



Is BIM useful for architects and engineers as well?

Yes, it is. BIM does not only help them to offer better services, but also to present them to building owners. The detailed models allow a more specified calculation of costs and more precise scheduling. The effects of changes and variants on building and operational costs can already be judged more reliably at an early point of time. By means of a proven BIM expertise, especially smaller offices clearly increase their chances to be involved in major projects.

Is BIM also suitable for structural alteration works?

Yes, it is. For structural alteration works at first a model of the existing building is made that is subsequently interfered with a BIM model. Thus, the actual state of an existing building can be shown exactly. The total process of reconstruction can alternatively be presented in the model. The digital building documentation serves as safe base for designing, offer calculation, production scheduling, order documentation and invoicing.

Which advantages does BIM offer?

BIM allows a more accurate forecast of services and scheduling than before to all persons involved in designing, building and operating. Many works that so far have been done manually, such as the establishment of 2D plans or determination of quantities, can now be deduced from the model automatically, promising the permanent availability of a current design status for all persons involved. The construction progress can already be simulated at an early point of time. By this, the number of change processes is reduced and a higher degree of prefabrication is possible. By means of BIM, the collision test is easier to do and is less fault-prone. Thus, BIM also gives safety of design and reduces costs. After completion of the building, the BIM database serves as base for a safe and efficient operation of the building.

In which phases of design, construction and use will it make sense to use BIM?

A big advantage of BIM is to combine all important information over the total life cycle of a building. From the preliminary planning to demolition, well-managed BIM databases provide reliable information that is quickly available about the physical and functional properties of a building.

Does BIM lead to an increase of planning costs?

Experts assume that the introduction of BIM brings about a shift in costs in direction of the early service phases, but no increase of planning costs. A professional handling with BIM in contrast ensures to reduce considerably planning errors and change processes, thus in the end having a cost-cutting effect.

What is Open BIM?

Open BIM stands for open interfaces in case of data exchange between various software. This ensures increased mutual processes in designing, realization and operation. Open BIM represents the software neutral basic requirement for an effective processing of projects without data losses and media breaks, and is considered as unrivaled future method in the building sector.

How do the legal conditions look like?

In January 2014, the European Parliament already passed a guideline saying that all member states of the European Union are to promote the use of BIM for the realization of publically financed building and infrastructure projects. In the Netherlands, Great Britain, Denmark, Finland and Norway the use of BIM is yet compulsory today. In Germany, the Federal Ministry of Transport and Infrastructure has presented a plan by stages within the scope of the digital agenda, compulsorily providing the use of BIM for major projects as of 2020.

Will BIM become accepted in Germany?

BIM has already been widely used in many countries. It is regarded as standard in Scandinavia, the Netherlands and the USA. Due to BIM's proven efficiency experts forecast that it will also become accepted throughout Germany within short time. As of 2020, BIM is to be used for all new infrastructure projects of the Federal Ministry of Transport and Infrastructure to be planned according to the proficiency level 1.

Why should you make yourself familiar with BIM already now?

In the German competition, definitely the capability to handle BIM is currently a clear advantage in competition. The method significantly increasing the safety of planning, scheduling and costs besides offers individual surpluses to any company involved in the building value chain and its projects. Furthermore, it is just a question of a few years until BIM will also count among the basic knowledge in this country.

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PRESS INFORMATION:

AQUATHERM SUPPORTS ARCHITECTS AND DESIGNERS IN 3D MODELING WITH BIM FILES

Product data are available as Revit families

Attendorn, 17th. July 2017: Building Information Modeling (BIM) belongs to the future – experts of the construction and building technology industry are sure of that. The software-aided method for designing, executing and managing buildings and other civil works is based on virtual models and includes extensive databases, providing a central administration of all information that is relevant to projects.

aquatherm, worldwide leading manufacturer of polypropylene pipe systems for plant engineering and building services, provides free BIM data sets to architects and specialist planners which can be downloaded under www.aquatherm.de/BIM. The data are available as Revit families for the product lines aquatherm green pipe, aquatherm blue pipe and aquatherm lilac pipe. In addition, the two CAD data formats dwg and stp are offered for 3D modeling. On request, the company also provides iam and ipt data. The data sets for the aquatherm red pipe, aquatherm ti and aquatherm black system product families will follow until the end of the year. aquatherm will inform, as soon as they are available.

Beside graphical 3D models, the aquatherm Revit families contain all necessary information to make BIM-capable designs: from article numbers, flow rates and analyses, volumes, dry weight and water weight to information for the static calculation of the building.

„It is still a long way to the perfect BIM world. Above all in Germany, where the issue is rather raised with hesitation. There is still a lot of awareness and training work to do in order to reduce fears and refusal,“ explains Dirk Rosenberg, managing director at aquatherm. “For many years we at aquatherm have already been working intensely to provide users with our product data as 3D models. The extension of the data sets for BIM is a logical step that we are consequently following and implementing“, added Rosenberg.

BIM offers advantages for all persons involved

BIM offers versatile advantages for all persons involved in the designing and building process, as well as for operating companies. This includes the simulation of the building progress at an early point of time, which leads to less changes and more accurate forecast of scheduling. Collision tests are easier to do and less fault-prone. The degree of prefabricated products and modules is increasing. BIM allows architects and designers a more specified calculation of costs. They can judge more reliably which effects changes have on building and operating costs.

Whereas the governments of Great Britain, the Netherlands, Denmark, Finland and Norway already ask for the use of BIM in case of publically financed projects, the issue gradually but continuously gains momentum in Germany. On December 15, 2015 the Federal Ministry of Transport and Digital Infrastructure (BMVI) presented a plan by three stages for the introduction of BIM. In the last stage as of end of 2020, BIM should be used regularly in the total traffic infrastructure construction for new projects to be planned. Independent of the BMVI plan, experts expect BIM to become accepted throughout Germany within a few years because of its proven efficiency.