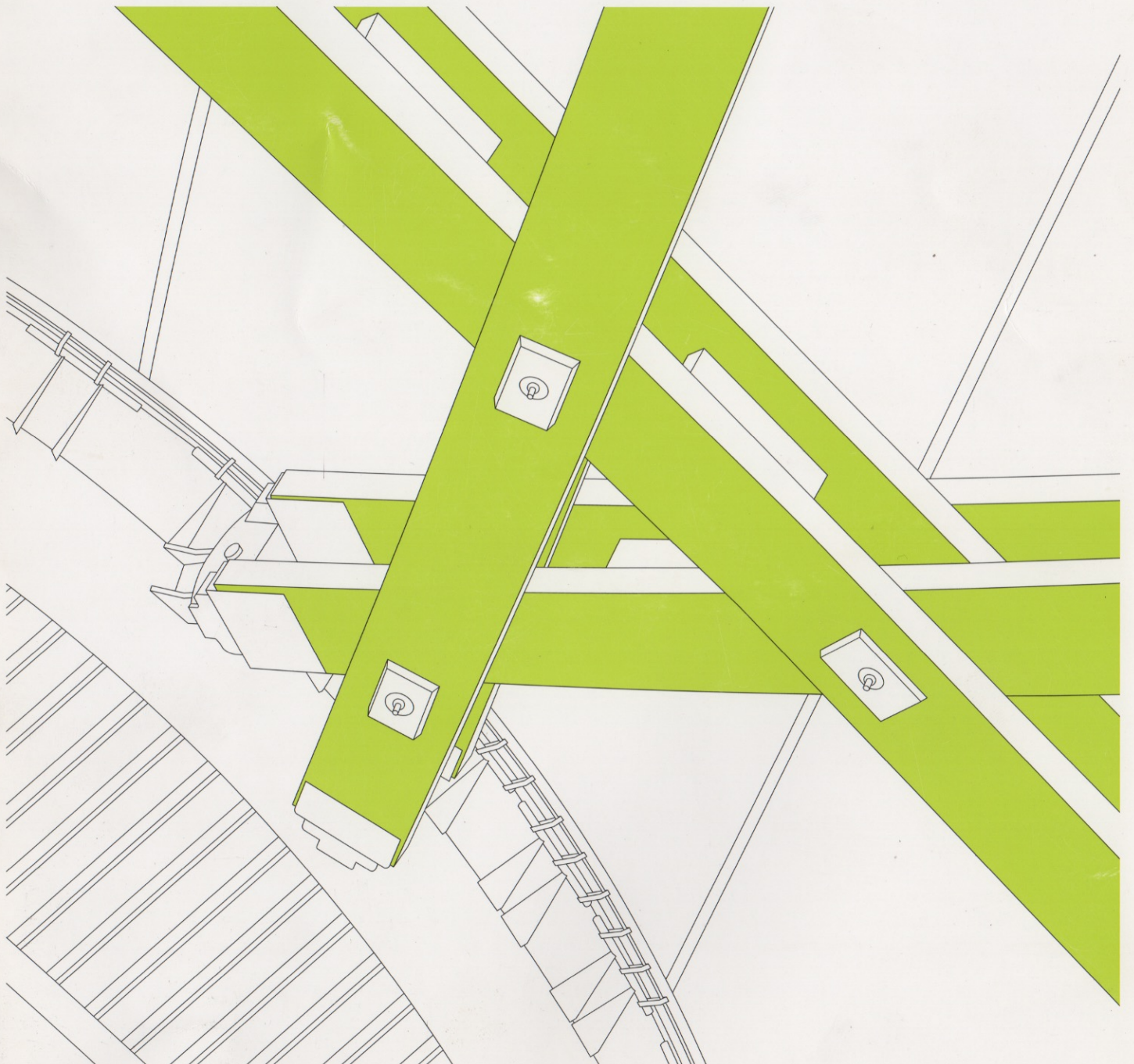


English Edition

DETAIL

Review of Architecture and Construction Details · Timber Construction · Vol. 2010 · 6



Studios in Austin

Architects:

Pollen Architecture & Design, Austin
Elizabeth Alford and Michael Young

Design team:

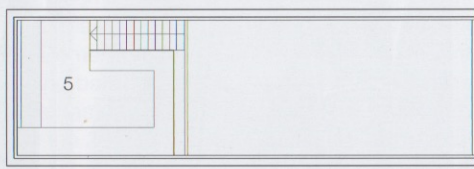
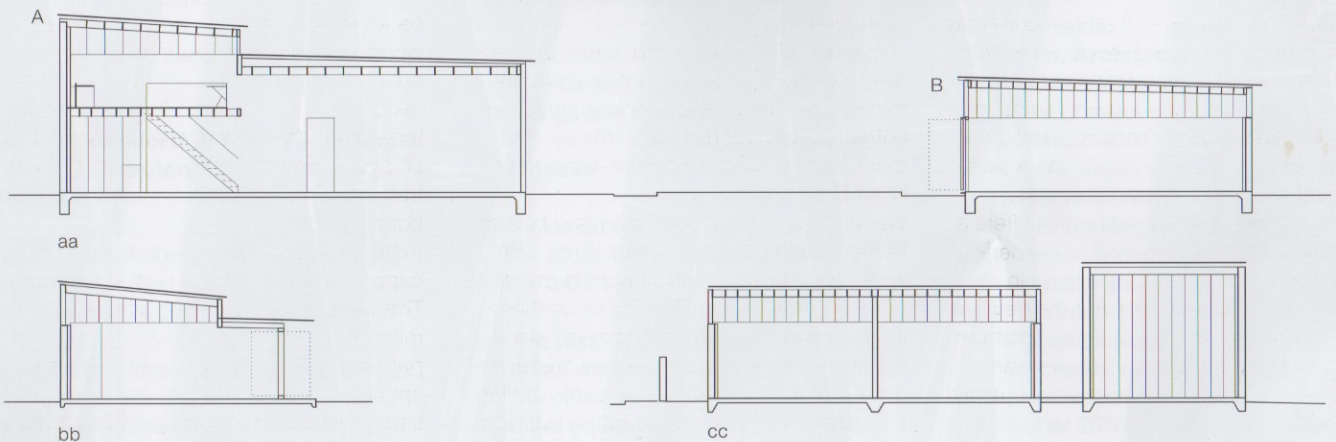
Dason Whisett, James Faircloth,
Sam Schonzeit, Parker Williams,
Lucy Begg

Structural engineer:

Structures, Austin

Gerry Garcia

Others involved in the project: see page 668

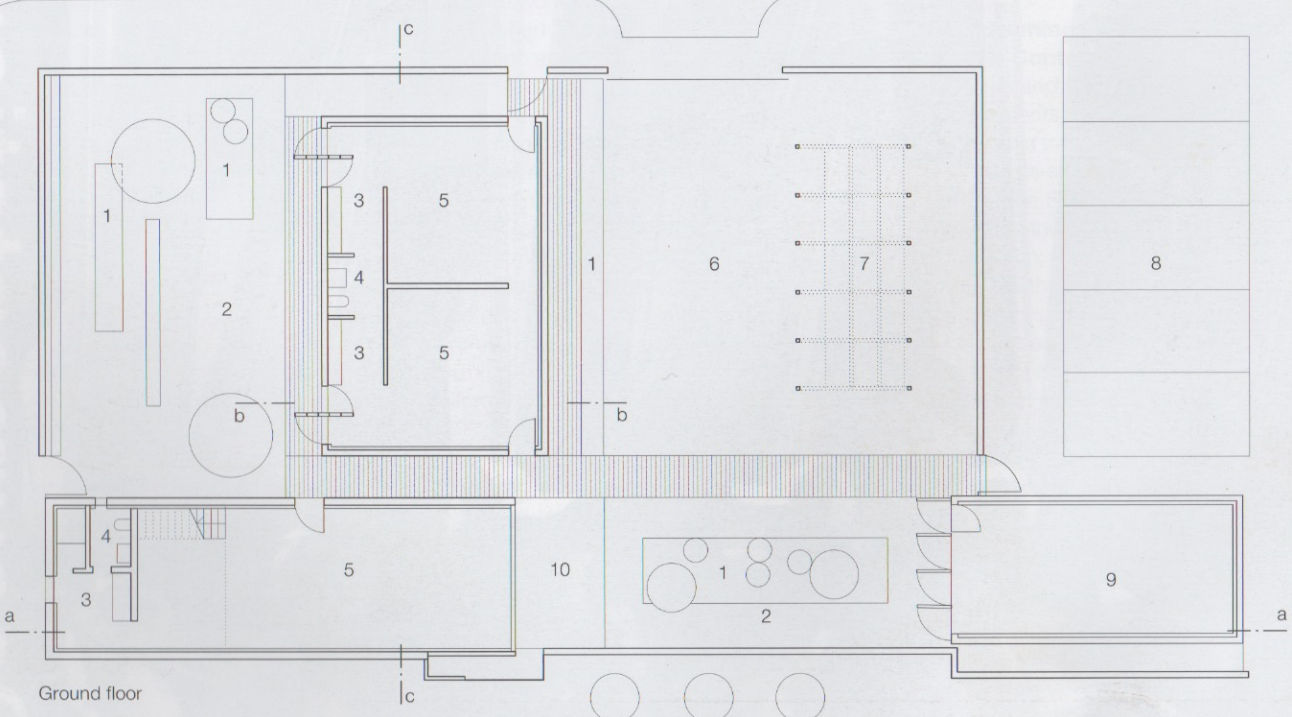


Mezzanine level

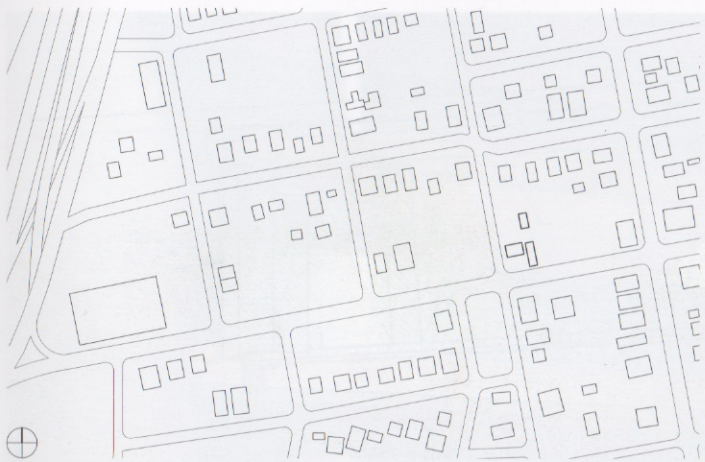
- | | |
|-----------|-----------------------------|
| 1 Planter | granite |
| 2 Gravel | 7 Pergola with solar panels |
| 3 Kitchen | 8 Parking |
| 4 WC | 9 Shop |
| 5 Studio | 10 Rocks |
| 6 Crushed | |

Floor plans
Sections
scale 1:250

Site plan
scale 1:5000



Ground floor

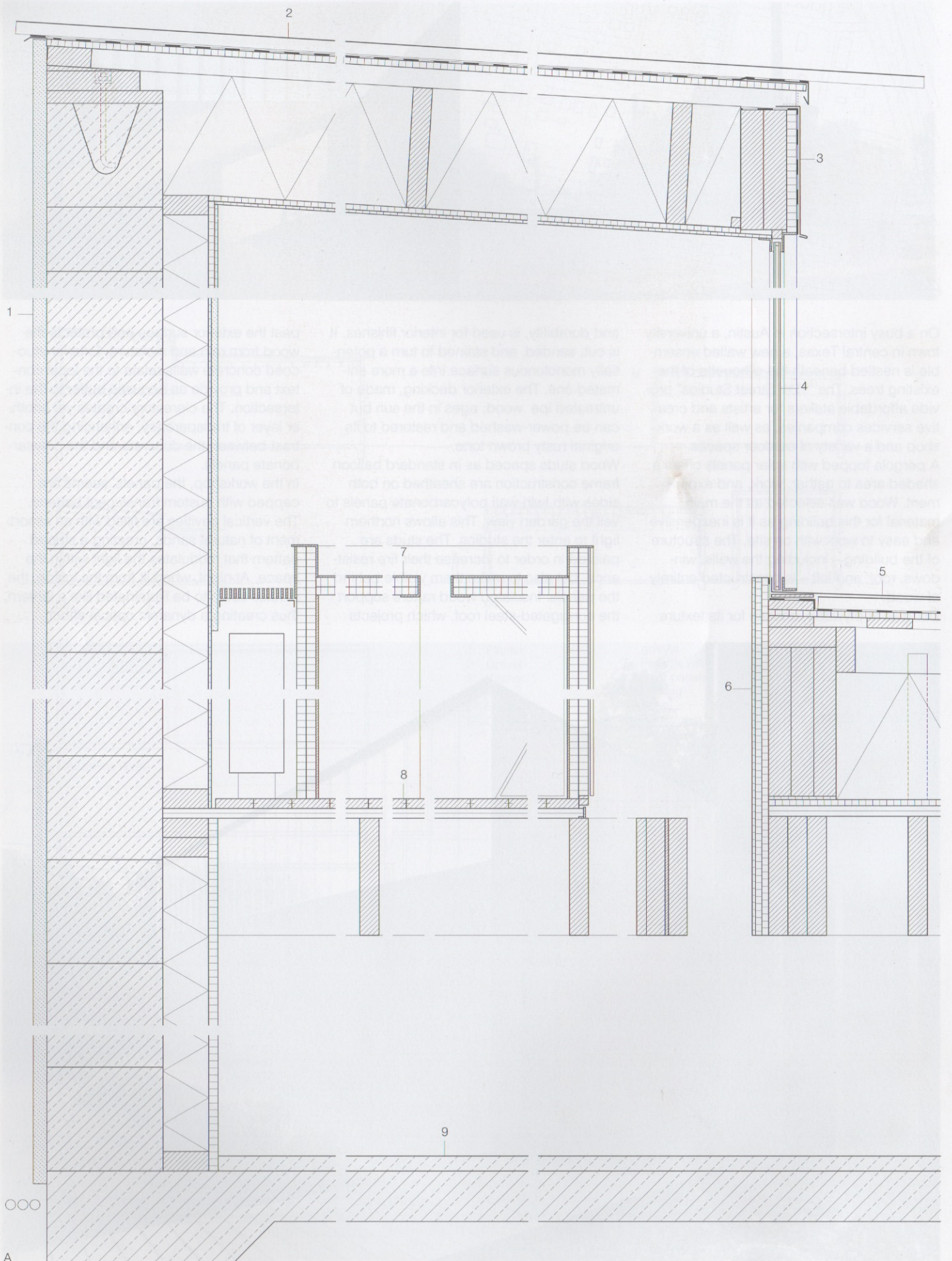


On a busy intersection in Austin, a university town in central Texas, a new walled ensemble is nestled beneath the silhouette of the existing trees. The “12th Street Studios” provide affordable ateliers for artists and creative services companies, as well as a workshop and a variety of outdoor spaces. A pergola topped with solar panels offers a shaded area to gather, work, and experiment. Wood was selected as the main material for this building as it is inexpensive and easy to work with on site. The structure of the building – including the walls, windows, roof, and loft – is constructed entirely of wood. Douglas fir plywood, chosen for its texture

and durability, is used for interior finishes. It is cut, sanded, and stained to turn a potentially monotonous surface into a more animated one. The exterior decking, made of untreated ipe wood, ages in the sun but can be power-washed and restored to its original rusty brown tone. Wood studs spaced as in standard balloon frame construction are sheathed on both sides with twin-wall polycarbonate panels to veil the garden view. This allows northern light to enter the studios. The studs are painted in order to increase their fire resistance, but also to make them visible behind the panels. Insulated wood rafters support the corrugated-steel roof, which projects

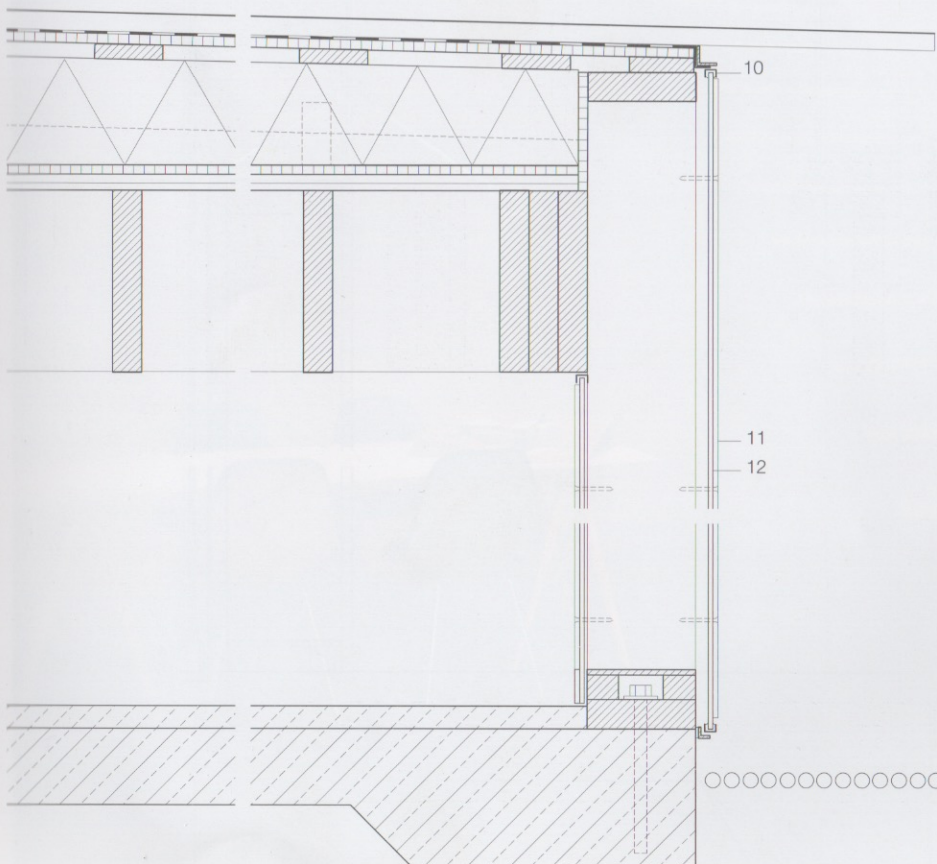
past the exterior surface and protects the wood from rain and moisture. Exterior stuccoed concrete walls relate to the local context and provide an acoustic buffer to the intersection. The clerestory creates yet another layer of transparency, enhancing the contrast between the concrete and the polycarbonate panels. In the workshop, the panels’ seams are capped with custom translucent battens. The vertical cavities are filled with an assortment of natural sands, creating a striped pattern that modulates the light within the space. At night, when lit from the inside, the studios seem to be illuminated like a lantern, thus creating a dynamic optical effect.







Vertical section
scale 1:10



- 1 30 mm cement plaster
203 mm concrete masonry unit
90 mm insulation
7 mm plywood board
13 mm plasterboard
- 2 24 mm corrugated steel sheet, aluminium-zinc coated
rubberized asphalt membrane
13 mm plywood decking
51/102 mm purlin, 254/50 mm joist
254 mm insulation
13 mm plywood
7 mm douglas fir plywood
- 3 steel sheet, aluminium-zinc coated
rubberized asphalt membrane
19 mm plywood
- 4 4 mm float glass with low-e coating +
7 mm cavity + 4 mm float glass
- 5 steel sheet, aluminium-zinc coated
24 mm corrugated steel sheet,
aluminium-zinc coated
rubberized asphalt membrane
13 mm plywood deck
25/102 mm battens
250-63 mm insulation to falls
13 mm plywood deck
13 mm yellow pine, tongue + groove
51/254 mm joist
- 6 7 mm Douglas fir plywood
2x 13 mm plywood
- 7 worktop: steel sheet, aluminium-zinc coated
2x 19 mm plywood
- 8 19/76 mm yellow pine, tongue + groove
19/76 mm yellow pine, tongue + groove,
face down
40/235 mm yellow pine joist
- 9 self-levelling polymeric concrete
120 mm reinforced concrete
- 10 polycarbonate cap
- 11 8 mm acrylic batten, frosted
- 12 8 mm twin-wall polycarbonate sheet



Vertical section
scale 1:10

- 1 24 mm corrugated metal
rubberized asphalt
membrane
- 13 mm plywood decking
- 25/102 mm battens
- 254/50 mm joist
- 254 mm insulation
- 13 mm exterior grade
plywood
- 2 steel sheet, aluminium-zinc
coated
- 3 254/51 mm yellow pine
double ledger, stained
- 4 8 mm twin-wall
polycarbonate sheet, clear
- 5 8 mm frosted acrylic batten
- 8 mm twin-wall
polycarbonate sheet,
sand-filled as sun protection
- 41 mm vertical battens
- 6 102/7 mm aluminium plate
- 7 102/51 mm yellow pine rail
- 8 2x 102/51 mm post
- 9 8 mm twin-wall
polycarbonate sheet
steel sheet, aluminium-zinc,
coated
- 32/32 mm SHS
- 10 8 mm twin-wall
polycarbonate sheet
64/64 mm between
steel angle
- 11 smooth trowelled
concrete slab
- 12 51/153 mm yellow
pine block
- 13 8 mm frosted acrylic battens
- 8 mm twin-wall
polycarbonate sheet,
sand-filled
- 2x 19 mm vertical battens
- steel sheet, aluminium-zinc
coated
- 19 mm exterior grade
plywood
- 153 mm insulation
- 13 mm exterior grade
plywood
- 14 43/35 mm pressure-treated
plate
- 15 51/26 mm steel angle

