

BIM

BUILDING INFORMATION MODELLING

FREQUENTLY ASKED QUESTIONS

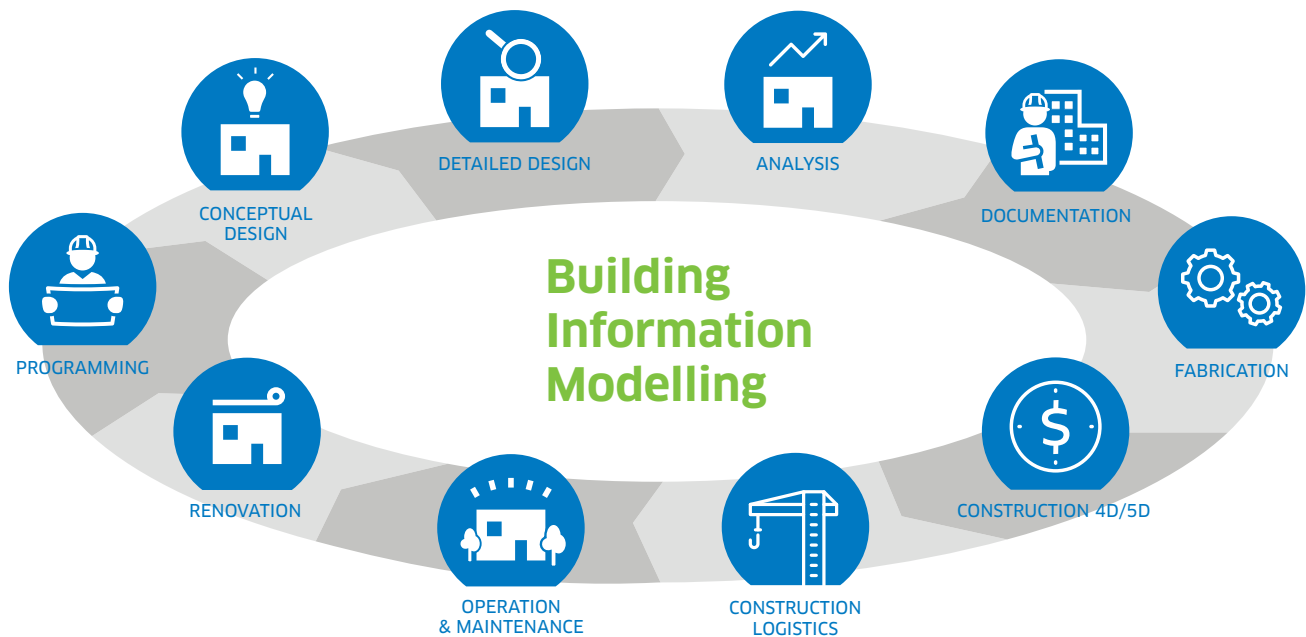
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1. What is BIM?

Building information modelling is a process of creating three dimensional intelligent constructions which provide architecture, engineering and construction professionals (AEC) the information and tools to design, construct and manage buildings. Basically an information management process for construction projects.

These videos on youtube can also help:

- [What is BIM?](#) by Autodesk
- [Hva åpenBIM gjør for deg - buildingSMART på fire minutter](#) (norsk)
- [What is BIM?](#) by ArchiCAD



2. Why is BIM needed?

The concept of BIM has existed since the 1970s, but only with recent technology and software has it become a strategic focus for the construction industry. BIM allows for more collaboration between the different industries involved in building design and construction. The main aim is to save time and costs whilst reducing errors and the need to rework.

Governments are also increasingly pushing the use of BIM in order to increase productivity and reduce costs. Often state/government projects are now requiring the use of BIM as a mandatory requirement.

3. Who uses BIM?

BIM is primarily used by architects, specifiers and engineers involved with the design and construction of buildings. The information in BIM is further utilised by facilities management for the maintenance of a building and ultimately used during the demolition and recycling of materials.

4. What has Protan created?

Protan has a wide portfolio of roofing products which in turn can be used in systems of many different designs. So we have initially created 13 BIM “products” to cover the majority of roofing constructions:

- Protan adhered warm roof system on concrete substrate
- Protan adhered warm roof system on steel substrate
- Protan adhered warm roof system on timber substrate
- Protan BlueProof water attenuation system on concrete substrate
- Protan BlueProof water attenuation system on steel substrate
- Protan BlueProof Green water attenuation system on concrete substrate
- Protan Extensive Green roof system on concrete substrate
- Protan Extensive Green roof system on steel substrate
- Protan mechanically fastened warm roof system on concrete substrate
- Protan mechanically fastened warm roof system on steel substrate
- Protan mechanically fastened warm roof system on timber substrate
- Protan Protected (ballasted) warm roof system on concrete substrate
- Protan Vacuum warm roof system on concrete substrate

These have been created in collaboration with BIMobject. The objects have been created for use throughout Europe (countries in which Protan is distributed), so country specific designs/constructions may not be available.

These objects can be further modified by the architect or specifier. Editable attributes include:

- Membrane thickness
- Membrane colour
- Insulation type and thickness
- Vapour control layer type

The information and objects are currently only available in English and will be available for Revit and Archicad. Please note, IFC format files are not currently available.

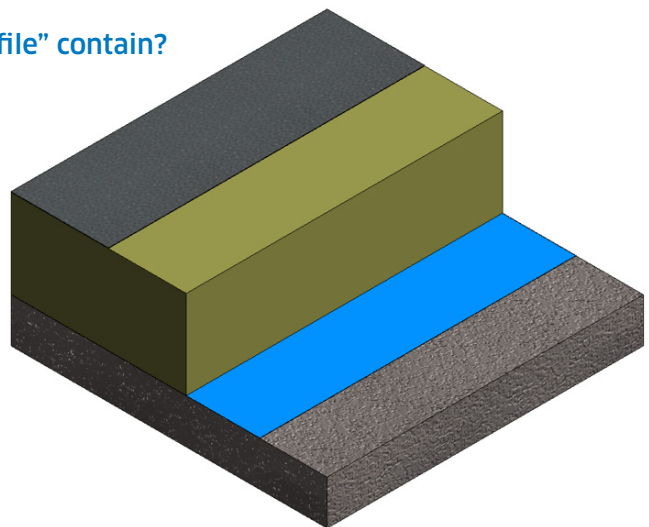
5. Who is BIMobject?

BIMobject is the largest source of BIM content. It provides a library of products allowing visitors to browse, view and download products. Apps are also provided for BIM software platforms, such as Revit and Archicad, so that the library is available directly in the software. As of October 2018, 97 of the top 100 architectural firms use BIMobject.

6. What information does BIMobject and the BIM “file” contain?

The information in the file includes:

- Product details
- Company details
- Product options
- Product performance
- Links to relevant websites and documentation
- Product classifications
- Specification information



7. How can we benefit from BIM?

BIM allows for Protan to provide information about its systems and products to specifiers and architects. Information and data is critical for the BIM process and so as a provider of BIM objects, we can take more control of the information that is used for roof systems and provide meaningful objects rather than generic models which lack critical information.

With the increasingly mandatory requirement for BIM on state/government projects, we can ensure Protan can continue to offer roof solutions for prestigious projects.

8. How do we access Protan's BIM products?

Protan's BIM products are available from www.bimobject.com/protan/. It is free to view, register and download the products. We will add links from our website in the near future.

9. Who is the target group?

The primary targets are architects and specifiers. These groups are responsible for a project's BIM model and often there is also a BIM manager or coordinator for projects.

10. Are sales leads generated from the BIMObject website?

Analytical data will be available once the products are online. We will be able to find out which products are most popular and can make contact with the users who are downloading them. Due to data privacy, we cannot contact the users directly but can contact them using BIMObject's mail system.

Any enquiries which are received via BIMObject will be distributed to the appropriate Protan sales teams.

11. What is the BIM process and where do roofing contractors fit in?

The BIM process starts very early in a project's timeline, from design to construction and eventually to facilities management. Protan can now supply detailed BIM objects for the architects to use and once the object is in the architect's model, this is equivalent to being specified. The role of the roofing contractor will still be the same, but may be asked to access the BIM model to review the roof's construction. Access is usually provided by the main contractor and will provide the roofing contractor with the necessary information to construct the roof.

12. Do we need to learn new software?

The BIM products can be viewed using BIMObject's online viewer. It shouldn't be necessary to edit the products as existing products can be modified by the architect and new products must be created by Protan.

13. Where do responsibilities lie?

The architect/specifier has the principle responsibility for the BIM process. Protan, as a manufacturer, has the responsibility to supply the BIM objects and can advise architects on the best use of Protan systems (as per today). The roofing contractor must be able to understand BIM models and be ready to access and review the digital information.

14. How are BIM objects used?

The objects are downloaded by the architect/specifier and used within design software (Revit / Archicad) to create a roof structure. Case studies will be provided soon.

15. What are the different file formats?

There are several file formats associated with BIM:

- **IFC** - The Industry Foundation Classes (IFC) file format is maintained by buildingSMART. IFC provides an interoperability solution between different software applications. The format establishes international standards to import and export building objects and their properties. These can be viewed using the free Solibri Model Viewer (<https://www.solibri.com/solibri-model-viewer>).
- **RVT** - this file format is for use with Autodesk Revit BIM software. A free online viewer is available here: <https://viewer.autodesk.com/>
- **GSM** - this file format is for use with Archicad software as a library object.
- **SMC/SMV** - these are files for viewing using the free Solibri Model Viewer (<https://www.solibri.com/solibri-model-viewer>). These are primarily for only viewing and checking a BIM project.
- **BIMx** - known as a “hyper-model” this contains full documentation and 3D model from Archicad. This can be opened using the viewer from: https://www.graphisoft.com/downloads/bimx/bimx_desktop.html

16. What is next for Protan & BIM?

BIM is relatively new to the roofing industry, so the demand for these objects is unknown. The current batch of objects should be suitable for the majority of projects, but we are aware that some new models may be needed for constructions/systems specific to particular markets/countries.

Please provide any requests, ideas or feedback to bim@protan.com.

17. Is ProPlan compatible with BIM?

ProPlan is currently not compatible with BIM. The development of ProPlan with BIM integration is being explored.

18. Can Protan's BIM files be made available in other libraries?

In theory, yes, Protan's information can be added to other online BIM libraries, but there is often a cost associated with maintenance and hosting the products. We are starting with BIMobject, which is the largest and most popular resource.

19. Who do I contact if I need more information?

Please send any questions to bim@protan.com.



Contact us:
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www.protan.com/BIM

