



Client:

Project Value:

Project Details: Portland were commissioned to undertake structural calculations for the installations of a proposed infill building located at the currently existing S&B facility in Dudley, Cramlington.

Due to limited special requirement and the location of existing buildings, a tapered steel frame was adopted to sufficiently infill the desired area. As the surrounding existing buildings had previously been surveyed and designed by Portland, we 3D modelled the proposed building against the existing to ensure our new structure could fill the available space with no clashes.

A new canopy was required due to the upstand in building height adjacent to an existing building. This was necessary as the existing buildings' roof was not capable of accommodating the additional loads from the snow drift scenario.

As the extension was sandwiched between the two existing buildings it needed to be tapered in geometry. In addition to this, the column centres were spaced out to avoid existing foundations from the surrounding buildings. The location of this building created various challenges regarding the location of new structural members while avoiding existing ones.

It was required to install a mega door to the south facing elevation which was 14m wide and a truss was required to form this opening.

