

scSTREAM Launcher (Autodesk® Revit®)

scSTREAM Function

Converts BIM model of Autodesk® Revit® Architecture to scSTREAM thermal airflow analysis software

Development Background of Launcher (Autodesk® Revit®)

The demand for thermal environment analysis and airflow analysis among BIM (Building Information Modeling) is growing in recent years. However, architects tend to spend most of their time for modeling the 3D geometry among all the processes required for thermal and airflow simulation.

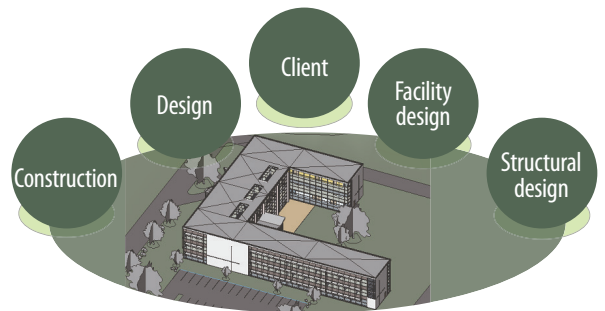
Or, their busy schedule is the very reason for architects not to perform a simulation. For the possible solution to the problem, scSTREAM Launcher (Autodesk® Revit®) is developed to achieve utilization of Revit® original data for the analysis purpose.

Benefits of using original data

Using an intermediate format for various applications can cause some data or non-shape information loss during conversion and it takes long hours to fix the problem after the data being loaded. Meanwhile, the original data does not depend on particular application and has high accuracy shape conversion, and the attribute of each material can be added. This results in significant contribution in reducing the operational time for model creation.

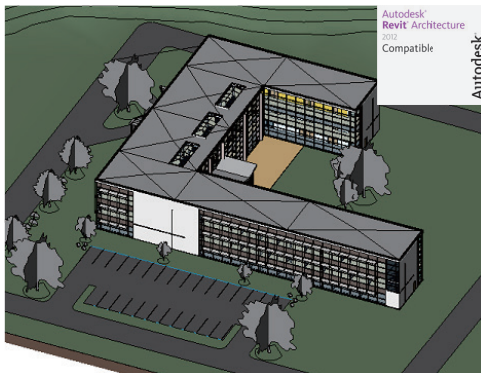
What is BIM?

BIM (Building Information Modeling) is a new work flow that enables adding attribute information to 3D data. BIM can be used to share the information-added data throughout the architectural design process including design, simulation, construction, and maintenance. As a result, it is a major enabler for increasing work efficiency.



The basic concept of BIM

scSTREAM Launcher (Autodesk® Revit®) Data Conversion

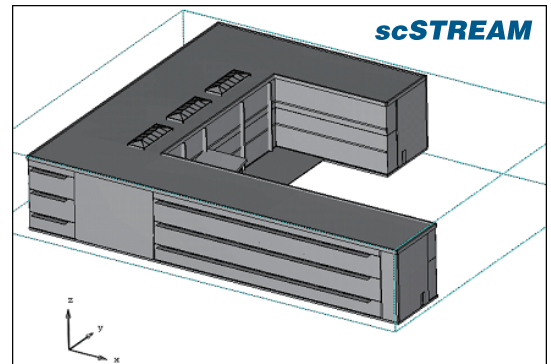


Revit® original model

Automatically simplifies the unnecessary parts during the data conversion!

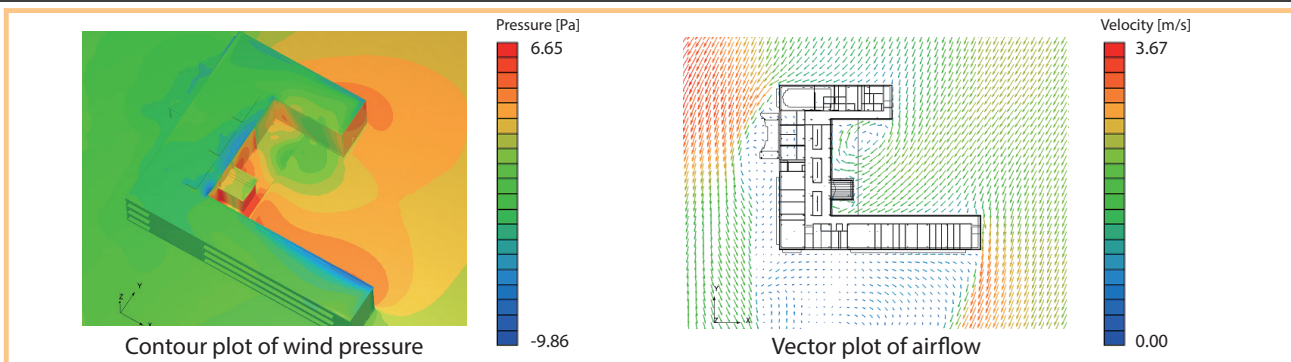


Converts the data to analysis model while keeping layers in Revit®



Analysis model

Analysis Results of scSTREAM



Contour plot of wind pressure

Vector plot of airflow

Notes

scSTREAM Launcher (Autodesk® Revit®) enables us to load an original data of 3D CAD model into scSTREAM and to set all the analysis parameters at once to the architectural model even with numerous parts. It also provides practical data conversion functions, such as automatic simplification of unnecessary parts and extraction of a targeted layer for a particular simulation, by incorporating know-how obtained from working on various applications in various industries.

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