

CASE STUDY

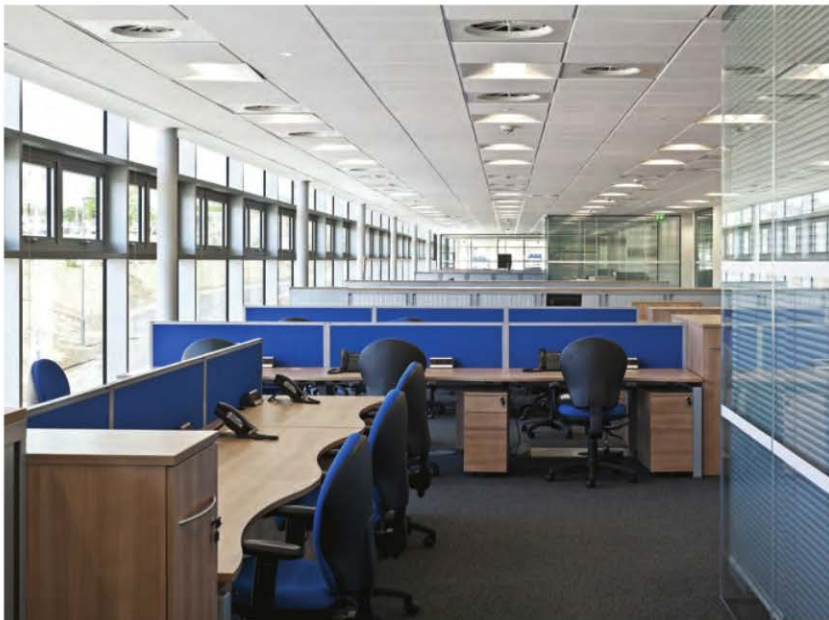
**ABERDEEN
CRIMINAL
JUSTICE AND
CUSTODY
CENTRE,
ABERDEEN**
**RYDER
ARCHITECTURE**



Above The fully glazed administration block is in stark contrast to the precast concrete custody suite below

Below White steel pillars punctuate the full-height glazing

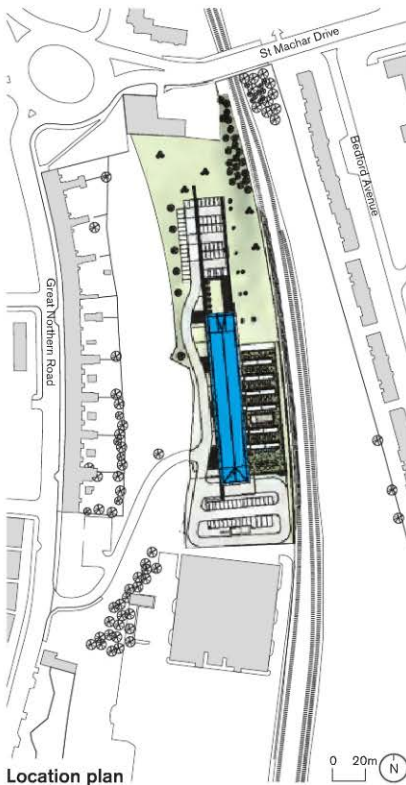
Photography by
Keith Hunter



This building is one of contrasts. The simple, linear form is defined by local characteristics of site layout and topography. A process-driven plan defines the journey of a custody from arrival through to release or prison, while the section reinforces the separation of functions, highlighting the contrast between secure and unrestricted, heavy and ephemeral, closed and open, light and dark.

Contrast is heightened by materiality. Below, the heavy, dense, cellular, precast concrete custody suite, rugged in texture, emerges from the landscape as an extrusion of Aberdeen's granite bedrock. Above sits the light, public, open-plan administration and support wing, a precise steel and glass pavilion, with the white steel pillars and a floating roof plane referencing the ideal of the civic forum on the hillside.

The building seeks to reflect the ethos and aspirations of its operating organisation: robust, durable, secure and authoritative as befitting its function, yet also expressing the idea of openness, simplicity, fairness and justice. *Chris Malcolm, architectural director, Ryder Architecture*



Location plan

Specified products

Suspended ceilings

CEP Ceilings
Sequence 600 x 600 mineral fibre tiles
www.cepceilings.com

Custody suite secure partitions

Creagh Concrete
150mm precast concrete wall panel system
www.creaghconcrete.com

Cell doors and specialist custodial fittings

Cell Security
Securitech
Classified
www.cellsecurity.co.uk
www.securitech.ie

Precast concrete cladding

Techrete
370mm thick light grit-blasted composite panel with
hammered finish insets
www.techrete.com

Curtain walling

Kawneer
Kawneer AA100HC system with capless
vertical joints
www.kawneer.com

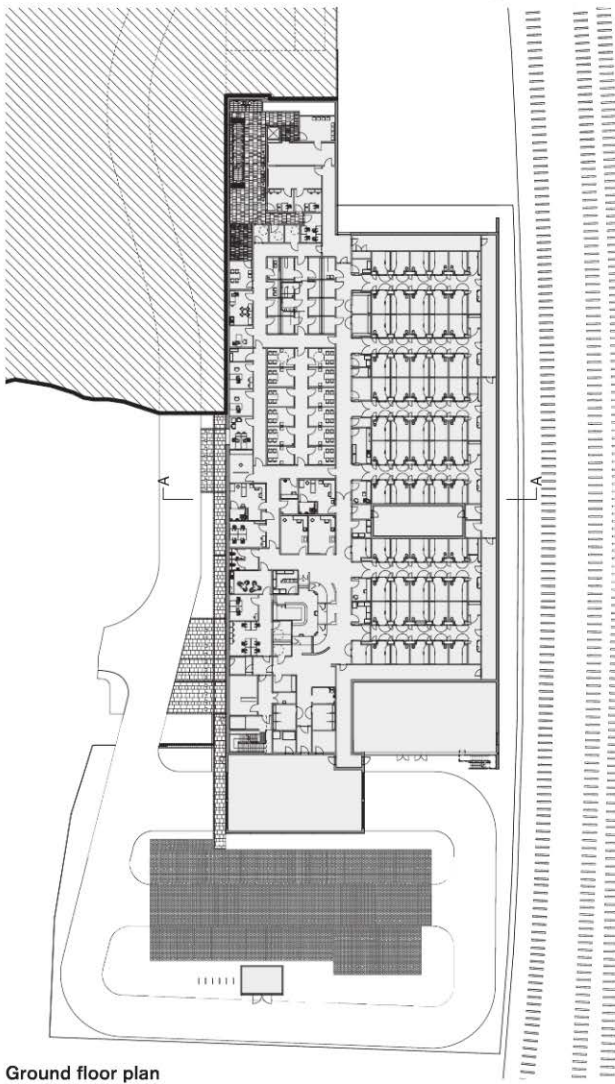
Roofing

Bauder
Total Green Roof system (sedum green roof),
Thermofol system (single ply roofing)
www.bauder.co.uk

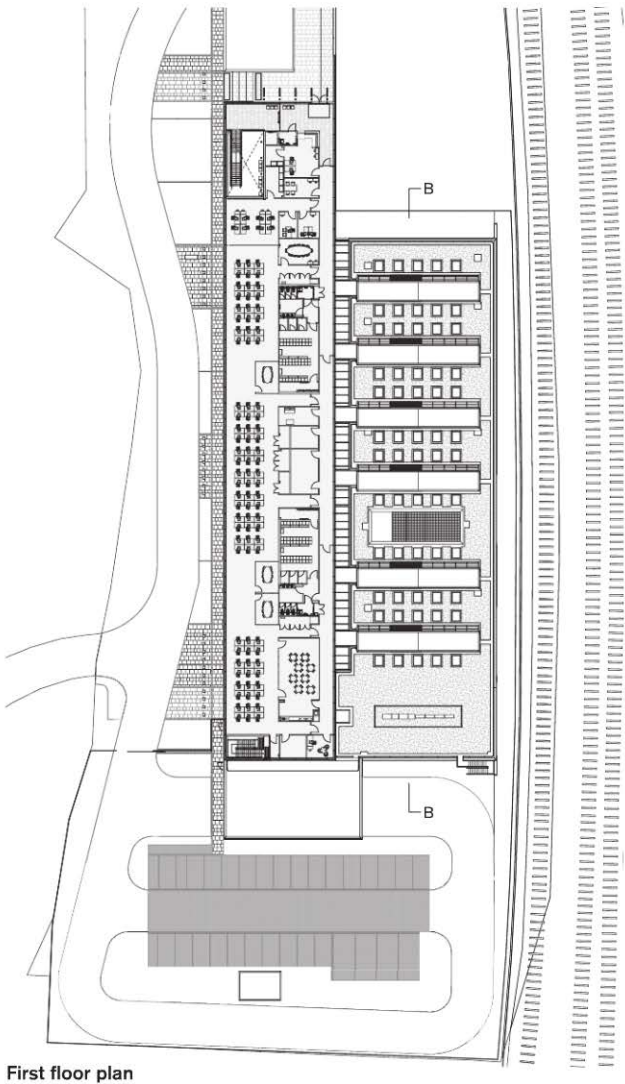
Project data

Start on site January 2013
Completion May 2014
Gross internal floor area 4,500m²
Form of contract or procurement route
Design and Build
Construction cost £11.5 million
Construction cost per m² £2,555
Client Police Scotland/Hub North
Scotland Limited
Structural engineer Buro Happold
Quantity surveyor Sweett Group
Project manager Sweett Group
MEP consultant TÜV SÜD Wallace Whittle
Landscape architect TGP Landscape Architects
CDM coordinator Sweett group
Main contractor Balfour Beatty
CAD software used Revit
Annual CO₂ emissions 62.8kg/m²

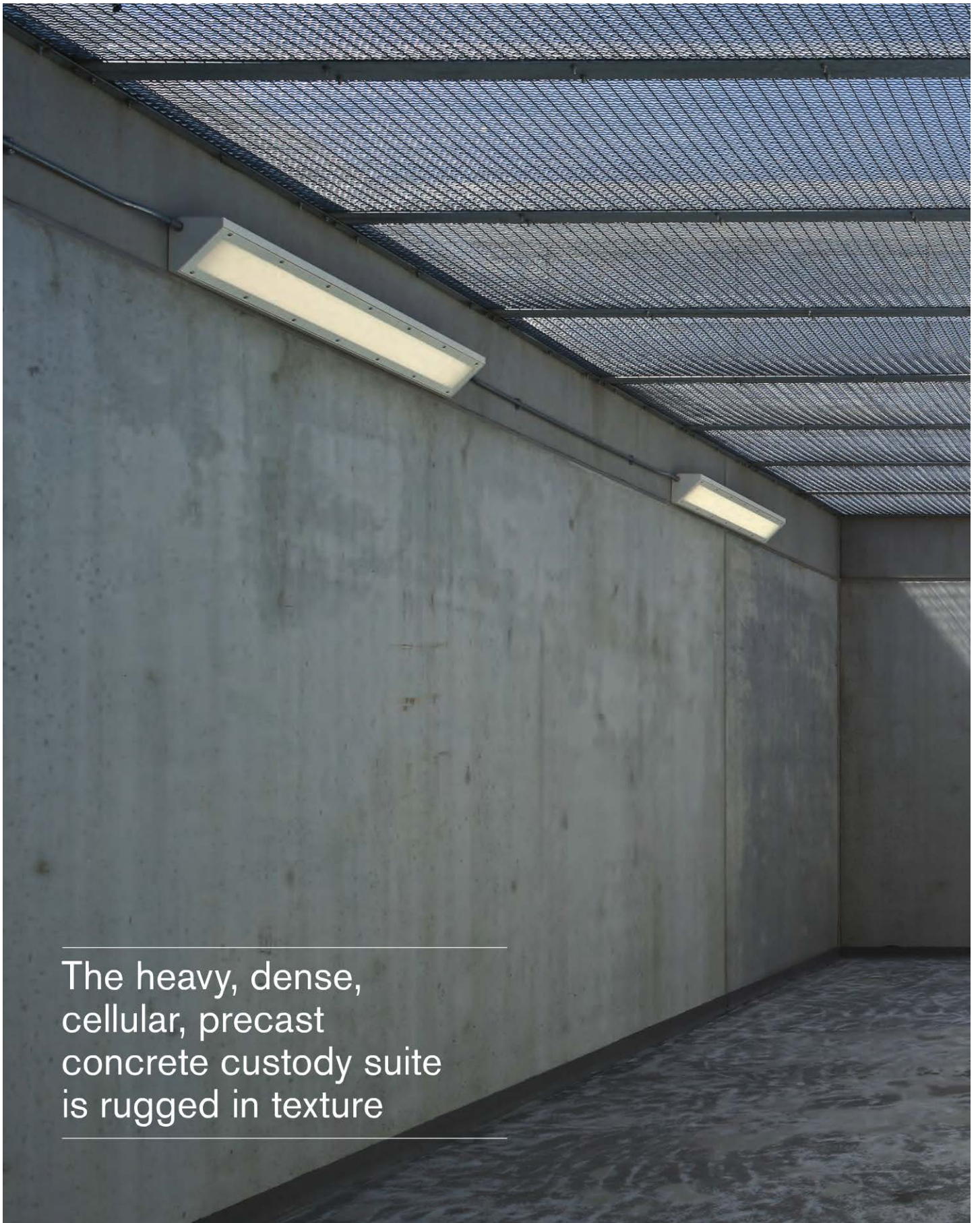
Right First-floor meeting space
Next page The custodial suite is clad in precast concrete
Please note, for security reasons it is not possible to annotate the plans and section drawings



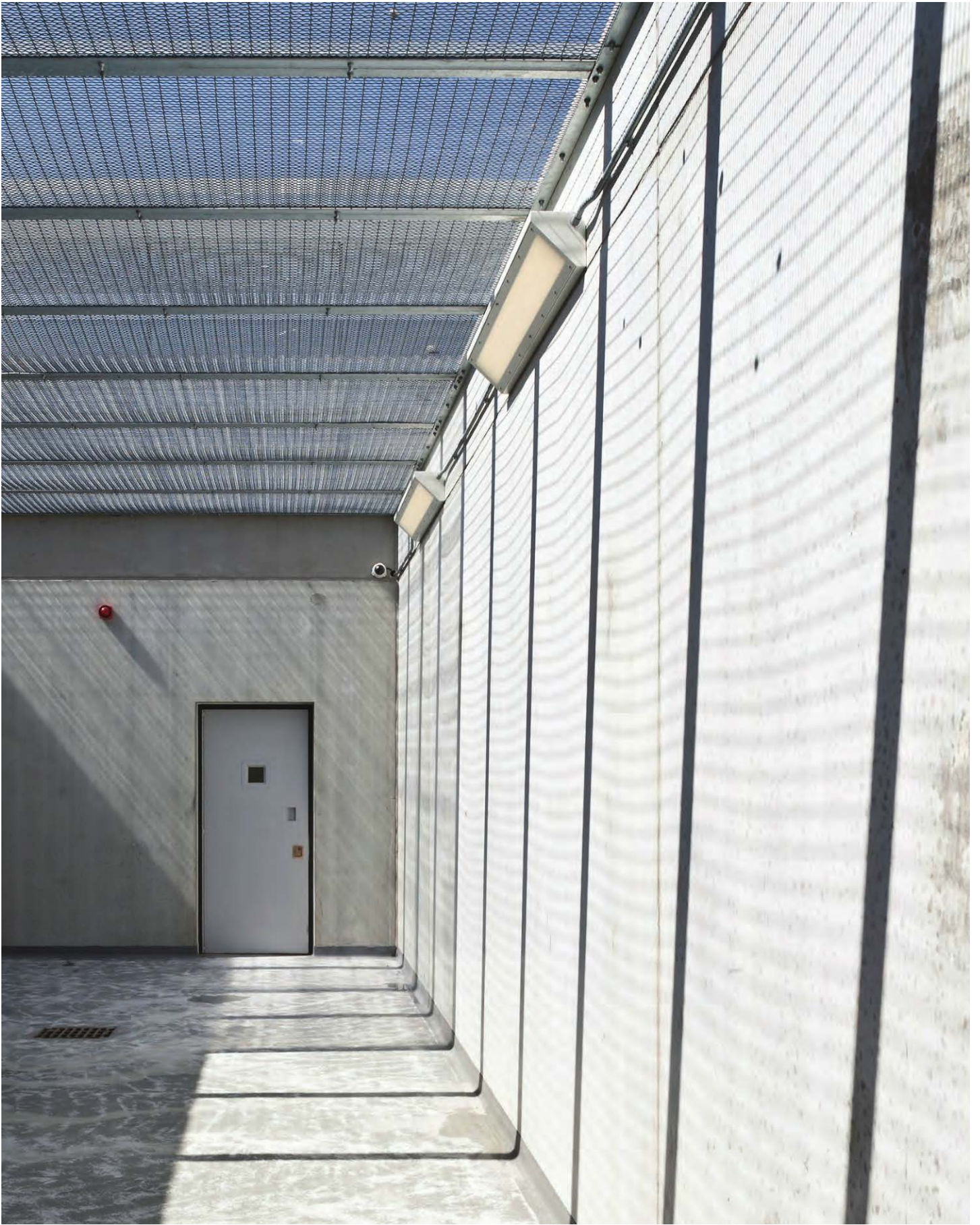
Ground floor plan



First floor plan



The heavy, dense,
cellular, precast
concrete custody suite
is rugged in texture





The building seeks to reflect the ethos of its operating organisation: robust and secure yet also expressing the idea of openness, simplicity and fairness

Above The building incorporates a green roof and roof lights
Right Internal corridors are flooded with natural light



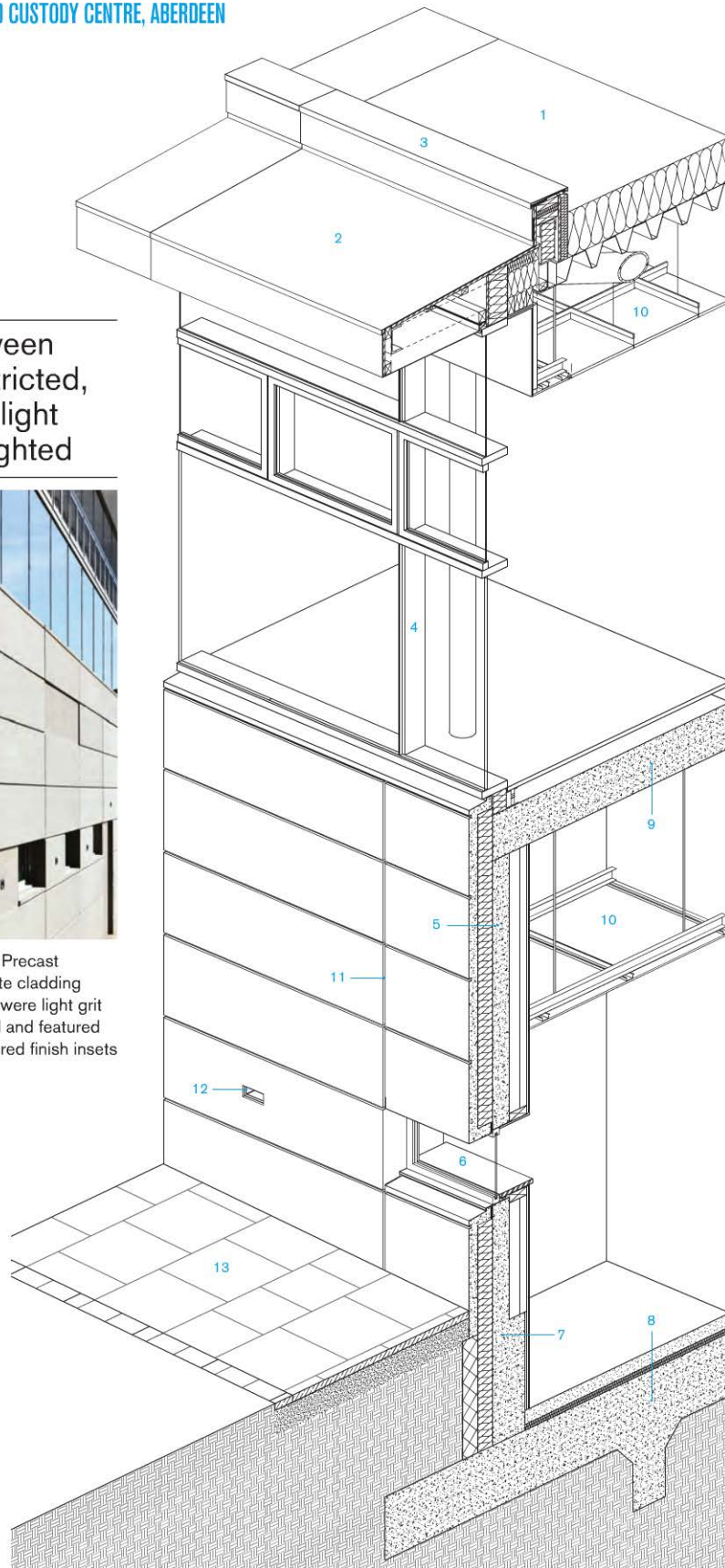
Section A-A

0 5m



Section B-B

The contrast between secure and unrestricted, closed and open, light and dark, is highlighted



- 1. Single-ply membrane on warm roof system
- 2. White PPC Alucobond on steel outriggers to form cantilever
- 3. Silver anodised aluminium flashing
- 4. Silver anodised curtain wall system with capless verticals
- 5. Precast concrete sandwich panel with light grit blast finish
- 6. Silver anodised aluminium secure window
- 7. Concrete retaining wall
- 8. Structural foundation and load-bearing slab
- 9. Precast concrete slab with raised access floor
- 10. Suspended ceiling system
- 11. 20 x 20mm recess to external concrete leaf
- 12. Recessed external light fitting
- 13. Concrete flagstone

Above Precast concrete cladding panels were light grit blasted and featured hammered finish insets

Detail