

Direct Digital transfer between Designer and factory at Skandinaviska Byggelement

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At Skandinaviska Byggelement paper copies of drawings are no longer sent from designer to the factory. Instead it happens digitally which simplifies the transfer and mistakes are minimized.

It is becoming even more important that information is transferred in an effective way. The manufacture of a precast element involves several stages, from planning and design through to the actual manufacture. Skandinaviska Byggelement has made this process more efficient in a number of ways.

The company designs and develops precast concrete elements and have their own factories in five locations in Sweden; each specialized in one or other of several products. Mostly they produce wall and beam units and precast balconies. Their head office is in Katrineholm.

Standardization

The company's effort to optimize the transfer of information is in several stages resulting in new ways of increasing efficiency.

-It is an on-going process involving the whole company, says designer Michael Malki.

One stage has been to develop uniformity in the process. We have standardized the information relating to components and moulds, such as, cast-in goods, electrical points and designer mouldings so that designers can easily use these in the design of the elements. The information is collected in a database which is part of the precast design programme IMPACT.

-We don't have to look for different descriptions of components when the design data is pre-loaded and clearly available. It is only a matter of picking up the one you need from the project database.

It also simplifies the work of external consultants.

-Instead of having to go through various details with them we email them our standards which they can import into IMPACT and they automatically get the right characteristics on the details.

Direct Transfer to the factory without middlemen

The standards also ensure that the transfer to the company's different works. The transfer has been digitized.

-We don't use paper drawings anymore, says Michael.

With the help of the ERP-system ELiPLAN the digital information goes direct from IMPACT to production.

When an element is to be cast it receives a status which indicates that it is cleared for manufacture. When an element has this status all its data is exported to ELiPLAN which generates special machine files.

These files include all its information such as dimensions, window frames, reinforcement and cast-in goods.

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The files which are relatively small, are sent to the factory where they are imported directly into the machines producing the element. It is not necessary to do drawings and give them to the person controlling the machine and they in their turn do not need to input any information. It all goes automatically and mistakes are excluded. This minimizes the lead time because it misses out several stages.

Project managed through information transfer

The element data is collected in a database accessible to the planning, design and manufacture. The information is therefore distributed to important parts of the process where the element is developed and produced.

-The project manager uses the 3D model to plan the work. IMPACT Model Viewer indicates which element is to be cast, when they will be delivered and installed. This information is exported with the help of ELiPLAN and we in the design department import this from IMPACT. Then we know which element we need to work further with.

ELiPLAN works also as a link so that several people can use the database's assembled information. This means shorter lead times.

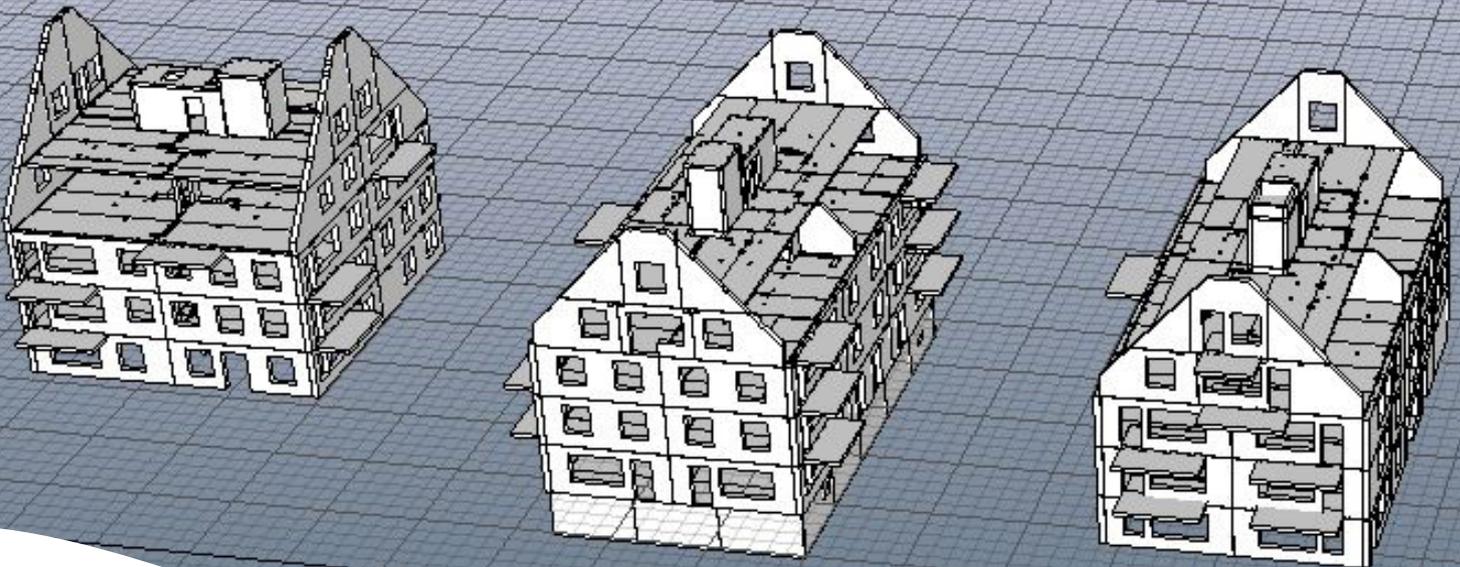


“We achieve a much more effective way of working” - Michael Malki.

-We don't need to check how things are in a traditional time schedule, we get information about what the order is. Then we can more easily get going with the design.

This time provision can be used to undertake several projects. It is also cost effective because the project gets a shorter through-put time and fewer errors. The linking of information becomes therefore shorter which ensures the transfer from the designers and out to the different manufacturing centres round Sweden. That there are standardized components and moulds also helps.

-We achieve a much more effective way of working, sums up Michael Malki.



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