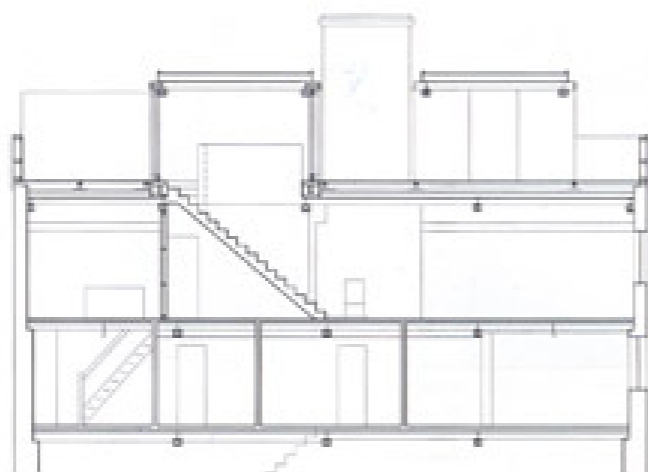


Loft Conversion in London

Architects:
Dow Jones Architects, London
Biba Dow, Alun Jones,
James Grayley (project architect)
Structural engineers:
ABP Engineers
Others involved in the project: see page 104



"London in my living room" was the client's unequivocal request. The project involved converting the top two floors and adding two discrete spaces to the roof of a five-level Victorian brick warehouse into a home for a filmmaker. In order to take advantage of the views previously available only from the roof, the living spaces are situated on the top floors, and the sleeping and bathroom area on the lower level. The existing roof structure was removed and replaced with two parallel steel-and-timber box girders. These rectangular volumes divide the terrace in three open sections and create a new datum line at roof level. Inside one box girder is a rooftop space for contemplation, replete with spectacular views of the city. The other box girder is glazed to create a room-like window bringing light down to the floor below, and at the same time, extending that space upwards. On the lower floors, a bathroom and kitchen are formed – using in-situ concrete – within the existing brick volume. These elements are conceived as large pieces of furniture placed atop the existing surfaces to shape space. Preserving the stairways in their original positions and installing automatic fire doors was key to retaining the character of the open spaces. The internal material palette combines the original brick surfaces and rough timber structure with new smooth oak linings and flush camouflaged doors.



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Section	1 Terrace	6 Living room
Floor plans	2 Winter garden	7 Bathroom
scale 1:200	3 Light box	8 Bedroom
	4 Void	9 Wardrobe
	5 Kitchen	10 Laundry/Services



Roof level

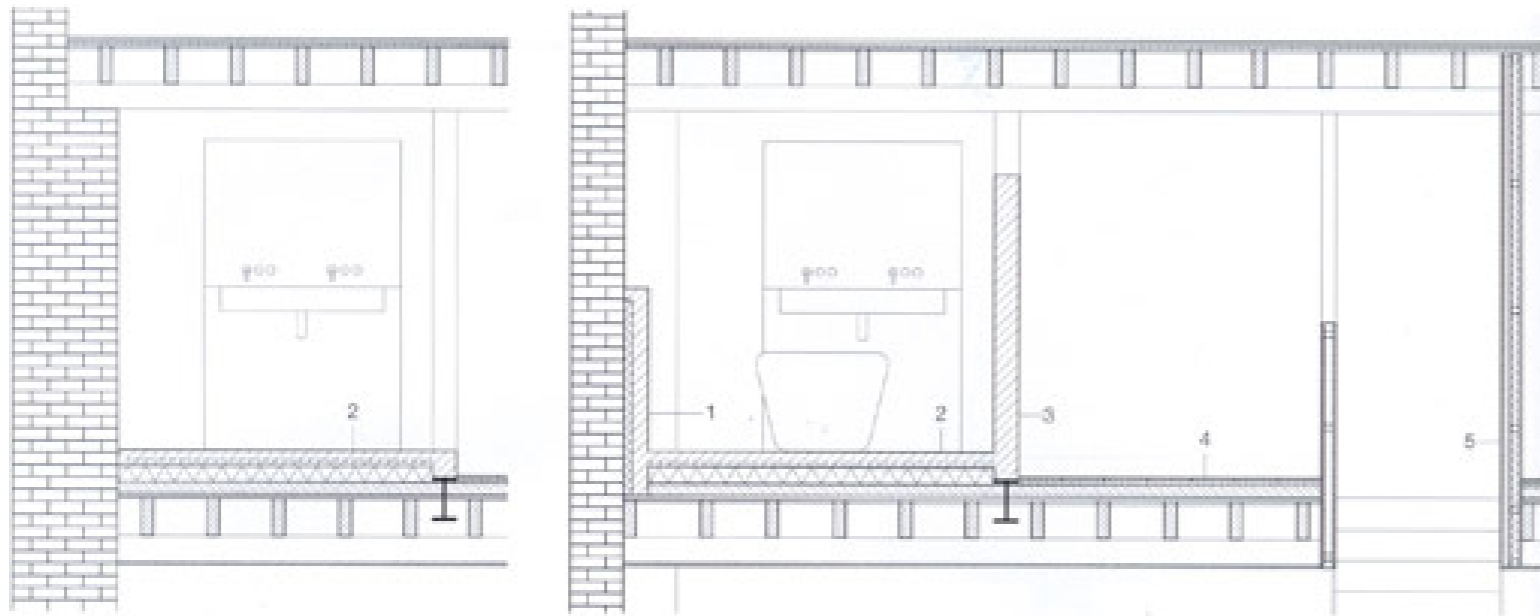


Third floor



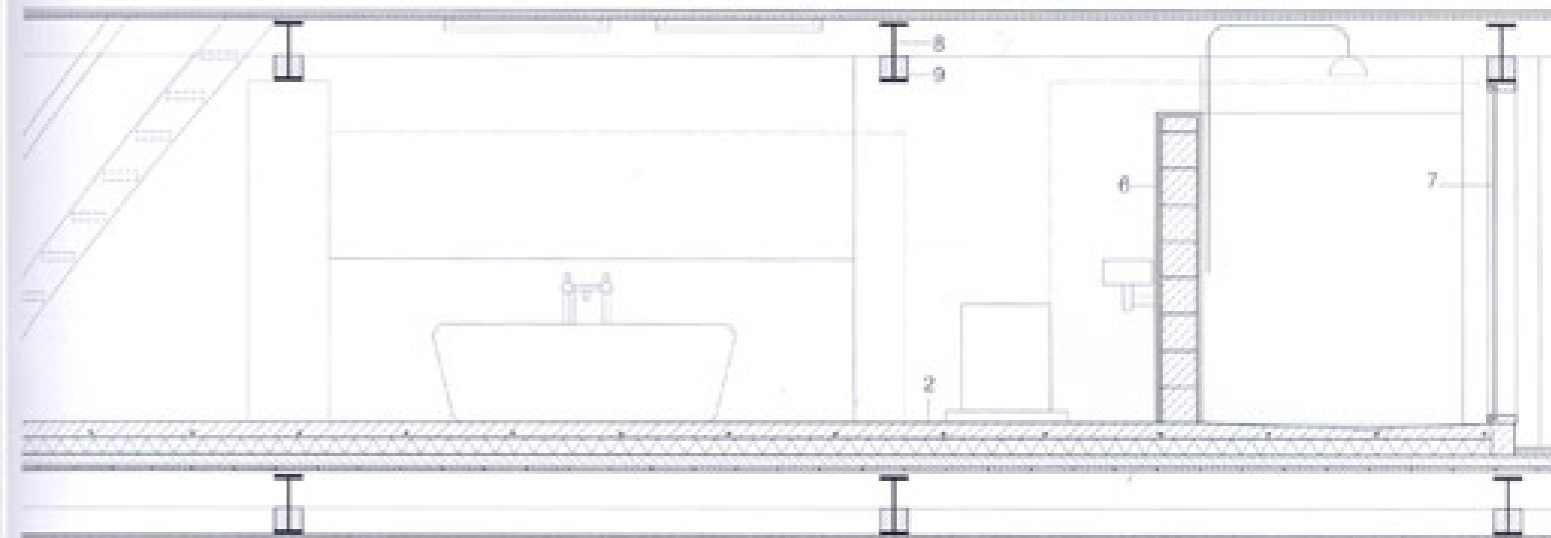
Second floor



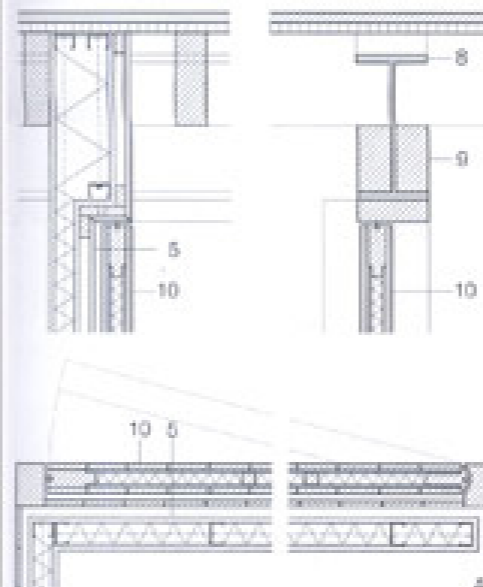


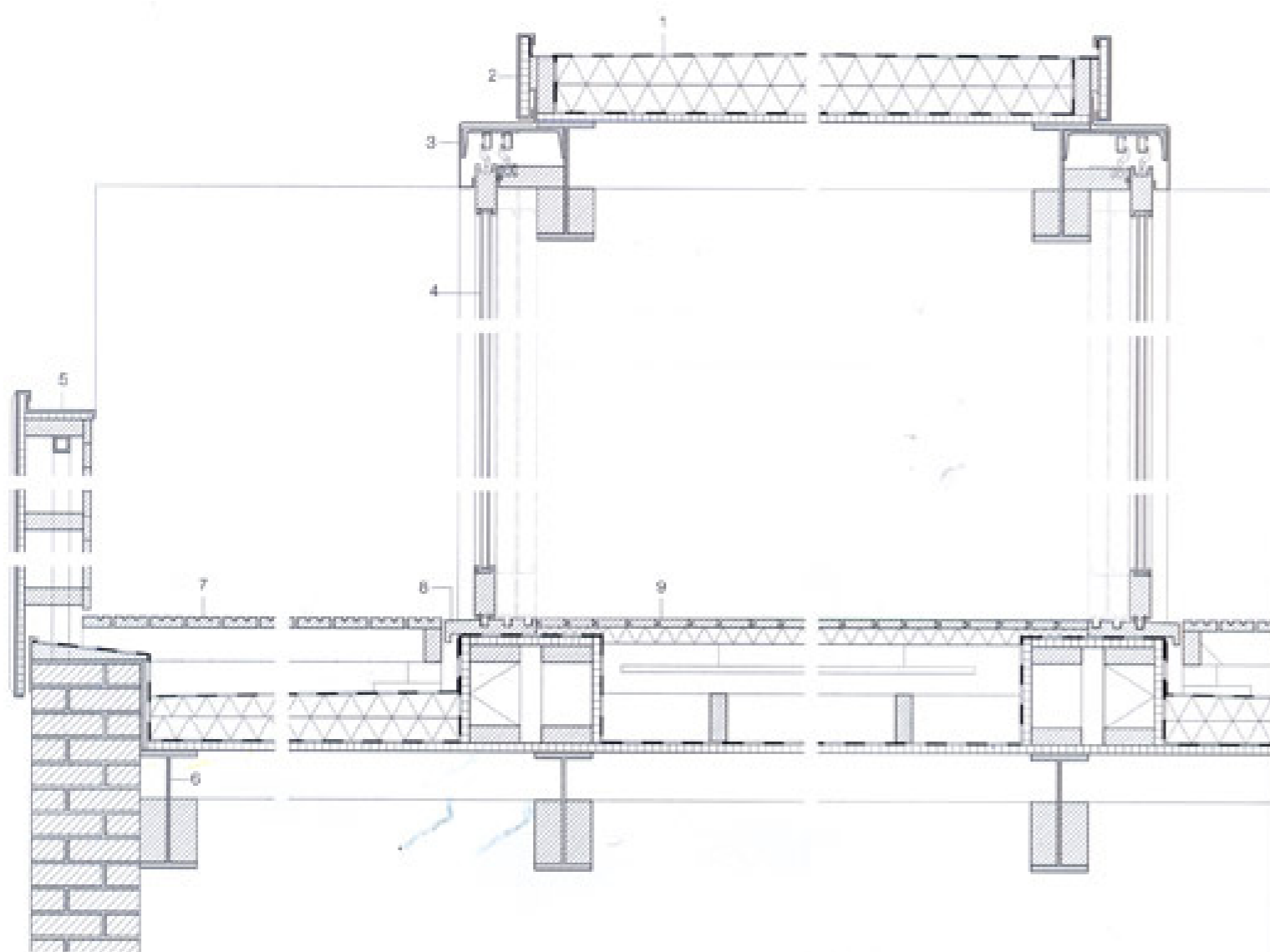
Sections bathroom
scale 1:50

Section and plan of door between bathroom and bedroom
scale 1:20

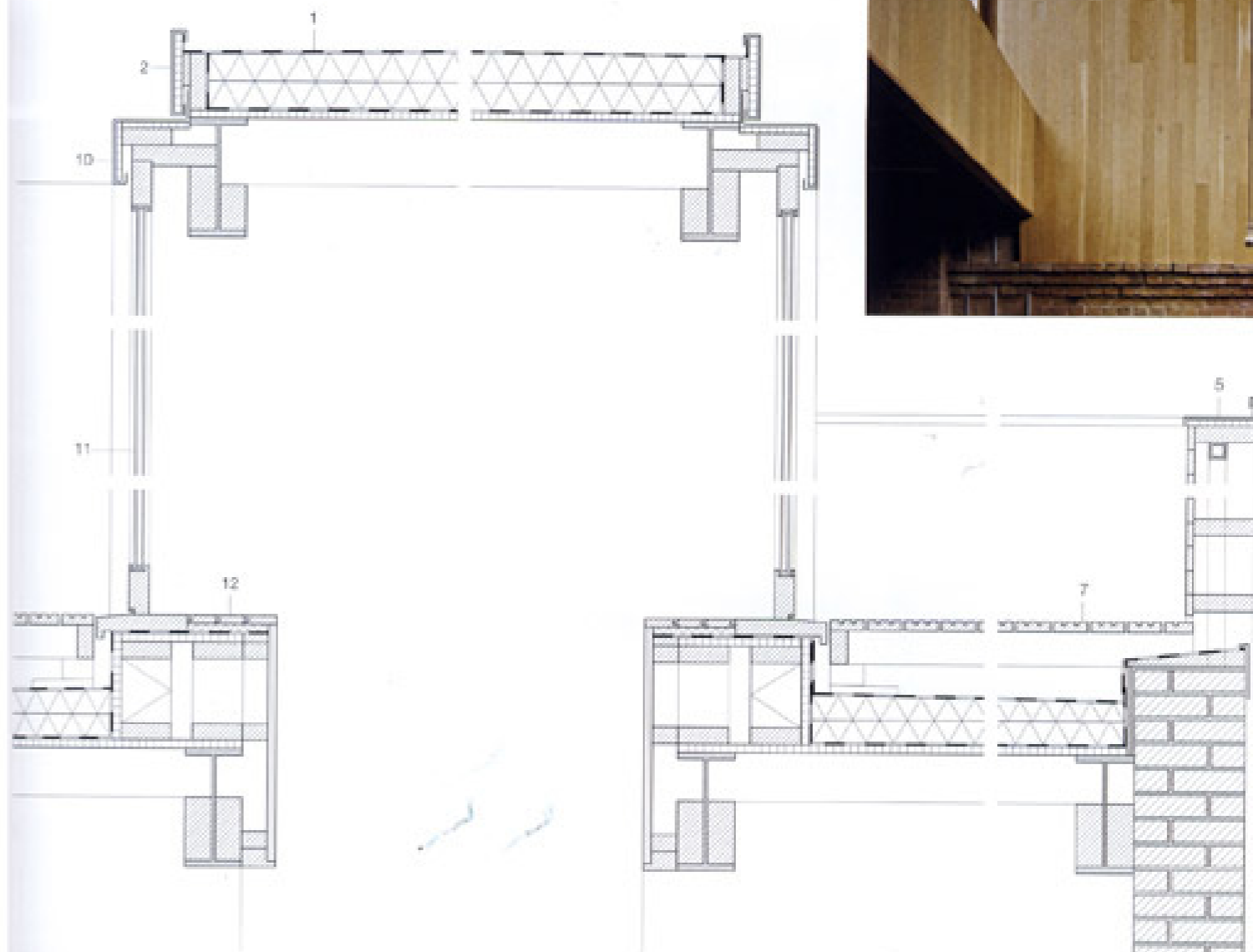


- 1 100 mm concrete wall
80 mm polystyrene rigid insulation
- 2 100 mm reinforced-concrete slab with underfloor heating
100 mm rigid insulation
75 mm existing concrete screed
25 mm existing softwood planks
225/75 existing joists: 100 mm cavity
12 mm plasterboard
- 3 150 mm concrete
254/140/31 mm steel I-beam
- 4 20 mm American white oak
25 mm exterior grade plywood
75 mm existing concrete screed
- 5 100/15 mm oak boarding, tongue and groove
50/25 mm softwood battens
15 mm plasterboard
50 mm metal stud with rockwool insulation
15 mm plasterboard and skim
- 6 440/215/215 mm lightweight hollow blockwork with concrete render to all faces
- 7 fire screen: 10 mm glass in oak frame
- 8 356/171/67 mm existing steel I-beam
- 9 170/54 mm oak timber
- 10 fire door: 15 mm vertical oak boarding, tongue and groove
6 mm high-performance plasterboard
32 mm softwood stud with rockwool insulation



Section through terrace
scale 1:20

- 1 roof construction:
2 mm plastic sealing layer
200/50 mm joists
150–200 mm rigid urethane insulation to falls
2 mm vapour barrier
25 mm exterior grade plywood
306/171/67 mm existing steel I-beam
200/75 mm softwood joists in between
135/81 mm structural softwood, cut to infill
- 2 1.2 mm flush folded copper
on 18 mm exterior grade plywood substrate
- 3 1.2 mm flush folded copper flashing
on 305/89 steel channel
bolted to steel I-beam
- 4 sliding door:
150/54 mm white oak frame
fixed with aluminium top-hung gear system
double glazing, $U = 1.8 \text{ W/m}^2$
6 mm toughened glass
+ 16 mm cavity + 6 mm low-e-glass
- 5 parapet wall:
2 mm vertical standing-seam copper on
18 mm exterior grade plywood
50/50/4 mm hollow section steel frame
fixed on 300/200/12 mm welded steel bracket
set on existing brick wall
frame of 200/75 mm softwood joists
75/19 mm tongue and groove oak boarding
- 6 306/171/67 mm existing steel I-beam
225/50 mm softwood joist in between
150/81 mm structural softwood, cut to infill



- 7 terrace construction:
100/32 mm oak docking screw-fixed onto
100/50 mm joists on galvanized hangers
100/50 mm beam, supported every 1200 mm
100/100 mm tanalised softwood post
300/300/25 mm marine ply spreader plate
2 mm plastic sealing layer
150–200 mm rigid urethane insulation to falls
2 mm vapour barrier
25 mm exterior grade plywood
- 8 bottom door frame of solid section white oak
with aluminium sliding door rail routed in
- 9 20 mm white oak
50 mm rigid insulation between
200/50 mm softwood joists
underfloor heating between joists
145/50 mm softwood joist
2 mm vapour barrier
306/171/67 mm existing steel I-beam
225/50 mm softwood joist in between
- 10 1.2 mm flush folded copper flashing
12 mm exterior grade plywood substrate
- 11 fixed window:
150/54 mm white oak frame
fixed on 260/63 mm horizontal oak frame
double glazing: 6 mm toughened glass
+ 16 mm cavity + 6 mm low-e-glass
bottom window fixed on oak threshold plate
- 12 25/75 mm oak boarding, tongue and groove
18 mm exterior grade plywood
substructure of 150/50 mm studs
with insulation between

