



IBPSA Project 1

International Building Performance Simulation Association

Work Package 2.2 – BIM – Breakout Group Summary

Web Meeting, 13 and 14 October 2020

Breakout Group Summary

Geometry processing

- Space boundary algorithm development progress for 1st and 2nd level SB
- Demonstration application for KIT FZK building samples

Model conversion process

- Update on conversion process taking generated SB as input
- Currently increasing the robustness of SB concerning input processing of different CAD authoring tools
- Recent progress of processing EnergyPlus input files from Revit IFC export, still minor issues to be solved in terms of robustness

Multi physics model coupling

- Current status of meshing and CFD simulation process using Ansys Fluent and surface temperatures from EnergyPlus calculation

Breakout Group Summary, contd.

- Discussion
 - on IFC scheme specification for SB, which is not clear
 - on zone definition methods
 - on SB types which need to be flexible in terms of supporting different purposes

Tool chain

- Discussion on next steps in order to process entire tool chain from IFC to coupled multi physics simulation
 - Eric to set up internal meetings
- Demonstration of FZK viewer with MVD rule definitions and model check
- Discussion
 - on support of connection component analysis and spatial querying