

The scheme for 16 Broadway Market involved the refurbishment of the existing shop and duplex flat above, and construction of a rear extension to provide a new triplex flat. Broadway Market is a vibrant area, lined with two and three storey properties including a variety of commercial uses, and on Saturdays the street is pedestrianised for a lively market.

The Challenge

Our challenge was to create a code compliant design for a duplex and triplex apartment and a retail unit, whilst retaining the architectural design ambitions of the client. We created a high-level fire engineering solution to allow for an open plan design to be designed into a building that exists on multiple floors.

The biggest challenges to consider were the location of the dwelling in the basement, the lack of a protected escape and the proximity the cooking area had to the final exit.

The Solution

We advised the client to use fire curtains to allow for an open plan design whilst ensuring there was a protected route in the event of a fire.

With the orientation of the kitchen a small wall had to be designed into the plan, however, this had little effect on the open plan nature of the flat as possible with the larger portion of the protected exit being formed by a fire curtain that would deploy in the event of a fire.

To allow for a basement an alternative escape route was introduced into the design, similar issues also had to be solved for the buildings on the upper floors with an escape window being installed to allow escape from the top floor.

The Outcome

We provided the client and building control inspector with multiple options that allowed for a discussion into what would be a code compliant design, whilst satisfying the client's vision.

The designs were altered and discussed with all parties throughout the process to make sure that the optimal solution was achieved.

Contracting Client:

Delvendahl Martin Architects

Location:

London, UK

Sector:

Residential

Key Elements:

- ✓ Fire Safety Strategy
- ✓ Retain Architectural Design Ambitions
- ✓ Fire Safety Engineering Advice



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Since our foundation, we have continued to deliver robust, innovative and cost-effective fire safety solutions.

Indeed, we have lent our expertise to developments right across the built environment spectrum, from the necessities of Residential, Education and Healthcare to the more iconic buildings of the past, such as historical royal palaces and stately homes.