

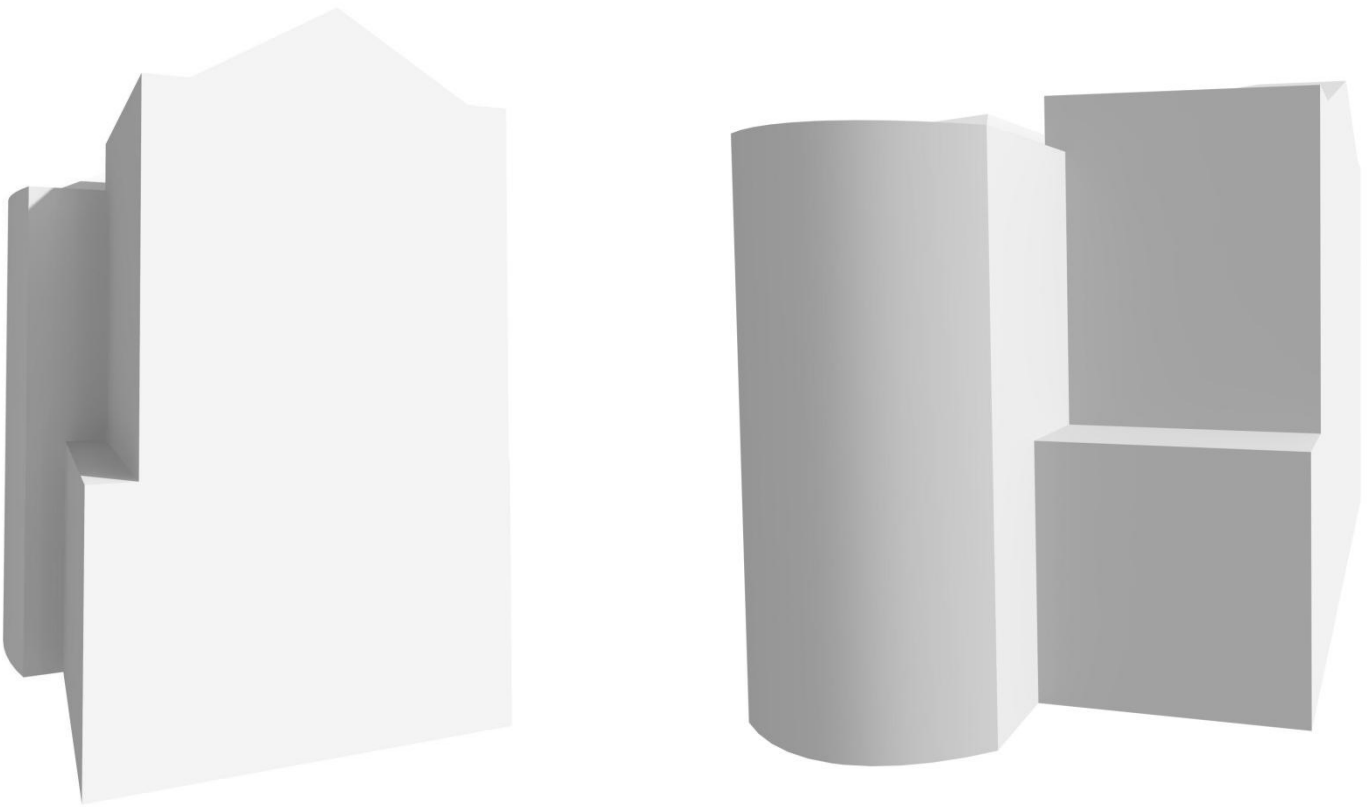
BIM Level of Detail Specification



L A S E R S C A N N I N G

August 2020

Level 1 – Mass Model



Modeling on the Level of Detail 1 is generally used for the depiction of the architectural context in which the investment is occurred. Based on the solid models of the building environment there is a chance to explore the level of sunlight.

- least detailed and most generate model of BIM
- it presents the general form of the building,
- on this level no details like windows, doorways, elements of the service or architectural ones are presented

Level 2 – Basic Structural model



Modeling on the level of detail 2 is used to create a base project in the preliminary architectural concept. For example a BIM model (LoD2) generates details in the same way as a 2D documentation in the scale 1:200.

- the model contains the most important structural elements and openings in the building including floors, columns, beams and door openings and windows in a basic form
- the model doesn't present the elements of the installation or even architectural details, partition walls or interior doors

Level 3 – Basic Architectural model



Modeling on the level of detail 3 is used as a base project excluding the construction documentation. The BIM model (LoD3) generates details in the same way as a 2D documentation in the scale 1:50 or 1:100.

- the model contains all structural elements and basic simplistic architectural details.
- external woodwork like doors and windows are marked
- on this level the inner walls with doors and installation components are presented

Level 4 – Detailed Architectural model



Modeling on the level of detail 4 is generally used for creating engineering projects as well as for the finishing projects. What more, the model BIM (LoD4) represents the most geometrically described architectural details.

- this level contains in detail all structural elements as well as the architectural ones
- modelled are even the smallest items of installation and furniture

external woodwork like doors and windows along with door handles are marked

Walls

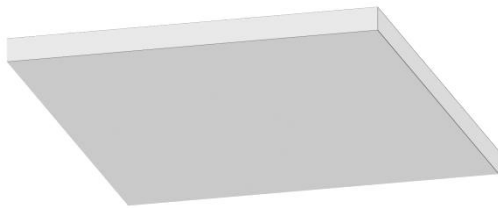


☐ Level 2/3

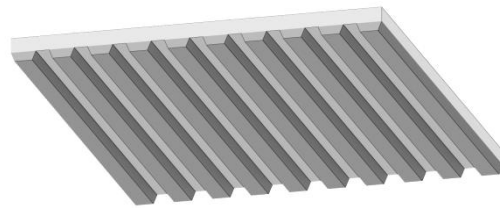


☐ Level 4

Floors

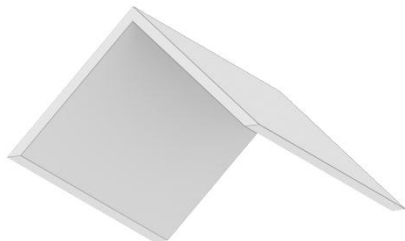


☐ Level 2/3

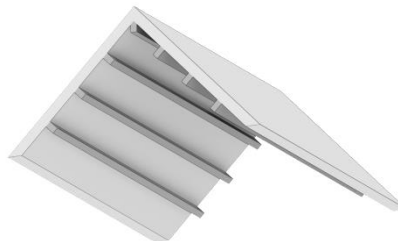


☐ Level 4

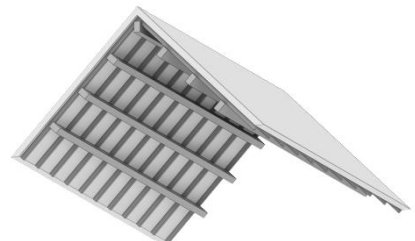
Roofs



☐ Level 2

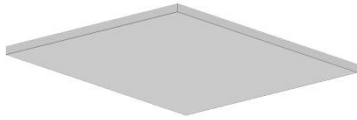


☐ Level 3

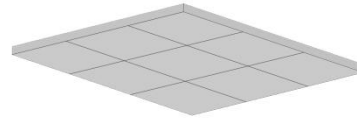


☐ Level 4

Ceilings



☐ Level 2/3

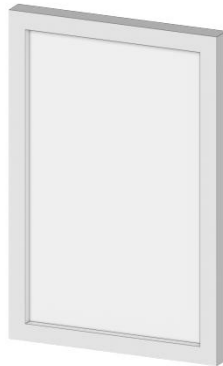


☐ Level 4

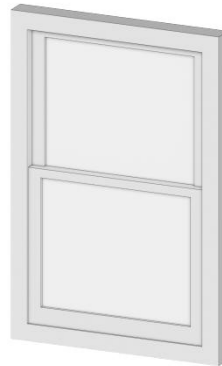
Windows



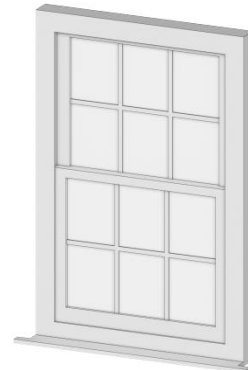
☐ Level 2



☐ Level 2.5



☐ Level 3



☐ Level 4

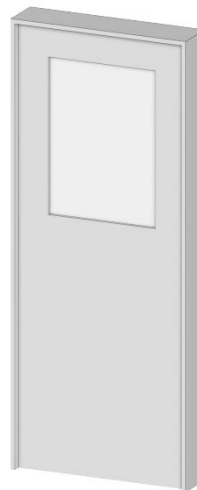
Doors



☐ Level 2



☐ Level 2.5

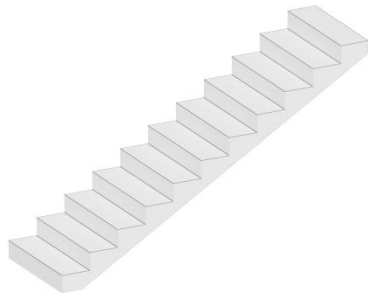


☐ Level 3

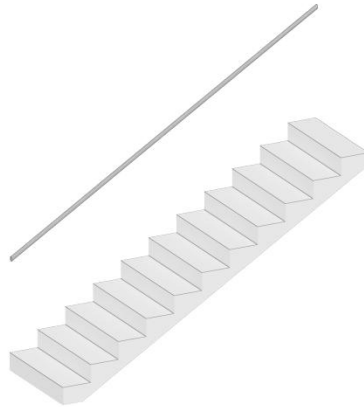


☐ Level 4

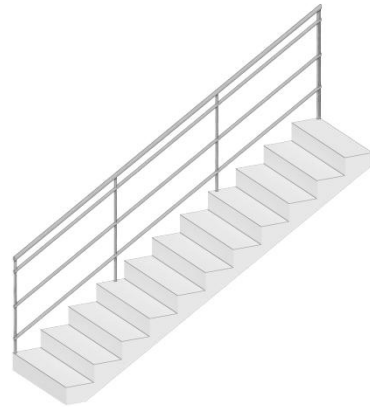
Stairs



☐ Level 2

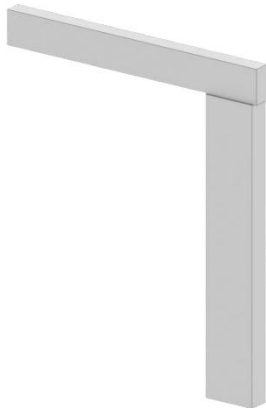


☐ Level 3



☐ Level 4

Structure



☐ Level 2

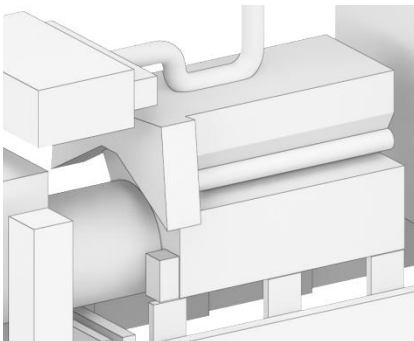


☐ Level 3

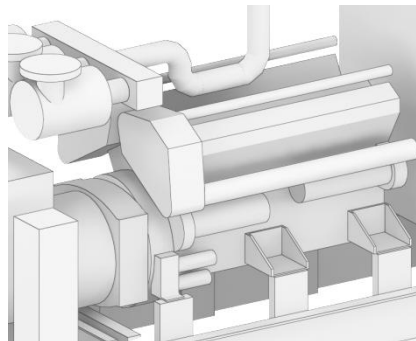


☐ Level 4

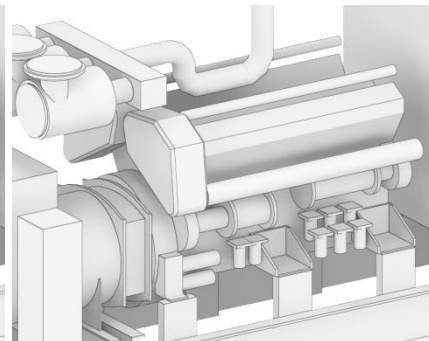
Equipment



☐ Level 2



☐ Level 3



☐ Level 4

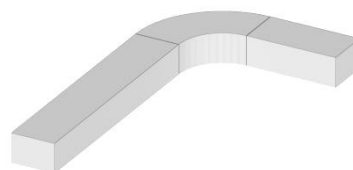
Pipes



☐ Not included

☐ Level 3/4

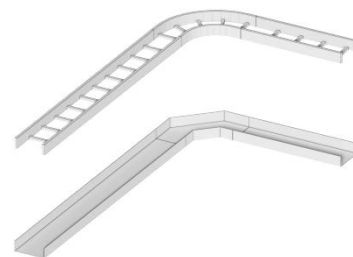
Ducts



☐ Not included

☐ Level 3/4

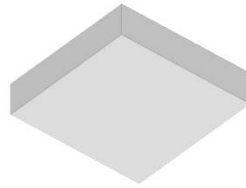
Cable Trays



☐ Not included

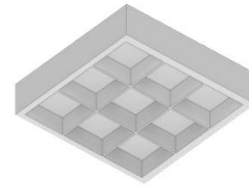
☐ Level 3/4

Lighting



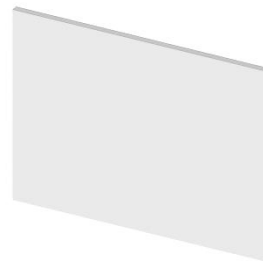
☐ Not Included

☐ Level 3



☐ Level 4

Radiators



☐ Not included

☐ Level 3/4

Switches and Sockets



☐ Not included

☐ Level 3/4

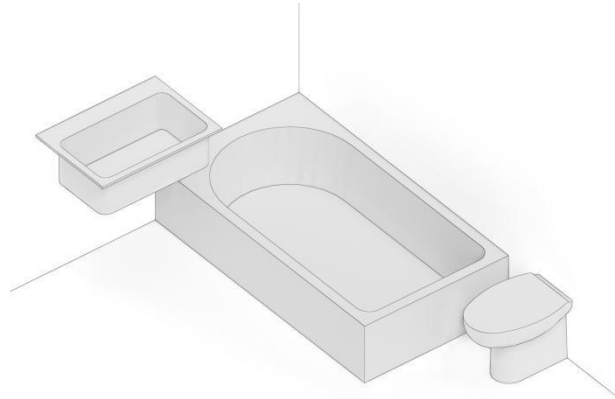
Smoke Ventilation



☐ Not included

☐ Level 3/4

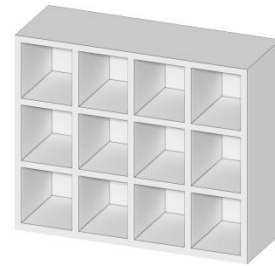
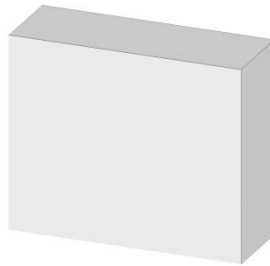
Sanitary Ware



☐ Not included

☐ Level 3/4

Fixed Furniture



☐ Not Included

☐ Level 3

☐ Level 4

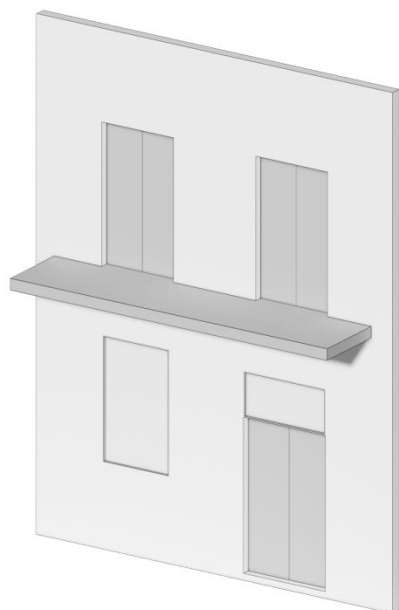
Gutters



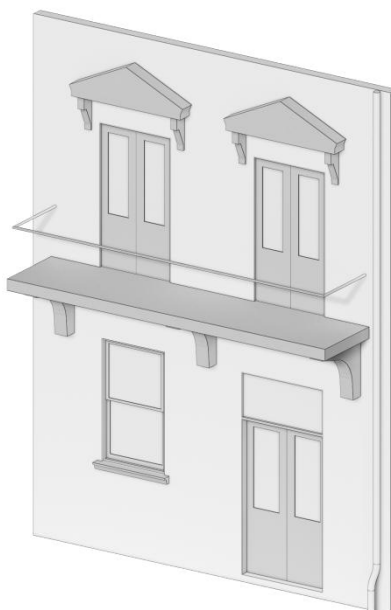
☐ Not included

☐ Level 3/4

Facade Details



☐ Level 2

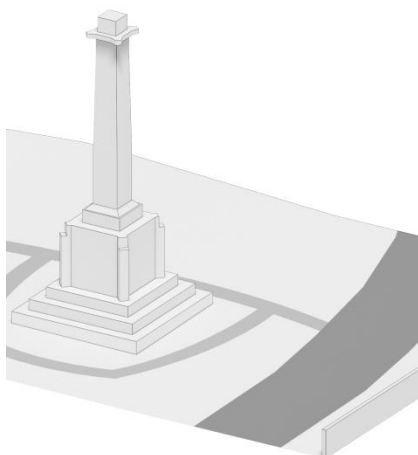


☐ Level 3

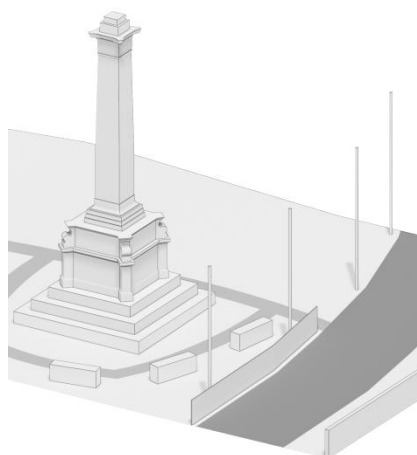


☐ Level 4

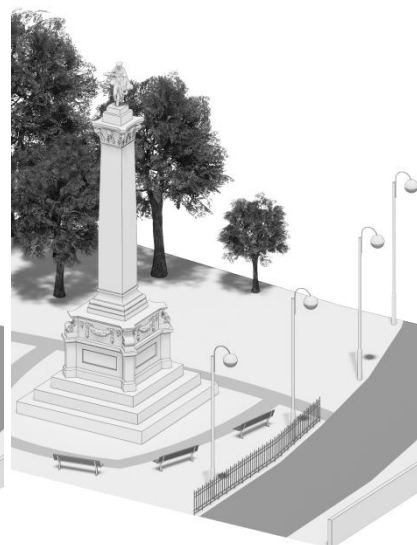
Topographical Details



☐ Level 2



☐ Level 3



☐ Level 4

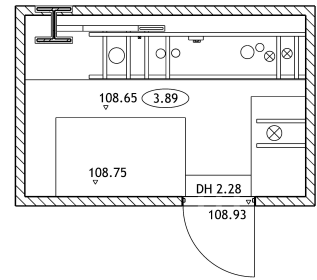
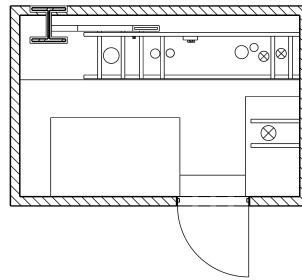
Revit Version 2017 ☐ 2018 ☐ 2019 ☐ 2020 ☐

Resolution (min size of detail shown) 20mm ☐ 50 mm ☐ 100 mm ☐

Modeling Accuracy

- | | | | |
|--------------------------|--------------------------------|--------------------------------|--------------------------------|
| • Wall, Floor, Structure | 15 mm ☐ | 30 mm ☐ | 50 mm ☐ |
| • Roof | 20 mm ☐ | 40 mm ☐ | 60 mm ☐ |
| • Services | 20 mm ☐ | 40 mm ☐ | 60 mm ☐ |
| • Openings | 15 mm ☐ | 30 mm ☐ | 50 mm ☐ |

2D Documentation generated from the Revit model Yes ☐ No ☐



- | | Not included | RAW model extraction | With annotations added |
|---------------------------|--------------------------|--------------------------|--------------------------|
| • Floor Plans | ☐ | ☐ | ☐ |
| • Reflected Ceiling Plans | ☐ | ☐ | ☐ |
| • Sections | ☐ | ☐ | ☐ |
| • Exterior Elevations | ☐ | ☐ | ☐ |
| • Roof Plans | ☐ | ☐ | ☐ |

Comments: