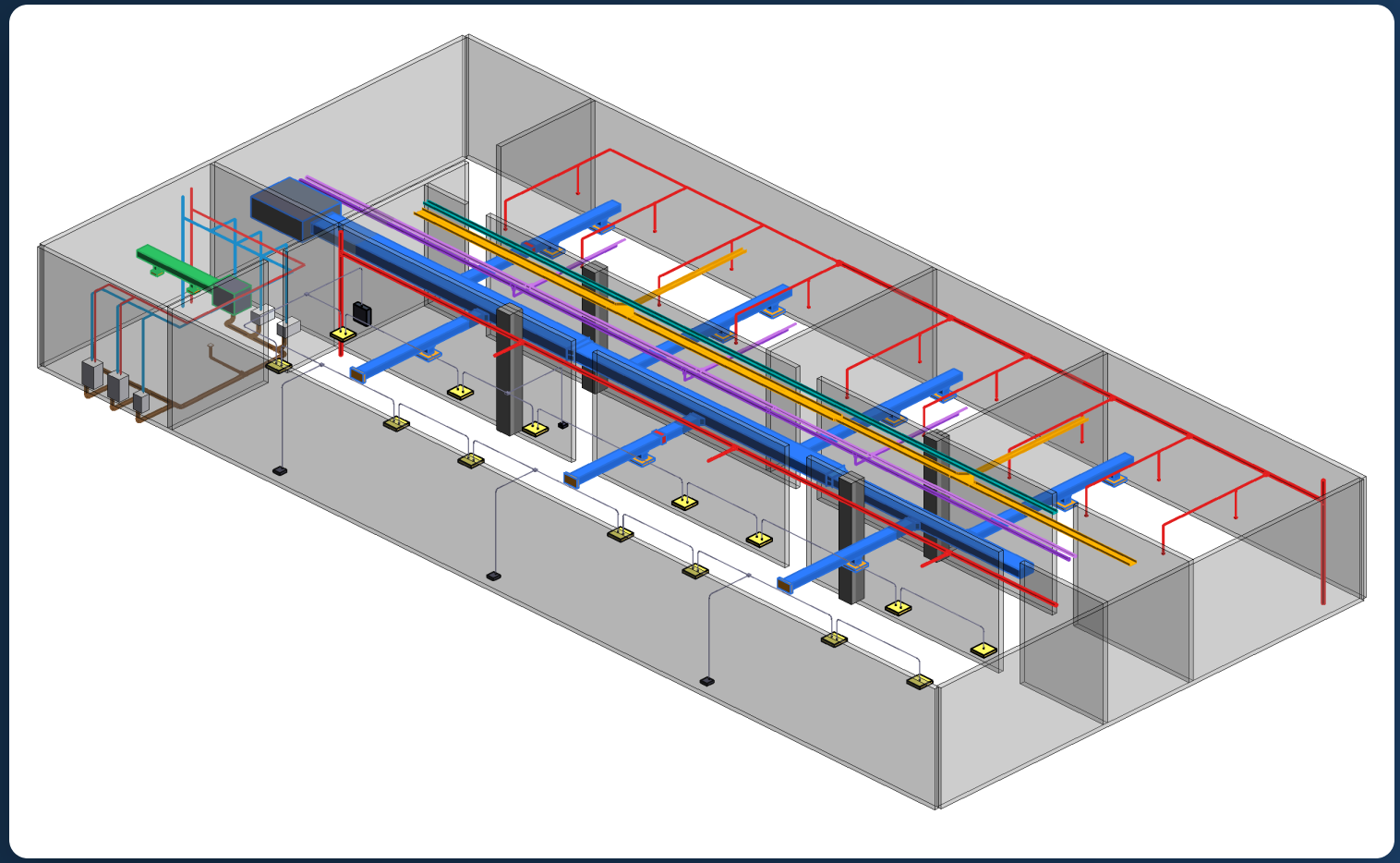
CAD to Revit MEP

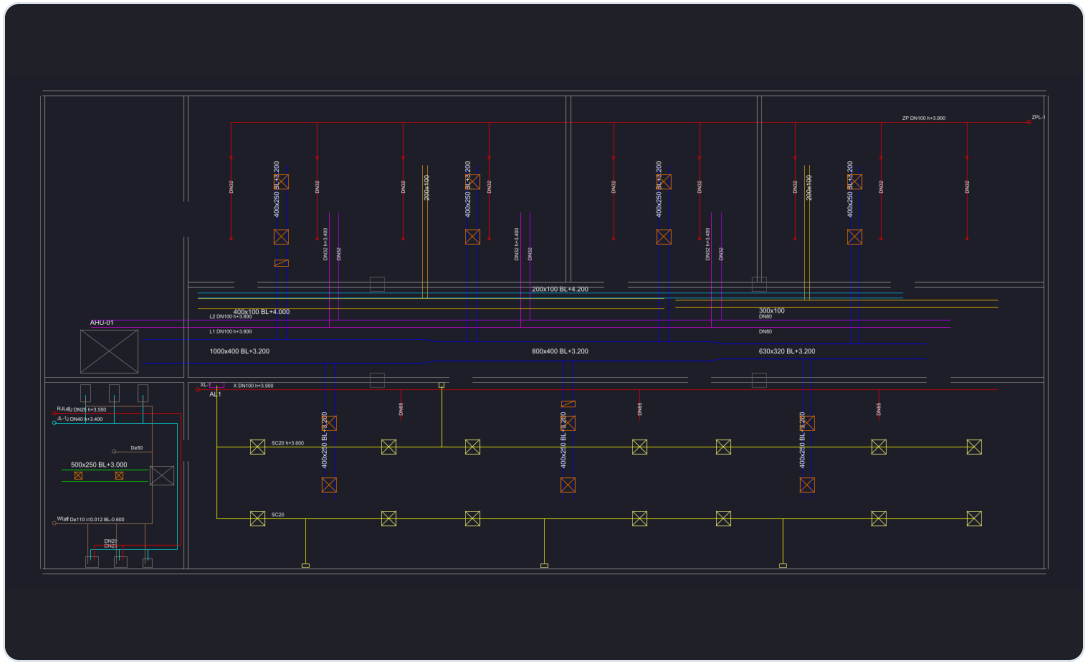
Your 2D MEP drawings turned into a connected Revit model — HVAC, plumbing and electrical in one pass

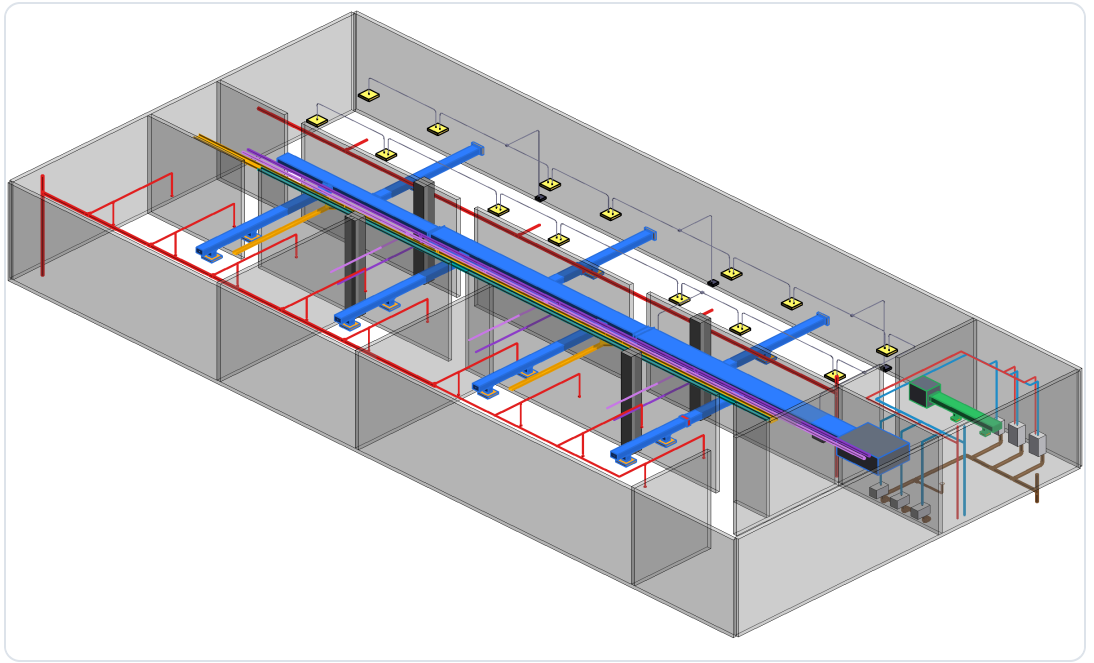
- Ductwork
- Piping & risers
- Sprinklers
- Plumbing fixtures
- Cable trays & conduits
- Lighting & panels
- Multi-storey
- Clash check



Demo project (fictional office floor, 42 × 20 m). All images are unedited Revit output.

From DWG to Revit





Input: 2D plan (DWG / DXF)

Double-line ducts and trays, single-line pipes, size and elevation labels, equipment blocks — drawn the usual way.

Output: connected Revit MEP model

Real Revit ducts, pipes, cable trays and fittings at the labelled sizes and heights, joined into systems.

What gets modelled

HVAC

- Rectangular and round ducts from double lines or centrelines
- Sizes 1000x400 / Φ400 and elevations (bottom, centre, top)
- Elbows, transitions, takeoffs, 45° offsets at height changes
- Fans / AHUs, dampers, diffusers and grilles with real connectors
- Supply / return / exhaust systems from layer names

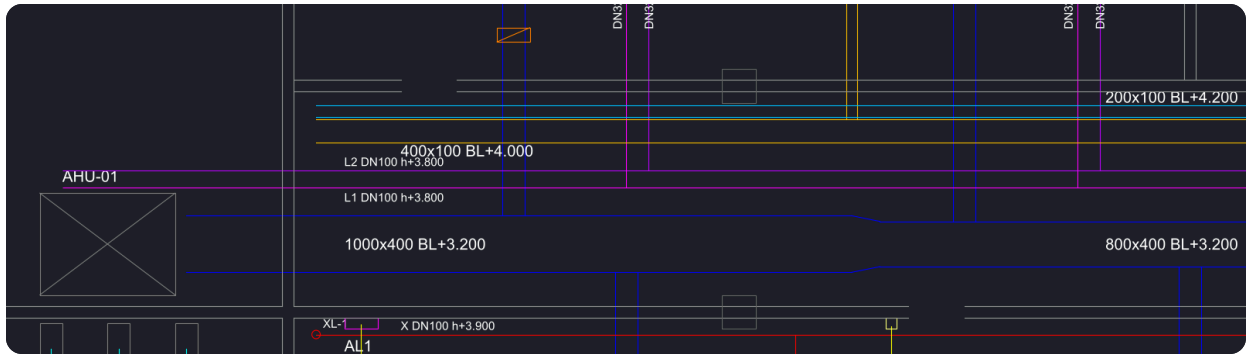
Plumbing & fire

- Single-line pipes, DN / De / Φ labels; elbows, tees, crosses, reducers
- Cold & hot water, drainage, vent, chilled water, hydrant and sprinkler systems
- Risers from JL-1 / WL-1 / XL-1 symbols, run through every floor
- Drainage sloped to its stack (i=0.012 read from the drawing)
- Sprinkler heads with drops; WCs, basins, urinals, floor drains connected

Electrical

- Cable trays: power / low-voltage / fire kept separate
- Conduits SC / JDG / KBG / PC with bends and tees
- Lights, sockets and switches connected to their conduits
- Distribution boards and cabinets, conduits connected
- Coloured per service in the 3D views

Also from the same drawing: walls (door gaps kept), columns, arcs and angled runs. Several floors: one plan per storey, risers with the same tag join through all of them.



Read straight from your labels

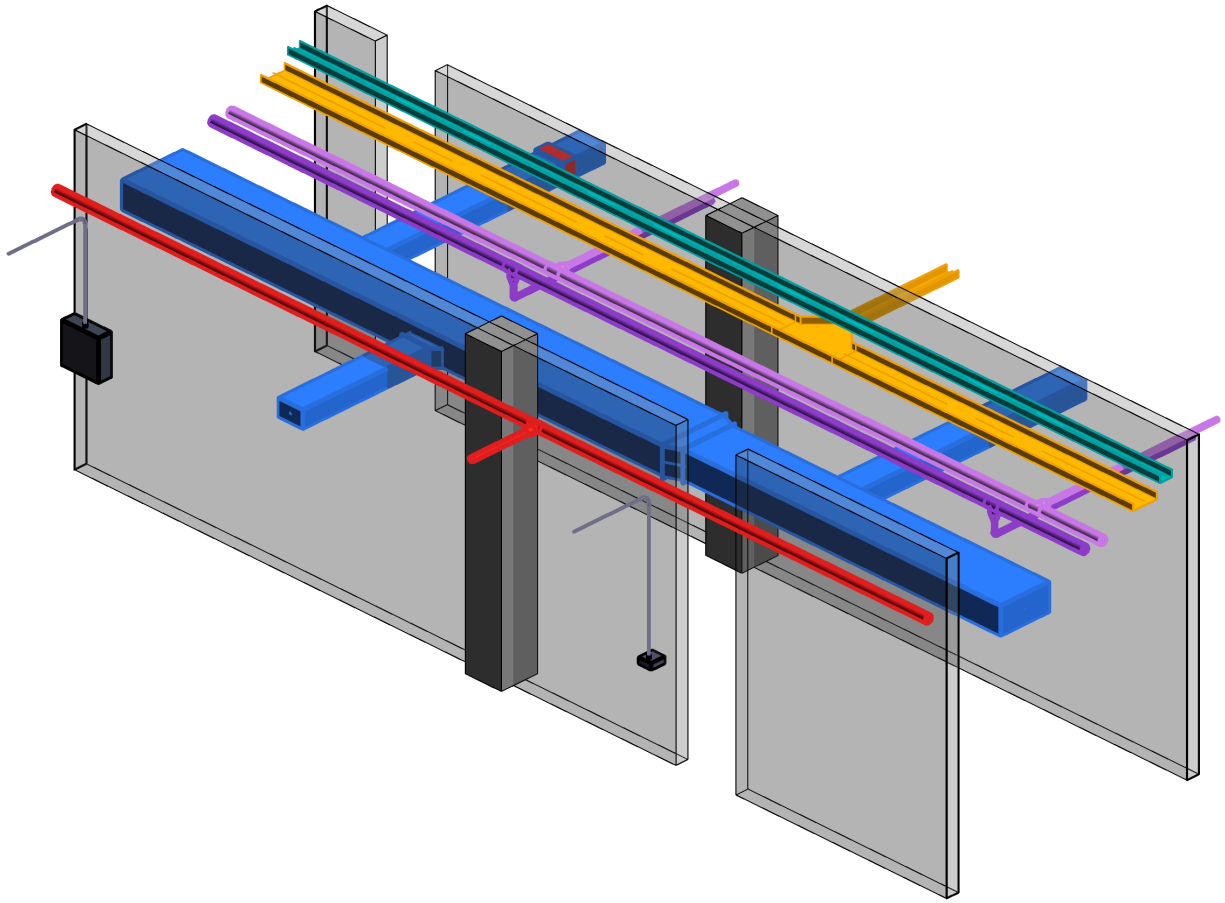
`1000x400 BL+3.200` → duct 1000 × 400, bottom at +3.200

`L1 DN100 h+3.800` → chilled water supply DN100, centre at +3.800

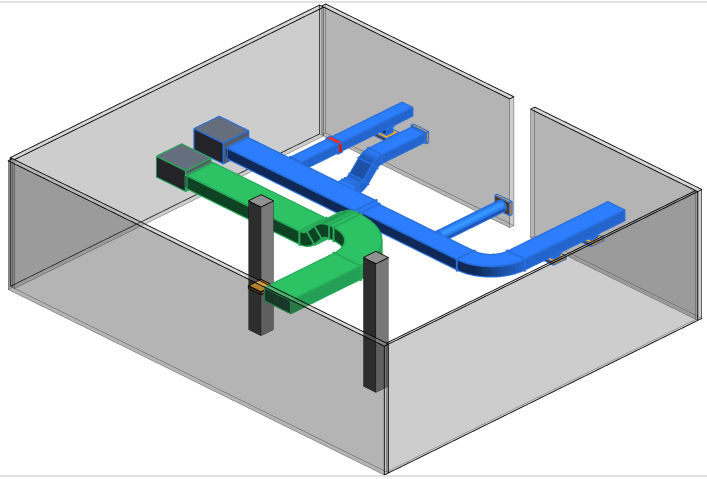
`400x100 BL+4.000` on a tray layer → power tray 400 × 100

Office label standards are set in a config file — no redrawing needed

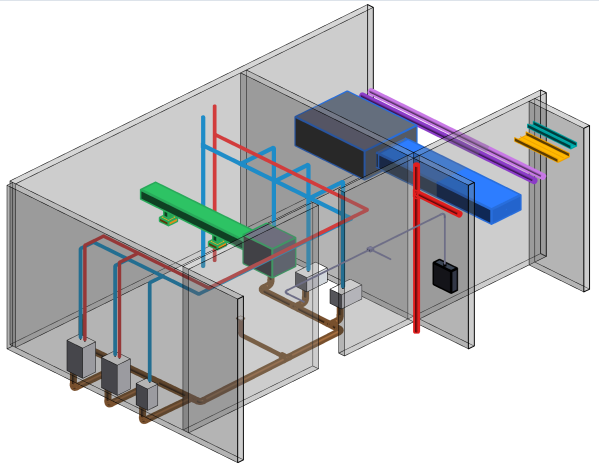
Model details



Corridor: supply duct with takeoffs, chilled water with branch drops, fire main, power and low-voltage trays

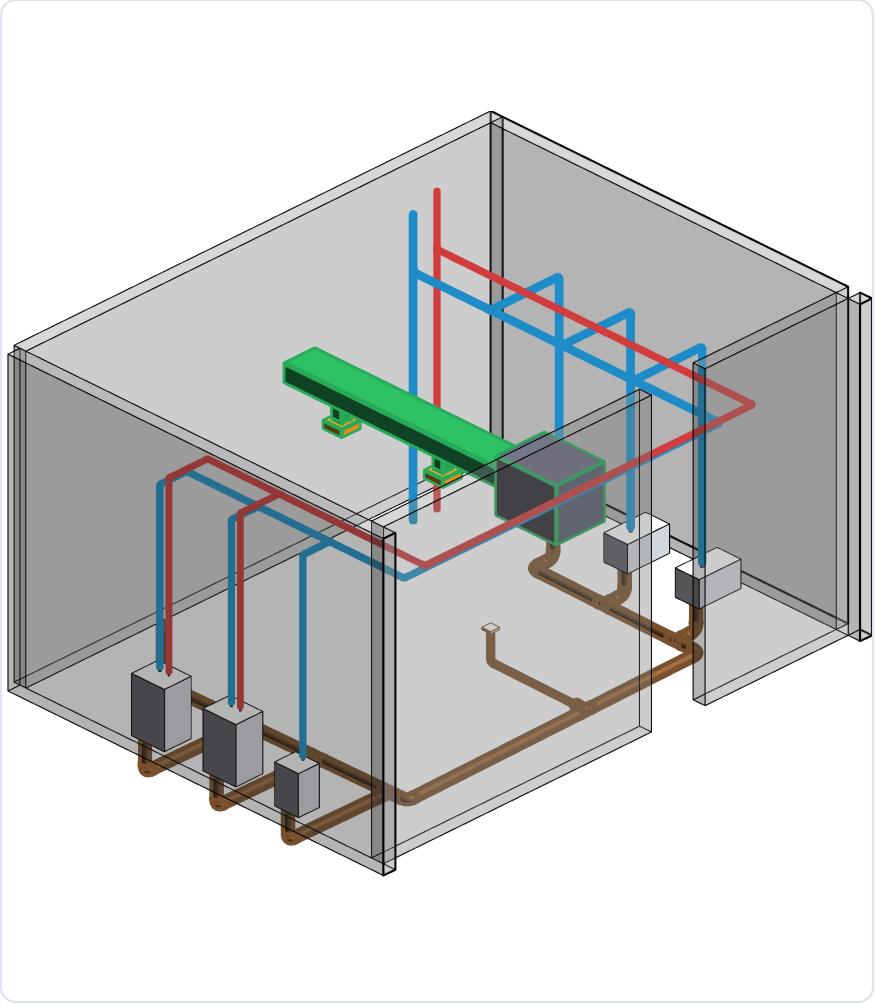


Ductwork: fans, transitions, elbows, 45° offsets, damper, diffusers and end grilles

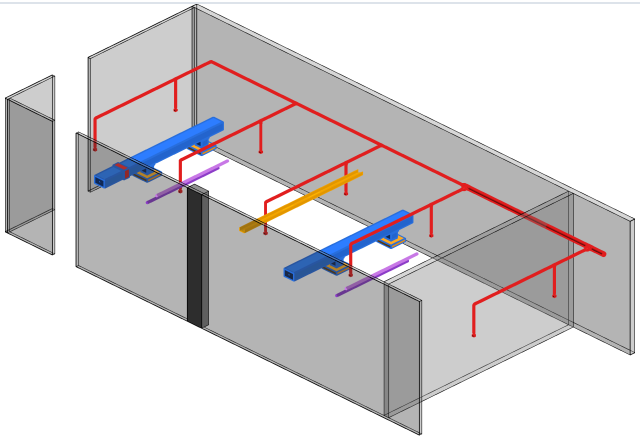


Plant room and toilets: AHU, exhaust fan and grilles, water supply and drainage

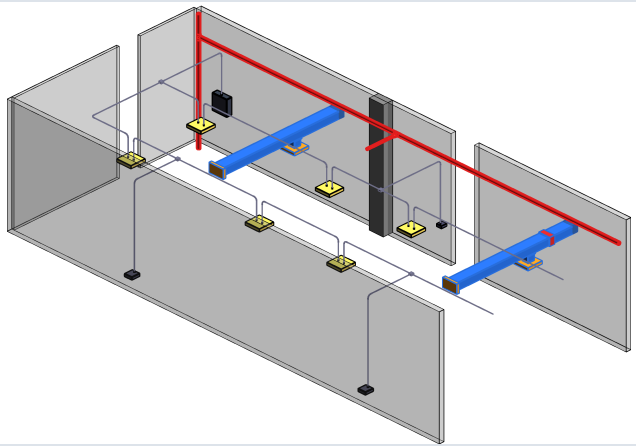
Plumbing, fire and electrical



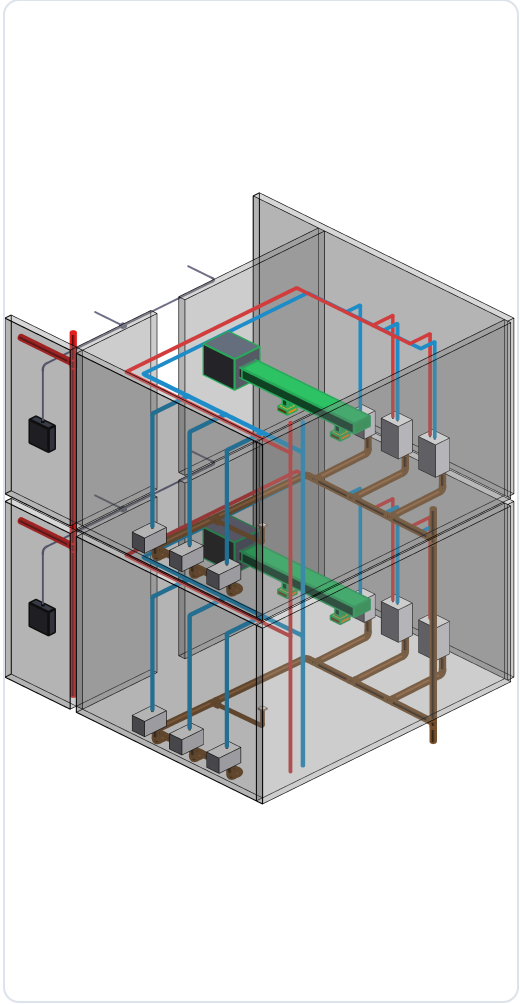
Toilets: risers JL-1 / RJL-1 / WL-1, cold and hot water to every fixture, drainage below the slab sloped to the stack



Sprinklers: main from riser ZPL-1, branches with drops to the heads, clear of ducts and trays



Lighting: panel AL1, SC20 conduits to the troffers, switch and sockets — every device connected



Two storeys from two plans: risers with the same tag run through both floors

Checked before delivery

24 duct segments	**22** duct fittings
90 pipe segments	**82** pipe fittings
5 cable trays	**50** conduits
62 connected devices	**19** walls
0 modelling errors	**0** clashes

Result of the demo project above.

Open-end check

Every unconnected duct, pipe and tray end is listed. The only open ends left are the ones that are open on the drawing.

Device check

Fans, dampers, terminals, sprinklers, fixtures, lights and panels are connected into their systems; any device with a free connector is reported.

Assumption report

Every inherited size or elevation and every guess is listed, with a preview image of what was recognised, so you can check it before modelling.

Clash check

Ducts, pipes, trays, conduits and devices are checked against columns and beams and against each other; the demo above: 465 elements, 0 clashes. Wall penetrations are listed for sleeves.

Accuracy check (optional)

If you have a manually built reference model, the generated model can be compared element by element: missing, extra, moved and resized items.

How it works

1

Send your drawings

DWG plans with sizes and elevations, plus your layer standard and Revit template if you have one.

2

Recognition preview

I send back what was recognised and a list of open questions before any modelling.

3

Model + QA

The Revit model is built, joined into systems and checked.

4

Delivery

Revit model, 3D views, QA and clash reports. Fixes from your review included.

You receive

- Native Revit model (.rvt)
- Shaded 3D views (PNG)
- QA report: open ends, devices, assumptions
- Clash report: each clash with both elements and its location — 0 at delivery, or each one agreed with you
- Model accuracy report (when a reference model is supplied)

Good to know

- Models are built in Revit 2026; a Revit file cannot be opened in an older version.
- Clean drawings with labelled sizes and elevations give the best result; missing heights are agreed with you first.
- Your drawings stay confidential and are never used as samples.

→ **Send your drawings and scope for a quote**

Phone: +86 151 6711 6563

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