



LEEDS TRINITY SHOPPING CENTRE LEEDS, UK

This busy shopping centre in the heart of Leeds' retail district was in need of updating in line with modern consumer expectations. Built in the 1980s, it offered a rather awkward layout of staggered floors, with a confusing number of access and egress points.

BuroHappold Engineering commenced work by creating computer simulations that helped us mock-up a number of layout options in order to find ones that would work most efficiently within the constraints of the existing building. We used the resulting drawings to inform the client of the various design options and help them identify the best solutions to meet their requirements. We also used these models to coordinate the work undertaken on the retail units so minimum disruption was made to their trading schedule. This ensured the majority of the centre remained operational throughout, reducing its impact on the building's revenue.

The brief continued to evolve as work was carried out, and our team was quick to adapt to the new challenges. For example, we created an extra storey by demolishing an existing floor and replacing it with two lighter weight levels that ensured load balancing, which in turn reduced the need for disruptive strengthening works.

One of the most exciting opportunities that arose to test our engineering capabilities was that of Trinity Kitchen, an innovative food concept presented as a street festival. To accommodate this, we had to incorporate new access routes for the street vans into our transport design, as well as strengthening the floor of the area so it could carry the additional weight acting on it.

Our work helped realise a design that integrated old and new features, visually and logistically, to create a flexible and responsive building within tight programme dates.

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