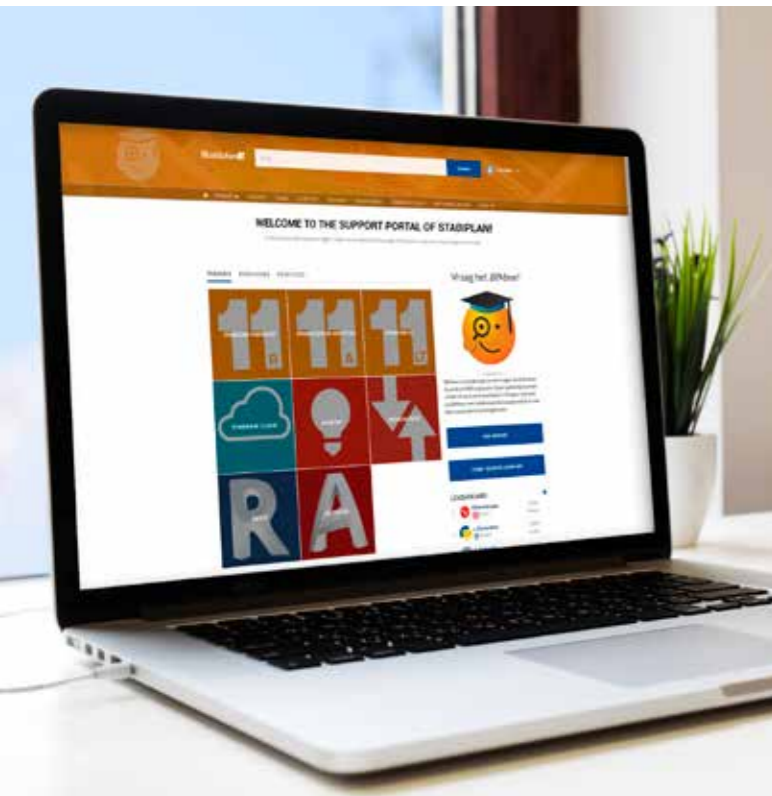
Communication between calculation data and model

Thanks to the calculation overview, you will see the calculation results in your Revit model immediately. The dimensions can be changed in this overview, and you can calculate systems without the new values being saved directly in the model. This enables you to check the results easily and quickly calculate alternative systems by continuing to model with the preferred situation.

Calculation Overview

Section no.	Dimension (mm)	V (m³/s)	Q (kW)	L (m)	Dimension (mm)	n (1/s)	ΔP duct (Pa/m)	Σ ΔP (Pa)	Σ ΔP (Pa)	Σ ΔP (Pa)	Control pressure (Pa)
1	1000 x 1000	0.0	0.0	0.0	1000	0.00	0.00	0.00	0.00	0.00	0.00
2	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
3	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
4	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
5	Parallel 125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
6	Air terminal 125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
7	1000 x 1000	0.0	0.0	0.0	1000	0.00	0.00	0.00	0.00	0.00	0.00
8	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
9	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
10	125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
11	Parallel 125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
12	Air terminal 125	0.0	0.0	0.0	125	0.00	0.00	0.00	0.00	0.00	0.00
13	1000 x 1000	0.0	0.0	0.0	1000	0.00	0.00	0.00	0.00	0.00	0.00

Find out all about the Stabicad calculation functionality at [stabiplan.com/calculation](http://stabiplan.com/calculation)



## BIMme

The community for MEP engineers

BIMme is the platform where thousands of MEP engineers learn and share their experiences working with BIM, Stabicad, AutoCAD, Revit and MEPcontent. You can ask questions, vote and discuss new software features and meet other engineers. You will also find the Stabtips, short practical films, here. In short, BIMme is the number 1 website for any MEP engineer!

[www.bimme.com](http://www.bimme.com)

## Apps

Lightning fast MEP design

Next to our Stabicad software, we develop Revit apps for the installation industry. These apps are often free to download and usable next to Stabicad. Our apps are useful tools within Revit (an 'add-in') to perform repetitive MEP specific tasks faster. They are linked to quality manufacturer-specific content. Download the apps from our app store and increase your productivity with these quick, simple and robust apps for Revit!

[store.mepcontent.com](http://store.mepcontent.com)



## They are BIM LIVE!

A selection from our 10,000 users



## Training center

Learn when and where it suits you

We will be pleased to teach you all about using Stabicad and Autodesk products efficiently and effectively, and about BIM and the installation sector. You can follow one of our training courses; on site or in one of our own Autodesk Authorized Training Centers, always by qualified teachers with experience in installation technology. Stabicad is also used in secondary and higher level education to train future engineers in using our software.

[stabiplan.com/training](http://stabiplan.com/training)





# Stabicad

# BIM software for the MEP engineer

## Basic functionality

### General

- ✓ Extensive reporting possibilities, such as bills of materials, symbol lists and drawing lists
- ✓ Expanding the Palette Center with custom symbols and functions
- ✓ User management
- ✓ Adding custom 3D symbols
- ✓ Importing up-to-date product lines from MEPcontent.com
- ✓ Modeling in 3D
- ✓ Converting 1L/2D representations to 3D models
- ✓ Manage Sheets
- ✓ Clash detection of 3D Stabicad systems
- ✓ Drawing and generating rooms
- ✓ Context sensitive ribbon
- ✓ Stabicad Grips for quick drawing and editing, also in 3D
- ✓ Inserting 3D files using online content browser
- ✓ Project/drawing setup
- ✓ Data exchange with IFC, Excel and SXF files

### Building layout

- ✓ Drawing and hatching walls
- ✓ Inserting building symbols

### Space Management

- ✓ Configuration of extensive room properties
- ✓ Generating layout plan and legend
- ✓ FMIS exchange file
- ✓ Extensive room reporting
- ✓ Working with custom room label

### StabiBASE

- ✓ Central project management
- ✓ Flexible project settings
- ✓ Adjustable project structure
- ✓ Importing tree structure
- ✓ Profiles and project folders
- ✓ Advanced search functions
- ✓ Registration of modification data
- ✓ Exchanging projects and drawings
- ✓ Exporting drawing information for bills of materials
- ✓ Process automation using scripts
- ✓ Advanced title block management
- ✓ Filter options
- ✓ Revit worksharing support
- ✓ Setting calculation preferences

## Mechanical



### Heating & Cooling, Sanitary & Sewerage, Ventilation, Plant Rooms

- ✓ Drawing pipes and ducts
- ✓ Specific drawing with Stabicad Autorouting
- ✓ Advanced nodesolver
- ✓ Automatic annotation
- ✓ Drawing and generating installations in 3D
- ✓ Generating projections, sections, and helper spaces
- ✓ Management of custom dimensions of pipes and elements
- ✓ Creating custom heating and cooling pipe types
- ✓ Bendable and flexible pipes
- ✓ Placing floor heating
- ✓ Inserting sanitary symbols, such as toilets and baths
- ✓ Placing ventilation equipment, such as grilles and valves
- ✓ Inserting elements for plant rooms, such as boilers, air handling units and distributors
- ✓ Inserting, managing and connecting radiators automatically
- ✓ Check function

### Prefab

- ✓ Creating prefab sets
- ✓ Coding
- ✓ Generating sheets
- ✓ Extensive reports such as cut lists and bills of materials
- ✓ Prefab set based on model lines
- ✓ Bendable and flexible pipes

### Mechanical Diagram

- ✓ Generating sheets with sheet explorer
- ✓ Inserting symbols, such as valves
- ✓ Coding
- ✓ Element code monitor

### Recesses

- ✓ Creating and editing symbolic recesses
- ✓ Generating recesses from selection
- ✓ Generating recesses based on interference check
- ✓ Combining recesses
- ✓ Generating and importing recesses requests
- ✓ Recesses monitor

## Sprinkler

### Design & calculation

- ✓ Drawing and calculating sprinkler pipes
- ✓ Placing sprinkler connection sets
- ✓ Modifying placed sprinkler connection sets
- ✓ Inserting elements, such as sprinkler heads and valves
- ✓ Control calculation
- ✓ Check function
- ✓ Reporting of calculation results

- ✓ Flexible pipes
- ✓ Telescopic pipes
- ✓ Sloped pipes

### Calculation norms

- ✓ EN 12845 (2002)
- ✓ NFPA 13 (2013)
- ✓ VdS CEA 2001 (2014)

# Stabicad

## Electrical



### General

- ✓ Drawing low and high-voltage current installations
- ✓ Allocating symbols to circuits
- ✓ Placing recessed and surface-mounted elements
- ✓ Creating composites
- ✓ Generating installation diagrams
- ✓ Generating security and fire protection diagrams
- ✓ Drawing cable ducts and wall trays
- ✓ Specific drawing with Stabicad Autorouting
- ✓ Advanced nodesolver
- ✓ Automatic annotation of cable ducts
- ✓ Drawing and generating installations in 3D
- ✓ Generating projections, sections, and helper spaces of cable ducts
- ✓ Managing custom dimensions of cable ducts
- ✓ Coding symbols
- ✓ Generating block schedules
- ✓ Generating circuit explanation
- ✓ Installation Monitor
- ✓ Modifying properties of symbols
- ✓ Copying elements while maintaining circuit data

- ✓ Designing bus system installations
- ✓ Designing pluggable installations
- ✓ DIALux connection
- ✓ Recesses

### Safety

- ✓ Drawing escape routes
- ✓ Inserting symbols
- ✓ Generating overviews and reports

## Stabicad bundle

### Stabicad for Revit + Stabicad for AutoCAD

The Stabicad bundle is a complete package containing both Stabicad for Revit and Stabicad for AutoCAD, including all functionality for the different disciplines. Three types of bundles are available:



Stabicad Electrical bundle



Stabicad Mechanical bundle



Stabicad Electrical & Mechanical bundle

# BIM software for the MEP engineer

## Apps

[store.mepcontent.com](http://store.mepcontent.com)

Our apps are useful tools within Revit (an 'add-in') for placing product lines, configuring switch ranges or performing other MEP specific tasks. The tools are connected to manufacturer specific content to perform repetitive tasks faster.

### MEPcontent Browser

- ✓ Placing manufacturer specific content directly in the project without leaving Revit or AutoCAD.

### Stabicad Export & Import Excel

- ✓ Exporting an entire model, view or selection to Excel, modifying it and importing it from Excel.

### MEPcontent ABB Switch Range Configurator

- ✓ Configuring, placing and managing ABB Busch-Jaeger switch ranges including relevant data.

## Calculation

### Sewerage, Ventilation, Tap Water, Gas, Sprinkler

- ✓ Inserting consumers
- ✓ Drawing and calculating pipes
- ✓ Dimensioning and verification calculation
- ✓ Interactive calculation overview
- ✓ Reporting calculation results
- ✓ Calculating alternatives
- ✓ Calculating sewerage flow
- ✓ Visualizing sewerage pipe types
- ✓ Calculating velocity, pressure loss, sound, system pressure, control pressure, and air leakage in a ventilation system
- ✓ Automatic annotation of tap water system

### Calculation norms

Sewerage	EN 12056 (2000), DTU 60.11 (2013), DIN EN 12056 (2000) / DIN 1986-100 (2016), NTR 3216 (2003)
Ventilation	ISSO 17 (2010), ISSO 24 (1990)
Tap Water	NEN 1006 (2011) / ISSO 55 (2013), NBN 806 (2000), DIN 1988-300 (2012)
Gas	NEN 1078 (1999) / NEN 2078 (2001) Formula method, NBN D 51-003 (2004)
Sprinkler	EN 12845 (2002), NFPA 13 (2013), VdS CEA 2001 (2014)

'The fact that we can work in BIM with Stabicad for Revit is a deciding factor in winning good projects. In this specific sector, it's get on board or pull out.'

René Kamer, Head of Implementation



## Interested?

Please do not hesitate to contact us.

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FRANCE

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