

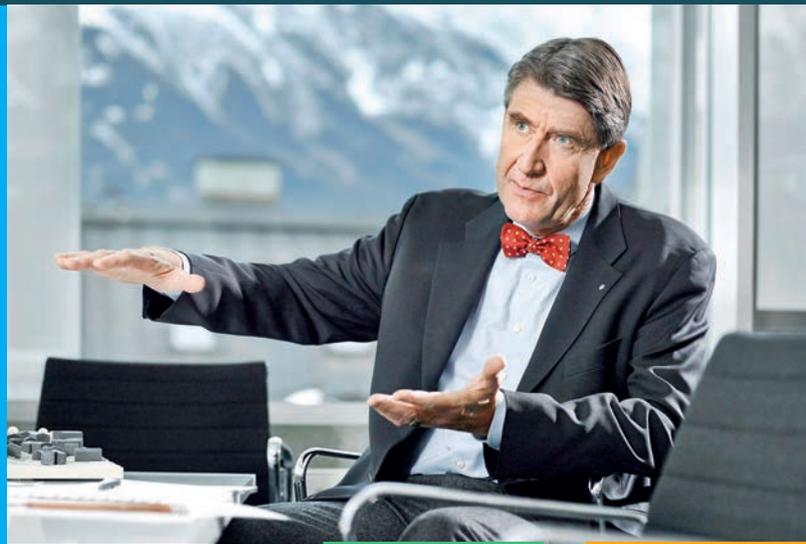
BIM: THE BUILDING BLOCKS OF THE FUTURE

The future of the construction industry is already online, that is why Knauf Insulation is contributing to a new digital landscape reimagined by Building Information Modelling.

ACCORDING TO THE EXPERTS

"ATP has worked in interdisciplinary design teams for decades. Since 2008 BIM has inspired and improved our integrated planning processes even further. It facilitates the optimisation of our future building through digital simulation in the very early stage. And, that allows us to predict the lifecycle performance of our buildings even more precisely. By means of new and helpful BIM standardisation approaches, we are able to improve data transfers from planning and tendering towards construction and maintenance. To design lifecycle-optimised buildings with healthy, comfortable working and living conditions, ATP uses BIM product data information from manufacturers like Knauf Insulation."

Prof. Christoph M. Achammer,
CEO ATP architects engineers



WHAT IS BIM?

Building Information Modelling (BIM) is a new exciting process that brings transparency, collaboration and efficiency to construction by combining 3D design, visualisation and data management. This data is important because it can be used to model a building's functionality as it is built, carry out energy simulations, access its impact on the environment and offer insight into areas such as thermal or acoustic performance.

WHO USES BIM?

Specifiers, engineers, architects and construction companies all use BIM to generate models that allow clients to create an overview of a building and make changes before work begins. Tackling issues at the design stage also helps avoid costly mistakes during construction. In the future BIM will allow everyone in a project team to work on all stages of a building's development to ensure it is kept on course. BIM information can also be used after a building has been completed to assess areas such as maintenance.

WHY IS KNAUF INSULATION PIONEERING BIM SOLUTIONS?

We believe BIM is the start of a digital revolution that will transform the construction industry and soon allow building data — such as R or U-values — to be managed and shared at the touch of a smartphone. Easy access to shared data is becoming increasingly important because building construction is now more complex, Green Building Rating Systems are demanding more digital information and real performance needs to be reliably audited.

HOW IS KNAUF INSULATION HELPING SPECIFIERS TACKLE BIM CHALLENGES?

We have carried out BIM training across our company and created an expert team to help specifiers with any BIM requests. We also host feedback sessions with BIM users around the world to ensure our support meets any challenges.

HOW IS KNAUF INSULATION VISUALISING A BIM FUTURE?

Innovative solutions such as our Green Roof System Urbanscape, Mineral Plus and SUPAFIL Blowing Wool are now available in the most common BIM formats on our country-specific websites. We have also published product and system BIM libraries from North America to Australia and are constantly reviewing our content to ensure it is useful and relevant. Sustainability also being important, we include environmental data in our BIM files.

HOW WILL BIM IMPACT GREEN BUILDING RATINGS SYSTEMS?

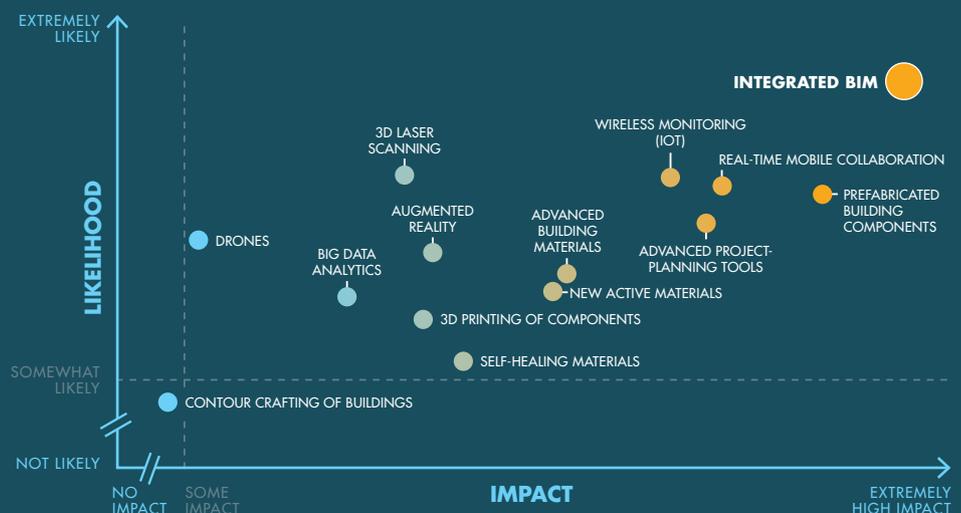
BIM could become influential in GBRSS as it could be used to assess the entire sustainable performance of a building. It's not part of any GBRSS criteria yet, but DGNB is working on how the "interlinking of BIM solutions and sustainability certification for buildings can work". Perhaps in a few years' time the data collected from Lifecycle Assessments and Environmental Product Declarations could be fed into BIM formats. How appealing would it be to know how to achieve your LEED or BREEAM rating simply by checking your phone?

HOW POPULAR IS BIM AMONG SPECIFIERS?

An ArchVision survey found that in 2015 a total of 56% of Dutch architects used BIM (up from 52% in 2013); 35% of UK architects used the system (up from 34% in 2013); 15% of German architects used the modelling system (up from 13%); Spanish BIM users made up 20% of architects (up from 14%) and French users made up 20% compared to 7%.

The most common reason for the growth in BIM popularity given by surveyed architects was down to the fact that clients demanded it.

IMPACT-LIKELIHOOD MATRIX OF NEW TECHNOLOGIES



BIM technology is highly likely to have the biggest impact on the construction industry according to the Boston Consulting Group study 'Shaping the Future of Construction' presented to the World Economic Forum in 2016.