

Stabicad 23.01 release

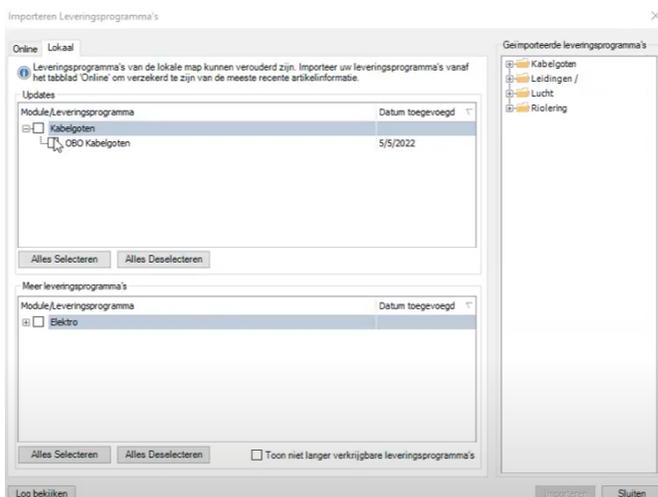
Release Notes United Kingdom (UK)

Highlights of the 23.01 release

- The functionality “Update radiators temperature with distributor temperature” has been renewed!
- Stabicad now supports schematic symbols from Cibse standard in Mechanical Diagram, including Air Terminals, AHU Components, Ductline Components, Heating and Cooling, and Pipework Accessories symbols!
- Revit shared parameters have been added that have a bidirectional link with the mechanical calculation parameters! This allows you to use Revit for inputting the calculation values and constraints as well as scheduling and tagging the calculation input.
- Stabicad now supports Single Phase Distribution Boards.

Stabicad for Revit

- The start-up time of StabiBASE has been improved when you have projects coupled with Trimble Connect.
- When you import product lines or upgrade to a newer version, a warning message will appear and to give you information about the new changes in the product line, if they face up with issues and how to tackle those issues.

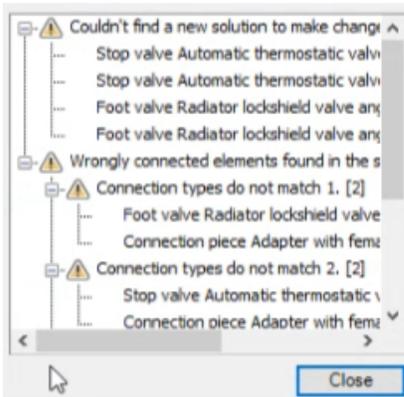


- In StabiBase, Manage → Pipe Types are now renamed to Manage → System Types, as they contain pipe types and electrical components.

Stabicad for Revit | Mechanical improvements

In this release we've focussed on implementing several mechanical improvements, so you can now work even more efficiently. An overview of these improvements:

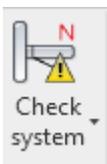
- After completing your heating & cooling calculation, the following warnings now only occur when the result is actually not properly connected.



- The pressure loss of non return valves is now calculated according to the following formula listed in the ISSO standard.

$$\Delta p = 0,1 \cdot \rho \cdot \left(\frac{3,6 \cdot q_v}{k_v} \right)^2$$

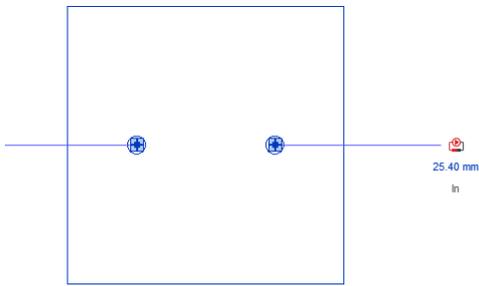
- In the ISSO tap water calculation the flush units are now taken into account as expected for all building types.
- When using pipe type Wavin Wadall 5m in the wastewater calculation, you will now get a correct diameter after calculation.
- Your saddle pieces will now be correctly placed by the nodesolver and correctly connected regardless of the system type.
- When the active standard is set to BS 8558, the equipment type of generic tap water consumers will show the correct values with the default equipment type Wash Basin.
- The functionality "Check system" which checks if your system is properly connected for calculation purposes will no longer return an error message upon usage.



Stabicad for Revit | Mechanical engineering

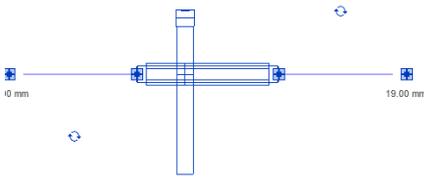
- Revit shared parameters that have a bidirectional link with the mechanical calculation parameters have been added!

This allows you to use Revit for inputting the calculation values and constraints as well as scheduling and tagging the calculation input.



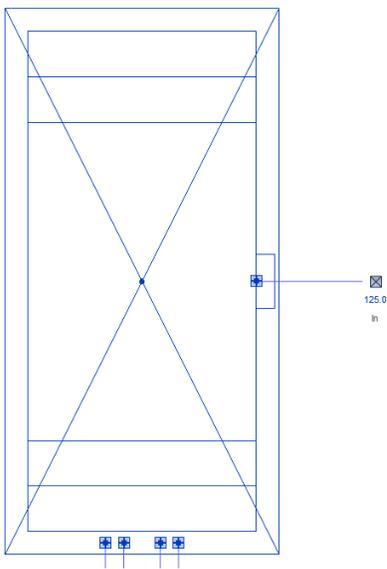
Mechanical	
Glycol Percentage	0.0000%
Hydronic Supply Flow	0.00 L/s
Lock Dimensions	<input checked="" type="checkbox"/>
Pressure Drop	0.000000 Pa
Pressure loss Piping - Input	0.000000 Pa
Return Temperature	65.00 °C
Supply Temperature	75.00 °C
Zeta Piping - Input	0.000000
System Classification	Hydronic Supply,Hydronic Return
System Name	
Code	
Mechanical - Flow	
Critical Path	<input checked="" type="checkbox"/>
Identity Data	
Image	
Comments	
Mark	4

Figure 1 | Example generic calculation boiler



Size	
Size	ø19 mm-ø19 mm
Mechanical	
Flow 1	0.00 L/s
Flow 2	0.00 L/s
Pressure loss Piping - Input	0.000000 Pa
Zeta Piping - Input	0.000000
System Classification	Undefined
System Type	Undefined
System Name	
System Abbreviation	
Loss Method	Use Definition on Type
Loss Method Settings	Edit...
Code	

Figure 2 | Example non return valve



Size	
Size	ø125
Mechanical	
Base Calculation on Flow	<input type="checkbox"/>
Cooling Flow	0.00 L/s
Fire Class	0
Heating Flow	0.00 L/s
Hydronic Resistance	0.000000 Pa
Maximum Air Flow	0.0000 m³/h
Maximum Cooling Power	1000.00 W
Maximum Heating Power	1500.00 W
Minimum Air Flow	0.0000 m³/h
Pressure loss Piping - Input	0.000000 Pa
Pressure loss Ventilation - Input	0.000000 Pa
Suitable for Exhaust Air	<input type="checkbox"/>
Suitable for Supply Air	<input type="checkbox"/>
Zeta Piping - Input	2.500000
Zeta Ventilation - Input	0.000000
System Classification	Supply Air,Hydronic Supply,Hydronic Return
System Type	Undefined
System Name	
System Abbreviation	
Code	
Mechanical - Flow	
Air Flow	100.0000 m³/h
Cooling Flow In	0.00 L/s
Cooling Flow Out	0.00 L/s
Heating Flow In	0.00 L/s
Heating Flow Out	0.00 L/s
Mechanical - Loads	
Heating Power	0.00 W
Cooling Power	0.00 W
Identity Data	
Article Type	
Function Code	
GLN	
GTIN	
Internal Art. No.	
Language	EN-EN

Figure 3 | Example induction diffuser

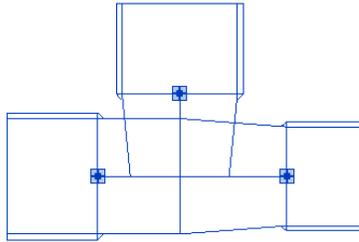


Figure 4 | Example tee

Mechanical	
Pressure loss Piping 1 - Input	0.000000 Pa
Pressure loss Piping 2 - Input	0.000000 Pa
Zeta Piping 1 - Input	0.000000
Zeta Piping 2 - Input	0.000000
System Classification	Undefined
System Type	Undefined
System Name	
System Abbreviation	
Loss Method	Use Definition on Type
Loss Method Settings	Edit...
Code	
Mechanical - Flow	
Critical Path	<input checked="" type="checkbox"/>



Figure 5 | Example generic heating consumer

Mechanical	
Base Calculation on Flow	<input type="checkbox"/>
Cooling Flow	0.00 L/s
Heating Flow	0.00 L/s
Hydronic Flow	0.00 L/s
Lock Dimensions	<input type="checkbox"/>
Pressure Drop	0.000000 Pa
Pressure loss Piping - Input	0.000000 Pa
Zeta Piping - Input	2.500000
System Classification	Hydronic supply, Hydronic Return
System Name	
Code	
Mechanical - Flow	

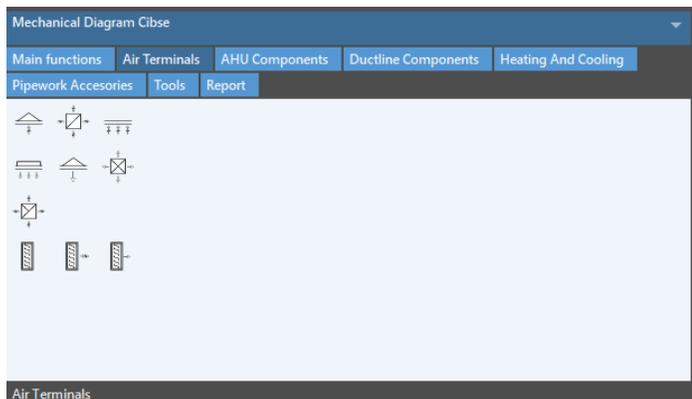
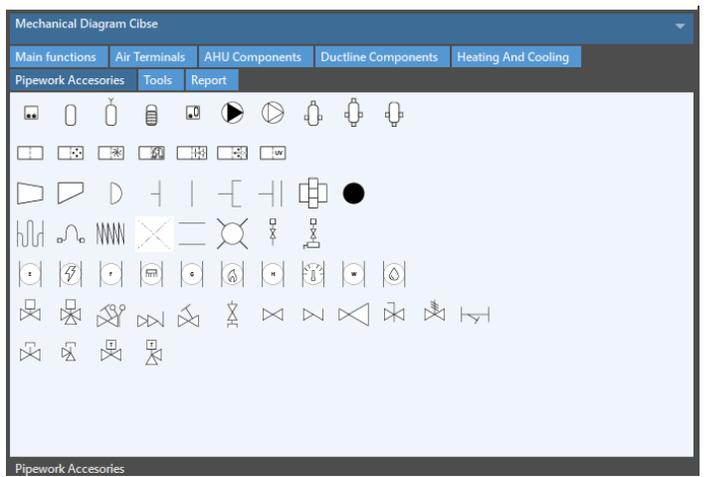
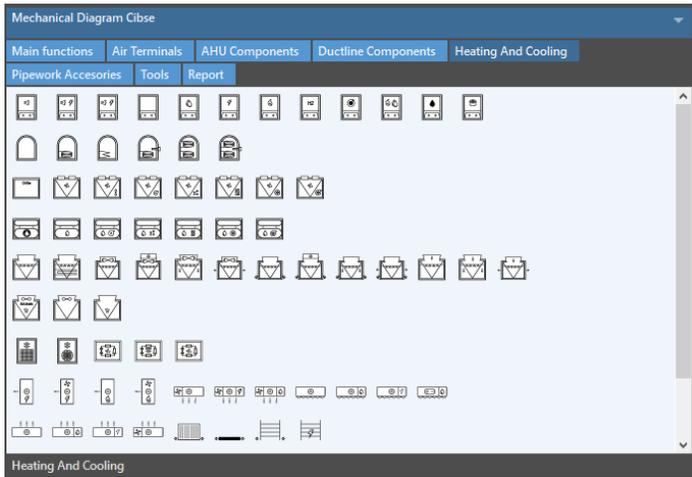
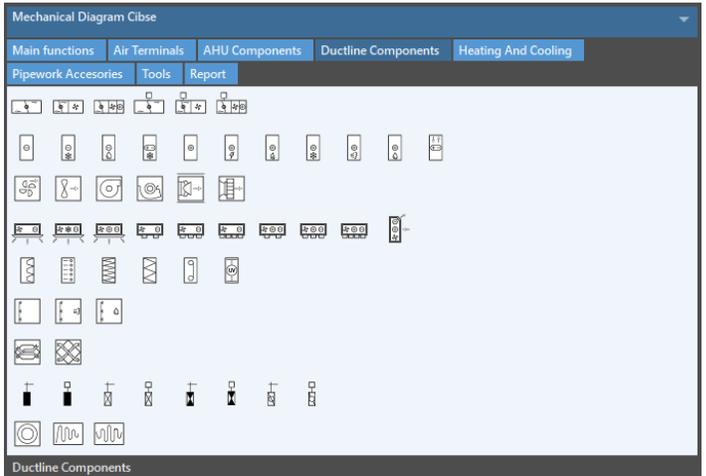
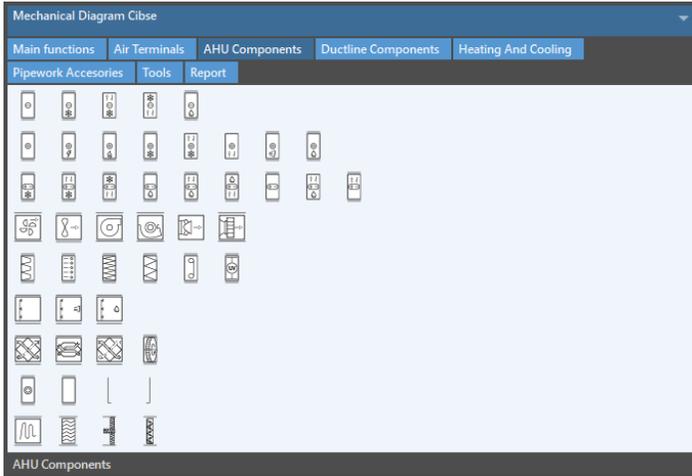
You can still use Stabicad's edit calculation properties screen to provide input into the calculation. This input will be automatically synced to Revit parameters. You can also use the Revit parameters directly to provide input, this input will automatically be synced to Stabicad's edit calculation properties screen. All new parameters are shared which means you can schedule and tag their values.

The Revit parameters are based upon the Revit units. If you make a change to the Revit unit, the value is automatically converted and is listed correctly in Stabicad's edit calculation properties screen as this one has a fixed unit.

All heating and cooling elements, ventilating elements and piping accessories have received these calculation parameters. The sanitary equipment families (including the tappoints) have not been modified yet. The only exceptions are the continuous consumers for the UK standards.

Tip: In combination with the import/export Excel functionality you can quickly populate all your calculation values. For example, you can easily set the zeta values of all your equipment and fittings in one go.

- Stabicaad now supports schematic symbols from the Cibse standard in Mechanical Diagrams, including AHU Components, Ductline Components, Heating and Cooling, Pipework Accessories symbols and Air Terminals.



This new feature allows users to draw schematic diagrams in the standard way following CIBSE guidelines.

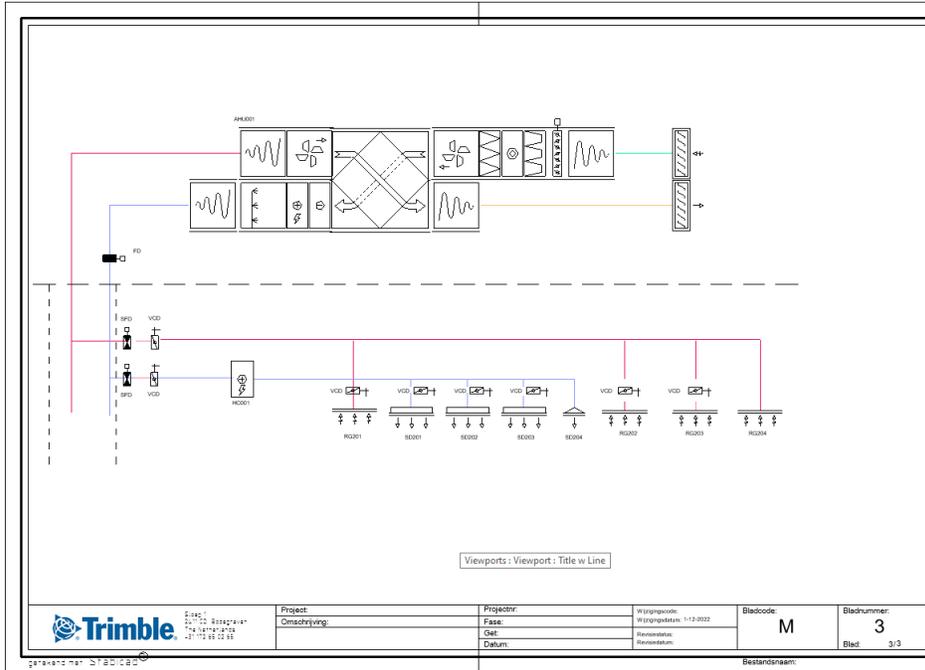


Figure 1 | Stabicad Ventilation schematic design

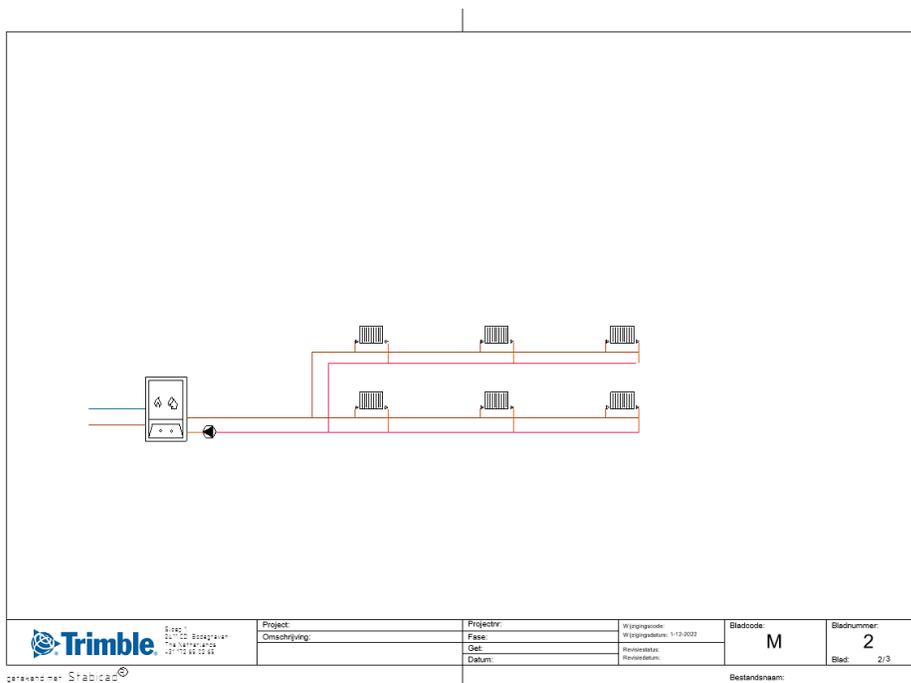
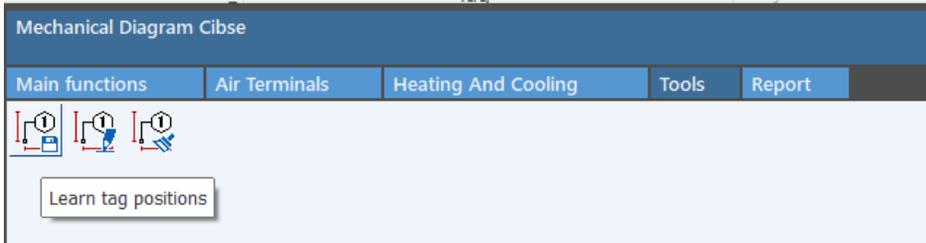


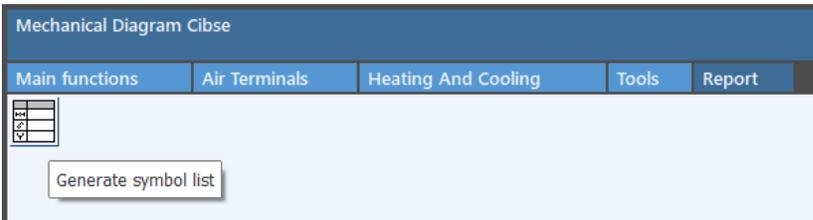
Figure 2 | Stabicad Radiator Heating Circuit

The main functions remain the same, being sheet explorer, create typical, typical manager, draw pipe, draw return pipe, draw control pipe, draw system border, assign element code, and element code monitor.

The Tools tab now provides 3 functions: learn tag positions, apply tag positions, and copy tag positions.



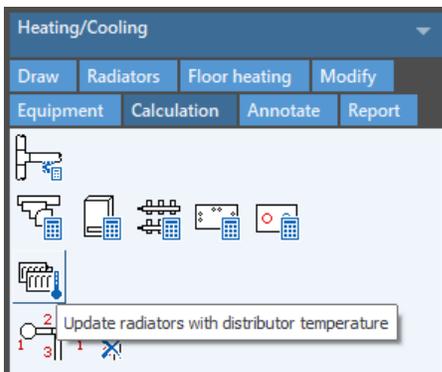
Under the Reports tab, Stabicad has the functionality to allow users to generate symbols lists of schematic drawings.



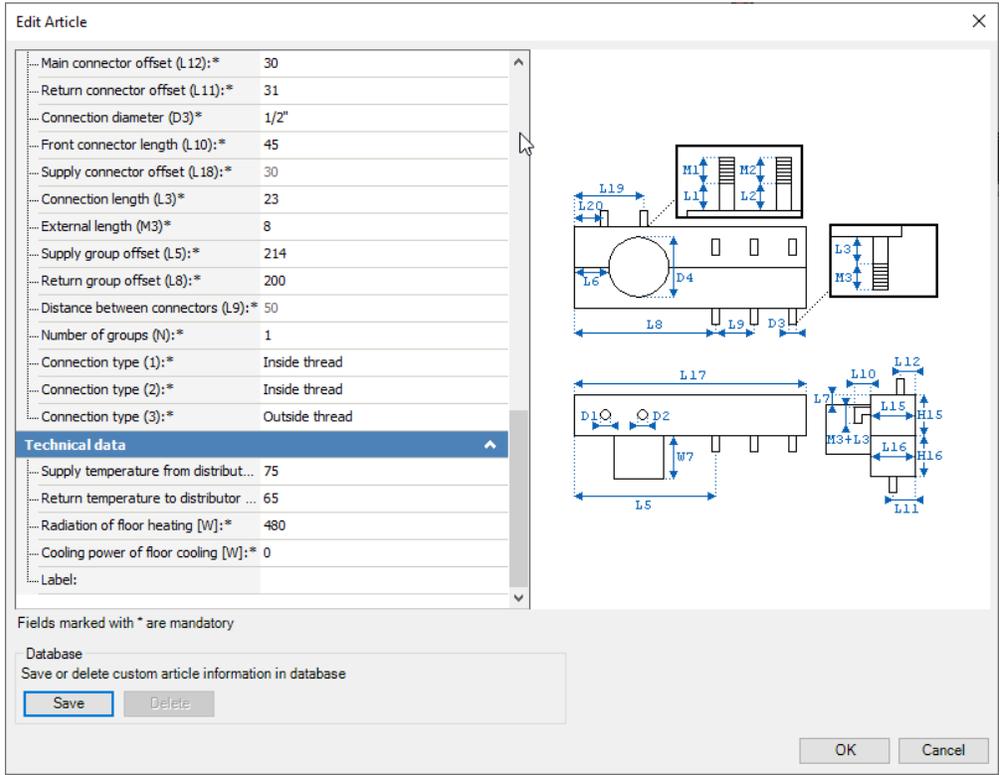
Number	Symbol	Description
1		Meter – Water
6		Valves – Isolating
1		Pressurisation Unit
1		Expansion vessel
1		Pipe Ancillaries – Air Vent
1		Pump
1		Valves – Double Regulating
1		Boiler Water Gas
1		Valves – Non-Return

■ **You can now update your radiator temperature with the distributor temperature!**

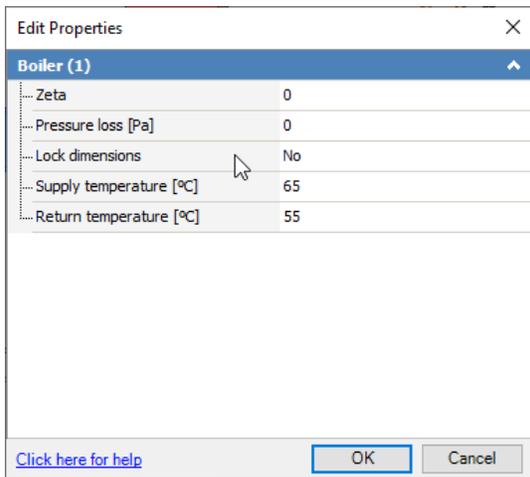
When you design a heating system with radiators you can choose the supply and return temperature of each radiator individually. This has an impact on the heating power which is automatically calculated based upon these temperatures. The functionality *update radiators with distributor temperature* allows you to quickly update the temperatures of all radiators within the same network based upon the temperature of the distributor. With distributor is meant a manifold or a boiler.



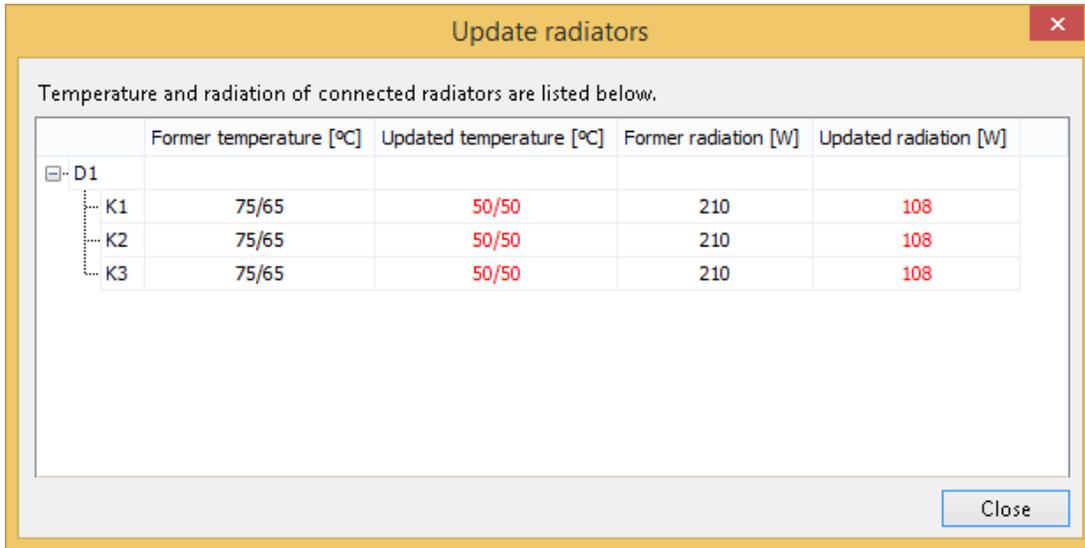
You can set the temperatures of the manifold in the edit article.



For the boiler (and combi boiler), they can be set in the edit calculation properties dialog or directly using the Revit parameters.

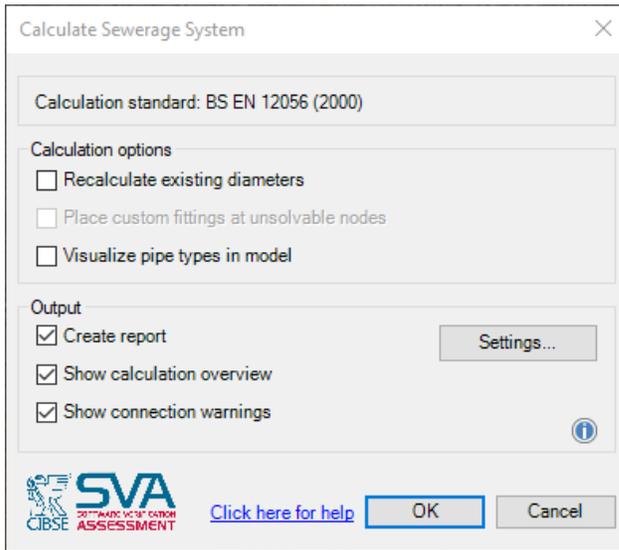


After you run this functionality, the temperatures of the radiators will be updated and the heating power will be calculated according to the new radiation. A dialog will show to indicate the changes.



- The waste water calculation according to BS EN 12056 now carries the CIBSE logo's.

The logo can be seen in the calculation dialog as well as the report:



Sewerage calculation											
Date:	11/8/2022	Stabicad version:	22.12								
Project name:	TEST	Standard:	BS EN 12056 (2000)								
Project description:											
Drawing name:	Sewage Logo.rvt										
System values:											
Total flow:		108 [l/min]									
Results per pipe segment											
Section nr.	Equipment	No.of eq.	Flow per eq. [l/s]	V [l/s]	L [m]	D o/i before calc. [mm]	D i calc. standard [mm]	D o/i after calc. [mm]	ΔH [m]	Lock diameter	Material
Branch pipe											
1 - 2		3		1.8	2.33	110/103.2	79	110/103.2	0	No	PP
2 - 3	Toilet, reservoir 7.5L	1	1.8	1.8	0.44	102/98	75	102/98	0.05	No	Galvanized
2 - 4		2		1.8	1.08	110/103.2	75	110/103.2	0	No	PP
4 - 5	Toilet, reservoir 7.5L	1	1.8	1.8	0.44	102/98	75	102/98	0.05	No	Galvanized
4 - 6		1		0.3	2.01	110/103.2	26	110/103.2	0	No	PP
6 - 7	Wash basin	1	0.3	0.3	0.85	53/50	26	53/50	0.08	No	Galvanized

Stabacad for Revit | Electrical engineering

- **Stabacad now supports Single Phase Neutral (SPN) Distribution Boards suitable for 230V Single Phase Installation.**

Users can find them in the Small Power (CIBSE) > Distributors section in the Palette Center. For the convenience of our users, we have provided the following variations of them (as it is with existing 3 Phase Distribution Boards):

- SPN Distribution Board
- SPN Distribution Board (Wall)
- SPN Distribution Board (Floor)

