



Detail in Contemporary Residential Architecture

Virginia McLeod

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drawings

Contents

6 Introduction

8 Concrete

- 10 **01** Alberto Campo Baeza
De Blas House, Spain
- 14 **02** Baumschlager & Eberle
Flatz House, Liechtenstein
- 18 **03** Studio Daniel Libeskind
Studio Weil, Spain

- 22 **04** Georg Driendl
Solar Tube, Austria

- 26 **05** Jim Jennings Architecture
Visiting Artists' House, USA

- 30 **06** Kei'ichi Irie + Power Unit
Studio
Y House, Japan

- 34 **07** Léon Wohlhage Wernik
Architekten
House Voss, Germany

- 38 **08** Pugh + Scarpa
Solar Umbrella, USA

- 42 **09** Tadao Ando
4 x 4 House, Japan

46 Glass

- 48 **10** Aranda Pigem Vilalta
M-Lidia House, Spain

- 52 **11** Ian Moore Architects
Rose House, Australia

- 56 **12** Kazuyo Sejima & Associates
Small House, Japan

- 60 **13** Kruunenberg Van der Erve
Laminata, House of Glass,
The Netherlands

- 64 **14** Shigeru Ban Architects
Picture Window House, Japan

- 68 **15** Carlos Zapata Studio
Private House, Ecuador

72 Masonry

- 74 **16** Brückner + Brückner
Architekten
House in the Landscape,
Germany

- 78 **17** Adjaye Associates
Dirty House, UK

- 82 **18** Carlos Ferrater
Tagomago House, Spain

- 86 **19** John Pawson
Tetsuka House, Japan

- 90 **20** MADA s.p.a.m.
Father's House, China

- 94 **21** Olson Sundberg Kundig
Allen Architects
Chicken Point Cabin, USA

- 98 **22** Will Bruder Architects
Sky Arc House, USA

102 Steel

- 104 **23** Aranda Pigem Vilalta
Bellows House, Spain

- 108 **24** Architecture Research Office
(ARO)
Colorado House, USA

- 112 **25** Julie Snow Architects
Koehler House, Canada

- 116 **26** Lorcan O'Herlihy Architects
Vertical House, USA

- 120 **27** Mack Scogin Merrill Elam
Architects
Mountain Tree House, USA

- 124 **28** Marin + Trottin
Artifice/MR House, France

- 128 **29** Shuhei Endo
Springecture B, Japan

- 132 **30** Troppo Architects
Rozak House, Australia

- 136 **31** Atelier Bow-Wow +
Tokyo Institute of Technology
Tsukamoto Lab
Gae House, Japan

- 140 **32** Werner Sobek
House R128, Germany

- 144 **33** WPA Inc.
Villa Lucy, USA

148 Timber

- 150 **34** Álvaro Siza Vieira
House in Oudenbourg, Belgium

- 154 **35** Architect Antonius Lanzinger
Single Family House, Austria

- 158 **36** Bernard Quirot +
Olivier Vichard
Convercey House, France

- 162 **37** Drew Heath Architect
Zig Zag Cabin, Australia

- 166 **38** Edge Design Institute Ltd.
Suitcase House, China

- 170 **39** Fougerson Architecture
Jackson Family Retreat, USA

- 174 **40** Kengo Kuma & Associates
Bamboo Wall House, China

- 178 **41** Martin + Martin Arquitectos
La Vega House, Spain

- 182 **42** Patkau Architects
Agosta House, USA

- 186 **43** Stutchbury and Pape
Verandah House, Australia

- 190 **44** RoTo Architects
Gompertz Residence, USA

- 194 **45** Sean Godsell
Peninsula House, Australia

- 198 **46** Smith-Miller + Hawkinson
Architects
Mustang Meadow, USA

202 Aluminium, Bamboo, Plastic, Rubber and Straw

- 204 **47** Ábalos + Herreros
Studio Gordillo, Spain

- 208 **48** Kengo Kuma & Associates
Plastic House, Japan

- 212 **49** Masaki Endoh +
Masahiro Ikeda
Natural Ellipse, Japan

- 216 **50** Sarah Wigglesworth
Architects
Stock Orchard Street House, UK

- 220 **51** Simon Conder Associates
Black Rubber Beach House, UK

- 224 **52** Steven Holl Architects
Turbulence House, USA

- 230 Directory of Details
233 Directory of Architects
236 Index
238 Picture Credits
239 Acknowledgments

22
Will Bruder Architects
Sky Arc House
Marin County, California, USA

Area
595 square metres (6,400 square feet)

Project Team
Will Bruder, Ben Nesbeitt, Eric Weber,
Dominique Price, John Puhr, Jeff
Densic, Rob Gaspard, Michael
Crooks, Tom Cheney, Joe Herzog,
Richard Jensen, Katie Jones, Dwayne
Smyth, Troy Strange, Greg Packham

Structural Engineer
Rudow + Berry, Inc

Main Contractor
Van Acker Construction Associates

This house is located on a forested hillside with dramatic views to the bay and Mount Tamalpais. The steep eastern part of the site was chosen for a new residence for a young family, while the western part accommodates a play area and garden, as well as a recording studio. An open-air stair links the residence through a tunnel under the driveway. The simple volumes, clad in pre-weathered pewter-grey zinc, recede into the texture of the landscape, with vertical standing seams in the cladding. The glazing is 'solex green' for visual harmony with the landscape, with operable windows in mahogany, and in lieu of overhangs, shade is provided by translucent fibreglass awnings.

The process of arrival begins as the driveway widens into a forecourt of ripple-textured concrete. A rhythm of translucent slots lead to the entryway, where the warm glow of a resin lantern-wall indicates the timber entry door. Children's bedrooms and a modest guest suite with bay views are located on the entry level. A switchback stair leads down to the main living level where expansive panoramas of the bay and mountains are revealed. Outwardly, the room expands seamlessly through glass and sliding partitions to a timber deck and lawn terrace. From the living room, the gallery tunnel connects to the garden stair and then to the studio. The studio and control room are shaped by acoustic considerations, their volumes sized and tuned for quality of sound, and built of in-situ concrete to minimize sound transmission.



1 Backing onto a steep hillside, the house curves with the topography to embrace dramatic views of the forest.

2 Stepping up along the hill, the verticality of the facades is reinforced by standing seam zinc cladding, interrupted with slots of glazing to take in the views.

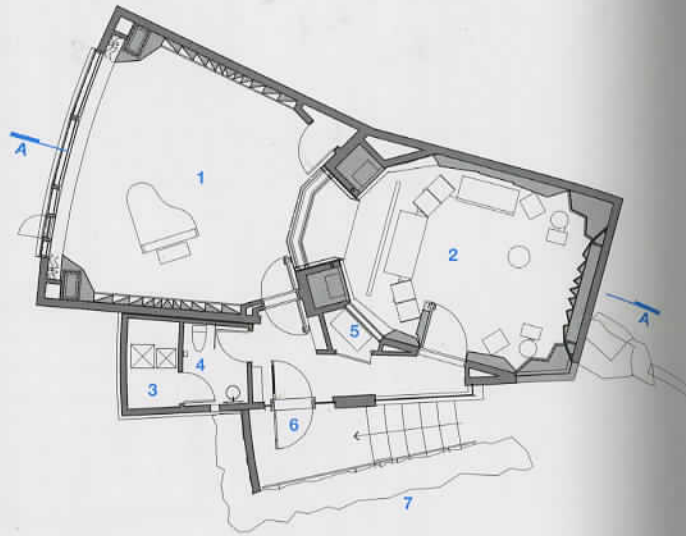
3 The south-east facade is shaded by translucent fibreglass awnings.



22.01
Studio Floor Plan
1:200

- 1 Recording studio
- 2 Control room
- 3 Utility and store

- 4 WC
- 5 Machine room
- 6 Entry
- 7 Garden



as a gallery.

5 View of the main entry where a wall of resin glows in welcome.

6 The interior of the studio is designed to maximize the acoustic performance of the space while connecting the musician with the landscape outside with panels of clear glazing.



22.02
Lower Level Floor Plan
1:200

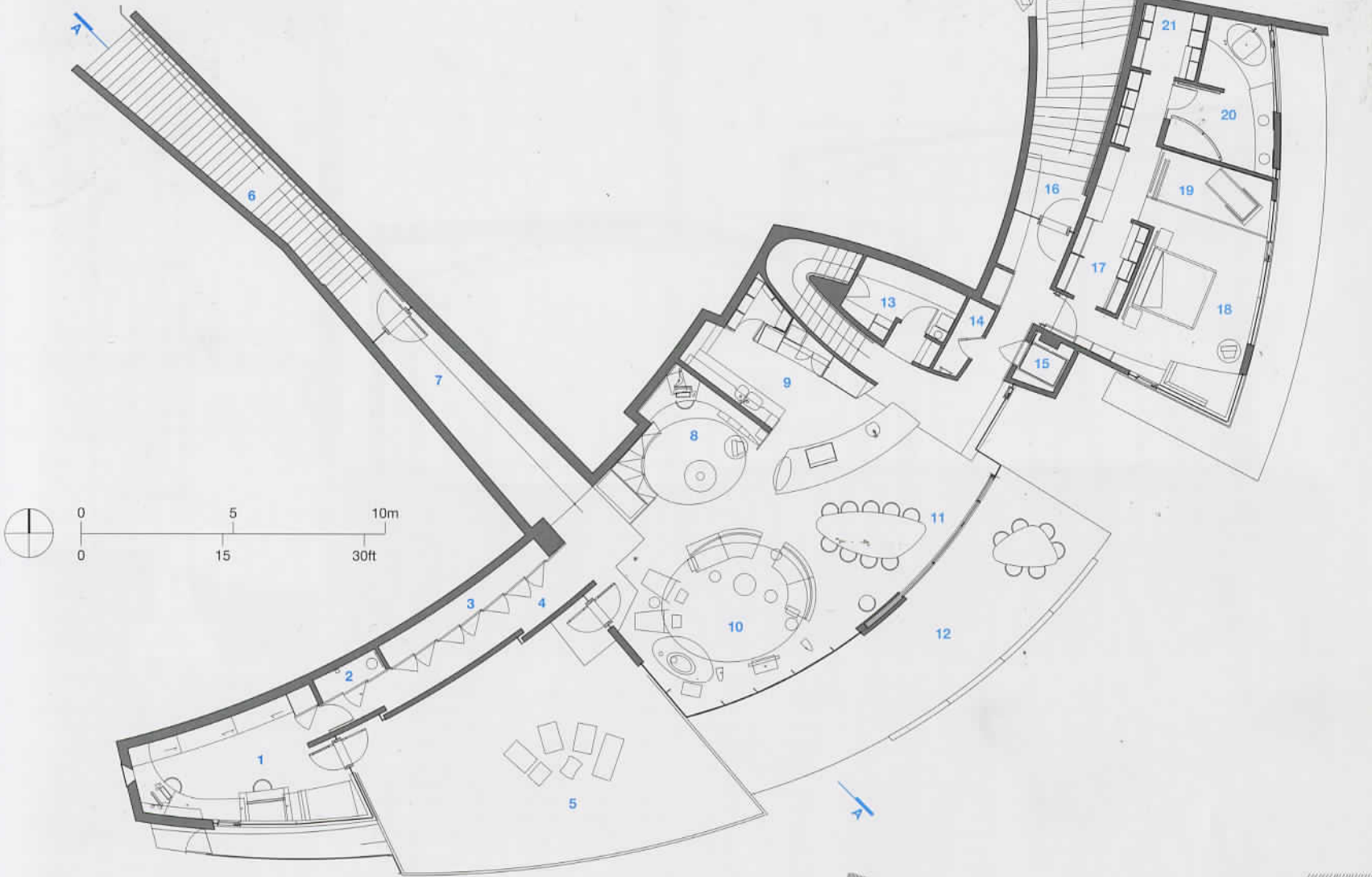
- 1 Graphics studio
- 2 WC

- 3 Store
- 4 Graphics gallery
- 5 Terrace
- 6 Garden stair
- 7 Gallery
- 8 Children's play

- 9 Kitchen
- 10 Living area
- 11 Dining area
- 12 Deck
- 13 Laundry

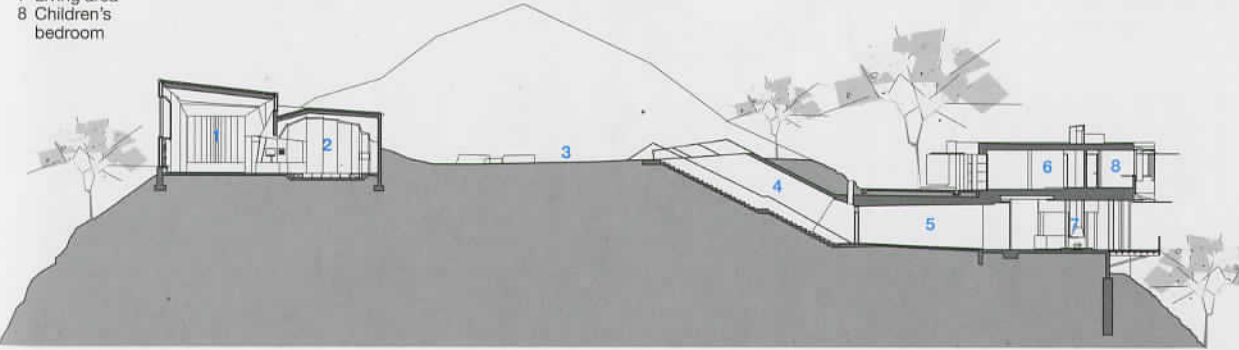
- 14 WC
- 15 Lift
- 16 Passage to forest
- 17 Dressing room
- 18 Master bedroom
- 19 Exercise studio

- 20 Master bathroom
- 21 Dressing room



22.03
Section A-A
1:500

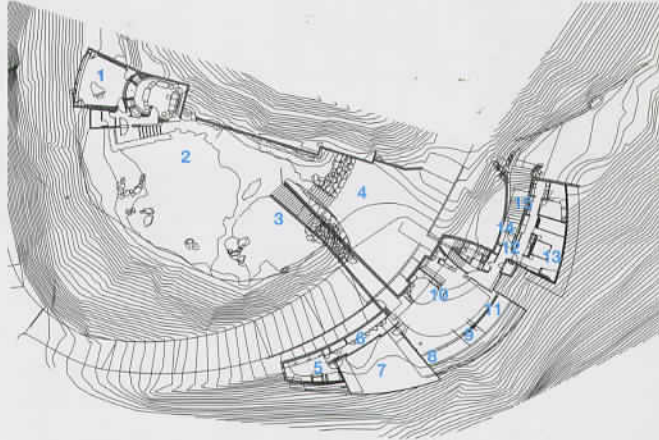
- 1 Recording studio
- 2 Control room
- 3 Garden
- 4 Garden stair
- 5 Gallery
- 6 Garage
- 7 Living area
- 8 Children's bedroom

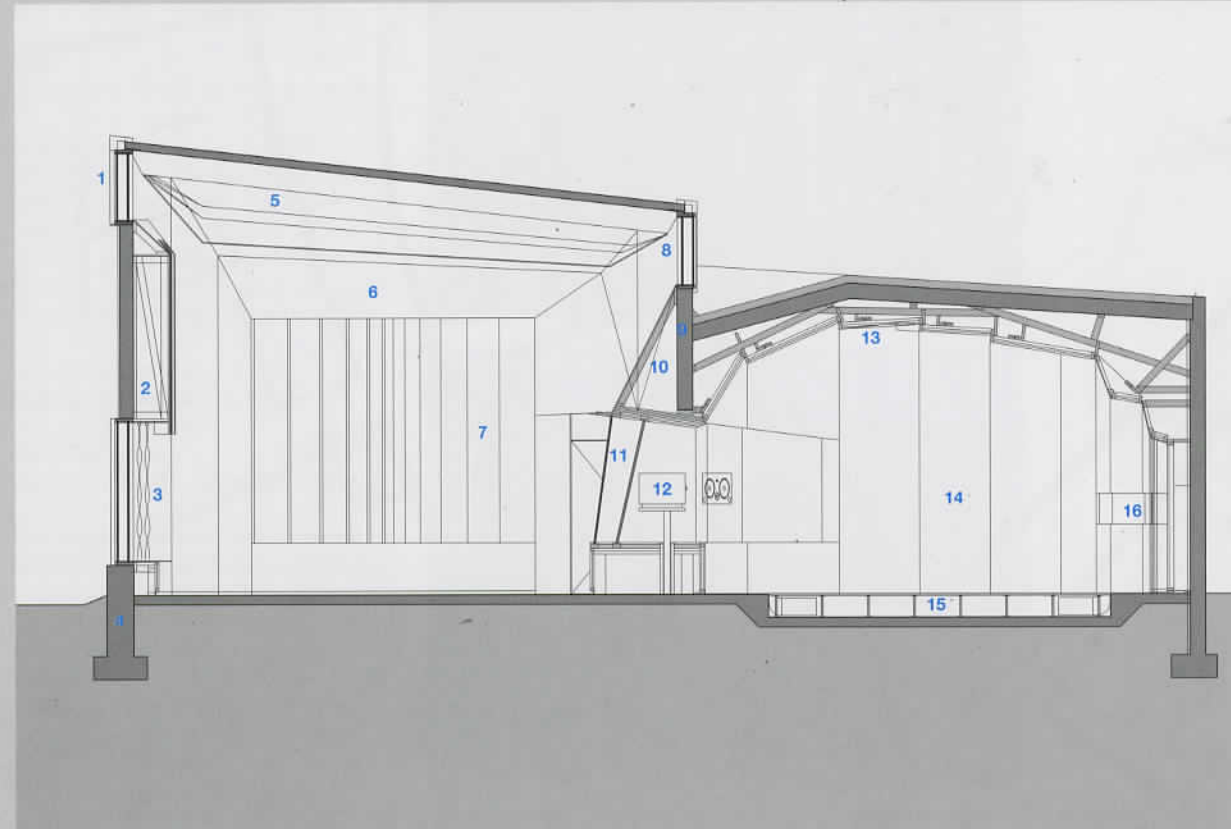


22.04
Site and Upper Level Floor Plan
1:1000

- 1 Music studio
- 2 Garden
- 3 Garden stair
- 4 Guest parking
- 5 Graphics studio below

- 6 Gallery below
- 7 Terrace below
- 8 Child's bedroom
- 9 Bathroom
- 10 Parking
- 11 Child's bedroom
- 12 Guest bedroom
- 13 Master suite below
- 14 Guest bathroom
- 15 Guest bedroom





**22.05
Studio Section
1:100**

1 Timber window and zinc flashing assembly
2 Gypsum board over 50 x 100 mm (2 x 4 inch) timber framed acoustic reflector
3 Insulated timber frame window assembly with laminated solex glazing
4 Reinforced concrete wall

5 Gypsum board over 50 x 100 mm (2 x 4 inch) timber framed acoustic reflector
6 Gypsum board over 50 x 100 mm (2 x 4 inch) timber framed acoustic reflector
7 50 mm (2 inch) rigid insulation soak panel on timber frame
8 Timber window and zinc flashing assembly
9 Reinforced concrete wall
10 Gypsum board over

50 x 100 mm (2 x 4 inch) timber framed acoustic reflector
11 Laminated glass acoustic glazing assembly
12 Removeable aluminium centre speaker
13 50 mm (2 inch) rigid insulation soak panel on timber frame
14 50 mm (2 inch) rigid insulation soak panel on timber frame
15 Acoustically

isolated raised access floor and plenum
16 Translucent laminated glazing over internal lighting (clear laminated glazing to opposite end)

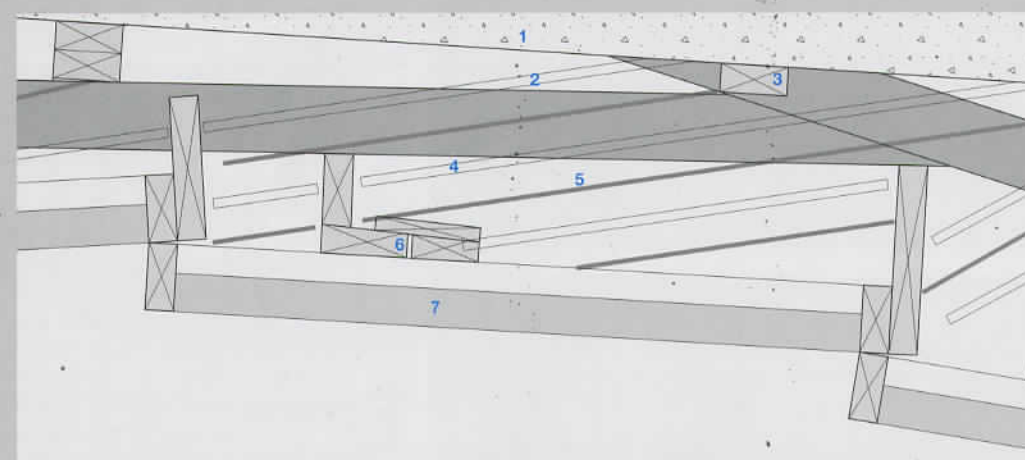
**22.06
Studio Wall Section
1:50**

1 Class A fully adhered membrane roof
2 100 mm (4 inch) rigid insulation board
3 Concrete roof deck
4 Timber window and zinc flashing assembly
5 Gypsum board to be flush with removeable stop to facilitate glazing replacement

6 Gypsum board on timber frame
7 Flat seam zinc flashing
8 Gypsum board on timber frame
9 Return finish at edge
10 Insulated timber window assembly with laminated solex glazing

11 Stainless steel plate with non-directional finish on plywood substrate and support frame
12 Rigid fiberglass soak panel with glued cloth covering on timber frame
13 Recessed aluminium base
14 Aggregate base course
15 100 mm (4 inch) concrete slab
16 50 mm (2 inch) rigid

insulation and vapour barrier
17 Finished grade
18 Reinforced concrete wall
19 Composite perimeter drain
20 Mortar wash
21 Reinforced concrete foundation



**22.07
Control Room Ceiling
Detail
1:10**

1 Reinforced concrete roof
2 50 x 100 mm (2 x 4 inch) timber acoustic panel framing beyond
3 50 x 100 mm (2 x 4 inch) timber nailer with 'tapcon' anchors at

405 mm (16 inch) centres
4 Alternating layers of 12 mm (1/2 inch) sound deadening board and batt insulation to fill cavity completely
5 Alternating layers of 12 mm (1/2 inch) sound deadening board and batt insulation to fill cavity completely

6 Taper cut timber panel support clips
7 50 mm (2 inch) rigid insulation soak panel on timber frame

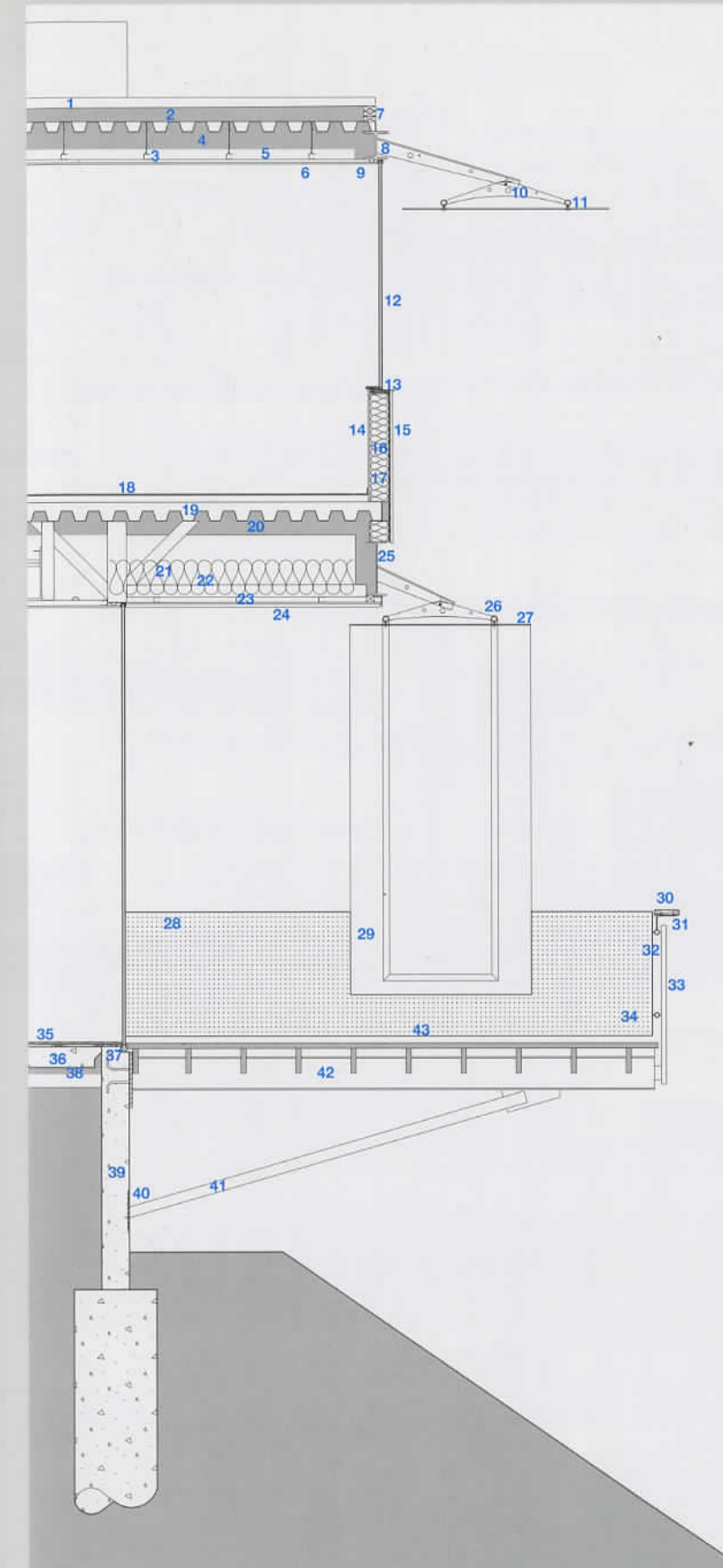
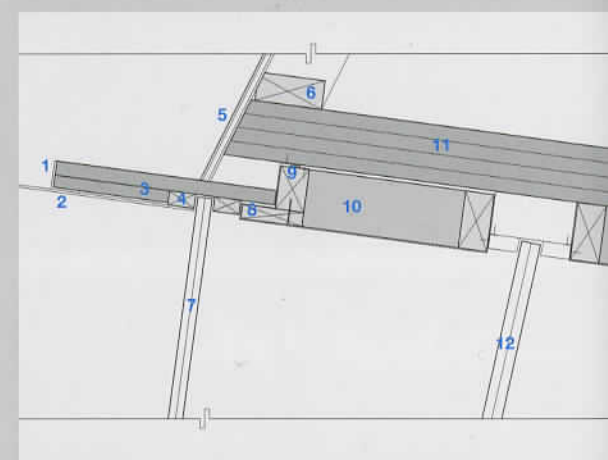
**22.08
Window Head at Control Room View Portal Detail
1:10**

1 Stainless steel angle with polished finish
2 Stainless steel head plate with non-uniform finish to both faces and polished edge

3 38 mm (1 1/2 inch) plywood head plate support
4 Completely filled cavity with acoustic caulk airtight seal
5 Veneer plaster over gypsum board
6 50 x 100 mm (2 x 4 inch) timber reflector panel framing
7 19 mm (3/4 inch)

laminated glazing
8 Fabric wrapped soak panel trim board
9 Galvanized Z-clip soak panel support
10 76 mm (3 inch) rigid insulation soak panel on timber frame
11 19 mm (3/4 inch) plywood portal head assembly to 76 mm (3 inch) total thickness

12 25 mm (1 inch) laminated glazing



**22.09
Wall Section
1:50**

1 Class A single ply membrane roof
2 Tapered roof insulation
3 Runner mains at 610 mm (24 inch) centres
4 Spray on foam insulation
5 Hat channels at 610 mm (24 inch) centres
6 12 mm (1/2 inch) gypsum board ceiling
7 Flat lock zinc fascia
8 Beam with mill markings concealed on inside of beam
9 22 mm (7/8 inch) hat channel welded to bottom flange of beam
10 Steel bracket arm and continuous pipe frame
11 9 mm (3/8 inch) thick translucent fiberglass awning
12 Insulated glazing
13 Sill flashing
14 Gypsum board wall lining
15 Standing seam zinc cladding over air infiltration barrier on plywood sheathing
16 Metal framing
17 Foil faced batt insulation with foil tape seams
18 Carpet
19 Topping slab with radiant heat system
20 Spray-on foam insulation
21 Batt insulation
22 Metal framing
23 Metal furring

channels at 610 mm (24 inch) centres
24 Cement plaster ceiling
25 Steel beam with mill markings concealed on inside of beam
26 Steel bracket arm and continuous pipe frame
27 10 mm (3/8 inch) thick translucent fiberglass awning
28 Perforated stainless steel guardrail beyond
29 Fiberglass vertical panel beyond
30 Cedar handrail fixed to steel angle with stainless steel wood screws
31 Steel angle welded to pipe rail
32 Steel pipe rail with steel spacers
33 Steel pipe stanchion
34 Perforated stainless steel plate with sandblast finish
35 Hardwood flooring over asphalt primer
36 Concrete slab with radiant heating system
37 Pressure treated sleepers set in mastic
38 Rigid insulation board and vapour barrier
39 Concrete stem wall
40 Embedded steel plate
41 Steel strut
42 Steel beam
43 Timber decking on timber joists

**22.10
Skylight Detail
1:10**

1 250 mm (9 3/4 inch) reinforced concrete shoring wall
2 Steel bearing plate beyond and behind, weld to pipe
3 Steel drainage pipe to trench drain beyond
4 Concrete driveway
5 Silicon sealant to completely fill joint
6 Continuous neoprene shim spacer
7 Fiberglass panel
8 Waterproofing membrane
9 Continuous J-bead tack welded to tube frame
10 Line of concrete beyond
11 Steel anchors with paint finish
12 Gypsum board
13 Z-furring channels with rigid insulation
14 Waterproof membrane
15 Concrete topping
16 Steel stiffener plate
17 Glass at kitchen and line of casework beyond