

Fire Safety and BIM



Solibri helps planning fire safety

Jun 23, 2022 19:00 UTC

Fire Safety and BIM: More benefits of using Solibri

Helsinki, June 23, 2022 - Solibri helps you and your team better plan and check fire safety in construction. Contact us when you need help with using BIM for fire safety!

Solibri helps customers to better plan and check the [fire safety](#) of buildings at the design stage and also for the customers in the UK to integrate it into the company's [Golden thread](#) requirements. By using [Solibri](#), it is possible to find fire safety compliance issues early on so that your team can fix them before they get built or before it becomes expensive and difficult to make changes

to the building design or during construction itself.

When your company takes advantage of Solibri you can:

- Review projects' firestop compliance.
- Check there is sufficient spacing between services within the builder's work openings and avoiding clashes between those services and also check proximity to the edge of the openings.
- Ensure that escape routes meet necessary requirements
- Evaluate the fire compartmentation as part of passive fire protection
- Provide fire rating information for all building components
- Check that sprinklers' coverage meet the requirements
- Ensure better collaboration between designers, architects, structural engineers, and service engineers to ensure transparency and accountability.
- Maintain and handle all the Fire Safety information for the project in one place

Solibri helps you review your [BIM models](#) in the digital design phase and identify fire safety issues so they can be resolved much earlier in the design process. With Solibri it is possible to analyse openings, spacing, fabrics and identify potential issues, for example services clashing with builders works in connection (BWIC) openings and non-compliant firestops. Using Solibri also helps to collaborate with responsible teams to fix these issues.

Golden Thread regulating fire safety in construction in the UK

In the UK there are upcoming changes in legislation to make the collection of 'golden thread' building performance information mandatory. [Golden Thread](#) will come into effect as early as spring 2023, according to the UK government's timelines for the Building Safety Bill. The Golden Thread

requirement commits companies and people that are responsible for building safety to take notice of fire safety and other issues so we know what was designed and who by, what the materials are, who installed them, who maintained them and when etc.

Those involved in planning and building fire safe buildings should be concerned about the process from early engagement with manufacturers at the initial design stages through to installation and inspection of penetration seals. In every detail when it comes to the process for identifying all the service types passing through the compartment floor or wall including any insulation products or establishing the space required to install and firestop the services, Solibri can help to solve these issues.

Golden Rules - The guide to good fire safety practice in construction

[There are nine Golden Rules](#) to ensure that using a co-ordinated and collaborative approach will lead to compliant design and installation when it comes to fire safety in construction. These rules work as a guide for people involved in the process and can be found in a specific publication called [The Firestopping of Service Penetrations guide from 2020](#).

Solibri's rule templates to address Golden Rule

There are four rules in Solibri helping to solve the requirements. The fire stopping identity rule, the fire stopping distance rule, the fire seal dimension rule and the fire seal positions in walls and floors.

Fire Stopping identity rule

- Fire Stopping Planning
- Identification of all services penetrating compartmentation walls and floors – including where voids are not present
- Fire stopping planning identification services that have been allocated a BWIC /Fire Seal component

Fire Stopping distance rule

- Optionally check service distance with Fire Seal -set to off
- Generic distance checks between services for planning purposes to detect proximity issues
- Optionally check service distance with Fire Seal set to on
- Check fire seal proximity to other Fire Seals /BWIC's
- Checking service distance to Fire Seal /BWIC edges
- Check services are completely covered by Fire Seal/BWIC
- Check service distances in Fire Seal /BWIC

Fire Seal dimension Rule

- Check min/max sizes of Fire Seals according to manufacturer's specifications defined in a spreadsheet

Fire Seal Positions in Walls and Floors

- Check for Fire Seal /BWIC positions within compartment walls and floors, drop head conditions etc.
- Check Fire Seals fit BWIC 100 % with edges fully touching

Solibri - the key to fast and reliable digital quality assurance and coordination

Solibri is the most comprehensive tool in the Construction industry software market to improve the quality of digital design and BIM models. With Solibri you can use the powerful rule-based checking algorithm to check the quality of a BIM model any time you want during the design process from individual disciplines to federated models. You can detect potential issues thoroughly and early on. This will make your design process more efficient and improve the quality of BIM models.

How can Solibri help you to comply with fire safety requirements?

Using Solibri, managers and specialists involved in fire safety can thoroughly check that fire protection related requirements are met already during the design process.

Design and build faster, better and more profitably using Solibri.

About the Nemetschek Group

The Nemetschek Group is a pioneer for digital transformation in the AEC/O and the media & entertainment industries. With its intelligent software solutions, it covers the entire lifecycle of building and infrastructure projects, guides its customers into the future of digitalization and enables them to shape the world. As one of the leading corporate groups worldwide in this sector, the Nemetschek Group increases quality in the building process and improves the digital workflow for all those involved. Customers can design, build, and manage buildings more efficiently, sustainably and resource-saving. The focus is on the use of open standards (OPEN BIM). The portfolio

also includes digital solutions for visualization, 3D modeling, and animation. The innovative solutions of the brands ALLPLAN, Bluebeam, Crem Solutions, dRofus, FRILO, Graphisoft, Maxon, Nevaris, RISA, SCIA, Solibri, Spacewell and Vectorworks in the four customer-oriented segments are used by approximately 6.5 million users worldwide. Founded by Prof. Georg Nemetschek in 1963, the Nemetschek Group today employs around 3,400 experts all over the world.

Publicly listed since 1999 and quoted on the MDAX and TecDAX, the company achieved revenue amounting to EUR 681.5 million and an EBITDA of EUR 222.0 million in 2021.

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