

SKANSKA SAVES TIME AND REDUCES COSTS INTRODUCING DIGITAL METHODOLOGIES IN THE BUILDING PROCESSES WITH BIMEYE DOOR MANAGER



With the scope to optimize the processes around the handling of doors in the project planning, in procurement and production, Skanska, in cooperation with Symetri, have created a digital methodology. This methodology enables them to change the manual processes thereby saving time and reducing the number of mistakes in the building processes. In addition, Skanska takes it a step further by introducing digital self-monitoring on the construction site.

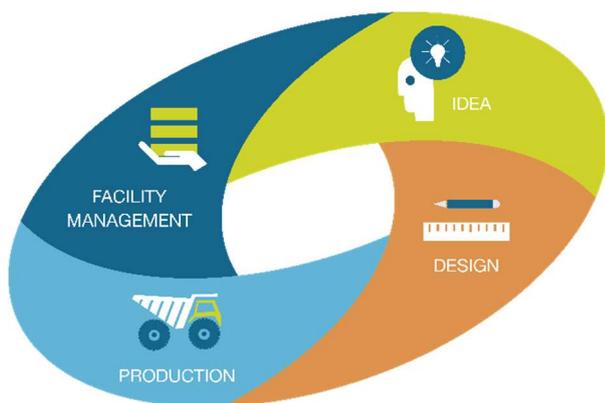
It is the cloud-based database BIMeye solution, which makes it possible to develop templates for working methods and pre-selected products to be used by all the partners in a construction project.

Initially, Skanska will be looking at the processes around doors. A door environment consists of several various products which must be described and categorised by several different partners in the projects. In Skanska's case, Kim Frelin has chosen BIMeye Door Manager which gives him the possibility to handle these requirements. At the same time, the system is

compatible with the most frequently used software in Skanska's projects, Revit and ArchiCAD. This means that they can use the same methodology regardless of the software and no matter what architect is working in the project.

One door card for all information

The demand in the market for collecting all information on doors in one common and explicit door card is not new. With BIMeye Door Manager one has a simple feature for printing these out physically while making sure that all information is in one common place – in the BIMeye database. This allows the involved parties with access to the door delivery to cooperate through all phases from early stages to production as well as handling over the information further on to facility management.



Today, several architects and engineers are demanding the BIMeye solution as they acknowledge that this set up is appropriate when starting up new projects. Hence, the challenges have been few when implementing BIMeye in new projects at Skanska. As contractor, Skanska already gains many benefits from the methodology, and on a long-term basis this will increase as BIMeye allows for an even more efficient handling of the BIM-data.

The Benefits 'at a glance'

With BIMeye you get a common database environment in the cloud, making all information accessible in a simple way. One works, contributes and shares the information in the web-based user-interface in BIMeye.

Reports like door cards and Excel are easily withdrawn from the system. With the built-in integration to all the most common design software tools available in the market, everyone in a project can take part in the valuable information which is normally only accessible through the BIM tools or on drawings or models. Therefore, with BIMeye, one does not need access nor skills in working with the advanced BIM tools to access the data.

According to experienced users in previous projects, they have experienced improved collaboration in their projects. The fact that the system ensures that you're always working on the right information and the latest

revision and version makes BIMeye a very safe environment to work in. All information in BIMeye can be time stamped and tracked which again is a great advantage as all changes throughout the project can be tracked and reported. The door card from BIMeye Door Manager gives a precise overview and description of all details in the door environment which all the parties in a project run in BIMeye can take advantage of; both planners, procurement, production, installation, inspection and maintenance.

Self-monitoring at the building site in the production stage with BIMeye, BIM360 and Bluebeam.

Today, many contractors use BIMeye to gain efficiency in the planning of the door environments. Typically, the output is just a physical door card (pdf) from BIMeye.

However, as the requirements on the work performed on building sites is increasing, Skanska wants to digitalise this process as well. Traditionally, the door card with all details and tasks to be done, would be hung up on the wall in the room in question. Here, with a pen, the worker has checked out the work performed with a tick mark. A manual process that Skanska wants to digitalise and make more efficient and transparent.

Already at the first encounter with BIMeye, Kim Frelin at Skanska acknowledged the opportunities in working with BIMeye and further developing the working processes. As all the data from the doors is already in the BIMeye database, then why settle for a physical pdf when it can be digitalised, accessible and traceable in the system? For the sub-suppliers this will mean that they can digitally sign off the work performed, and Skanska achieves a digital process that is easy to follow up on the ongoing process in the production.



To achieve these features, Symetri, together with Skanska, have developed a series of methods to enable a digital process for the handling of door information.

Templates for configuration of BIMeye Door Manager.

The templates are made explicit with the information needed to handle a door; which reports are needed, what products to select and use in the planning. The

products being the ones Skanska has frame work agreements on. In this way, when the project is done, all information will be present enabling the aftersales to easily access the digital documentation for the customers for their integration in the facility management system of their buildings.



Various possibilities for the suppliers of doors add QR codes

This enables control of the logistics as the products supplied can be scanned. The QR codes are also used in the self-monitoring solutions in the production phase in the building site.

Depending on needs and requirements, it is possible to choose from various systems:

Autodesk BIM360:

When mounting and testing the doors it is possible via BIM360 and QR codes to scan the doors and through integration of the door environment data in BIMeye obtain a complete information and here digitally sign off the work performed.

BIMeye:

Sign off directly in BIMeye or with the help of the app that is now available as a Beta version for cell phones.

Bluebeam PDF:

If one works with PDF in Bluebeam, one can create hyper-links with integration between the document in the Bluebeam PDF and in BIMeye for self-monitoring.

According to Kim Frelin, this gives Skanska the following important benefits:

- Improved control on the fittings in our projects
- The right tool from calculation to production
- Improved documentation for the aftersales market
- Improved possibility to assist our sub-suppliers in becoming more efficient
- A clear borderline already in the early stages of production
- Common self-monitoring for all sub-suppliers working on the doors

- Templates that streamline and enable 100% safety in procurement and calculation”

In a normal project planning of doors, there are many changes when the sub-suppliers can pick and choose from any product or supplier. By using the new concept, this process will be streamlined significantly.

Often the choice of product will be changes after the planning phase. In order to avoid this, the products from the sub-suppliers having a frame-work agreement with Skanska, will be present in the BIMeye database as alternative choices to pick from already in the planning phase. In this way the number of changes will be minimized, as the correct products are already present in BIMeye.

With the new way of working with uploaded product catalogues, Skanska can provide the architects and engineers working in their projects with a catalogue of the right products making the project planning more correct from the start.

One of the projects in which Skanska uses their new door concept



The office building will become the head office of the Goodbye Kansas Entertainment Group.