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ARCHITECTS' WORKING DETAILS

volume 5

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INTRODUCTION

THE PURPOSE OF THE *Architects' Working Details* series has already been explained in the introductions to the preceding four volumes: it is, in brief, to publish the solutions to various problems of detailing worked out by leading architects when designing some of the most interesting buildings which have recently been put up. To elaborate further on what has already been stated before—at considerable length—is therefore needless. Suffice it to say, here, that the ever-increasing need for the information supplied by these volumes gives ample reason for the publication of this fifth one in the series.

It contains those ' Working Details ' which, up to the time of preparing this for publication, have most recently been illustrated in *The Architects' Journal*. The headings of sections are the same as previously, with the exception that there are no Details under *Balconies* or *Covered Ways and Canopies*. Instead, the sections *Heating* and *Lighting*, which were omitted from Volume 4, have been re-inserted, and a few Details under a new heading (*Water Supply and Sanitation*) are now included.

Once again the editors wish to tender their thanks to all those architects who have supplied the information necessary for the preparation of the drawings, and permitted them to be published. Their names appear on the following three pages. Thanks and acknowledgement are also due to the draughtsmen who prepared the drawings, and to Violet A. Groom who is in charge of *The Architects' Journal* drawing office.

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Roofs and Ceilings

Heating

Lighting

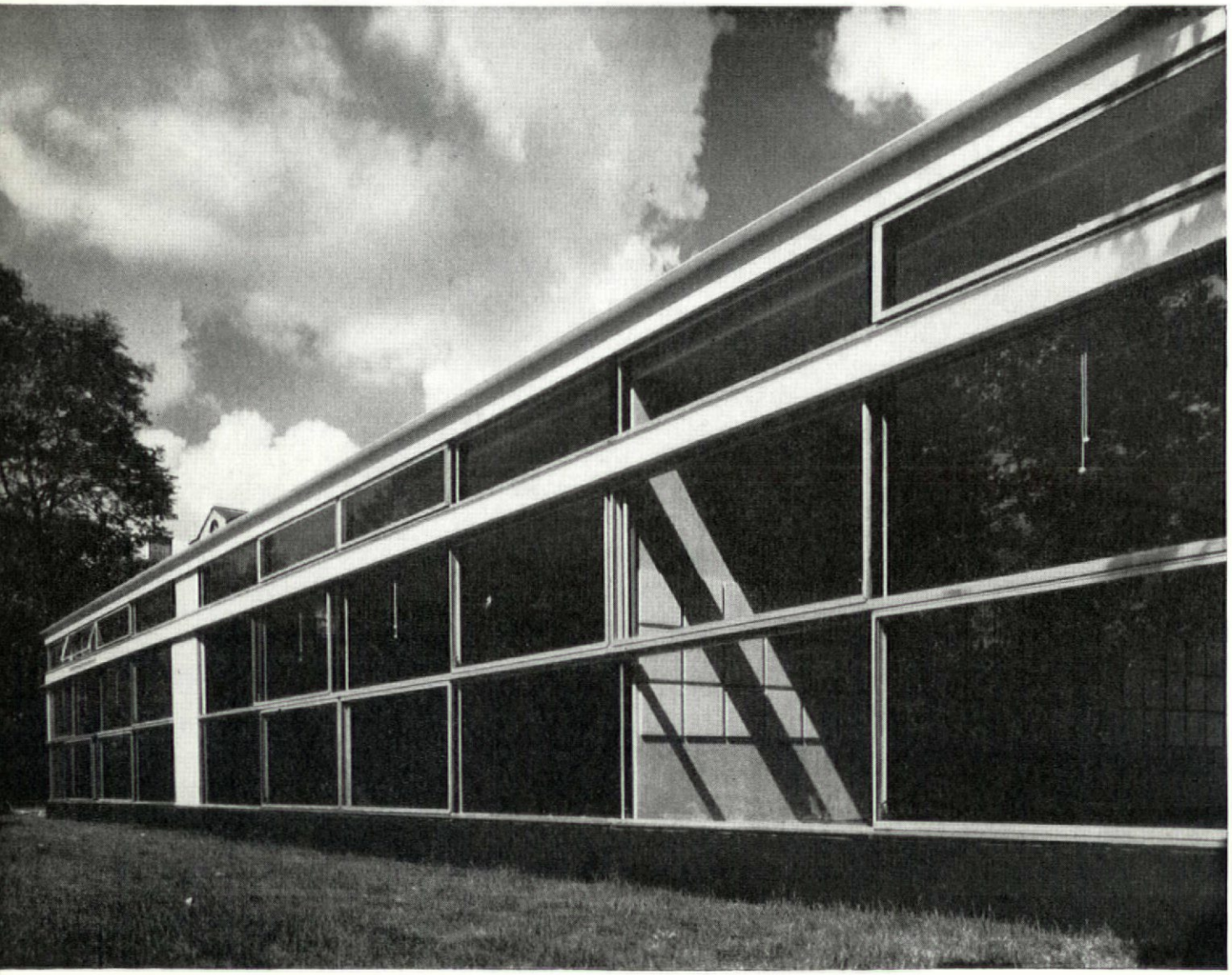
Water Supply and Sanitation

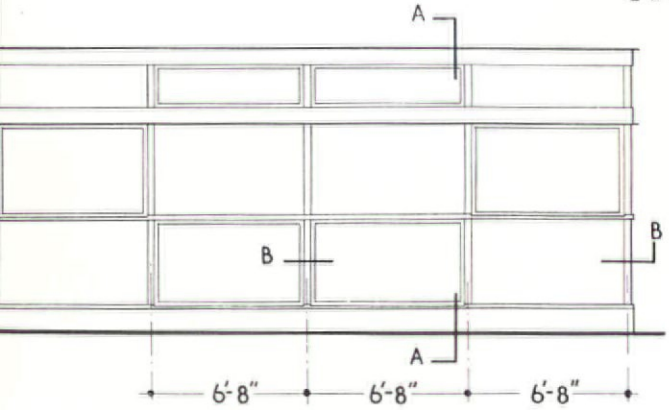
Furniture and Fittings

Miscellaneous

WINDOW WALL: SCHOOL IN LONDON, S.W.5
DESIGNED BY CHAMBERLIN, POWELL AND BON

The horizontally-sliding windows are framed in aluminium; the lower row are in Georgian wired glass and the ventilators over are top-hung, opening outwards. The stanchions to which the mullions are fixed are welded to base plates sunk into pockets provided in the concrete sill and each base plate is secured by two ragbolts.





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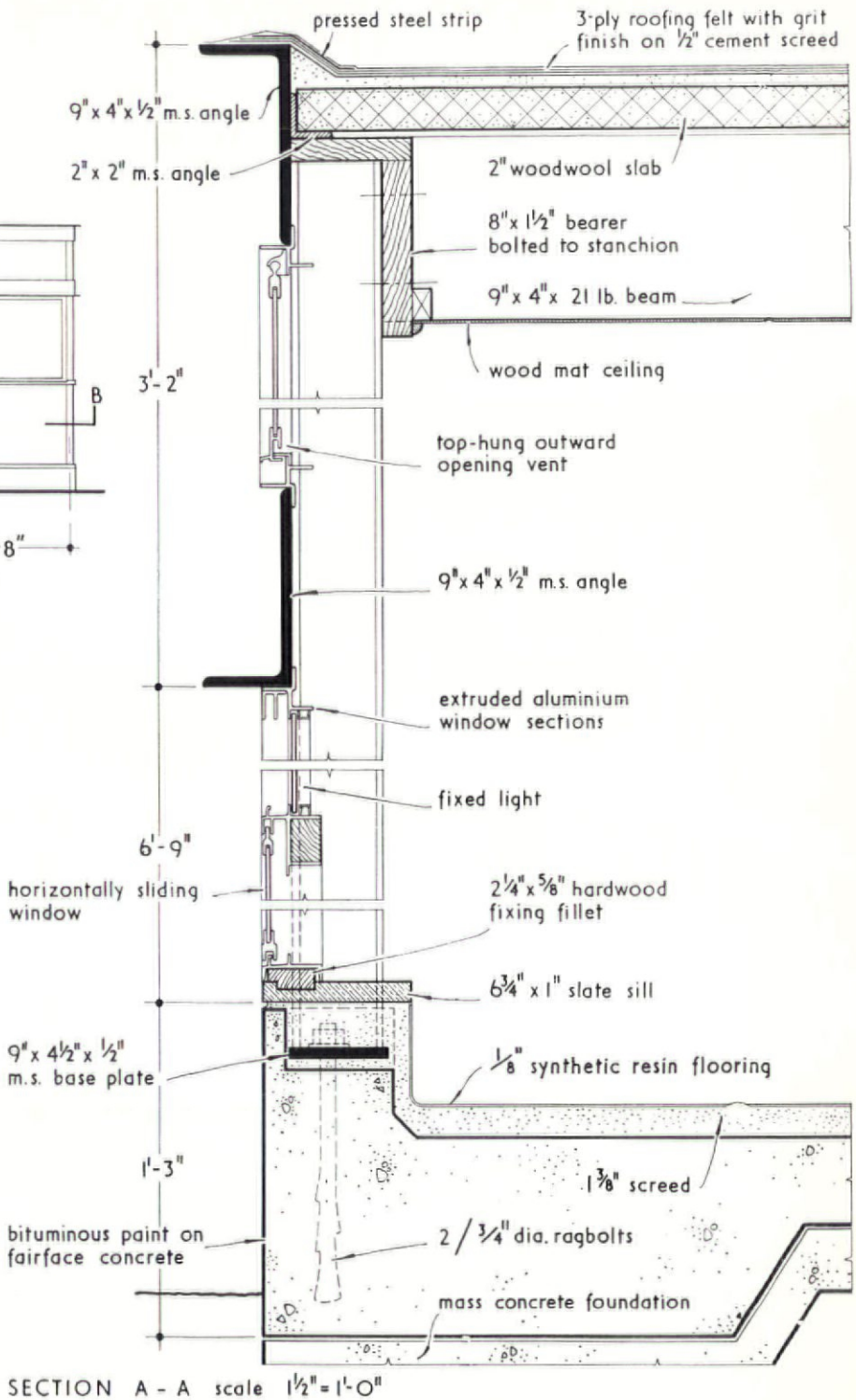
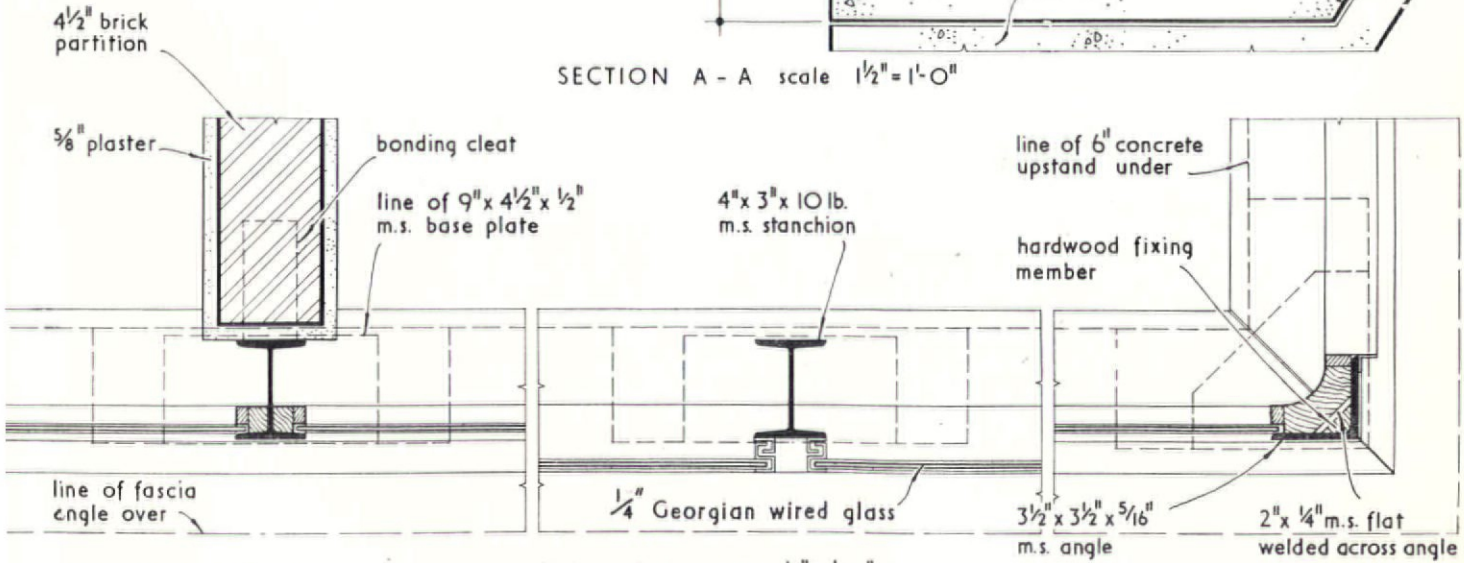


SECTION A - A scale 1½" = 1'-0"

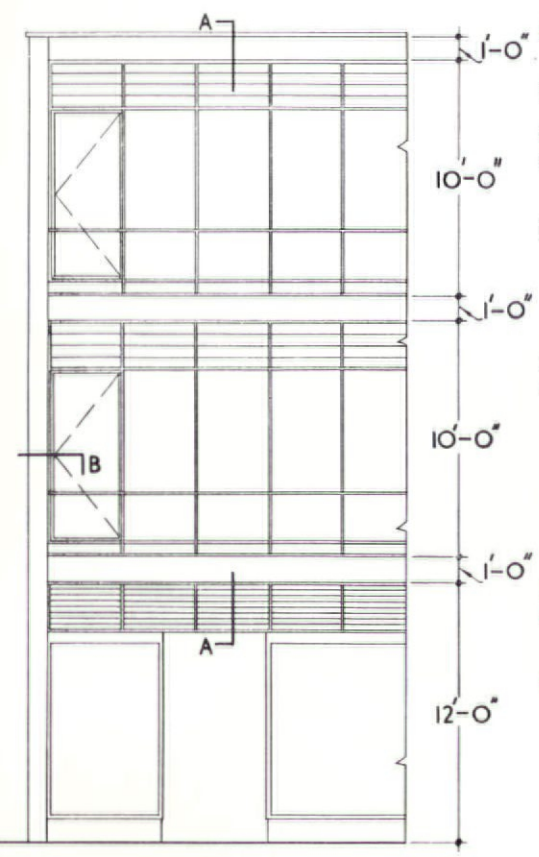


PLAN AT PARTITION.

PLAN B-B. scale 1½" = 1'-0"

SHOPFRONT: SHOP IN SOUTHAMPTON
DESIGNED BY OLIVER CAREY

Points to notice are the way the glazed front is recessed to provide a walkway for easy cleaning, the consistent use of one-window ventilators to avoid the need for opening lights (the right- and left-hand lights on the upper floors are in fact french doors leading to the walkway) and the concealment of the rainwater outlet and down pipe.



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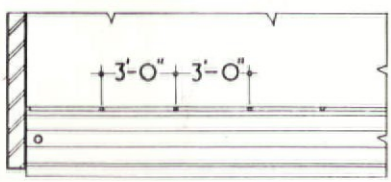

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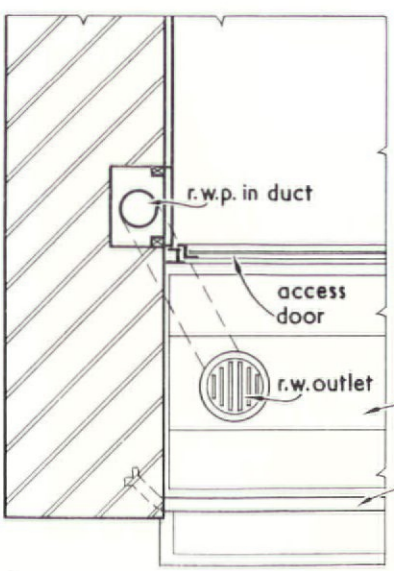
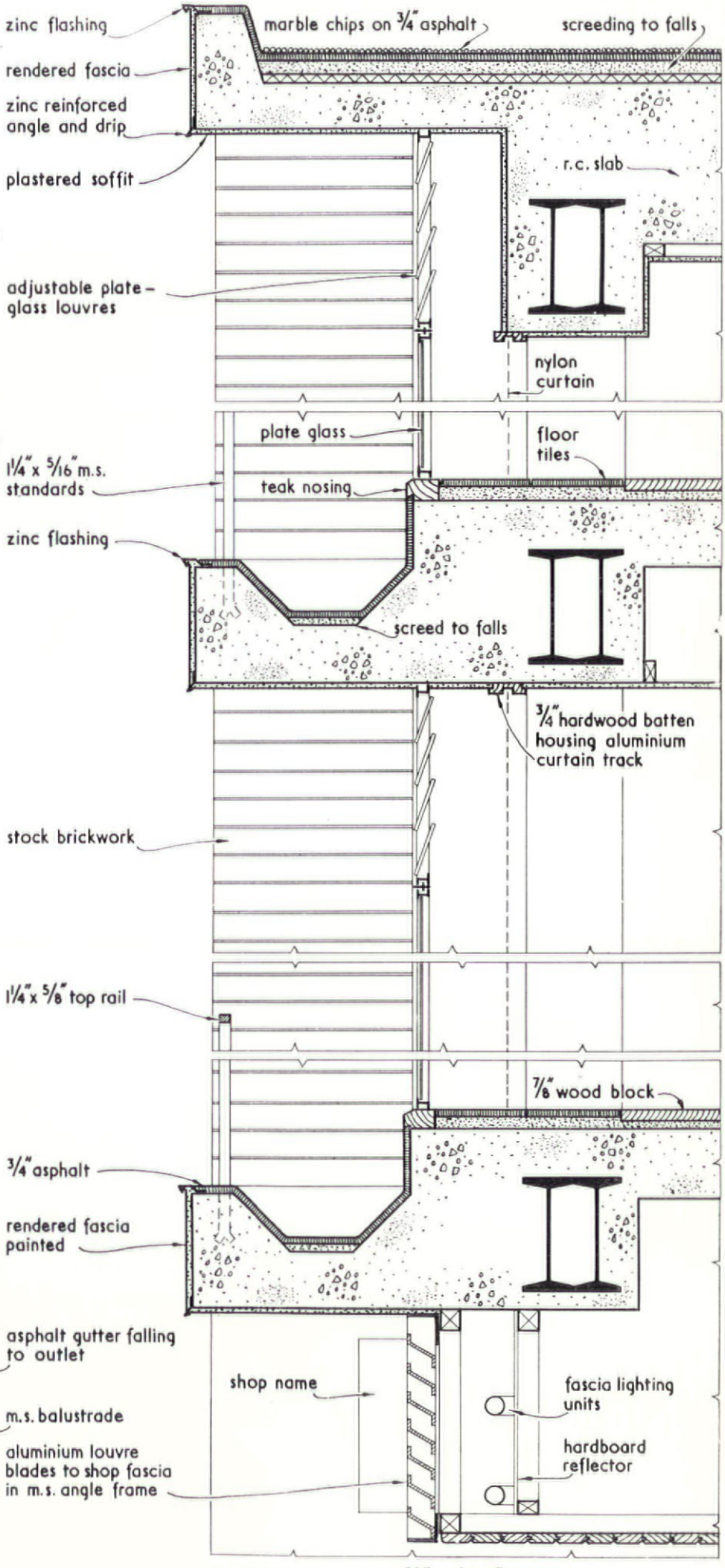


PLAN AT B. scale 3/4" = 1'-0"

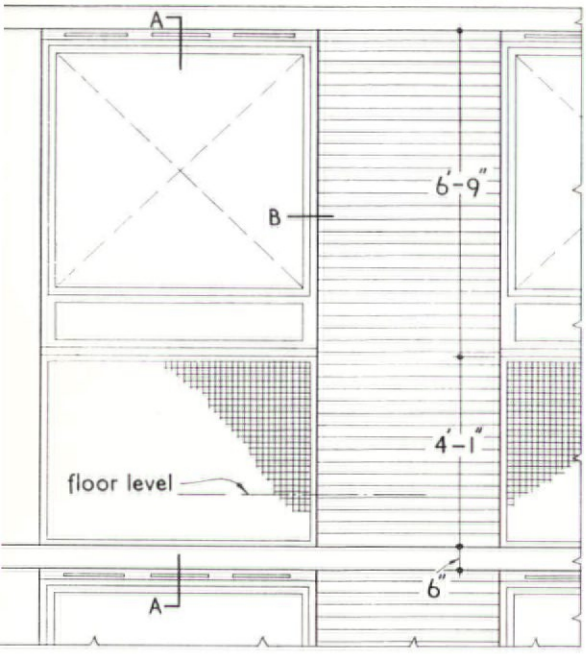


SECTION A-A. scale 3/4" = 1'-0"

WINDOWS: HOSPITAL IN LONDON, S.E.1

DESIGNED BY W. G. HOLFORD AND L. G. CREED

A factor determining the fenestration of this very skilful façade was the need to screen the bench tops, which lie directly behind the windows, from draughts from the opening lights. Therefore the opening lights were stopped about a foot above bench level and a strip of fixed lights inserted. Because this type of double window is so effective in stopping draughts when shut, a line of ventilation slots was inserted above the head. Woodwork is teak, varnished inside, oiled outside; strings are Westmorland slate, and the panels beneath the windows are oyster grey vitreous mosaic. The ground floor arcades form part of the existing building.



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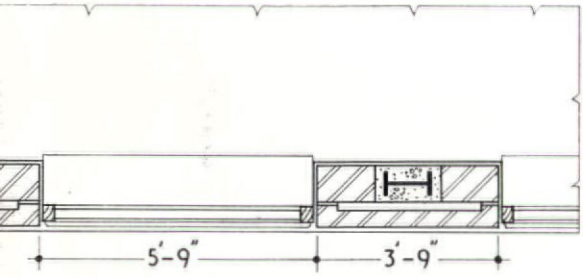

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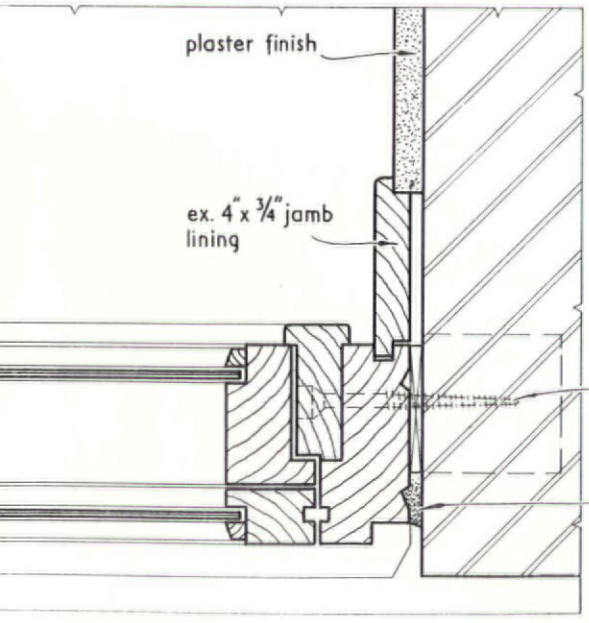
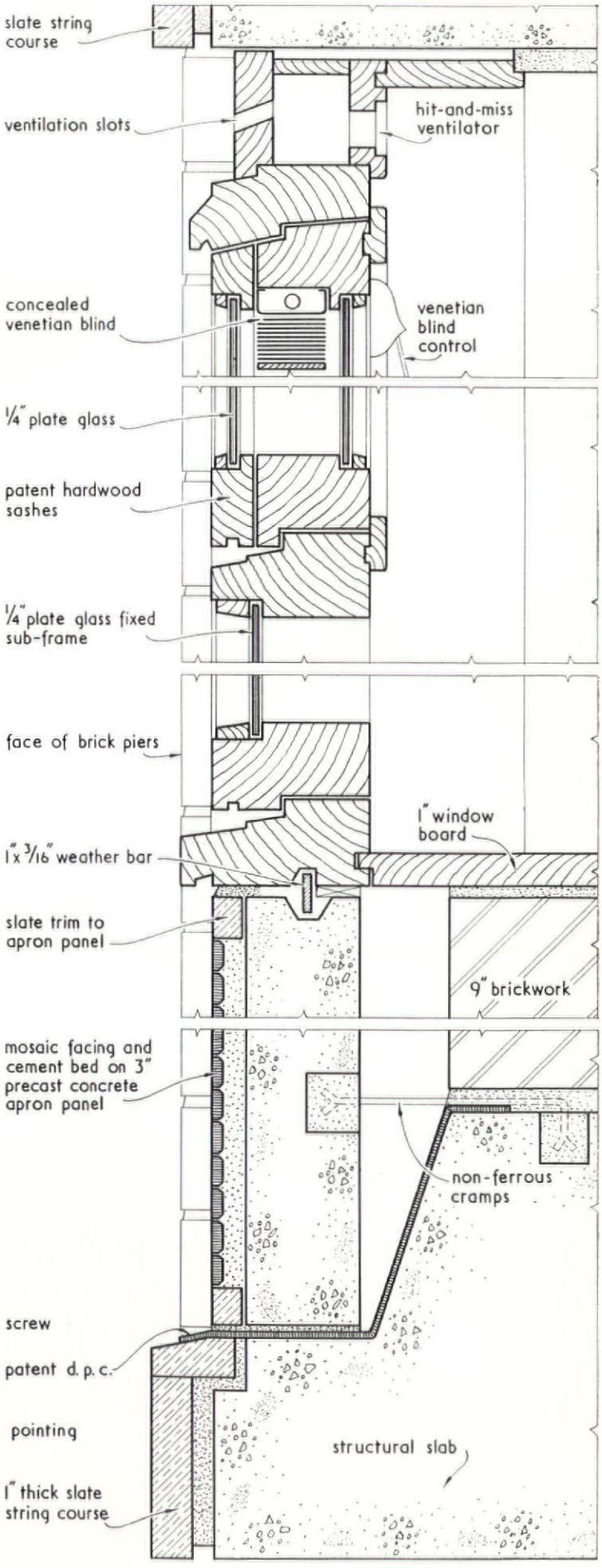


PLAN AT B. scale 1/4 full size

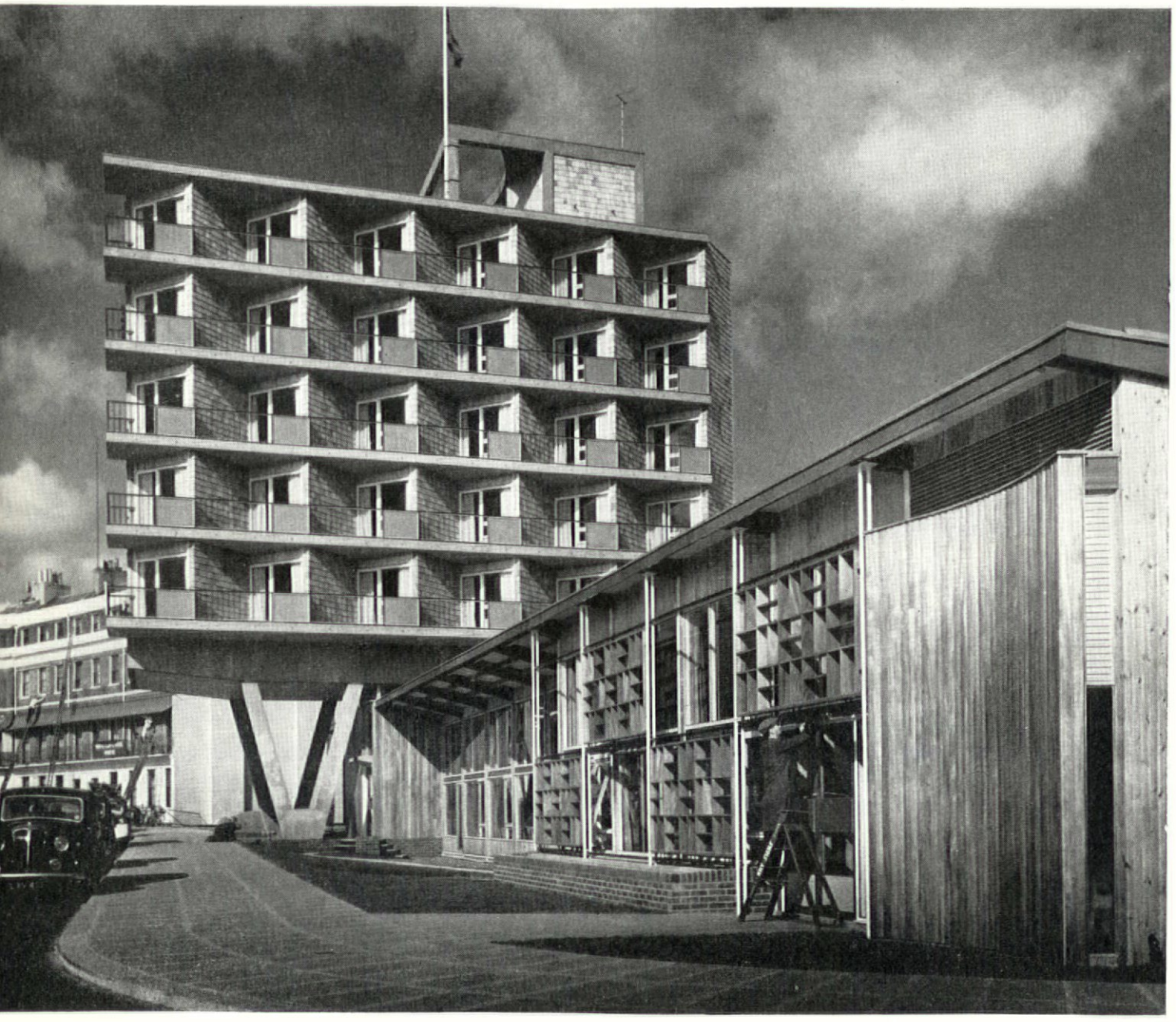


SECTION A–A. scale 1/4 full size

WINDOWS: HOTEL AT DOVER

DESIGNED BY LOUIS ERDI

The plan shape of the balconies and of the bays in which they are formed was determined by the desire to give each bedroom a clear view on to the sea. The blank wall in each case is formed of 6-in. concrete blocks to which have been fixed red cedar shingles, laid at 7-in. gauge. It is to be noticed that the opening light (as distinct from the french window) is of a special sliding pivoting type; the head of the light slides downwards as the bottom pivots outwards, so that, when fully open, the light projects forward of the opening in a horizontal position above eye level.



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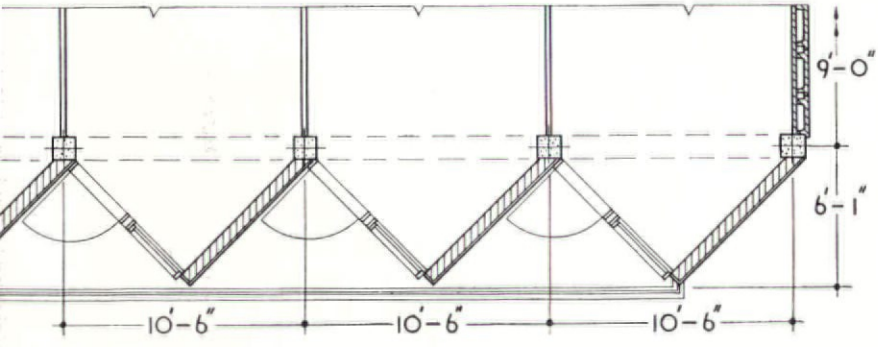

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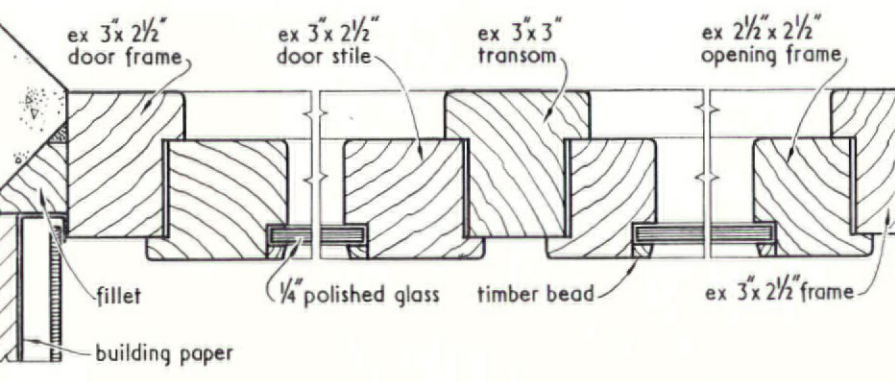
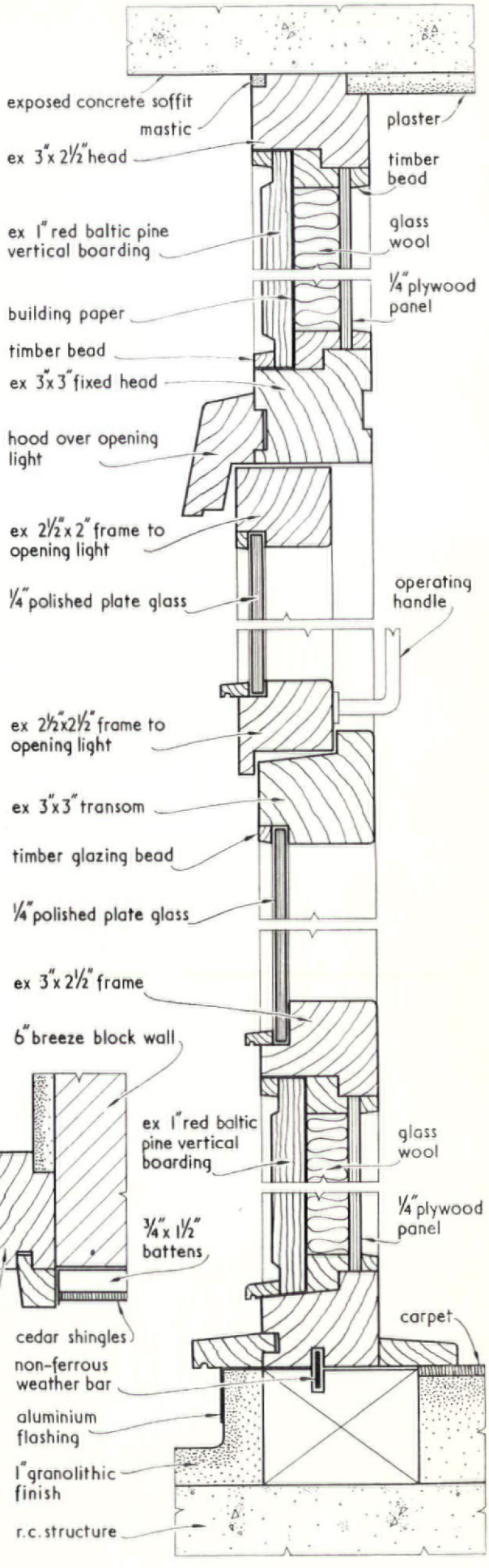


SECTION A–A. scale ¼ full size

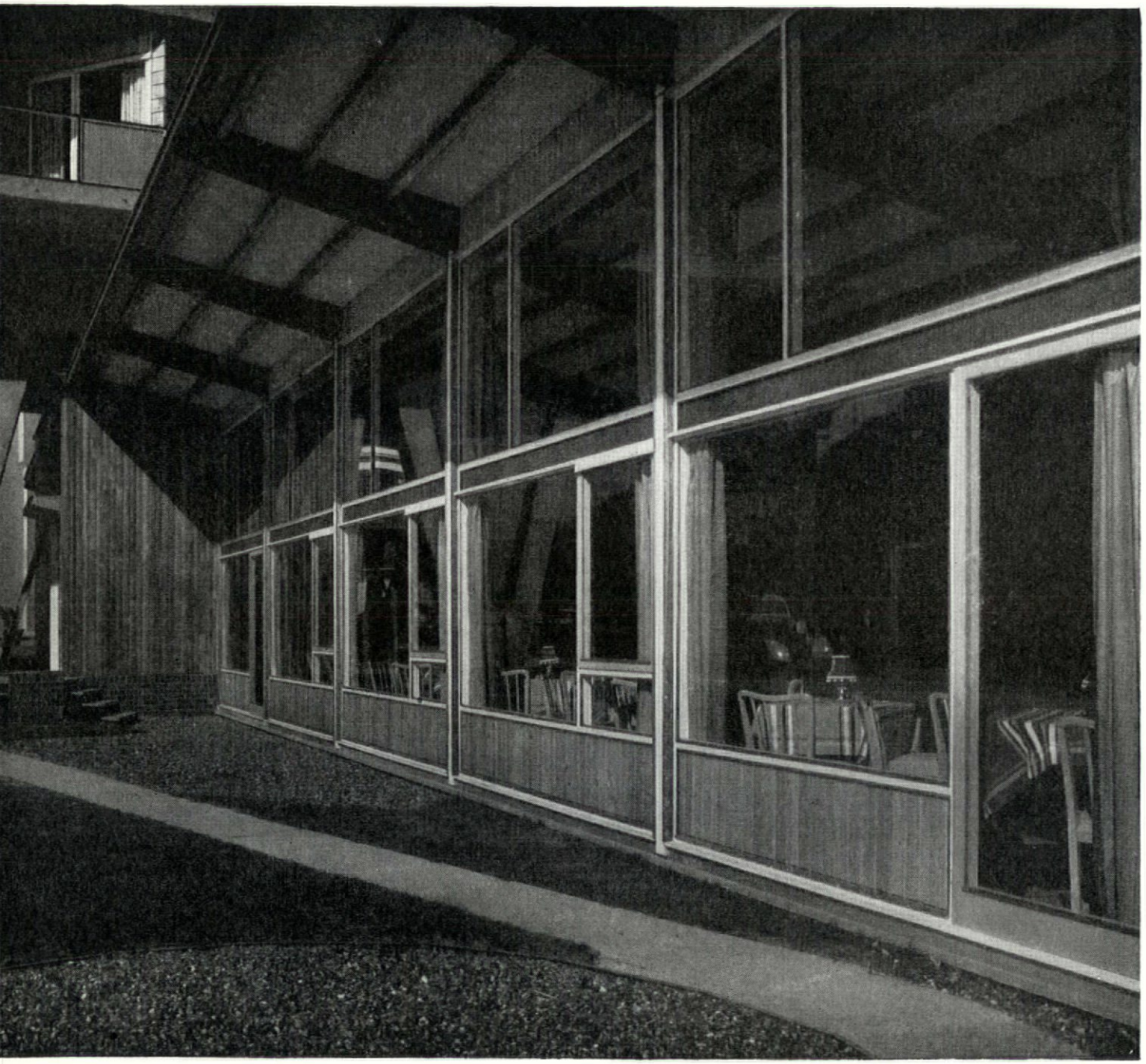


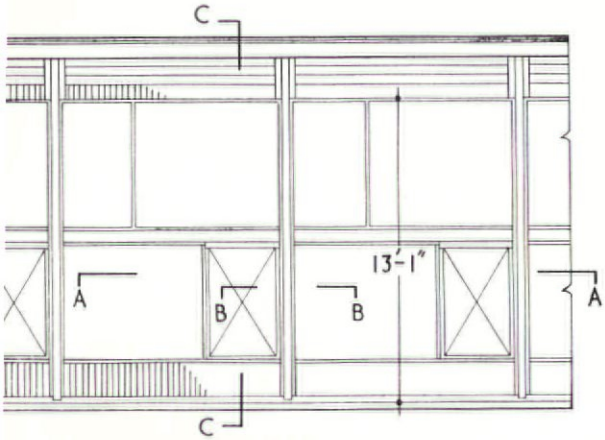
SECTION B–B.

WINDOW WALL: HOTEL AT DOVER

DESIGNED BY LOUIS ERDI

This is an unusual example of a glazed wall to a public room in which the transom is used to accommodate the curtain track, the strip lighting and the conduit.





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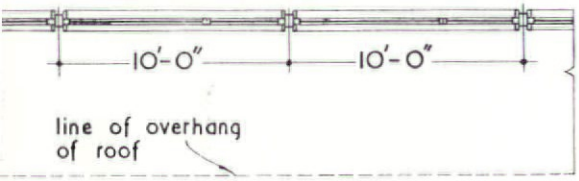
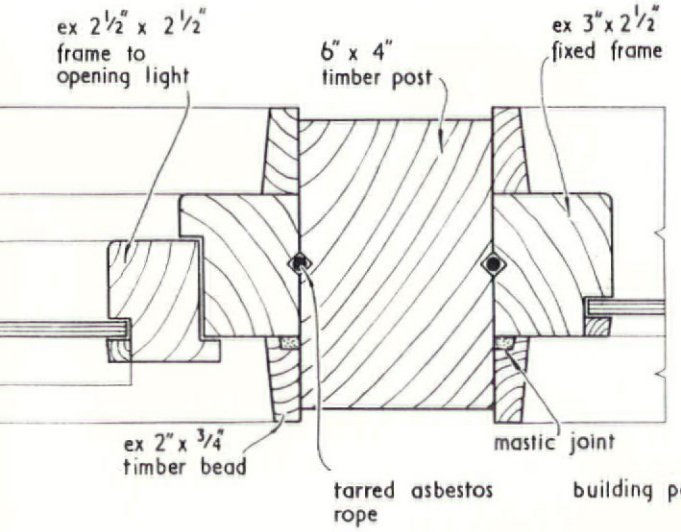
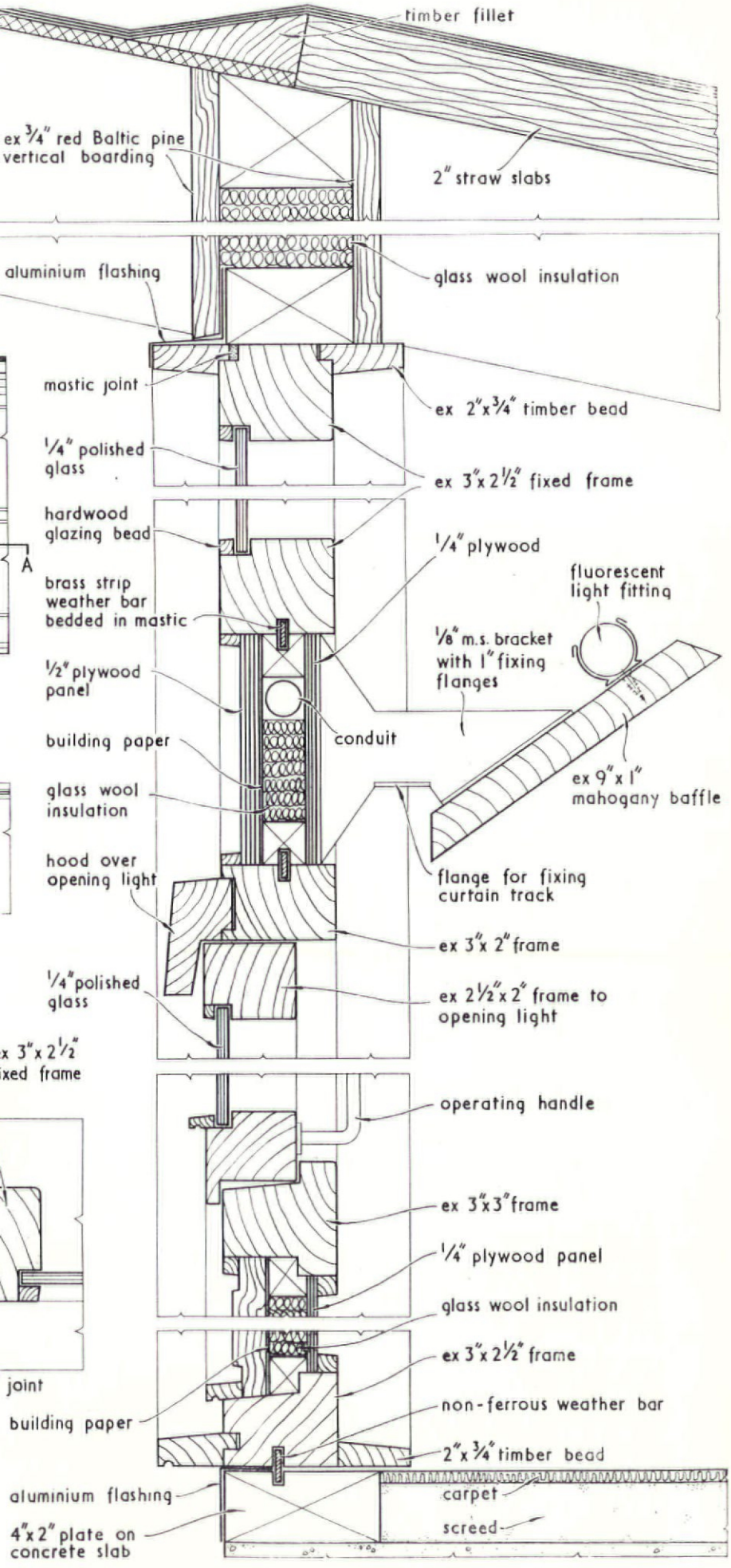


PLAN AT A-A.



PLAN AT B - B. scale ¼ full size

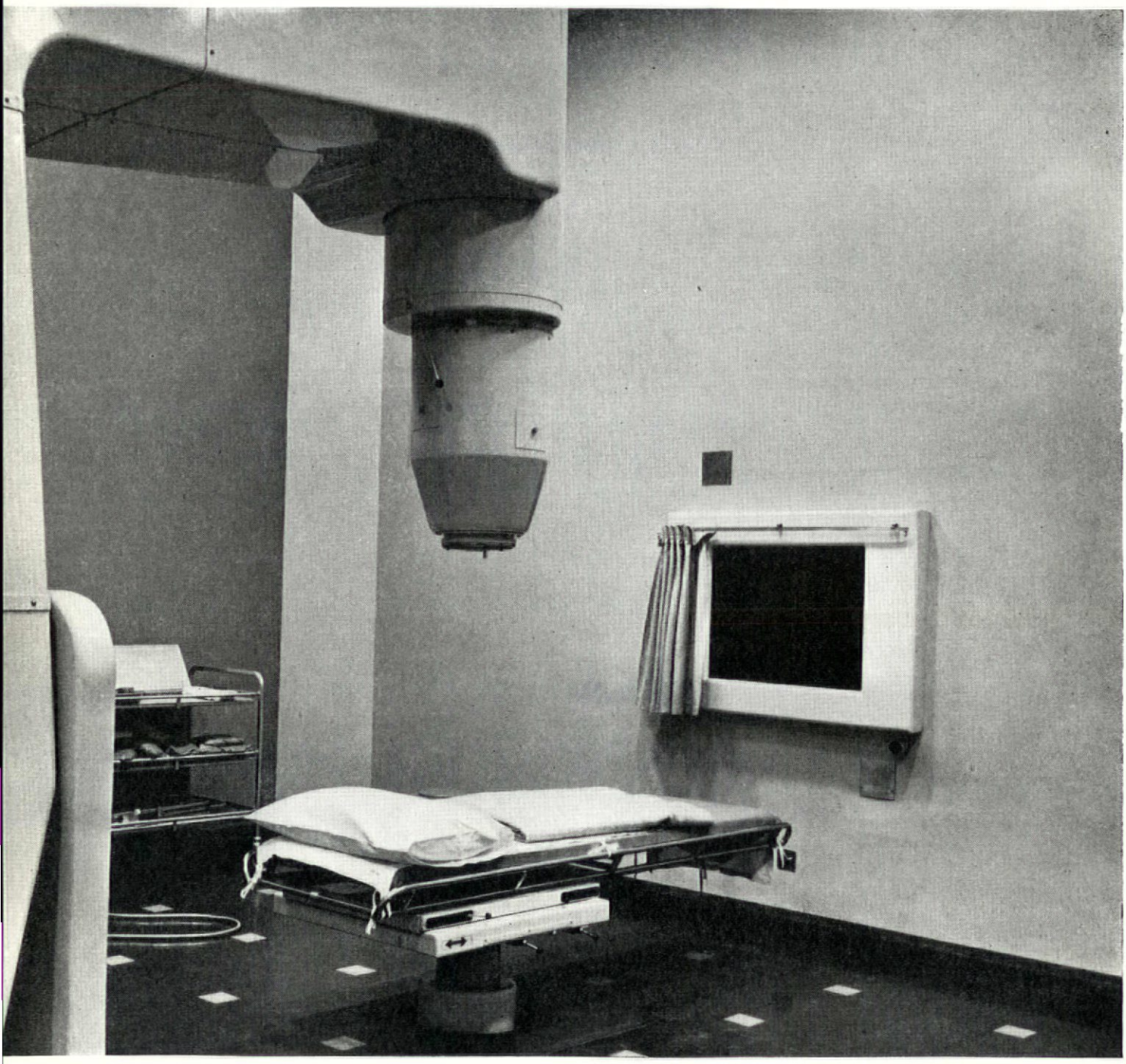


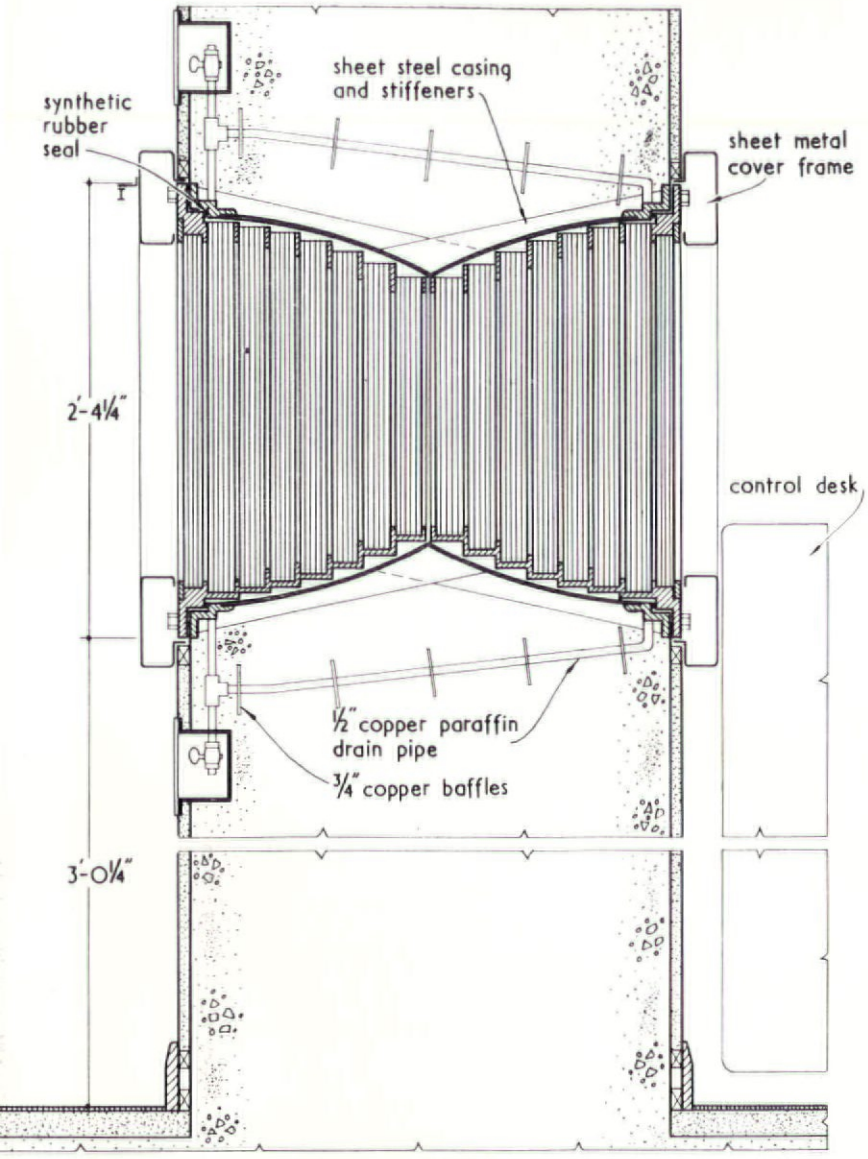
SECTION C-C. scale ¼ full size

OBSERVATION WINDOW: HOSPITAL IN EDINBURGH

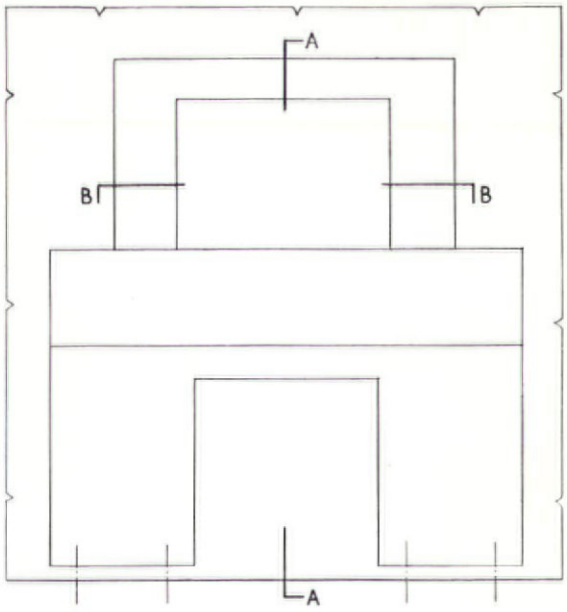
DESIGNED BY JOHN HOLT (architect to the South-Eastern Regional Hospital Board, Scotland);
WILLIAM WELLWOOD (architect-in-charge)

The sixteen sheets of glass which are required to form a shield against the penetration of X-rays are held in two hinged multiple frames. The eight sheets on the X-ray room side are of a special white stabilized glass to ensure that the X-rays will not cause a change in colour over a period of years. The edges of all sheets are staggered to avoid giving a direct through passage to X-rays, and the space occupied by the frames is sealed off both from the surrounding structure and from the rooms on either side, and filled with medium-pure paraffin. This liquid, which is unaffected by X-rays, has the same coefficient of refraction as glass and its object is to eliminate the distortion which would otherwise occur if dry glass were packed solidly. This window is considered a great improvement on the more usual version, which involves the use of a periscope and causes a great strain on the operator.

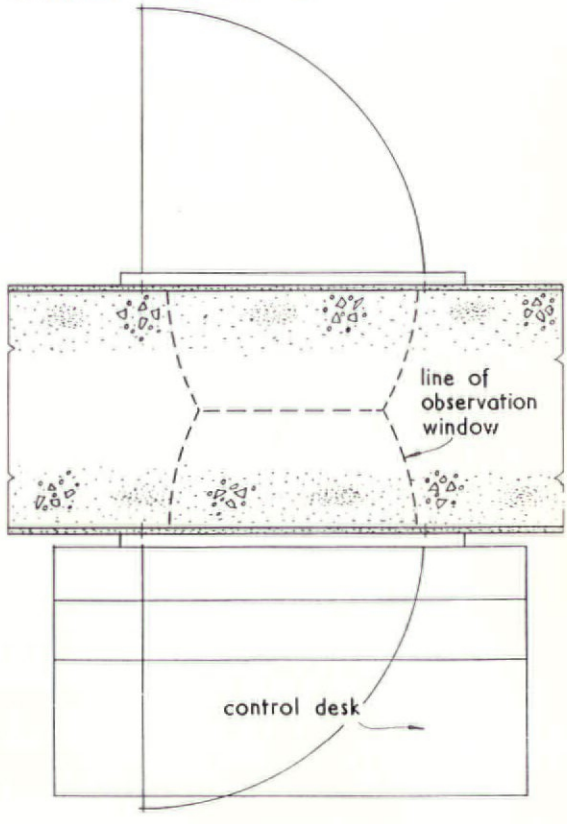




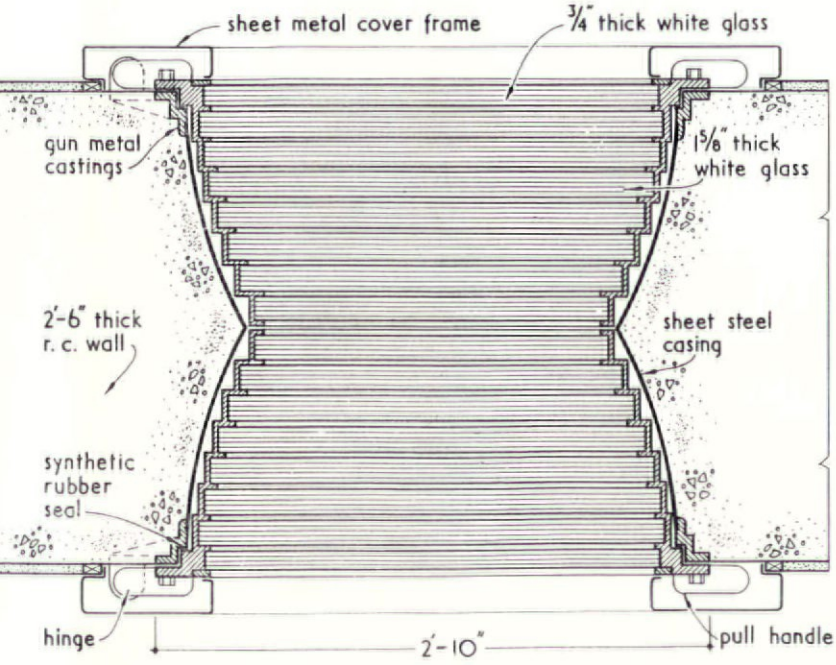
SECTION A–A scale 1"= 1'–0"



ELEVATION. scale ½"= 1'–0"



PLAN. scale ½"= 1'–0"

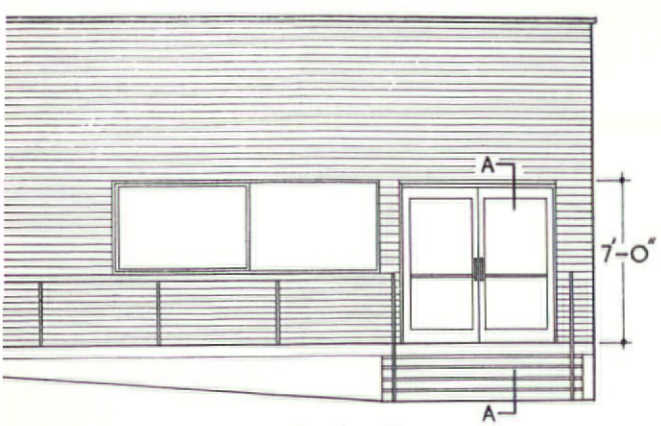


SECTION B–B. scale 1"= 1'–0"

ENTRANCE DOORS: PITHEAD BATHS AT DUDLEY, WORCESTERSHIRE

DESIGNED BY RICHARD SHEPPARD AND PARTNERS

There are a number of unusual uses of materials in this Detail which combine to produce an effect of sombre neatness fitting to this class of work. Notice, for instance, the solid 4-*in. by* $\frac{3}{4}$*-in. wrot iron handrail and the* 6-*in. by* $\frac{1}{4}$*-in. wrot iron edge strip to the terrace carried through to form the riser of the top step; also the black plastic kicking-plate in the built-up aluminium door and the galvanized pressed steel hood.*



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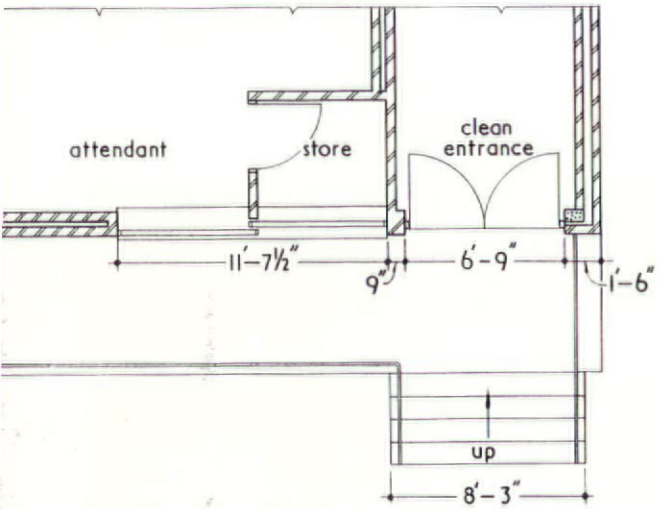

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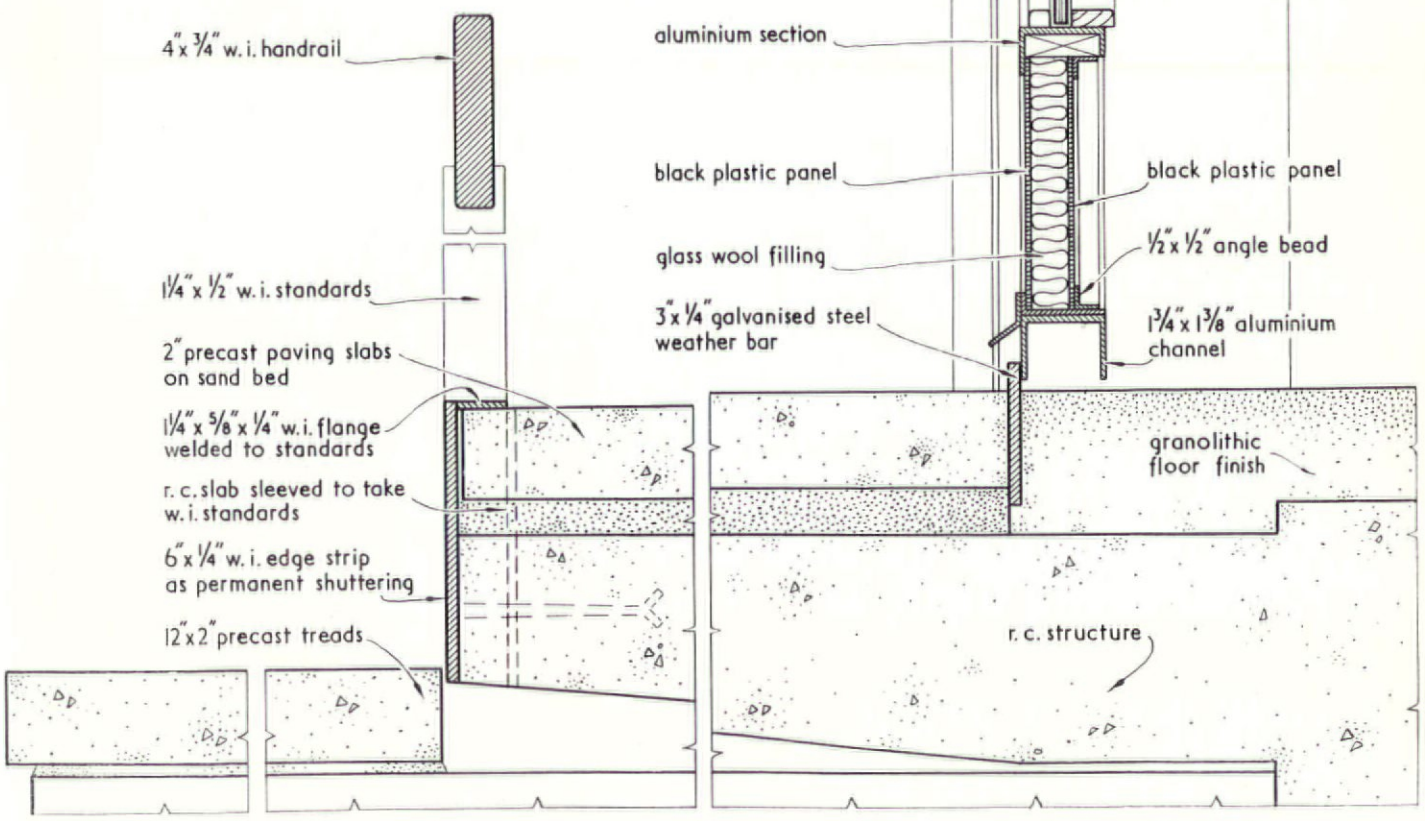
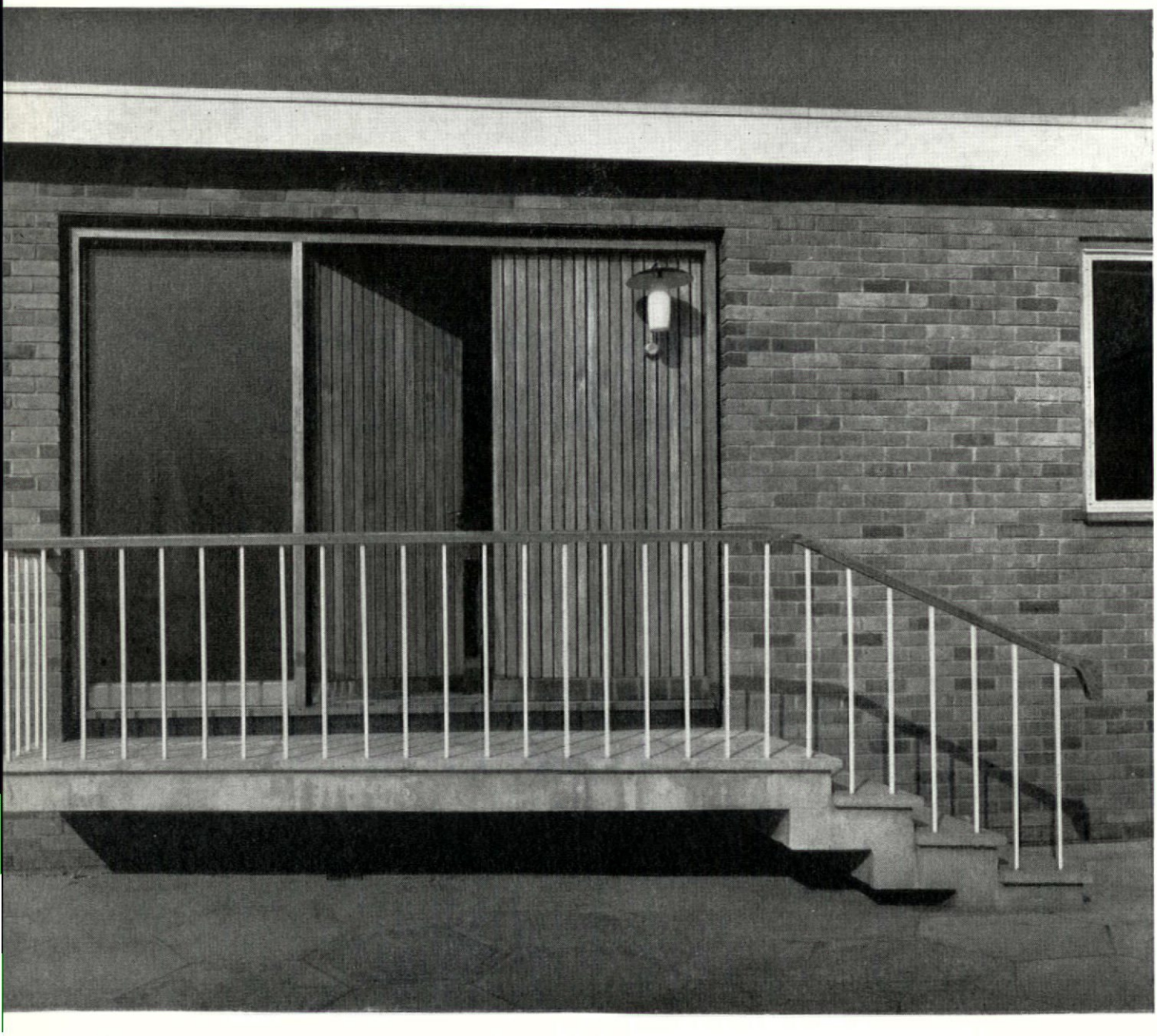


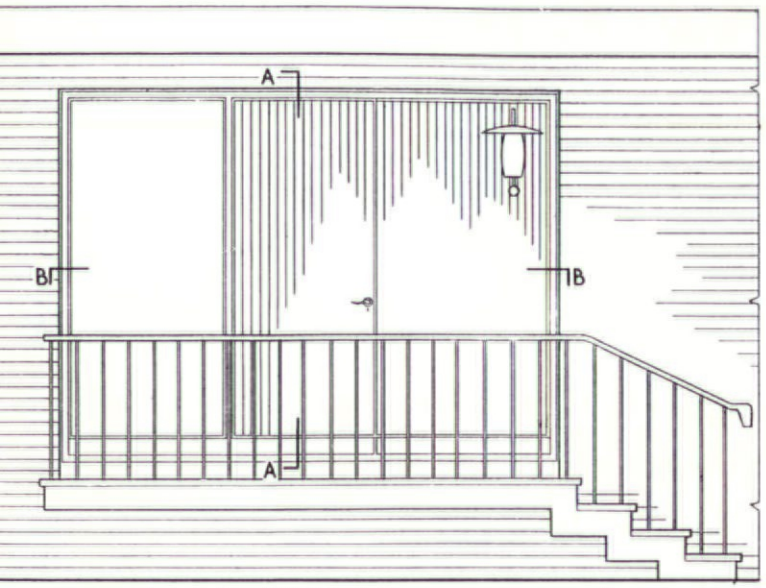
SECTION A–A. scale ¼ full size

MAGISTRATES' ENTRANCE DOOR: MAGISTRATES' COURT AT SLOUGH, BUCKS

DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

An 'informal' door designed to read as a single unit with an adjacent solid panel. This has been realized by the use of teak slats. These have been fixed flush with the outside face and the side stiles have been rebated to simulate slats. To reinforce the effect of the pattern the rebates between slats have been stained matt black.





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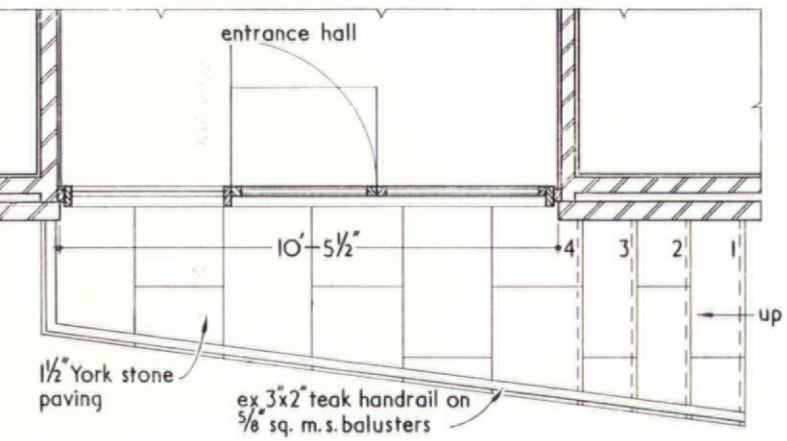
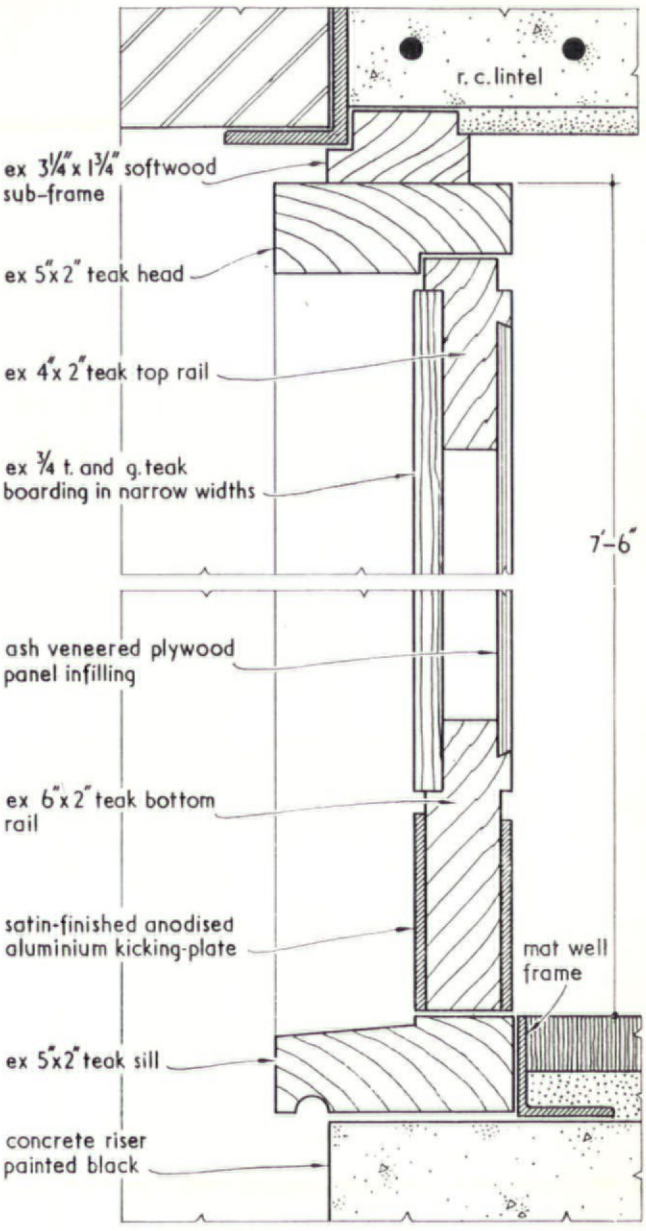
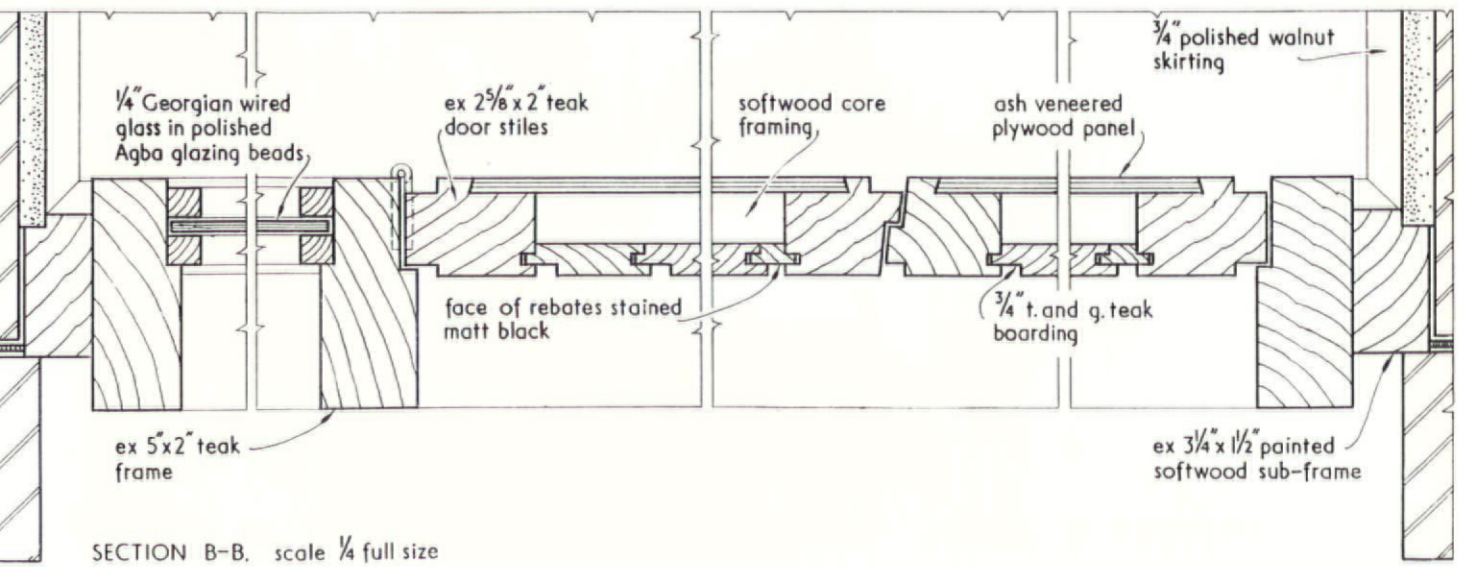


PLAN. scale ¼"= 1'–0"



SECTION A–A. scale ¼ full size

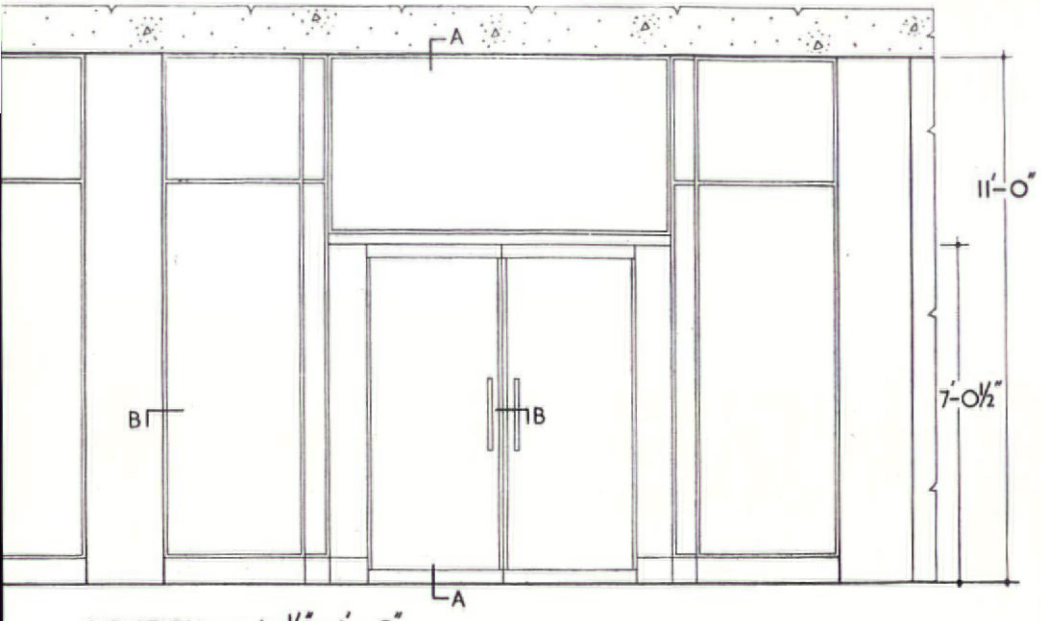


SECTION B–B. scale ¼ full size

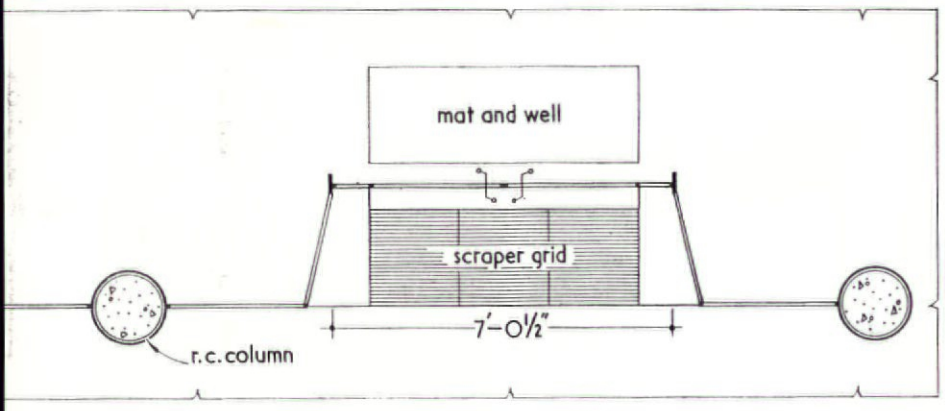
ENTRANCE DOORS: OFFICE BLOCK IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

The bronze sections which frame this screen are stiffened by mild steel flats which serve as mullions on either side of each entrance doorway and by a mild steel built-up box transom which spans between each pair. These steel members are sheathed with $\frac{1}{8}$-in. bronze plates. All bronze members are jointed by screws. The finish throughout is 'penny bronze.'



ELEVATION. scale ¼" = 1'-0"



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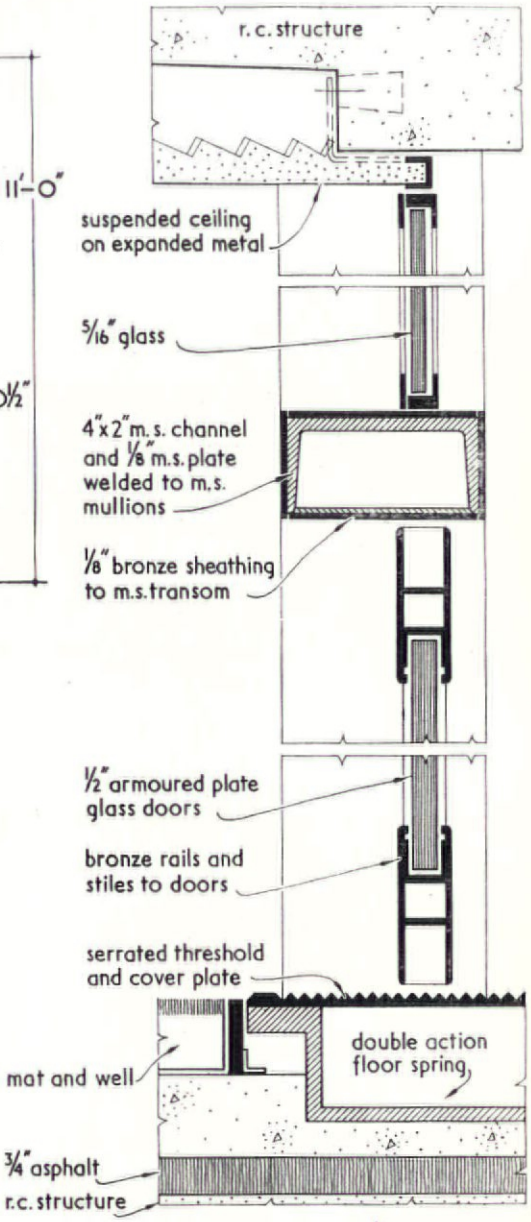
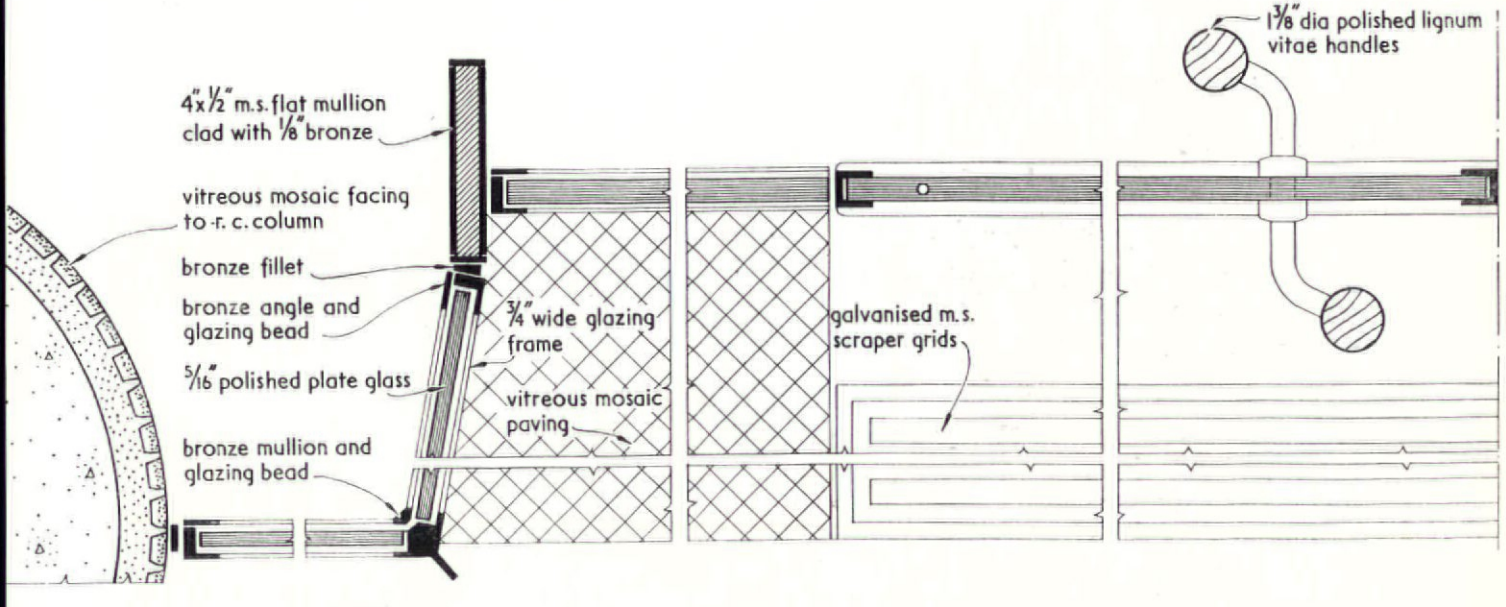


SECTION A–A. scale ¼ full size

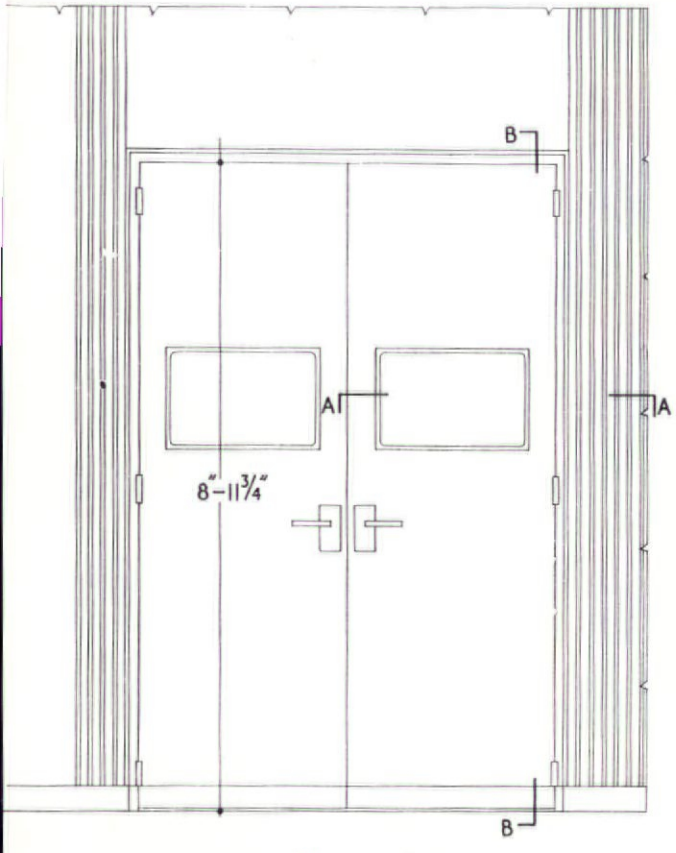


PLAN AT B–B. scale ¼ full size

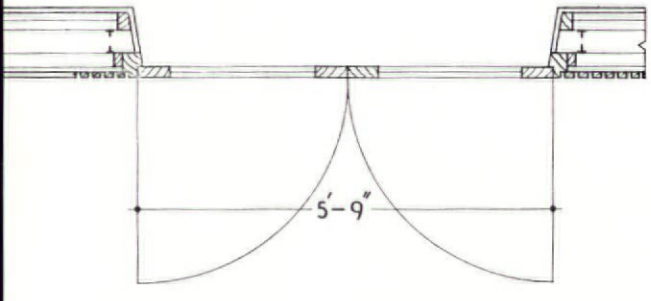
DOORS TO COMMITTEE ROOM: OFFICE BLOCK IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

Notice the effectiveness of the $\frac{1}{16}$-in. sinkings between the more important joins and the relations on the vertical plane between the door, the surround, the panel above the door, the Copenhagen slatting and the skirting.



ELEVATION. scale ⅜" = 1'-0"



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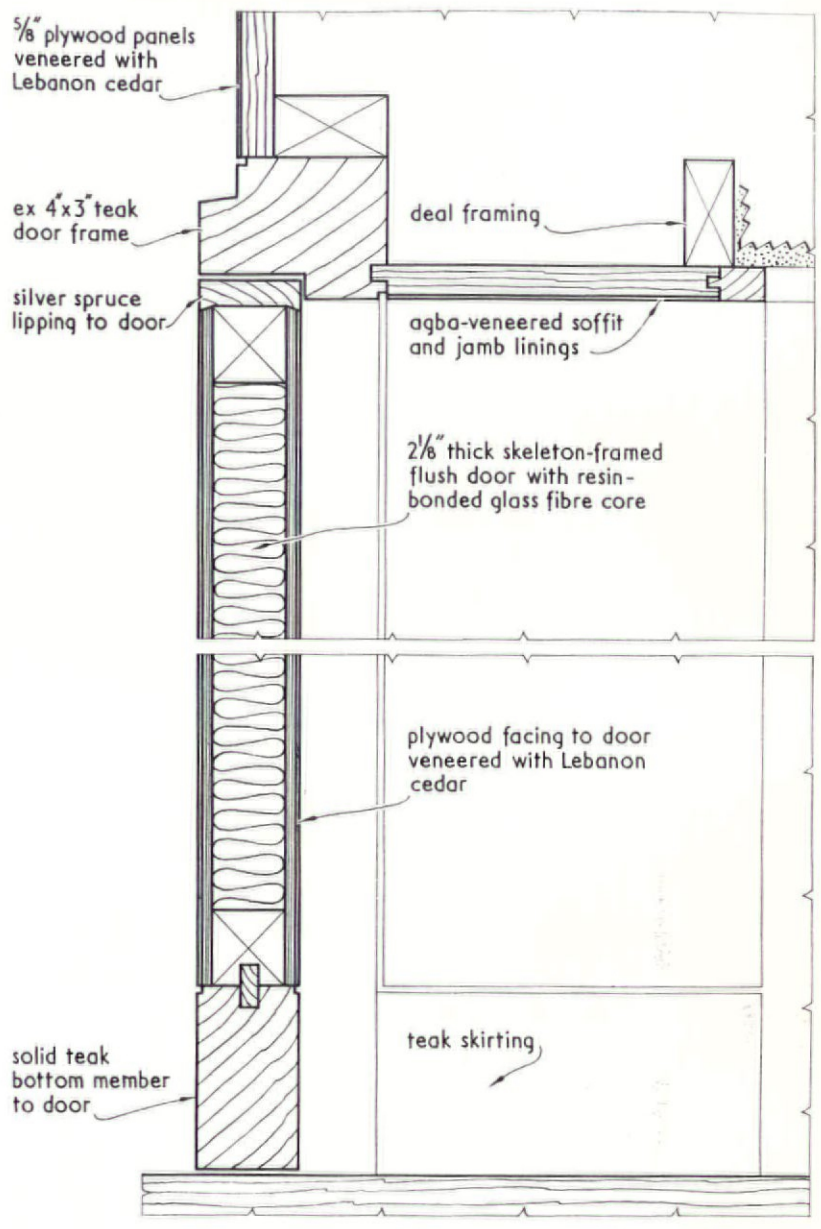
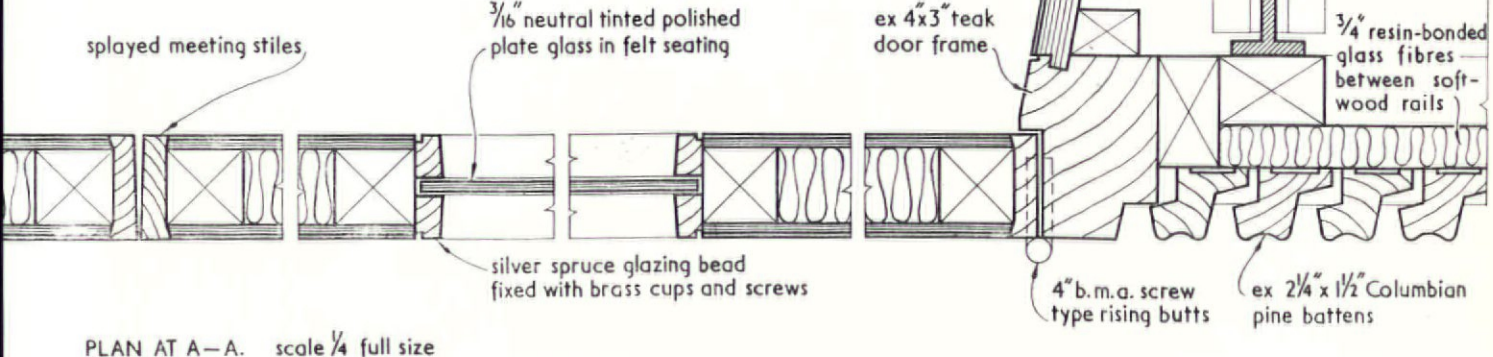


SECTION B—B. scale ¼ full size

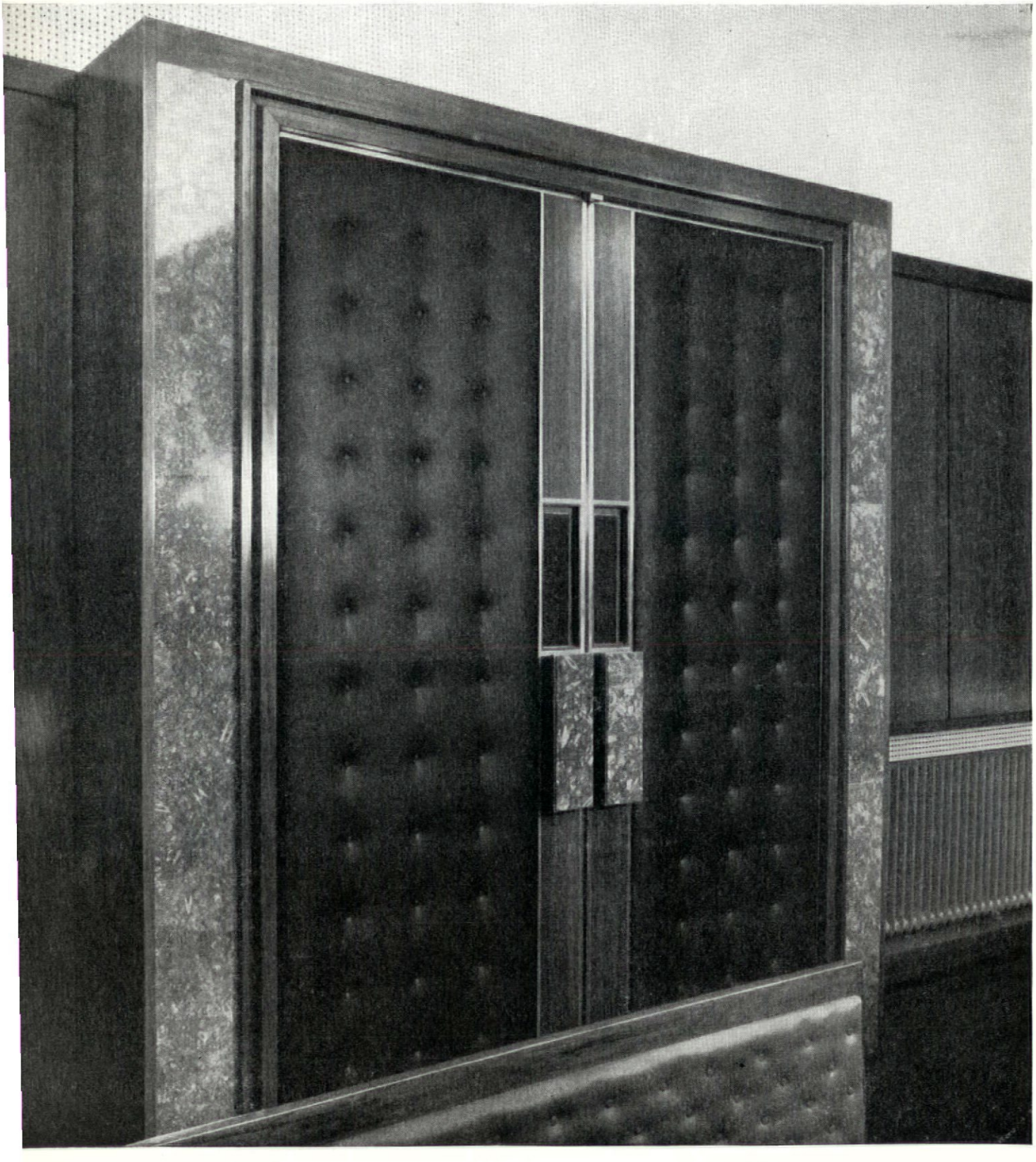


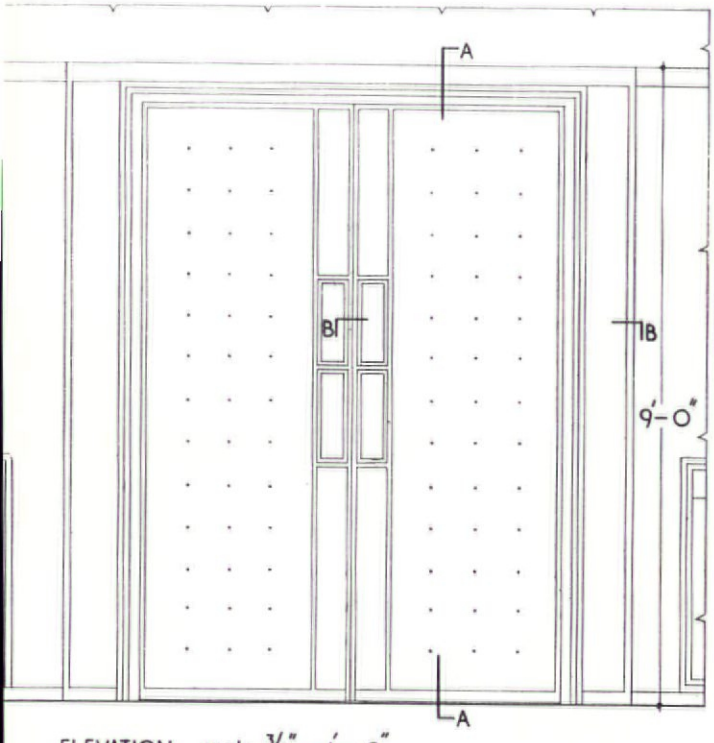
PLAN AT A—A. scale ¼ full size

COURTROOM DOORS: MAGISTRATES' COURT AT SLOUGH, BUCKS

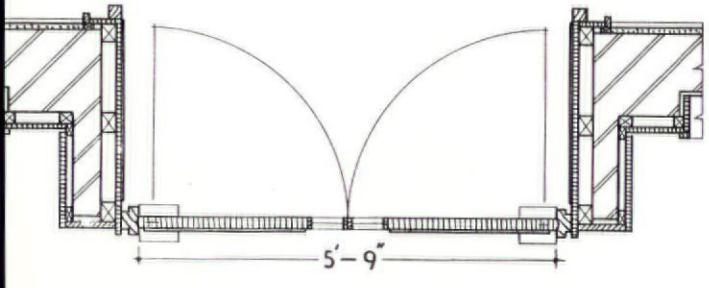
DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

A pair of exceedingly sumptuous doors in black padded leather, satin nickel finish brass and Derbyshire fossil marble. Note the skilful accommodation of observation panels and push plates on meeting stiles and use of recessed mouldings on the frame to avoid interrupting the main lines of the door casing. The inlaid marble push plates are secured to thin brass holders with screws.

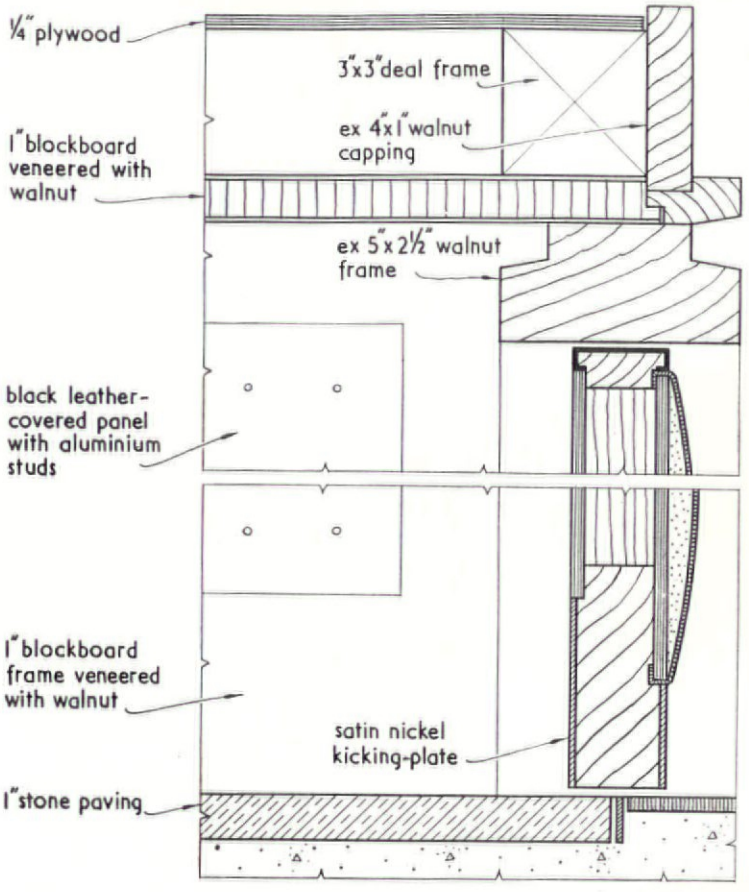




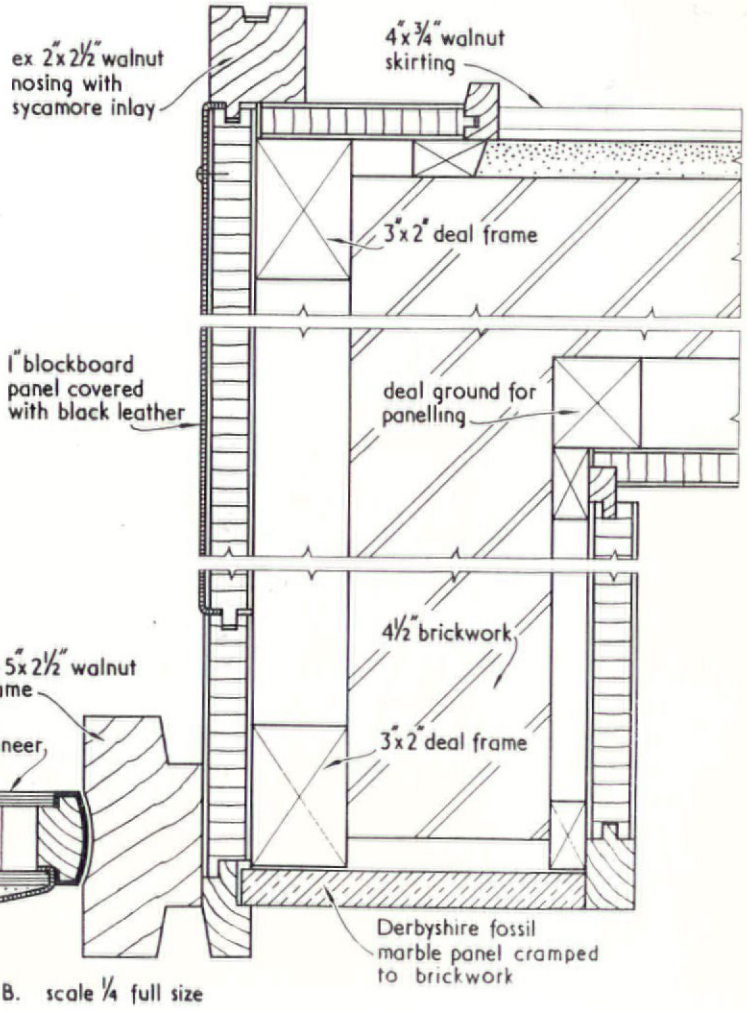
ELEVATION. scale 3/8" = 1'-0"

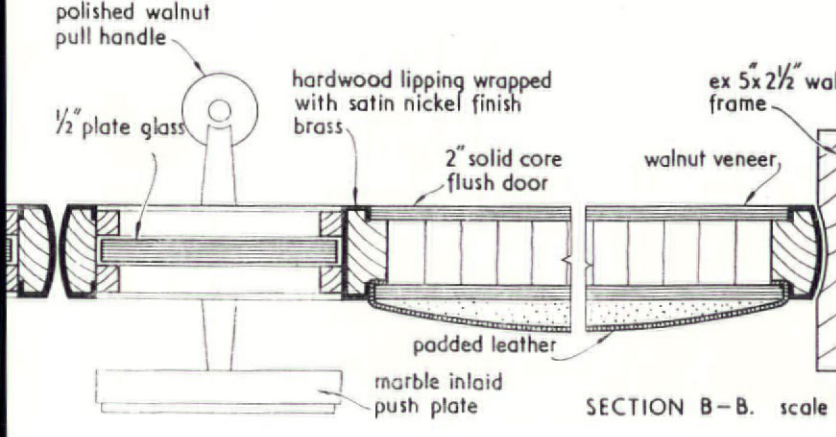


PLAN. scale 3/8" = 1'-0"



SECTION A–A. scale ¼ full size



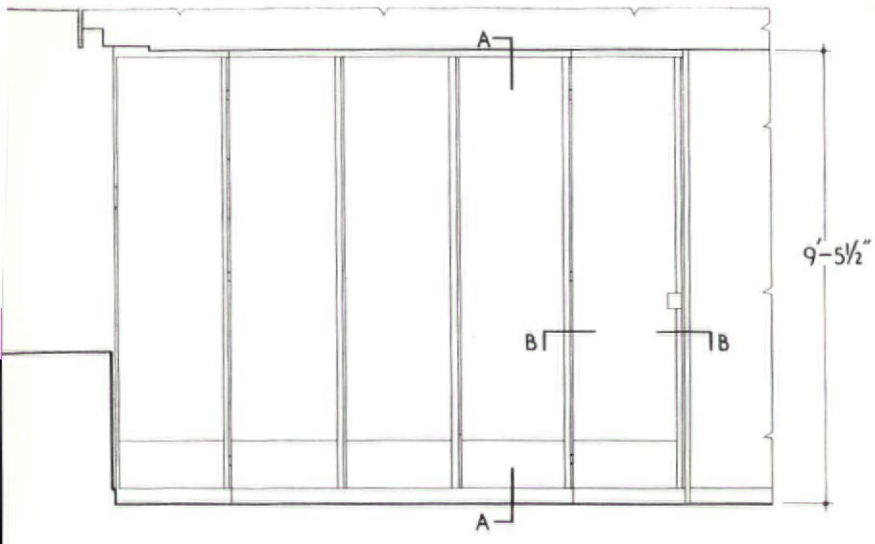


SECTION B–B. scale ¼ full size

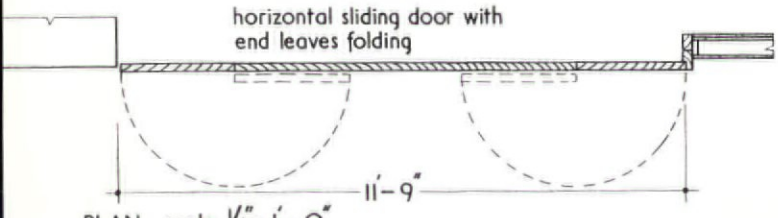
SLIDING AND FOLDING DOORS: OFFICES IN BIRMINGHAM

DESIGNED BY JACKSON AND EDMONDS

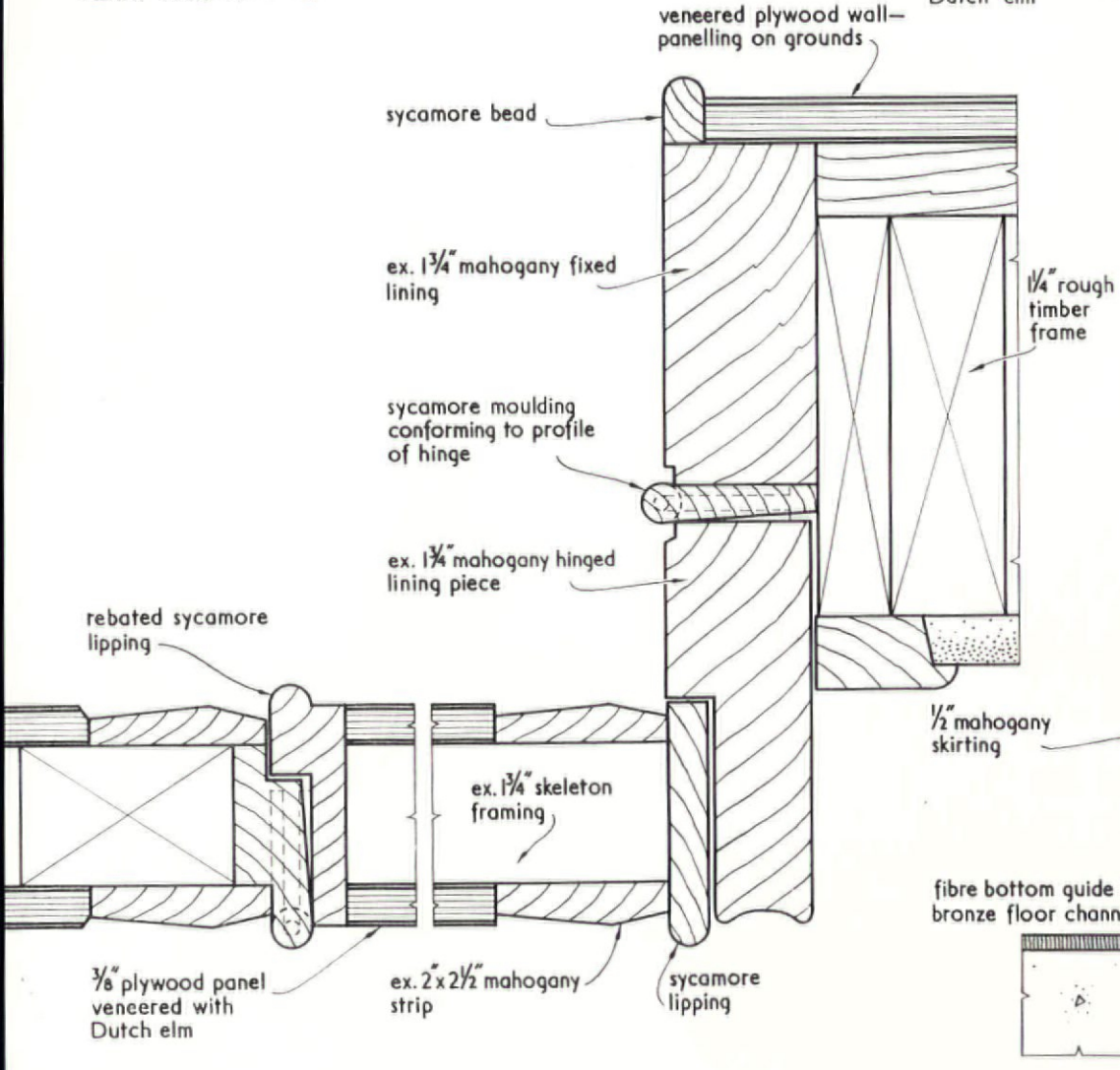
Though divided to suggest five leaves (by the use of sycamore beads of similar profile to the sycamore edging) the three central 'leaves' are solid in one plane; only the outer leaves fold. Note the flush bottom rail-cum-skirting and the hinged lining which masks the partition when it is fully rolled aside. The horizontal line, about 1 ft. 4 in. above the floor, is due to the fact that the plywood backing to the veneer is only obtainable in 8-ft. high pieces. The architects expressed the join with a V-shaped checking rather than trying to conceal it.



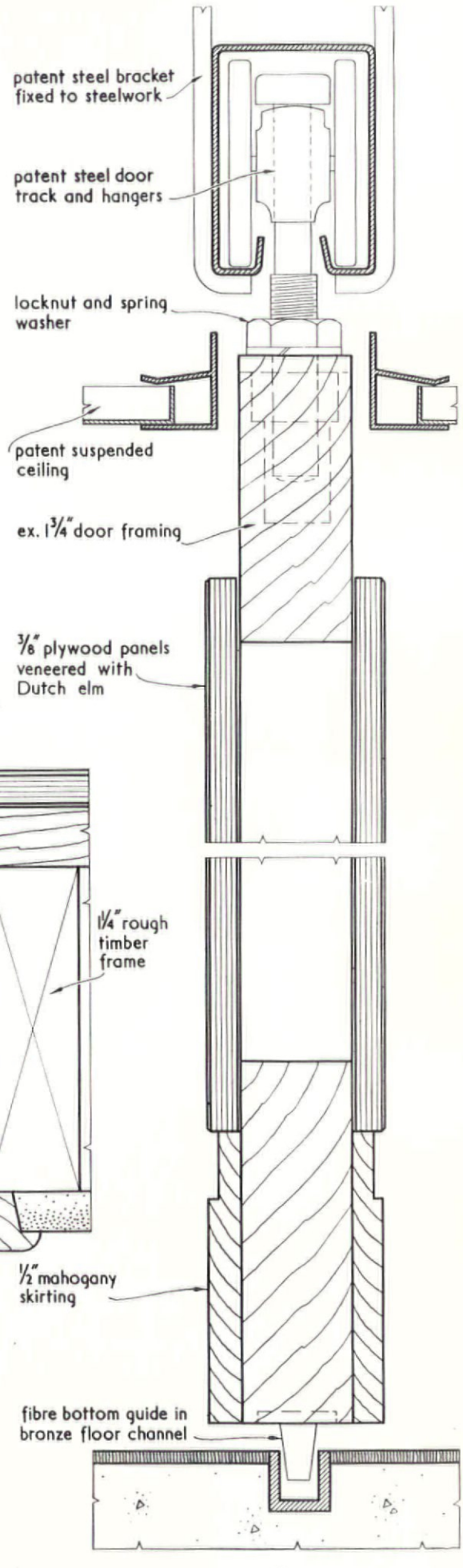
ELEVATION. scale ¼" = 1'-0"



PLAN. scale ¼" = 1'-0"



DETAIL AT B-B. scale ½ full size



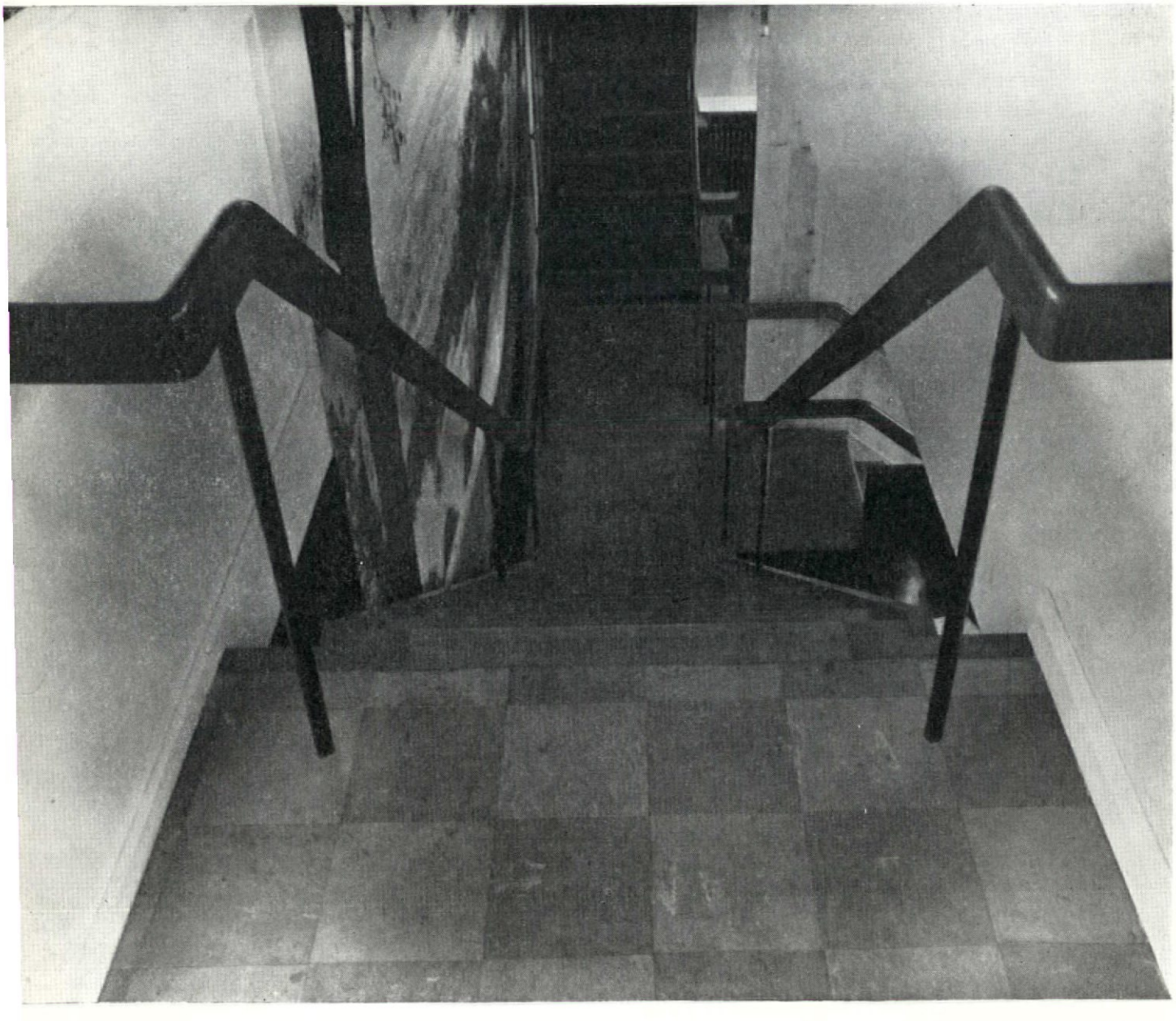
SECTION A-A. scale ½ full size

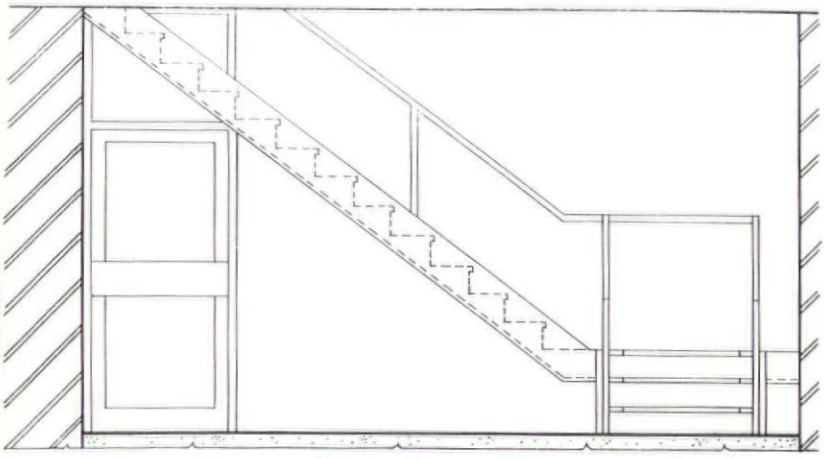
C

STAIRCASE: OFFICES AT UXBRIDGE, MIDDLESEX

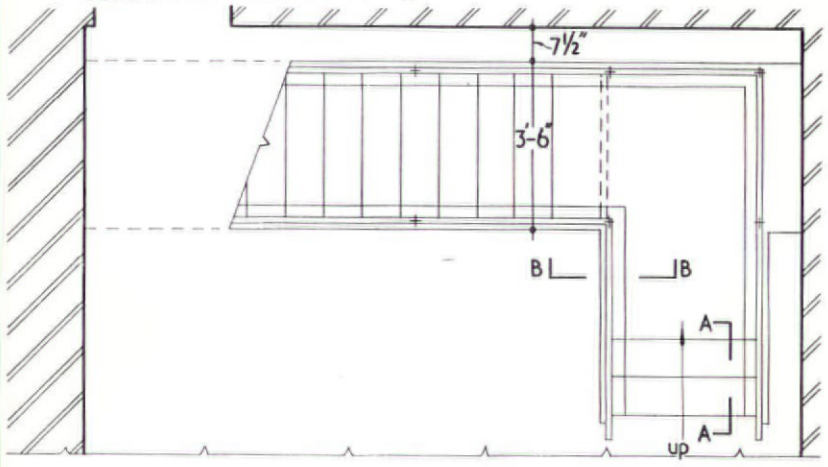
DESIGNED BY LEONARD MANASSEH AND PARTNERS

This is a small dog-leg stair which has been made to appear more spacious by the use of a photomural and a mirror—for the apparent 'return flight' opposite is only a mirror image. The most interesting point of detail is the balustrade with its deceptively simple planar relationships. Note, for instance, that the vertical faces of the mahogany rail are the same width as the bronze balusters.

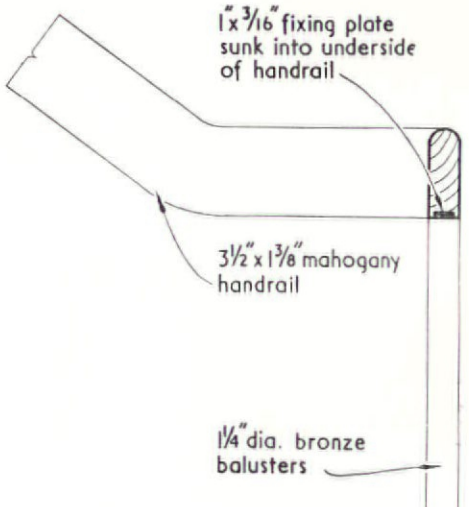


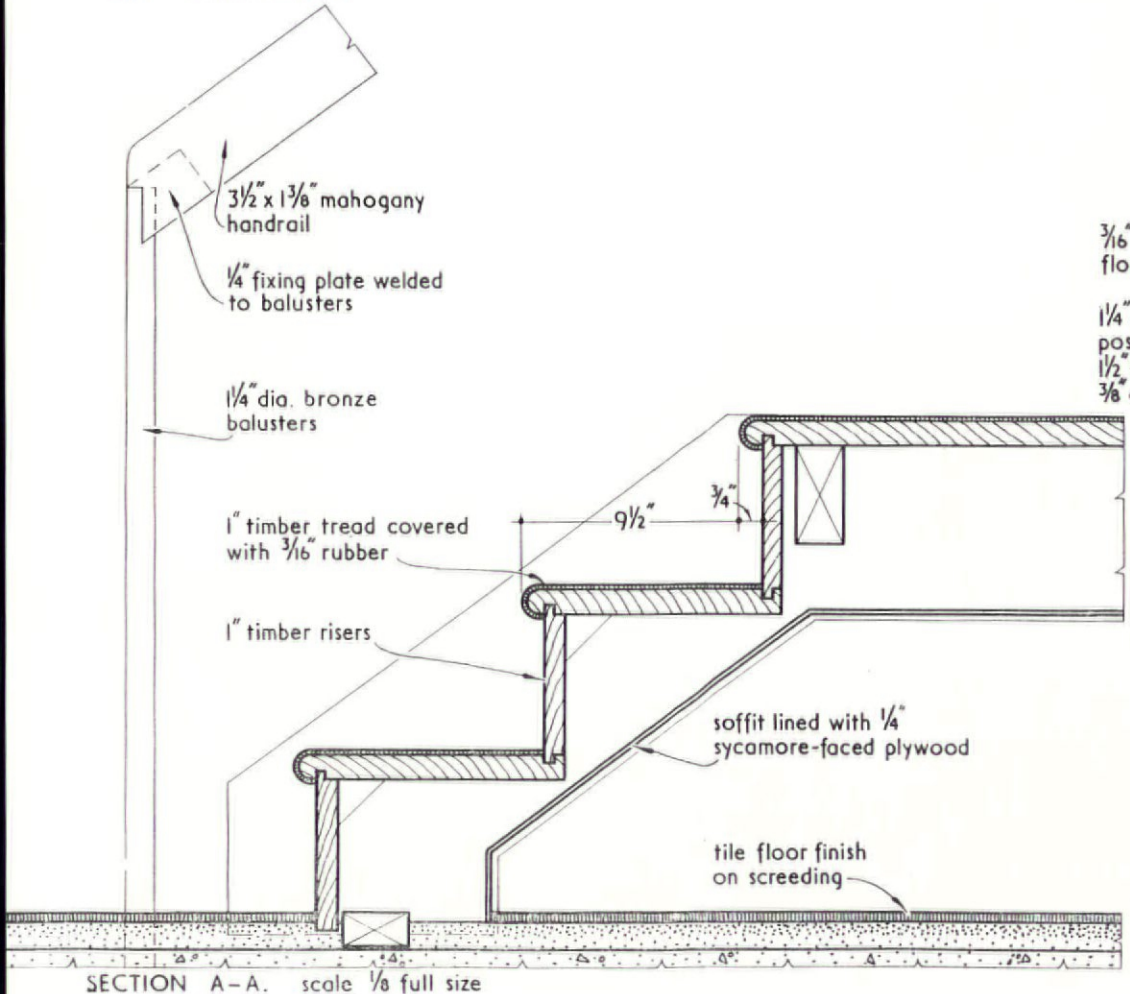


ELEVATION. scale 1/4" = 1'–0"

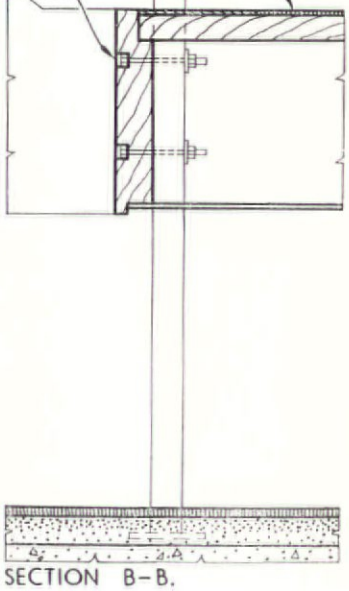


PLAN. scale 1/4" = 1'–0"





SECTION A–A. scale ⅛ full size

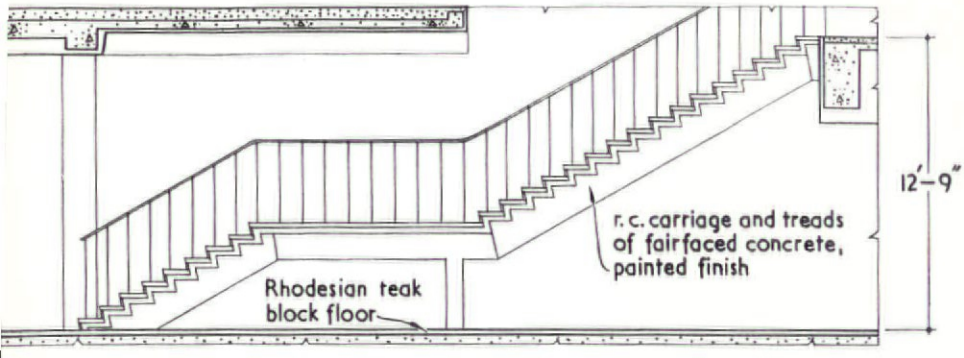


SECTION B–B.

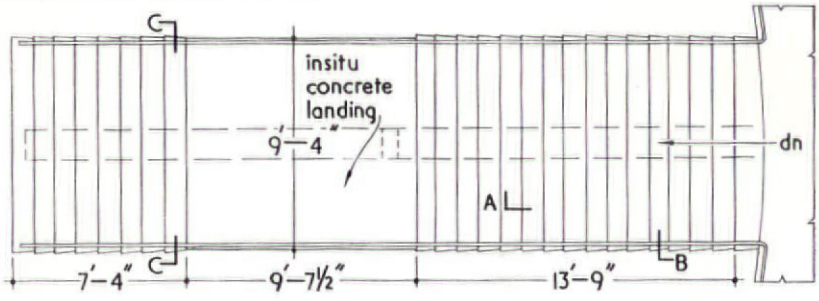
STAIRCASE: OFFICES IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

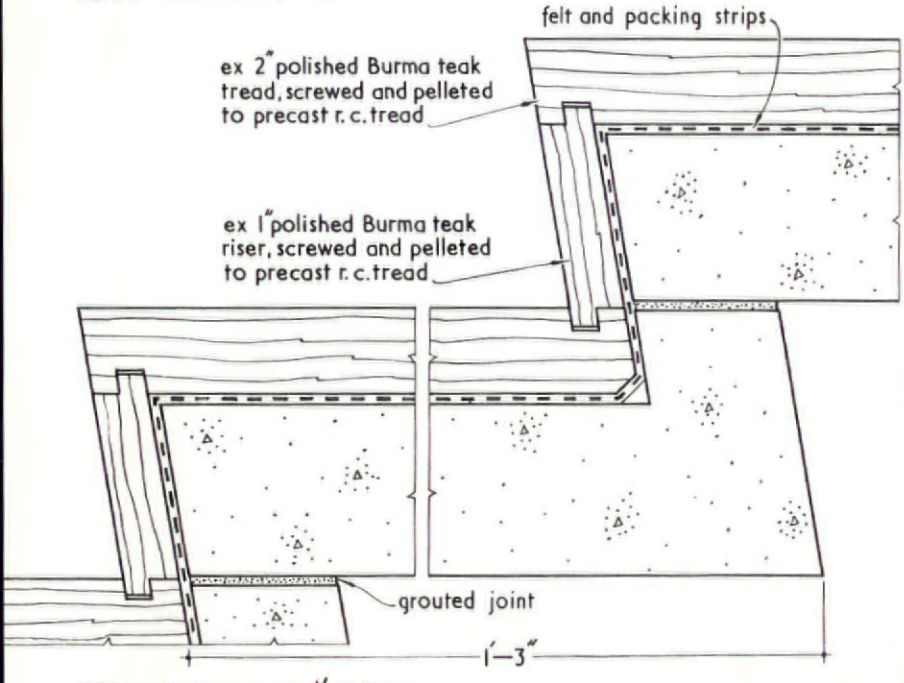
Precast concrete members comprising both treads and risers are cast into and cantilevered from a central in-situ concrete carriage. In order to enhance the 'stepped' effect, the plane of the stair edge is tilted, both downwards and in the direction of the stair head. The treads, risers and floor of the intermediate landing, which are of Burma teak, are laid on felt to provide 'give' in the stair and to deaden the sound of footfalls.



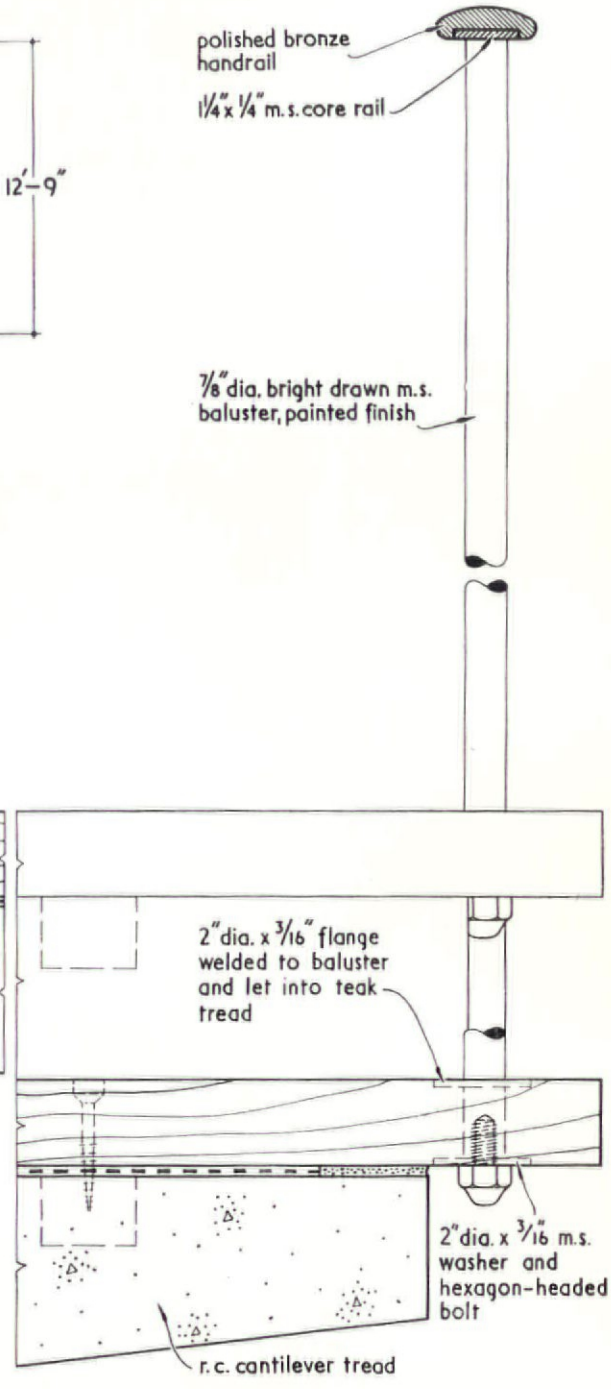
ELEVATION. scale 1/8" = 1'-0"



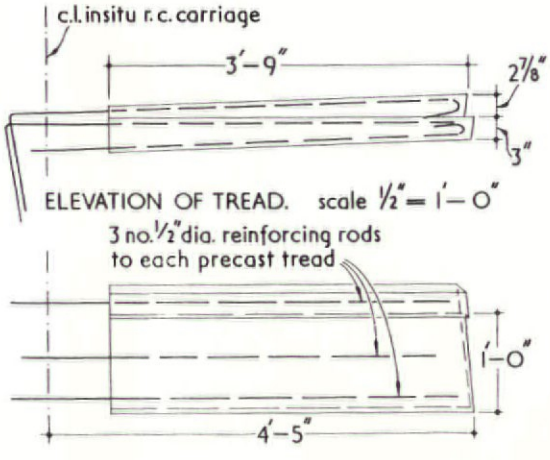
PLAN. scale 1/8" = 1'-0"



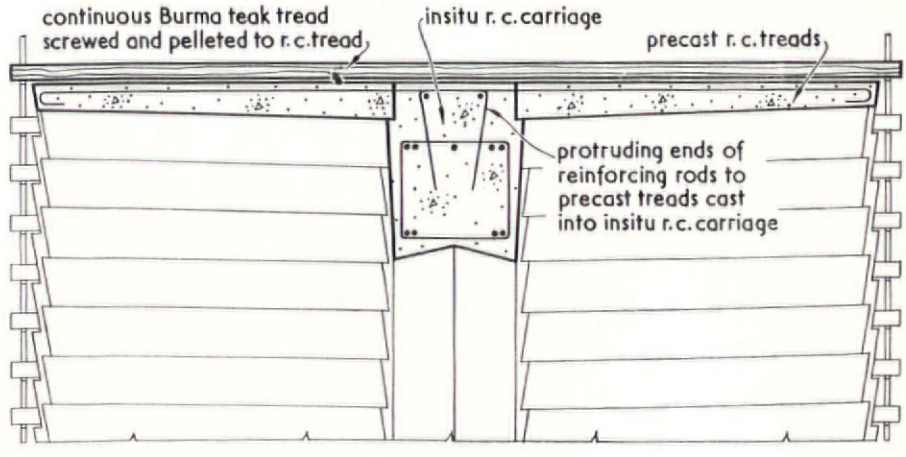
SECTION AT A. scale 1/4 full size



SECTION AT B. scale 1/4 full size



PLAN OF TREAD. scale ½" = 1'-0"

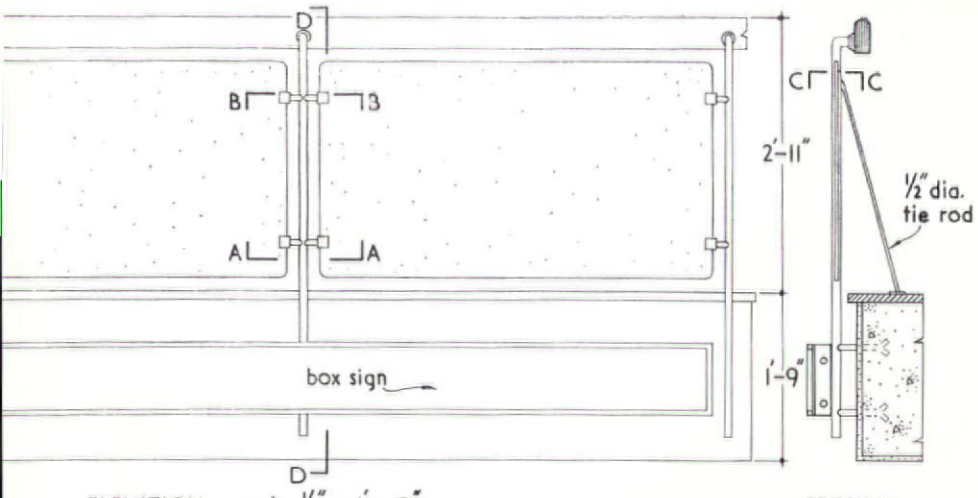


SECTION C-C. scale ½" = 1'-0"

BALUSTRADE: OFFICES IN LONDON, S.W.1

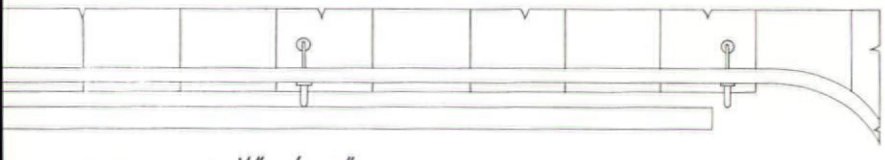
DESIGNED BY CLIVE PASCALL AND PETER WATSON

A very sophisticated version of the kind of balustrade which has the handrail set several inches on the inward side of the balusters, so that one can lean on it without catching the knees. It was decided to use a mahogany ply handrail as it is a continuation of the stair handrail. The balusters also serve to support a plastic-faced box sign on the balcony fascia.

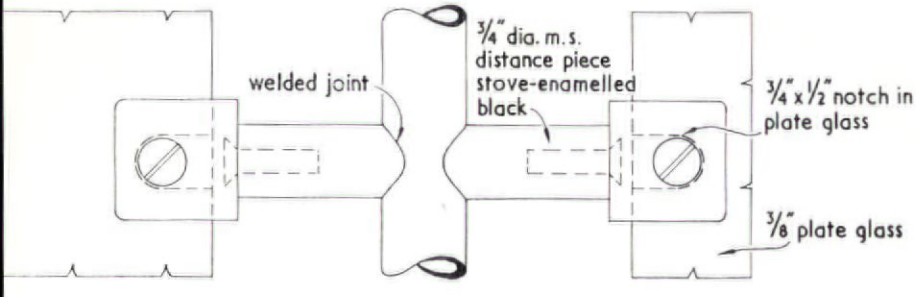


ELEVATION. scale ½" = 1'—0"

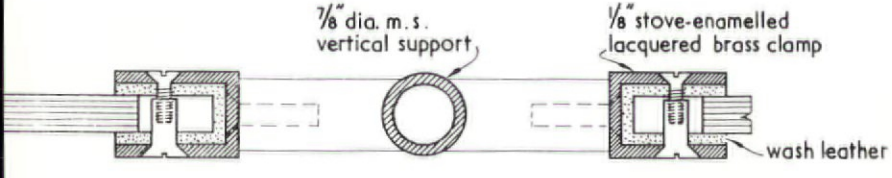
SECTION.



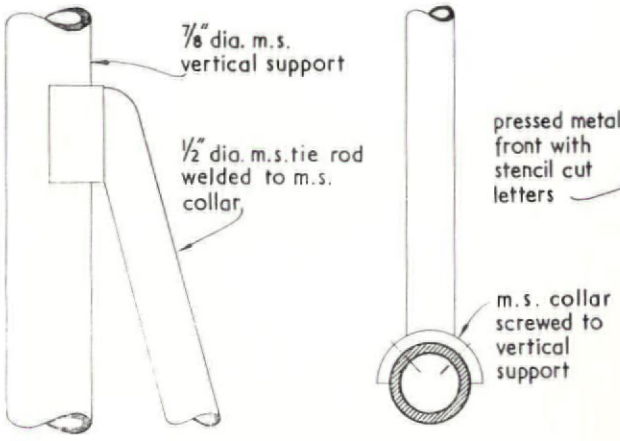
PLAN. scale ½" = 1'—0"



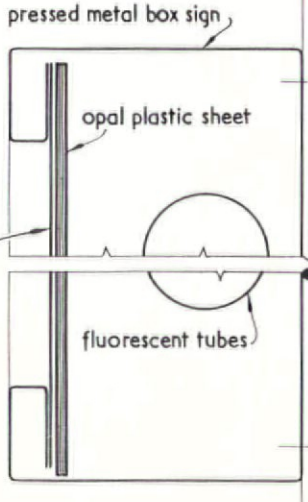
ELEVATION AT A-A. scale ½ full size



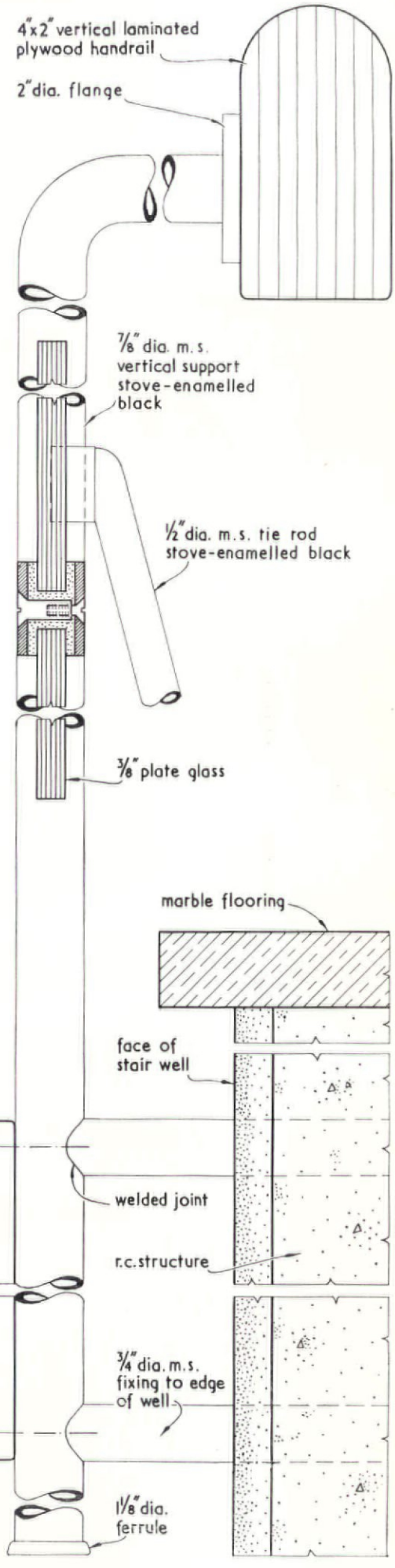
PLAN AT B – B. scale ½ full size



ELEVATION AND PLAN AT C—C. scale ½ full size



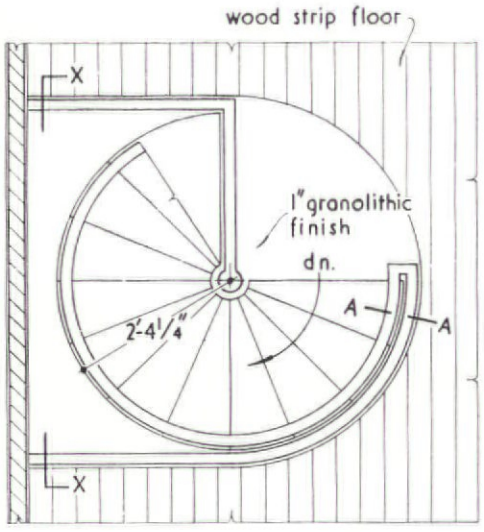
SECTION D—D.



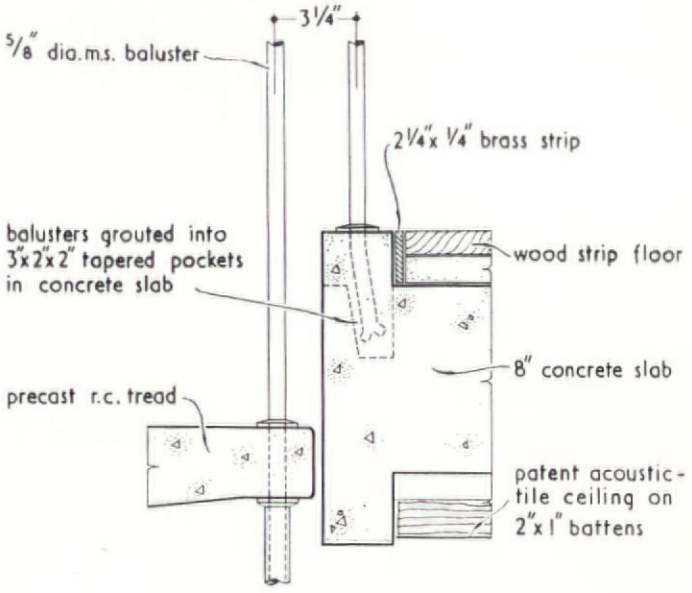
SPIRAL STAIRCASE: LABORATORIES AT ENFIELD, MIDDLESEX

DESIGNED BY G. A. JELLICOE

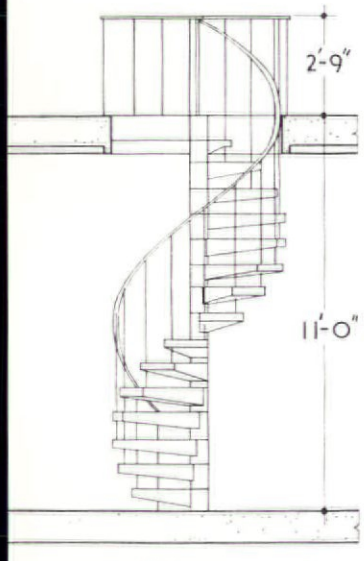
The sequence of construction was as follows:—(1) *Newel tube* (*m.s. tube with r.c. column cast inside*) *was secured, and treads threaded on.* (2) *Shuttering for quarter landing at top was fixed* (*as well as reinforcement connecting stair with floor above*) *and landing was cast.* (3) *Balusters were threaded through treads—and through the sleeves serving as spacers—and secured with screw, washer, nut and coverplate.* (4) *m.s. handrail was screwed on.* (*Cost of stair:* £130, *excluding fixing*).



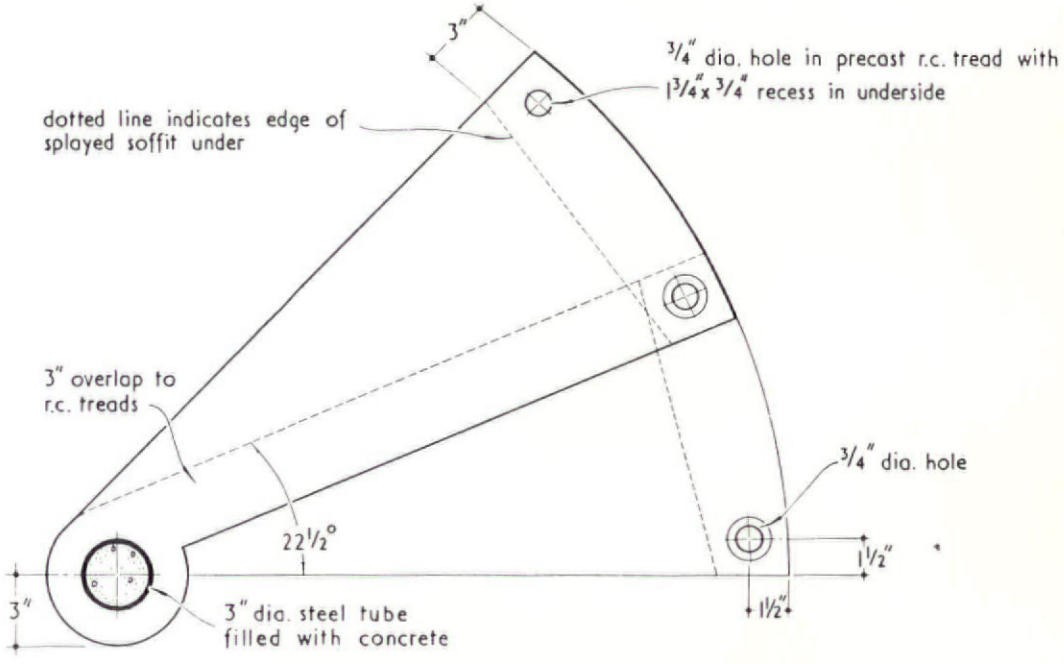
PLAN OF STAIRCASE. scale 3/8" = 1'-0"

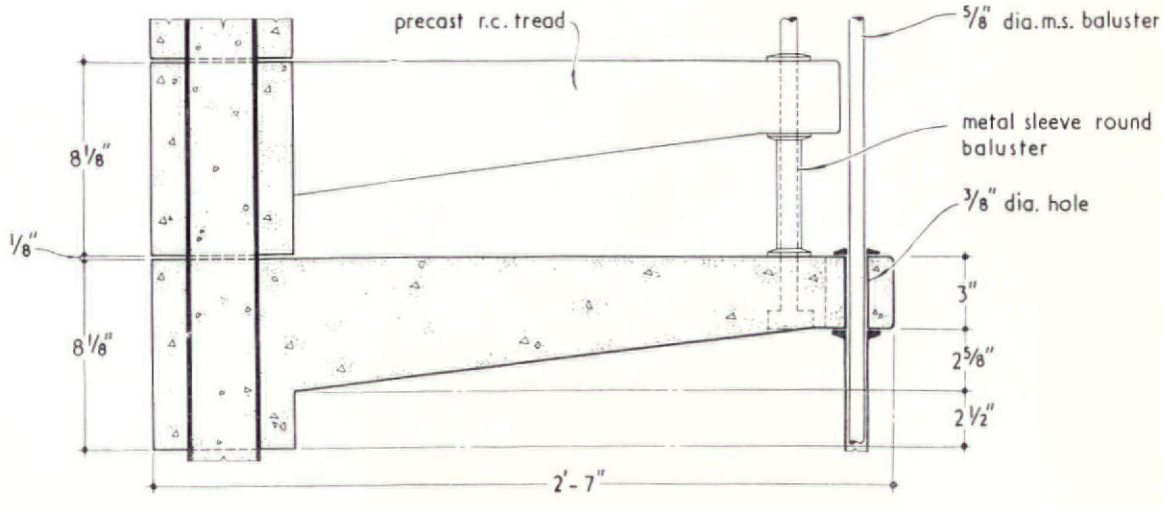


DETAIL AT A – A. scale 1 1/2" = 1'-0"



KEY ELEVATION OF STAIRCASE ON X-X.
scale 3/16" = 1'-0"

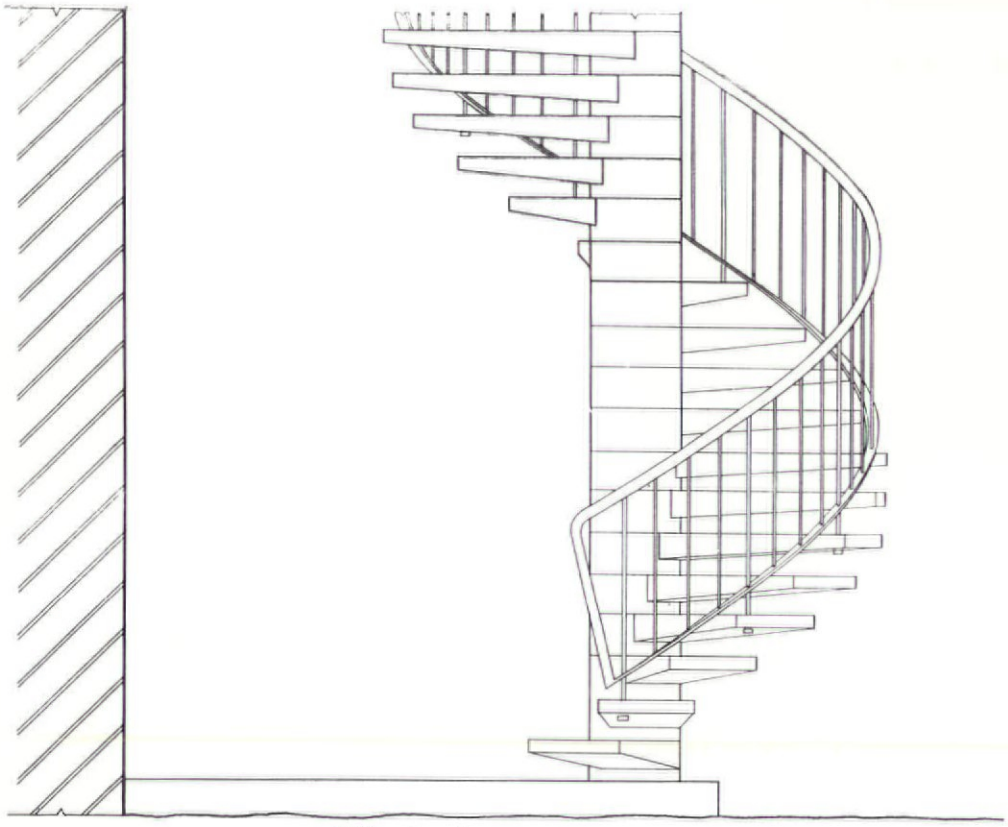




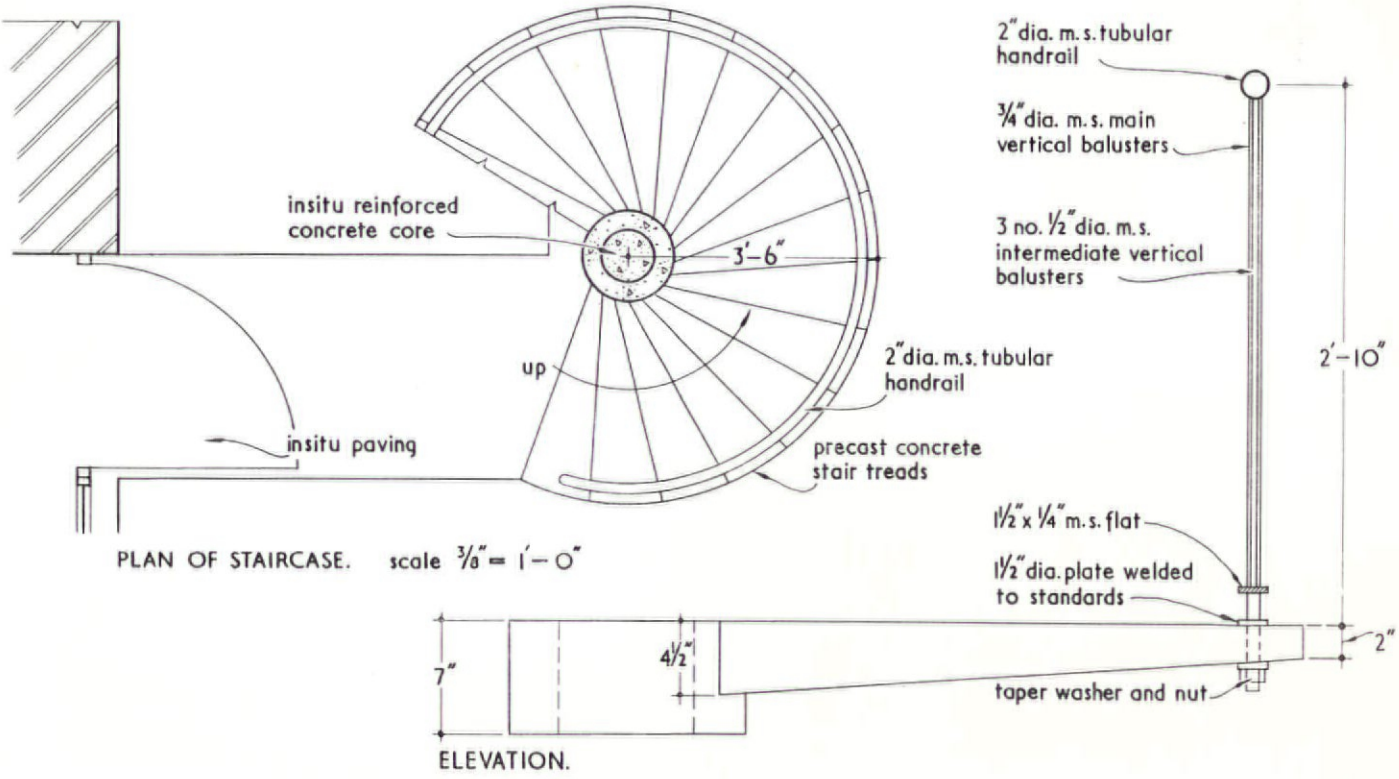
PLAN AND SECTION OF TYPICAL TREAD. scale 1 1/2" = 1' 0"

SPIRAL STAIRCASE: OFFICES IN SUNDERLAND
DESIGNED BY S. W. MILBURN AND PARTNERS

This stair with precast concrete treads is similar to a Danish example illustrated in The Architects' Journal, *April* 11, 1957. *Having no risers to give additional stiffness it requires a substantial newel. The steps are not radial but 'dancing,' to give greater width at the newel side, and the newel is cast into the in-situ landing at each floor level.*

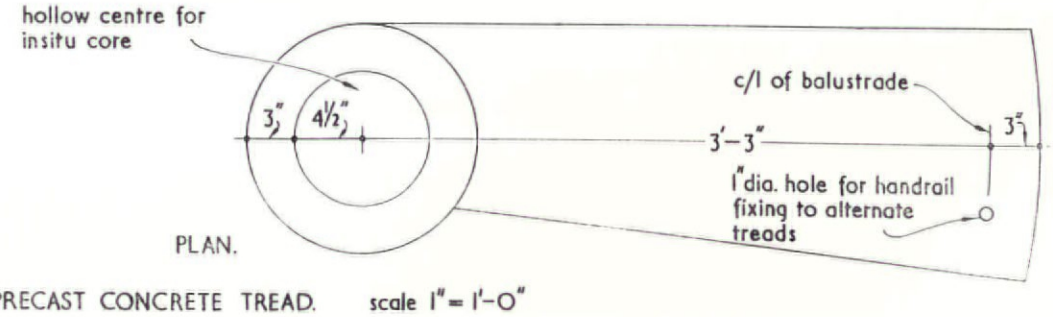


ELEVATION. scale 3/8" = 1'-0"



PLAN OF STAIRCASE. scale 3/8" = 1'-0"

ELEVATION.



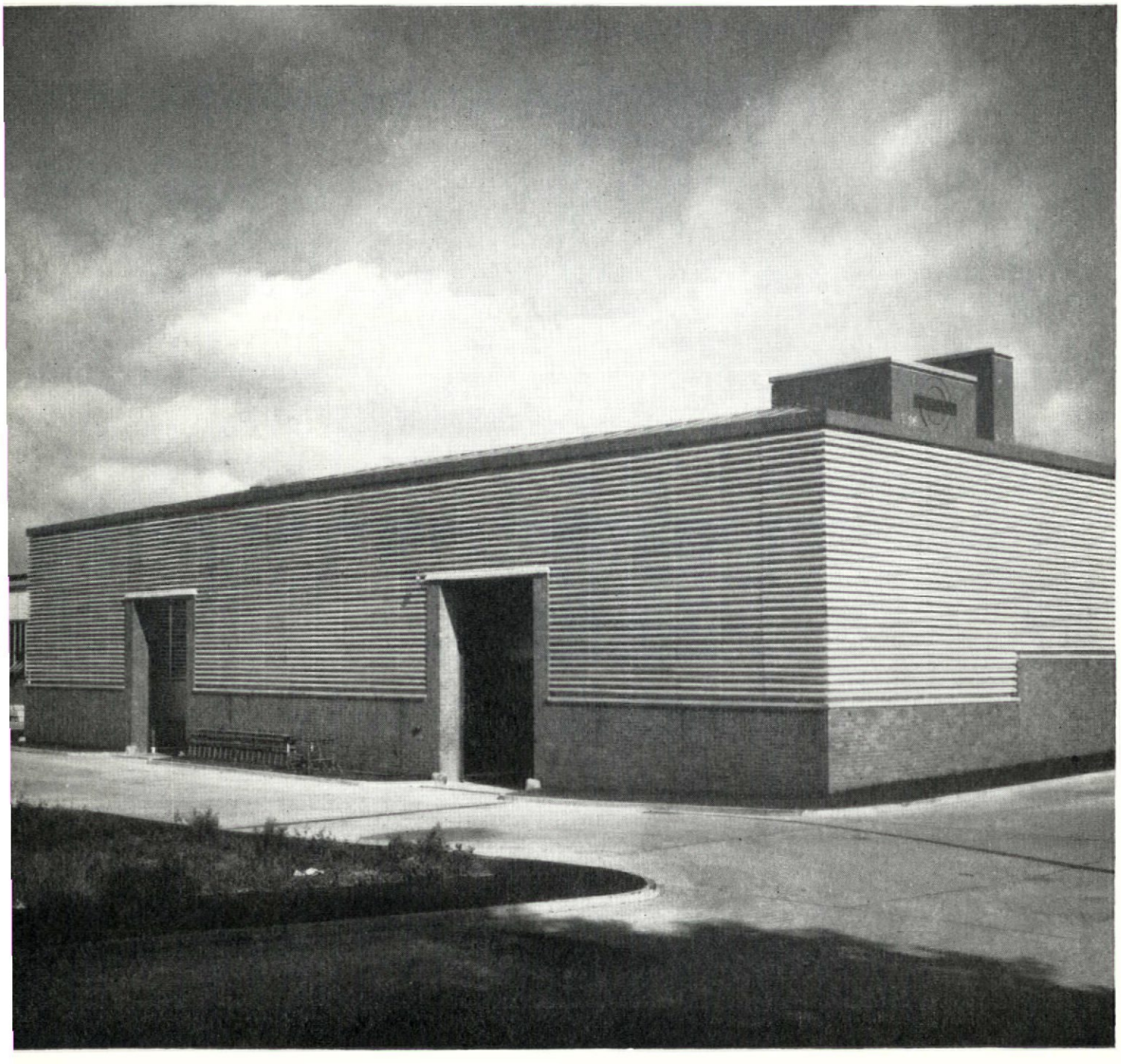
PLAN.

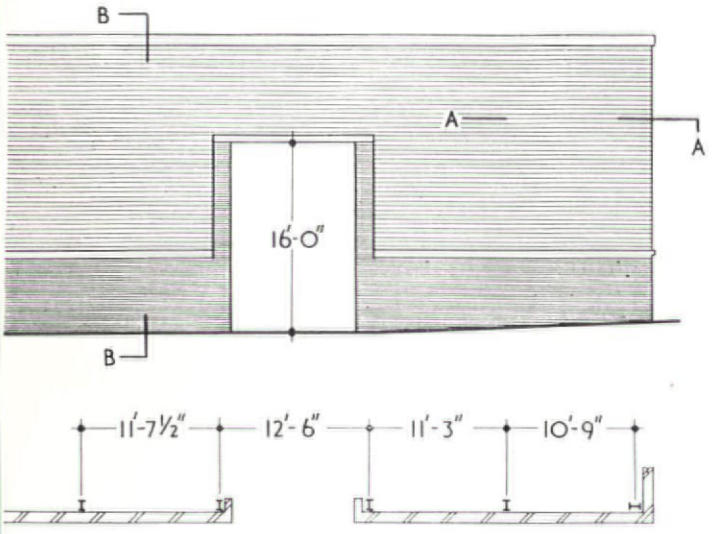
DETAIL OF PRECAST CONCRETE TREAD. scale 1" = 1'-0"

LOUVRED CLADDING: TIMBER DRYING STORE, ALDENHAM, HERTS

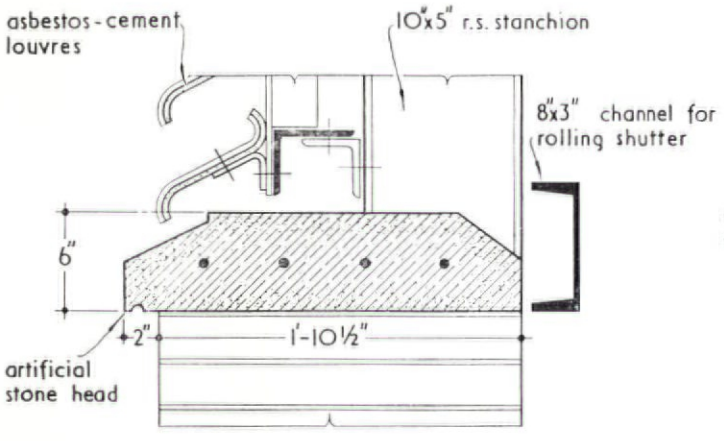
DESIGNED BY THOMAS BILBOW (architect to the London Transport Executive); K. J. H. SEYMOUR (architect-in-charge)

Asbestos louvre blades have been used instead of wood to save maintenance and because there was no serious danger of shattering. The neat appearance is largely due to the fact that all fixing is concealed from the outside.

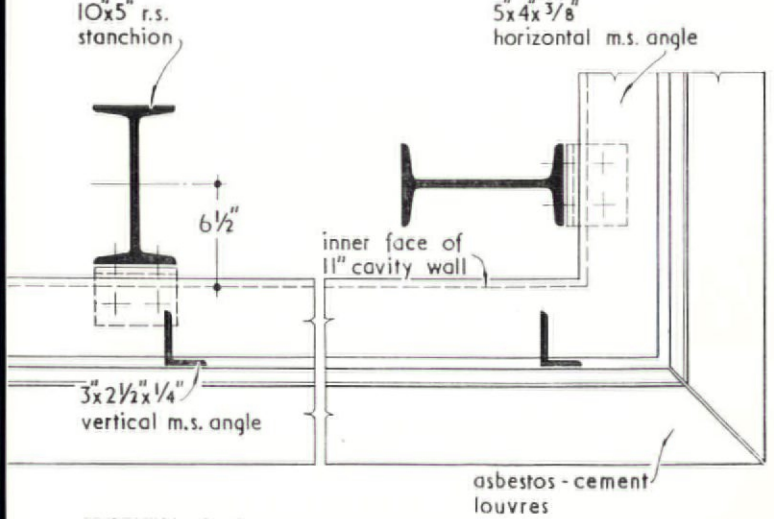




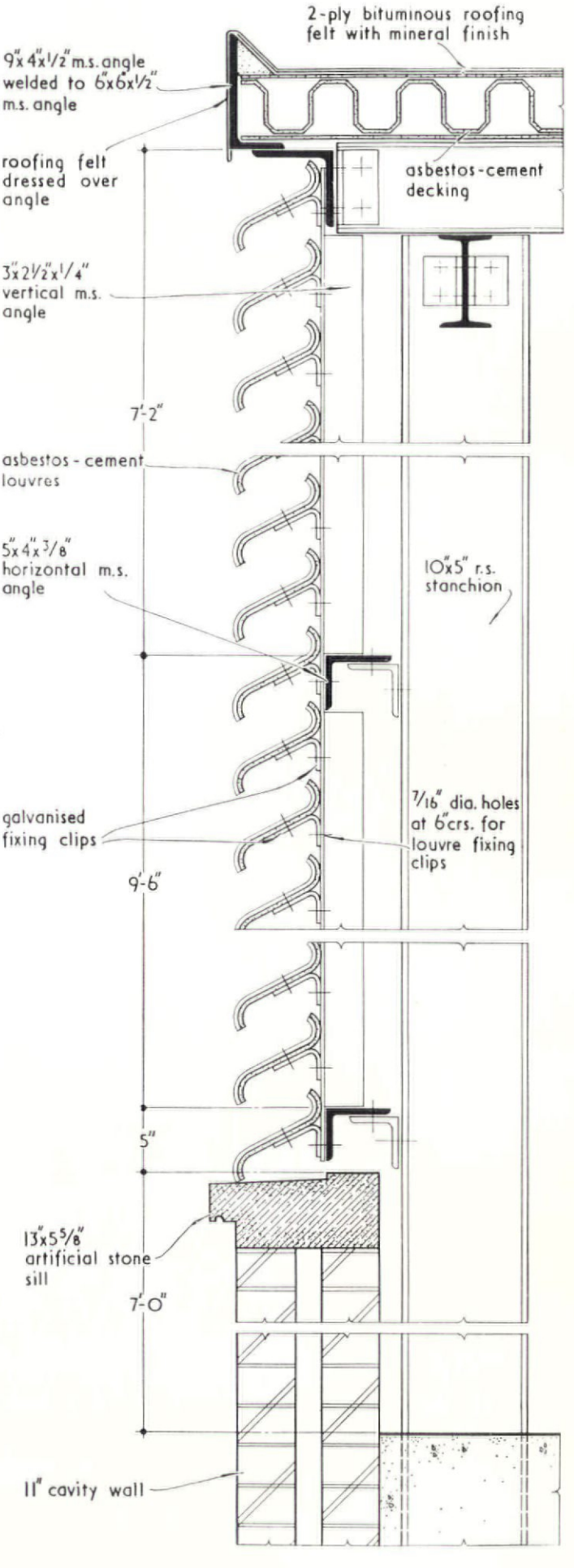
ELEVATION AND PLAN. scale 1/16"=1'-0"



DETAIL AT HEAD OF DOOR.



SECTION A–A.

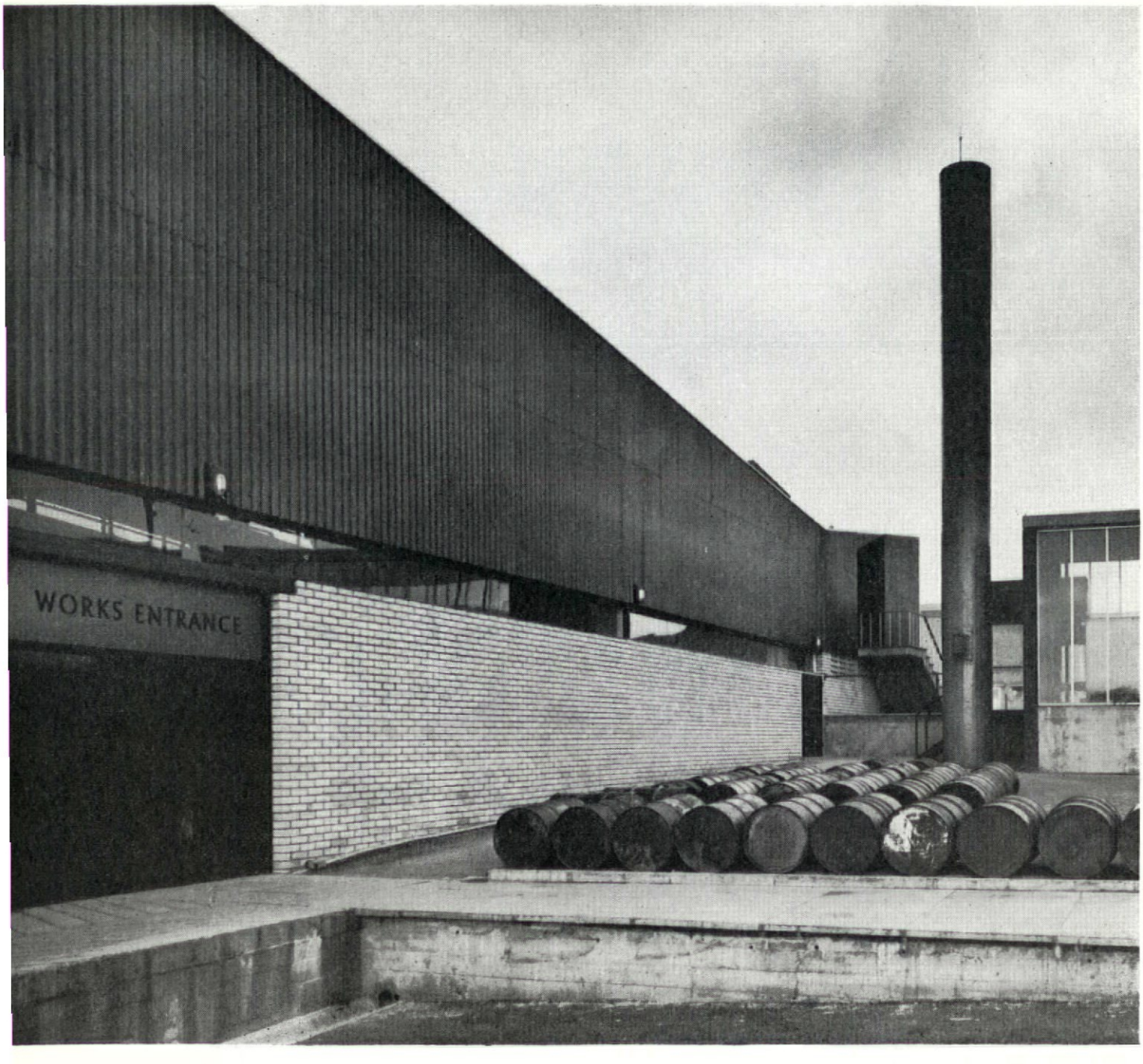


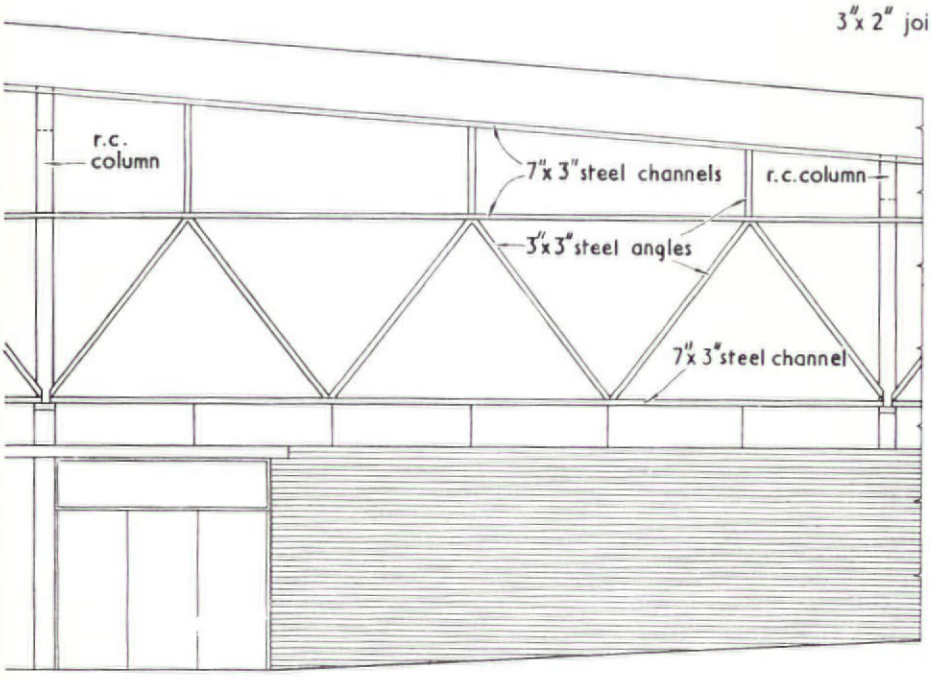
SECTION B–B. scale 1"=1'-0"

FACTORY CLADDING: FACTORY AT HEMEL HEMPSTEAD, HERTS

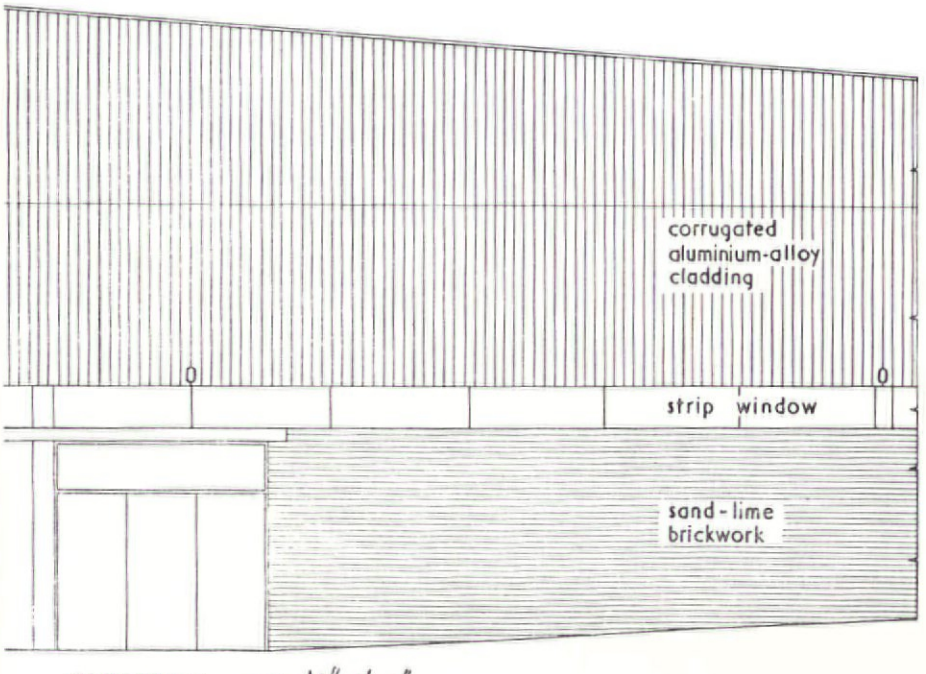
DESIGNED BY OVE ARUP AND PARTNERS; PHILIP DOWSON AND FRANCIS PYM (architects-in-charge)

The steel trusses which provide the framing for the upper part of the wall are supported on brackets bolted to r.c. columns placed behind the inside face of the wall. The lower part of the wall is 9-in. brickwork built in two 4½-in. skins to give a fair face on both sides. The gap between the top of the wall and the bottom chord of the trusses is closed with a continuous strip of glazing held top and bottom in aluminium alloy sections, the 5-ft. long strips of glass being jointed with lead cames.

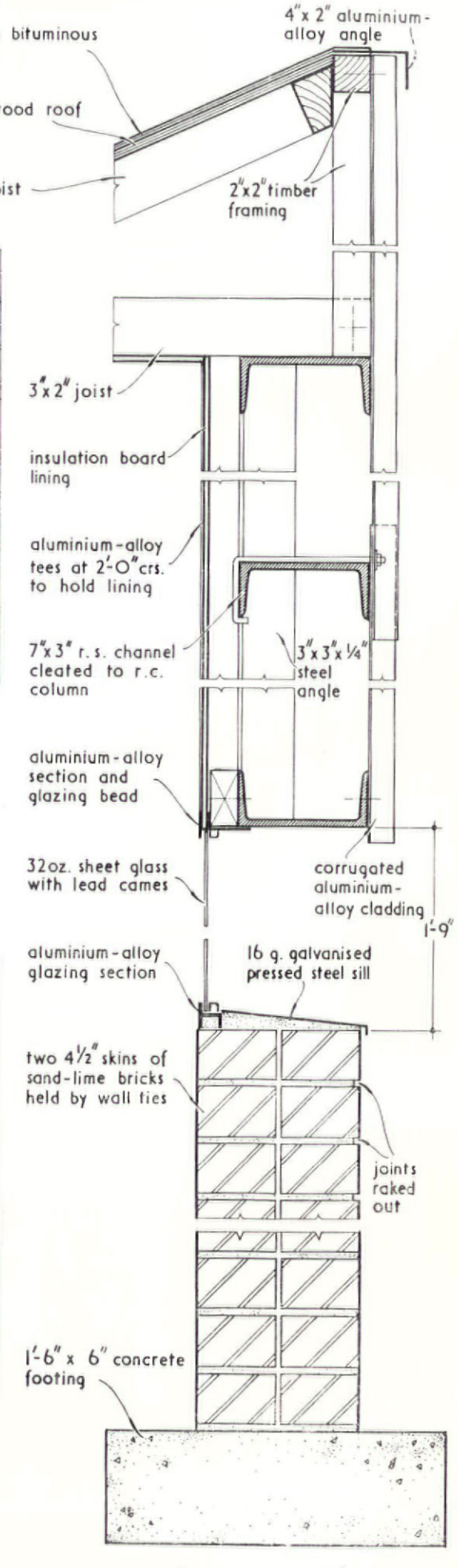




ELEVATION OF FRAMEWORK TO CLADDING.



ELEVATION. scale 1/8" = 1'-0"

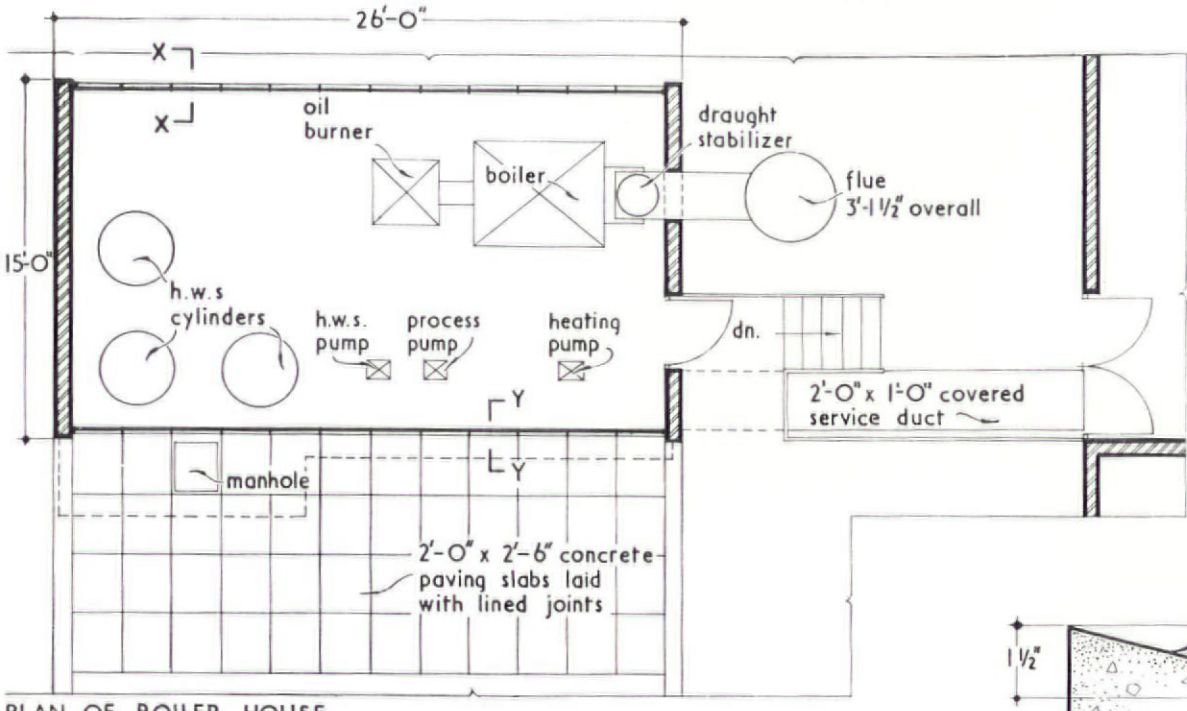


SECTION THRO' WALL. scale 1 1/2" = 1'-0"

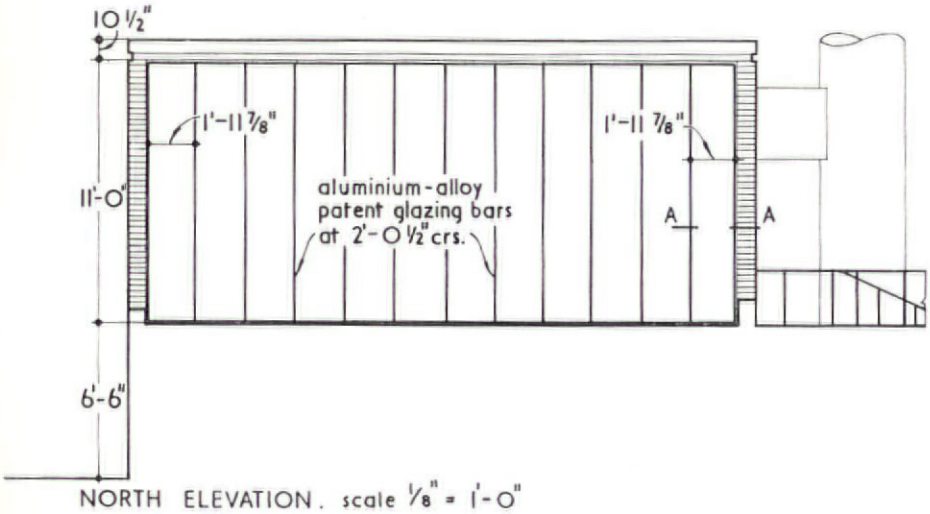
GLASS WALL TO BOILER HOUSE: FACTORY AT HEMEL HEMPSTEAD, HERTS

DESIGNED BY OVE ARUP AND PARTNERS; PHILIP DOWSON AND FRANCIS PYM (architects-in-charge)

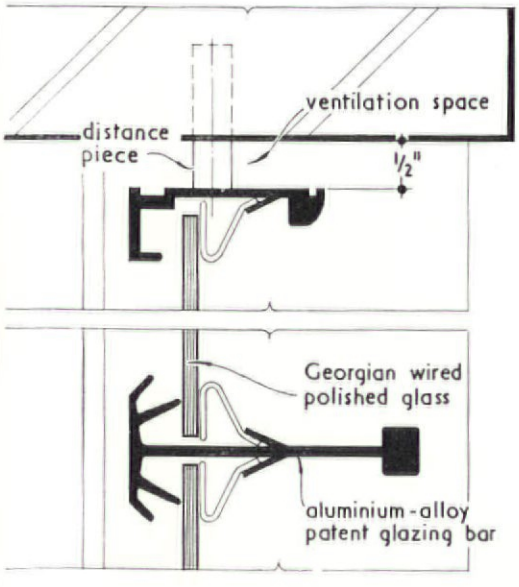
The equipment—the calorifiers, the pipe runs and the oil-fired boiler itself—is sufficiently lagged to make heat loss through the glass of no account. A half-inch gap is left to right and left of each glazed wall to let air into the boiler. But, as this was found insufficient, a louvred ventilator was inserted in the boiler-house door. An incidental advantage of glazed walling in this context is that it is simple to take down a few sections when any of the larger pieces of equipment have to be renewed.



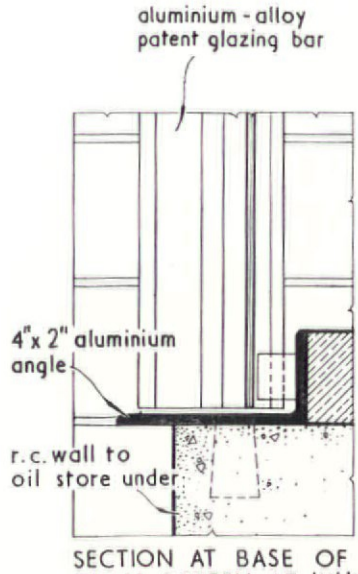
PLAN OF BOILER HOUSE.



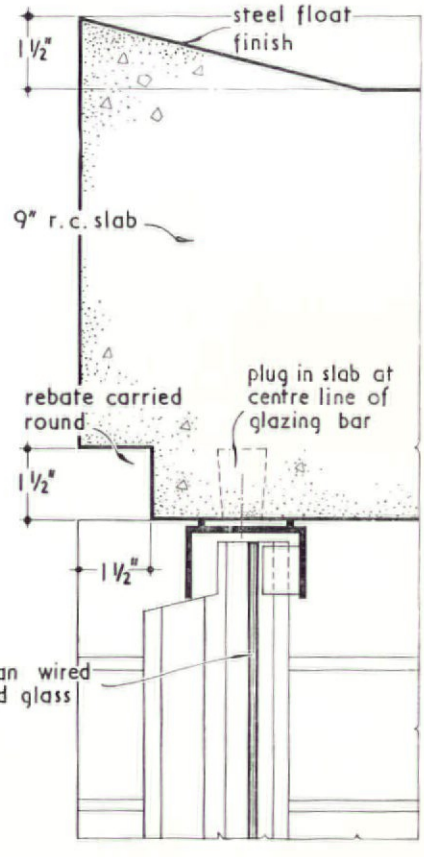
NORTH ELEVATION. scale ⅛" = 1'-0"

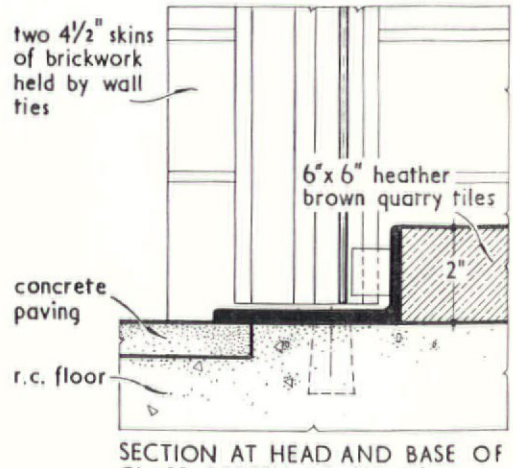


PLAN AT 'A'-'A'.
scale ½ full size



SECTION AT BASE OF GLASS SCREEN AT 'X'-'X'.
scale ¼ full size

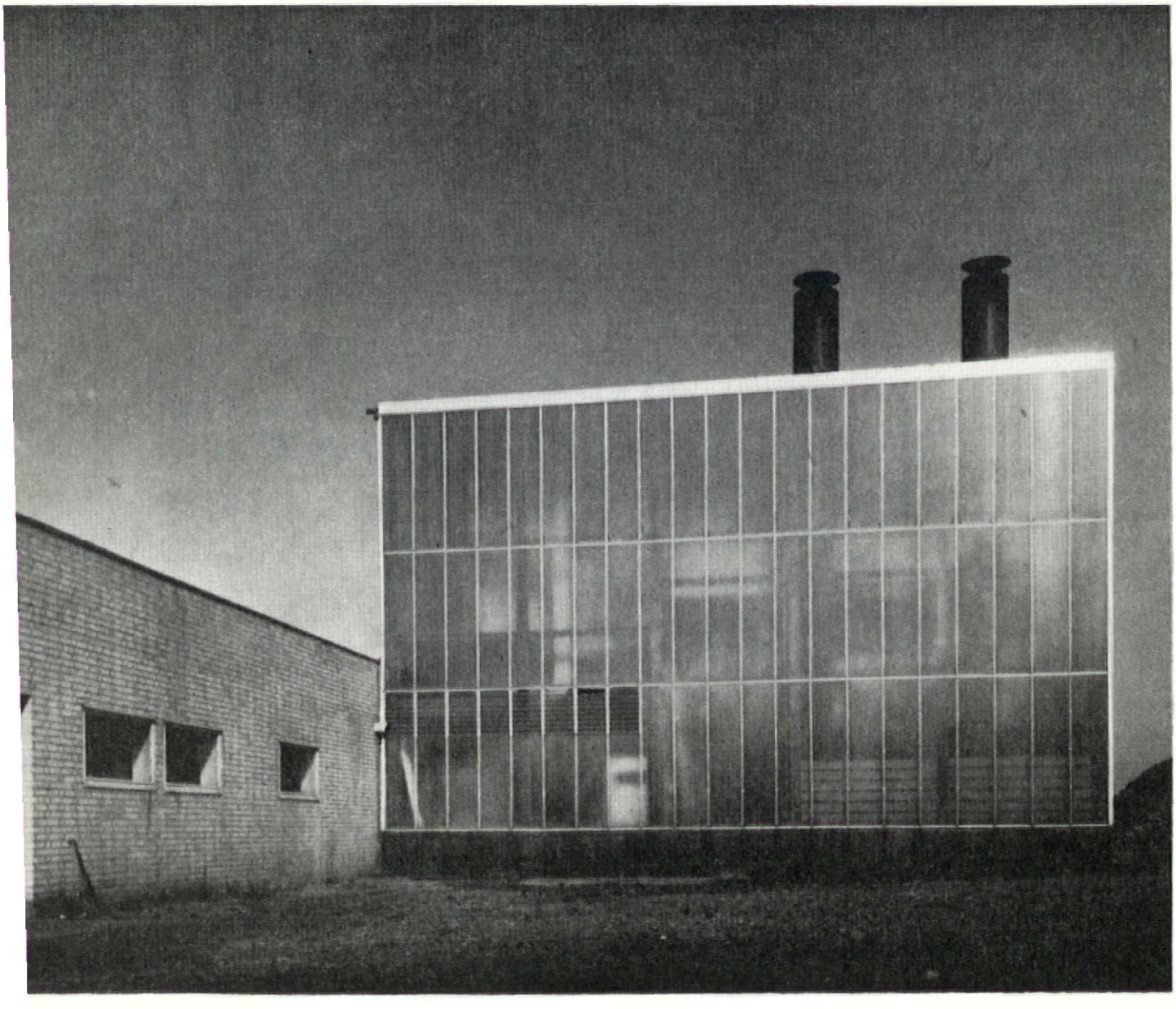


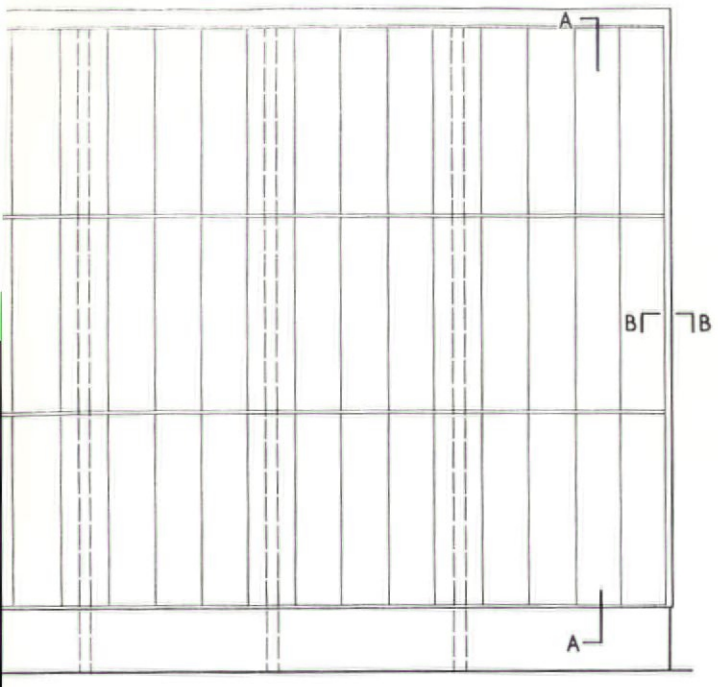


SECTION AT HEAD AND BASE OF GLASS SCREEN AT 'Y-Y'
scale ¼ full size

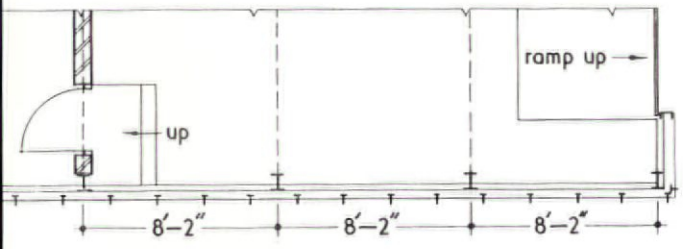
GLASS WALL TO BOILER HOUSE: PITHEAD BATHS AT DUDLEY, WORCESTERSHIRE
DESIGNED BY RICHARD SHEPPARD AND PARTNERS

Patent glazing is often used for boiler houses as the boilers themselves are, of course, independently lagged and sections of wall can easily be taken down to enable large pieces of equipment to be removed, as was pointed out in the similar example illustrated on page 48. One point of difference between that boiler house and this one is that here the ventilators are incorporated in the glazing to ensure a steady supply of air to the boilers.

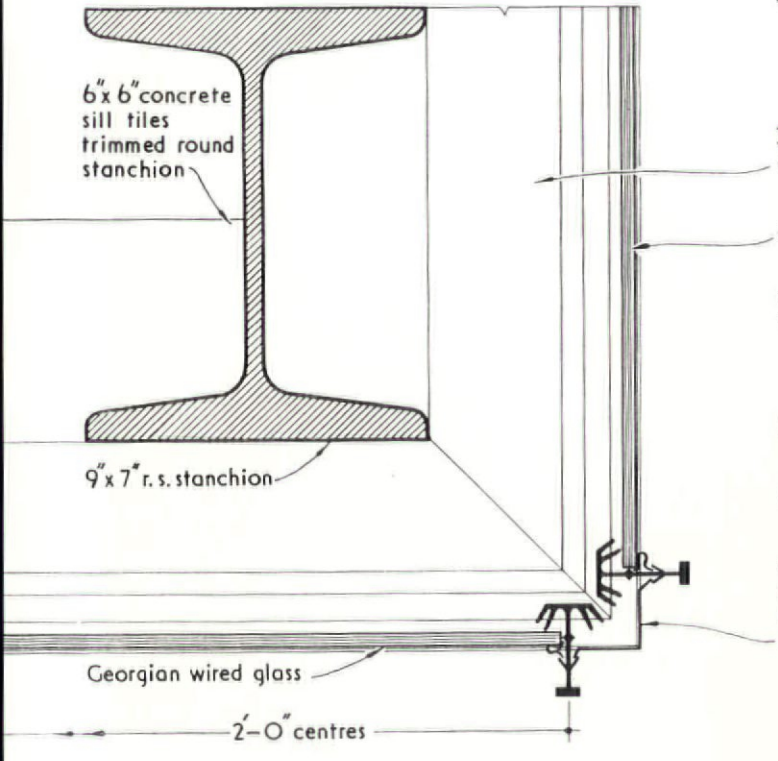




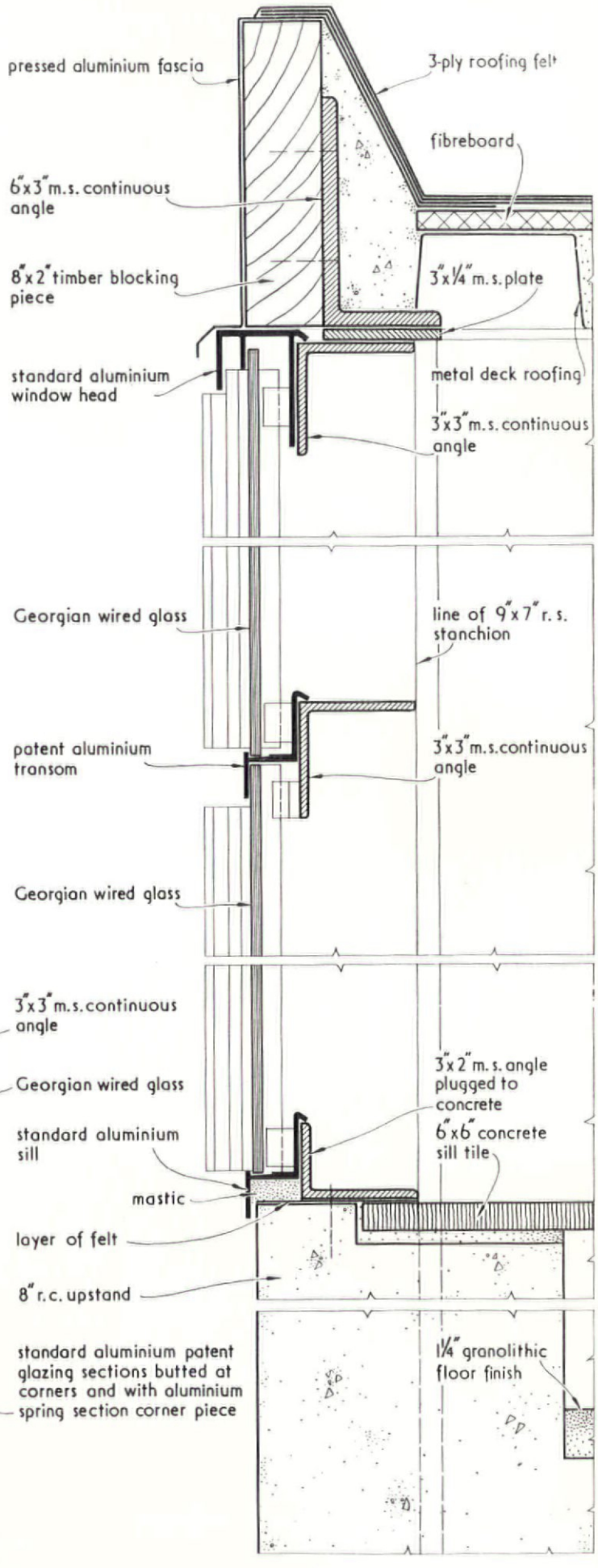
ELEVATION. scale 1/8" = 1'–0"



PLAN. scale 1/8" = 1'–0"



PLAN AT B–B. scale 1/4 full size

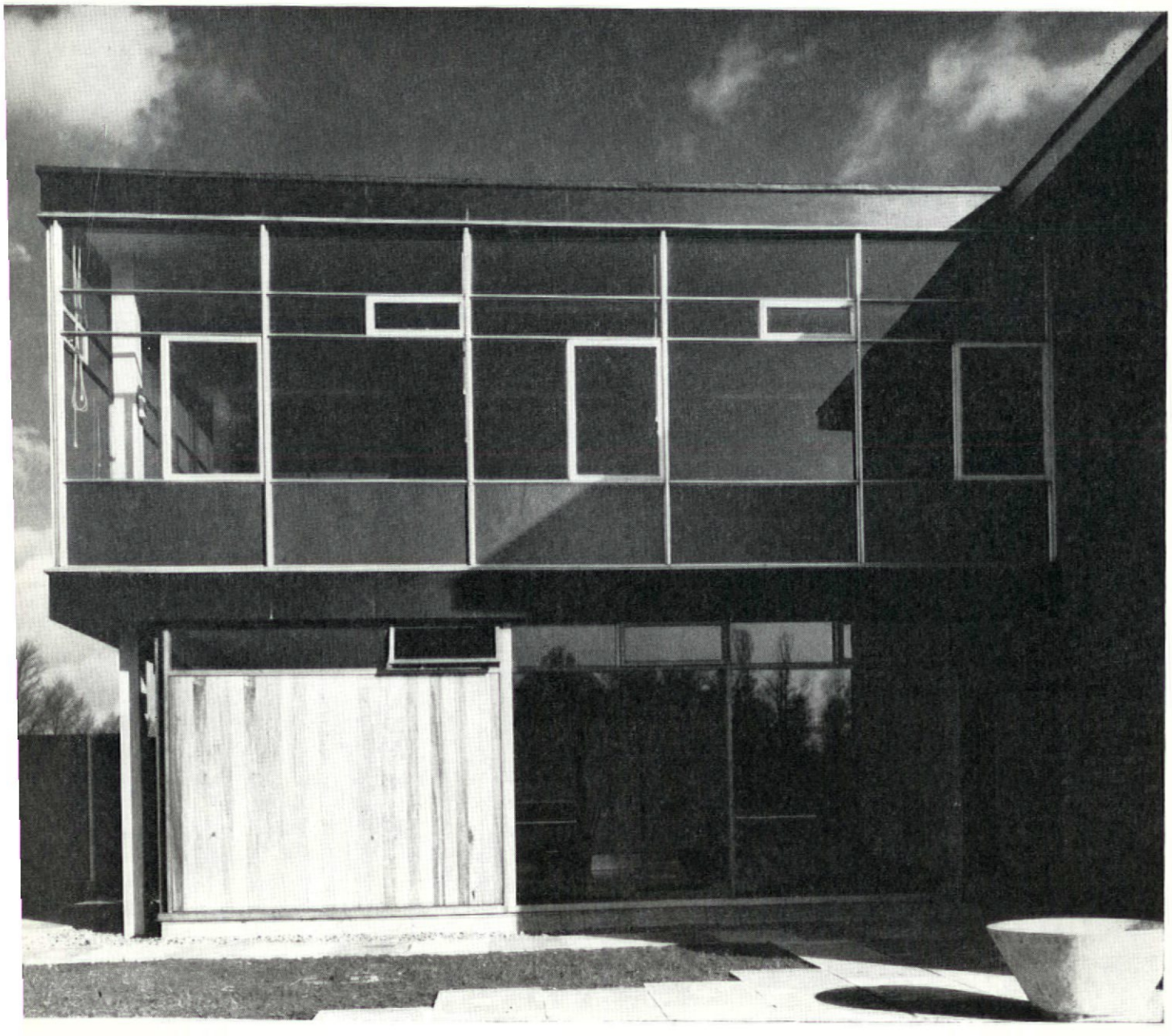


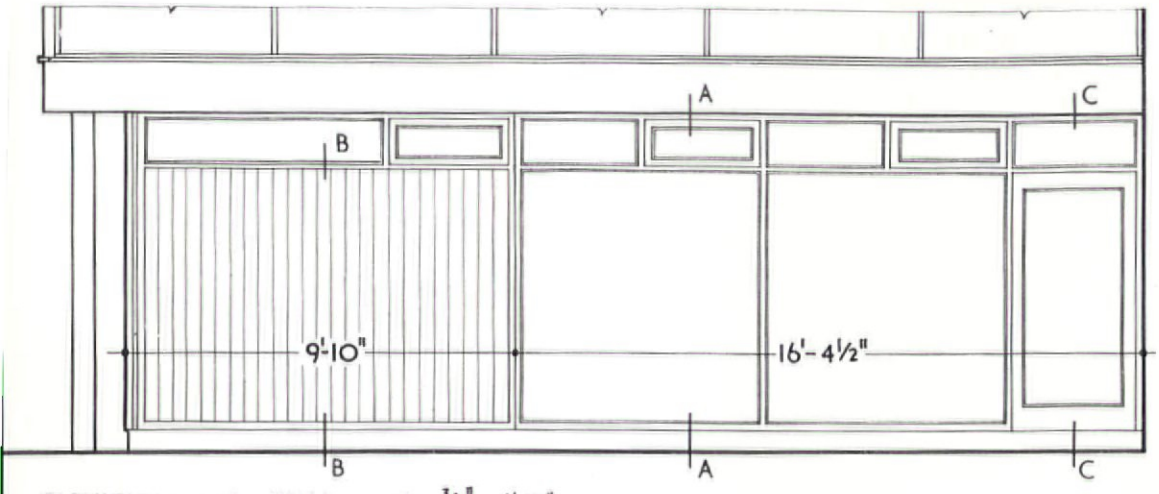
SECTION A–A.

GLAZED WALL: OFFICES AT CARDIFF

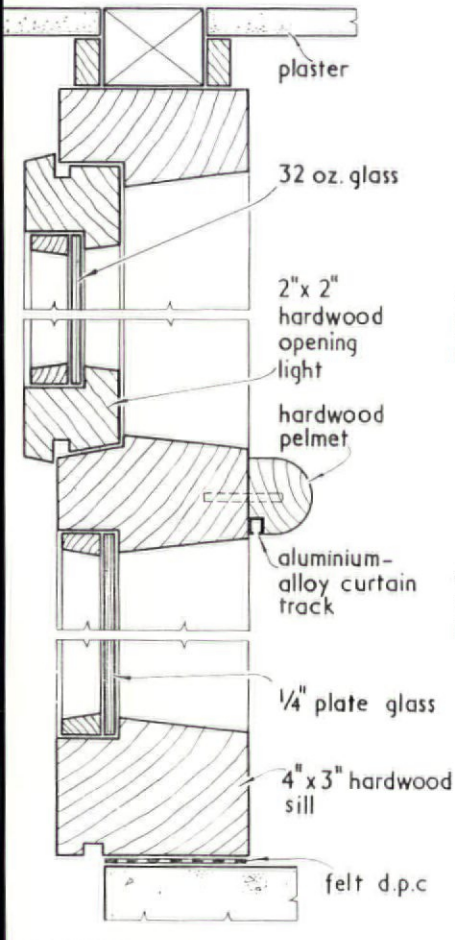
DESIGNED BY GRENFELL BAINES AND HARGREAVES

The framing and vertical boarding is meranti finished with alkyd varnish: the plywood which backs the solid partition is faced with mahogany veneer. One interesting detail (which is not visible on the photograph) is the pelmet-cum-curtain track which is fixed behind the transom above the two large lights. This (as can be seen from the drawing) consists of a moulded and rebated hardwood member (which is only 1¼ in. by 1½ in.) secured with hardwood dowels to each mullion into the rebate of which is fixed an aluminium extrusion to receive the nylon runners.

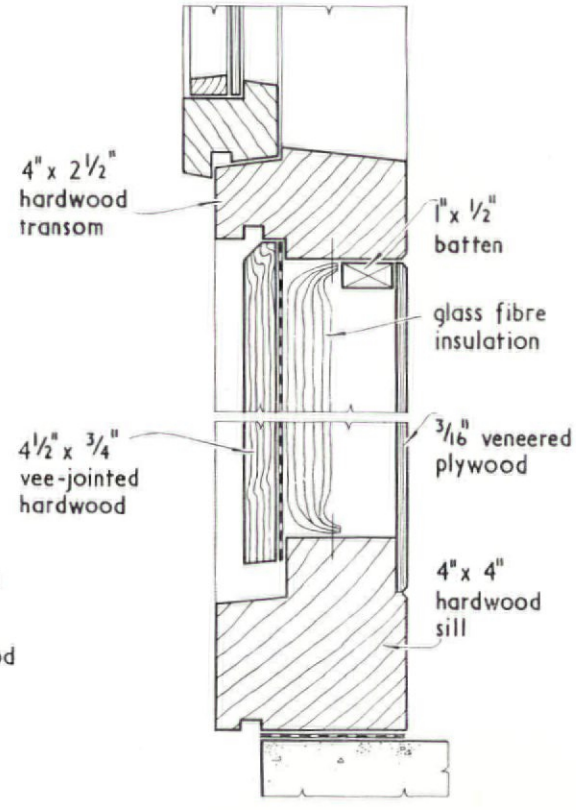




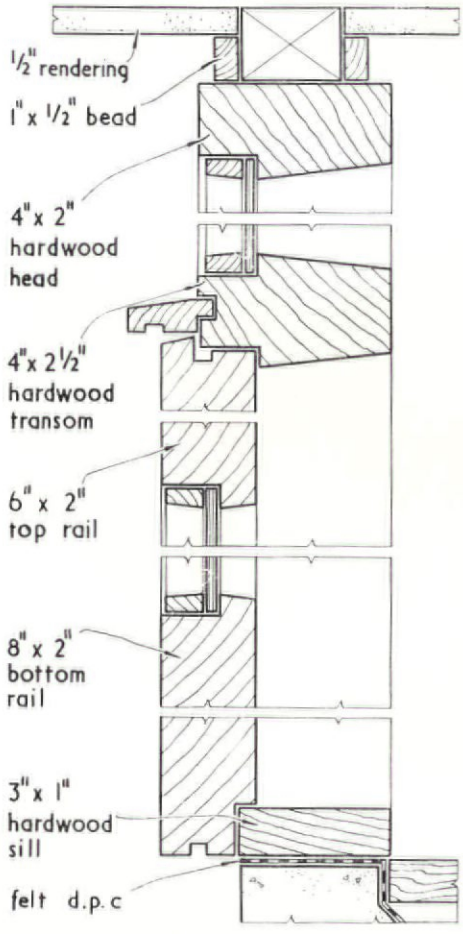
ELEVATION OF WALL. scale 3/16" = 1'-0"



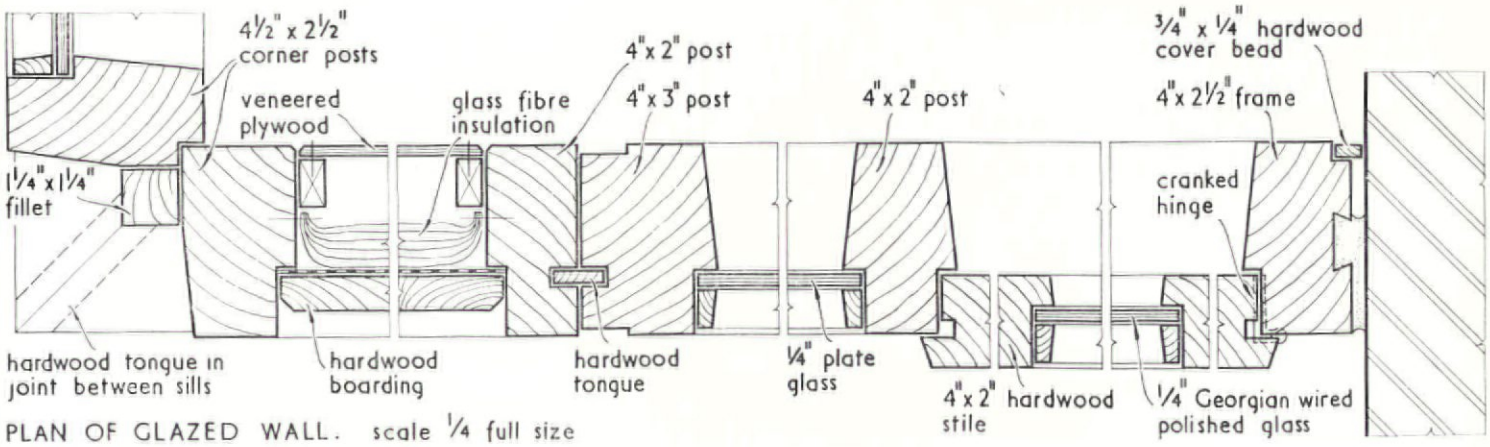
SECTION A - A.



SECTION B - B



SECTION C - C.

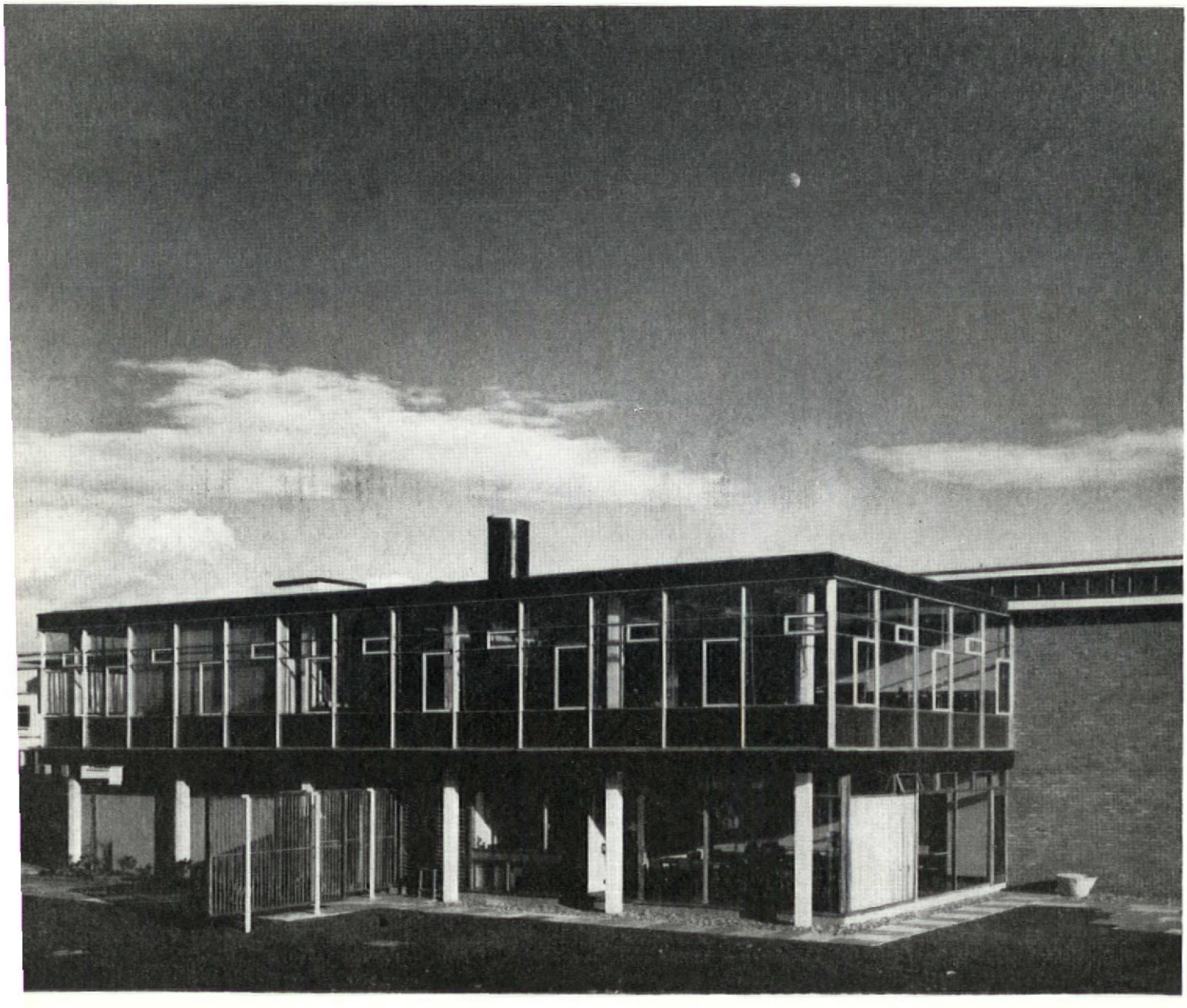


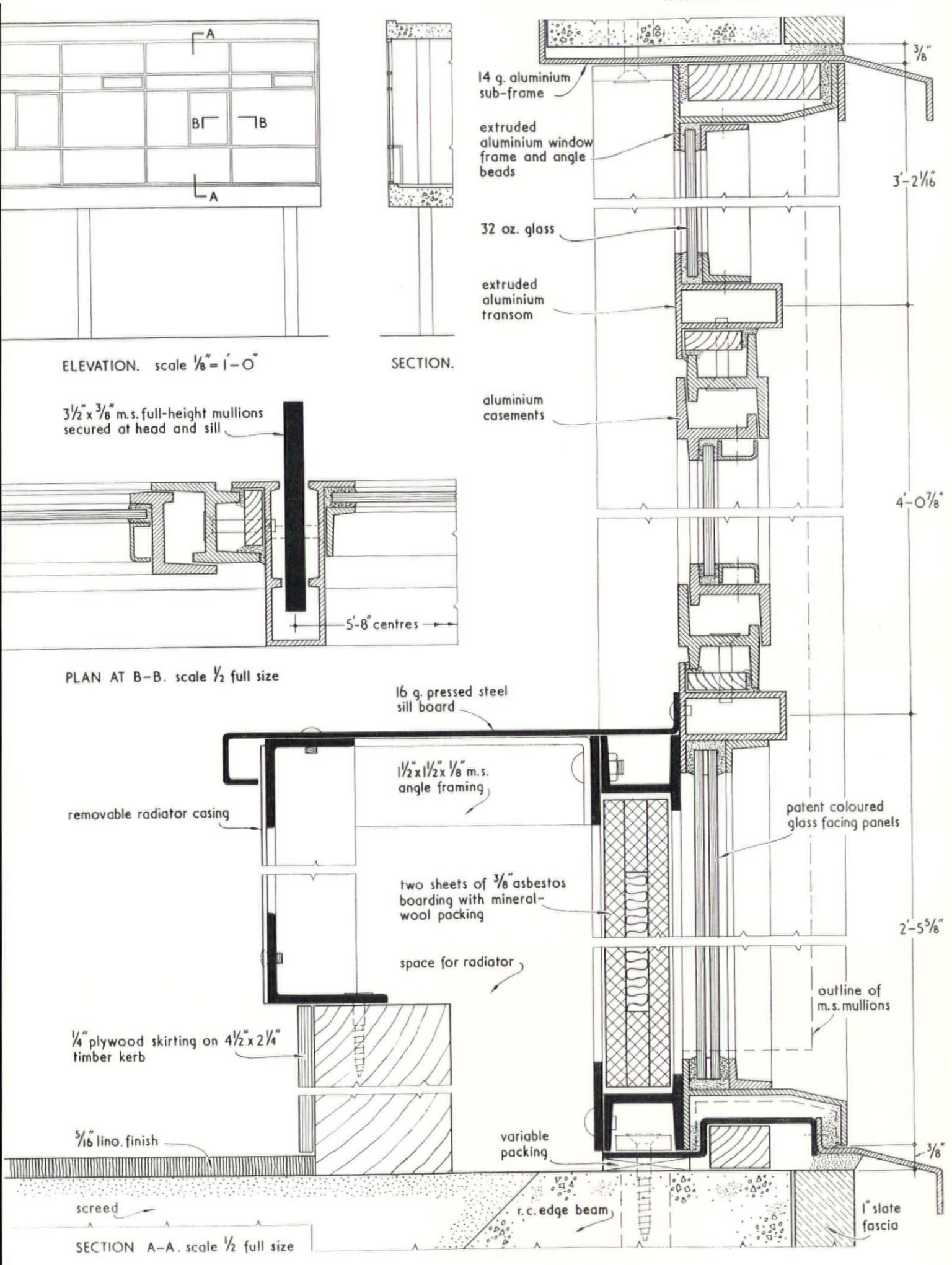
PLAN OF GLAZED WALL. scale ¼ full size

GLAZED WALL: OFFICES AT CARDIFF

DESIGNED BY GRENFELL BAINES AND HARGREAVES

This is a good example of a good cliché in present-day English industrial architecture: namely the use of single-storeyed curtain walling with slate fascias to lighten the effect of a reinforced concrete structure. In this particular proprietary brand of walling a mill finish aluminium framework is bolted to a system of 3½ in. by ⅜-in. galvanized steel mullions. Behind the glazed 'leg guard' is a combined asbestos and rockwool back-up panel which gives the prescribed one-hour fire resistance.

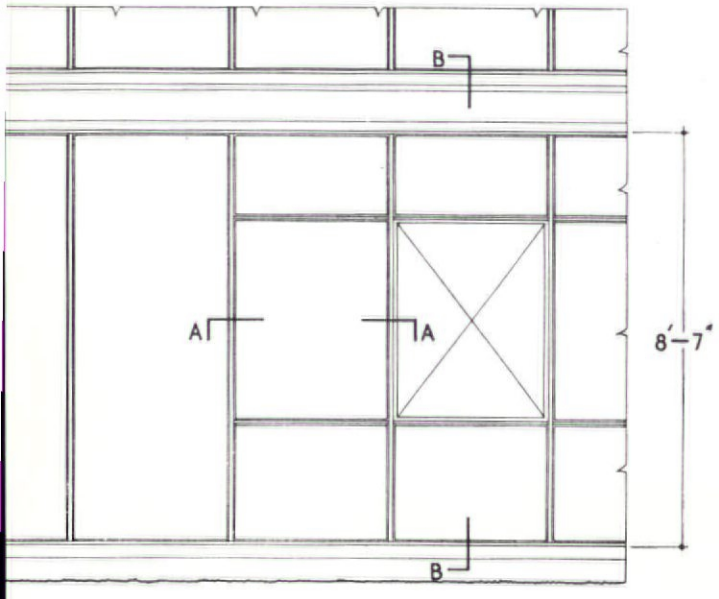



A
B
B
A
ELEVATION. scale ⅛" = 1'-0"
SECTION.
3½" x ⅜" m.s. full-height mullions secured at head and sill
5'-8" centres
PLAN AT B-B. scale ½ full size
14 g. aluminium sub-frame
extruded aluminium window frame and angle beads
32 oz. glass
extruded aluminium transom
aluminium casements
16 g. pressed steel sill board
1½" x 1½" x ⅛" m.s. angle framing
removable radiator casing
two sheets of ⅜" asbestos boarding with mineral-wool packing
space for radiator
¼" plywood skirting on 4½" x 2¼" timber kerb
5/16" lino. finish
screed
variable packing
r.c. edge beam
patent coloured glass facing panels
outline of m.s. mullions
1" slate fascia
⅜"
3'-2 1/16"
4'-0 7/8"
2'-5 5/8"
⅜"
SECTION A-A. scale ½ full size

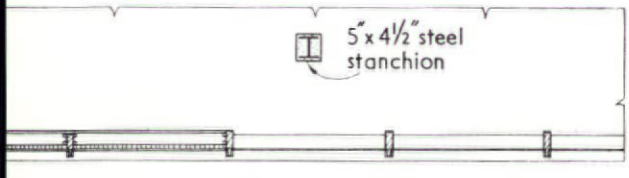
CURTAIN WALL: FACTORY AT CAMBERLEY, SURREY

DESIGNED BY JOHN BICKERDIKE

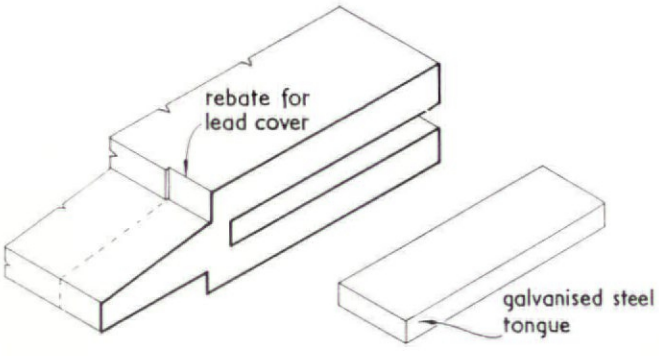
The framing is of redwood, prefabricated on a 3 ft. 4 in. module, in four and six module lengths. The frames are fixed with 3½-in. m.s. screws (at quarter span between module lines) to head and sill plates bolted to the structure. Apart from the narrow forward edge of mullions and the plate beneath ground floor sill, the softwood frame does not read in the external face. Window sills and transoms have aluminium drips; framing sills and remaining plates are lead-covered. Opening lights are steel and fixed lights are beaded in iroko.



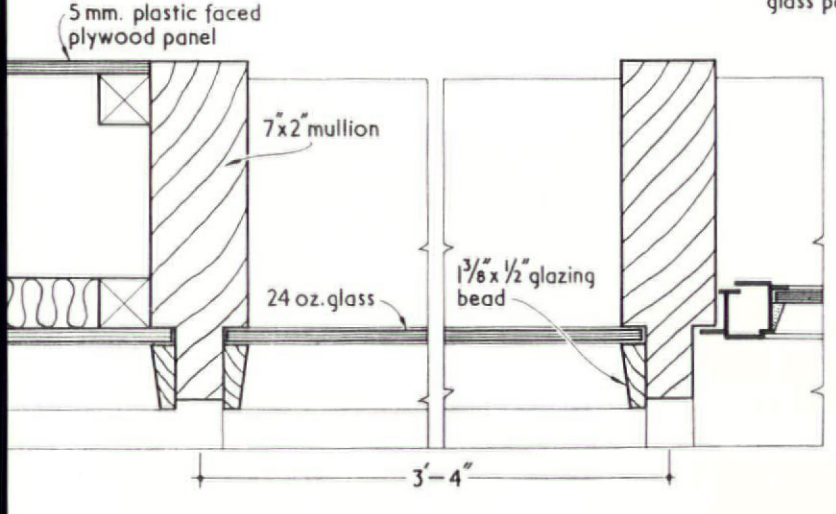
ELEVATION scale ¼" = 1'-0"



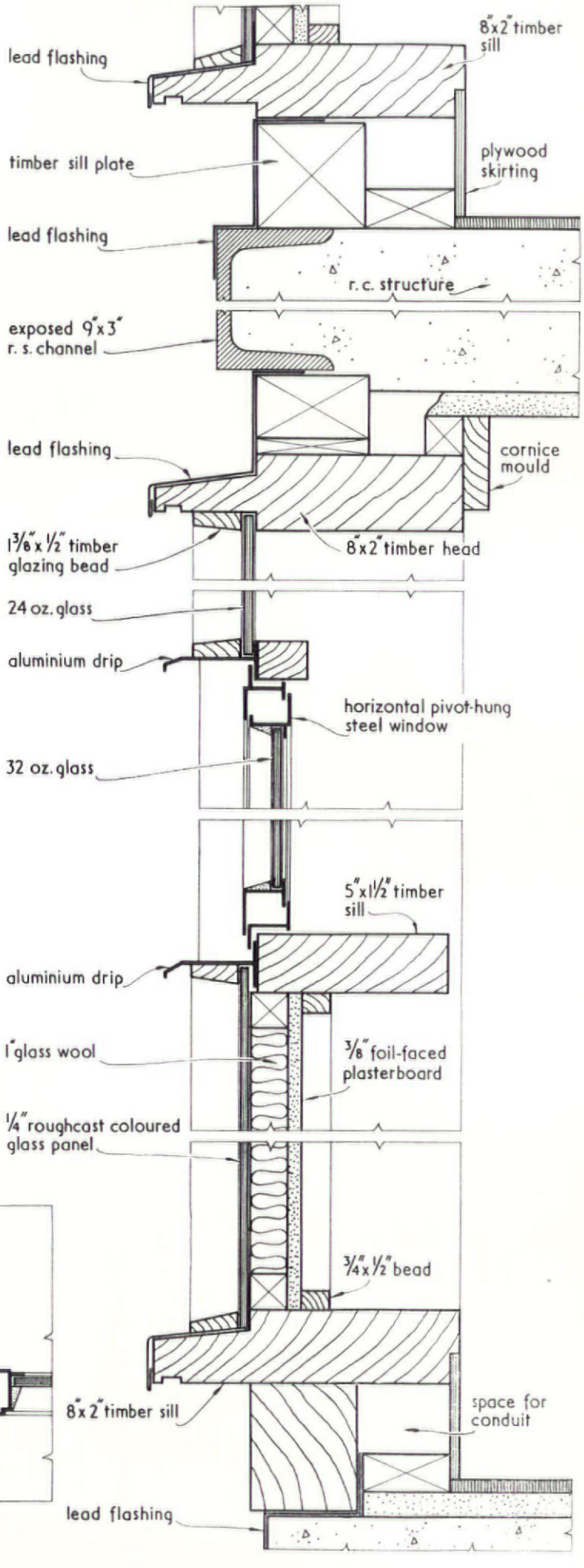
PLAN scale ¼" = 1'-0"



METHOD OF JOINTING HEAD AND SILL UNITS.



PLAN AT A–A. scale ¼ full size

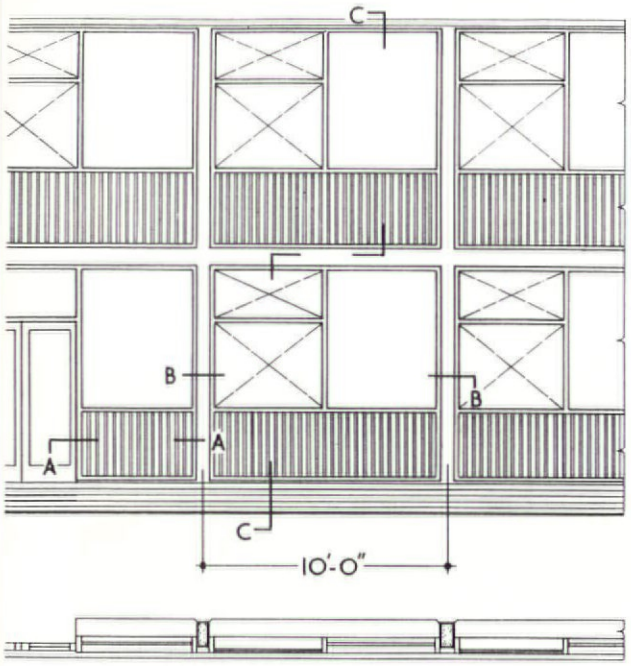


SECTION B–B. scale ¼ full size

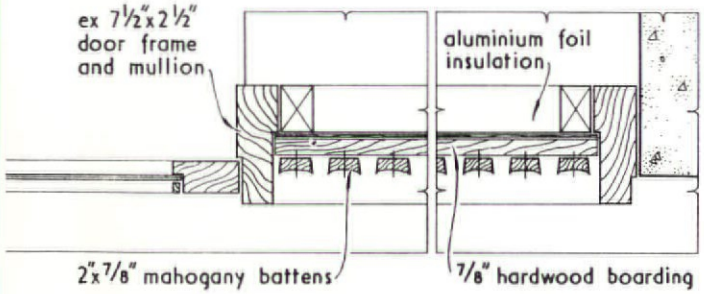
WALL PANELS: POLICE HEADQUARTERS AT WELLINGTON, SALOP

DESIGNED BY C. H. SIMMONS (architect to the Salop County Council)

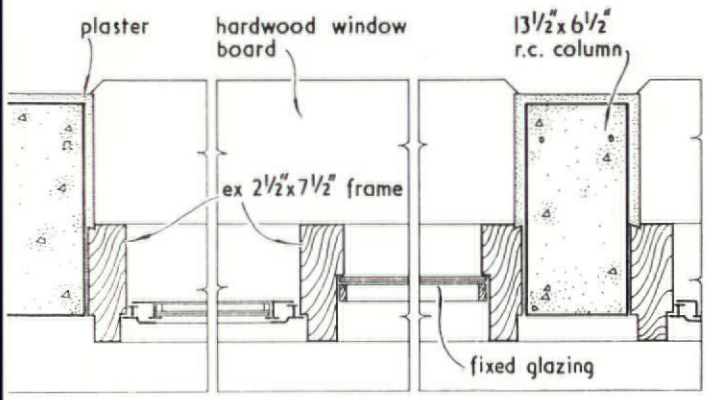
The softwood frames enclosing these inset panels are fixed proud of the supporting beams and columns and are painted white so that they and not the in-situ concrete structure determine the character of the façade. A deep upstand beam is concealed behind the panel at first floor level.



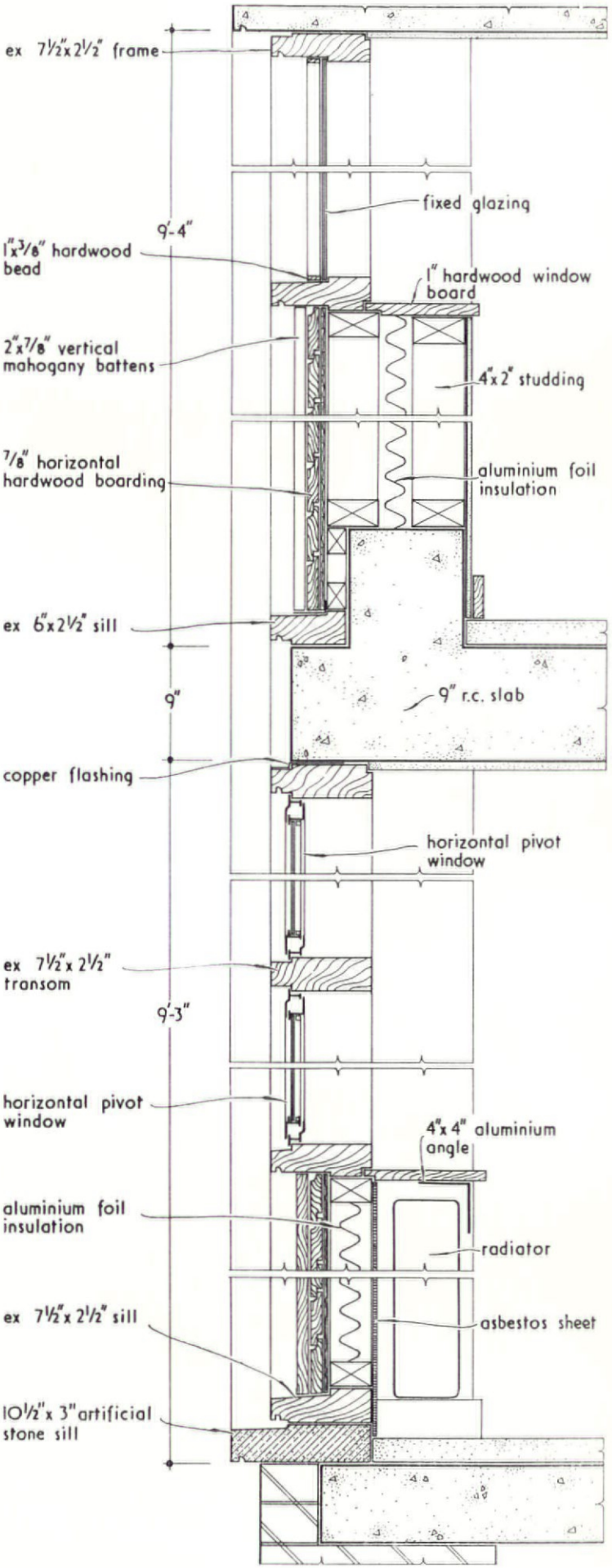
KEY ELEVATION AND PLAN. scale 1/8"= 1'-0"



SECTION A - A.



SECTION B - B.

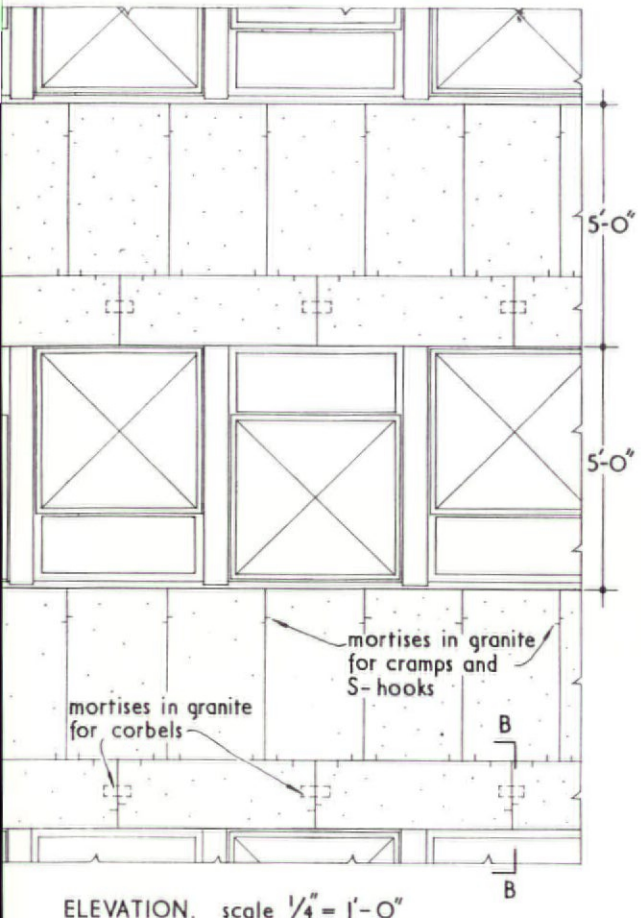


SECTION C - C. scale 1"= 1'-0"

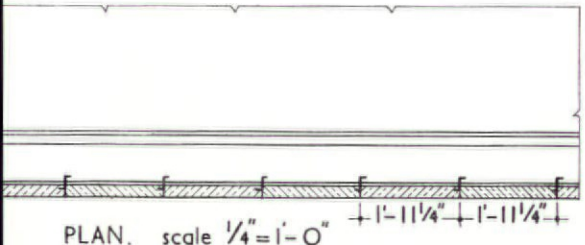
GRANITE FACING: OFFICE BLOCK IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

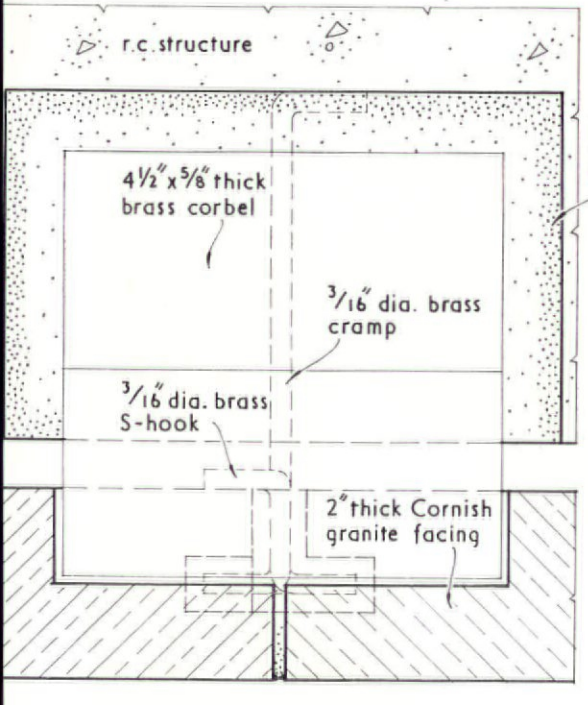
This cladding of grey Cornish granite from the De Lank Quarry is fixed in the traditional way, with brass corbels on the bottom course of each panel and brass 'S' hooks and cramps, the slabs being laid with only an $\frac{1}{8}$-in. joint. In view of the precision which this material enjoins, the architect inserted adjustable fixing lugs in the window heads to enable this precision to be echoed in the aluminium head weathering.



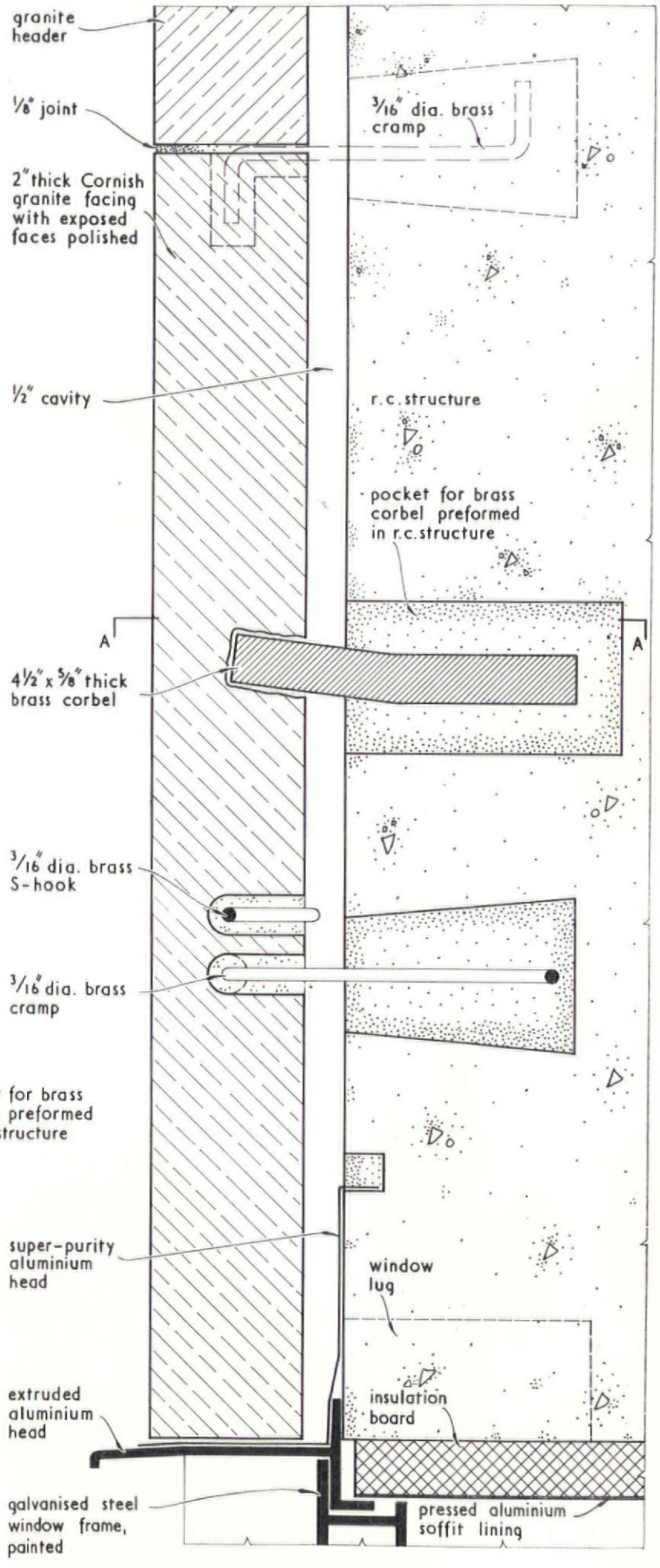
ELEVATION. scale 1/4" = 1'-0"



PLAN. scale 1/4" = 1'-0"



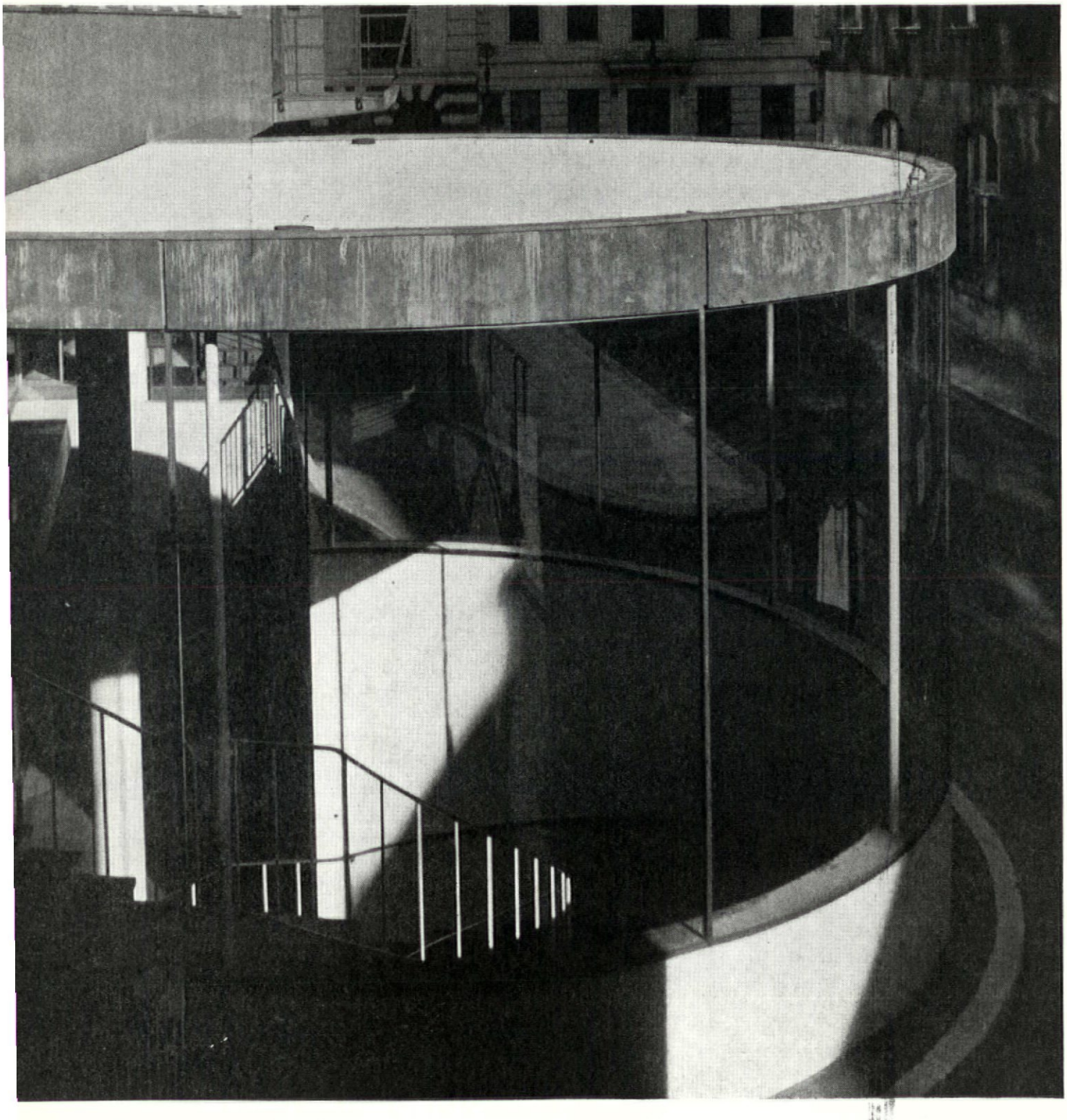
PLAN A–A. scale 1/2 full size

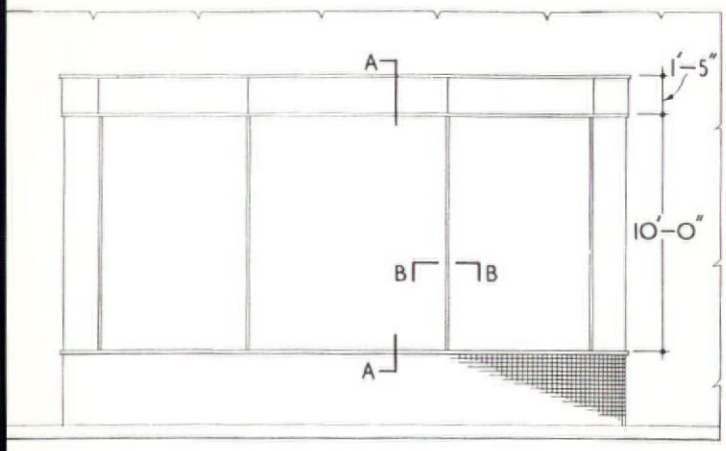


SECTION B–B. scale 1/2 full size

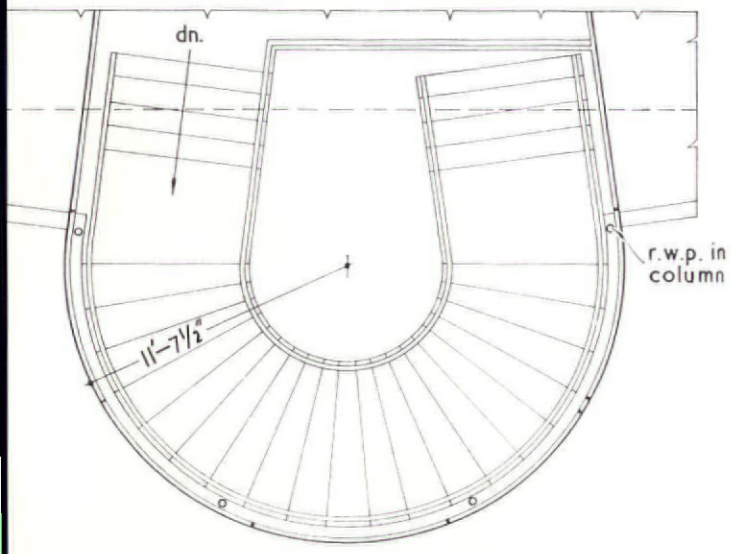
STAIRCASE ENCLOSURE: OFFICES IN LONDON, W.C.1
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

The horsehoe staircase connects a ground floor hall to a basement foyer. The curved polished plate glass is held in built-up bronze framing and the concrete stair drum is painted inside and finished on the exterior with vitreous mosaic.

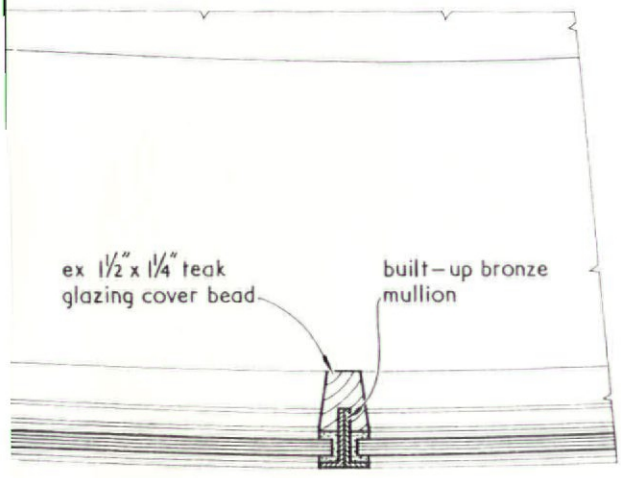




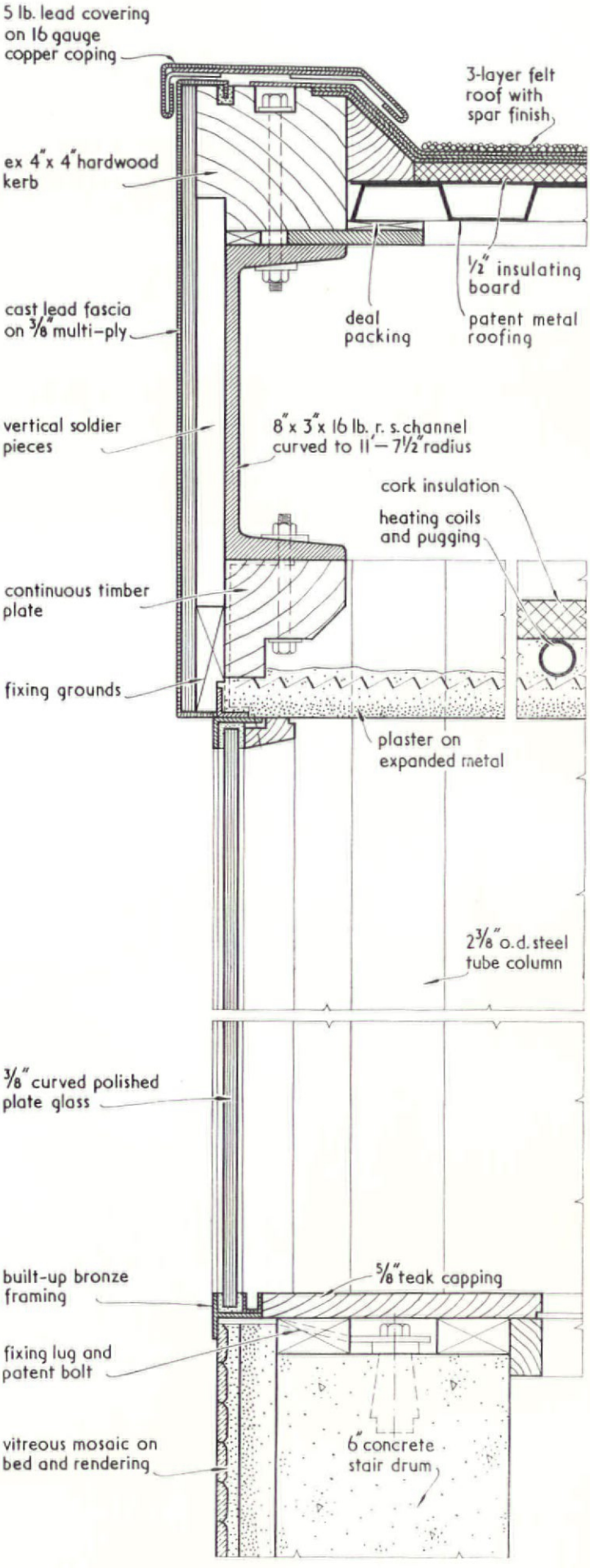
ELEVATION. scale 1/8" = 1'–0"



PLAN. scale 1/8" = 1'–0"



PLAN AT B—B. scale 1/4 full size

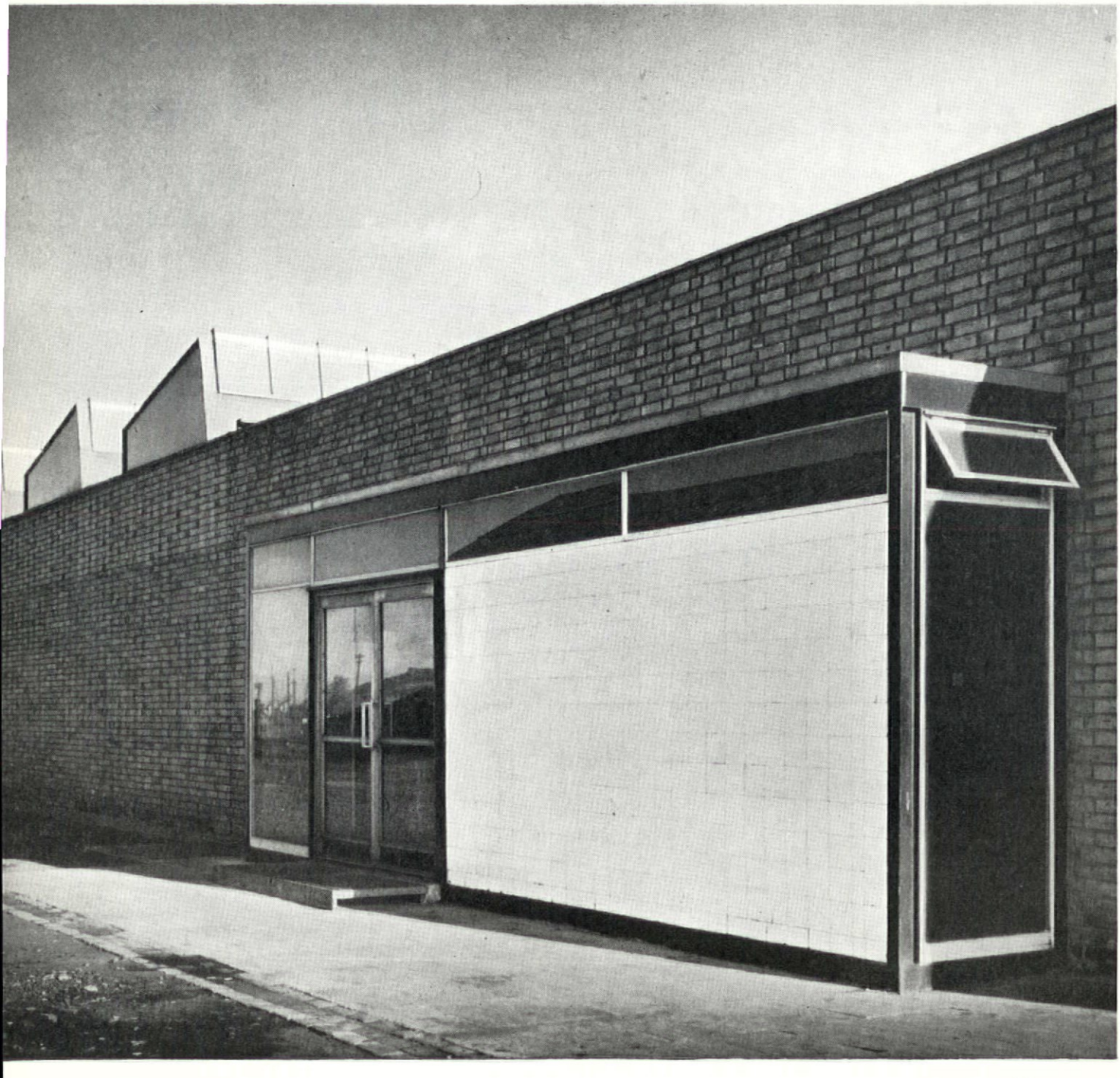


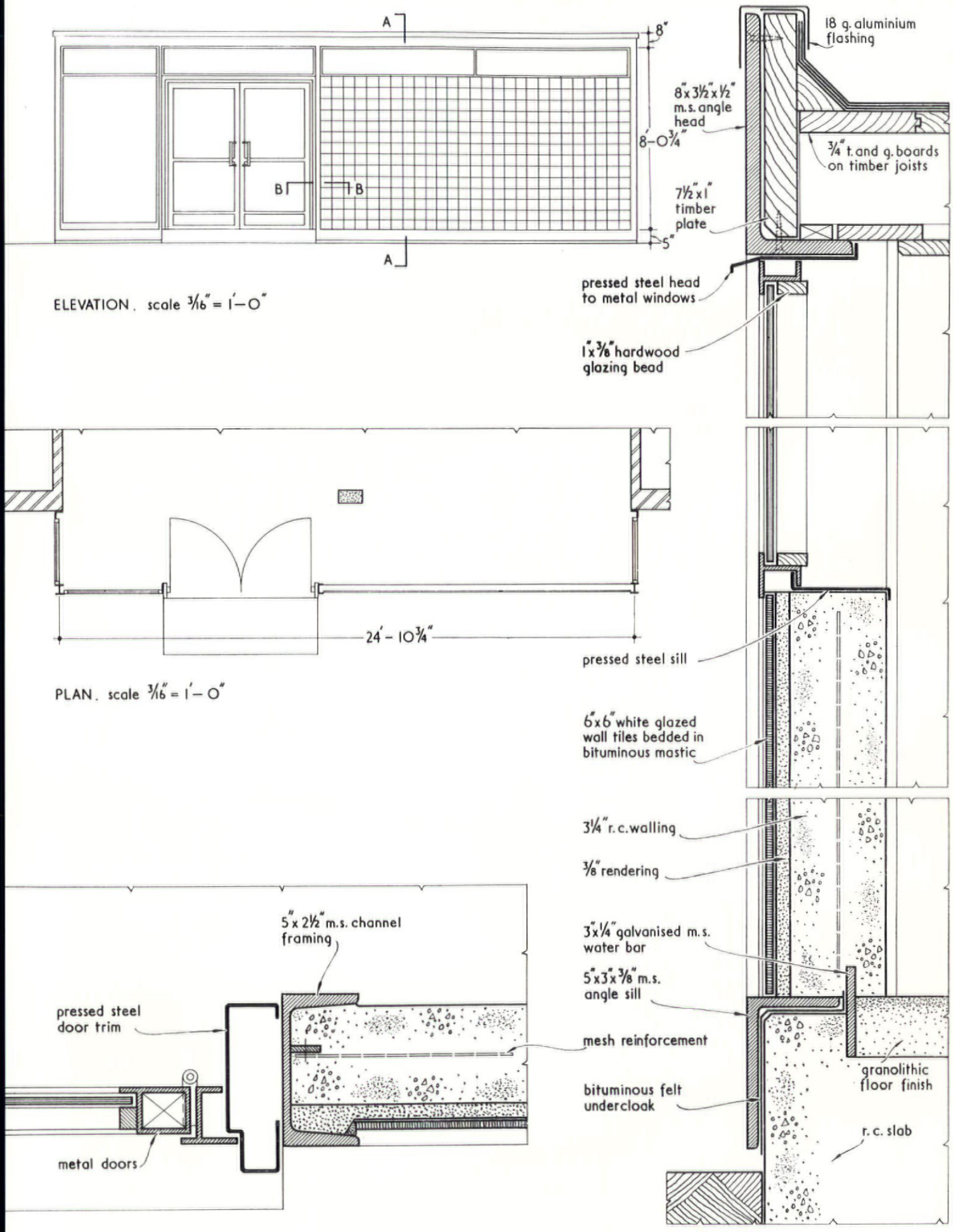
SECTION A—A. scale 1/4 full size

ENTRANCE SCREEN: PITHEAD BATHS AT DUDLEY, WORCESTERSHIRE

DESIGNED BY RICHARD SHEPPARD AND PARTNERS

Though the greater part of the wall area of this entrance bay is solid, it remains a glazed wall in intention and affords an interesting example of the use of 'industrial type' finishes for this class of work. Note, for instance, the use of a 5-in. by 3-in. by $\frac{3}{8}$-in. m.s. angle as a sill and the all-welded m.s. structural frame (including an 8-in. by $3\frac{1}{2}$-in. by $\frac{1}{2}$-in. m.s. angle to serve as lintel, fascia and upstand). Note also (though it does not figure in the drawing opposite) the removable eggcrate scraper which serves as a step.

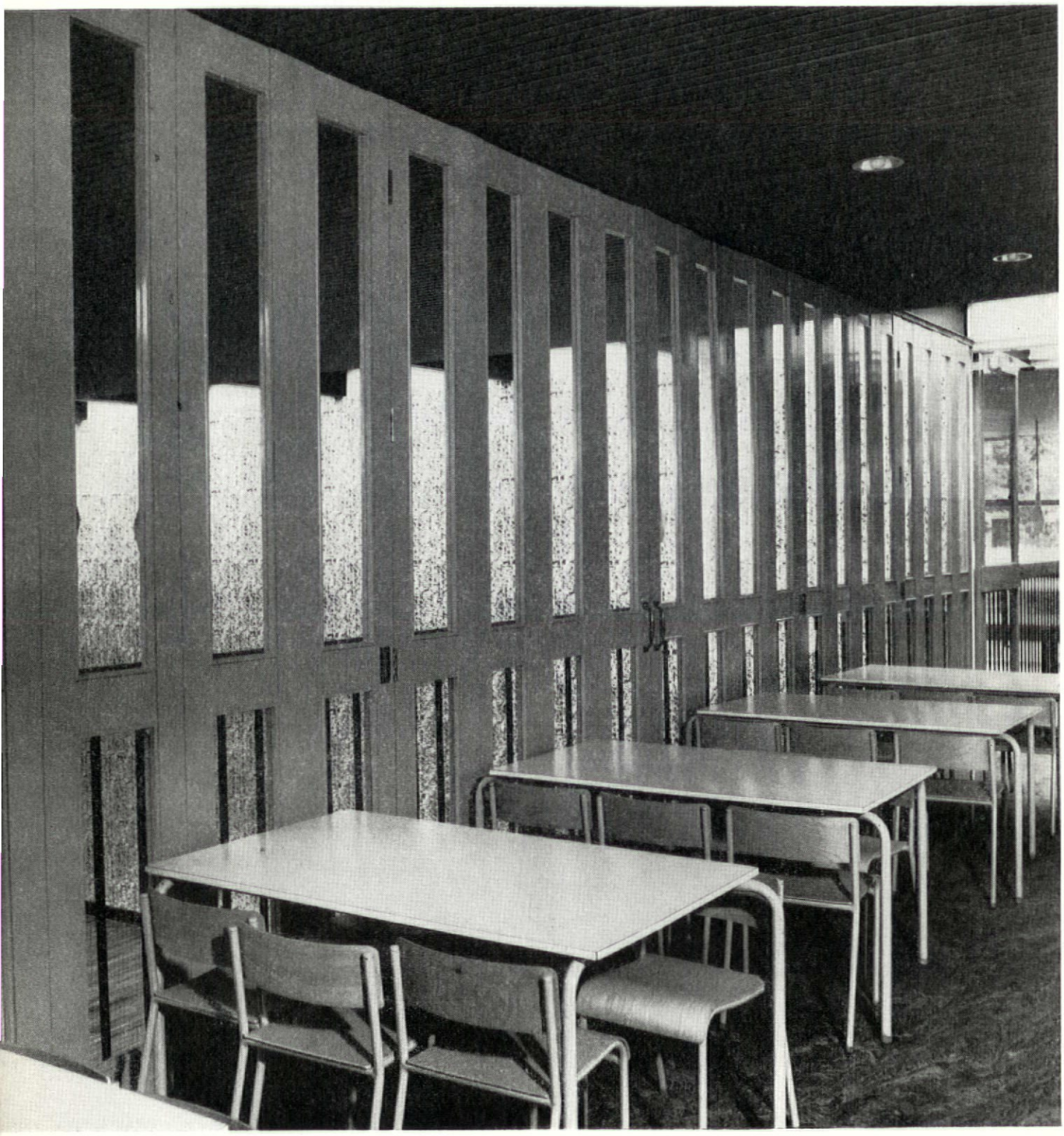


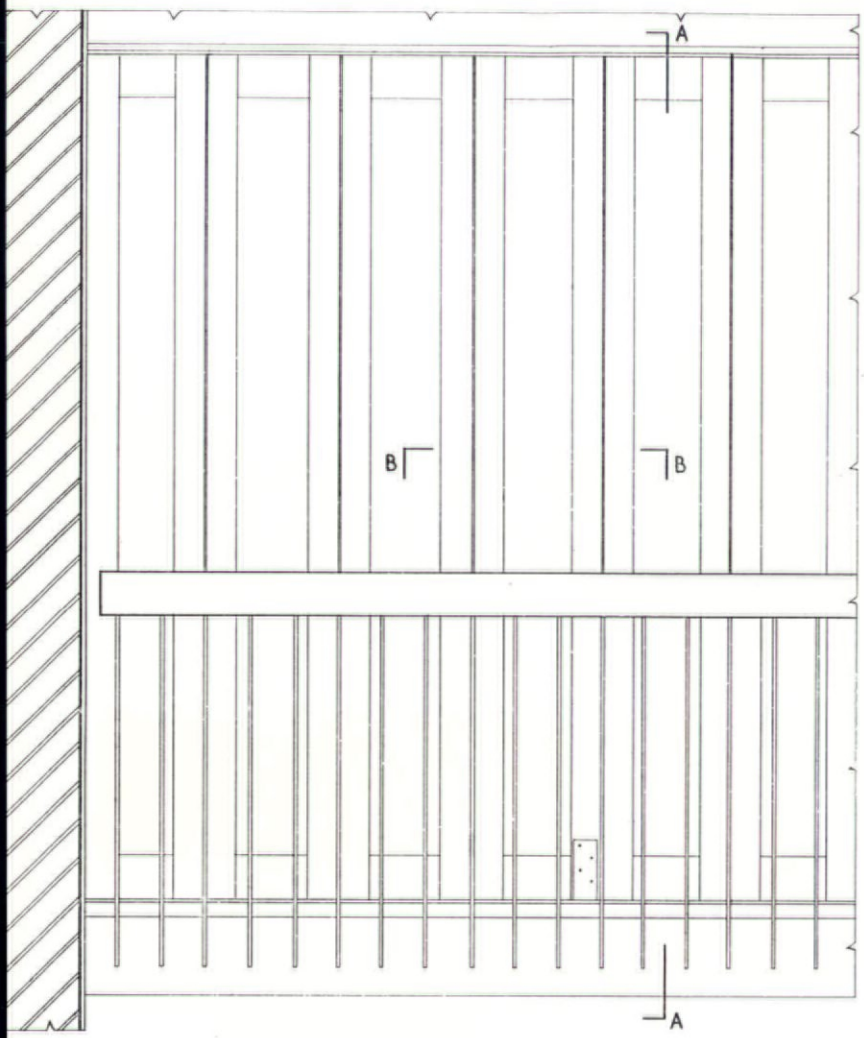

A
8"
8'-0¾"
5"
A
B
B
ELEVATION. scale 3/16" = 1'-0"
18 g. aluminium flashing
8"x3½"x½" m.s. angle head
¾" t. and g. boards on timber joists
7½"x1" timber plate
pressed steel head to metal windows
1"x⅜" hardwood glazing bead
24'-10¾"
PLAN. scale 3/16" = 1'-0"
pressed steel sill
6"x6" white glazed wall tiles bedded in bituminous mastic
3¼" r.c. walling
⅜" rendering
5"x2½" m.s. channel framing
3"x¼" galvanised m.s. water bar
5"x3"x⅜" m.s. angle sill
pressed steel door trim
mesh reinforcement
granolithic floor finish
bituminous felt undercloak
r.c. slab
metal doors
PLAN AT B-B. scale ¼ full size
SECTION AT A-A.

GLAZED SCREEN: SCHOOL IN LONDON, S.W.5

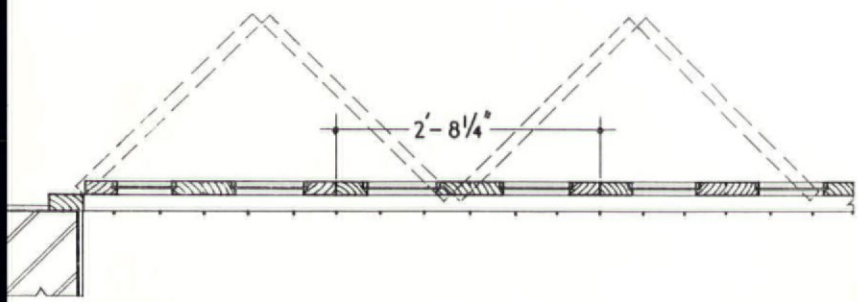
DESIGNED BY CHAMBERLIN, POWELL AND BON

The sliding folding screen makes it possible to convert the gallery of the assembly hall into an enclosed dining space.

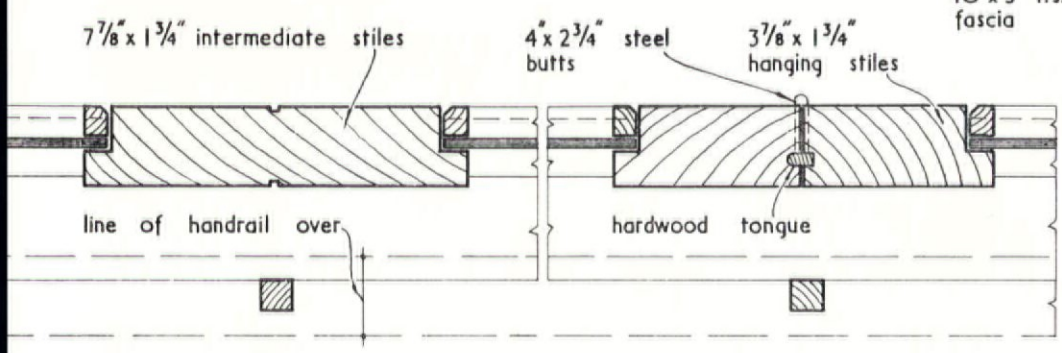




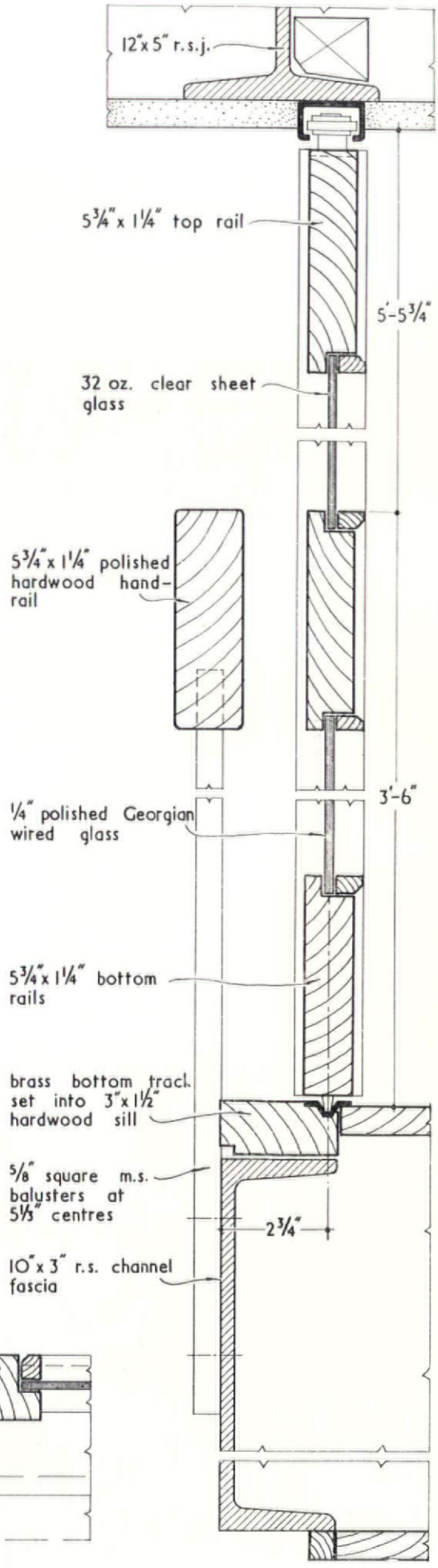
ELEVATION TO ASSEMBLY HALL.



PLAN. scale ½" = 1'-0"



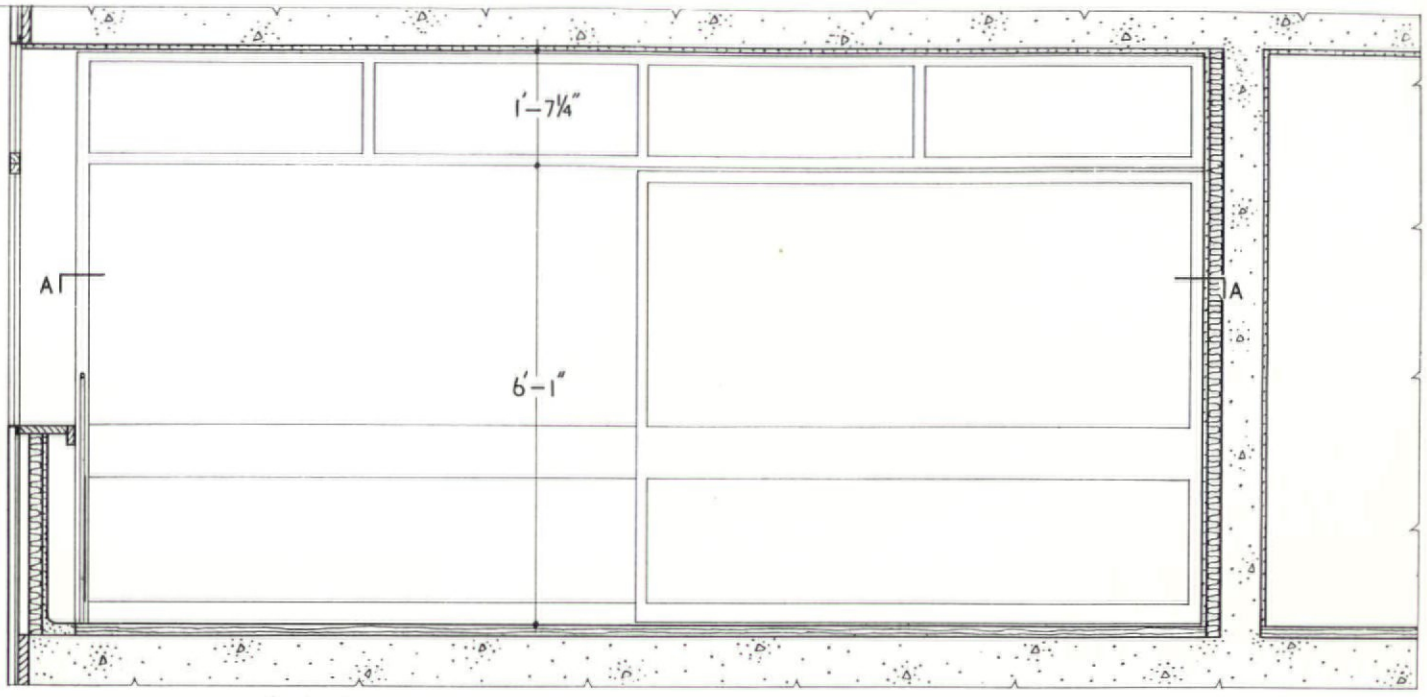
PLAN B-B. scale ¼ full size



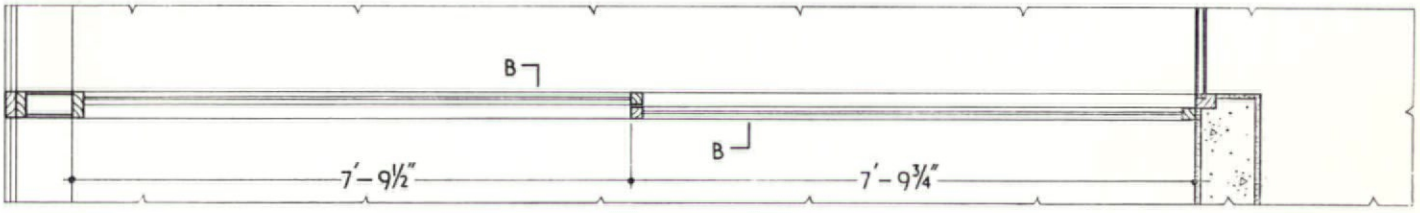
SECTION A-A. scale ¼ f.s.

SLIDING PARTITION: FLATS IN LONDON, E.C.1
DESIGNED BY CHAMBERLIN, POWELL AND BON

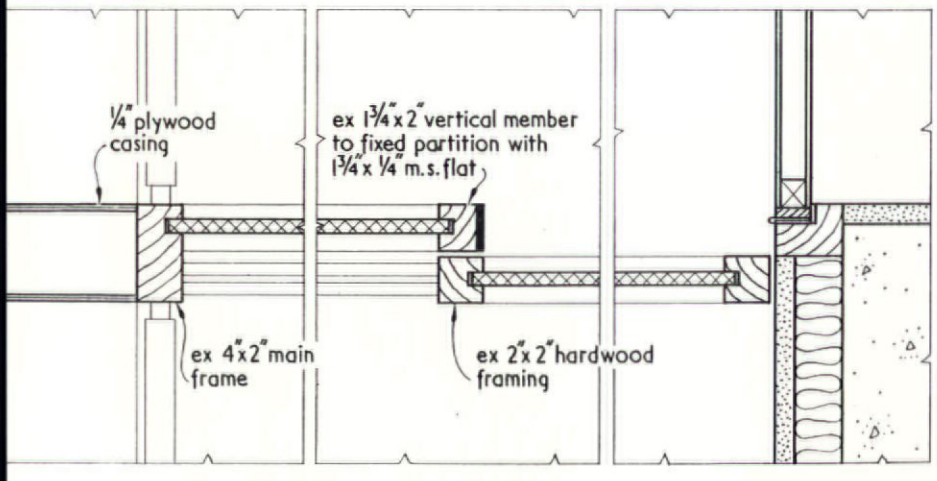
The interest in this Detail lies in the fact that what is shown is in fact a sliding wall and not, as it might so easily have been, a mere sliding door, making thereby two 'finished rooms' when closed, with no sense of makeshift. The second point to notice is the skill with which both the fixed and moving leaf are covered by a 4-*in. by* 2-*in. frame. This is achieved by making the framing of the leaves out of* 2-*in. by* 2-*in. hardwood and by fixing a m.s. plate to the forward edge of the fixed leaf to give rigidity.*



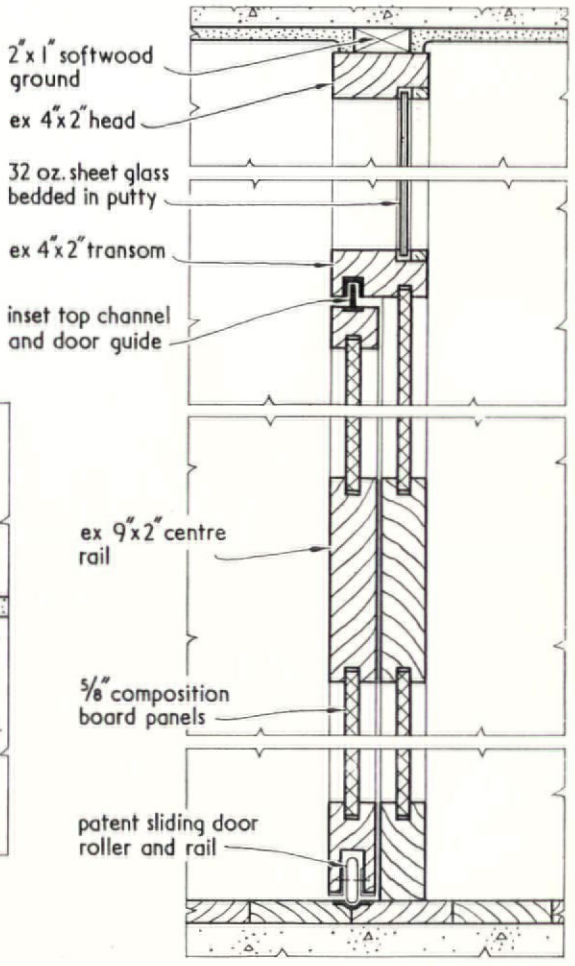
ELEVATION. scale ⅜" = 1'-0"



PLAN. scale ⅜" = 1'–0"



PLAN AT A–A. scale 1½" = 1'–0"

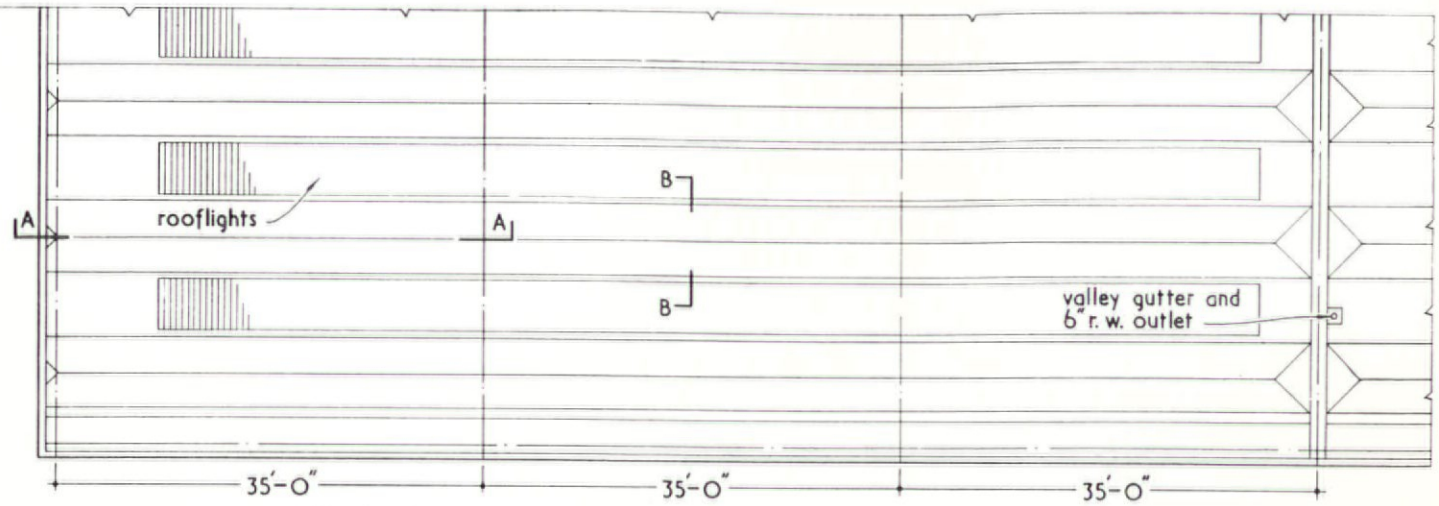


SECTION B–B. scale 1½" = 1'–0"

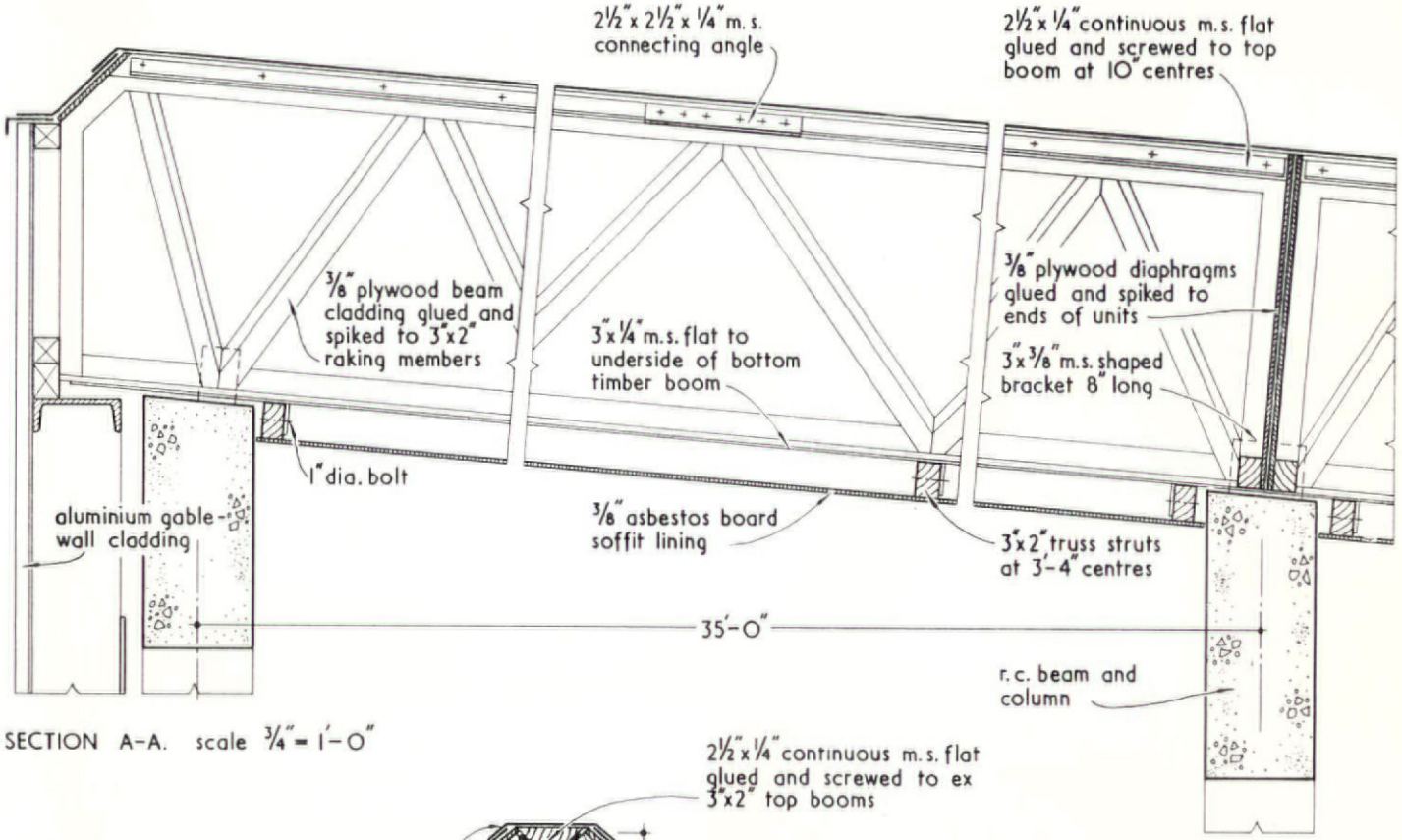
ROOF: FACTORY AT HEMEL HEMPSTEAD, HERTS

DESIGNED BY OVE ARUP AND PARTNERS; PHILIP DOWSON AND FRANCIS PYM (architects-in-charge)

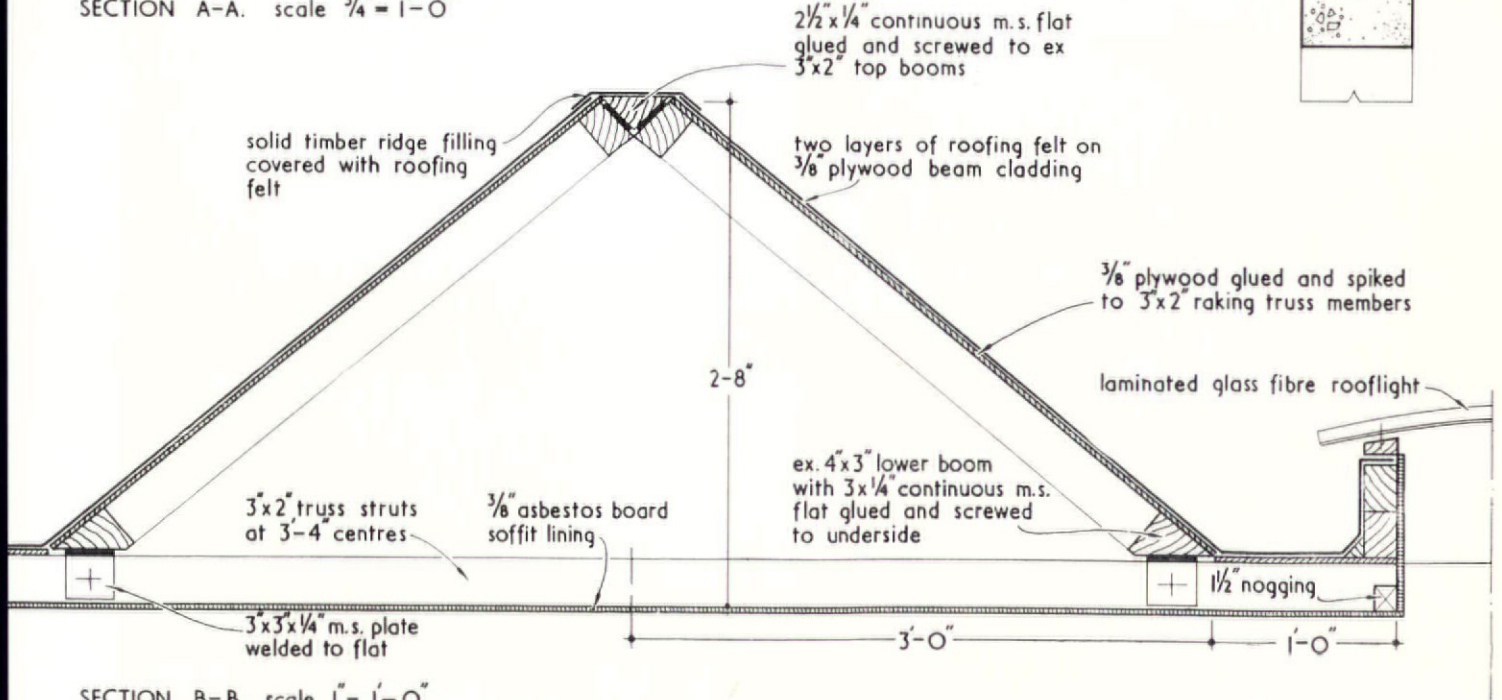
This Detail shows one method of freeing the wide span industrial roof from the display of 'knitting (i.e., the multiplicity of small scale engineering parts) which is all too common. The ceiling of ⅜-in. asbestos board conceals a system of composite stressed skin timber and steel triangular space frames. Steel is used for the top and bottom booms to take the main bending stresses of tension and compression. These booms are joined by timber triangulated struts glued and screwed to the steel. The ⅜-in. ply decking, on which the roofing felt is supported, being glued to the timber struts, acts as a flange for the junctions and a web for the two canted sides of the space frame.



PLAN OF ROOF. scale 1/16" = 1'-0"



SECTION A-A. scale ¾" = 1'-0"

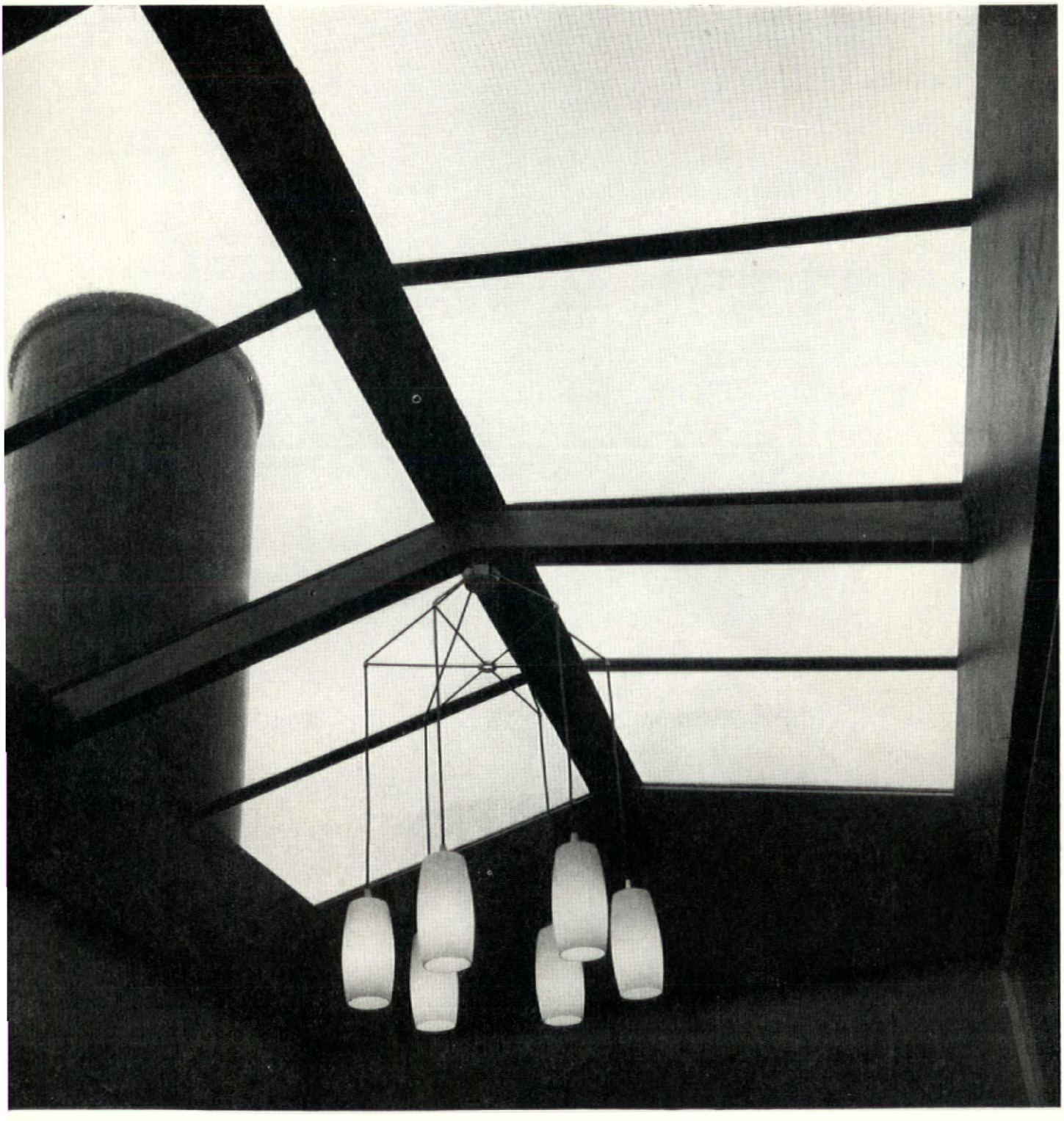


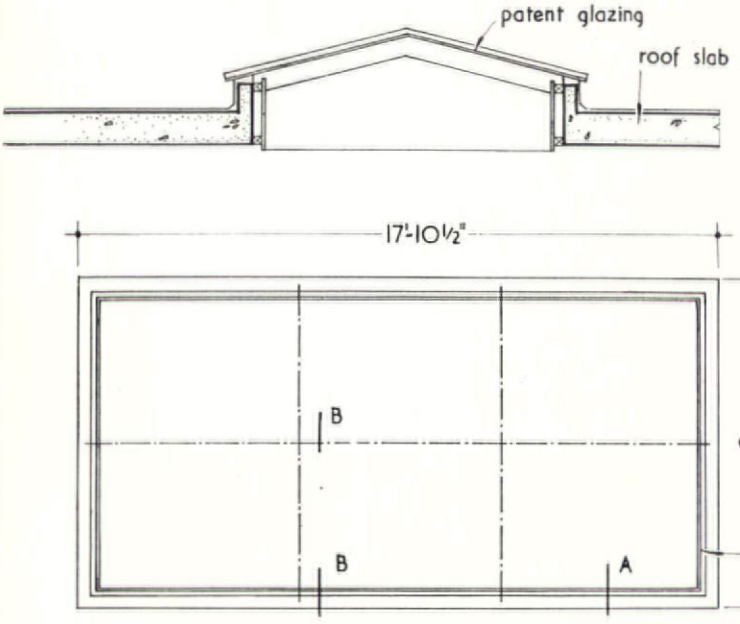
SECTION B-B. scale 1" = 1'-0"

ROOFLIGHT: OFFICES AT CARDIFF

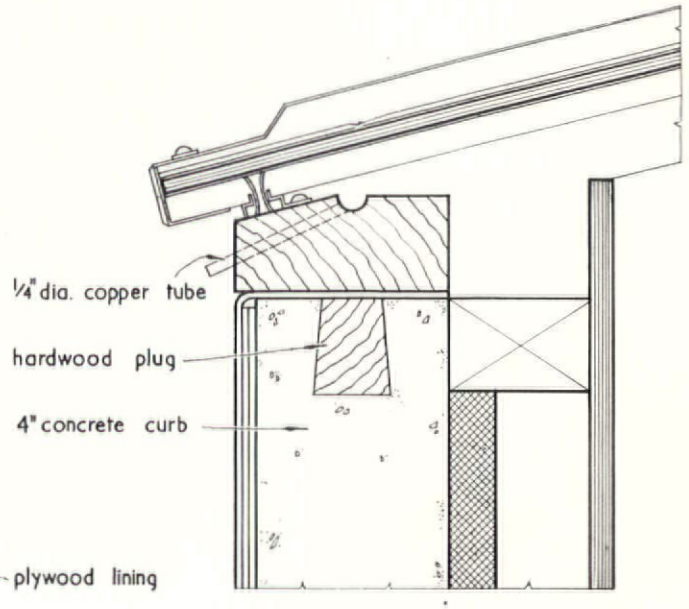
DESIGNED BY GRENFELL BAINES AND HARGREAVES

The interest of this Detail lies in the use of the plywood facing board to frame the light and to cut off from sight the eaves of the patent glazing and the green stains which commonly form there. It is also to be noted that the veneers on the separate pieces of board which comprise the facing on the long side have been carefully matched by the joiners: a precaution which is essential to obtain a good effect.

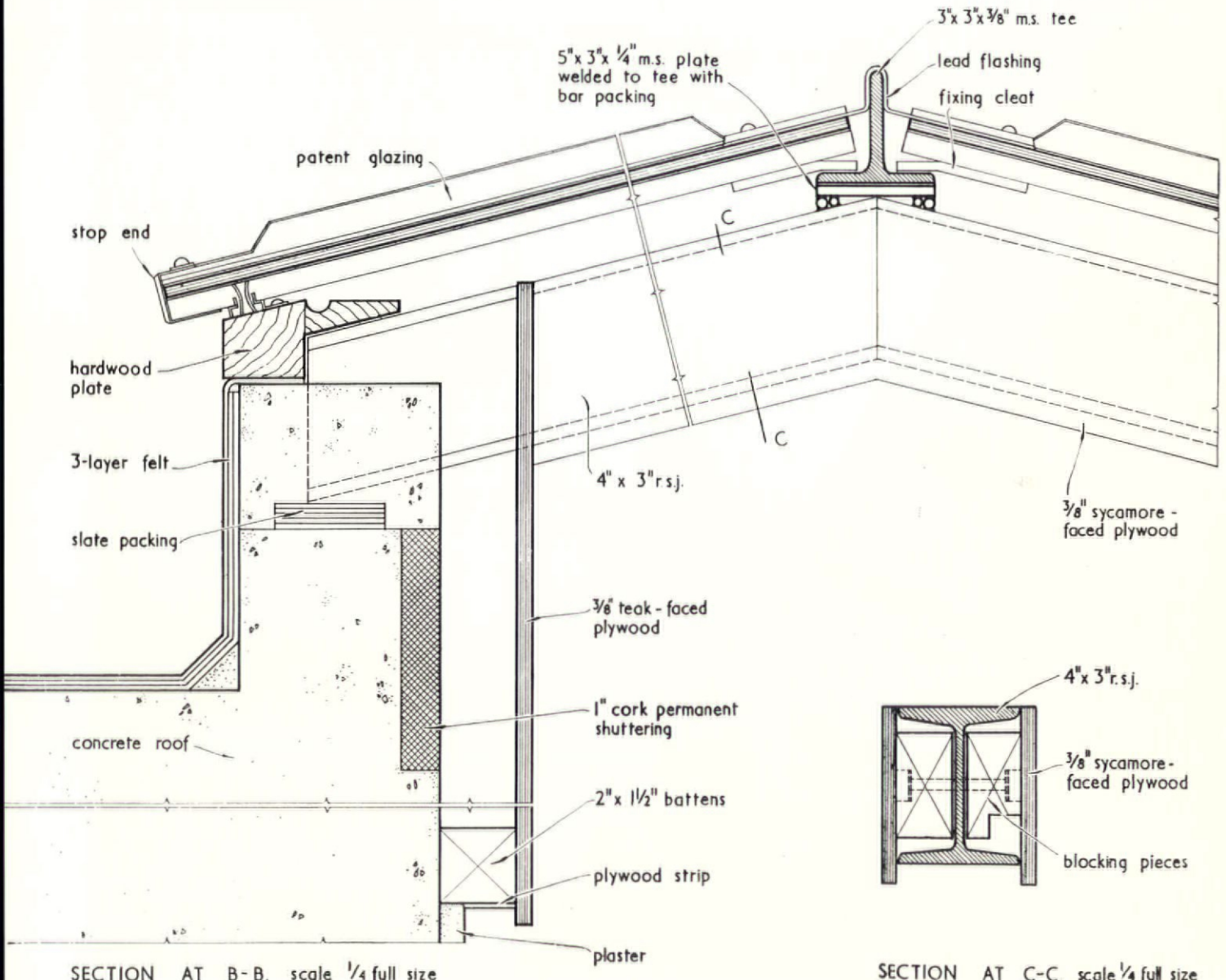




PLAN AND SECTION. scale 3/16" = 1'-0"



SECTION AT A. scale ¼ full size



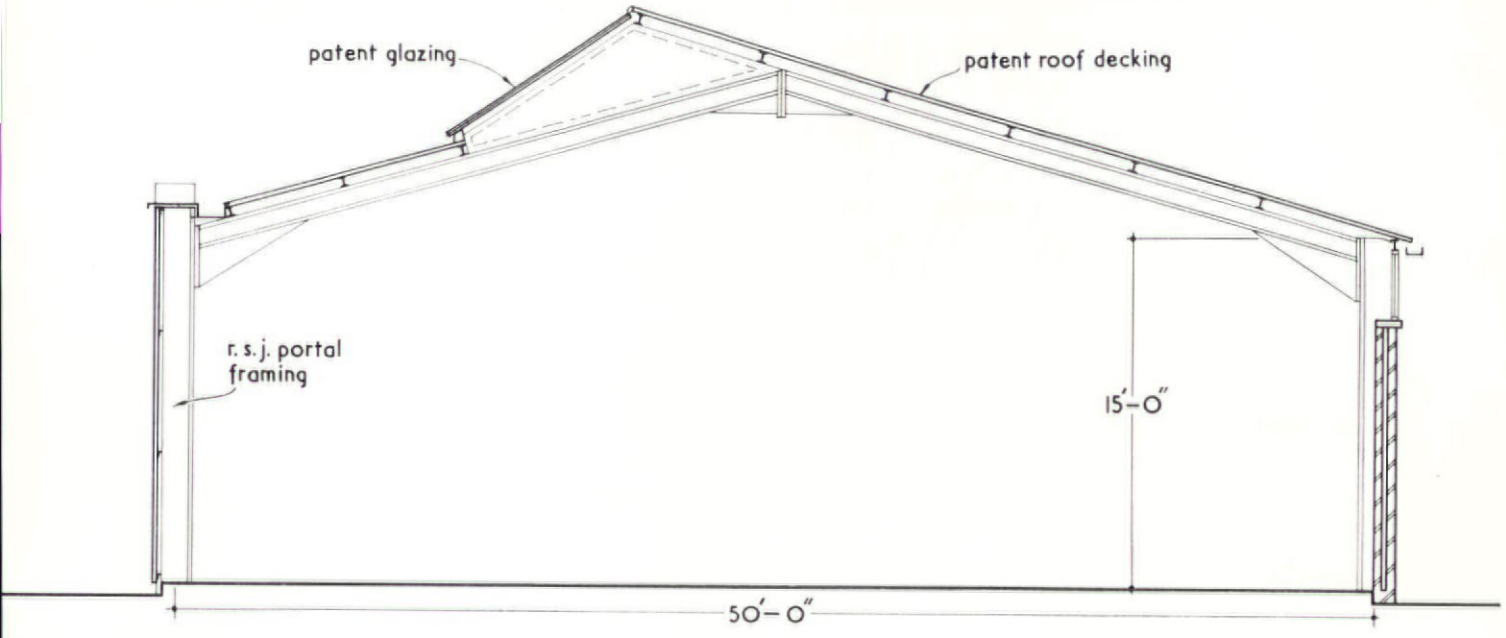
SECTION AT B-B. scale ¼ full size

SECTION AT C-C. scale ¼ full size

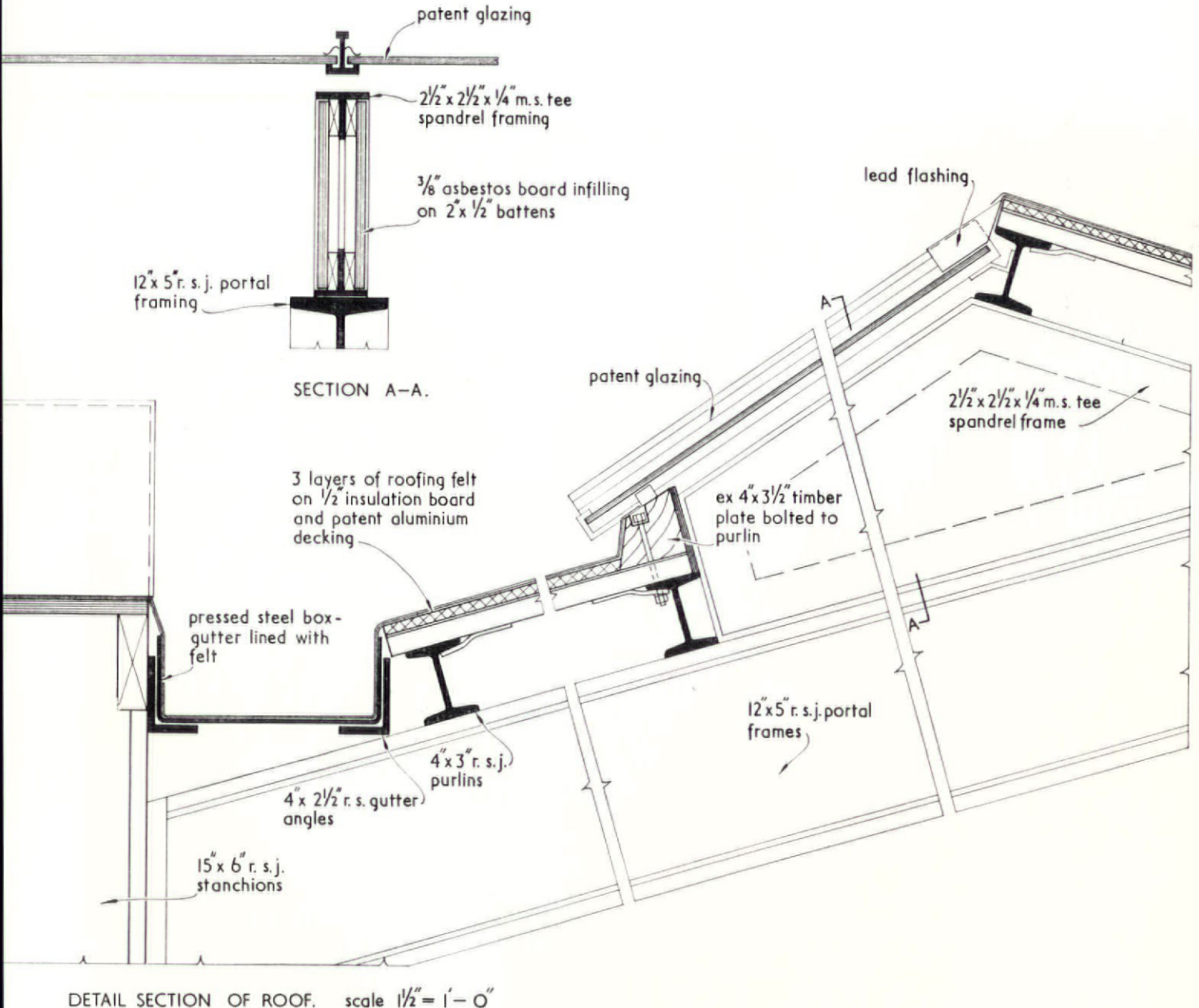
ROOFLIGHT: FACTORY AT CAMBERLEY, SURREY

DESIGNED BY JOHN BICKERDIKE

This unusually neat northlight is formed by the upward continuation of the southern slope of the roof. The light is supported on spandrel frames which rest on the main portal trusses. The spandrels are filled in (and, incidentally, painted magenta red) to provide some measure of glare protection.



SECTION. scale 1/8" = 1'– 0"



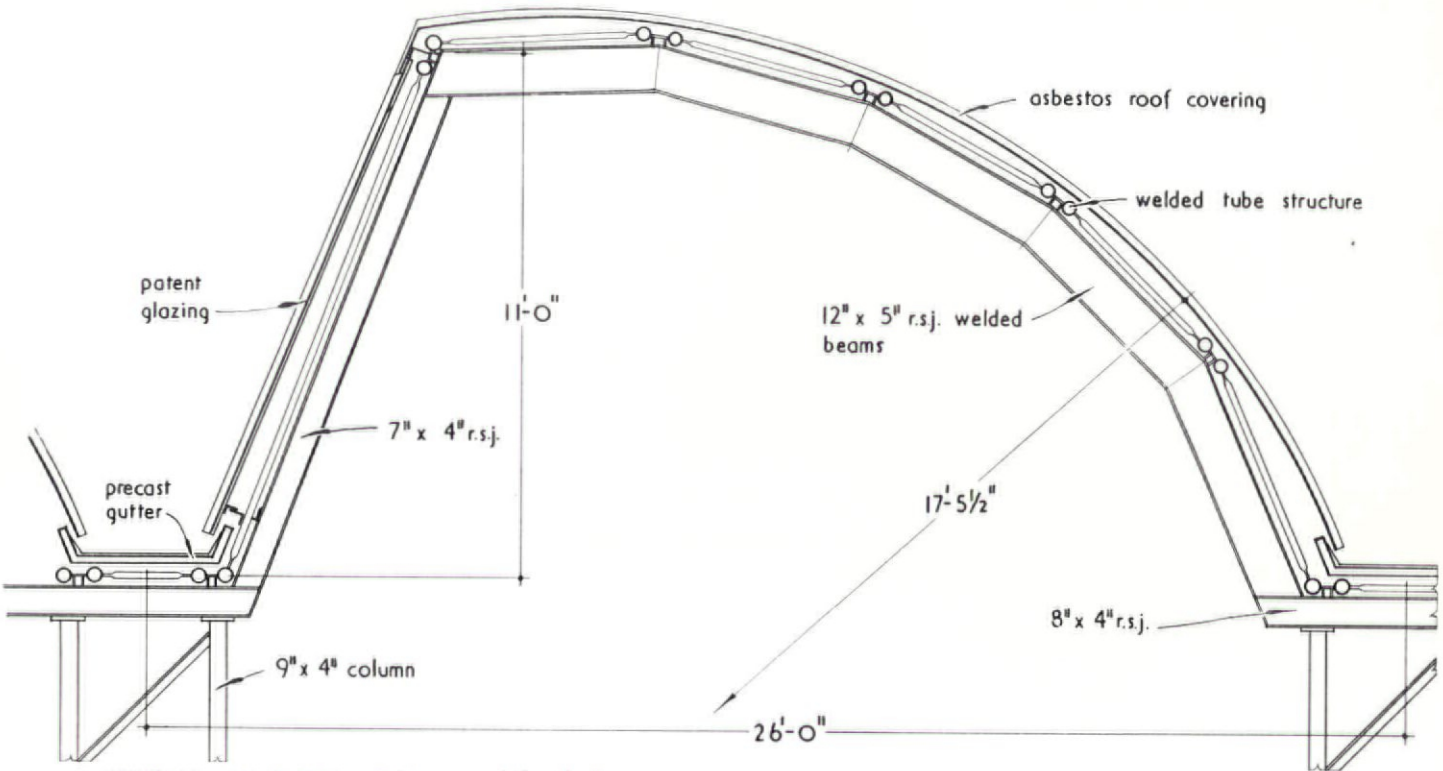
SECTION A–A.

DETAIL SECTION OF ROOF. scale 1½" = 1'– 0"

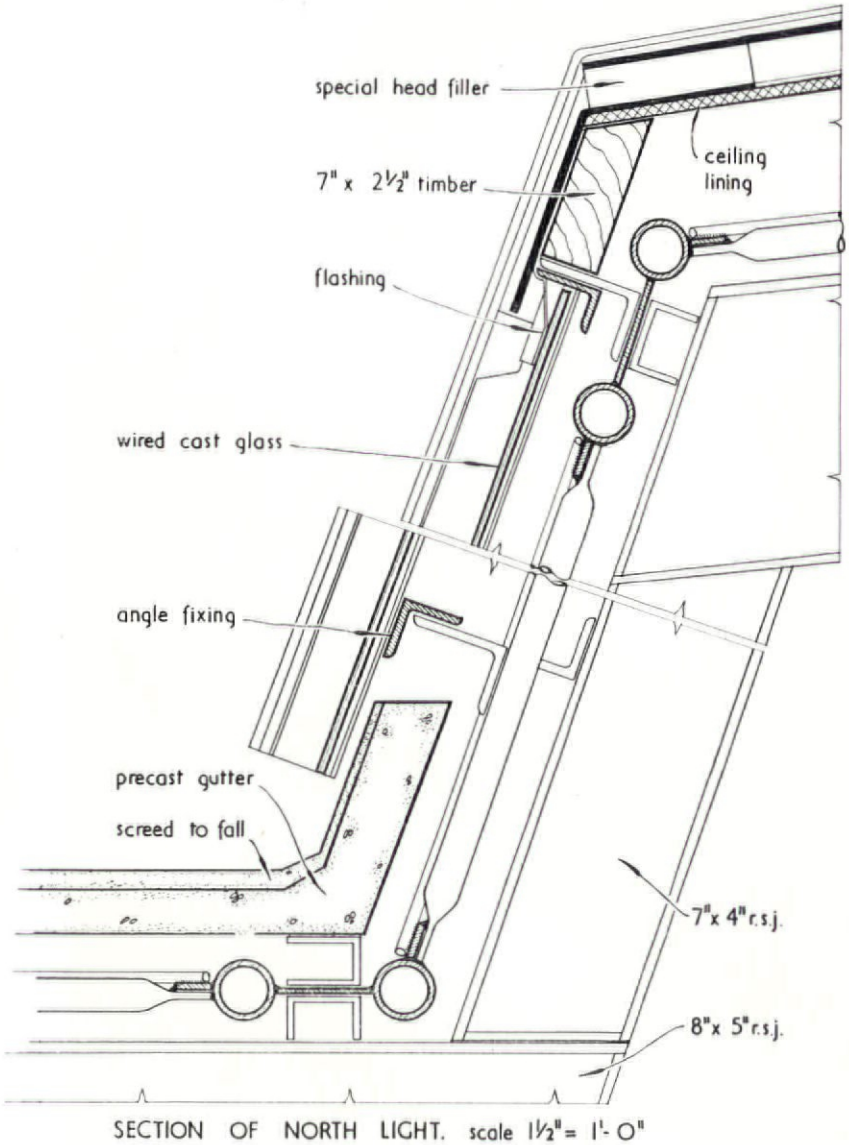
NORTHLIGHT ROOF: FACTORY AT CRAWLEY, SUSSEX

DESIGNED BY J. M. AUSTIN SMITH AND PARTNER; F. J. SAMUELY (consulting engineer)

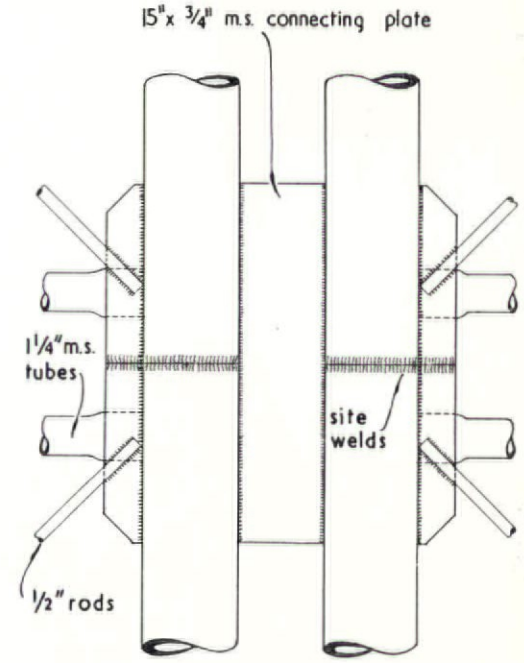
This roof, which is described by the designer as ' steel folded slab construction,' is built up from a number of lattice girders shop-fabricated from m.s. tubes and bars. These, which are of two standard lengths, 43 *ft.* 2 *in. and* 32 *ft.* 4 *in., are bolted together, side to side, through shear connections at each panel point; they are welded together end to end by means of shear plates which are introduced at each angle of intersection, and site-welded to all four adjacent girders. The shape of the roof is maintained by the supporting ribs which in the main bay are* 110 *ft. centre to centre. Temporary centring of the same profile was used to hold the girders in place prior to welding.*

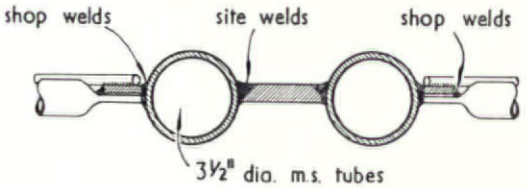


SECTION OF TYPICAL BAY. scale ¼" = 1'-0"



SECTION OF NORTH LIGHT. scale 1½" = 1'-0"

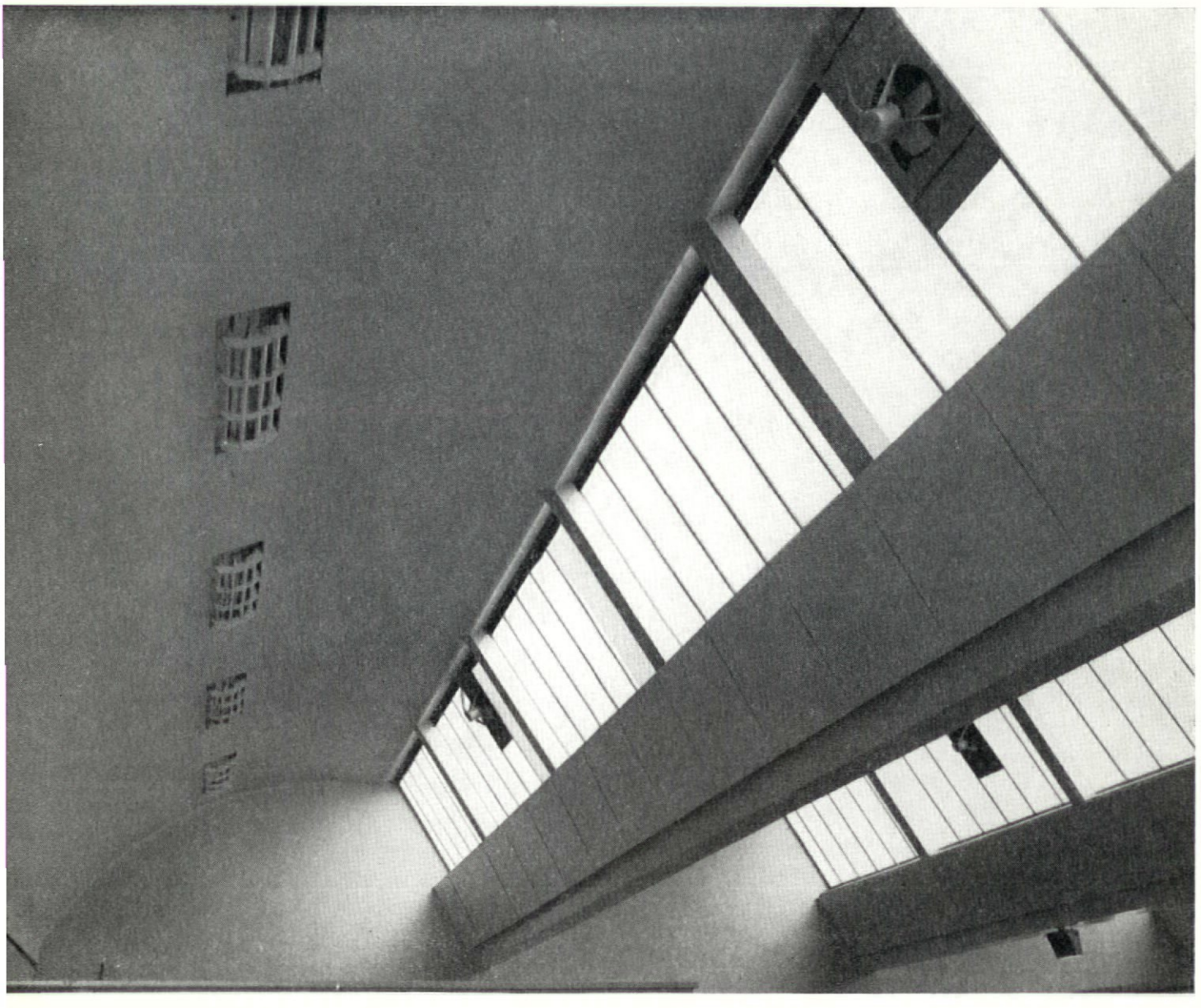


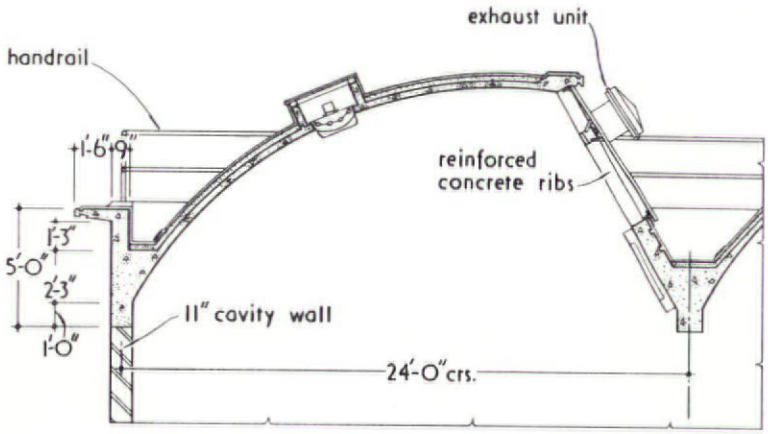


DETAIL OF TYPICAL CONNECTION BETWEEN TRUSSES.
scale 1½" = 1'-0"

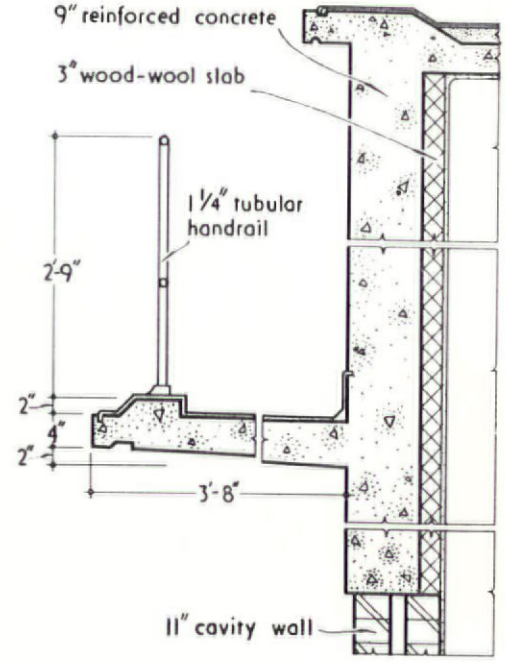
NORTHLIGHT ROOF: LABORATORIES AT DARTFORD, KENT
DESIGNED BY WATERHOUSE AND RIPLEY

Panel radiators are sited immediately below the glazing so as to prevent down-draughts. Access to the fluorescent lights is by means of upstand hatches which are reached from above.

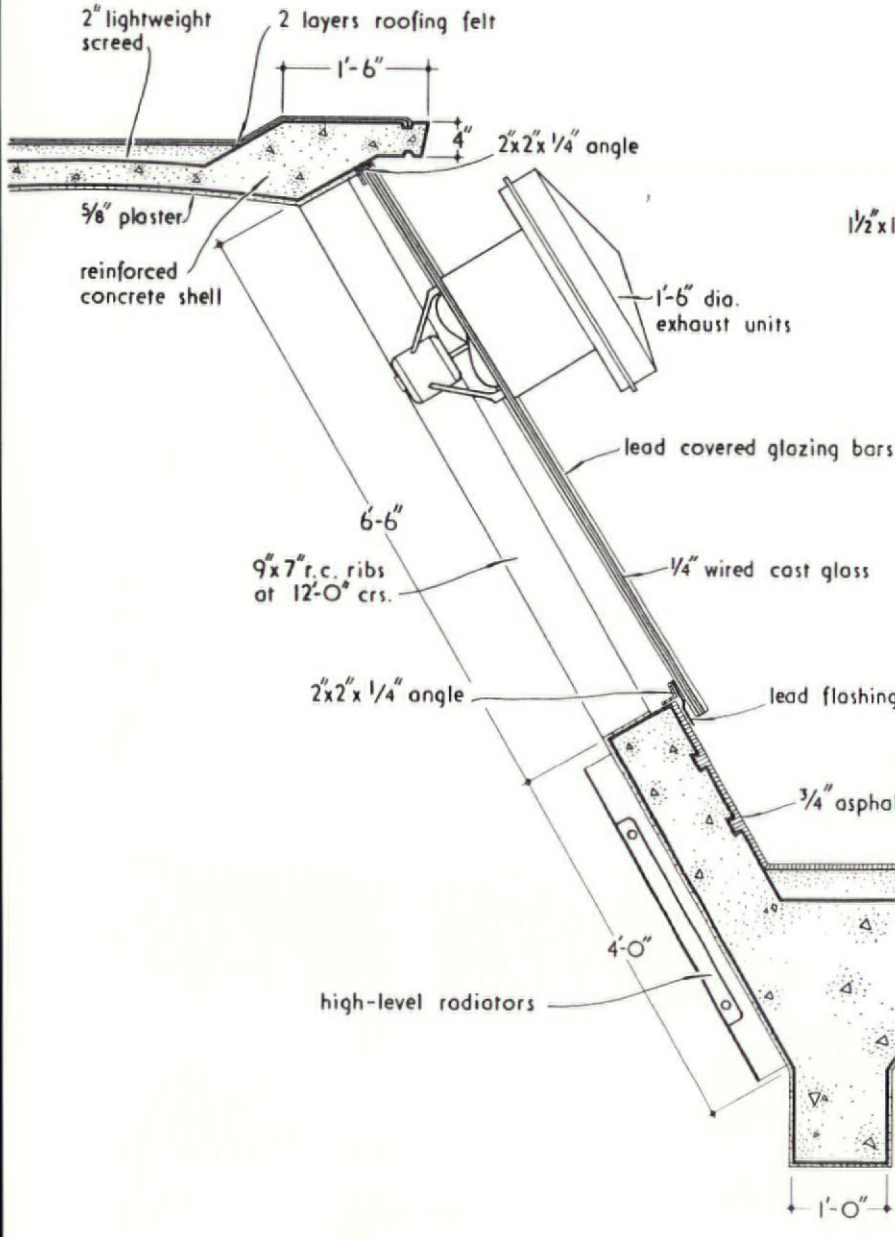




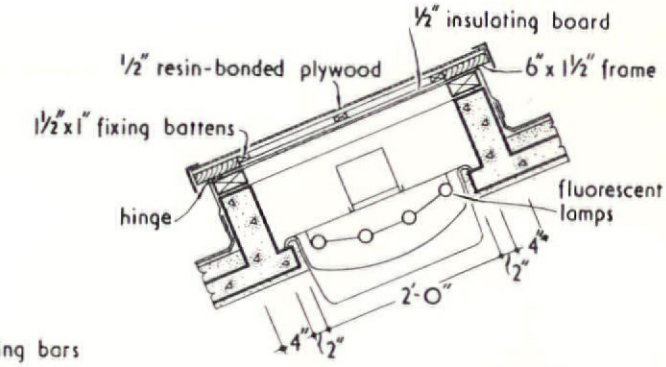
SECTION THRO' BARREL VAULT ROOF. scale 1/8" = 1'-0"



SECTION THRO' END WALL. scale 1/2" = 1'-0"



SECTION THRO' NORTH LIGHT. scale 1/2" = 1'-0"

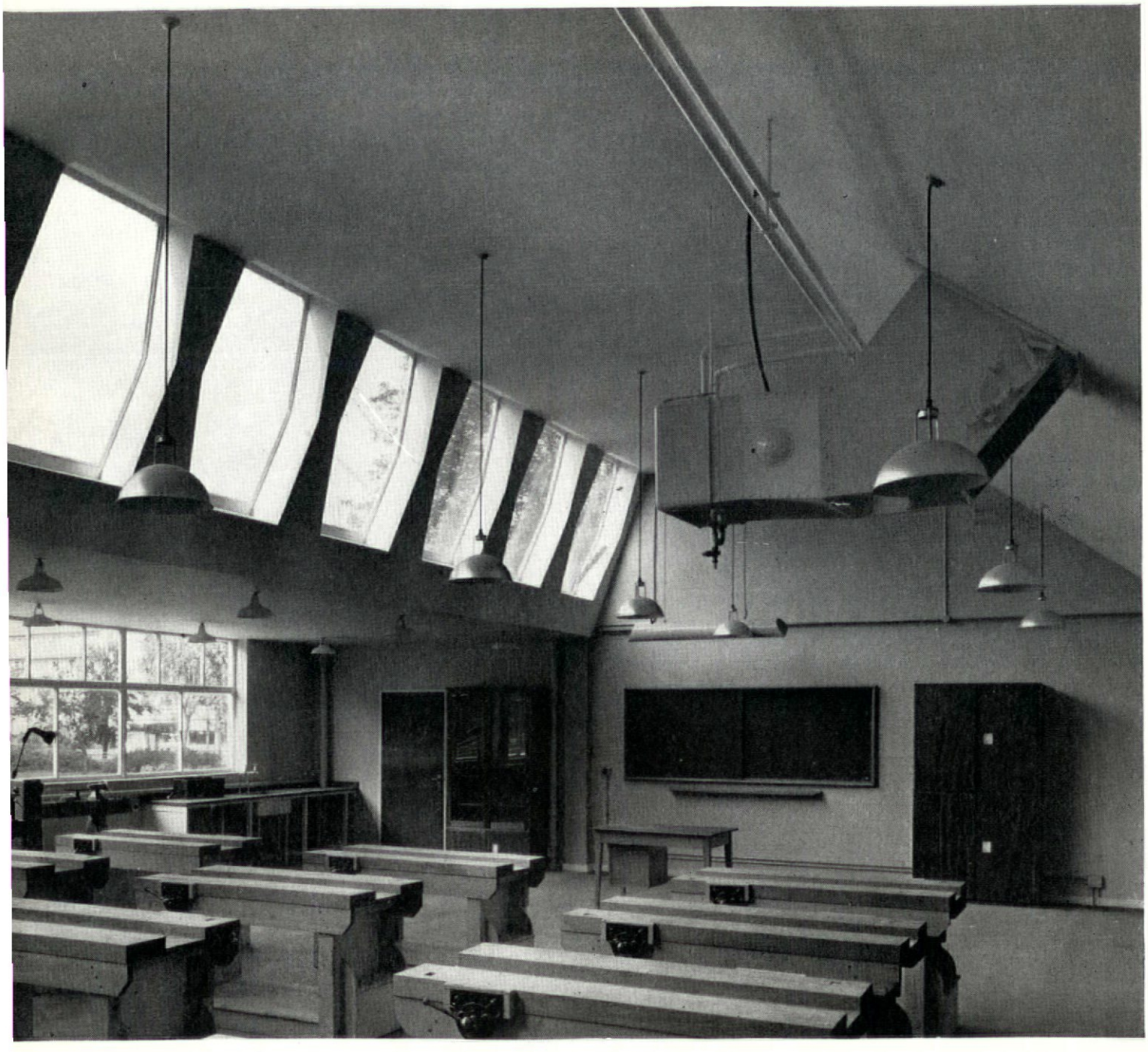


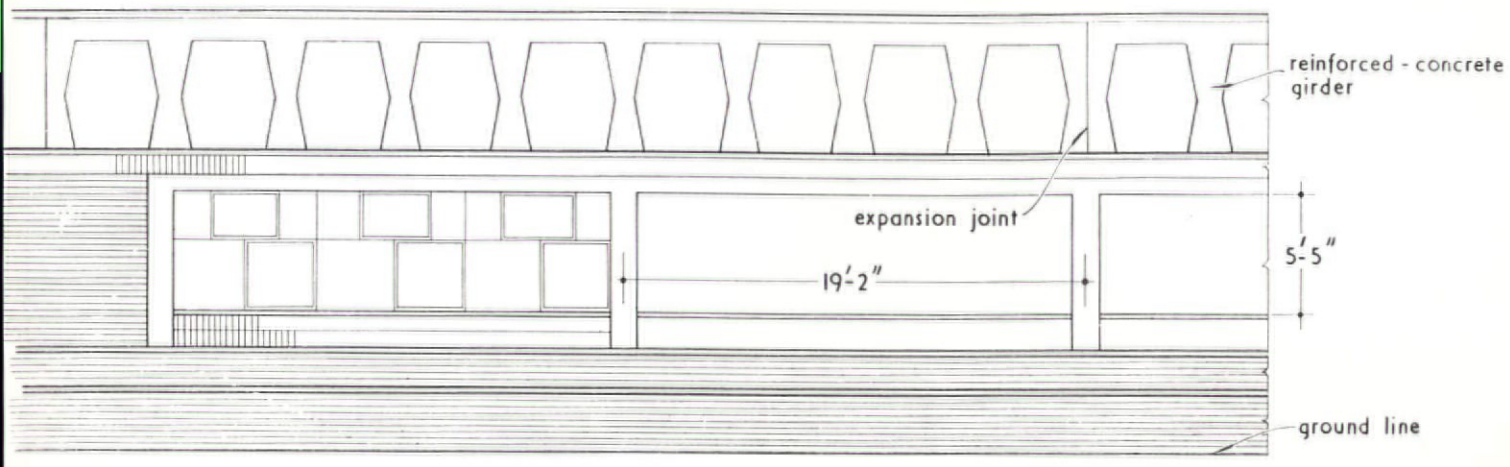
SECTION THRO' LIGHTING TROUGH. scale 1/2" = 1'-0"

WORKSHOP ROOF: SCHOOL AT STOKE NEWINGTON

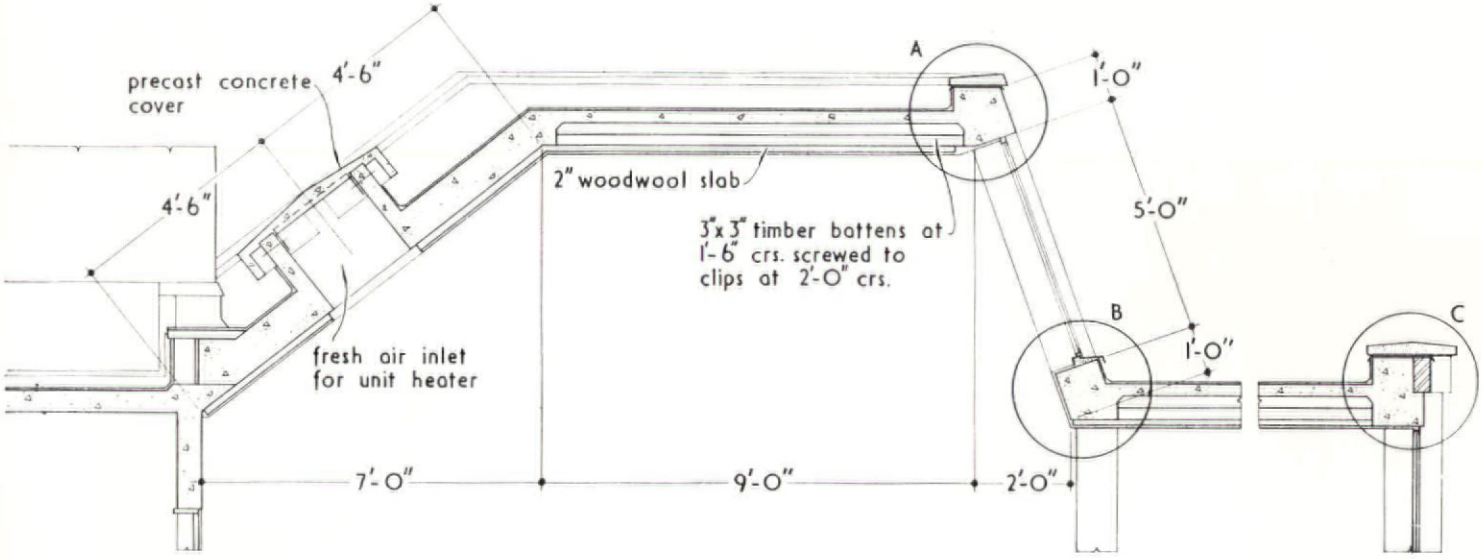
DESIGNED BY ROBERT H. MATTHEW (formerly architect to the L.C.C.); JOHN BROOME (architect-in-charge); F. J. SAMUELY (consulting engineer)

The north lights are accommodated between the struts of the reinforced concrete vierendeel truss. Unit heaters are fixed at intervals along the sloping part of the roof, each of these being fixed against an upstand vent formed in the concrete. The horizontal parts of the concrete roof are cast on hollow clay blocks and are lined internally with woodwool.

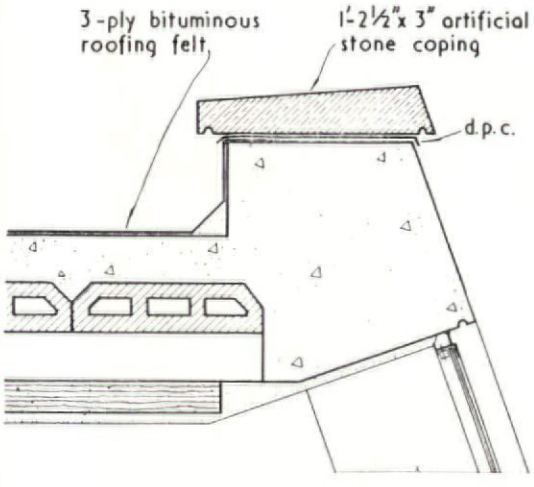




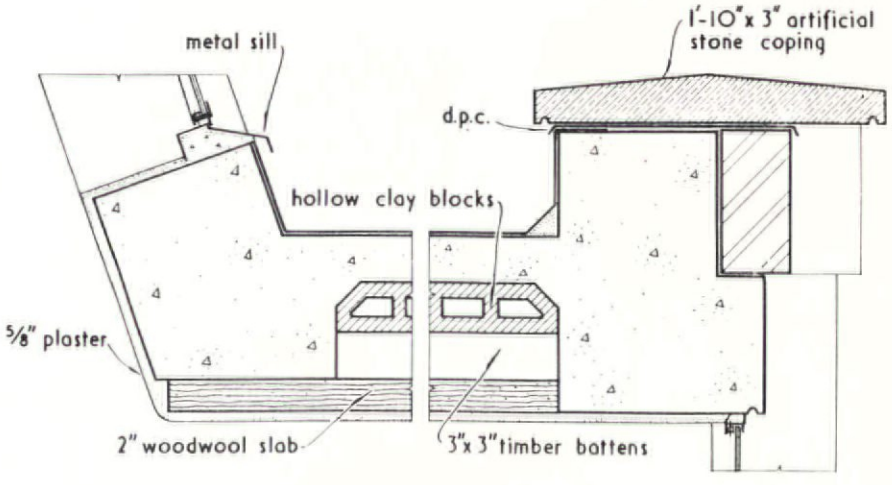
KEY ELEVATION . scale 1/8" = 1'-0"



SECTION THROUGH ROOF. scale 1/4"=1'-0"



DETAIL AT A.

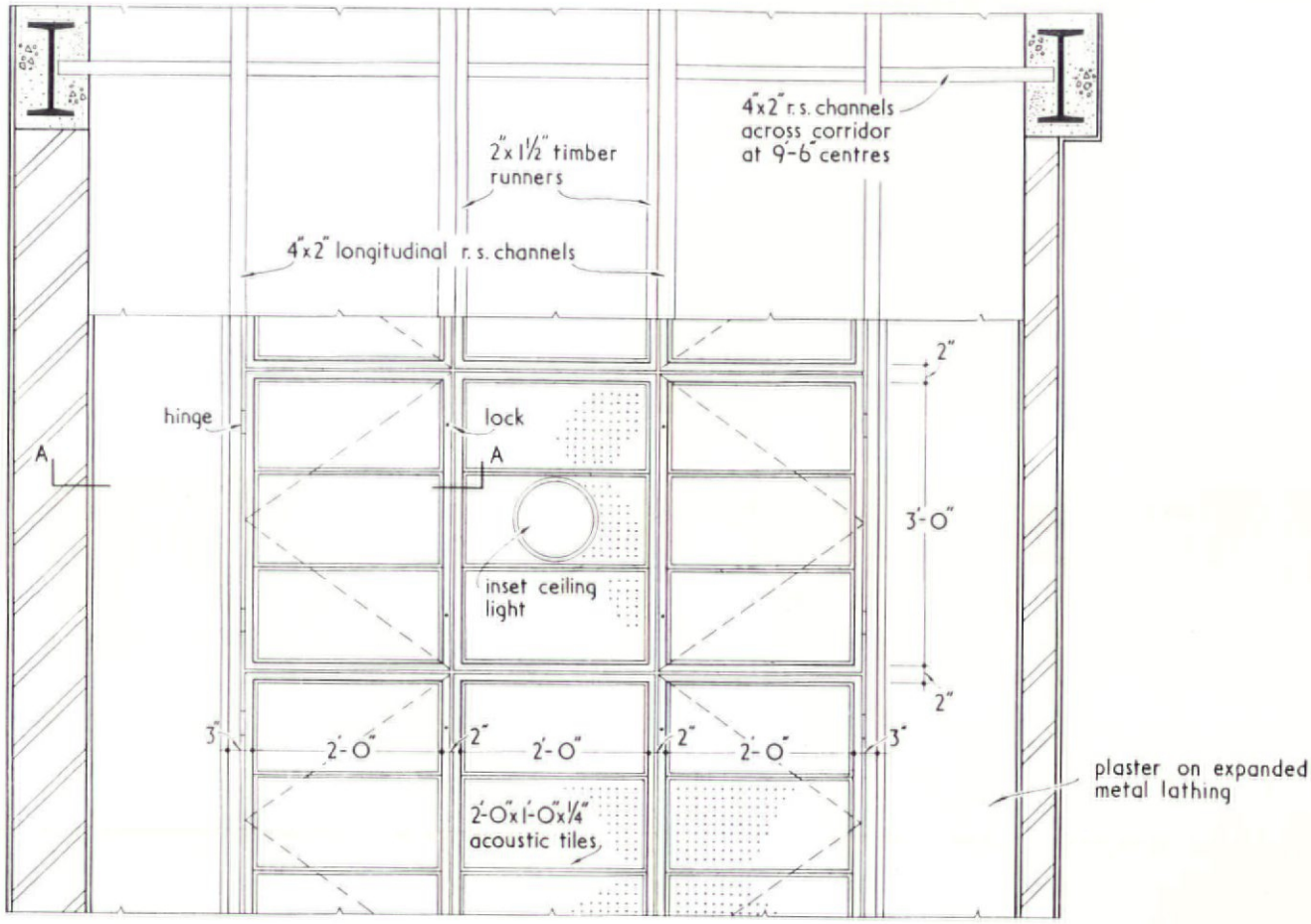


DETAILS AT B AND C. scale 1"= 1'-0"

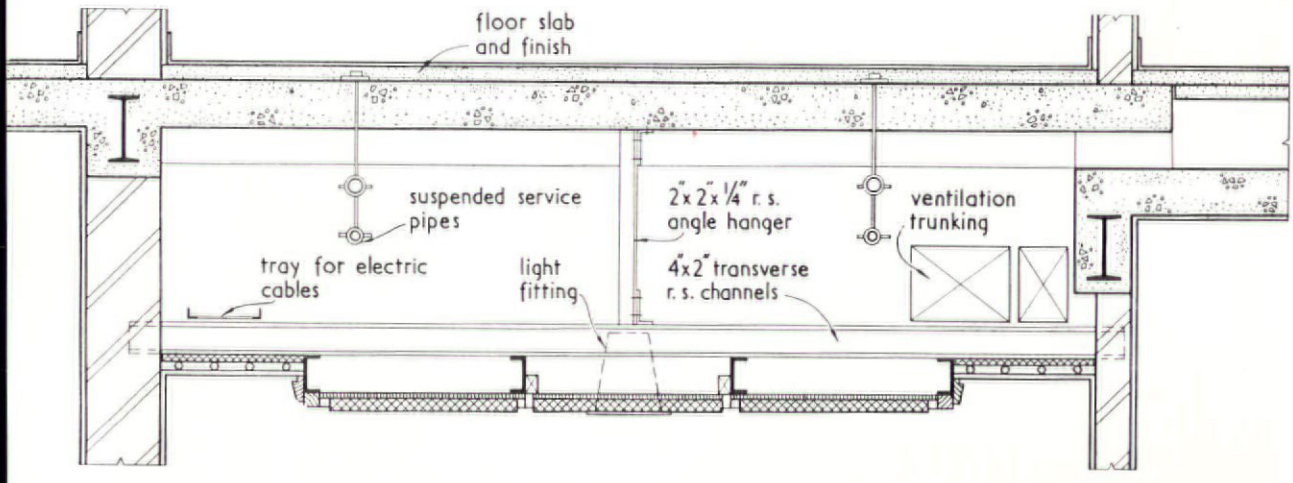
SUSPENDED CEILING: HOSPITAL IN LONDON, S.E.1

DESIGNED BY W. G. HOLFORD AND L. G. CREED

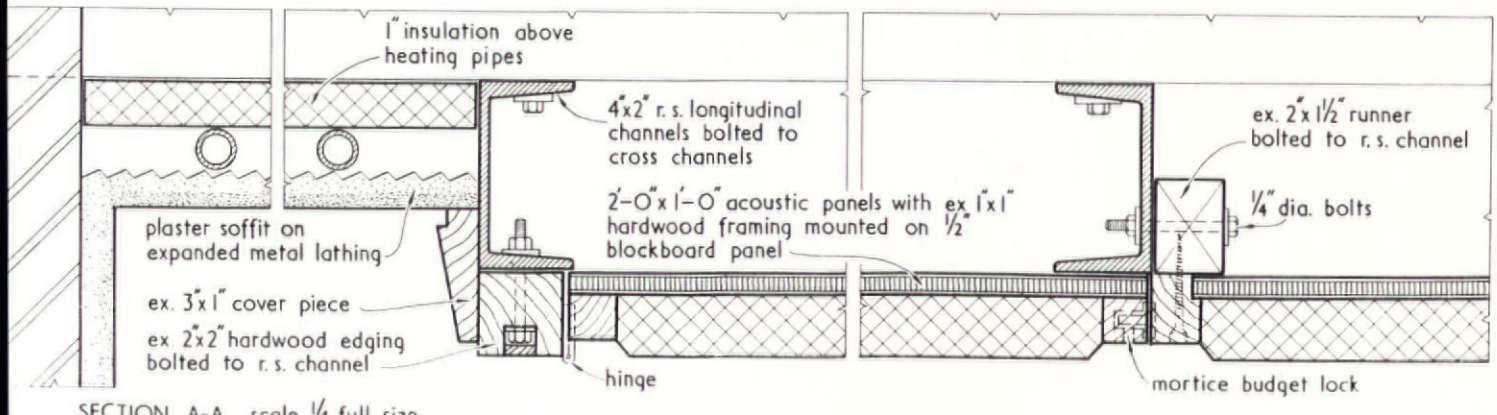
The duct above this ceiling contains the ventilation trunking, service pipes and electric cables. Access to these is via *the edge panels, which are hinged to flap downwards when unlocked. The use of hardwood framing to these panels and the contrast in colour between this framing and the acoustic tiles provides a strong pattern in the ceiling which masks the unevenness between tiles, usually so noticeable in ceilings of this type. The plaster bands on either side of the acoustic ceiling are heating panels.*



PLAN OF CEILING. scale ½"= 1'–0"



CROSS SECTION OF CEILING. scale ½"= 1'–0"

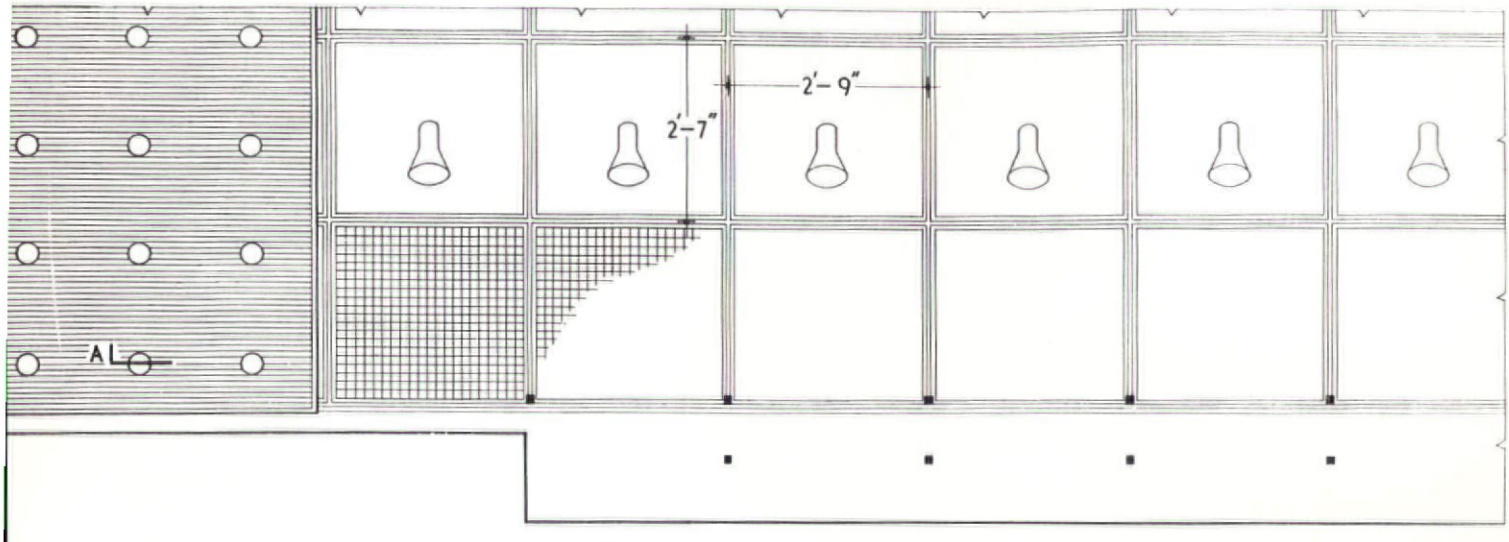


SECTION A-A scale ¼ full size

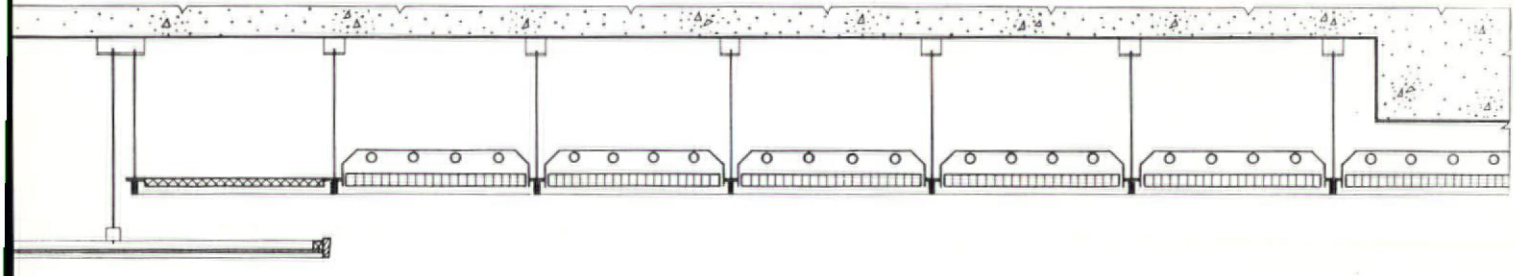
SUSPENDED CEILING: SHOWROOMS IN LONDON, W.1

DESIGNED BY HOWARD V. LOBB AND PARTNERS

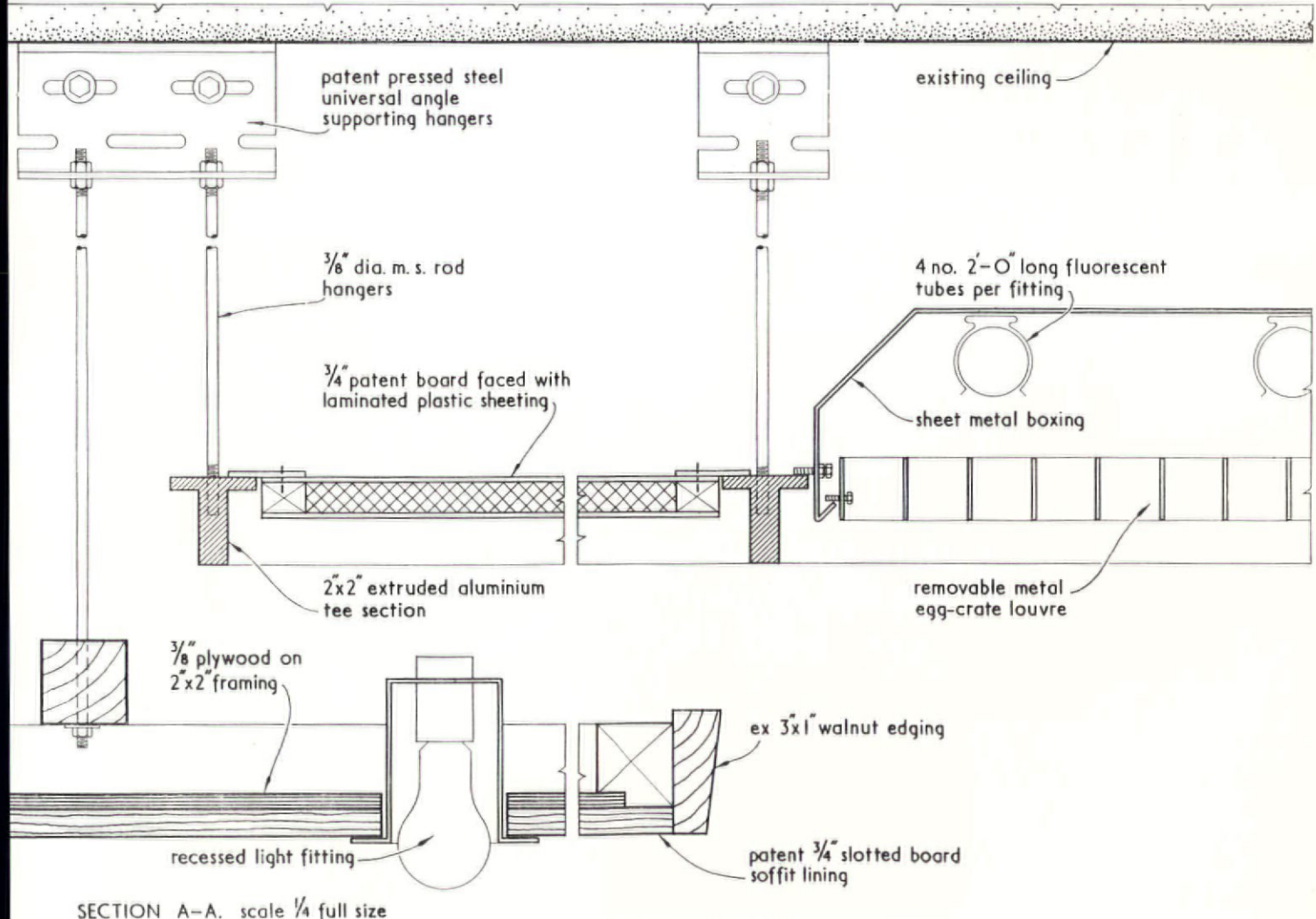
The use of a relatively substantial grid of upright T section enables the ceiling to serve as a support for the temporary display panels. The uprights for these panels are of 1 in. sq. steel tubing and are notched at the head to fit over the leg of the T section and can be tightened against this section by means of adjustable feet. The leg of the aluminium T section in the ceiling has a satin brass finish and the underside of the flange is painted black.



PLAN OF CEILING FROM BELOW. scale 3/8" = 1'-0"



CROSS SECTION OF SUSPENDED CEILING. scale 3/8" = 1'-0"

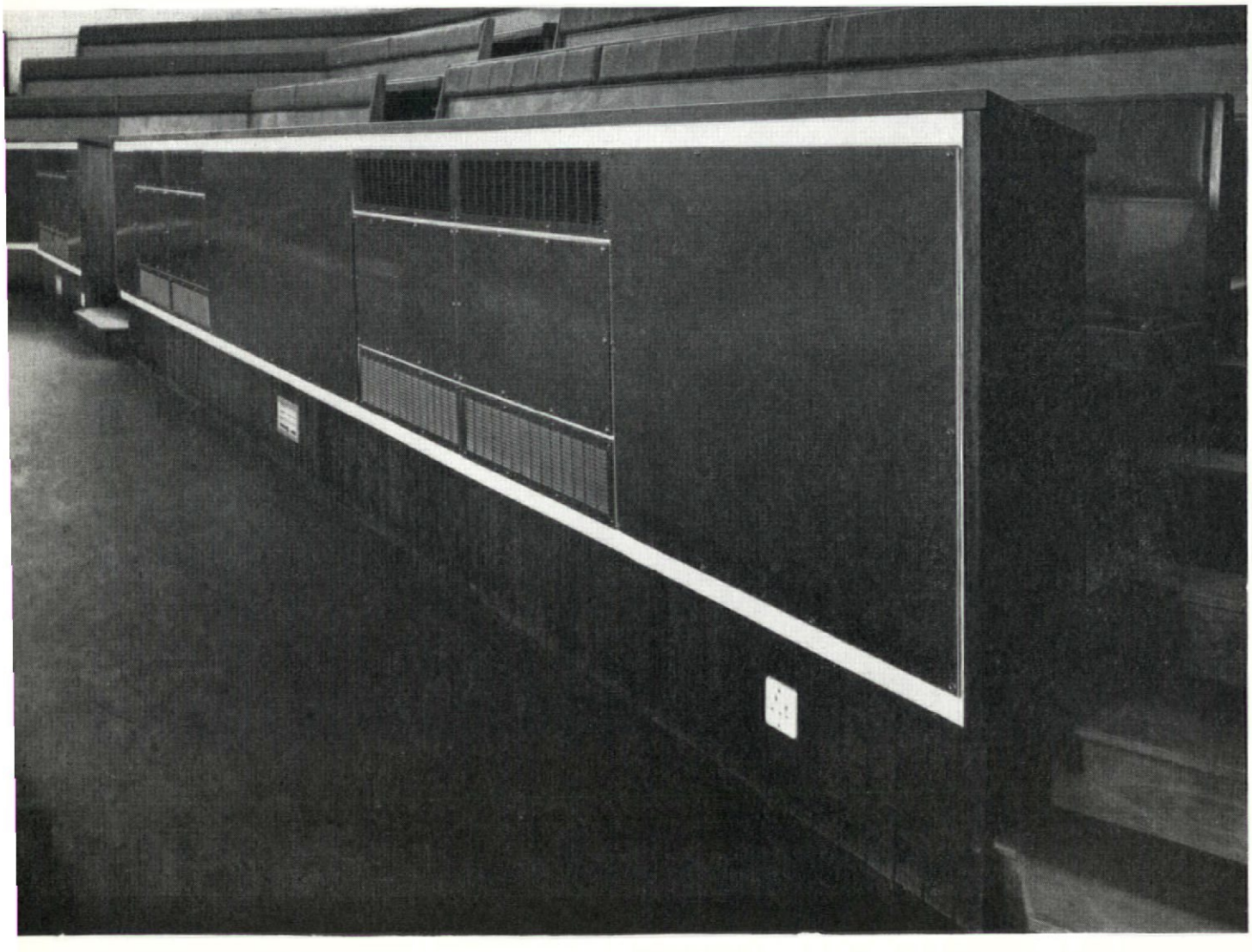


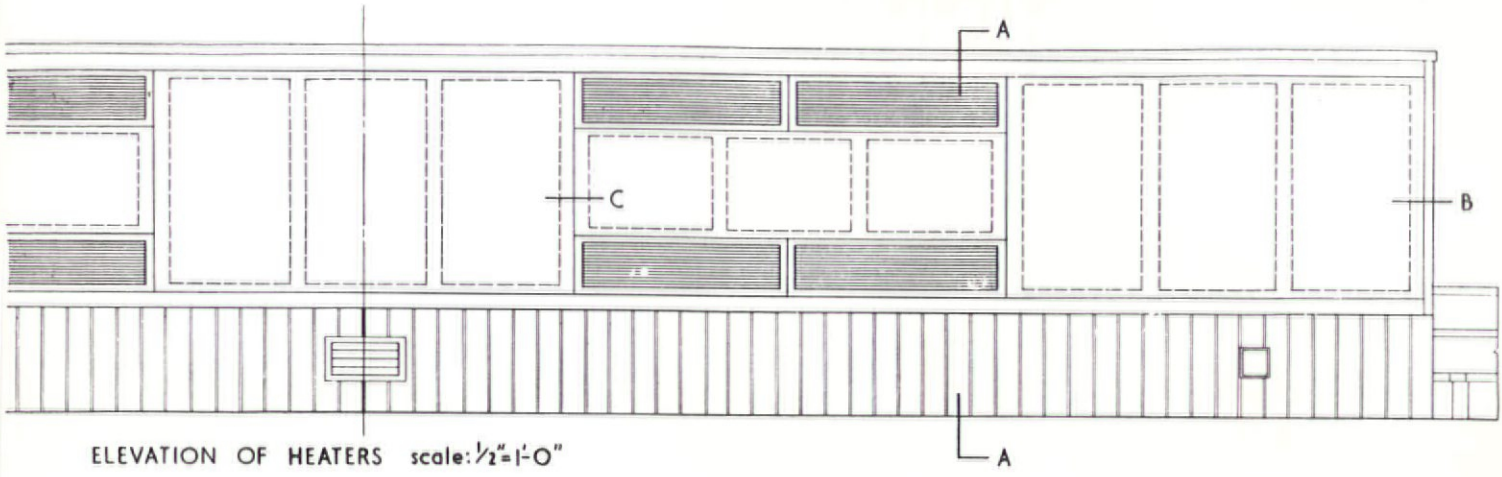
SECTION A-A. scale 1/4 full size

HEATING PANELS: SCHOOL AT STOKE NEWINGTON

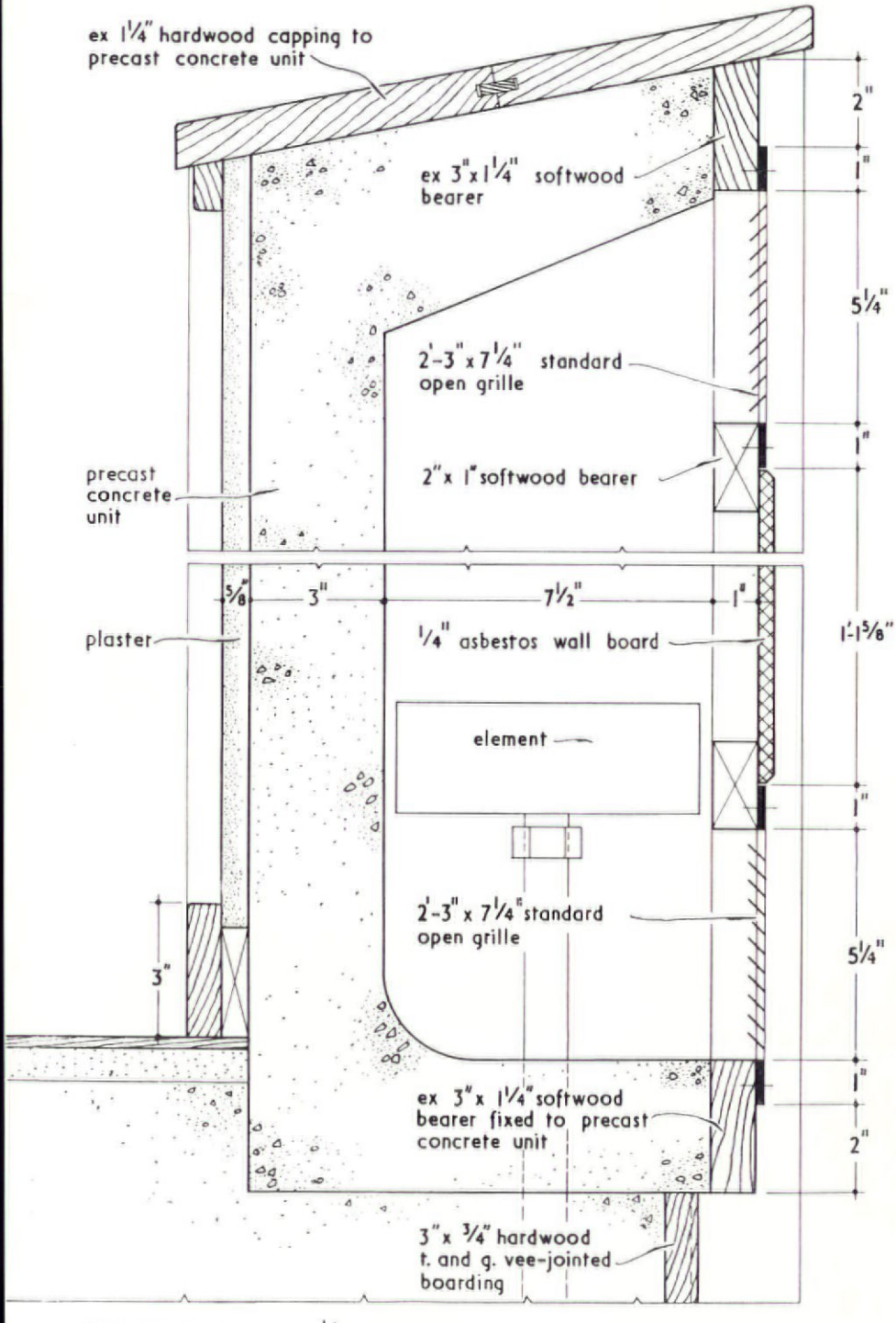
DESIGNED BY ROBERT H. MATTHEW (formerly architect to the L.C.C.); JOHN BROOME (architect-in-charge); F. J. SAMUELY (consulting engineer)

Support for the seating fronts in which the convectors are contained is provided by channel-shaped precast concrete units. These are 2 ft. 2⅜ in. wide and are bolted to the concrete floor. Heating is by hot water, passing through gilled tubes of square cross section. The open side of the channel section is cased in by metal grilles and asbestos hardboard on softwood framing, the other side being plastered. Hardwood capping and sides and softwood framing are fixed to wood plugs cast in the concrete units.

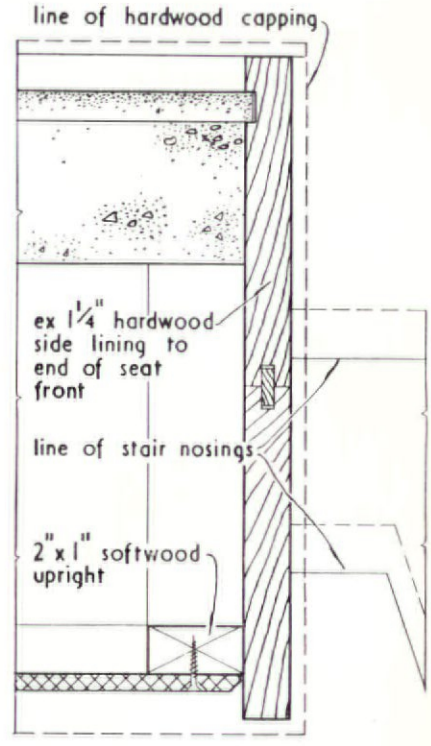




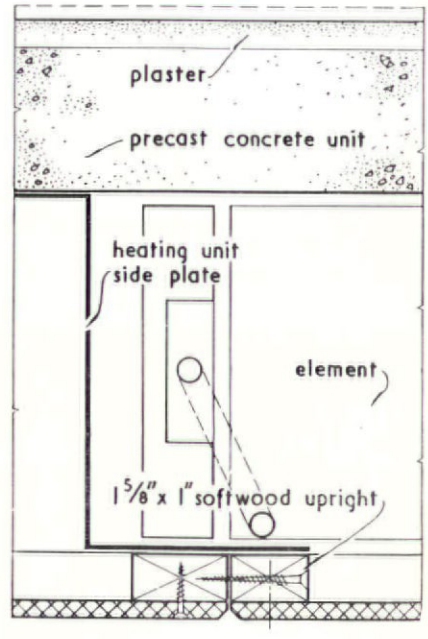
ELEVATION OF HEATERS scale: ½"=1'-0"



SECTION A-A scale ¼ full size



DETAIL AT B.

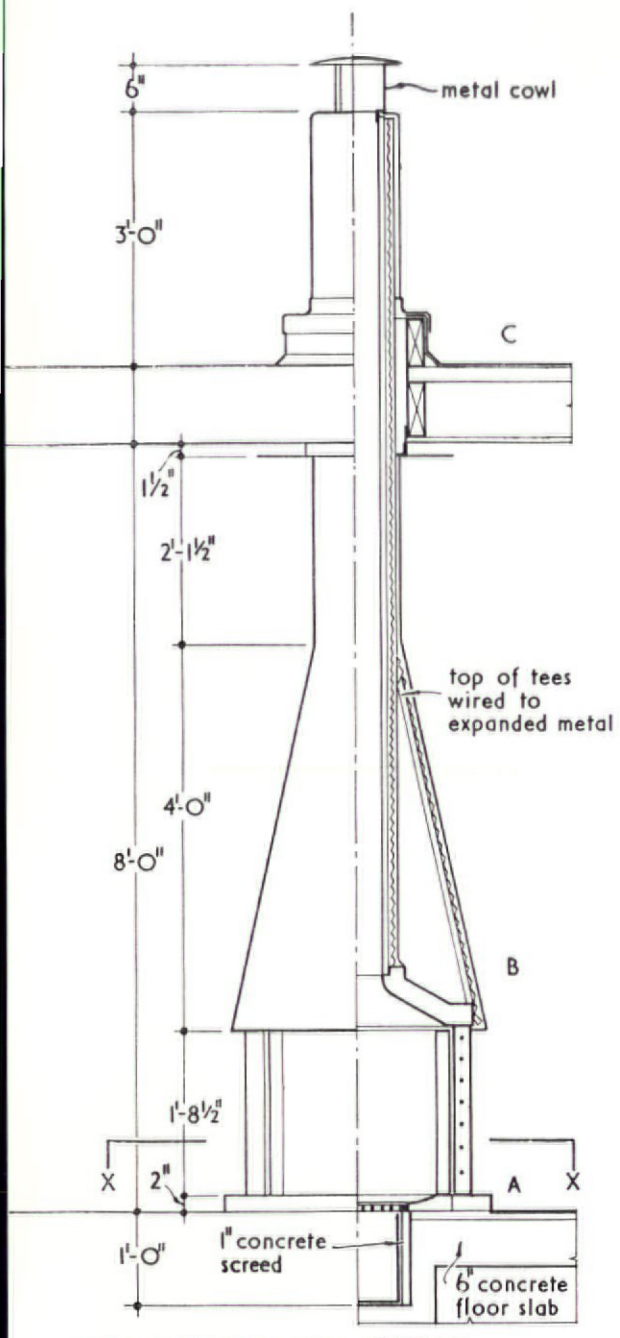


DETAIL AT C.

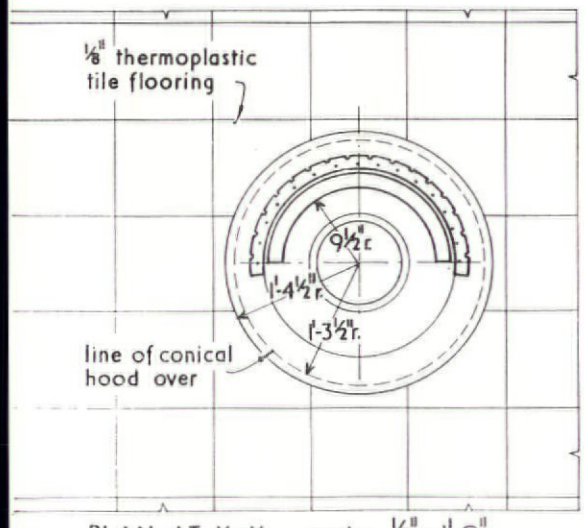
FIREPLACE: HOUSE AT LOWESTOFT

DESIGNED BY JOHN AND SYLVIA REID

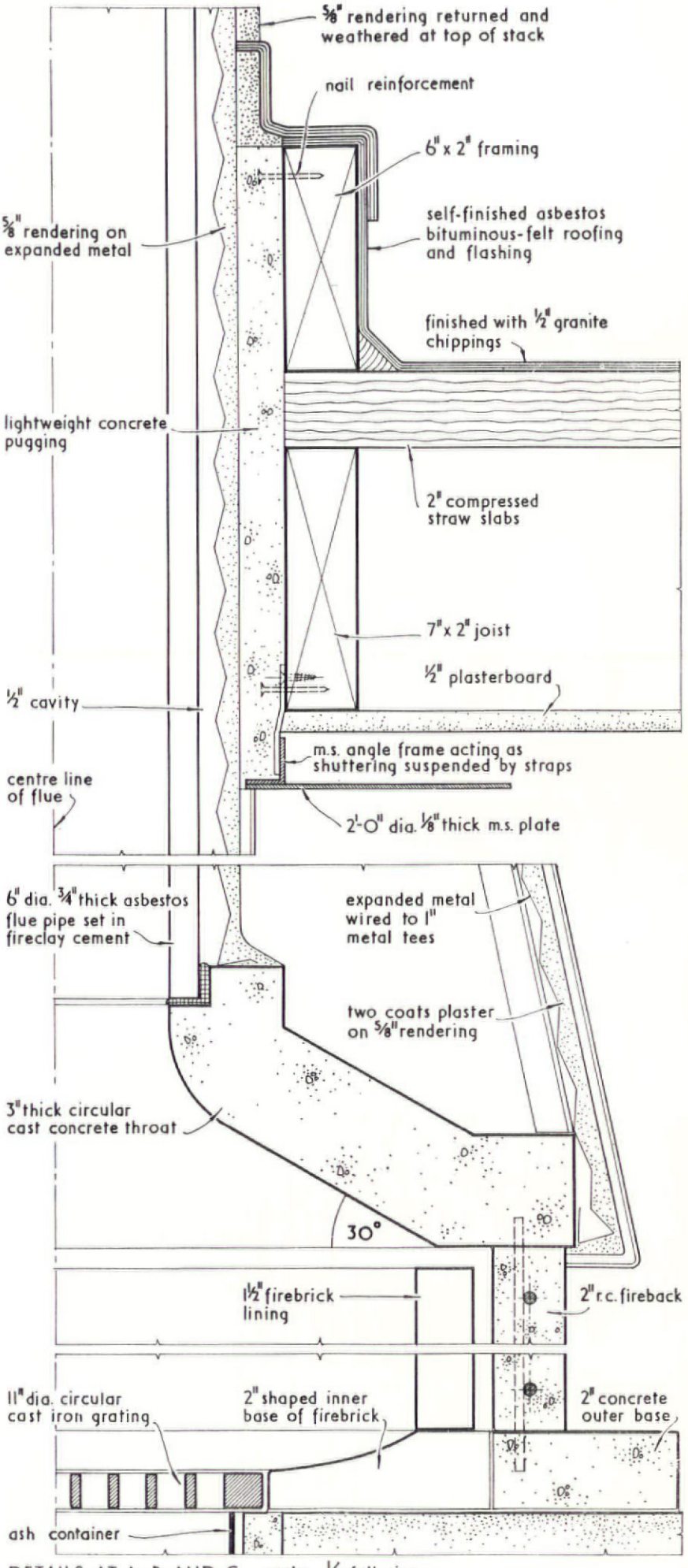
An under-floor duct leading to the ash pit provides draught. The fire brick lining, fireback and circular concrete throat were cast in-situ. A circular m.s. plate close to ceiling conceals the changeover from the circular chimney to the square timber framing above and forestalls the crack likely to form in a plaster angle at this point. The fire draws adequately, but the architects consider a taller stack would have improved the design.



PART ELEVATION AND SECTION.



PLAN AT X-X. scale ½" = 1'-0"

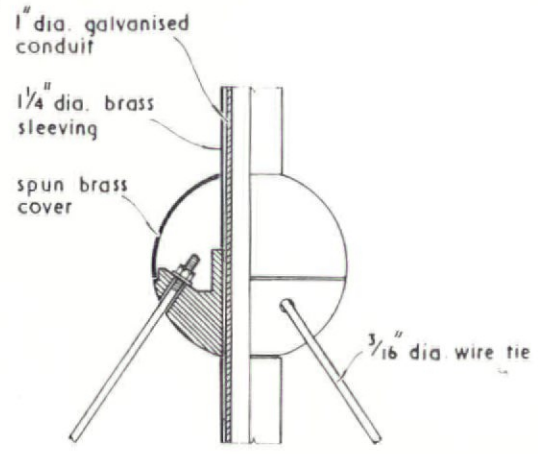


DETAILS AT A, B AND C. scale ¼ full size.

LIGHT FITTINGS IN ASSEMBLY HALL: SCHOOL AT STOKE NEWINGTON

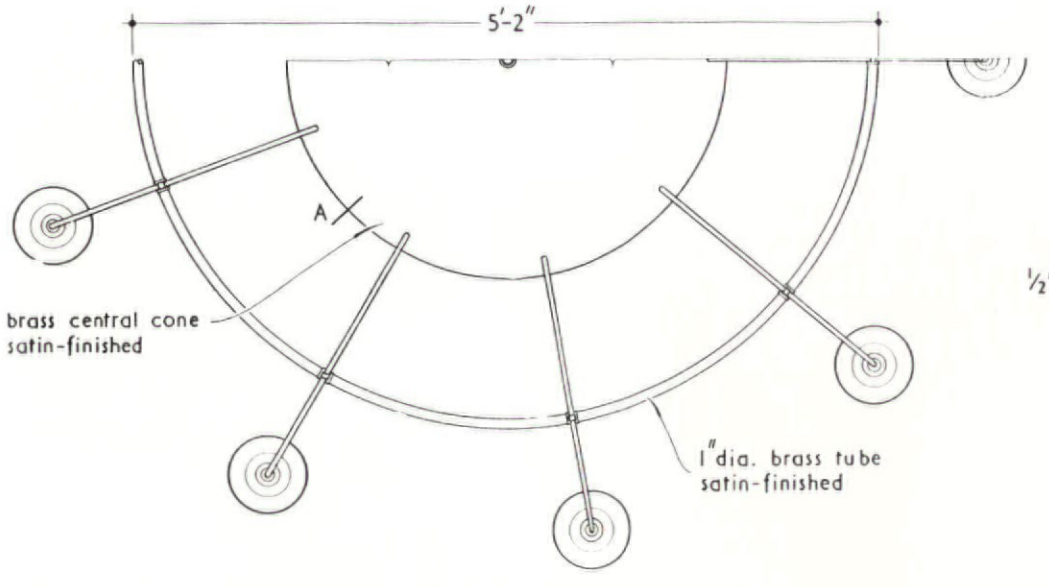
DESIGNED BY ROBERT H. MATTHEW (formerly architect to the L.C.C.); JOHN BROOME (architect-in-charge); F. J. SAMUELY (consulting engineer)

Main lighting (which is 'off' in the photograph) is provided by a 1,500*-watt bulb contained within the central cone. This shines downwards through a panel of Georgian wired glass with the help of an electro-brightened anodised aluminium-alloy reflector. A pattern of 'knock-out' holes has been cut in the upper part of the cone to give sparkle. The nine surrounding lights are* 100*-watt lamps in opal-glass shades.*

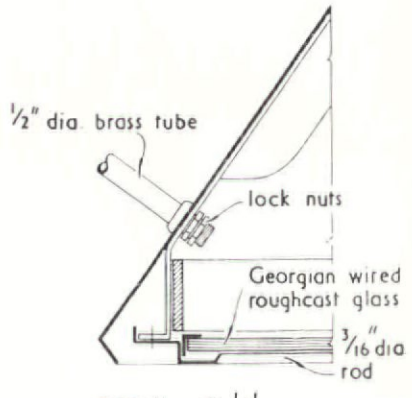


PART SECTION AND ELEVATION OF FIXING OF WIRE TIES scale ¼ full size

PART SECTION AND ELEVATION OF FITTING scale ¾" = 1'-0"



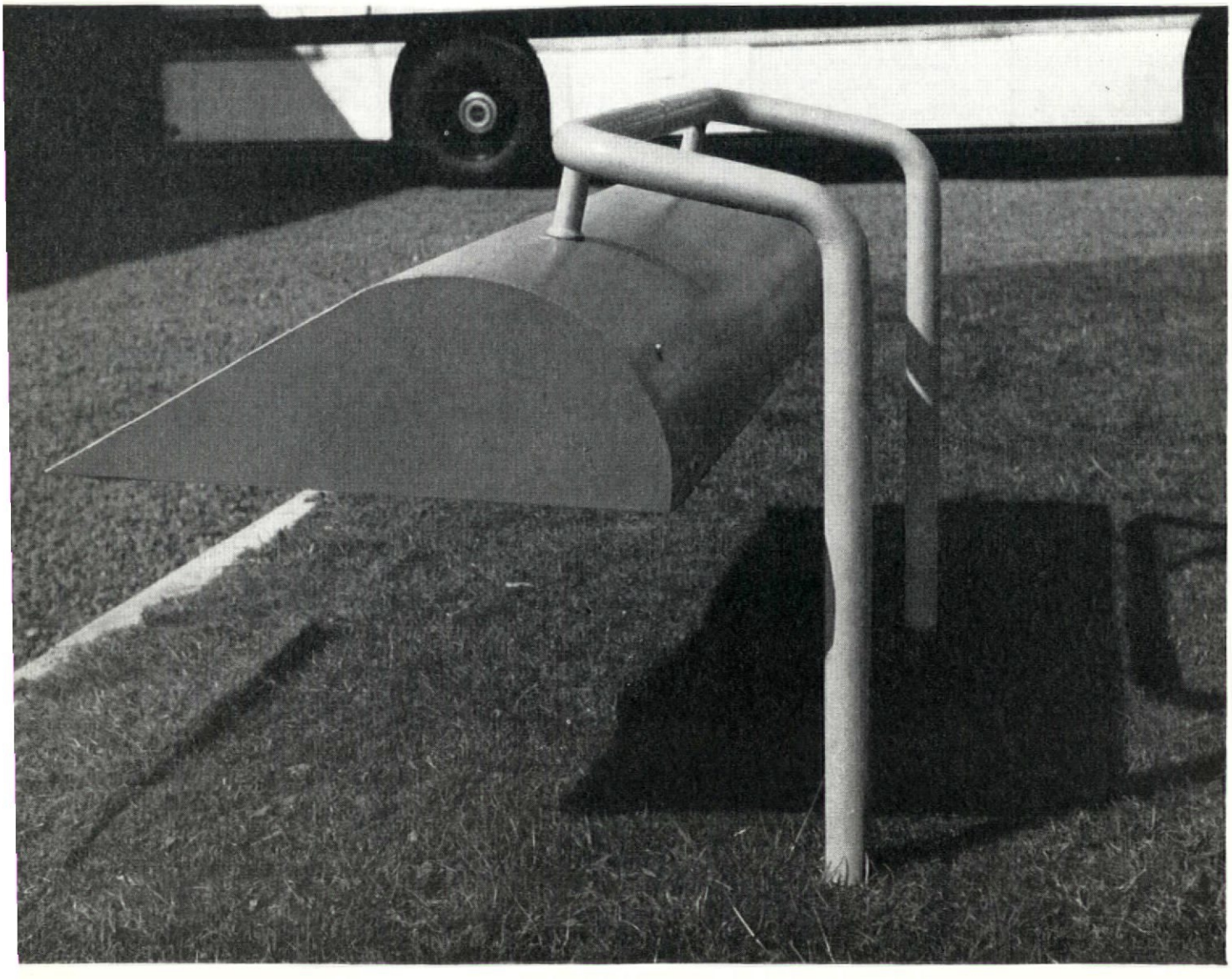
PART PLAN OF FITTING. scale ¾" = 1'-0"

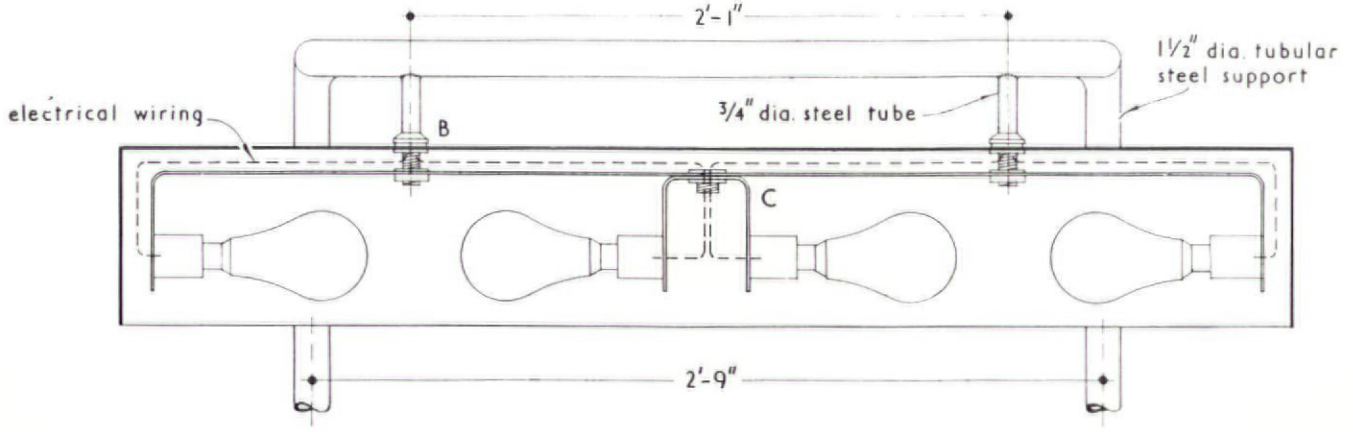


DETAIL AT 'A' scale ¼ full size

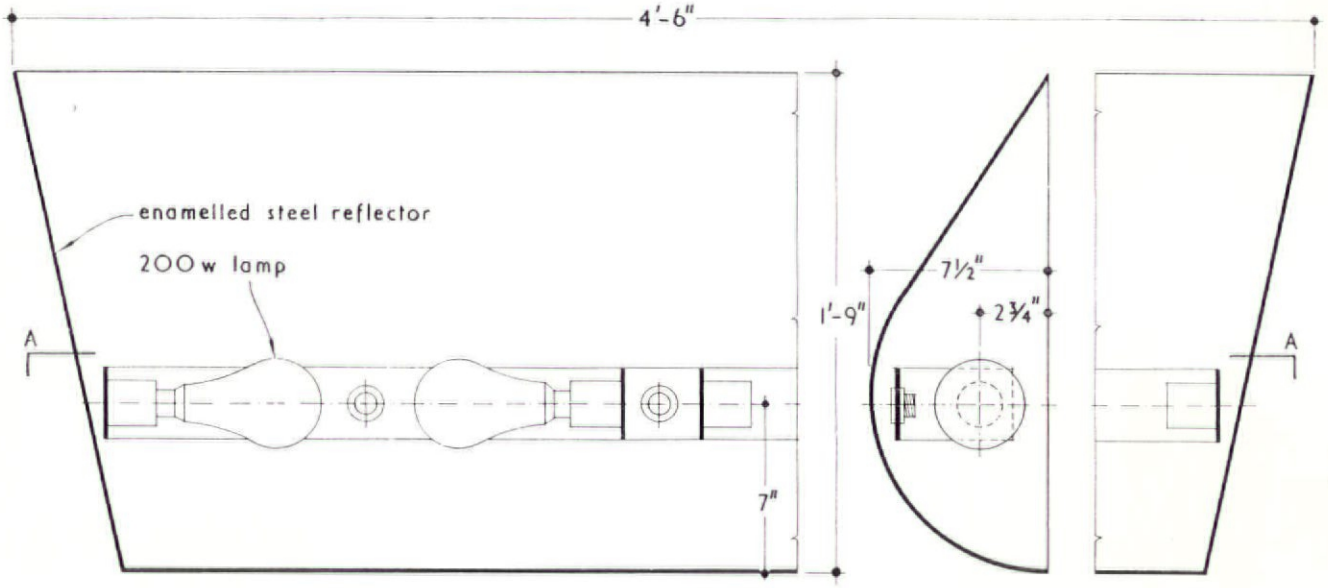
STREET LIGHTING: TURNHOUSE AIRPORT, EDINBURGH
DESIGNED BY ROBERT H. MATTHEW

This example at Turnhouse Airport shows a specialised application of lighting designed to screen the light source from the air.

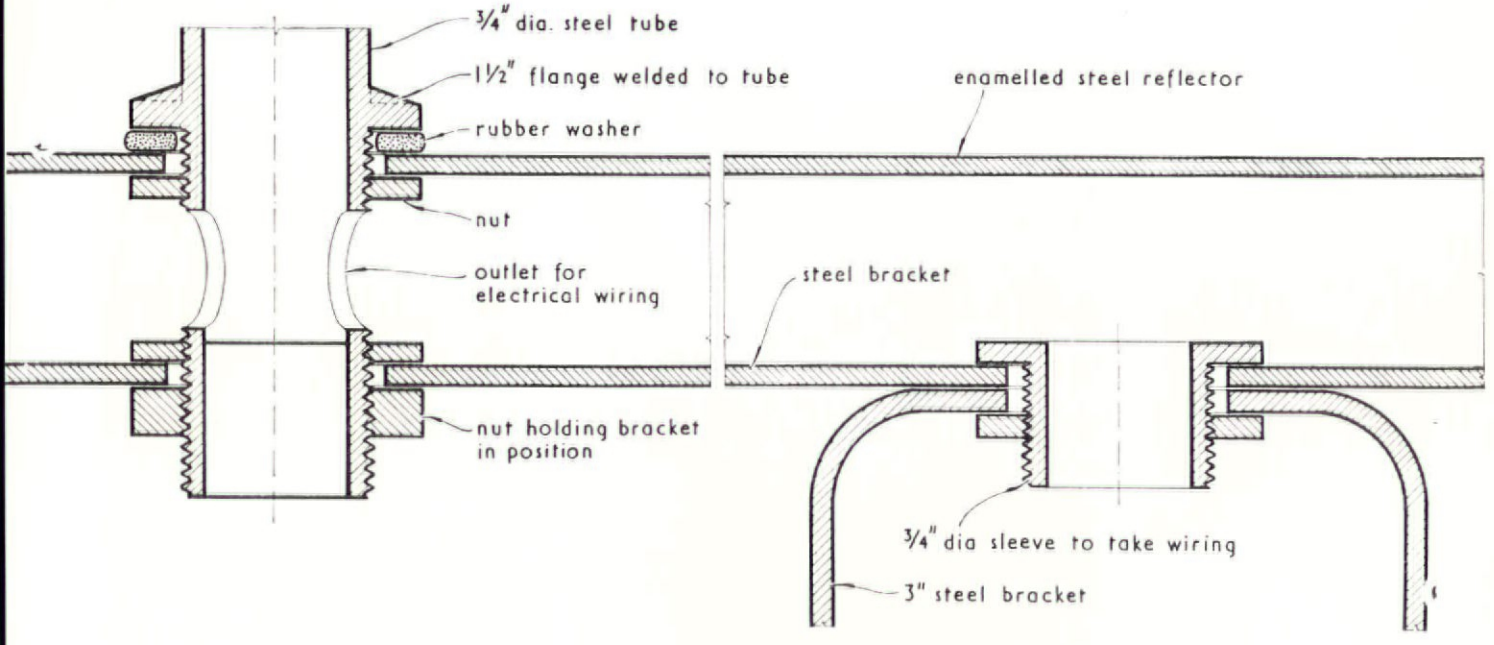




SECTION A-A scale 1½" = 1'-0"



PLAN AND CROSS SECTION. scale 1½" = 1'-0"

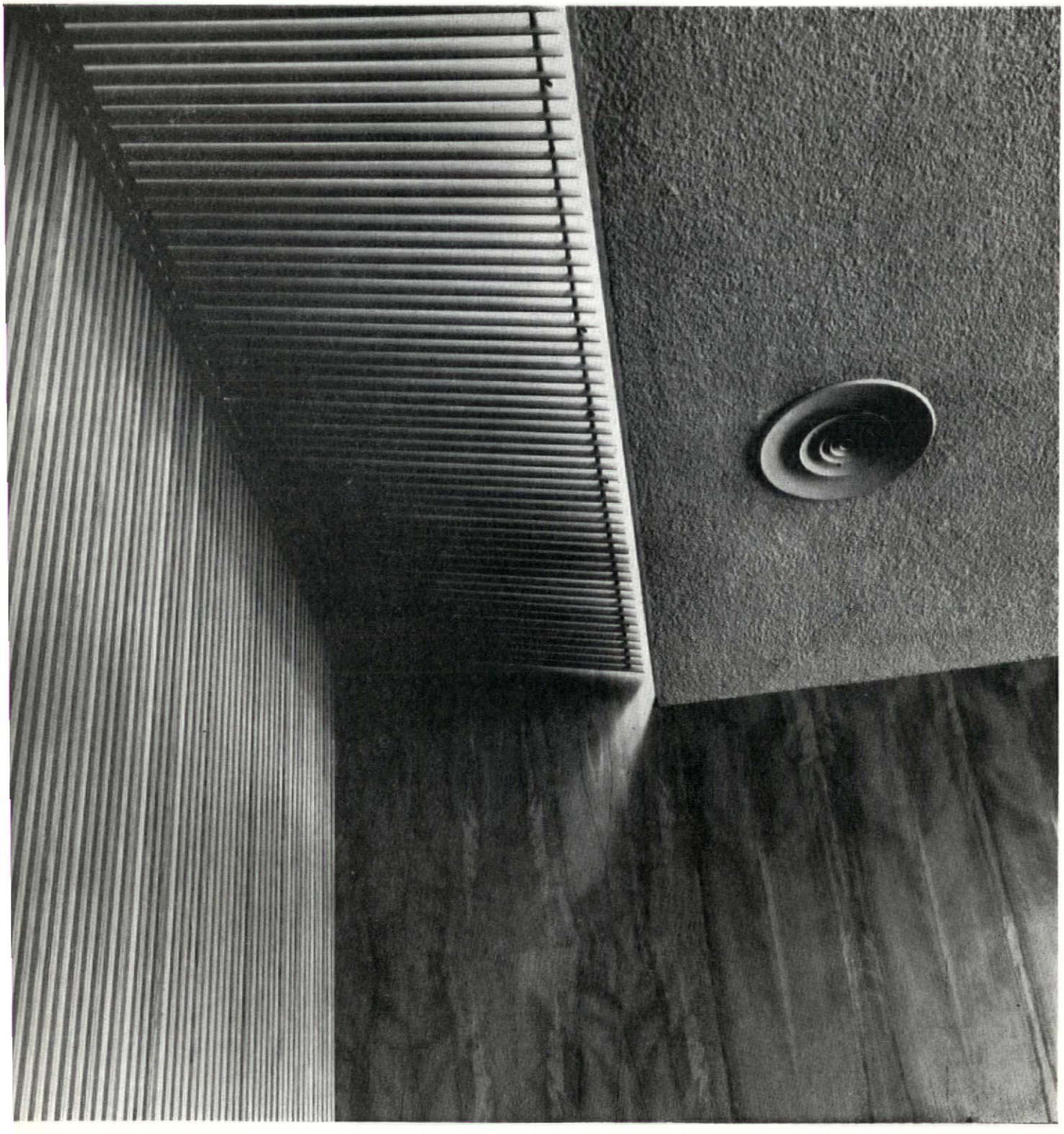


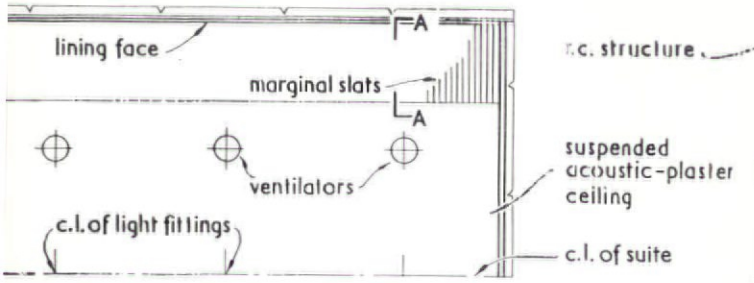
DETAILS AT B AND C. scale full size

CONCEALED LIGHTING: OFFICES IN LONDON, W.C.1

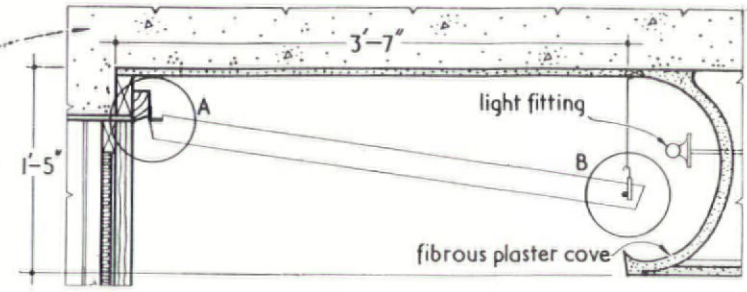
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

The combs which serve as a screen for this ceiling lighting are made in lengths of 3 ft. 10½ in. so that their joints fall on the module lines of the windows. Access to the lights is gained through unhooking each comb and lowering it on the hinge: a screw adjustment on each hook enables each comb to be exactly aligned with its neighbour.

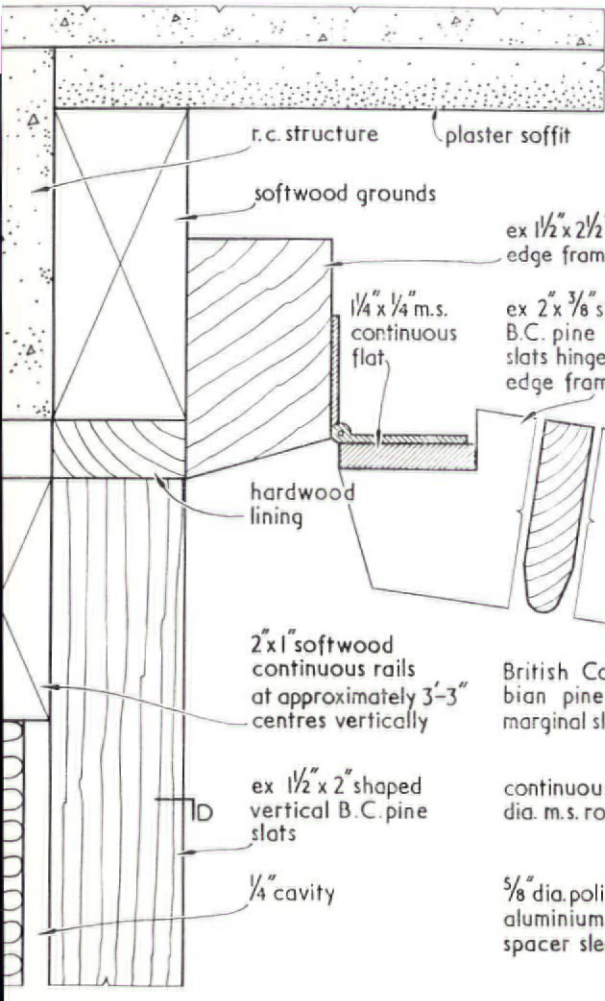




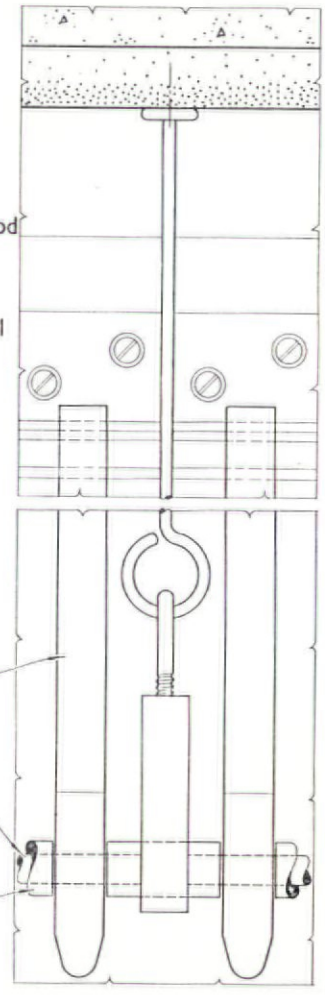
REFLECTED PLAN OF CEILING. scale 1/8" = 1'– 0"



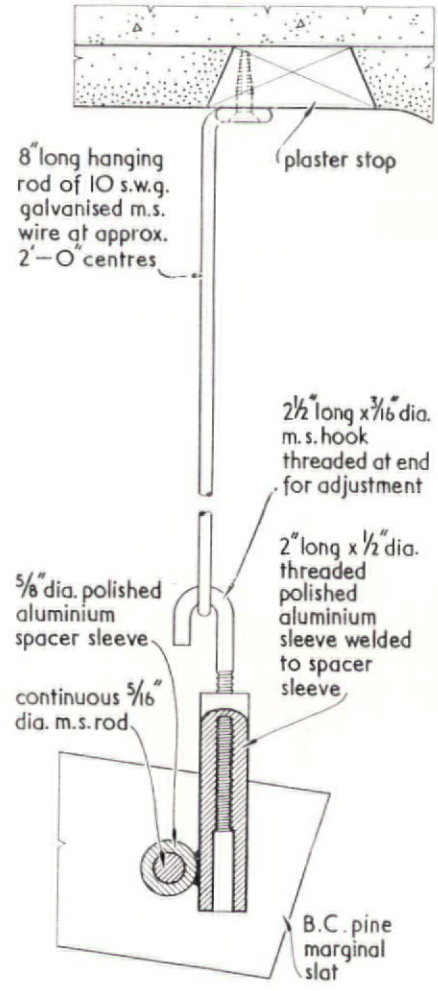
SECTION A–A. scale 3/4" = 1'– 0"



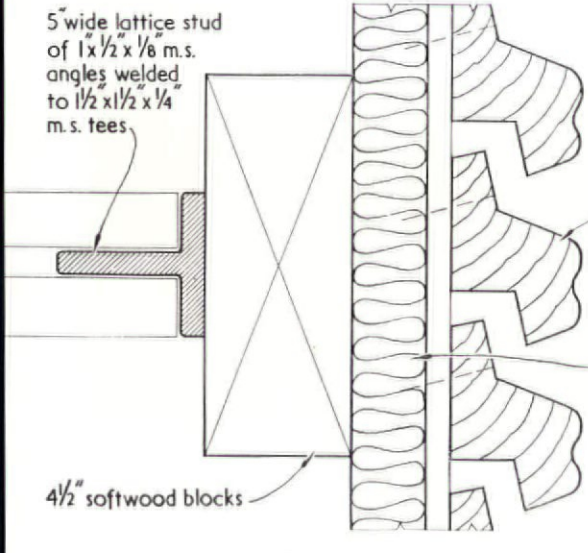
DETAIL AT A. scale ½ full size



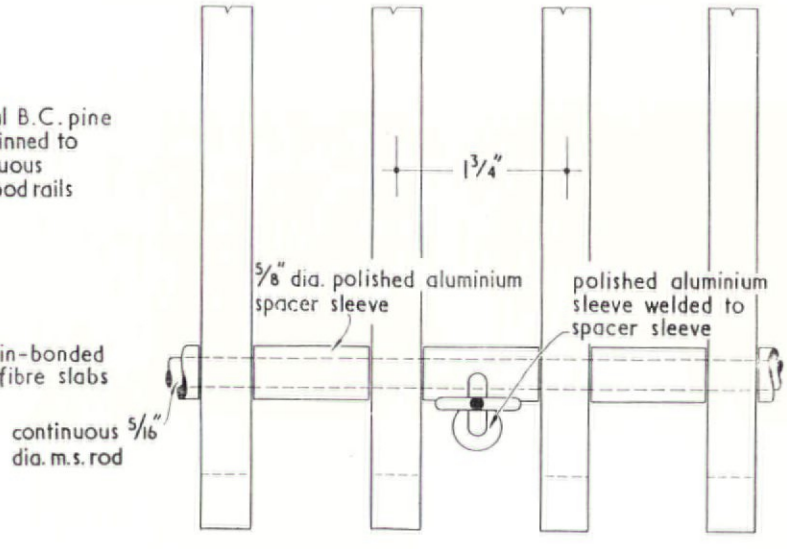
ELEVATION OF MARGINAL SLATS.



DETAIL AT B. scale ½ full size.



PLAN AT D. scale ½ full size

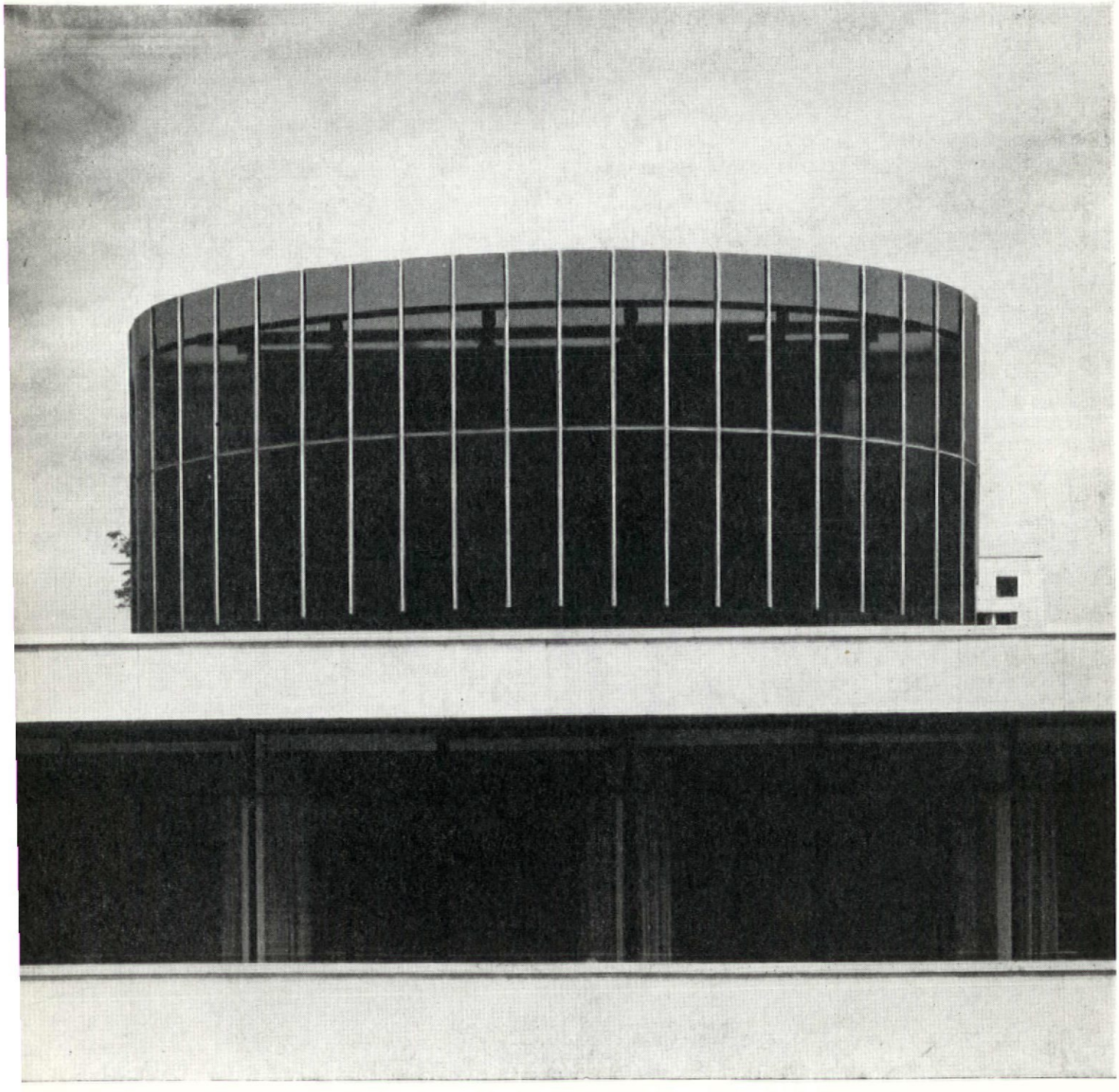


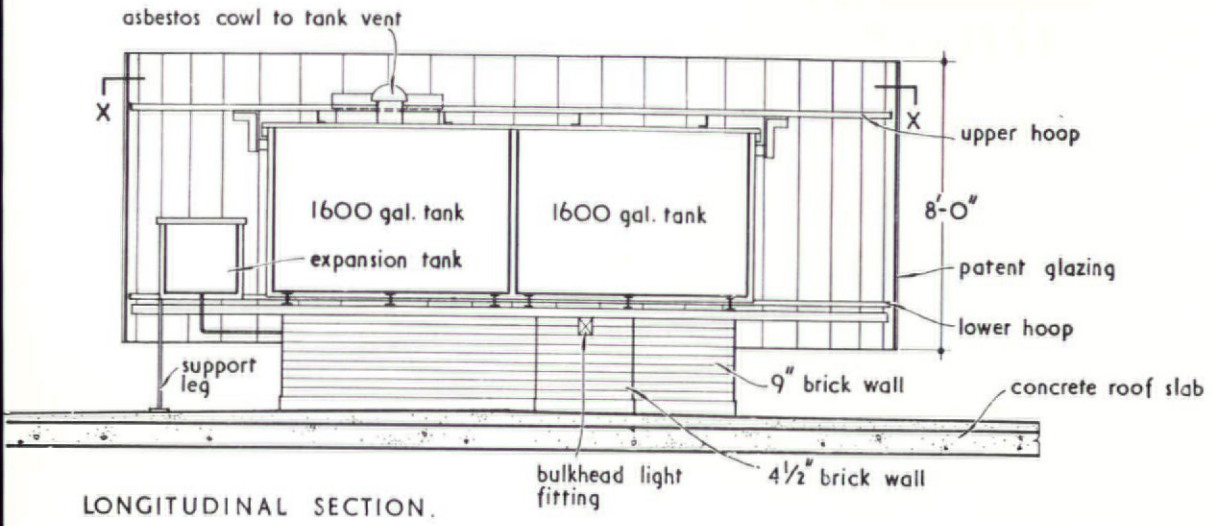
PLAN OF MARGINAL SLATS. scale ½ full size

TANK COVER AND SCREEN: SCHOOL IN LONDON, W.1

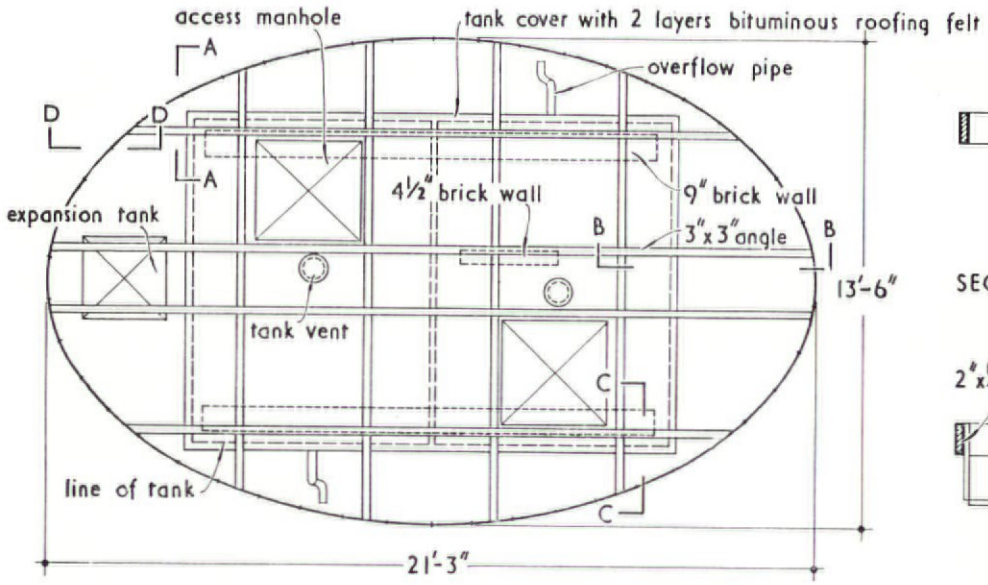
DESIGNED BY DRAKE AND LASDUN

The main tanks rest on r.s.j's. and are enclosed with 2-in. cork slab glued to the metal. Two layers of roofing felt were applied to the sides and top of the tanks, and the sides were further secured with chicken-wire netting. The aluminium glazing bars holding the tinted glass of the screen were screwed top and bottom to 2-in. by ½-in. m.s. hoops which were in turn cleated to a framework of 3-in. m.s. angles. The angles in the bottom framework were bolted to the r.s.j's. supporting the tanks; the top framework rests on pressure-creosoted deal pads laid on the felt-covered tank tops. L-shaped 'stabilisers' bolted to the framework and wedged to the sides of the tank further stops movement. Steelwork was painted with four coats of bituminous paint.

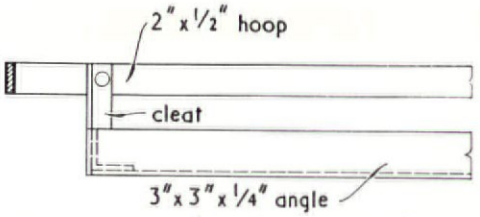




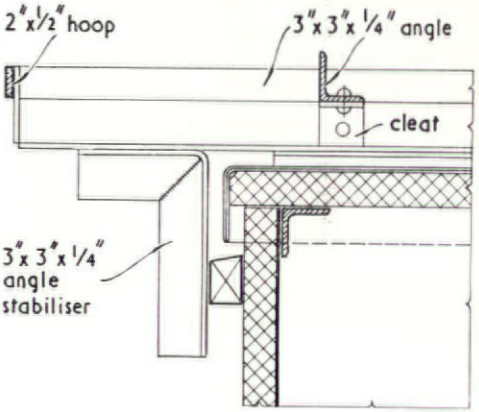
LONGITUDINAL SECTION.



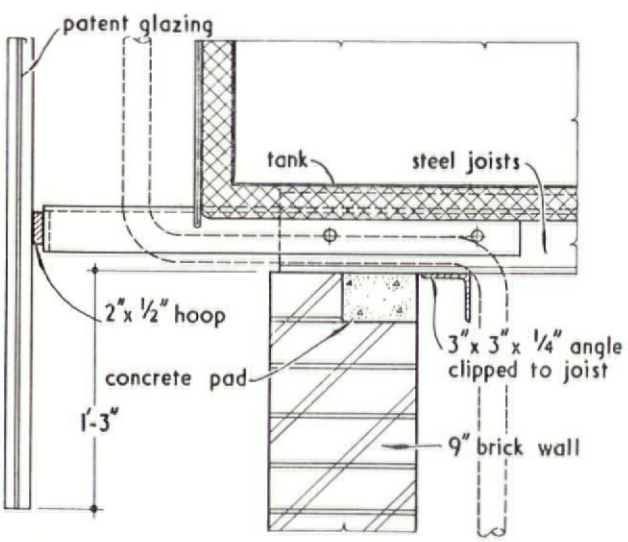
PLAN AT X-X. scale 3/16" = 1'-0"



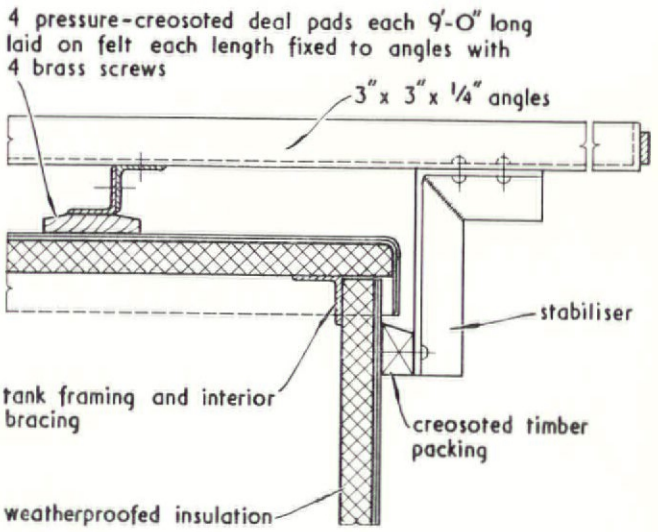
SECTION THRO' UPPER HOOP AT D-D.



SECTION THRO' UPPER HOOP AT C-C.



SECTION THRO' LOWER HOOP AT A-A.

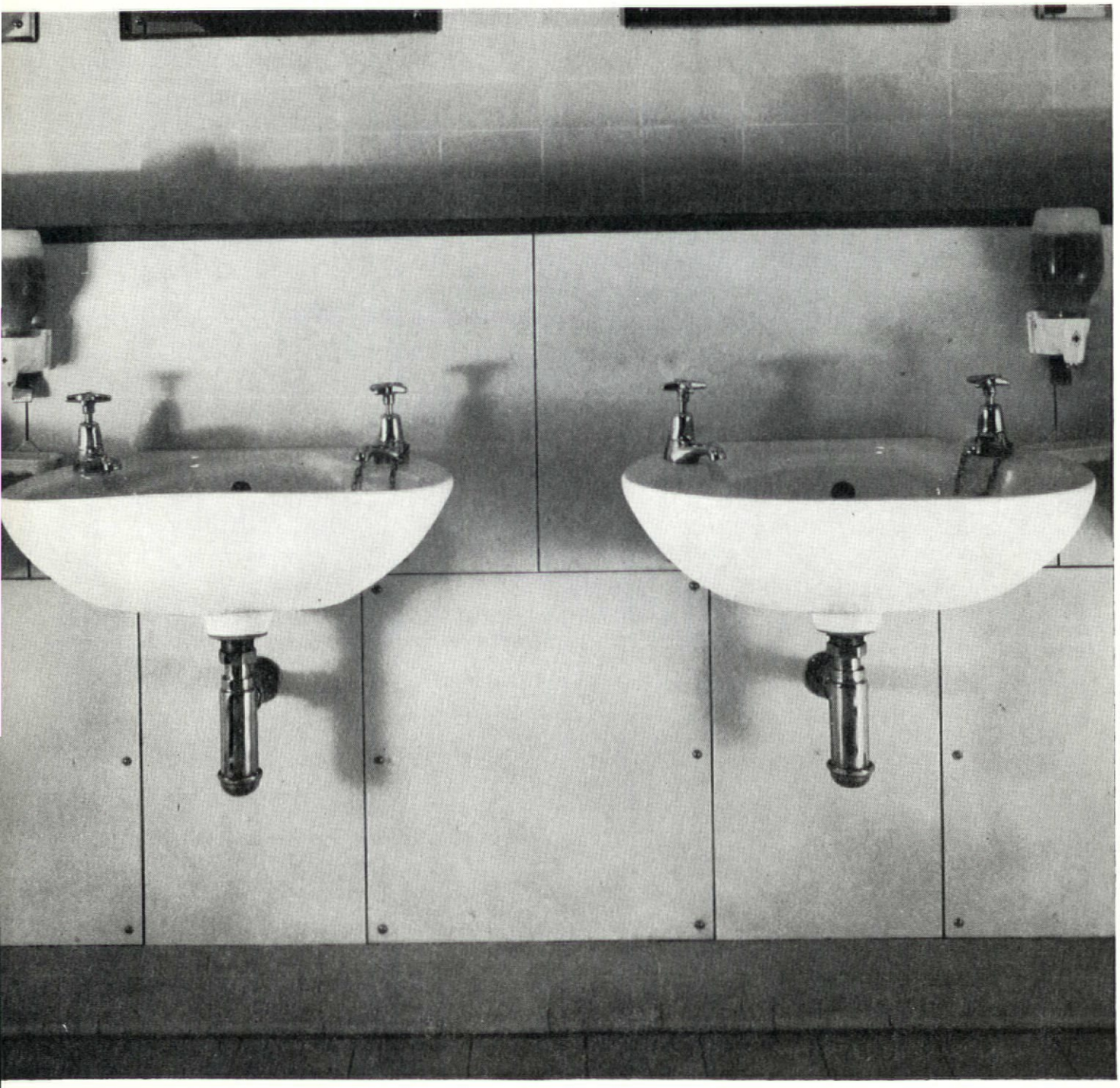


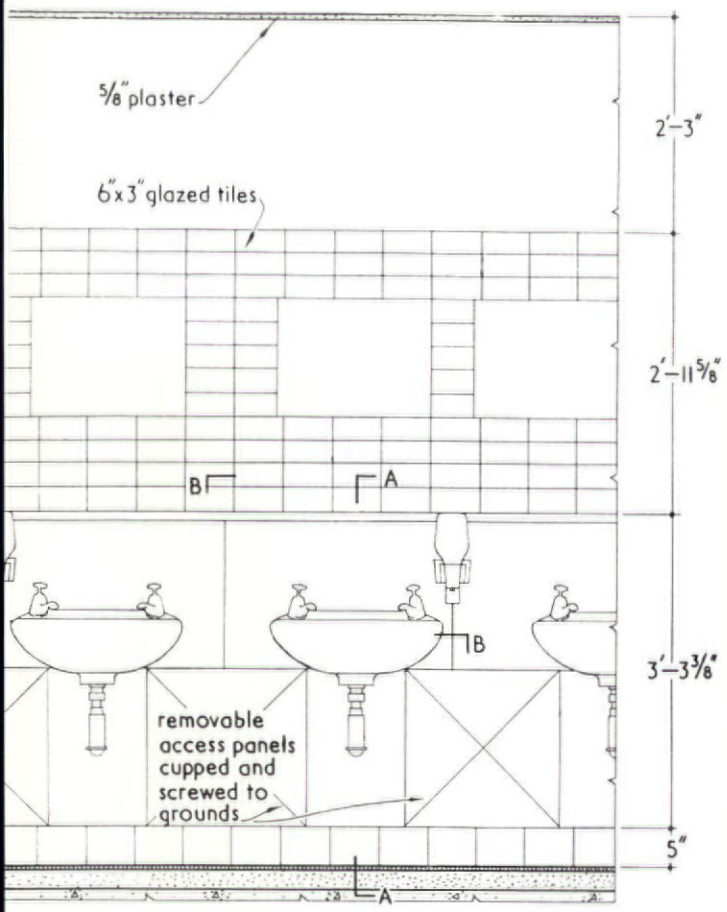
SECTION THRO' UPPER HOOP AT B-B. scale 1"=1'-0"

LAVATORY BASINS: OFFICES IN LONDON, W.C.1

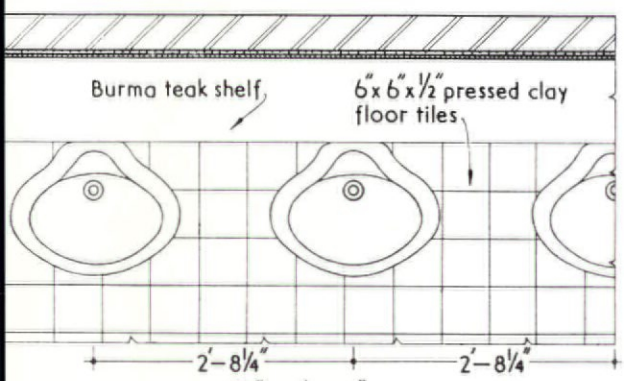
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

The main point of technical interest about these wash-basins is the substitution of a clamp for the usual bracket. The panels on which the basins are fixed are of melamine-faced sheet glued to timber framing, the lower panels between the basins being fixed with cups and screws to give access to the pipework behind.

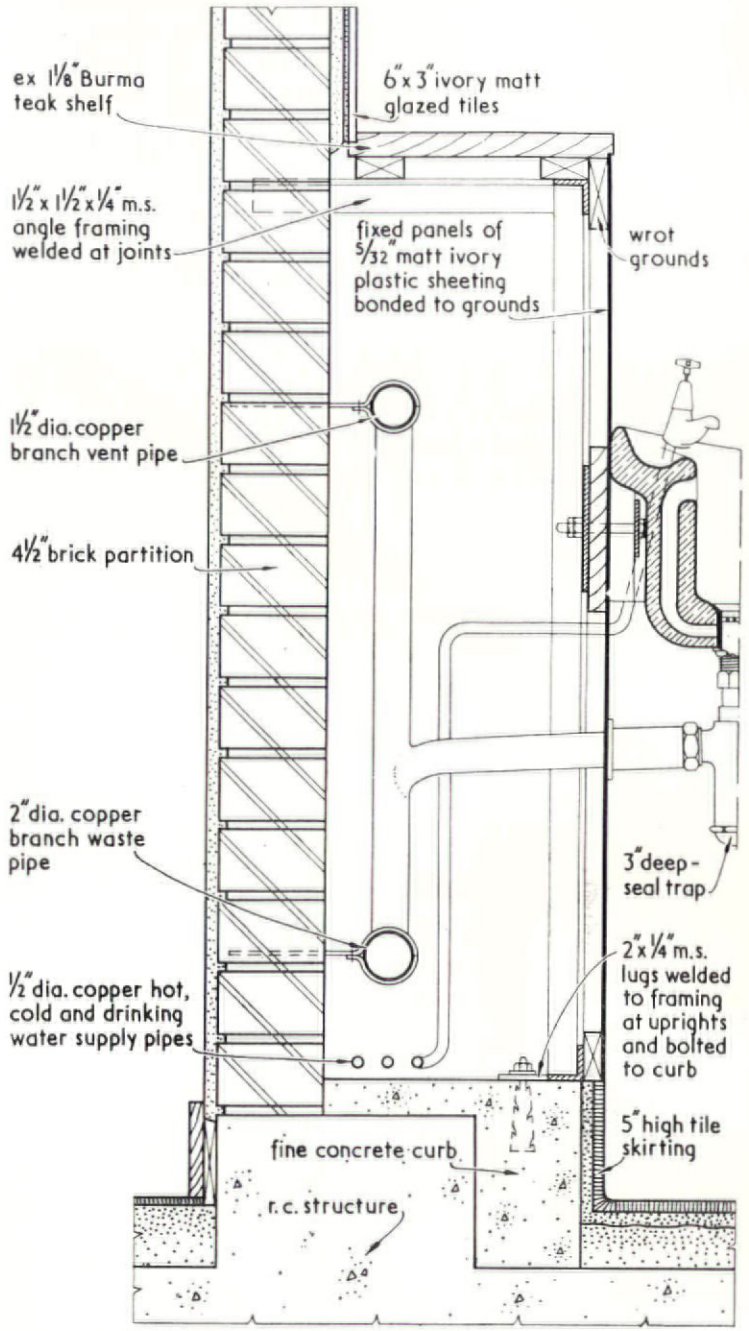




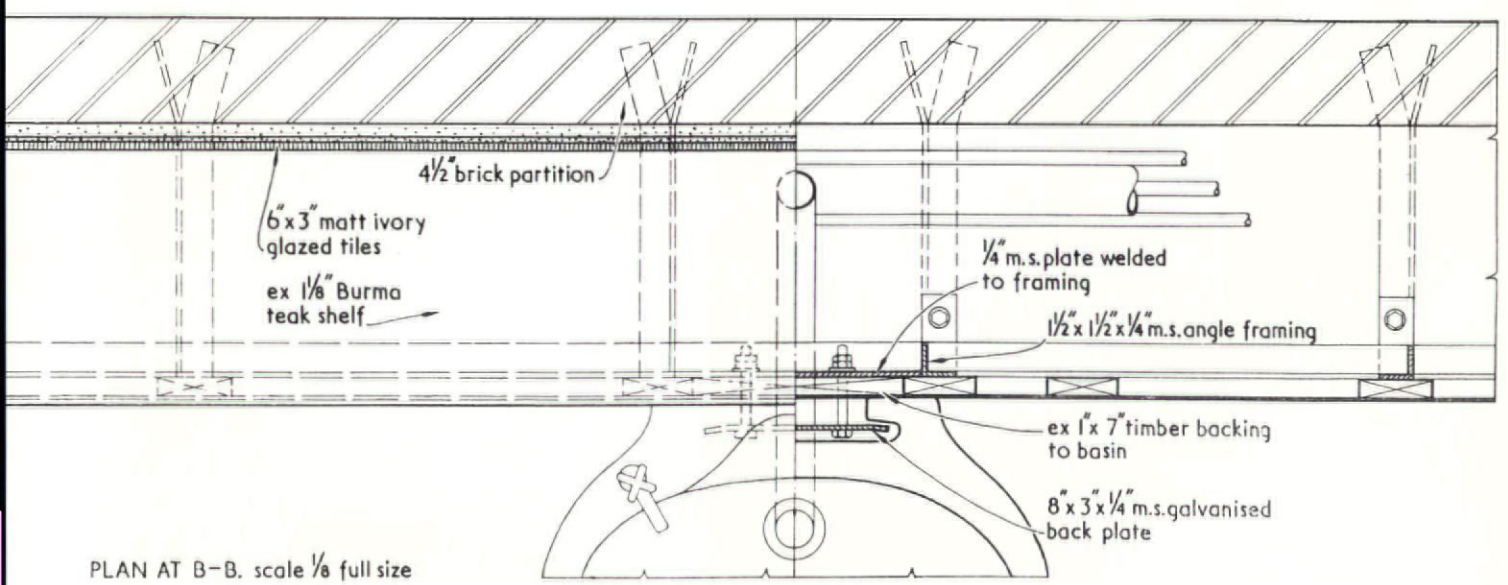
ELEVATION. scale ½" = 1'-0"



PLAN. scale ½" = 1'-0"



SECTION A–A. scale ⅛ full size

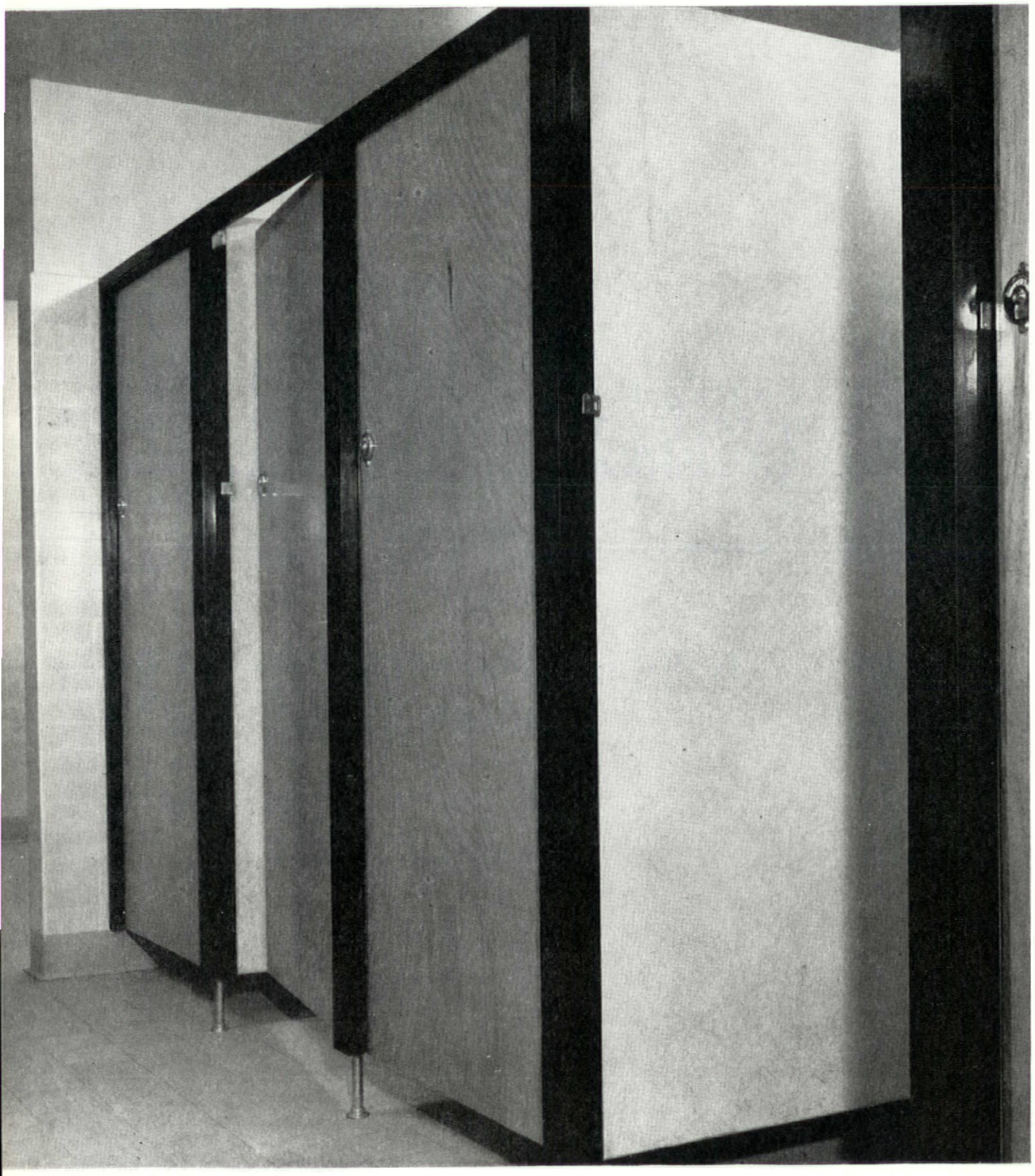


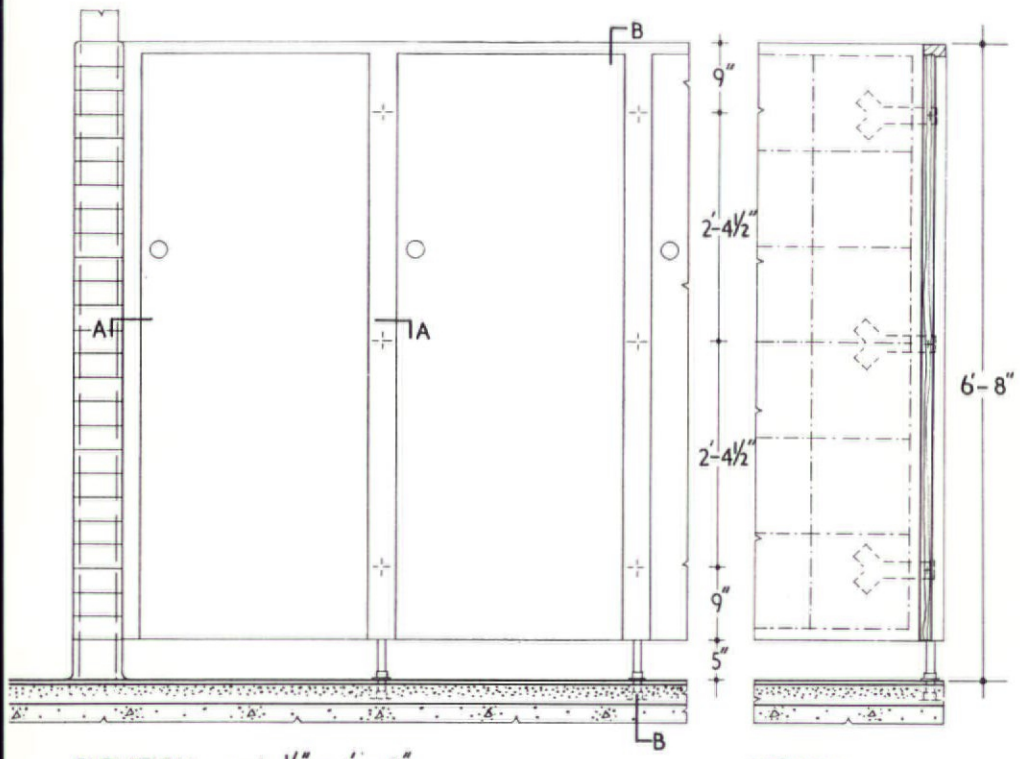
PLAN AT B–B. scale ⅛ full size

W.C. CUBICLES: OFFICES IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

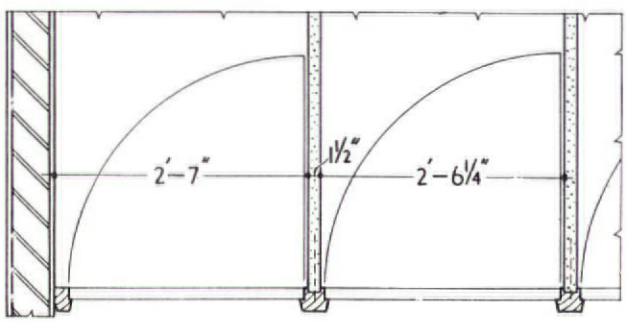
The hardwood frame and terrazzo partition slabs were assembled before screed and lining were laid, were trued by an adjustable baseplate and secured with daubs of cement mortar. The doors are on screw-type rising-butt hinges, which gives smoother self-closing than skew rising butts. They close against a compressible rubber stop concealed against the rebate.



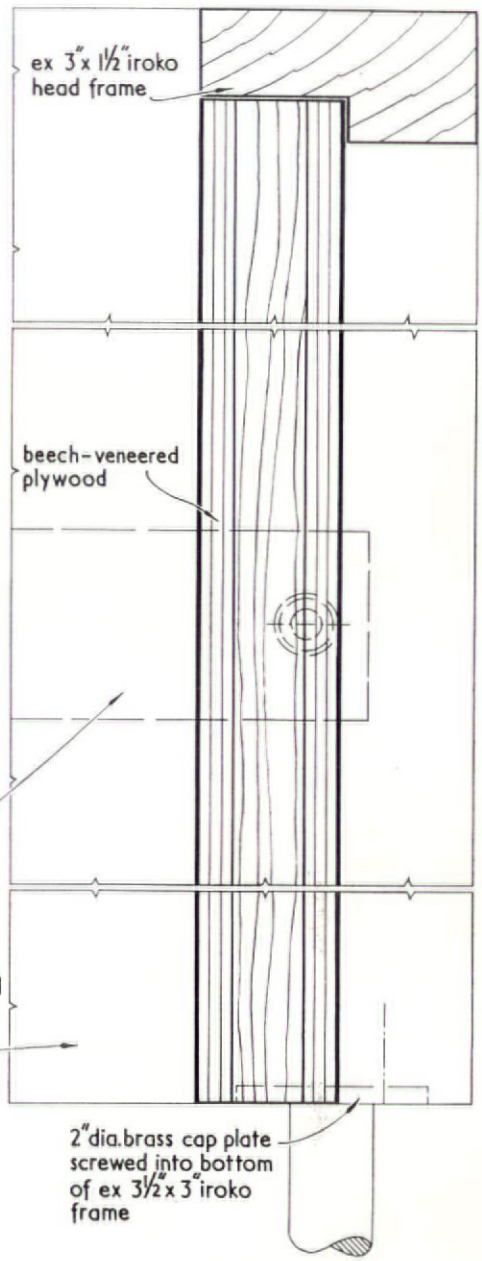


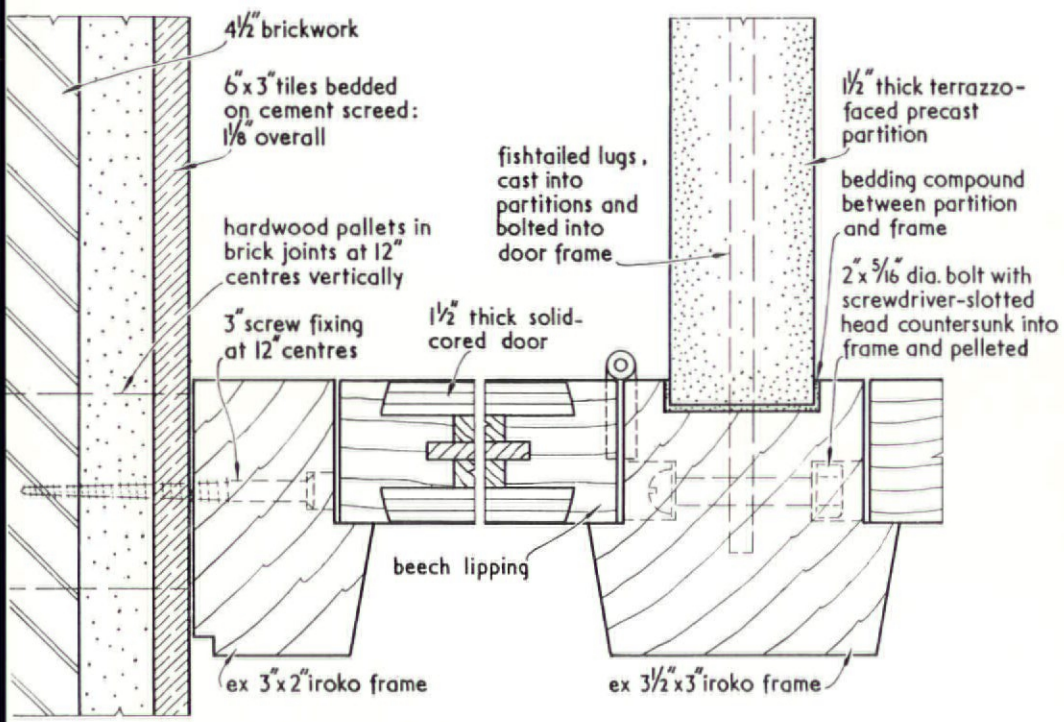
ELEVATION. scale ½" = 1'-0"

SECTION.

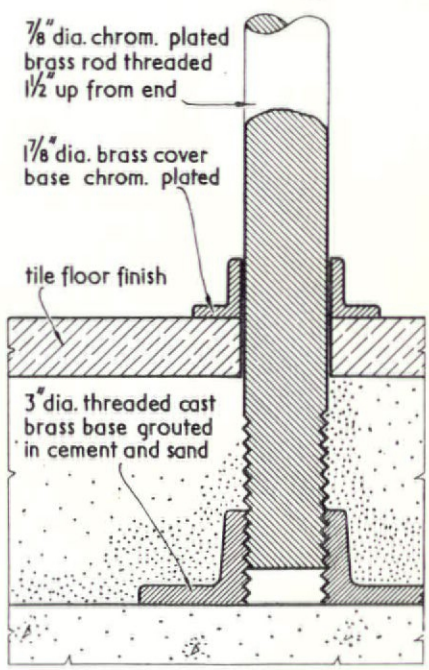


PLAN. scale ½" = 1'-0"





PLAN AT A–A. scale ½ full size

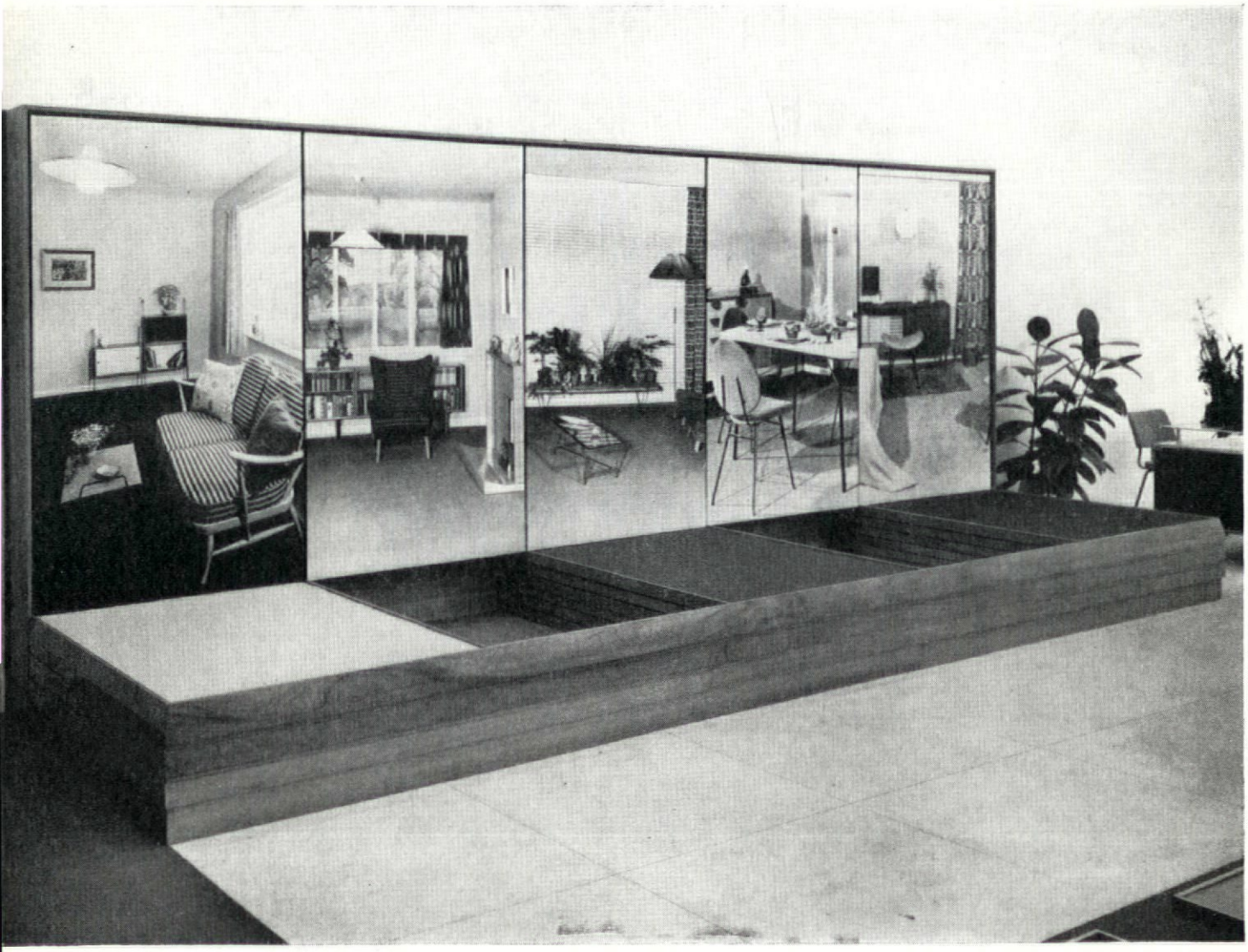


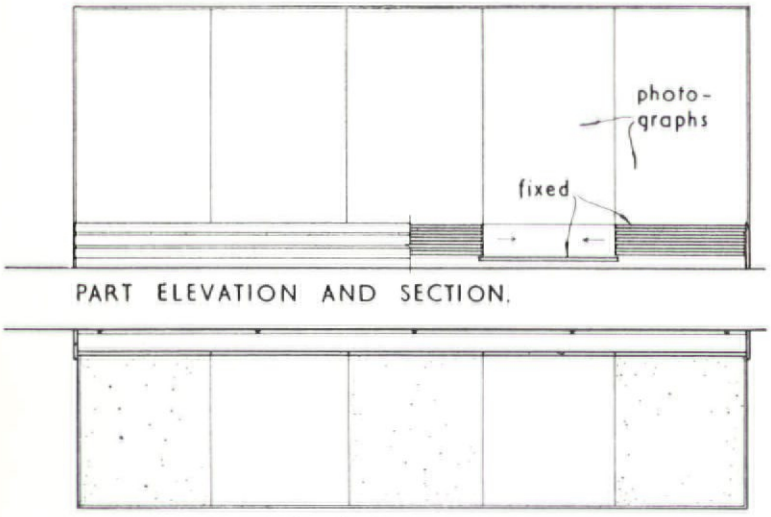
SECTION B–B. scale ½ full size

DISPLAY FITTING: SHOP IN LONDON, W.1

DESIGNED BY ROBERT A. SPITZ, in collaboration with NEVILLE CONDER (architect); MICHAEL H. HITCHMAN (executive architect)

The object of this case is to display carpets in approximately the same plane in which they will be seen in use while avoiding the exhausting practice of lifting up each piece and throwing it back over a roll. The three uppermost surfaces of the case are fixed: beneath each are five movable trays which are suspended on sliding door gear, and which can be slid into view in one or other of the two wells.





PART ELEVATION AND SECTION.

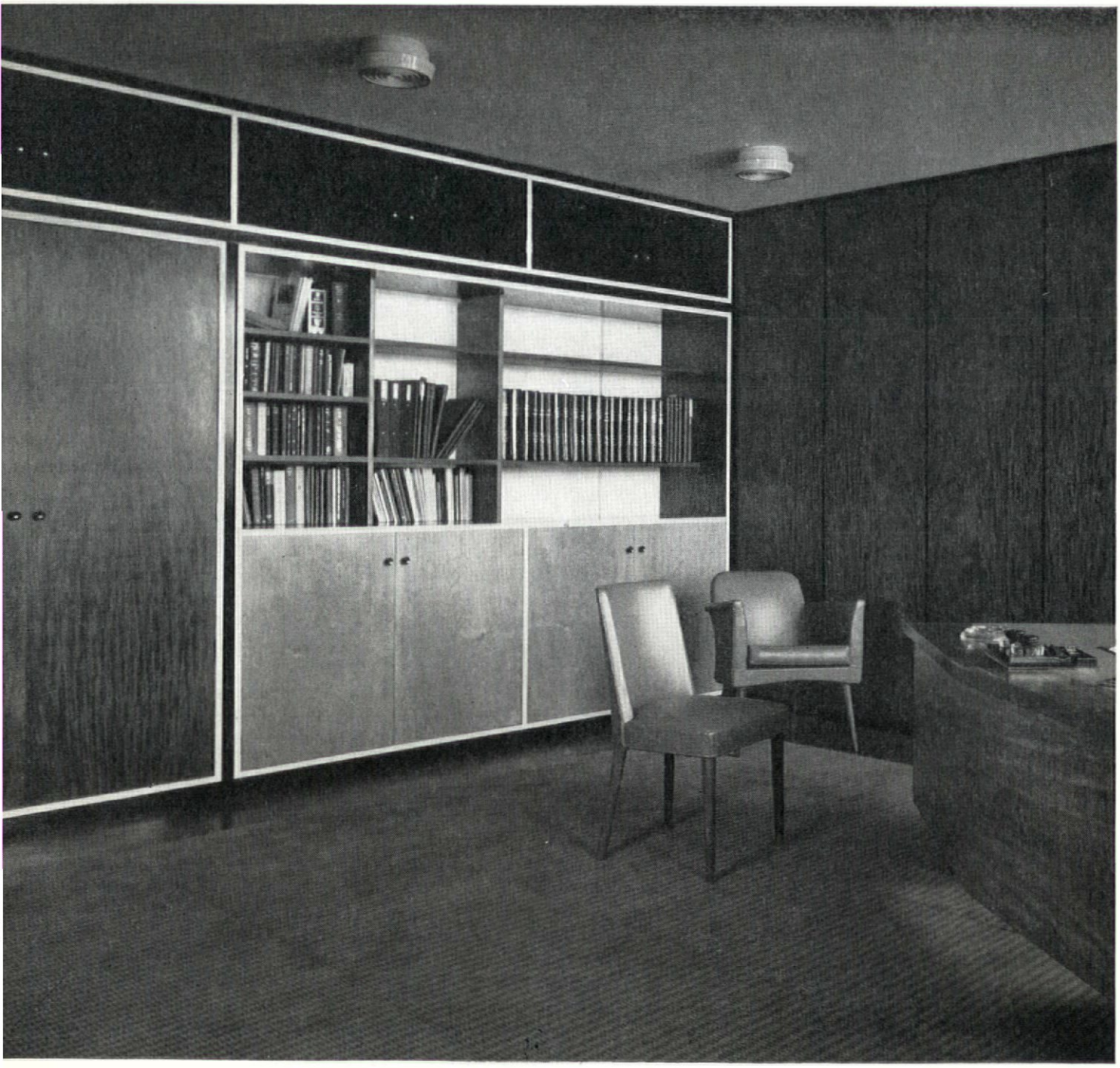
PLAN. scale 3/16" = 1'-0"

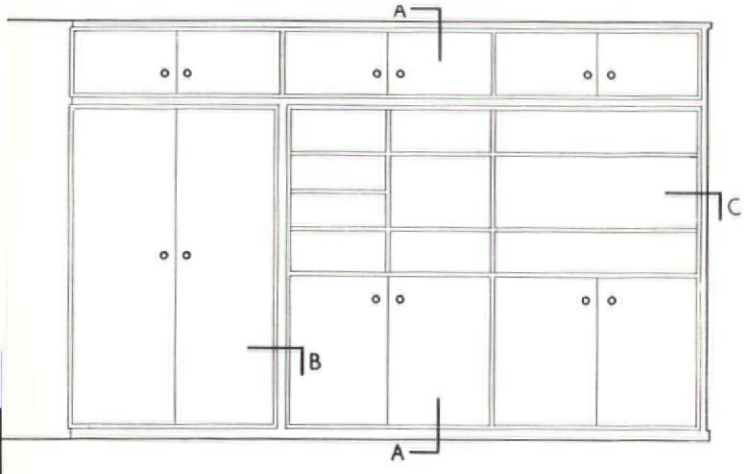
CROSS SECTION. scale 1/3 full size

WALL FITMENT: OFFICES IN LONDON, S.E.1

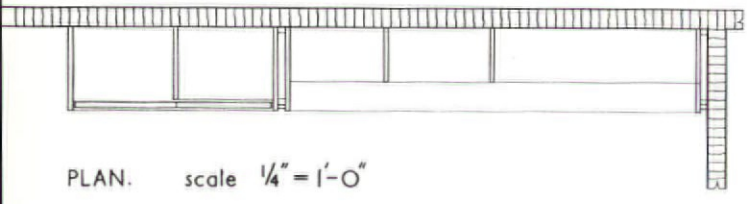
DESIGNED BY FREDERICK GIBBERD

The chief interest in this detail lies in the use (for aesthetic effect) of recessed black stained wood members to cover the junctions between the most significant elements of the design. The full-height doors on the left are faced with Honduras mahogany, the half-height doors on the right with grey sycamore and the doors at ceiling level are painted a charcoal black. The cupboards are of greater depth (1 ft. 7¾ in.) than is usual in offices owing to the fact that a safe is concealed behind one of them.

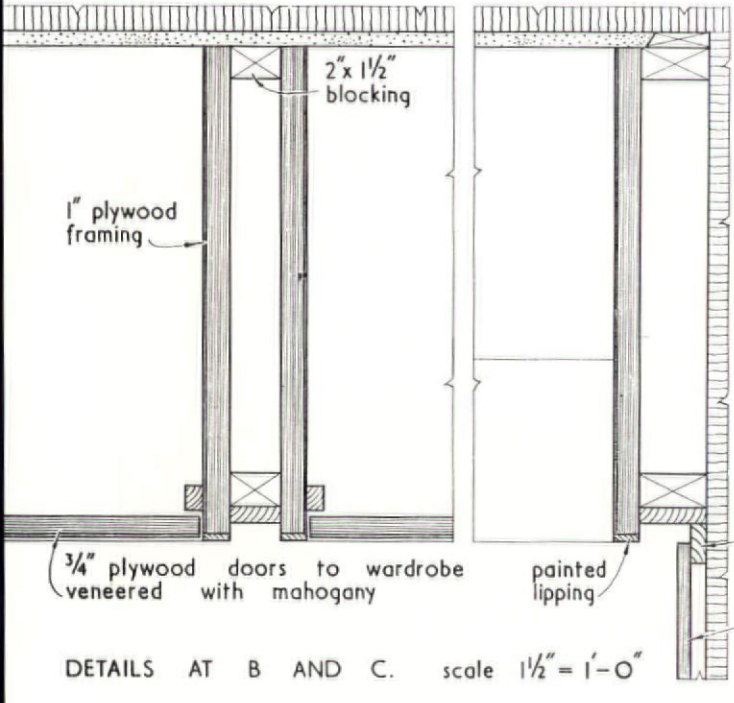




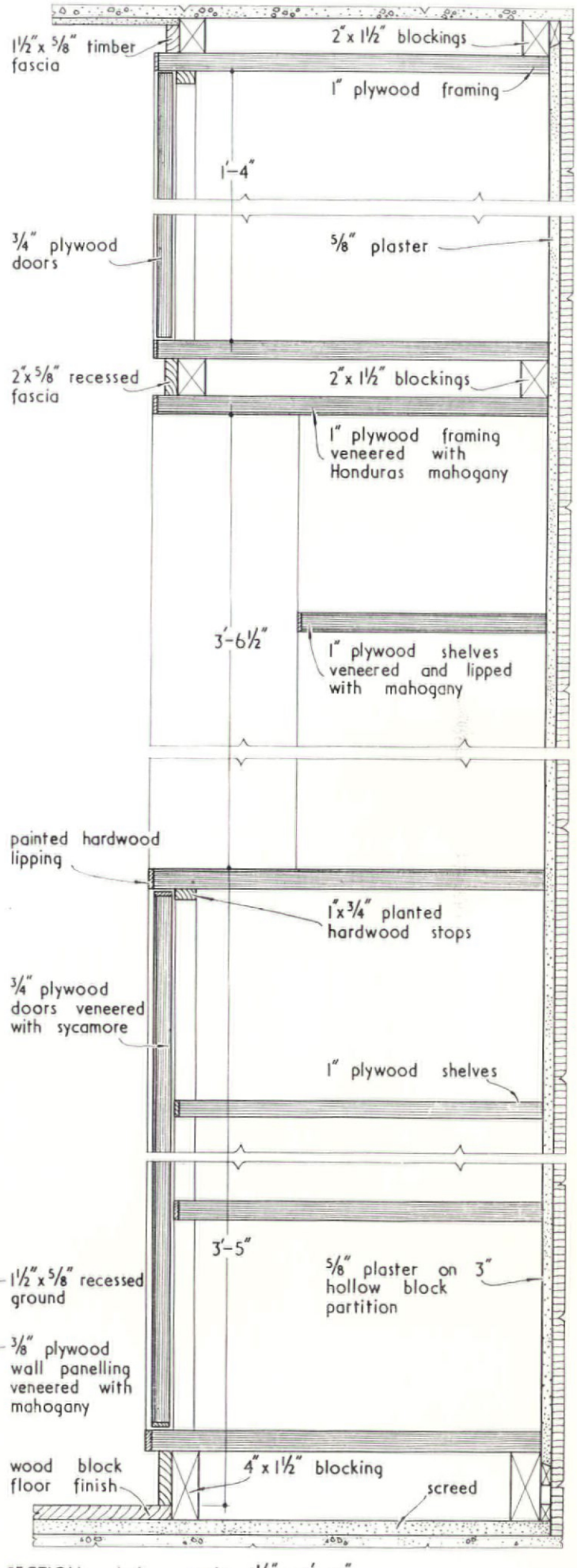
ELEVATION. scale 1/4" = 1'-0"



PLAN. scale 1/4" = 1'-0"



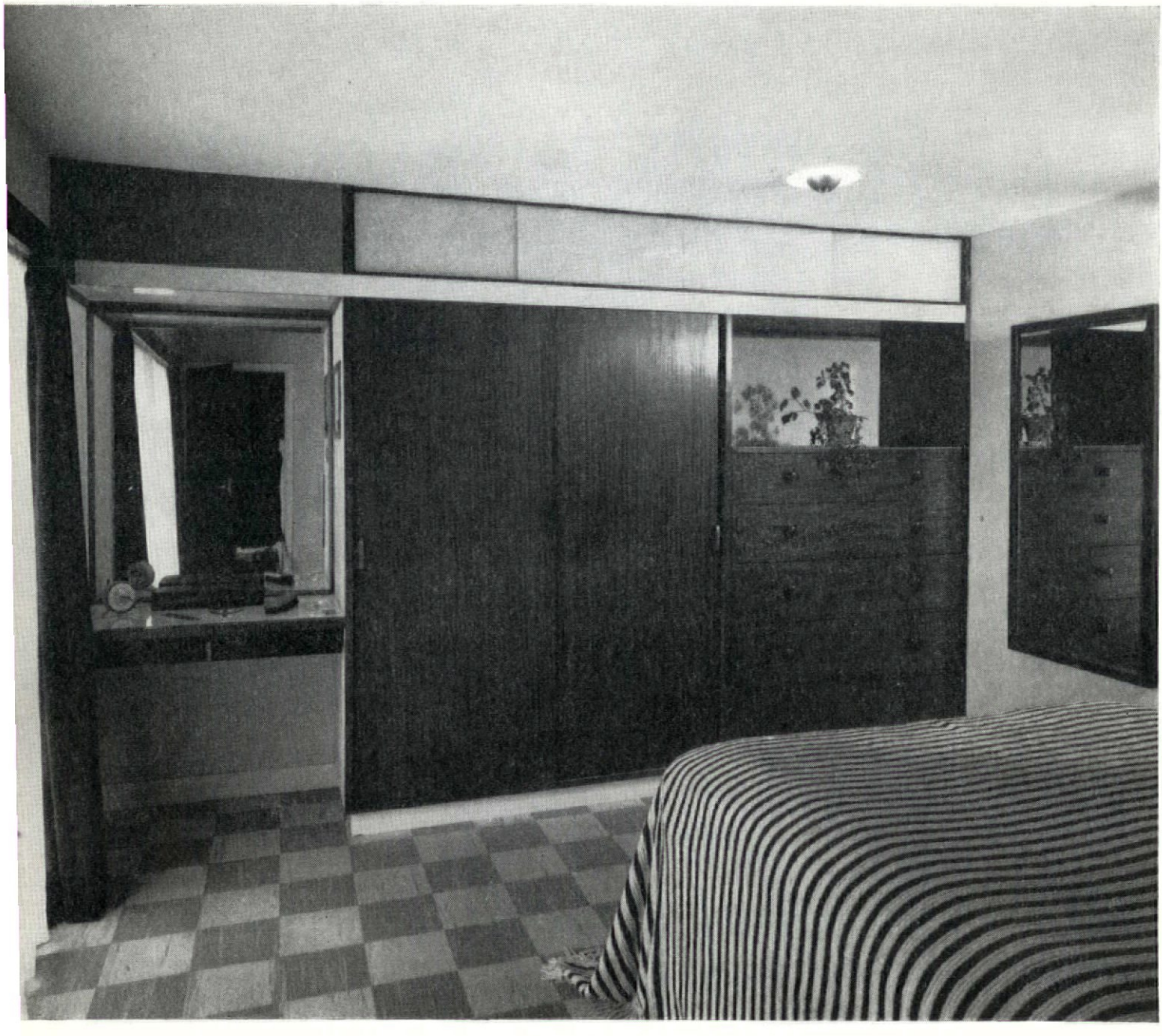
DETAILS AT B AND C. scale 1½" = 1'-0"

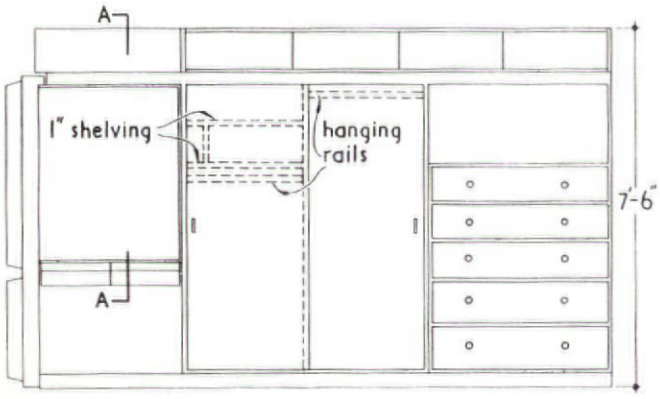


SECTION A-A. scale 1½" = 1'-0"

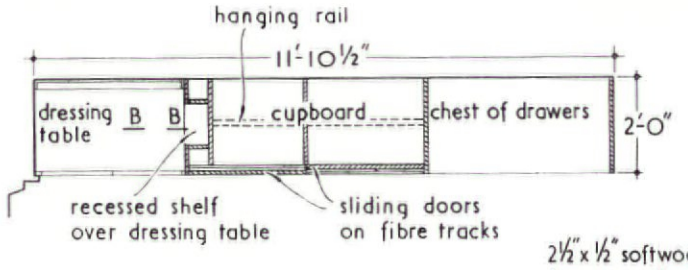
BEDROOM FITTING: HOUSE AT TOLLERTON, NOTTS
DESIGNED BY PETER BARTLETT AND JOHN GRAY

The left-hand space above the white trim contains concealed lighting, the right-hand space, cupboarding. The doors to this cupboarding are of glass painted white at the back and sliding in fibre tracks. The range of drawers is a second-hand chest of drawers provided by the client. The horizontal member which appears to be the fore-edge of the dressing table top is in fact the drawer pull of the two drawers beneath.

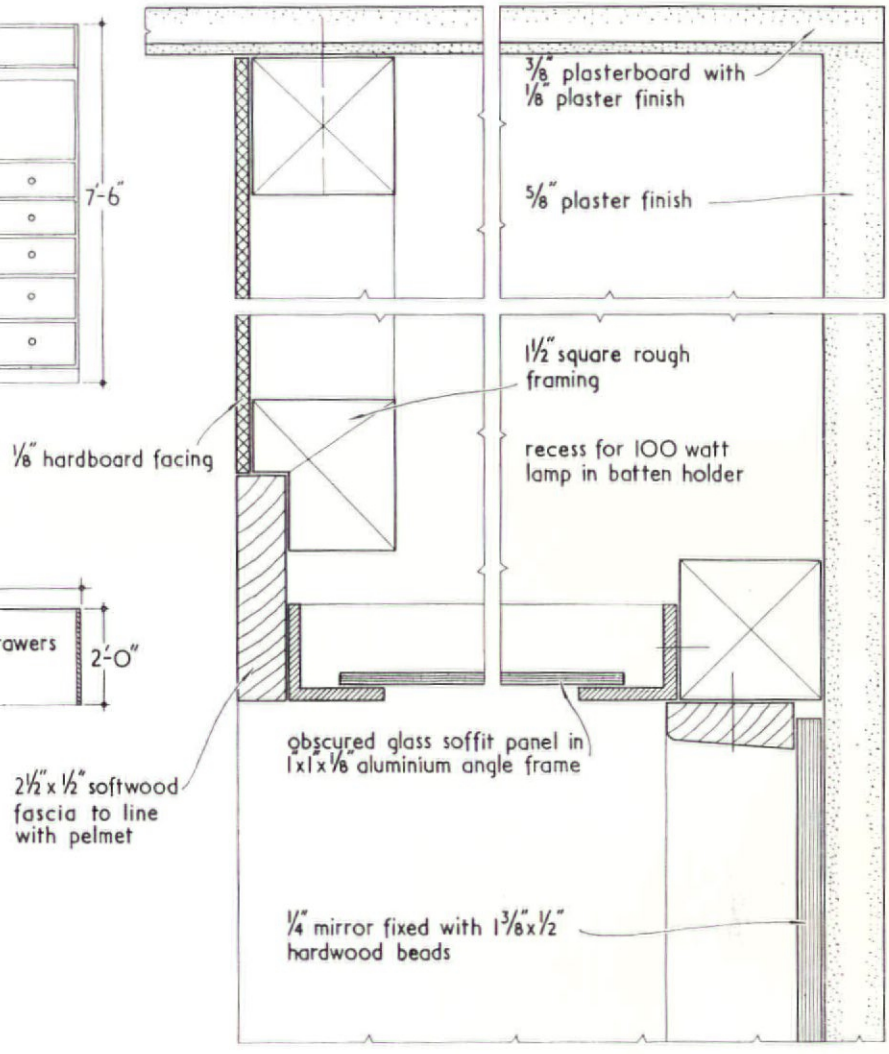


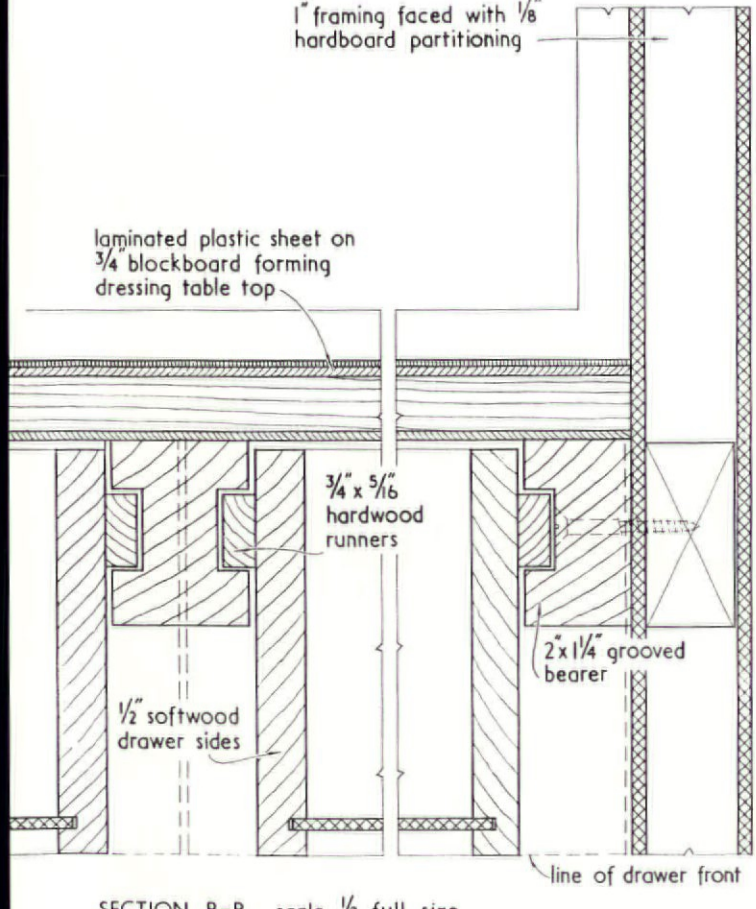


ELEVATION. scale ¼" = 1'-0"

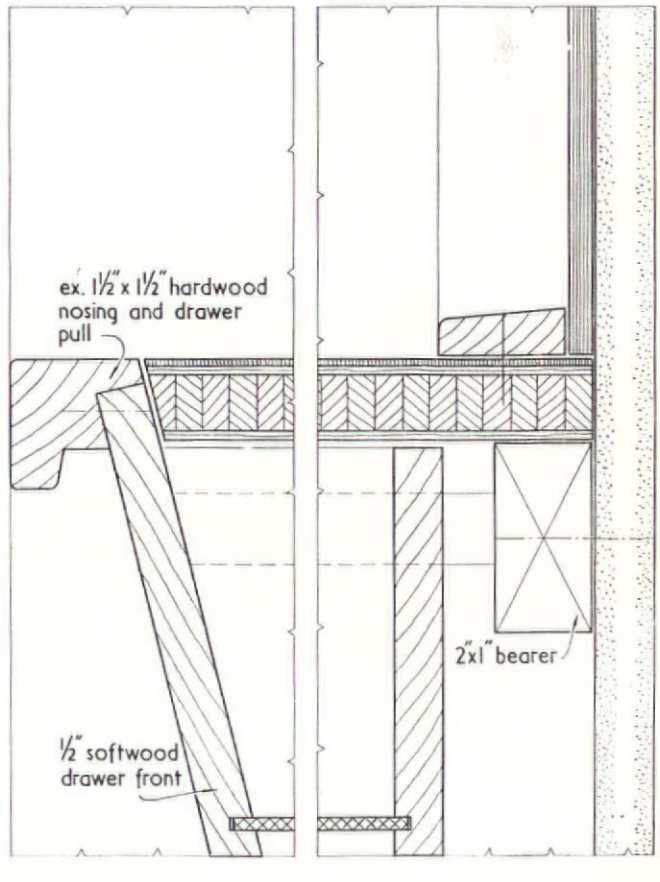


PLAN. scale ¼" = 1'-0"





SECTION B-B. scale ½ full size

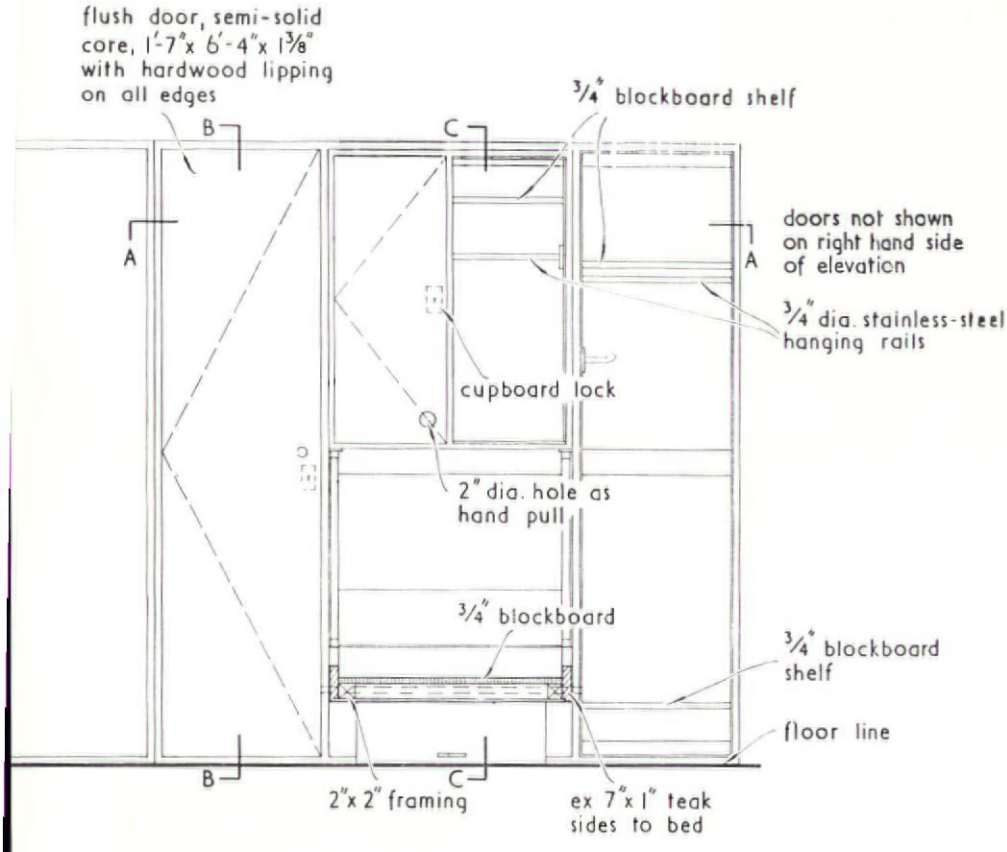


SECTION A-A. scale ½ full size

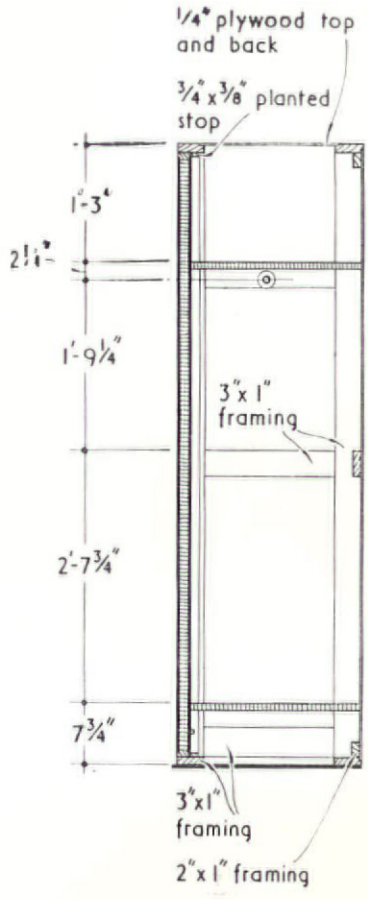
BED UNIT: FIRE STATION AT SLOUGH, BUCKS

DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

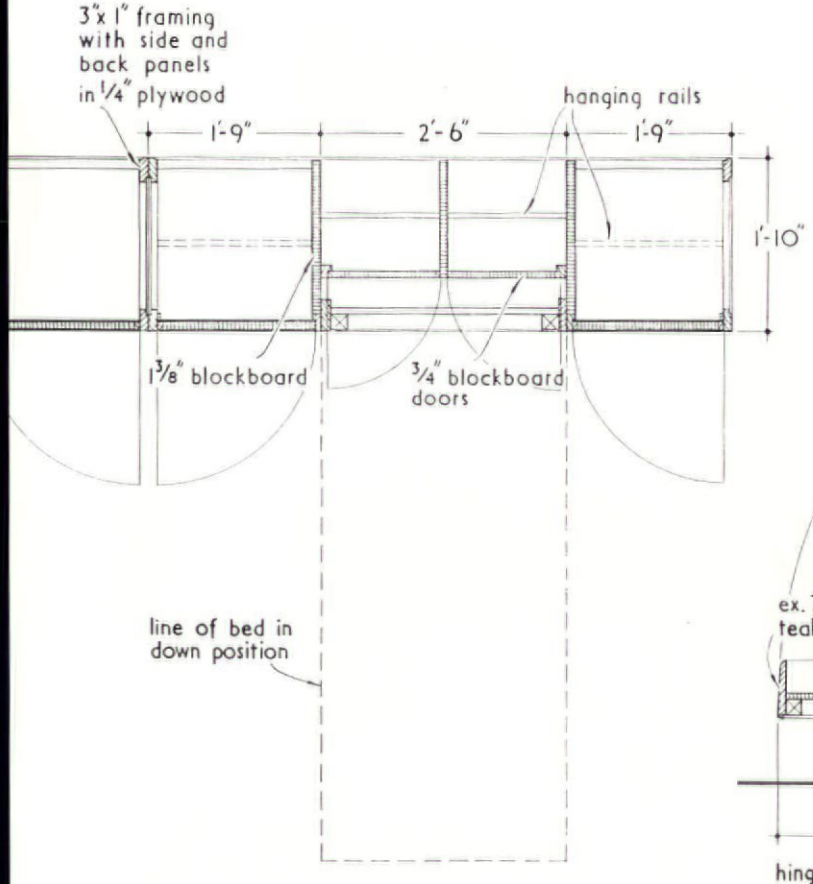
The unit is constructed of blockboard and plywood on a softwood framing. Each bed has two identical sets of cupboard units in order that it can be used by two firemen alternately.



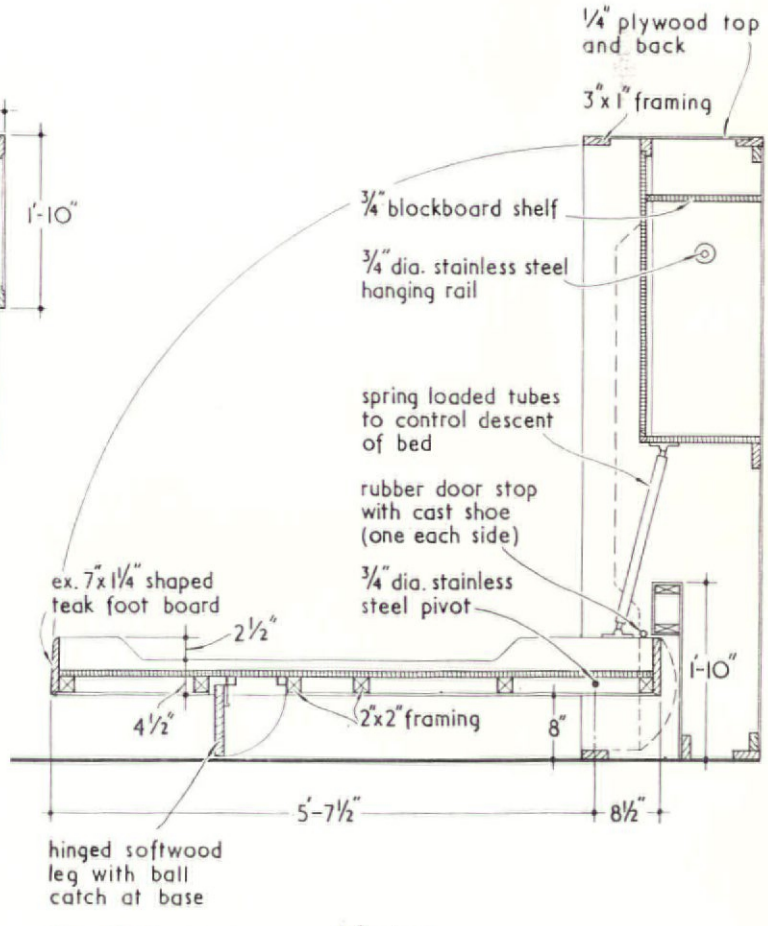
ELEVATION. scale 1/2" = 1'-0"



SECTION B-B. scale 1/2" = 1'-0"



PLAN AT A-A. scale 1/2" = 1'-0"

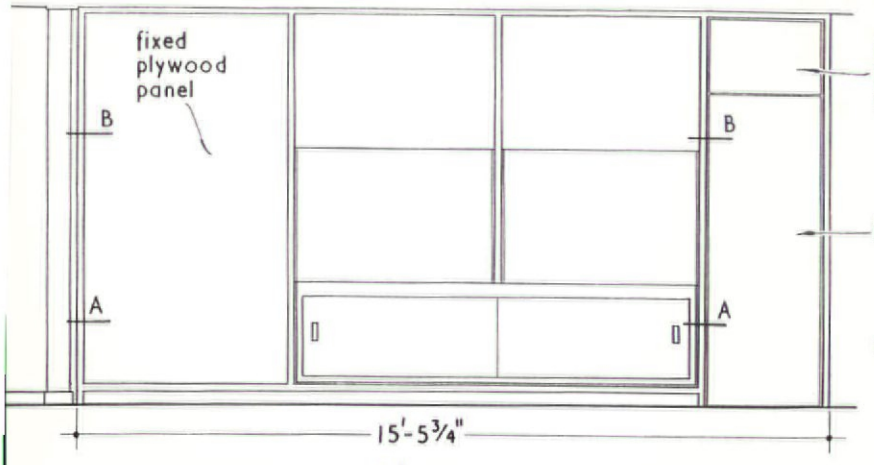


SECTION C-C. scale 1/2" = 1'-0"

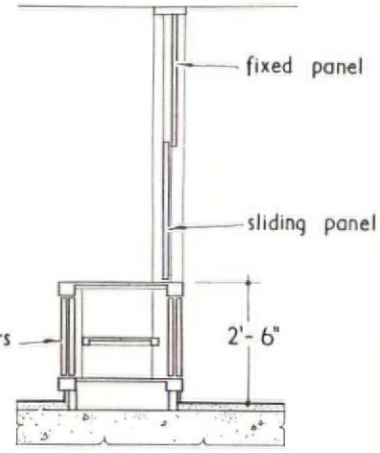
SERVERY HATCH: SCHOOL IN COVENTRY

DESIGNED BY ARCHITECTS' CO-PARTNERSHIP

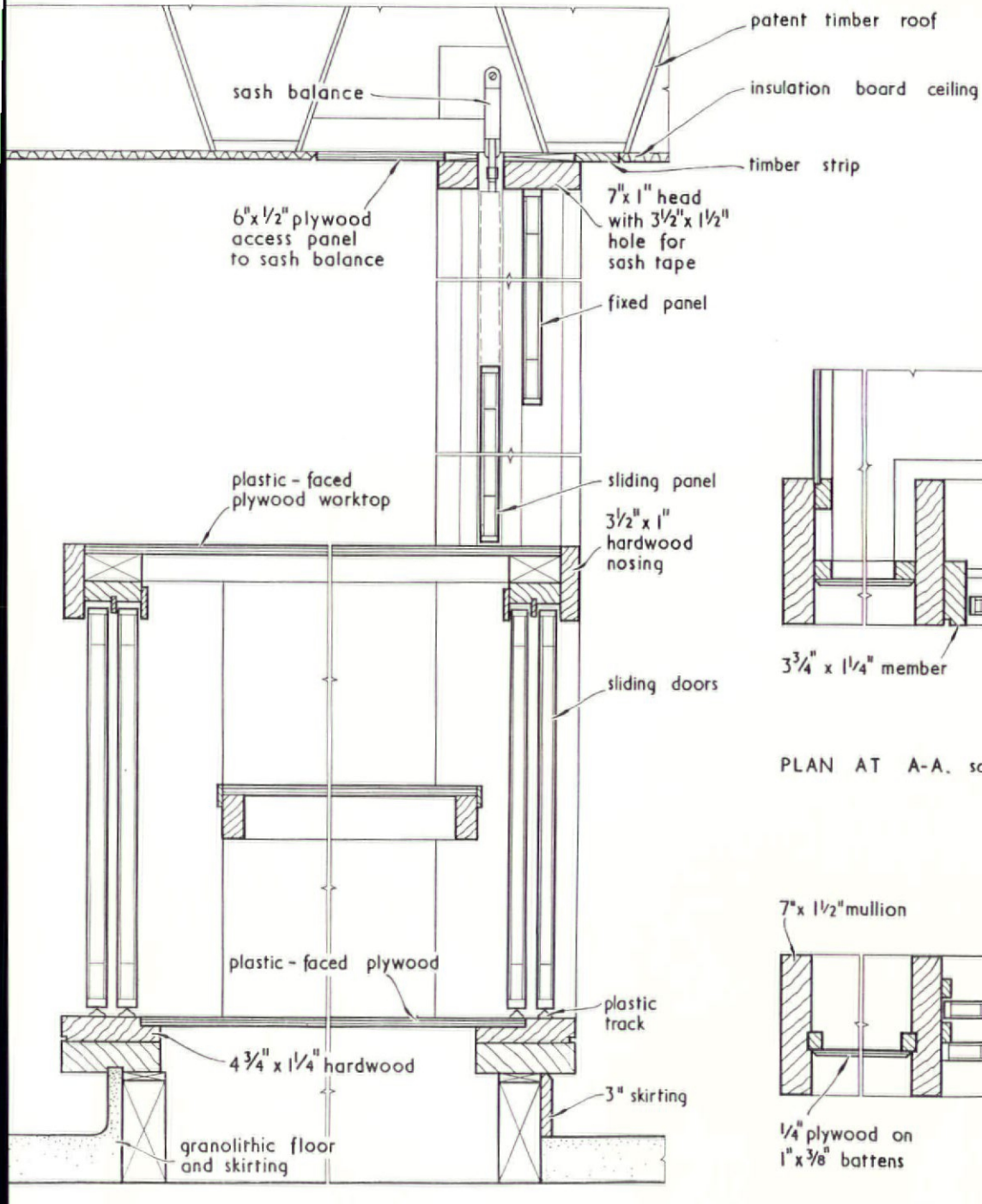
Being in an infants' school, the counter height is only 2 ft. 6 in. above the floor, and the top of the servery opening is only 5 ft. 3 in. above the level of the floor. This scaling down of dimensions is undoubtedly correct. At the same time it is important to ensure that, when this is done on a hatch of this type, the sashed opening is on the dining room (i.e., the children's side) as it is here, and not on the servery side; otherwise the servery staff will bump their heads against the top of the opening. The hardwood frame is West African mahogany, the panels gaboon-faced plywood: both are wax-polished.



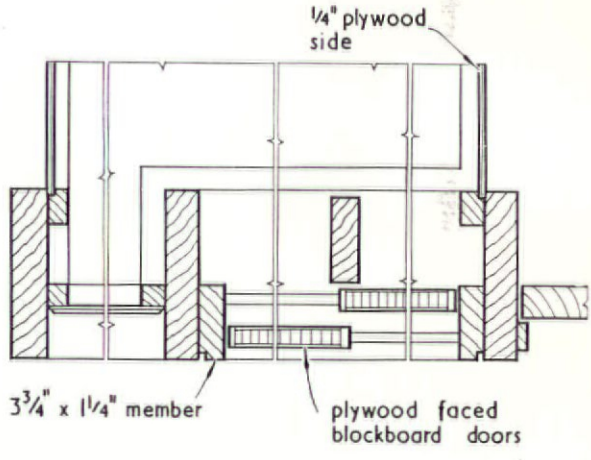
KEY ELEVATION. scale ¼" = 1'-0"



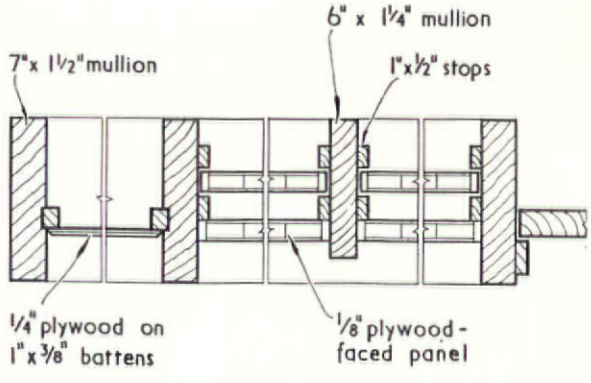
KEY SECTION.



SECTION OF SERVERY. scale 1½" = 1'-0"



PLAN AT A-A. scale 1½" = 1'-0"

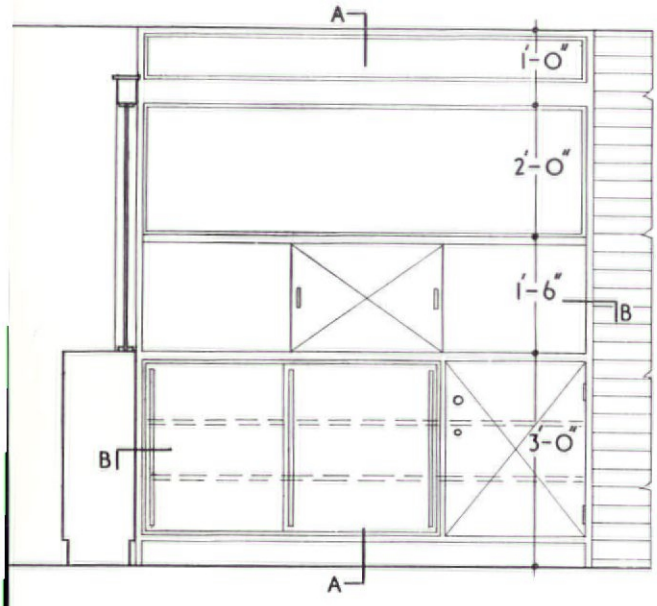


PLAN AT B-B. scale 1½" = 1'-0"

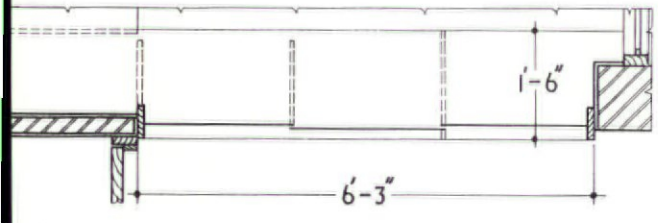
SERVERY HATCH: HOUSE AT THAMES DITTON, SURREY

DESIGNED BY WELLS COATES AND MICHAEL LYELL

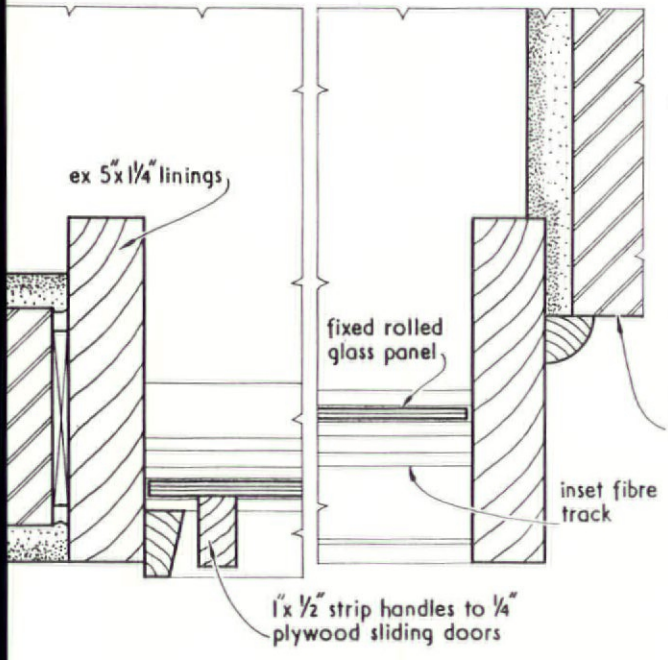
The hatch-cum-storage wall between dining room and kitchen has become almost a standard piece of built-in furniture. Here, sheets of rolled glass are used for the hatch proper, the two outer sheets being fixed and the centre sheet sliding to right or left. The cupboarding below is of ¼-in. ply painted with black gloss paint: the two left-hand leaves are sliding and are backed by two corresponding doors on the kitchen side of the cupboard. The right-hand leaf is side-hung, as access to this section of the cupboard is from the dining room only.



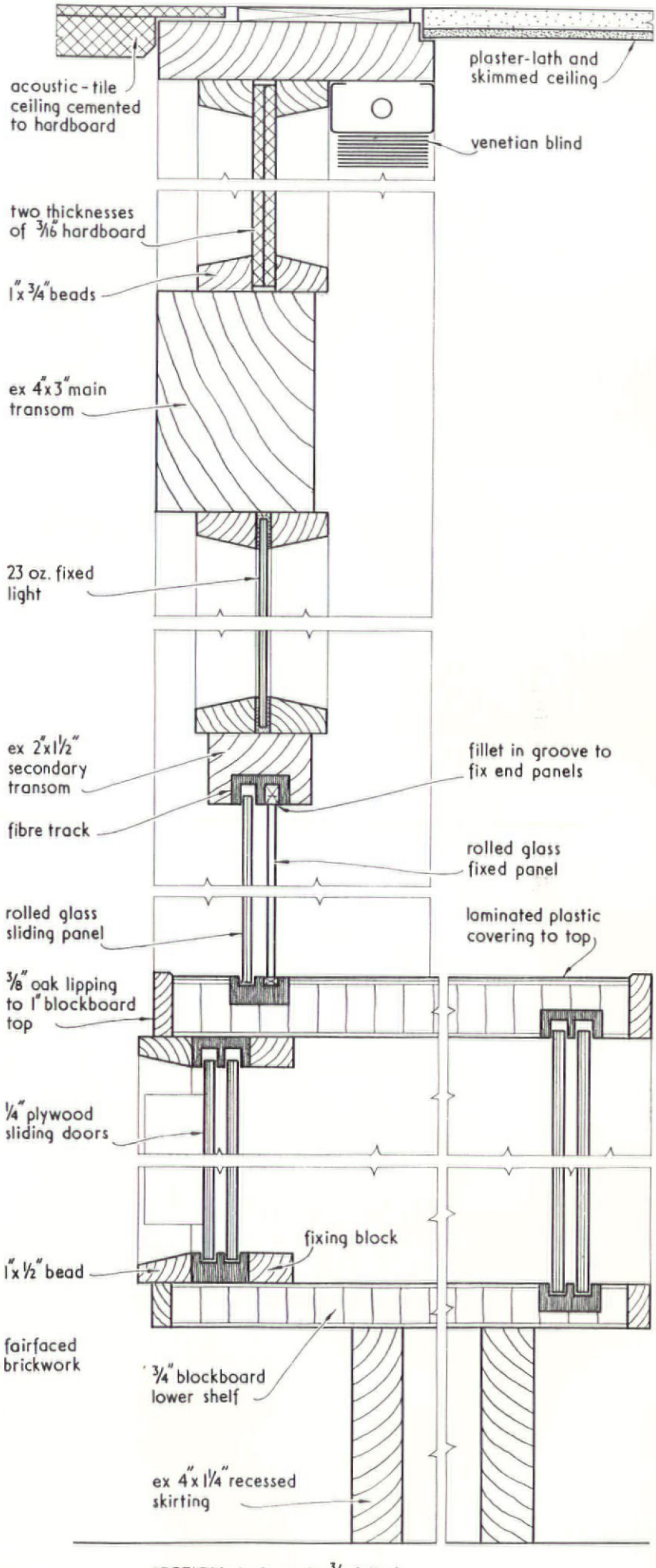
ELEVATION. scale 3/8" = 1'-0"



PLAN. scale 3/8" = 1'-0"



PLAN AT B–B. scale 3/8 full size

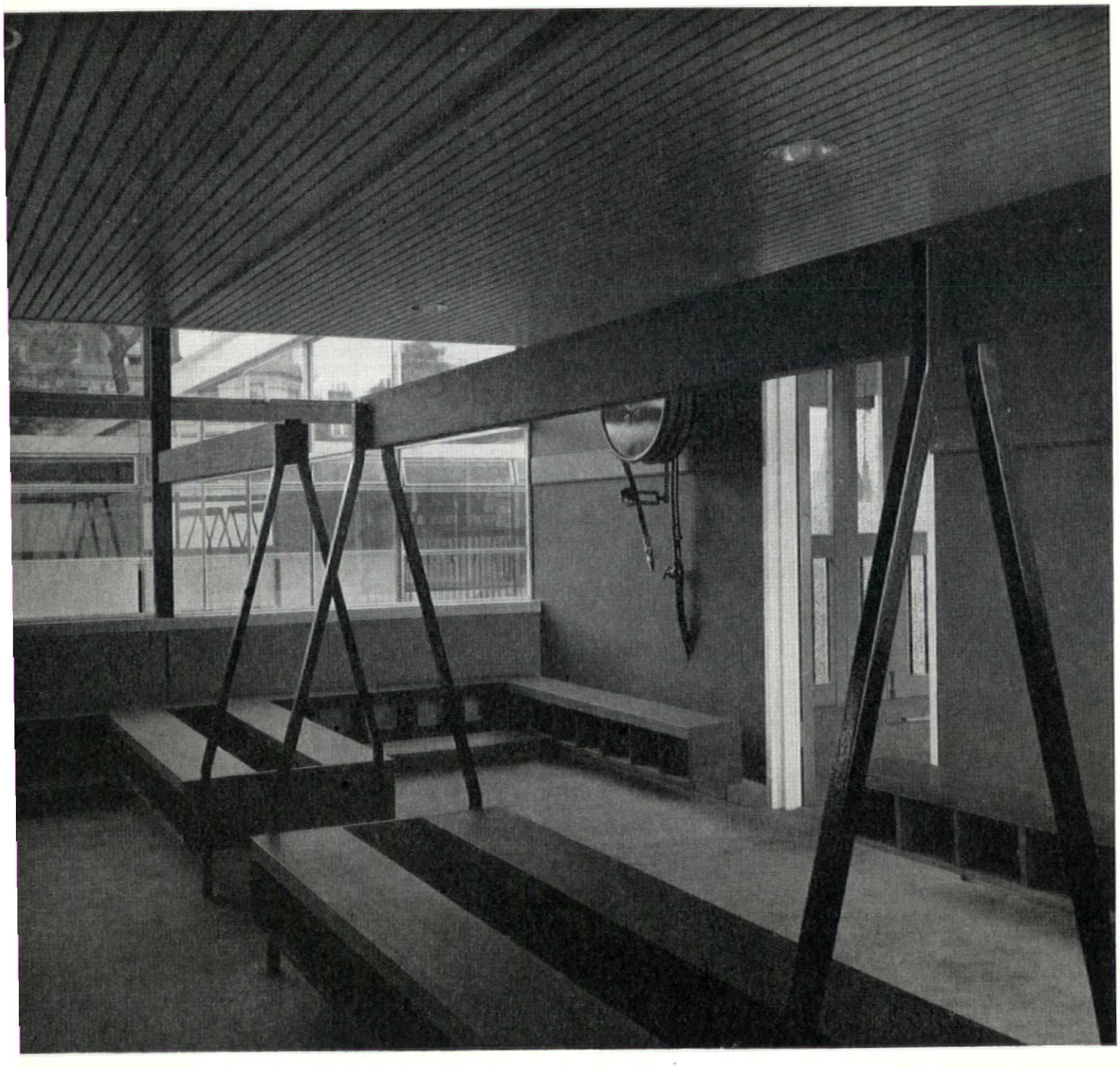


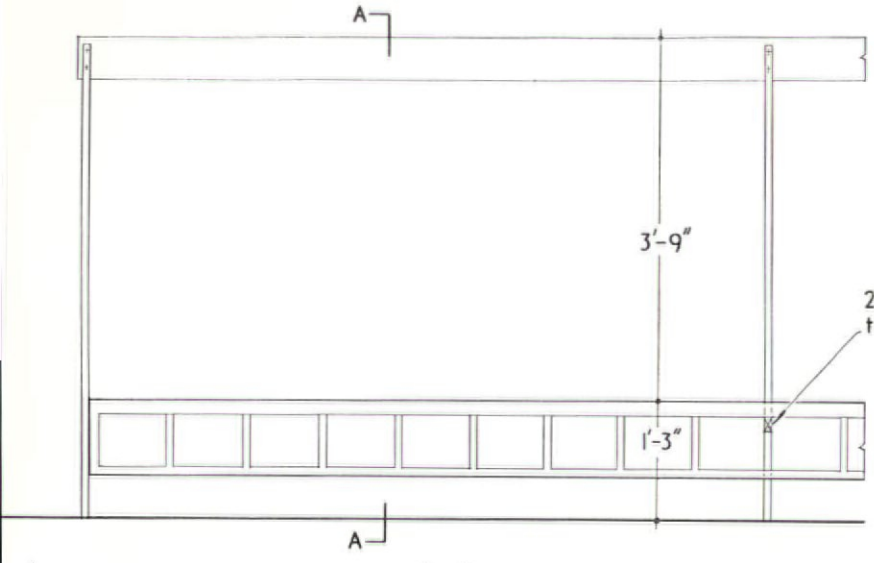
SECTION A–A. scale 3/8 full size

CLOAKROOM FITTINGS: SCHOOL IN LONDON, S.W.5

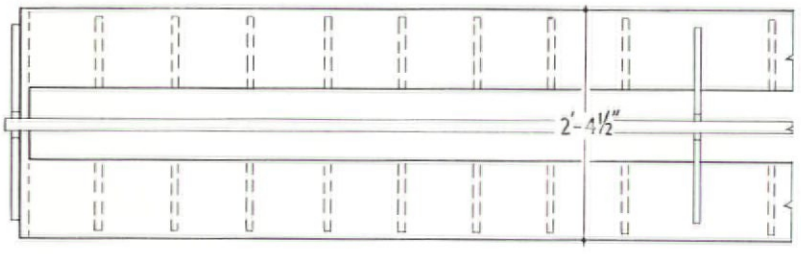
DESIGNED BY CHAMBERLIN, POWELL AND BON

The mild steel bars (which, surprisingly enough, are only 1 sq. in. cross section) stand on base plates which are sunk into the t. and g. boarding beneath the linoleum floor finish. The hardwood used is sapele mahogany. Coat rails and locker seats are waxed polished and locker divisions are oiled. To prevent damage at the seat ends by children climbing up, putting their feet in the lockers and then jumping off, a length of m.s. angle has been screwed to the locker bottom and end in these positions.

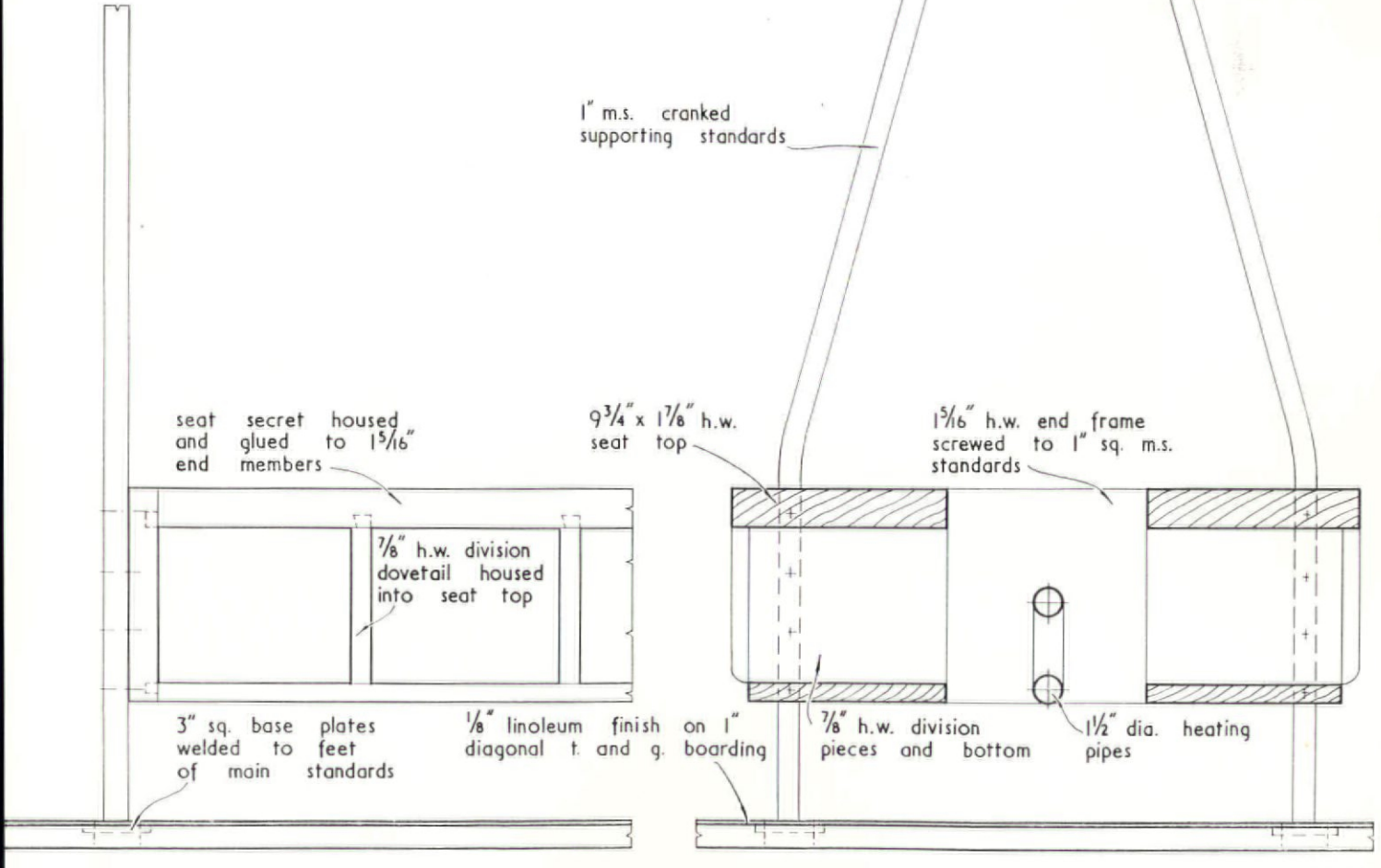




ELEVATION. scale ½" = 1'-0"



PLAN. scale ½" = 1'-0"



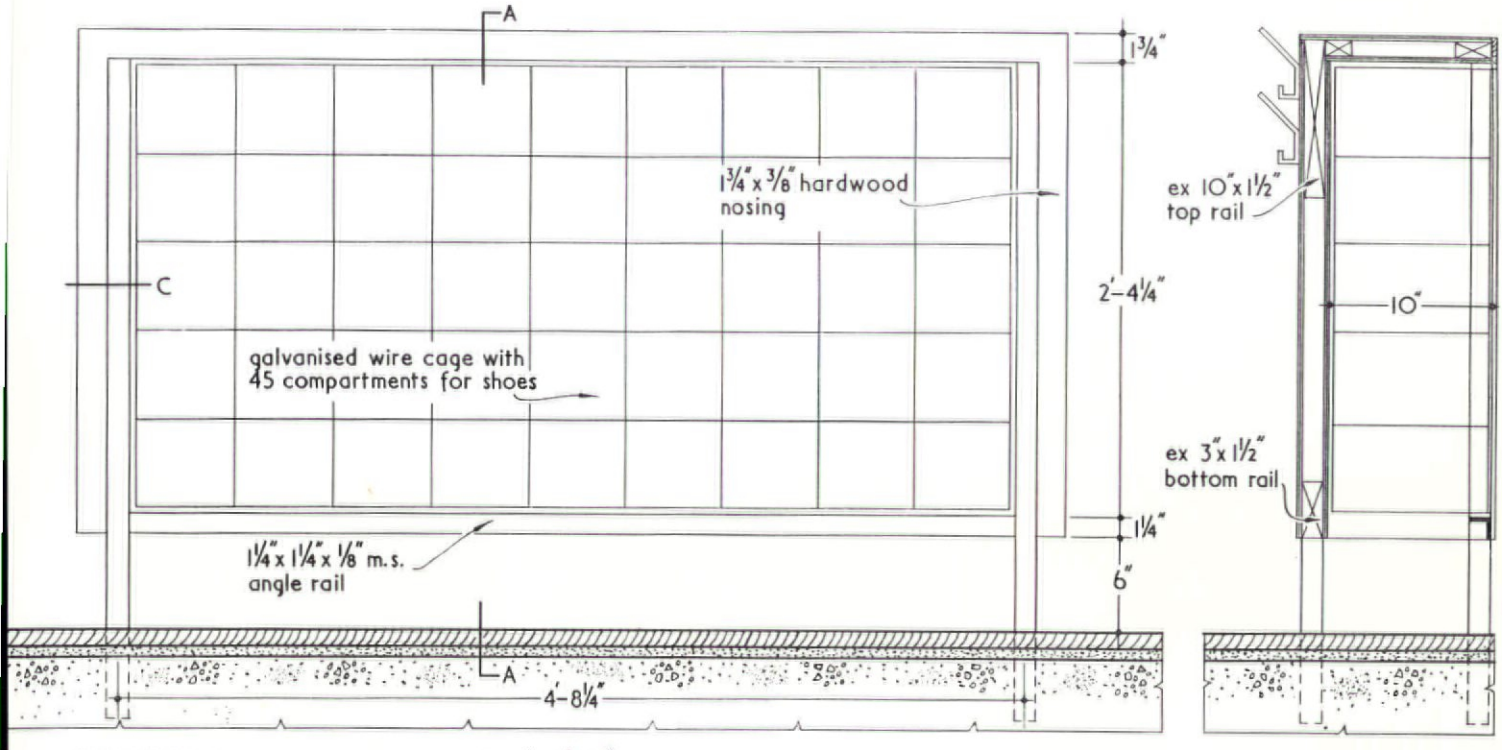
PART ELEVATION. scale ½" = 1'-0"

SECTION A-A. scale ½" = 1'-0"

CLOAKROOM FITTINGS: SCHOOL IN COVENTRY

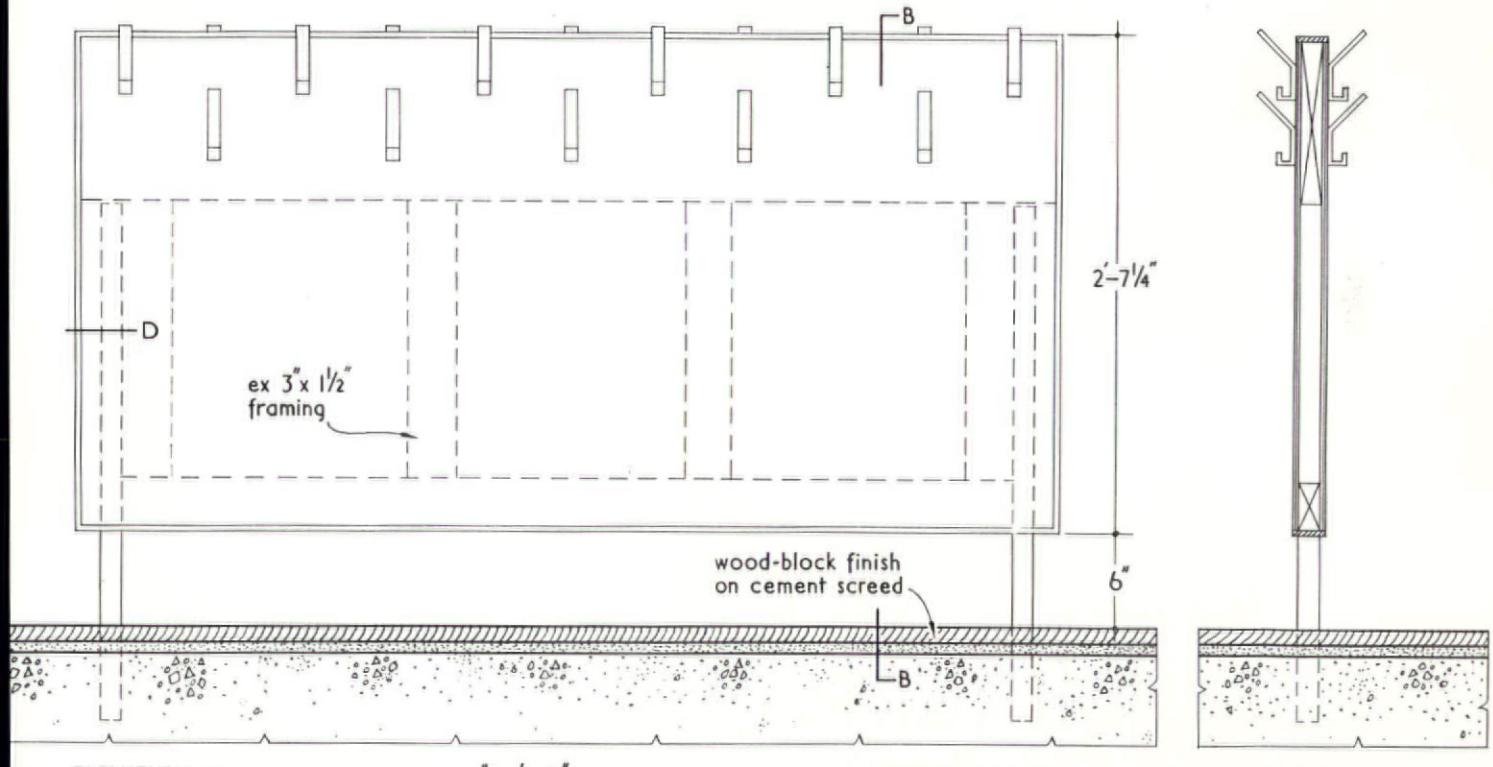
DESIGNED BY ARCHITECTS' CO-PARTNERSHIP

The fittings are of mahogany-veneered plywood with mild steel angle supports grouted into the site concrete. The wire compartments of the shoe locker are deep enough to take gumboots and there is nowhere for dirt to collect. The hooks on each side of the coat rack are staggered with those on the opposite side.



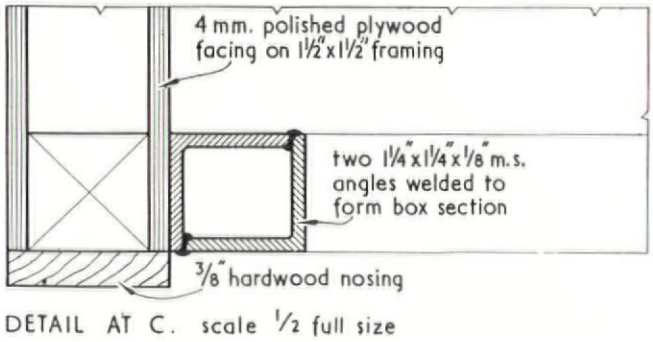
ELEVATION OF SHOE LOCKER. scale 1" = 1'-0"

SECTION A-A

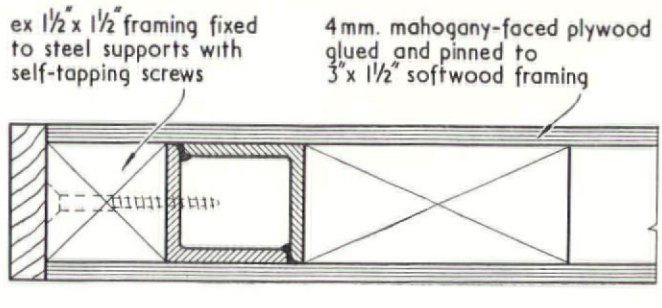


ELEVATION OF COAT RACK. scale 1" = 1'-0"

SECTION B-B



DETAIL AT C. scale ½ full size

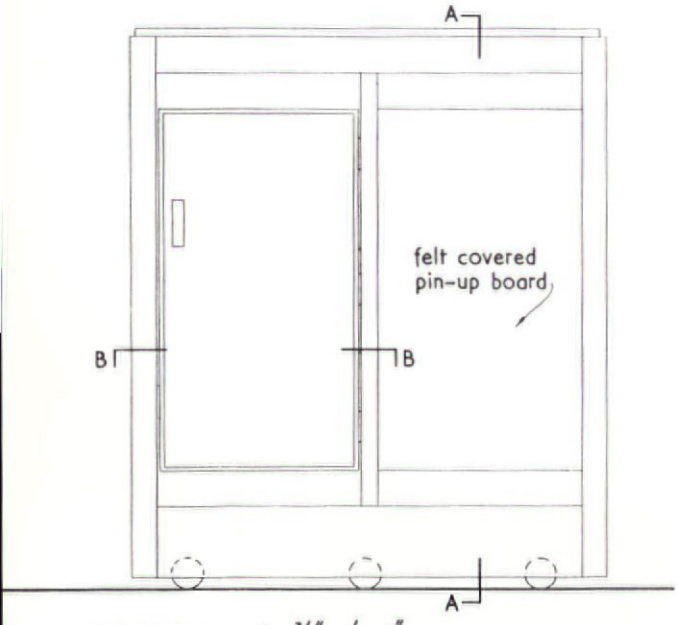


DETAIL AT D.

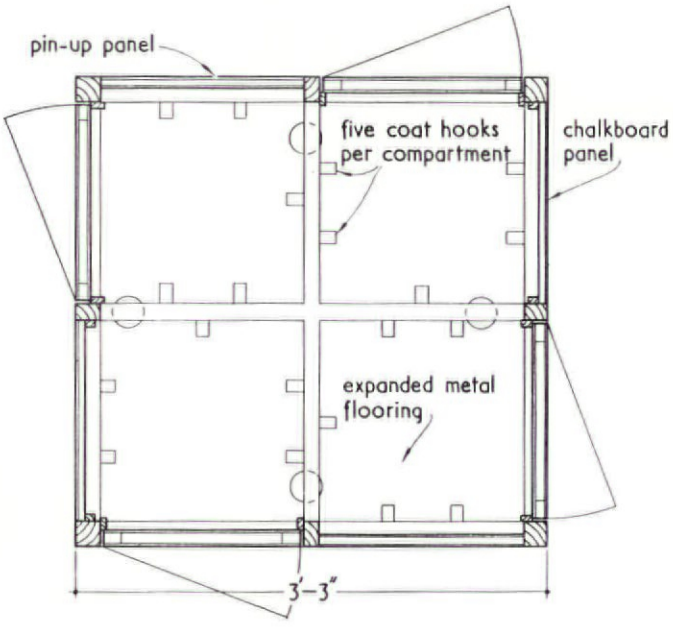
MOVABLE CLOAKROOM CABINET: SCHOOL AT SCUNTHORPE, LINCOLNSHIRE

DESIGNED BY DENIS CLARKE HALL AND H. S. SCORER

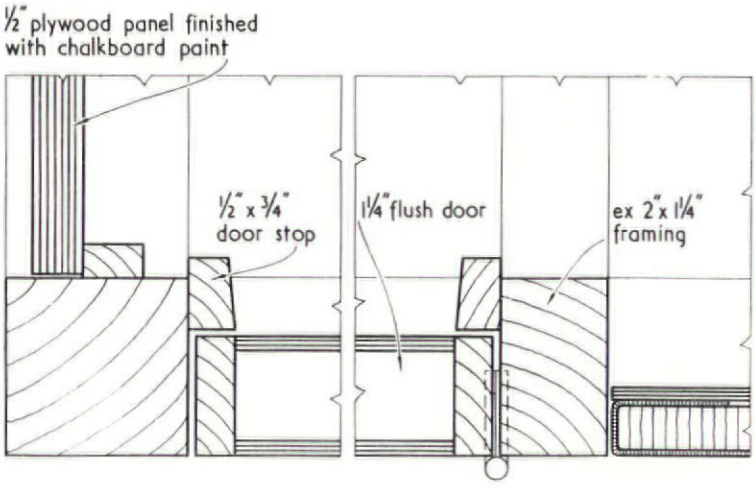
This has been designed to enable the teacher to keep an eye on children who are putting on their coats while the remainder are still 'in class.' The enclosing panels provide additional chalkboard and pin-up space, of which there is seldom enough in schools. The cabinet is smaller than it appears, the height being only 3 ft. 9 in. Thus children can hang up their coats without stepping inside. The plywood doors are mahogany-veneered, polished natural colour. The hardwood is beech, finished natural colour and wax-polished.



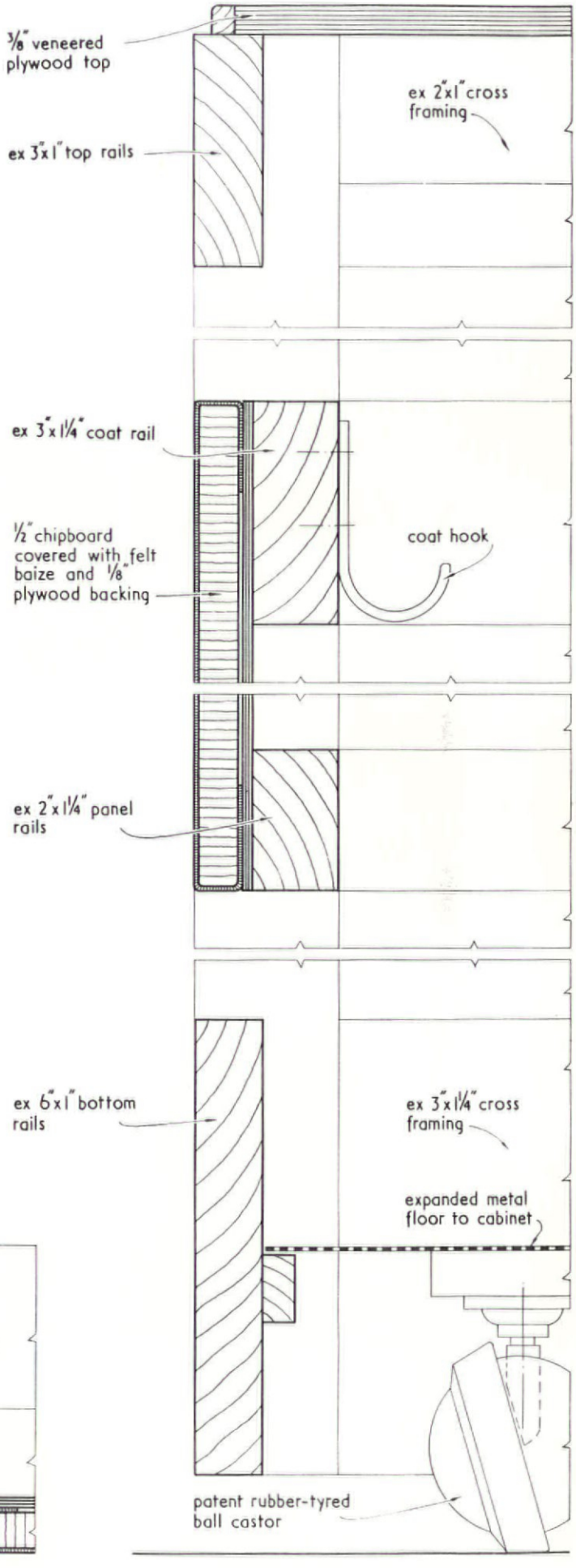
ELEVATION. scale ¾" = 1'-0"



PLAN. scale ¾" = 1'-0"



PLAN AT B-B. scale ½ full size

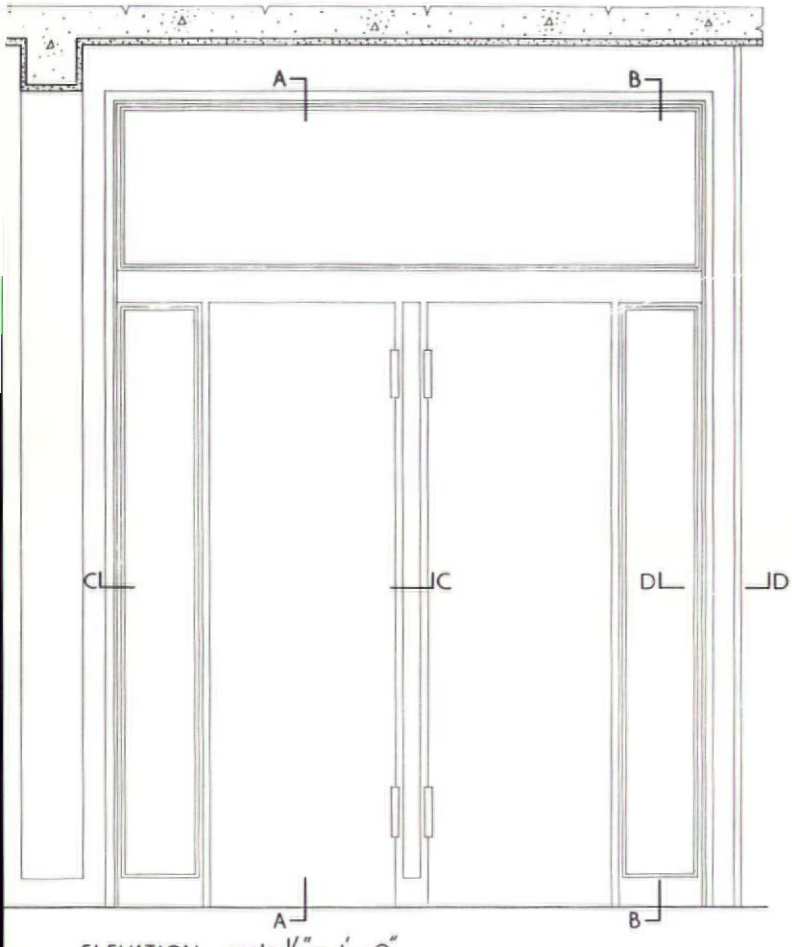


SECTION A-A. scale ½ full size

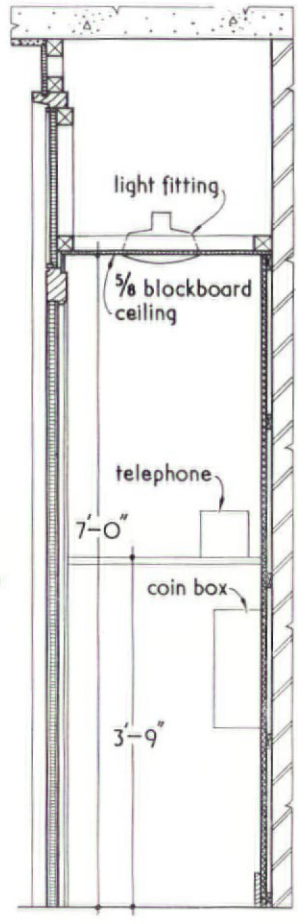
TELEPHONE BOXES: MAGISTRATES COURT AT SLOUGH, BUCKS

DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

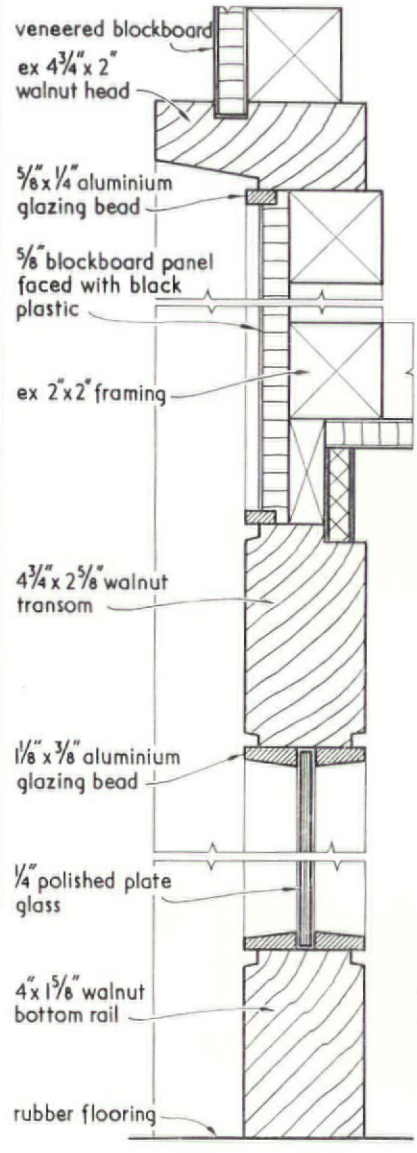
A good example of detailing with a definite 'public' character and an almost Victorian regard for quality, but which still avoids 'stuffiness.' Note the handsome aluminium beads which express the full thickness of the joinery, also the use of self-closing hinges in preference to unsightly door closers (the right-hand door has been wedged open for photographing). The limitation of the glazing to the side panels gives a privacy which callers in a police court will appreciate.



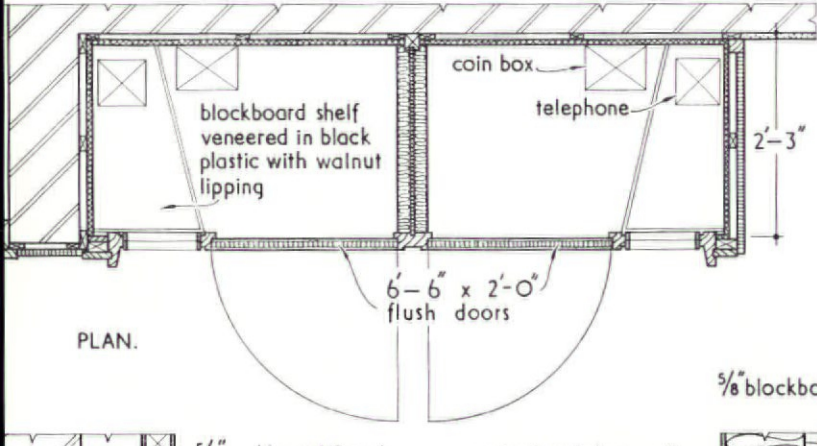
ELEVATION. scale ½" = 1'–0"



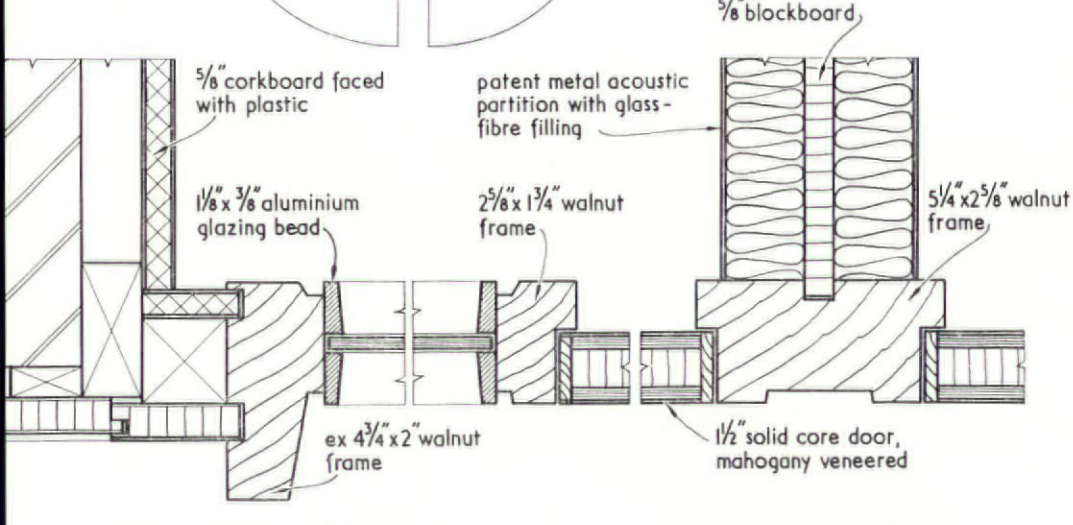
SECTION A–A.



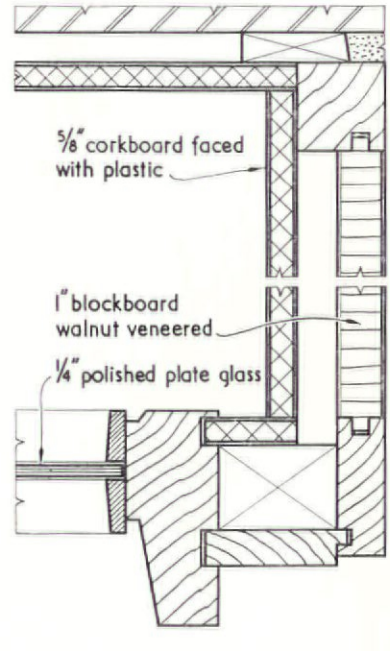
SECTION B–B.



PLAN.



SECTION C–C. scale ¼ full size

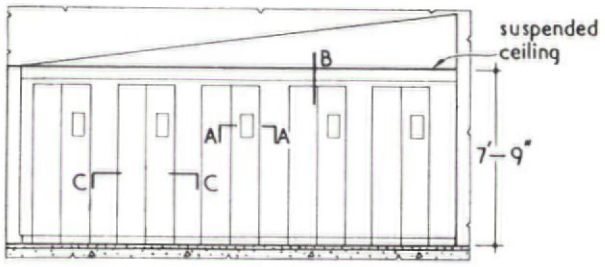


SECTION D–D.

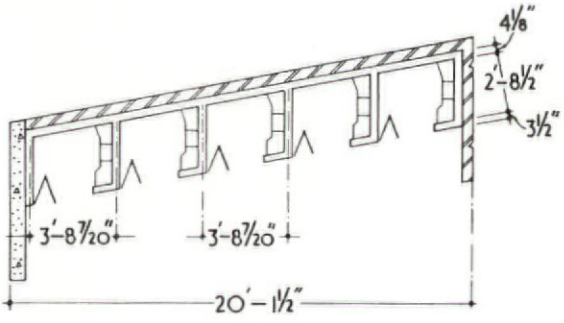
TELEPHONE BOXES: OFFICES IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

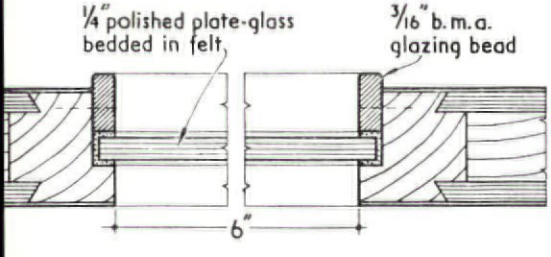
When all the doors are closed this range of phone boxes presents as uninterrupted a wall plane as its function will admit. The principal surface is Yugoslav beech veneer, the kicking plate-cum-skirting being iroko. The continuous slatting above the doors conceals the fresh air trunking and ventilates the cavity between the framing of the boxes and the main structure. Above each door head is a hinged, top-hung panel which, on being opened, releases the top guide of the sliding door for emergency access to box. Note the 'non-pinch' detail at the hinge between the folding panels (i.e., on the inside *of the door) and also the detail at the forward edge of the door to ensure a tight closure.*



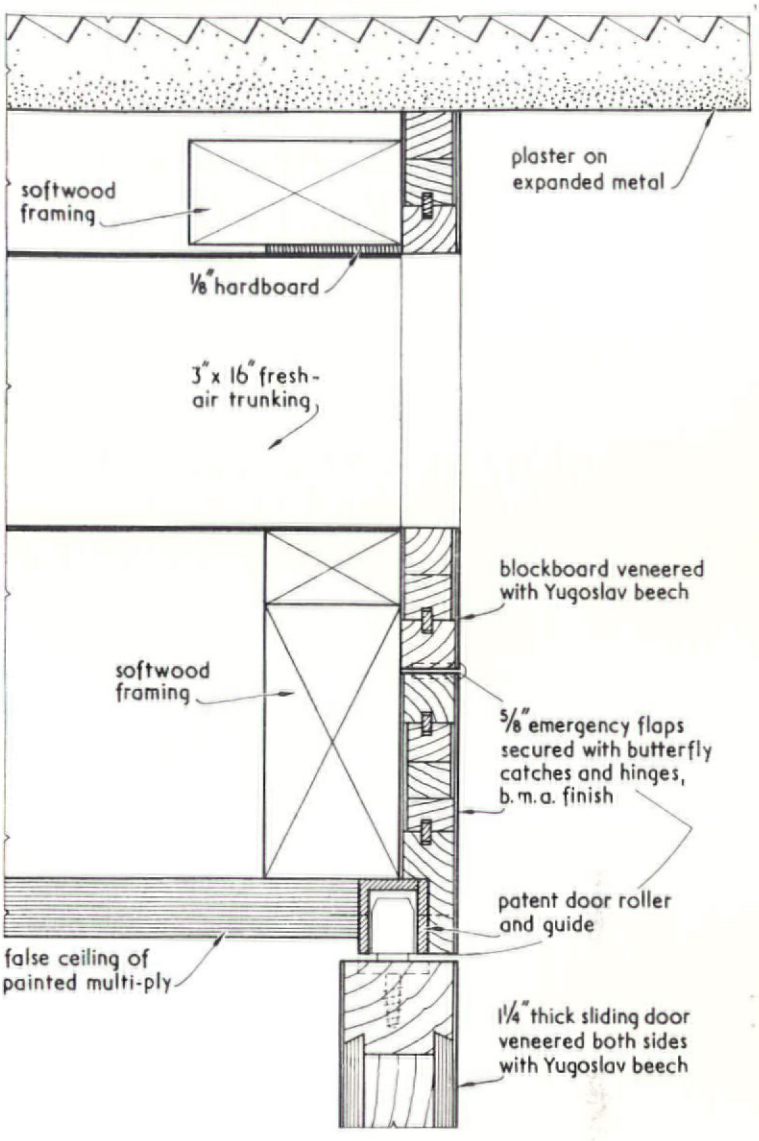
ELEVATION. scale ⅛" = 1'–0"



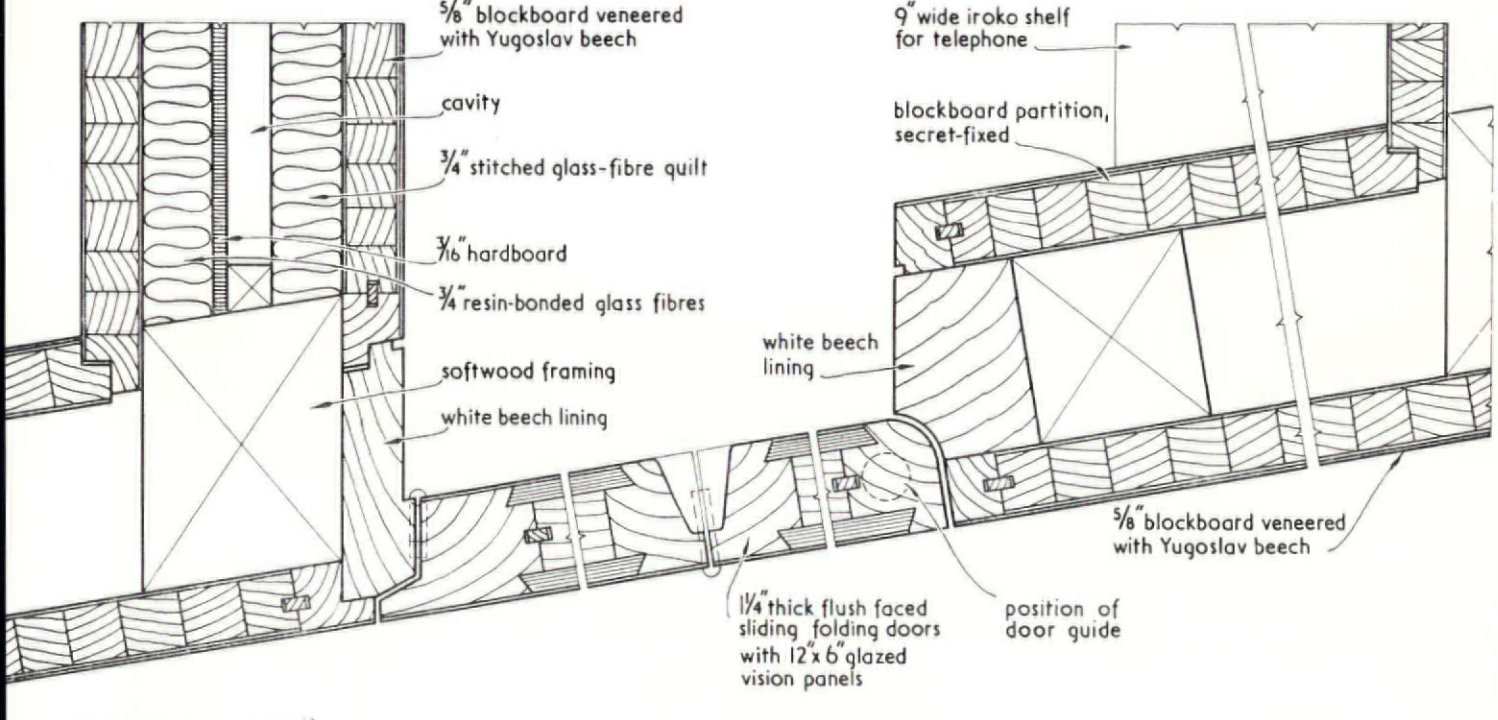
PLAN. scale ⅛" = 1'–0"



PLAN AT A–A. scale ½ full size



SECTION B–B. scale ½ full size

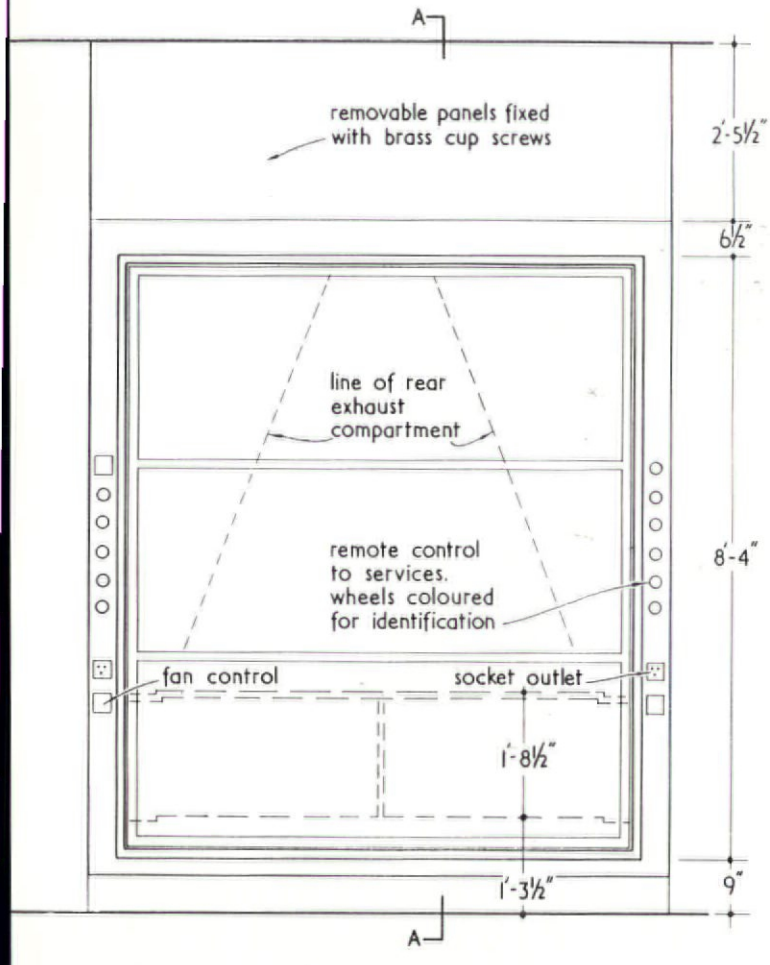


PLAN AT C–C. scale ½ full size

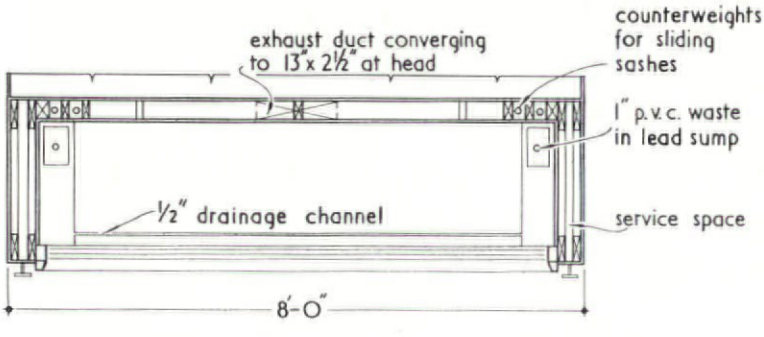
FUME CUPBOARD: LABORATORIES AT EGHAM, SURREY

DESIGNED BY WALKER, HARWOOD AND CRANSWICK; R. A. COX (architect-in-charge)

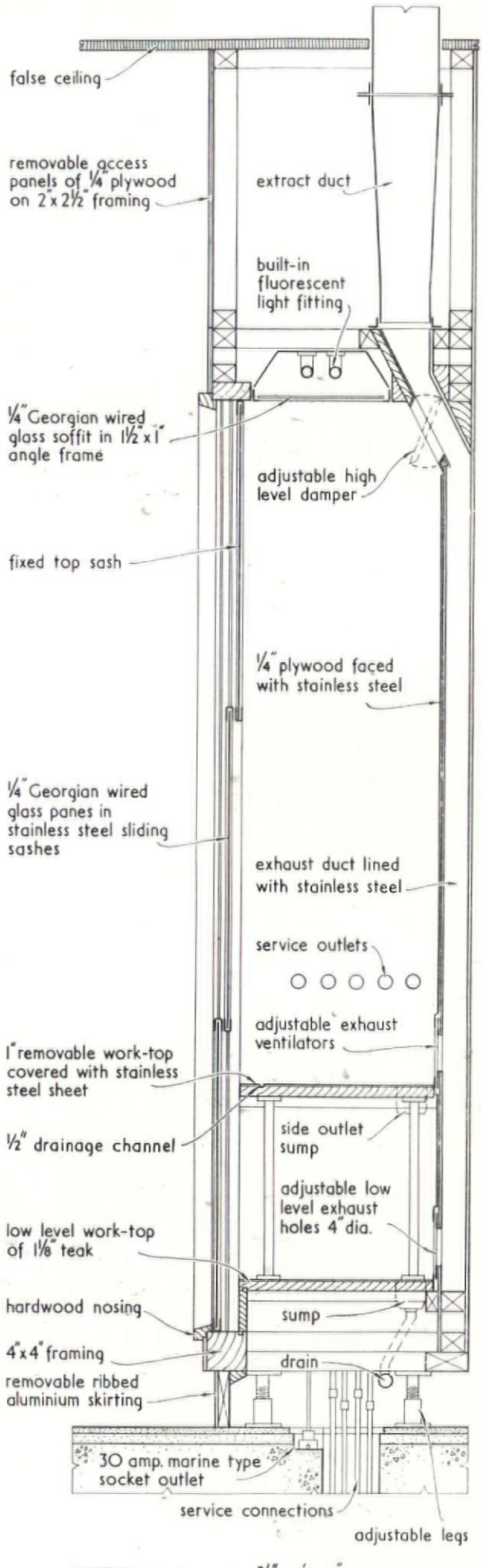
The service connections in the building are designed to permit fume cupboards to be connected at 10 ft. intervals, as required. The fume cupboards are therefore demountable and are designed to permit easy connection to the services. They are also provided with a double work-top: a removable top at normal bench height and a low level work-top to permit the use of tall equipment.



ELEVATION. scale ⅜" = 1'-0"



PLAN. scale ⅜" = 1'-0"

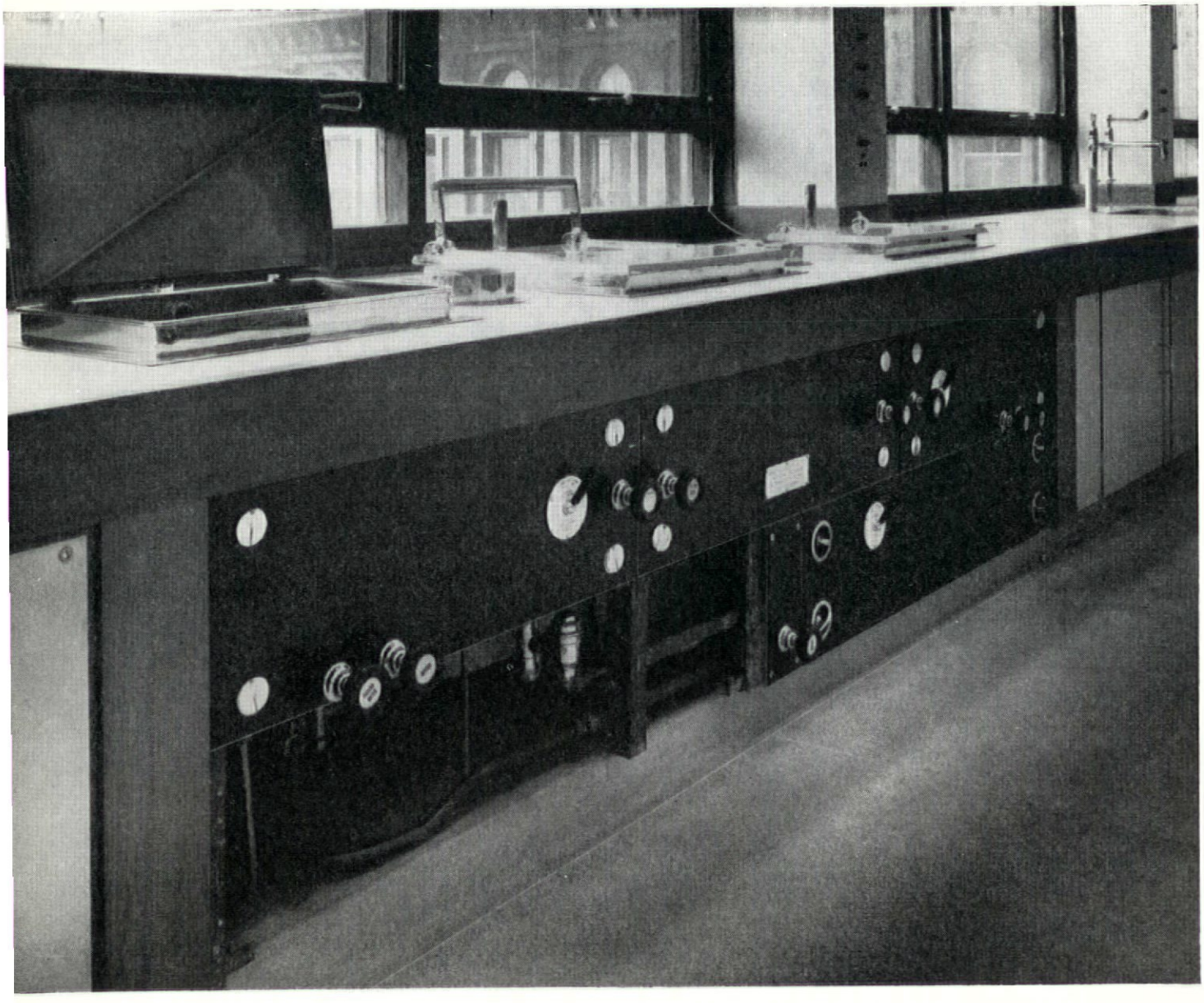


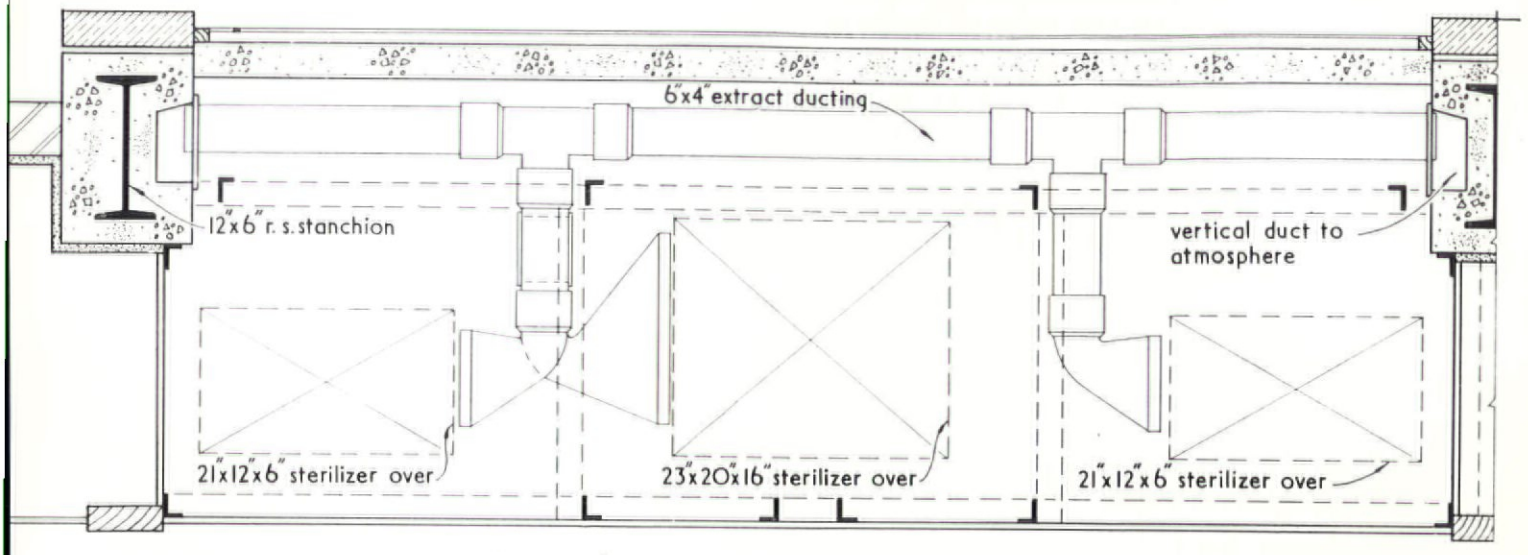
SECTION A-A. scale ¾" = 1'-0"

BENCH STERILIZER: HOSPITAL IN LONDON, S.E.1

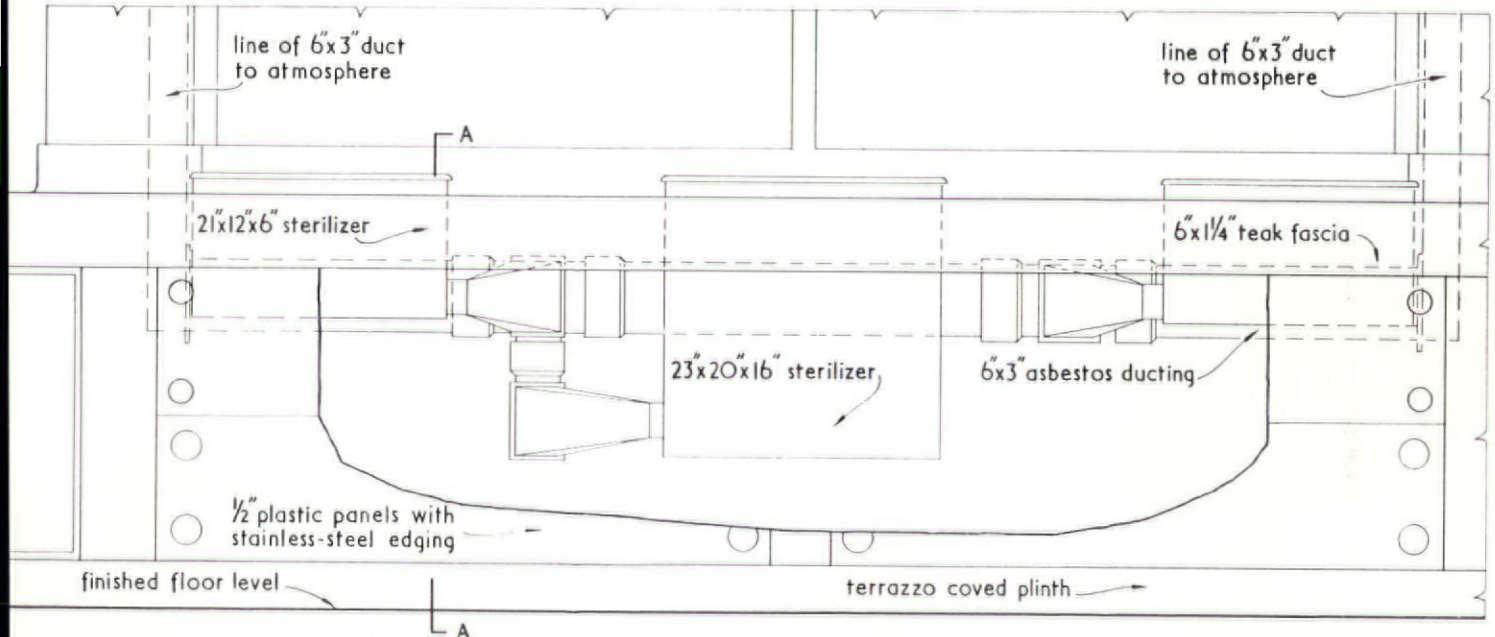
DESIGNED BY W. G. HOLFORD AND L. G. CREED

This is a good example of how complex equipment can be organised into a neat architectural setting. The sterilizers (or autoclaves, as they are called) are steam heated but, to guard against failure while an operation is going on, alternative emergency gas heating had to be provided. This required flues (accommodated in the solid piers) and also quick access behind the panels. This was obtained by quick hand-release turnbuckles with bayonet-type fixing in the lower panels (one of which has been removed in the photograph). The panels themselves are of asbestos cement with stove-enamelled finish (matt black) and with stainless steel edging. The round discs in the corners of the upper panels are chromium-plated brass covers to key-operated bayonet-type fixings.

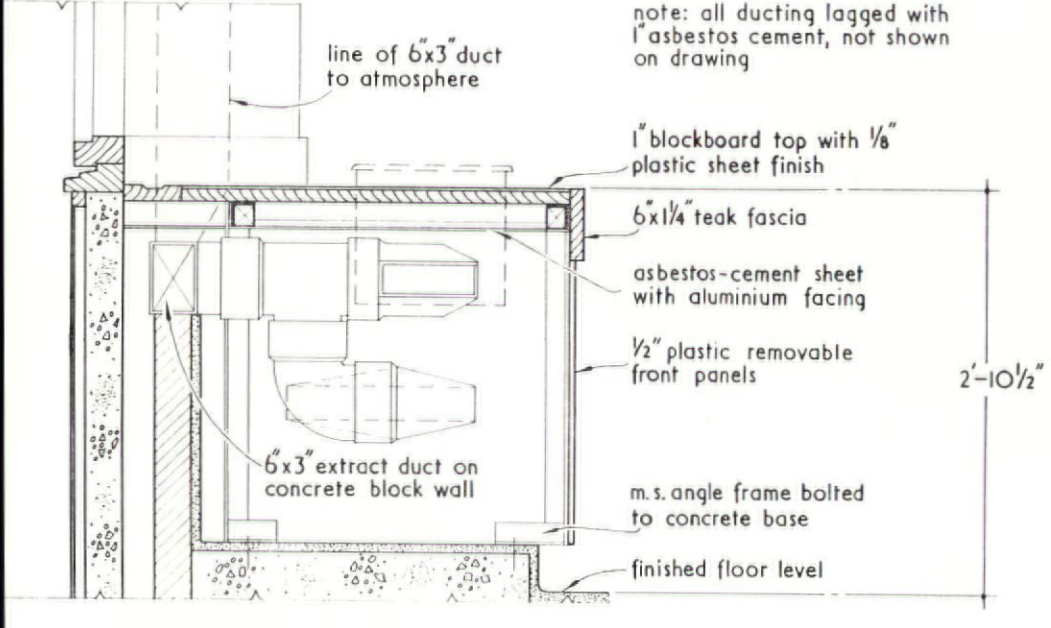




PLAN BELOW BENCH TOP. scale 3/4" = 1'-0"



ELEVATION. scale 3/4" = 1'-0"

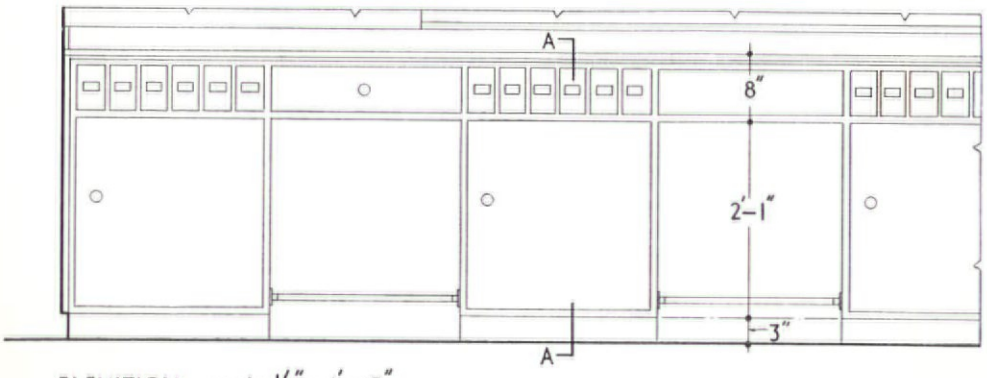


SECTION A-A. scale 3/4" = 1'-0"

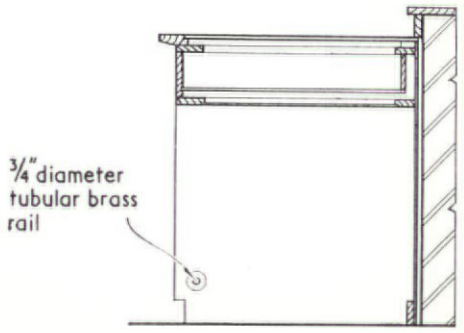
WORKROOM BENCH: LIBRARY AT BEACONSFIELD, BUCKS

DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

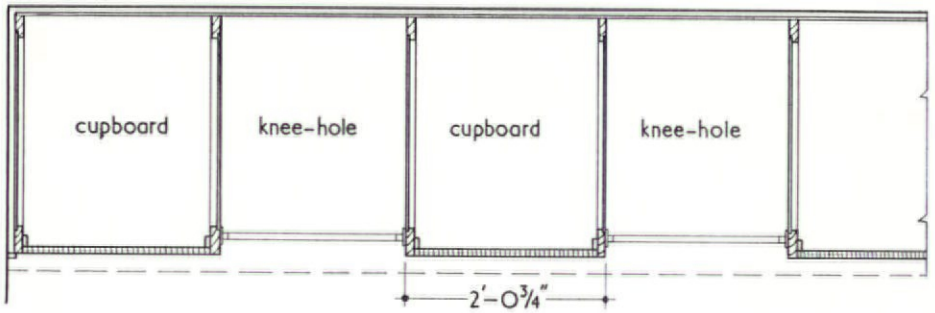
We record this piece of specialised furniture because it shows the orderly accommodation of that most troublesome adjunct—the card index cabinet.



ELEVATION. scale ½" = 1'-0"



CROSS SECTION.



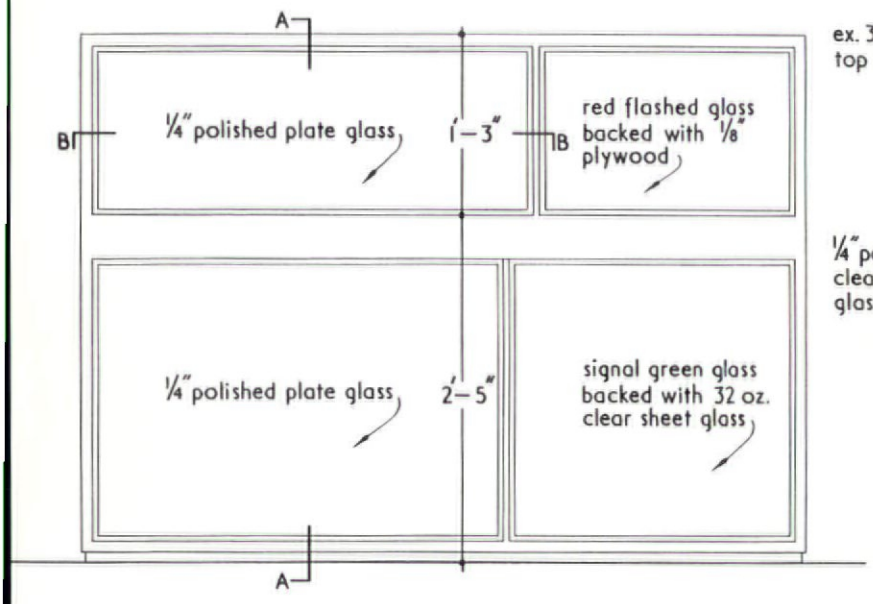
PLAN. scale ½" = 1'-0"

SECTION A–A.
scale ½ full size

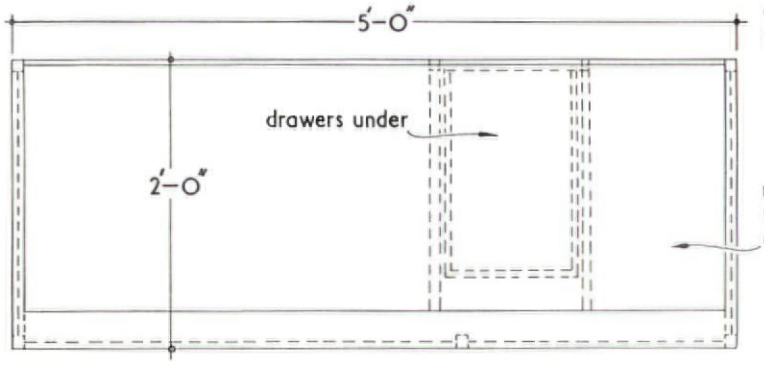
RECEPTION DESK: OFFICES AT UXBRIDGE, MIDDLESEX

DESIGNED BY LEONARD MANASSEH AND PARTNERS

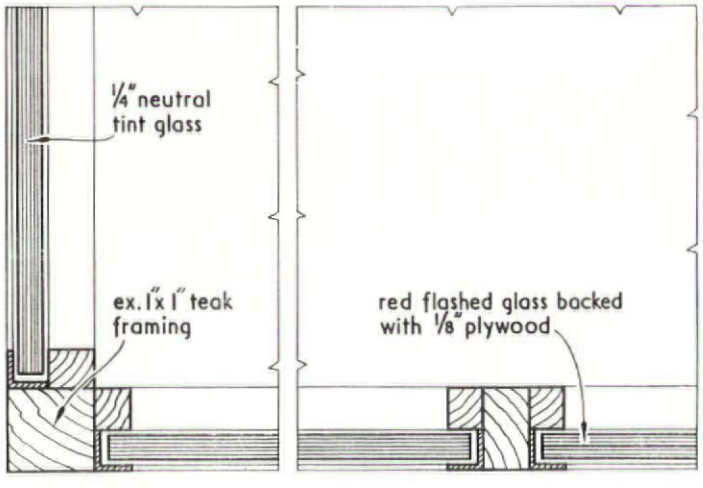
A good example of the way an exceptionally neat jointing technique (i.e., the use of brass angle trim to hold the polished plate glass panels) facilitates functional design by drawing attention to proportioning and by giving a sense of evident deliberation to the architects' decisions. Thus the unequal vertical division as between the top and bottom compartments, which could so easily have become a source of irritation, is here wholly convincing and in fact provides a key to the design. The architect opines that an obscured glass might have been better in the lower left front panel.



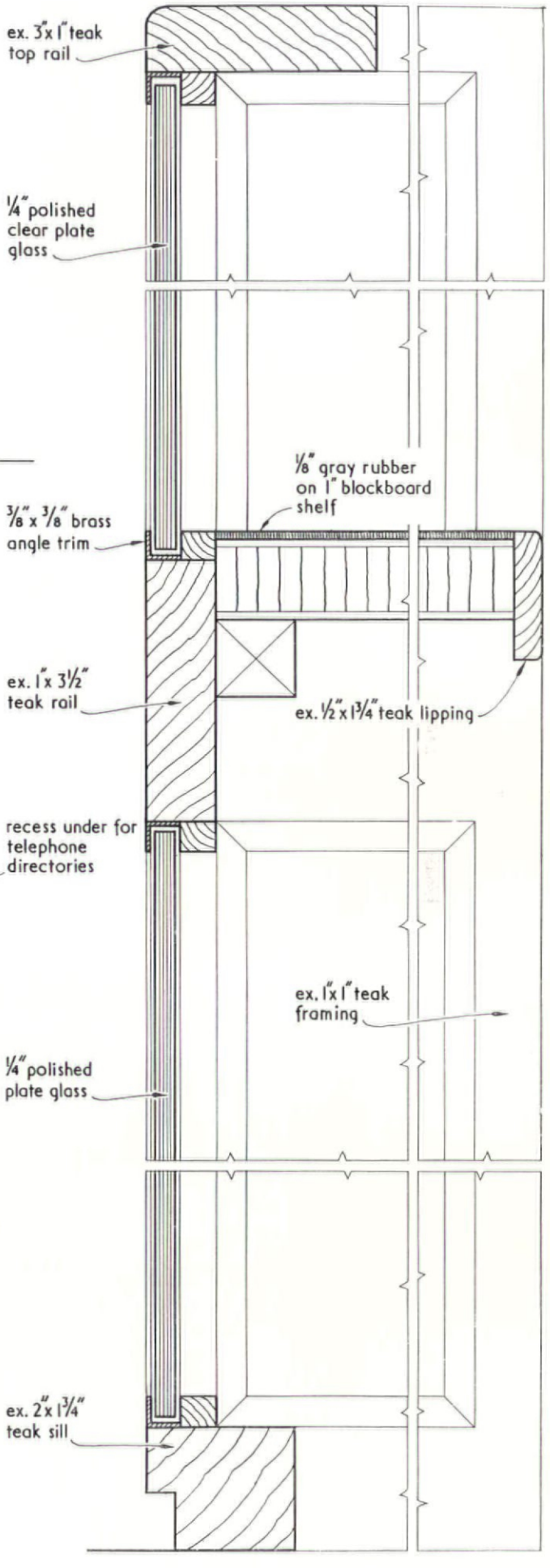
ELEVATION. scale ¾" = 1'–0"



PLAN. scale ¾" = 1'–0"



DETAIL AT B–B. scale ½ full size

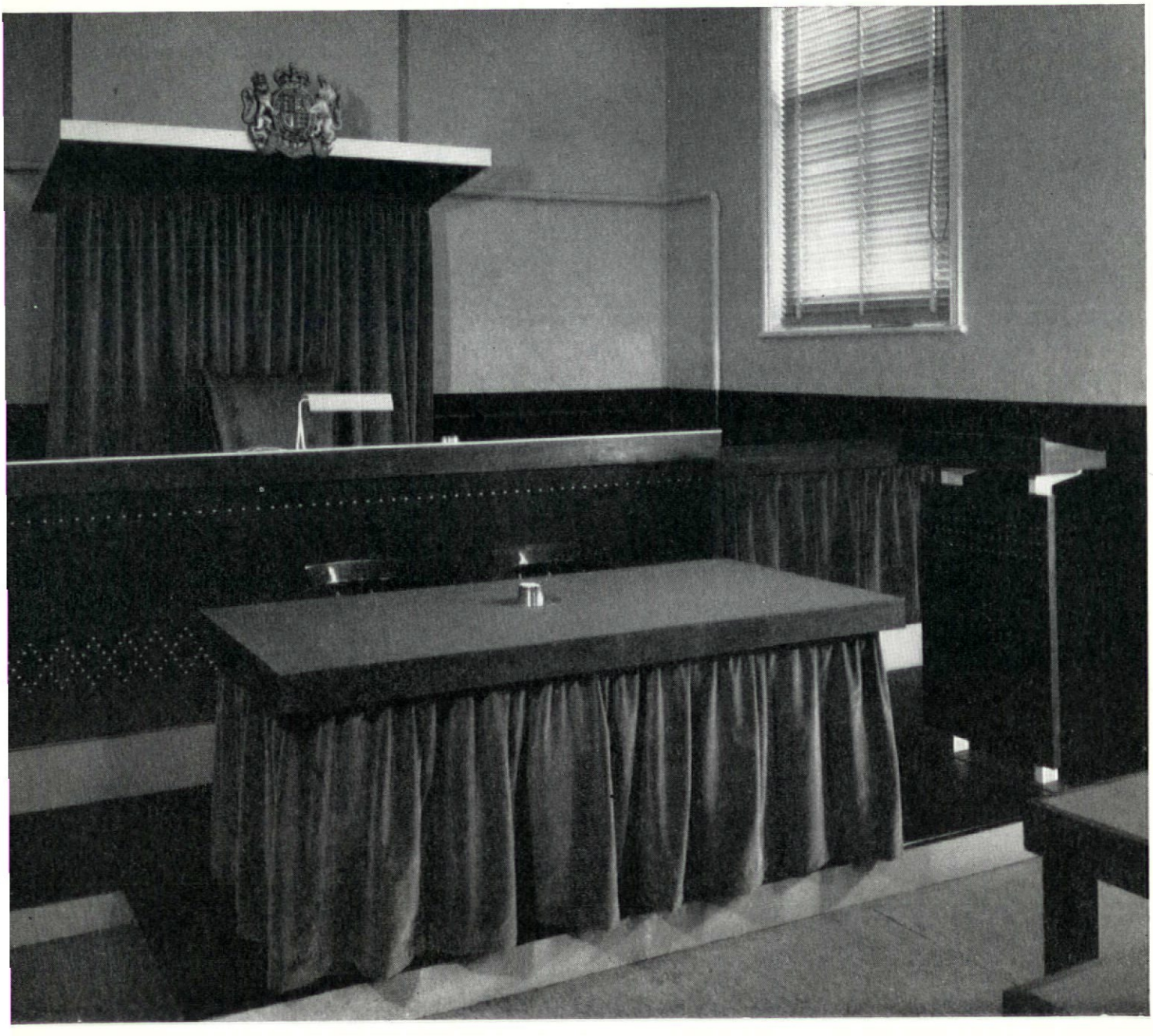


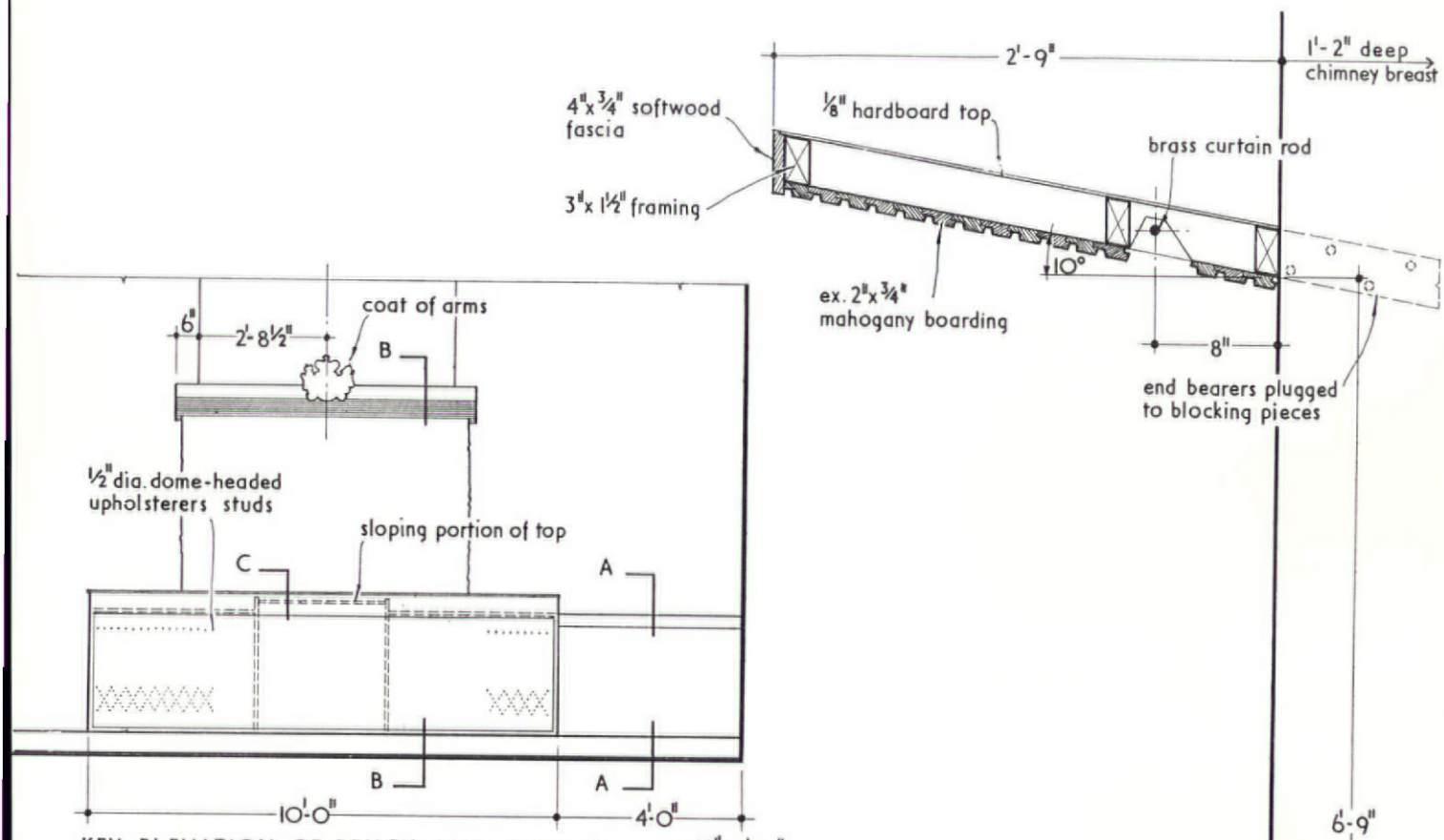
SECTION A-A.

MAGISTRATE'S BENCH: COURT AT LINSLADE, BUCKS

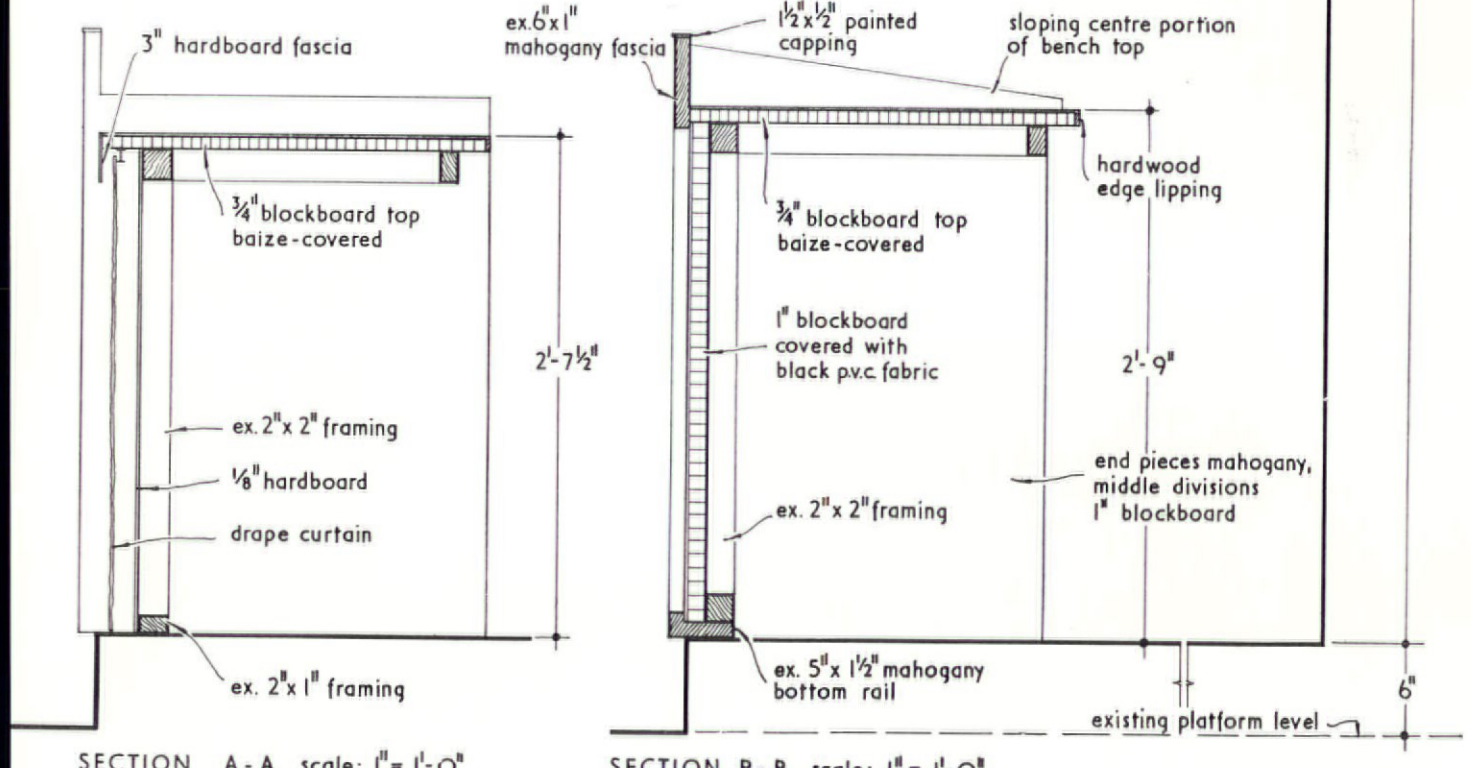
DESIGNED BY F. B. POOLEY (architect to the Buckinghamshire County Council)

The magistrate's bench forms part of the refurnishing of a police court. The drapes behind the canopy are lime green, the other drapes in the courtroom being dark green. The baize top of the magistrate's bench is described as 'amber rust,' the other desk tops in the room being 'oyster grey.' The dado is in effect a warm black being a low chroma, low value yellow (7·5 *Y* 2/2)*: the walls above the dado are light stone* (5 *Y* 8/2).



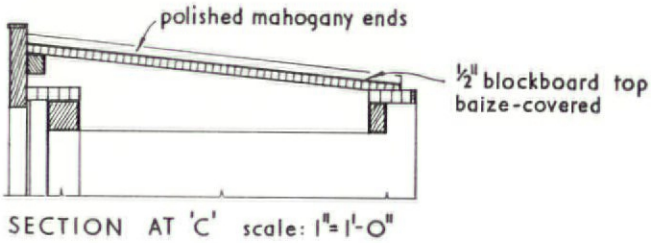


KEY ELEVATION OF BENCH AND CANOPY. scale: ¼" = 1'-0"



SECTION A-A scale: 1" = 1'-0"

SECTION B-B. scale: 1" = 1'-0"

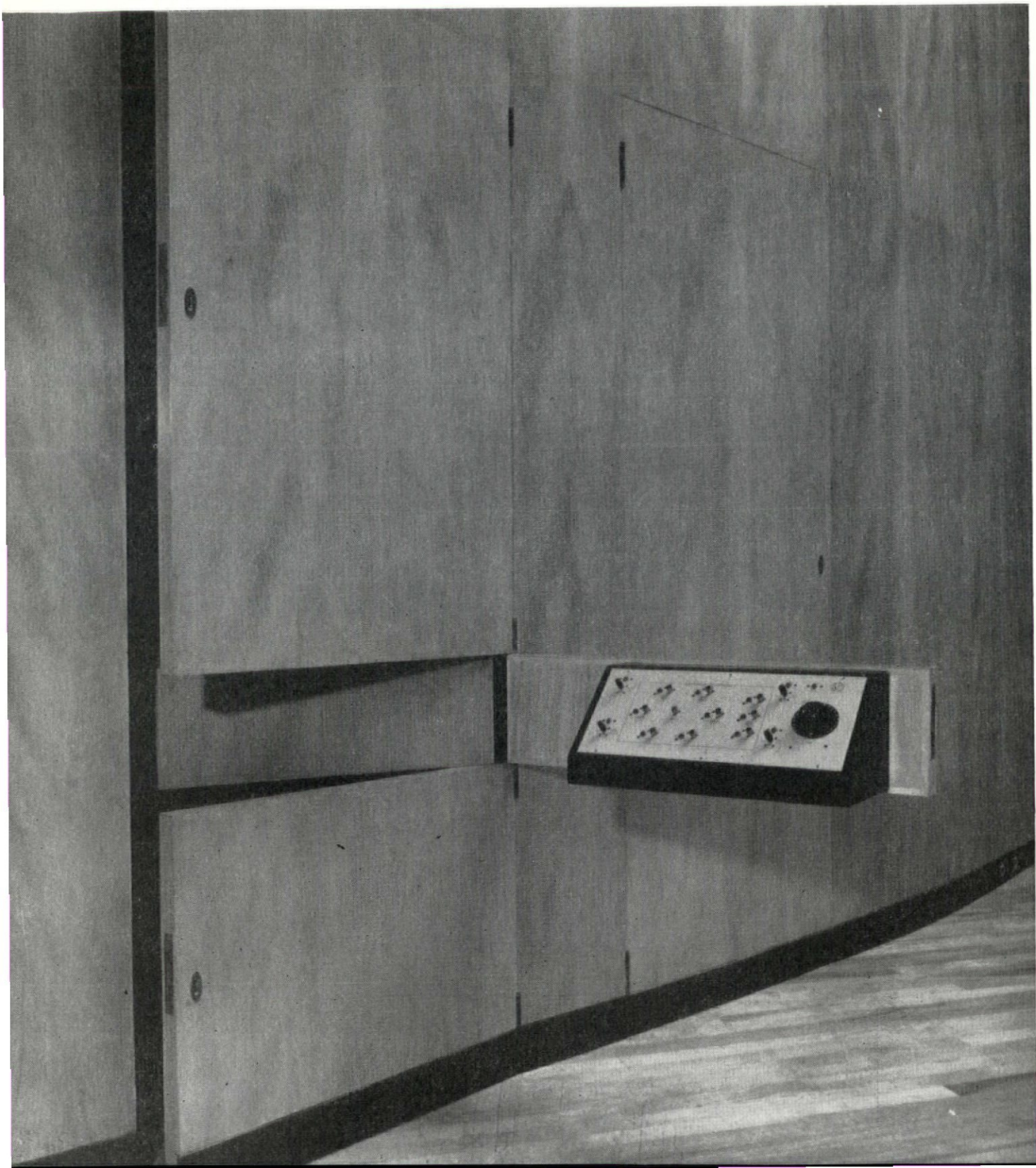


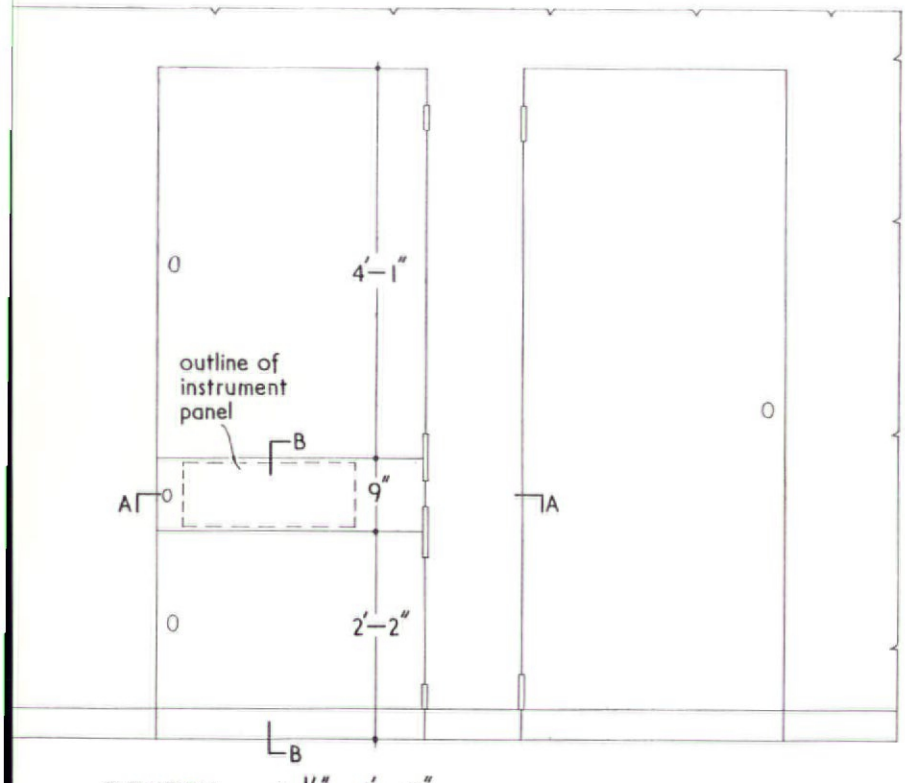
SECTION AT 'C' scale: 1" = 1'-0"

HINGED INSTRUMENT PANEL: OFFICES IN LONDON, W.C.1

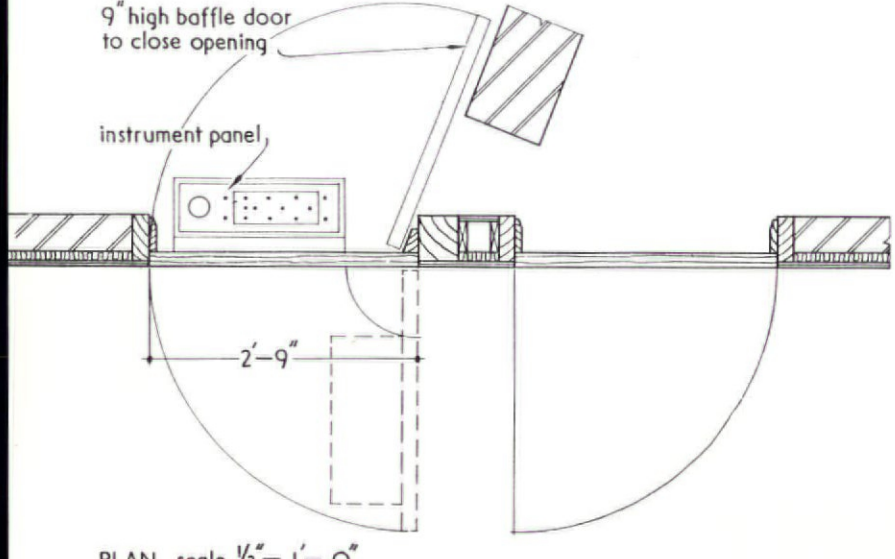
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

These controls of the amplifier system in the assembly hall are wanted only when the hall is in use. The conditions were: the panel when folded away to be invisible, and the screen from which it emerges to be visually unbroken. They are solved by a three-part 'stable-door' in the screen and a 'baffle' leaf to close the gap when the panel is swung forward. So that the cable leading to the panel is not pinched by the leaves, the 'baffle' leaf is hinged from a false jamb and an ample channel is ploughed partly in this jamb and partly in the main jamb. The screen wall and doors curve to a radius of about 97 ft. 6 in.

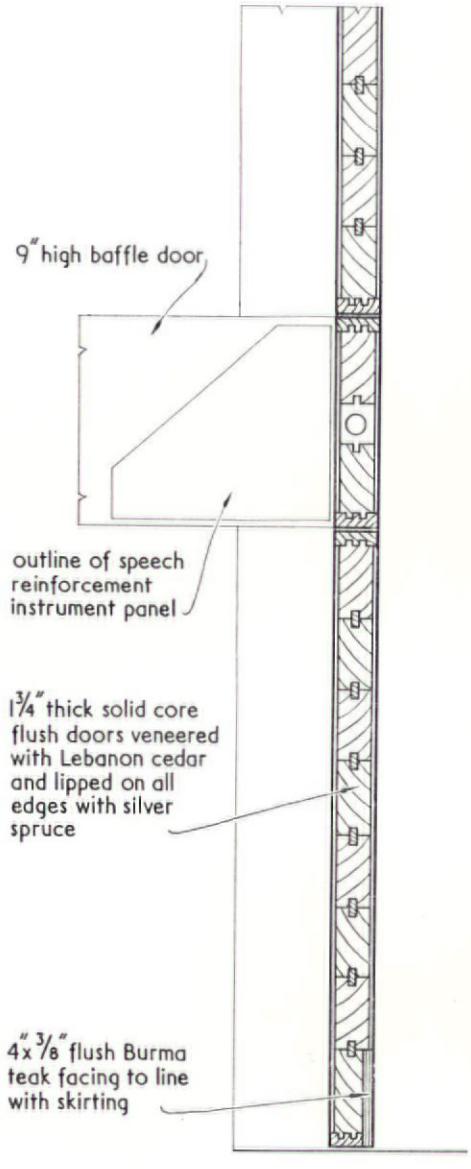




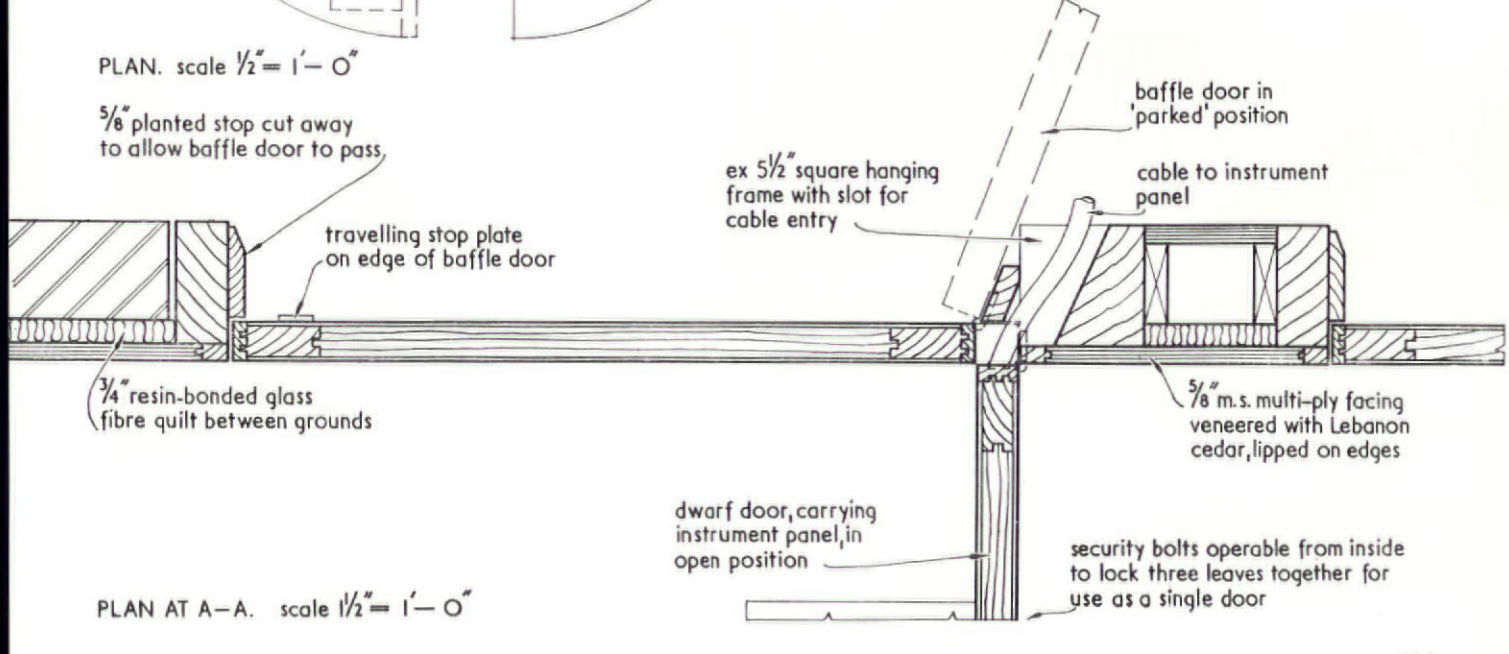
ELEVATION. scale ½" = 1'– 0"



PLAN. scale ½" = 1'– 0"



SECTION B–B. scale 1½" = 1'– 0"

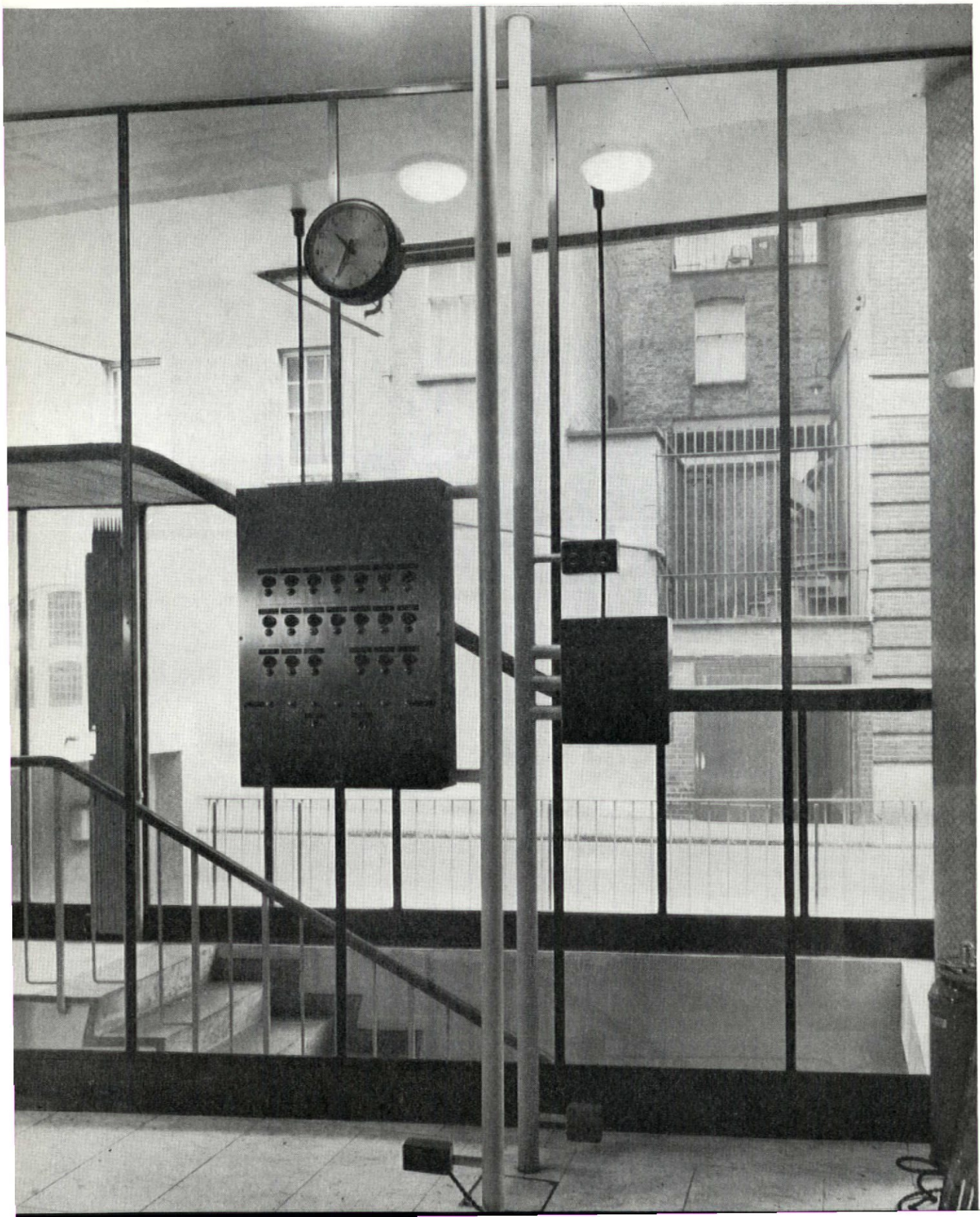


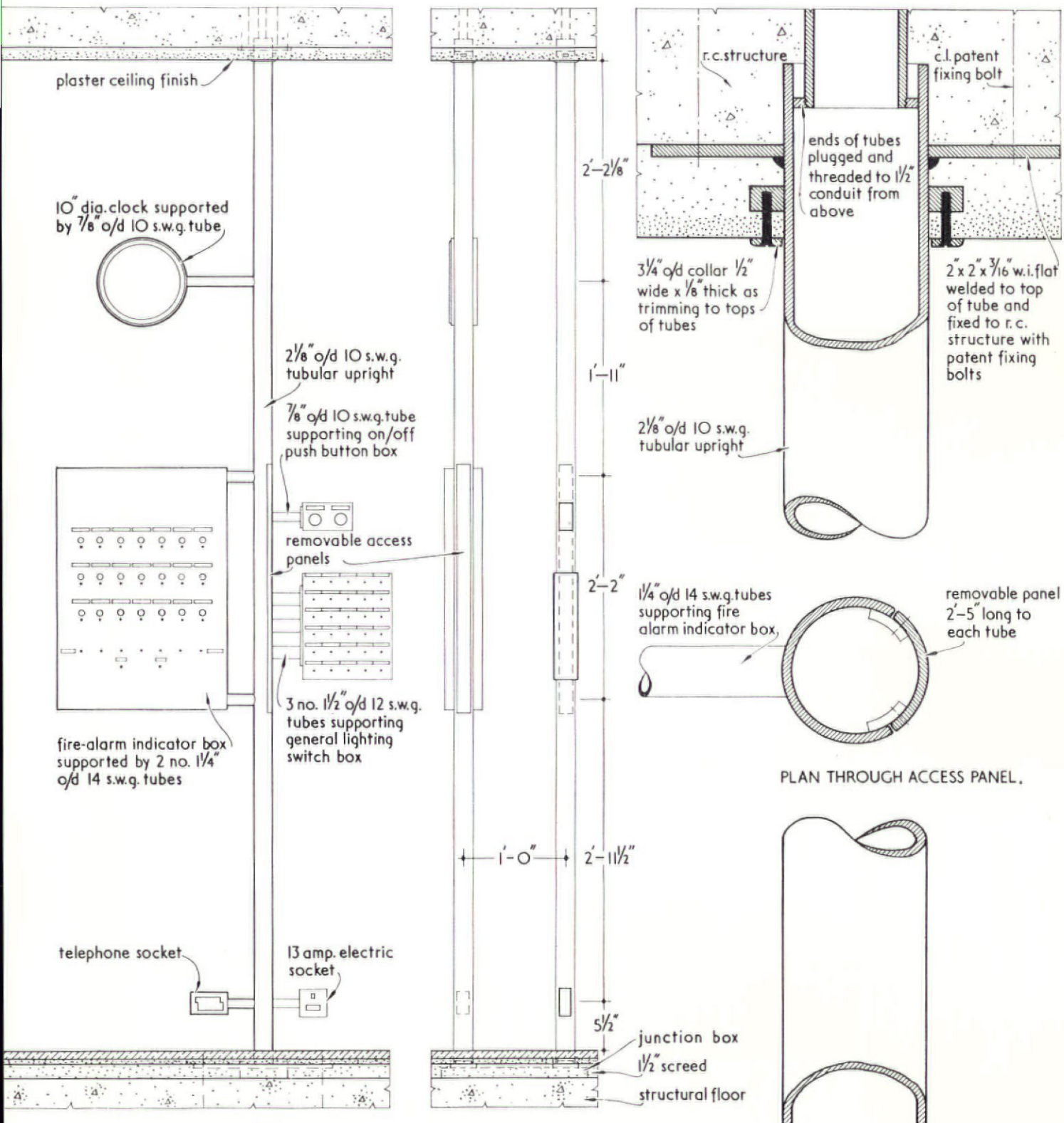
PLAN AT A–A. scale 1½" = 1'– 0"

CONTROL PANEL UNIT: OFFICES IN LONDON, W.C.1

DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

Points to be noticed are: first, precautions taken to ensure reliable fixing to floor and ceiling and neat junctions; second, that the separate panels are secured to the 1-*in. steel tubes, which serve as brackets, by two screws passing through saddle blocks welded to the case: by unscrewing these, the panels can be dismantled for repair.*

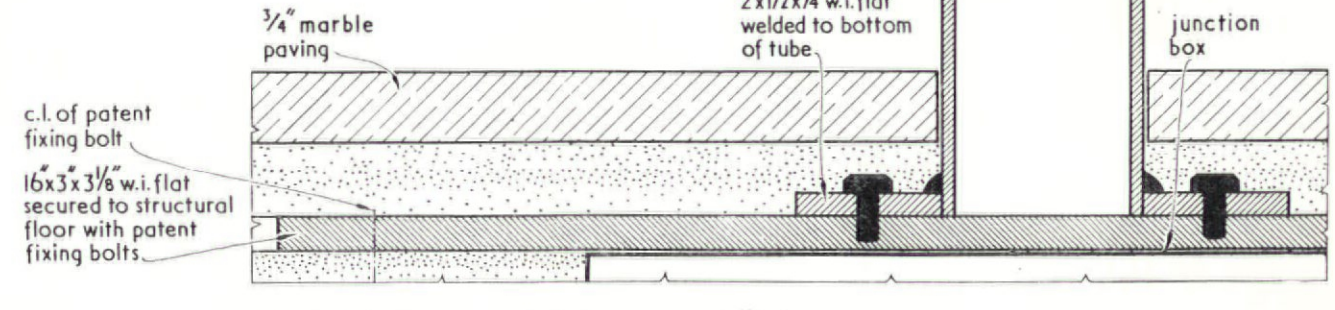




FRONT ELEVATION. scale 3/4" = 1'-0"

SIDE ELEVATION.

PLAN THROUGH ACCESS PANEL.

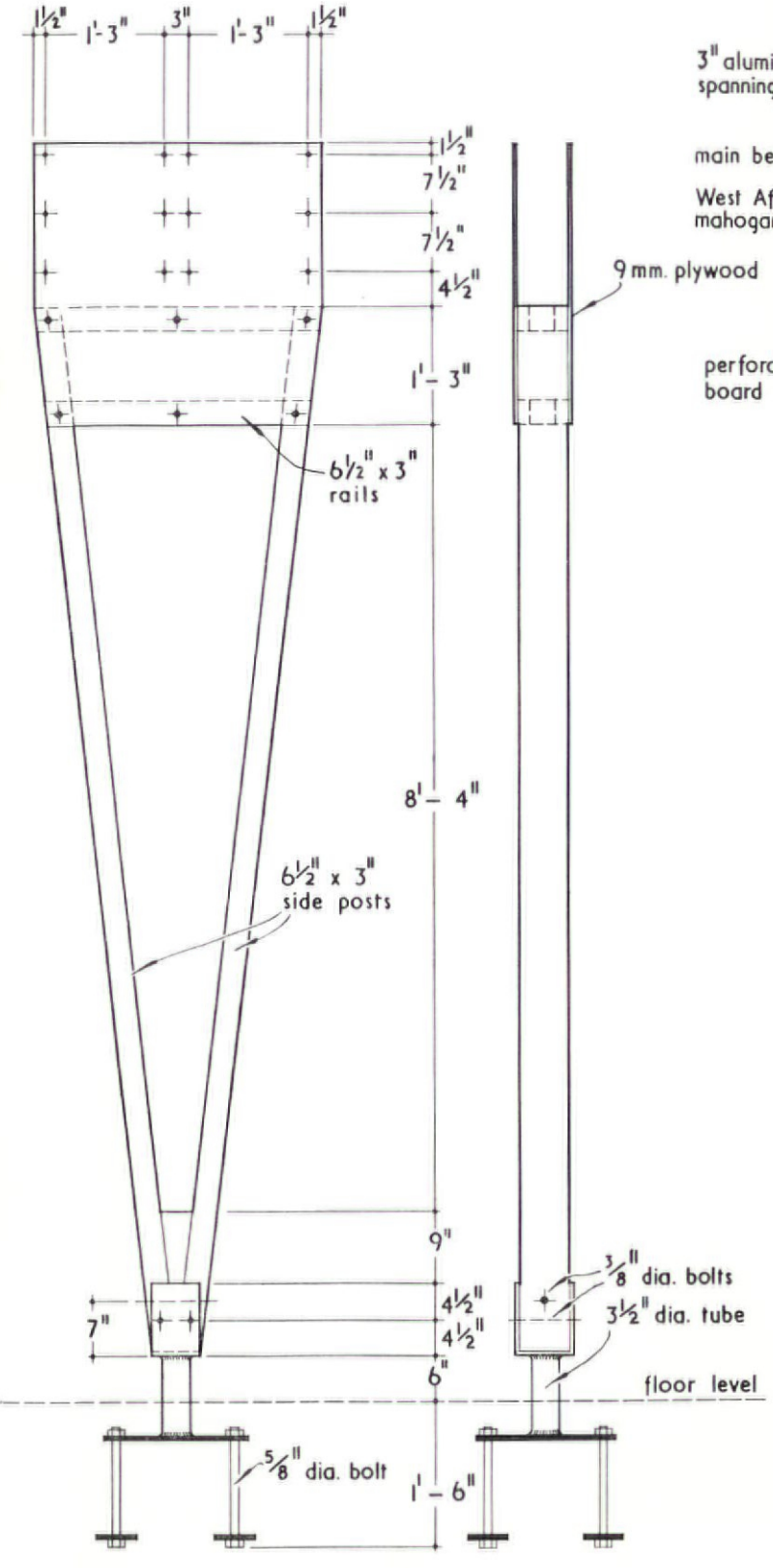


SECTION THROUGH TUBULAR UPRIGHT. scale 1/2 full size

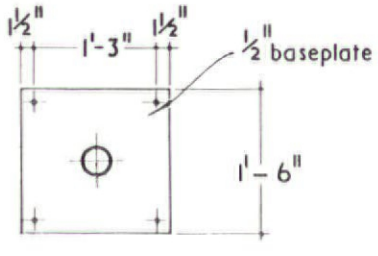
STANCHION IN ASSEMBLY HALL: SCHOOL AT WATFORD

DESIGNED BY C. H. ASLIN (architect to the Hertfordshire County Council)

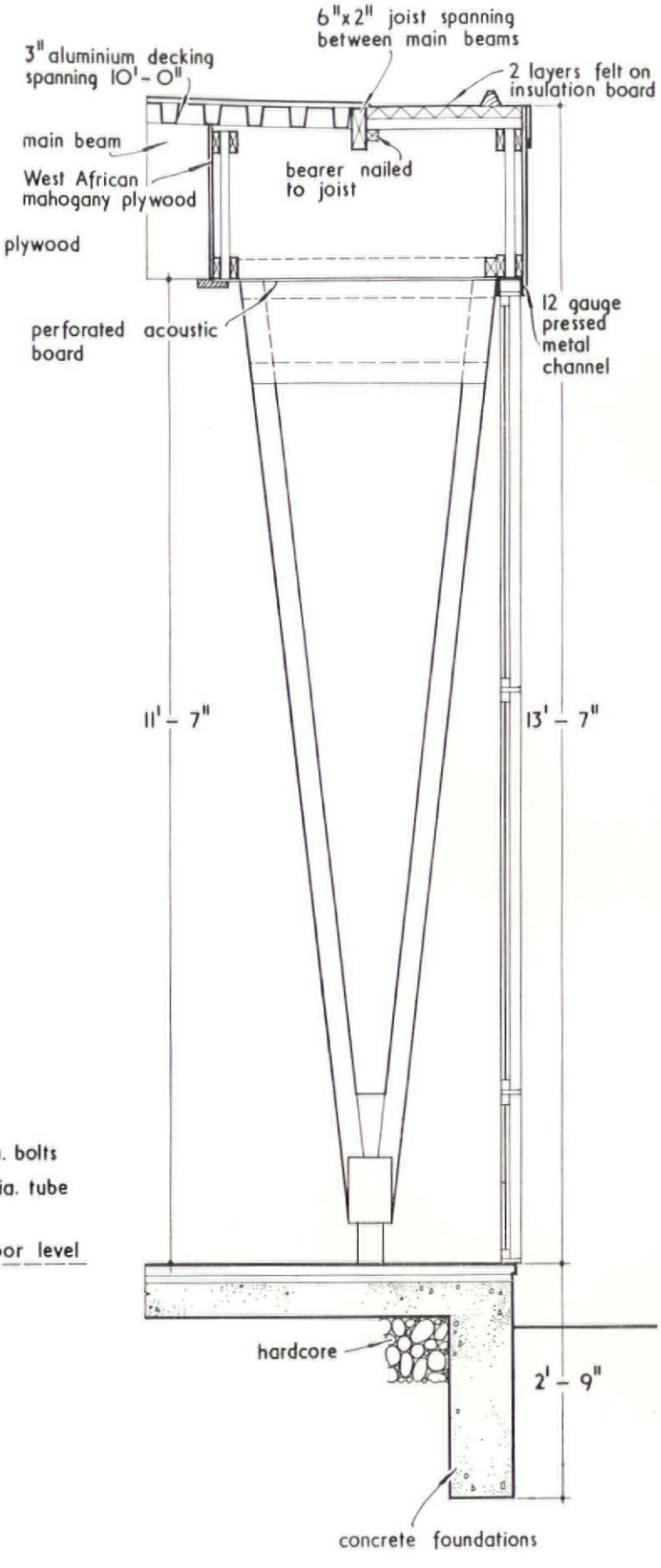
The form of the stanchion is chiefly determined by the need to provide a connection with the beams strong enough to overcome wind pressure. The timber used is red meranti. One plywood gusset plate is glued to the stanchion in the shop and the other is glued on the site after fitting the beam in position.



SIDE AND FRONT ELEVATION OF STANCHION.



PLAN OF STANCHION BASE. scale ½" = 1'-0"

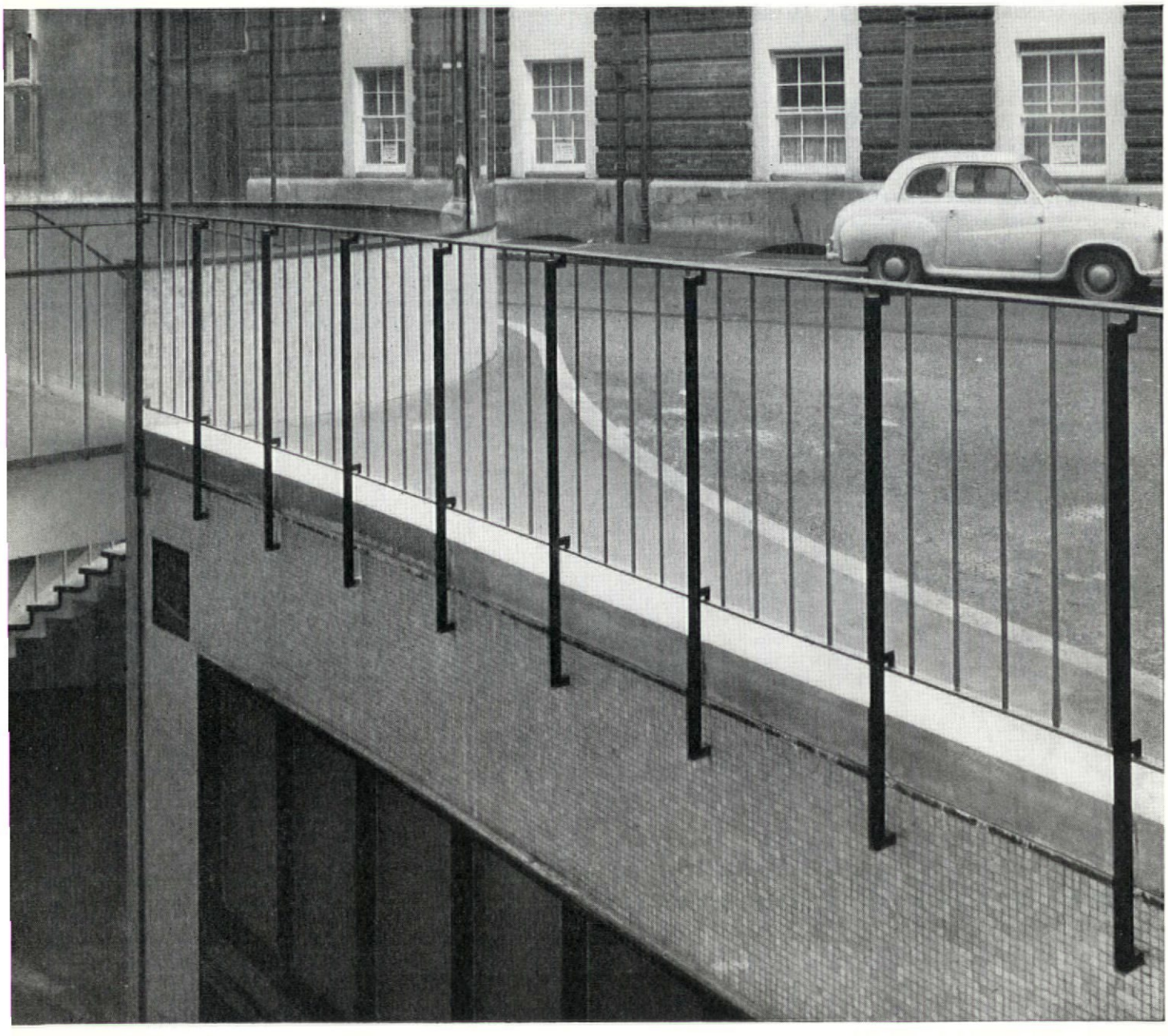


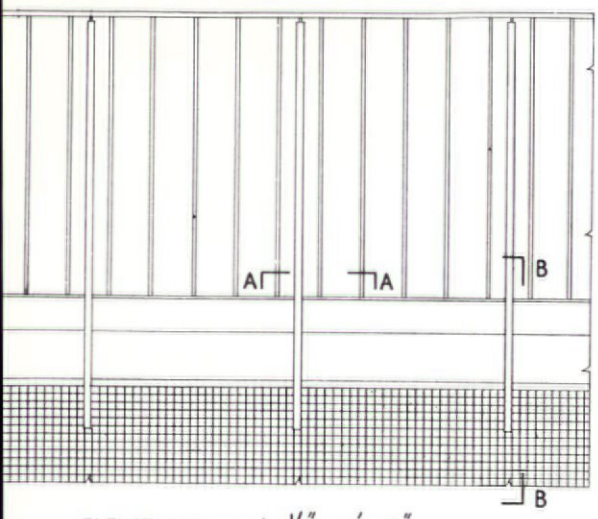
VERTICAL SECTION SHOWING STANCHION AND BEAM DETAILS. scale ½" = 1'-0"

BALUSTRADE: OFFICES IN LONDON, W.C.1

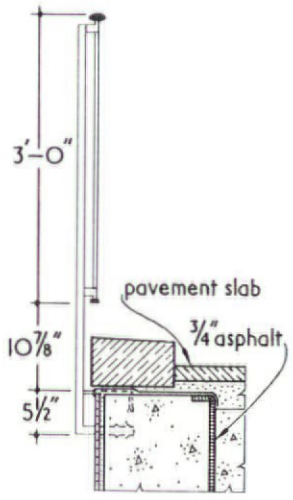
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

The point to notice about this balustrade is the complete dissociation of the steel from the structure to avoid all risk of damage or disfigurement by rusting. The balusters and top and bottom rail are of bright drawn steel, welded and painted, and are secret-screwed to the bronze handrail and bronze uprights.

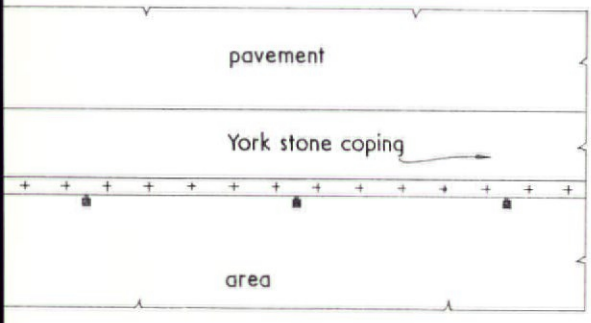




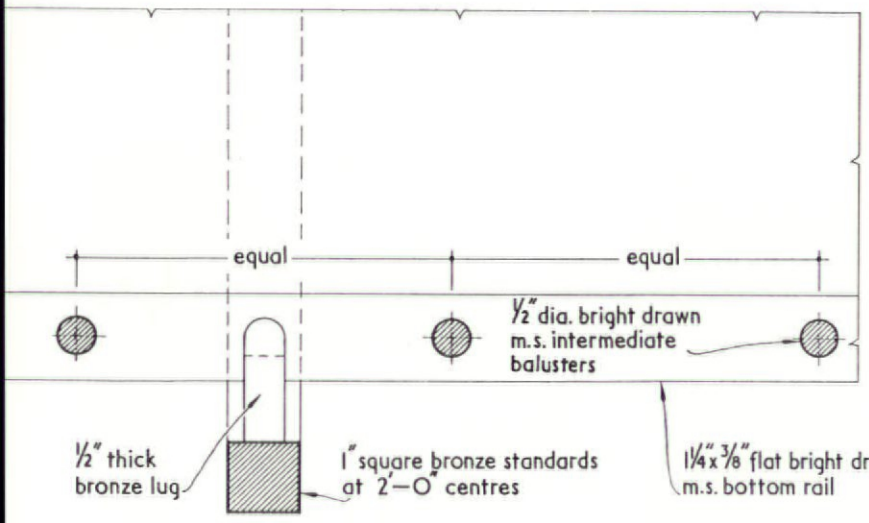
ELEVATION. scale ½" = 1'–0"



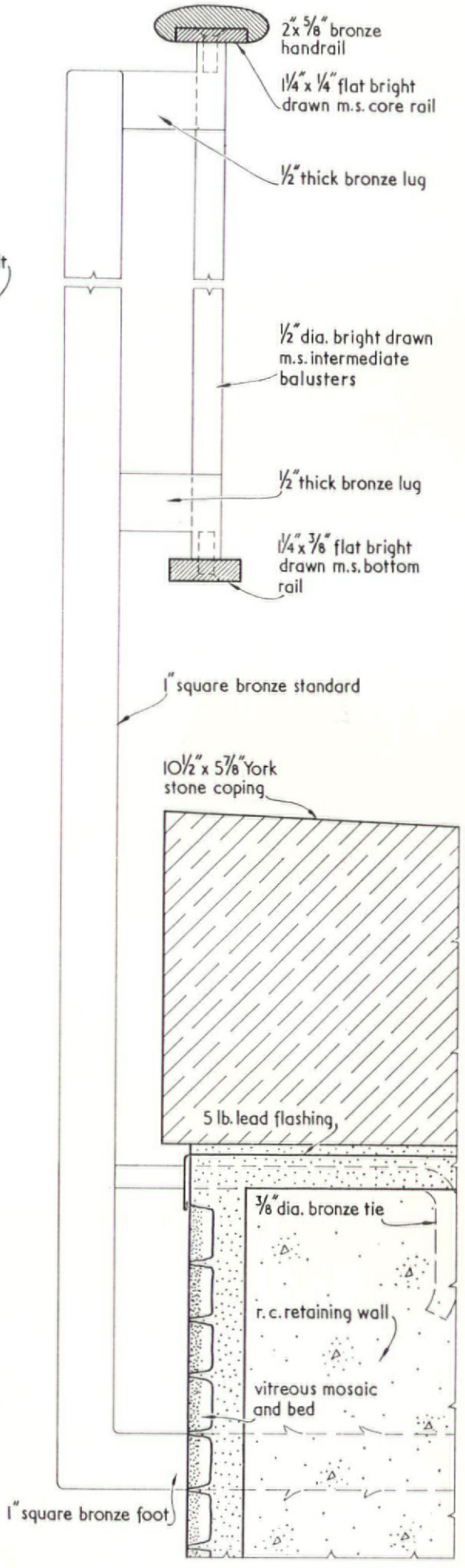
SECTION.



PLAN. scale ½" = 1'–0"



PLAN AT A–A. scale ⅜ full size

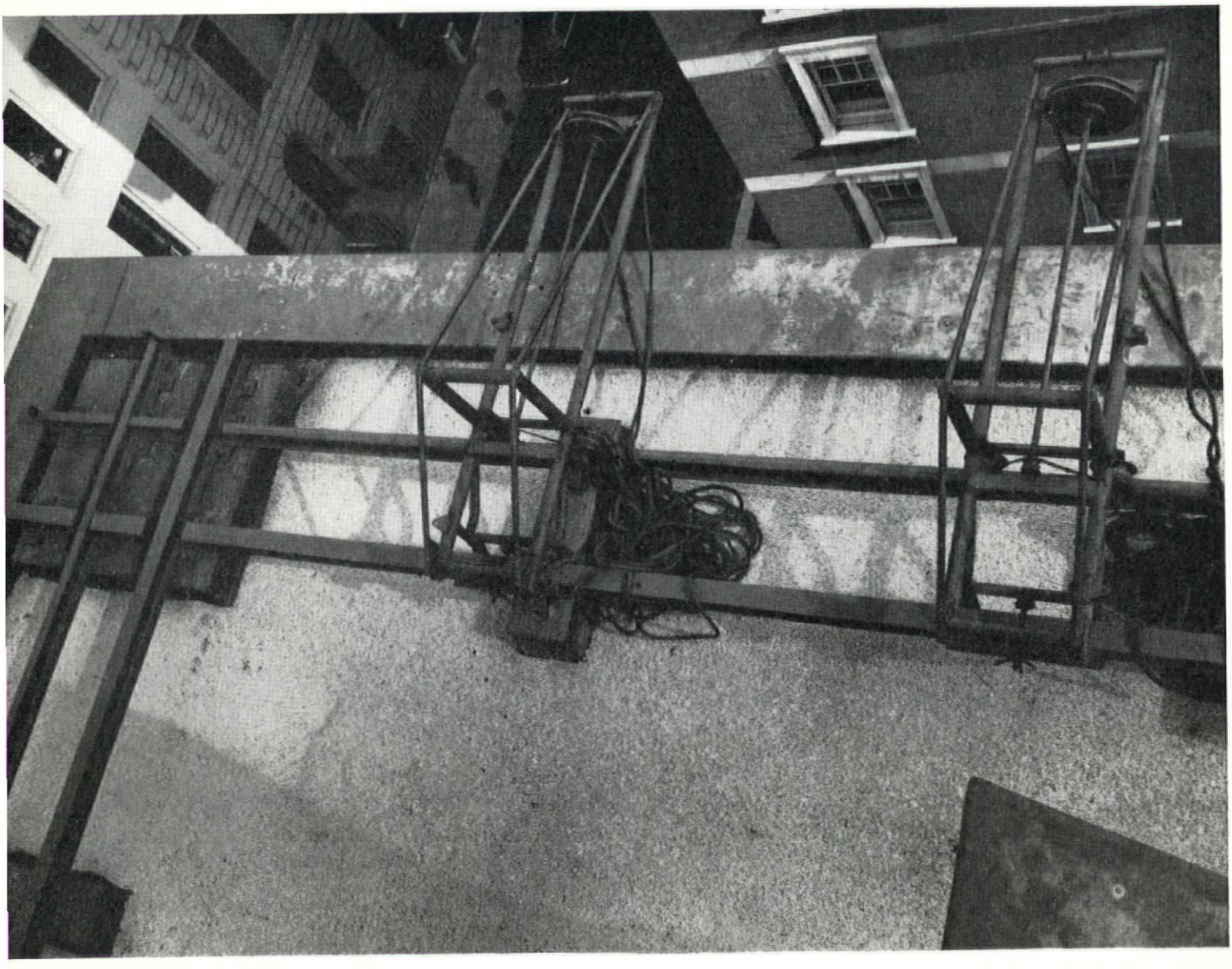


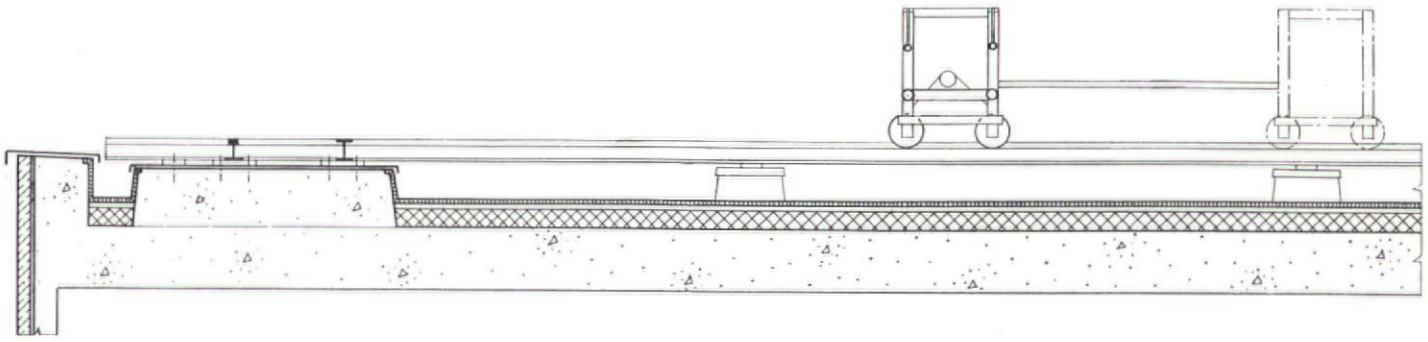
SECTION B–B. scale ⅜ full size

RUNNING DAVITS: OFFICES IN LONDON, W.C.1

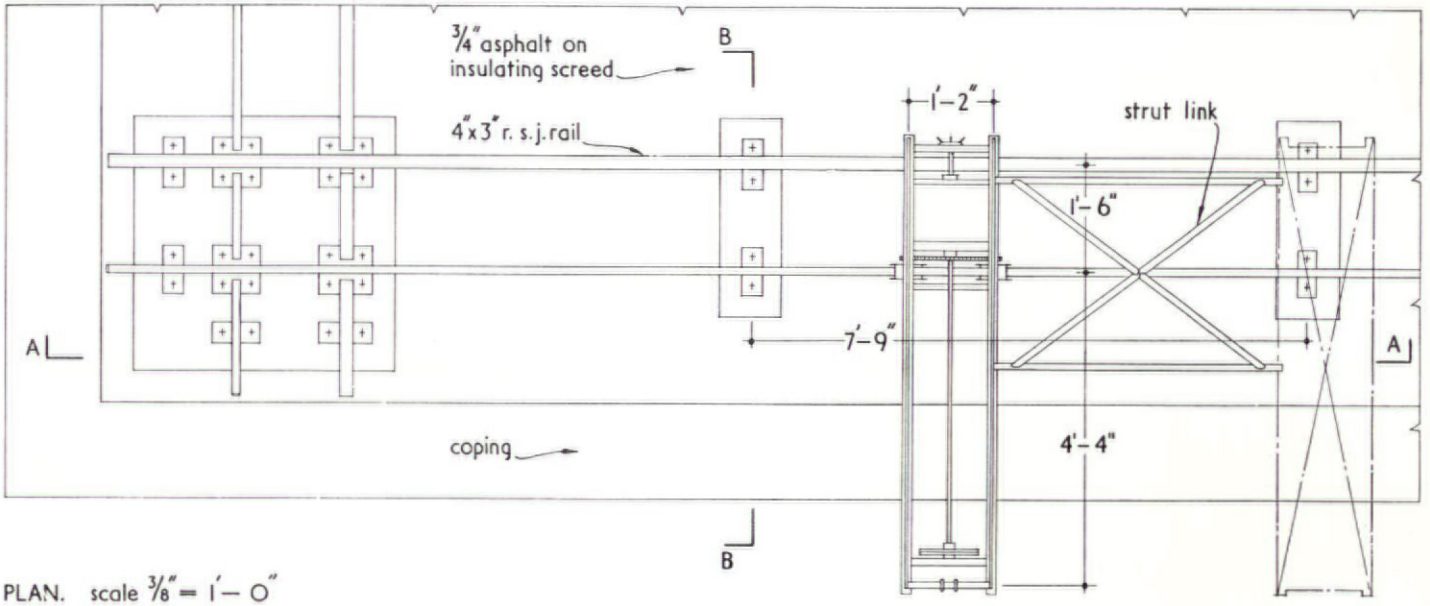
DESIGNED BY DAVID du R. ABERDEEN AND PARTNERS

These demountable davits can be used either singly (to support a bosun's chair) or in pairs (to support a cradle). When used in pairs they are bolted at a fixed distance apart and connected by a strut (which is not, however, shown in the photograph): by pulling the rope which passes over the pulley wheel the men in the cradle can move their cradle horizontally across the face of the building. The distance between the centre line of the drop and the face of the building must, of course, be constant. To enable the external corner of the building to be covered the rails must extend to the inside edge of the parapet: hence the cross-over. The rails are welded to the plates which in turn are held down by sleeved bolts which are bedded in the upstand stools and are secured by capped nuts.

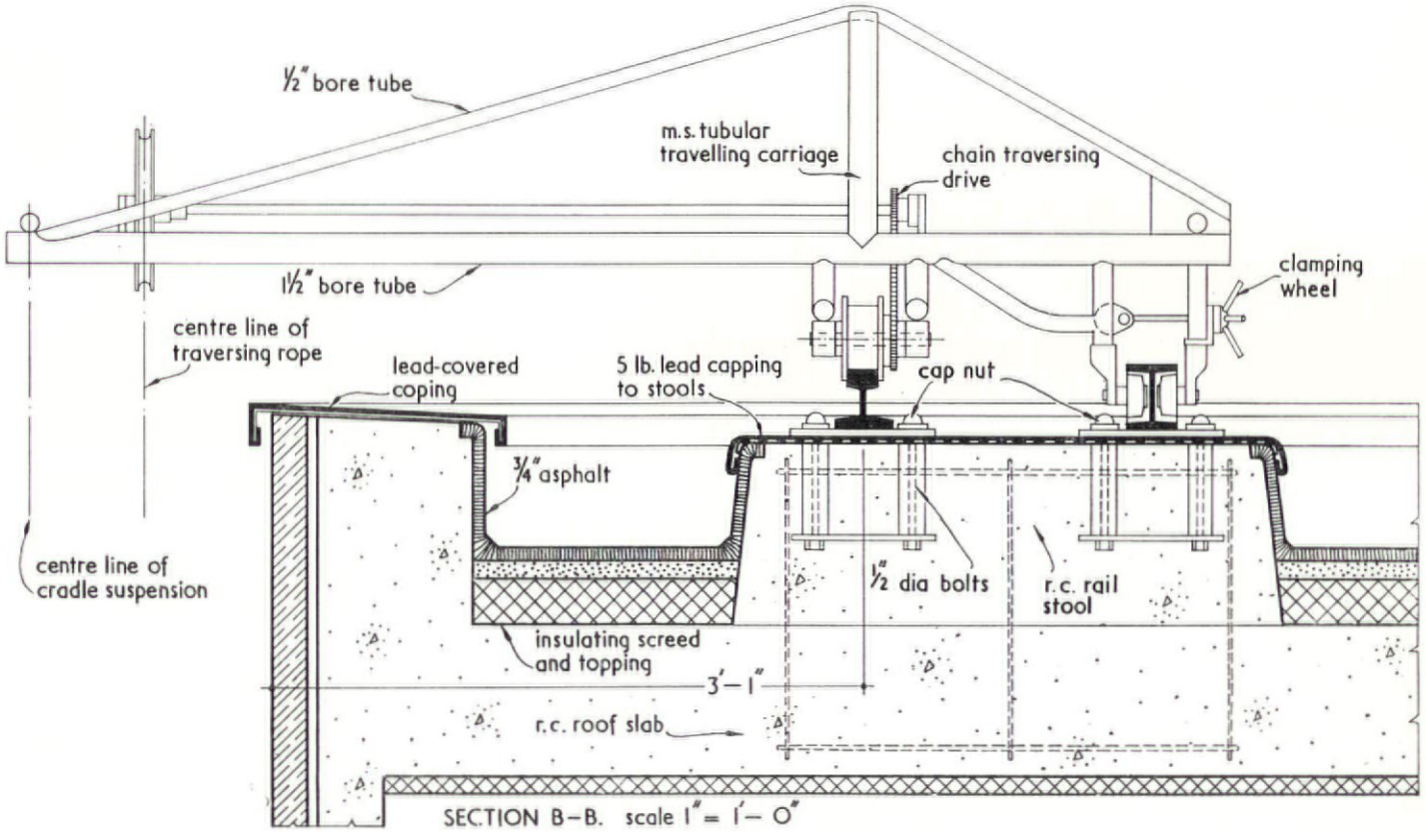




SECTION A–A. scale 3/8" = 1'– 0"



PLAN. scale 3/8" = 1'– 0"

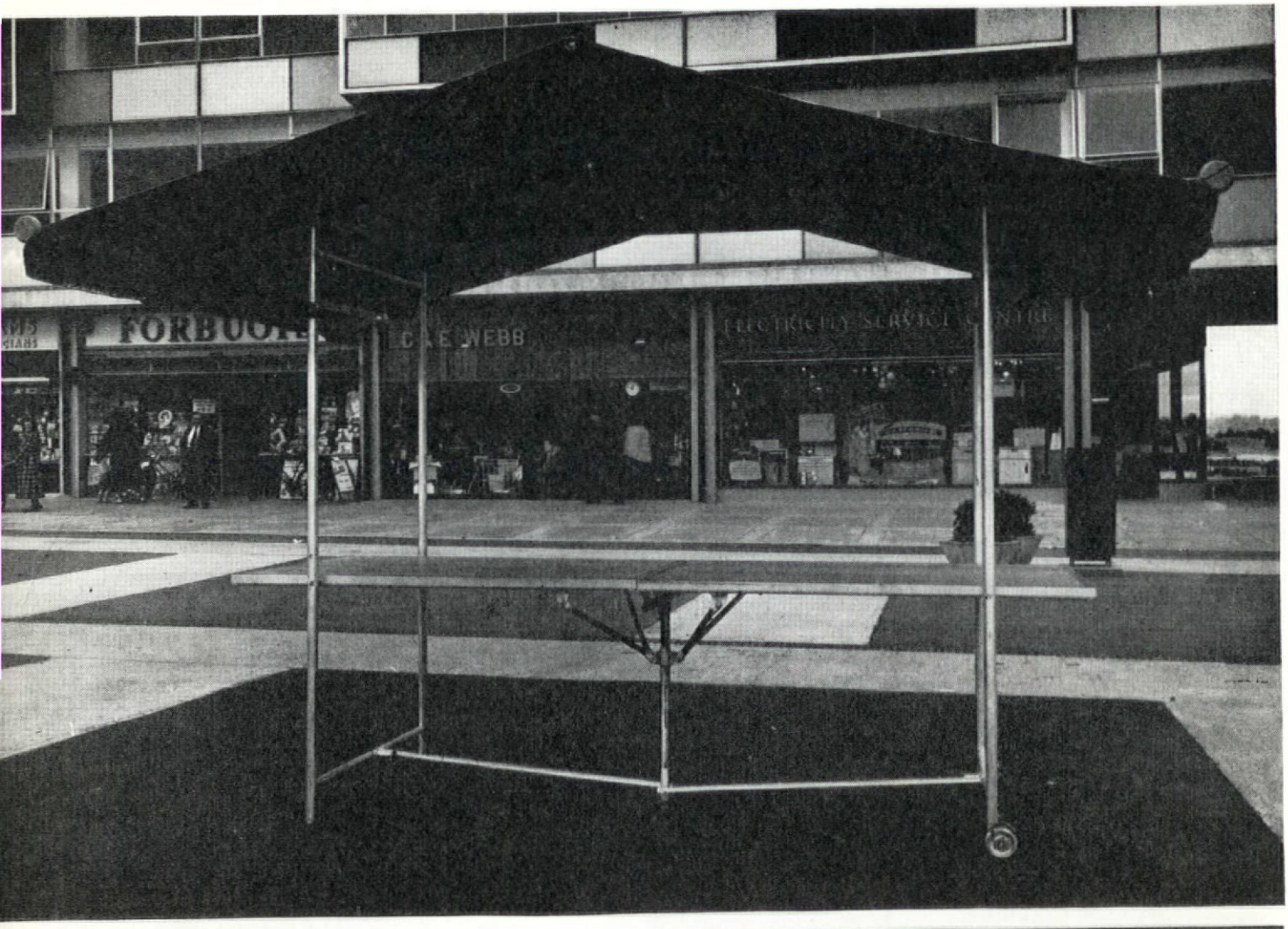


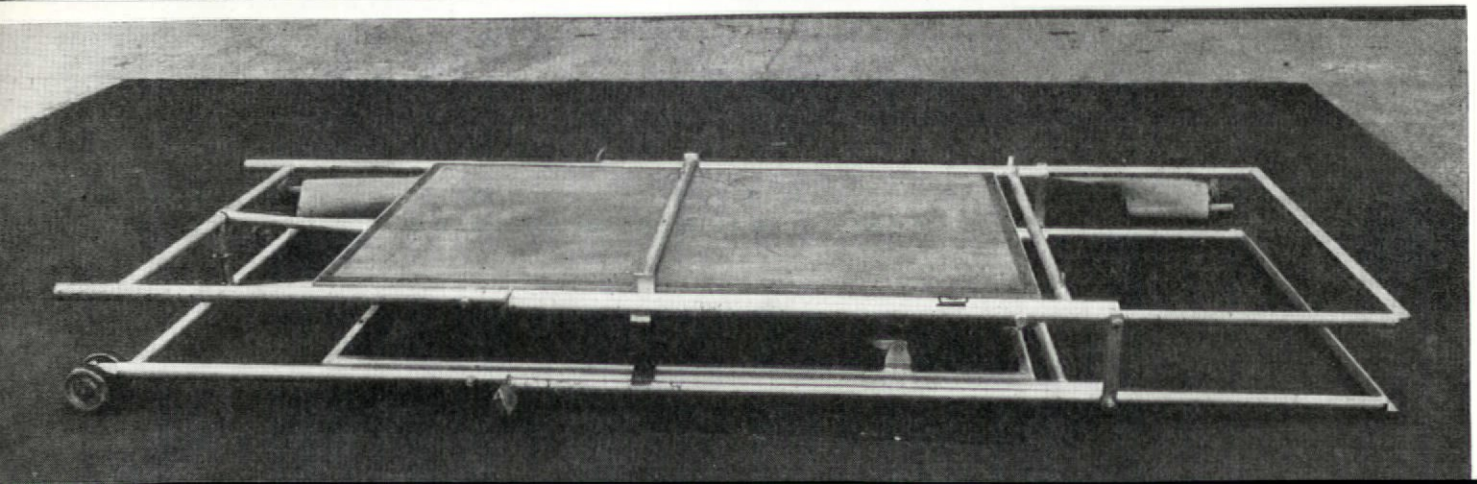
SECTION B–B. scale 1" = 1'– 0"

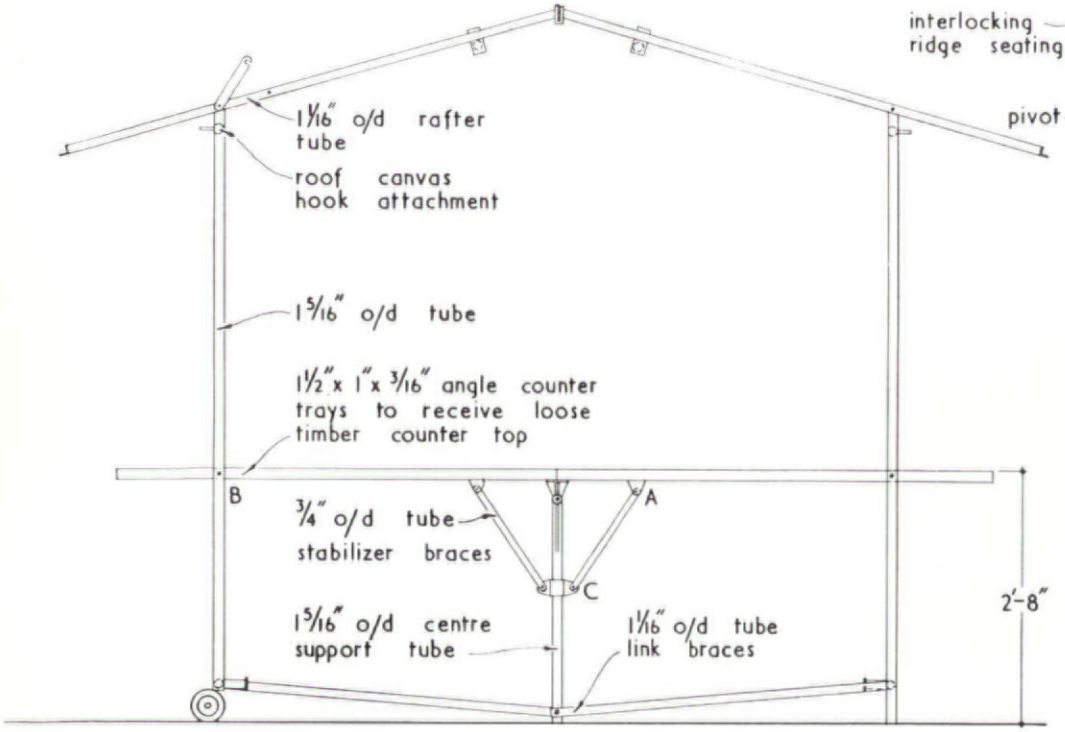
PORTABLE MARKET STALL: HARLOW NEW TOWN

DESIGNED BY FREDERICK GIBBERD (architect-planner); VICTOR HAMNETT (executive architect)
HAROLD TITKIN (architect-in-charge)

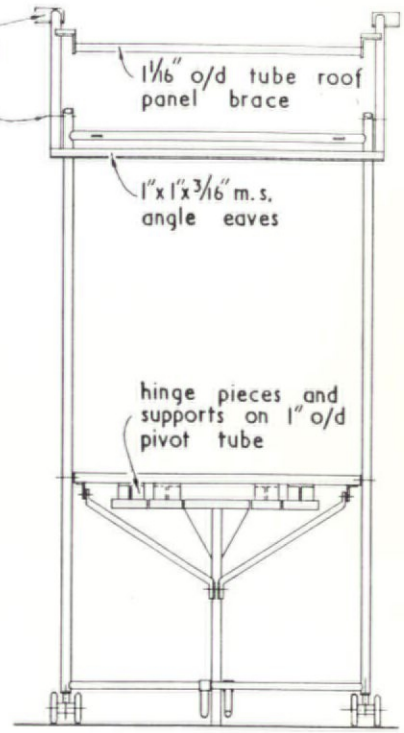
As a result of research the architects found that the market stalls previously available, being made in a dozen or more pieces, required a lorry and six men and averaged 30 minutes each to erect. This design, which they developed with the manufacturer, can be wheeled out of its store and takes two men an average of 2¼ minutes to erect. For an order of 50 the cost per stall (excluding the name board) was £55, to which must be added an average of £7 for the canvas which, being of different colours, varies in price. It is calculated that the saving in labour will offset the extra cost in about one year. The structure is m.s. tube primed, rust-proofed and painted with aluminium paint: the three steel tubes which hold the canvas are galvanised. The counter is ⅜-in. resin-bonded waterproofed ply framed in hardwood and screwed to the structure.



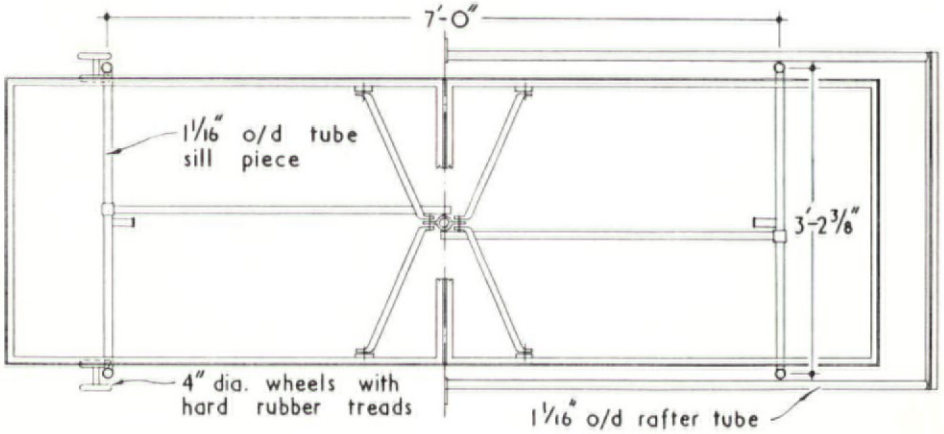




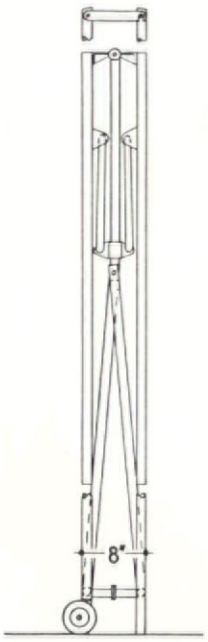
FRONT ELEVATION.
stall open



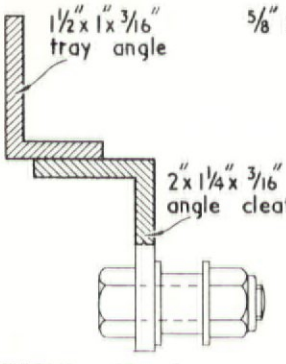
END ELEVATION.



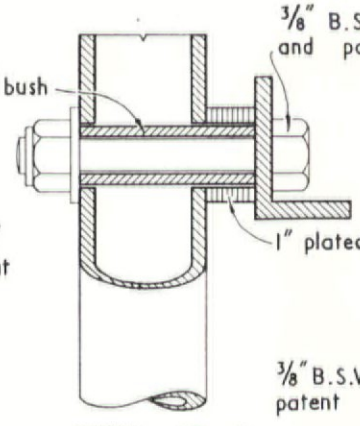
PLAN.
scale 1/2" = 1'-0"



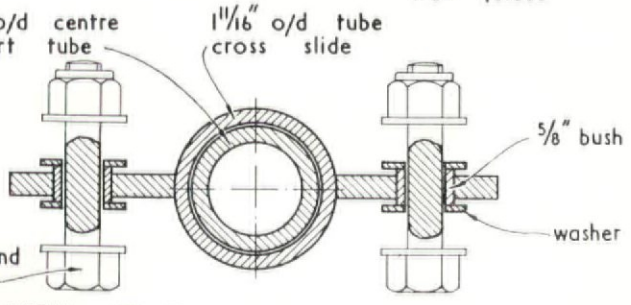
FRONT ELEVATION.
stall folded



DETAIL AT A.
scale 1/2 full size



DETAIL AT B.

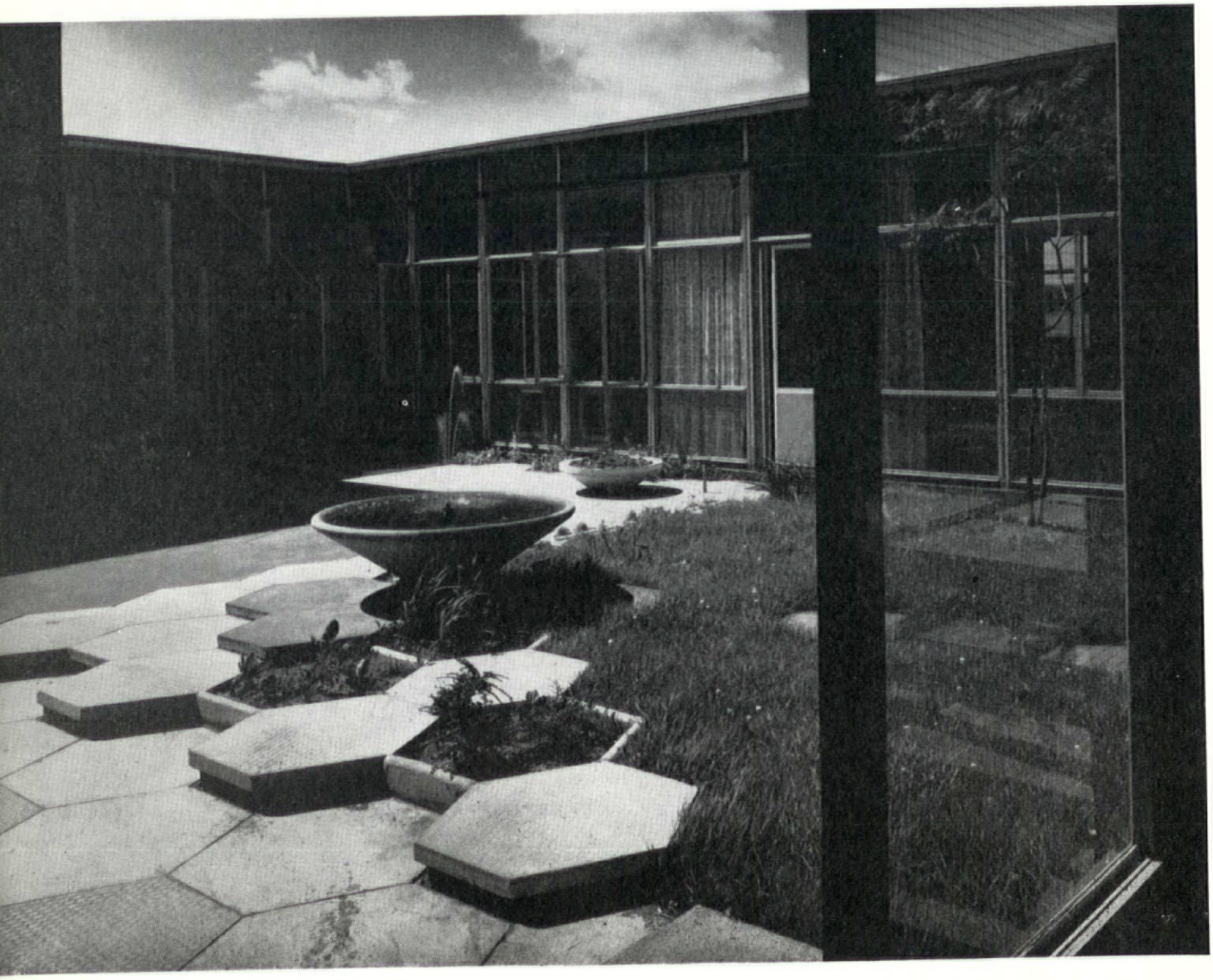


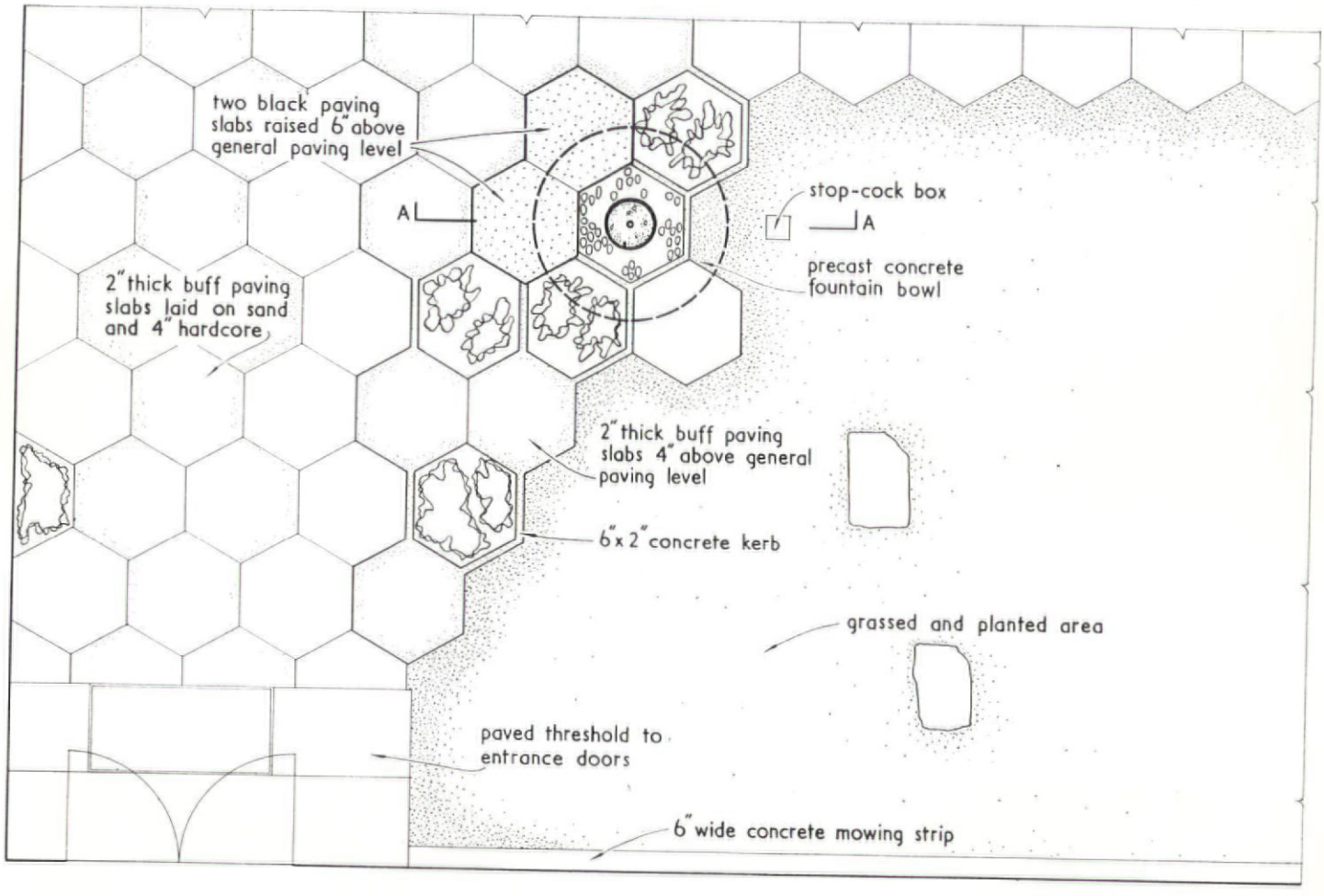
DETAIL AT C.

FOUNTAIN: SCHOOL AT COVENTRY

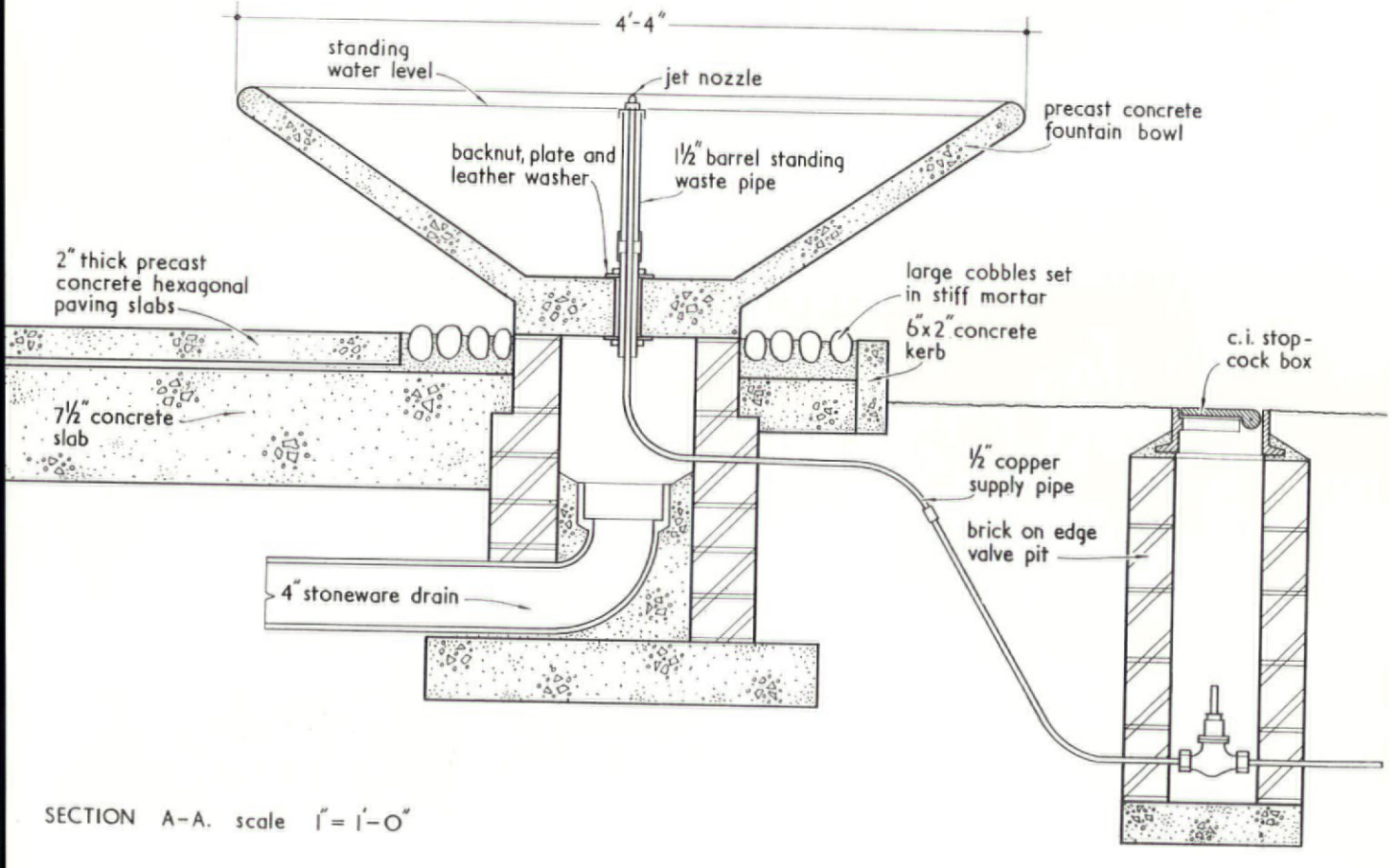
DESIGNED BY THE CHIEF ARCHITECT, M.O.E. in association with THE CITY ARCHITECT, COVENTRY; PETER NEWNHAM AND DARGAN BULLIVANT (architects-in-charge)

Though the strong light diminishes differences of tone in the photograph, the precast concrete hexagonal paving slabs are in three colours: black, buff and grey. Only the raised slabs rest on a concrete base; the remainder are laid on 1 in. thick 1:3 cement-sand mortar on 4-in. hardcore. The kerbs are of 6-in. by 2-in. section and, where not cast in with the main foundation slab, are held in place by a haunched concrete foundation. A detail of interest on the fountain itself is the incorporation of the overflow in the vertical column containing the jet nozzle.





PART PLAN OF COURT. scale 1/4" = 1'-0"

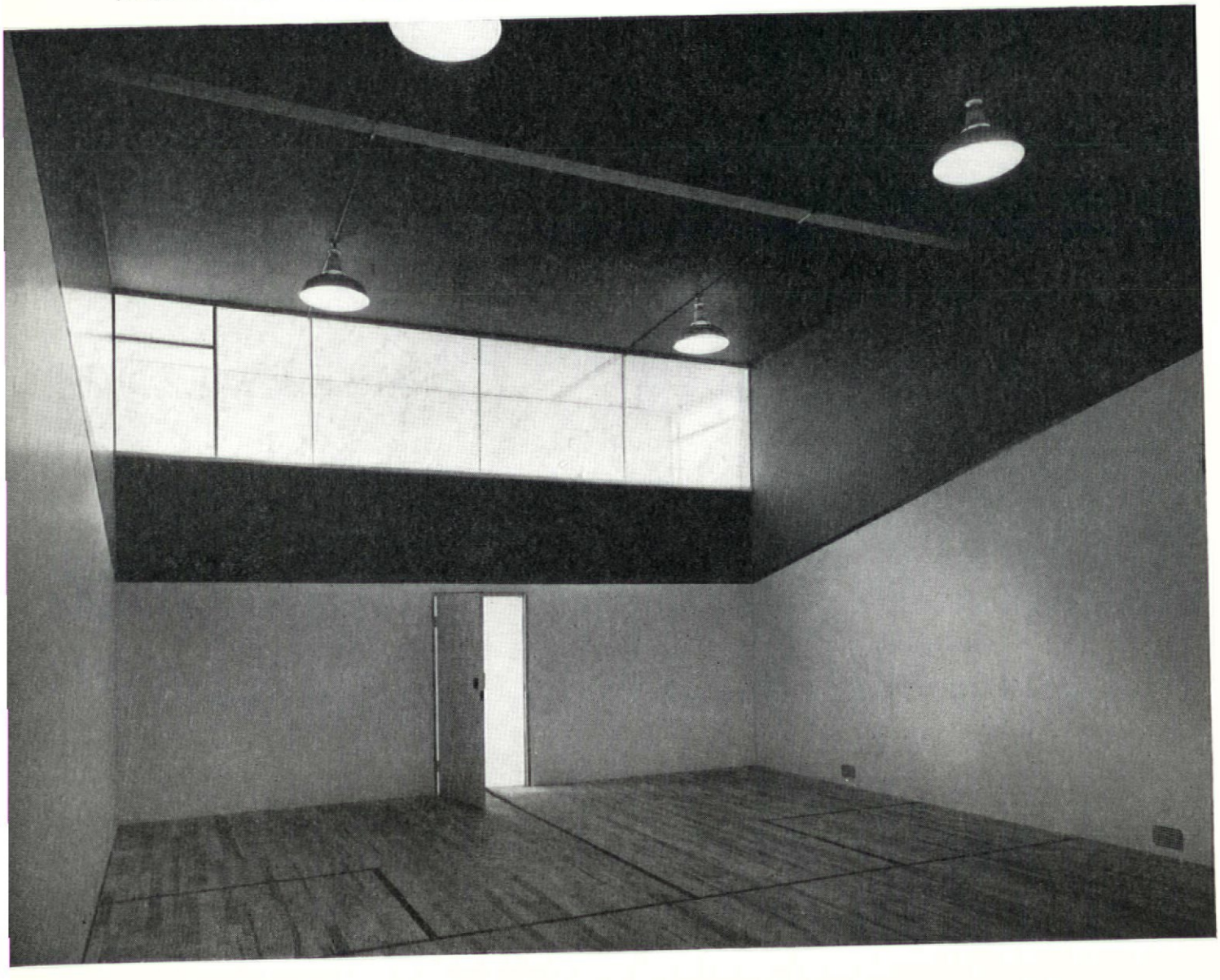


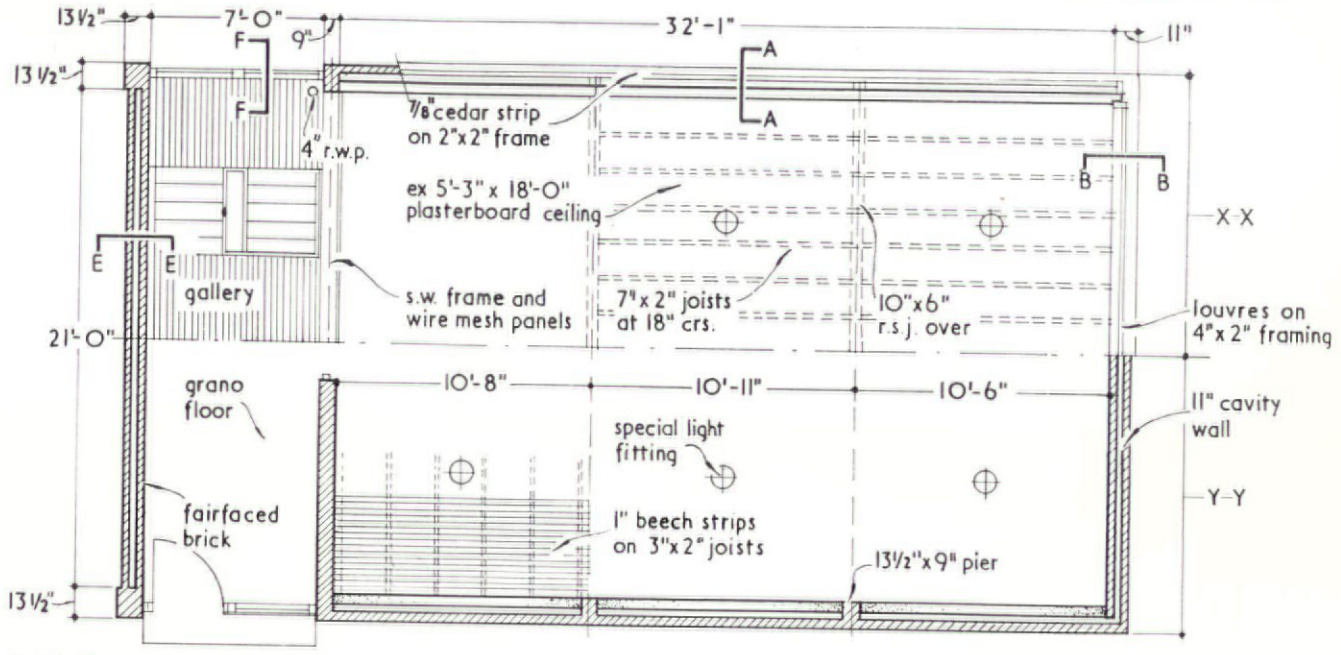
SECTION A-A. scale 1" = 1'-0"

SQUASH COURT: ST. ANTONY'S COLLEGE, OXFORD

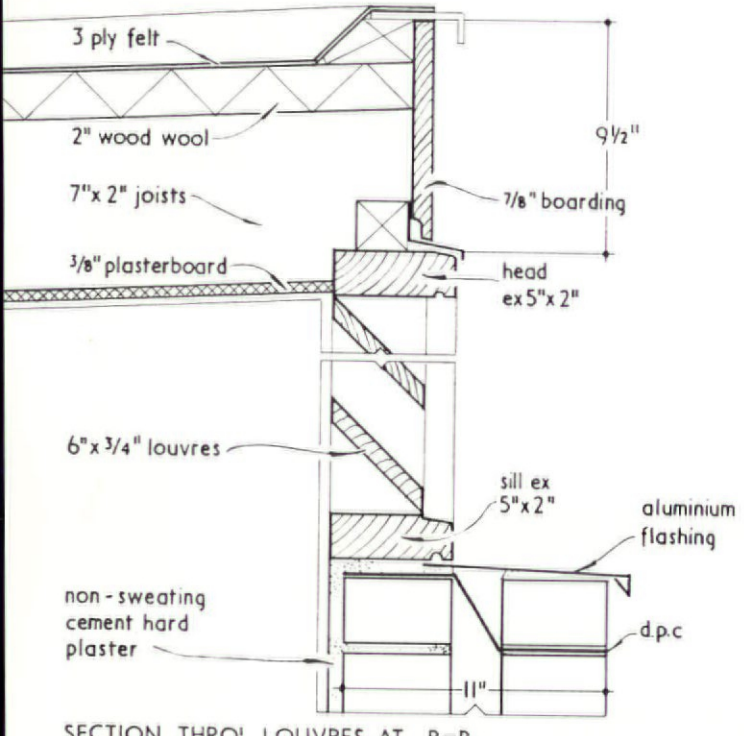
DESIGNED BY STEPHEN GARDINER

The spectators' gallery is protected by a wire-mesh screen. The door to the court has been specially designed so that when shut it is flush with the wall surface, and has an inset handle. The wall lines are 1-*in. strips of aluminium-alloy, fixed to timber grounds, and are painted scarlet. Each light fitting contains a* 500 *watt bulb and has a wire guard.*

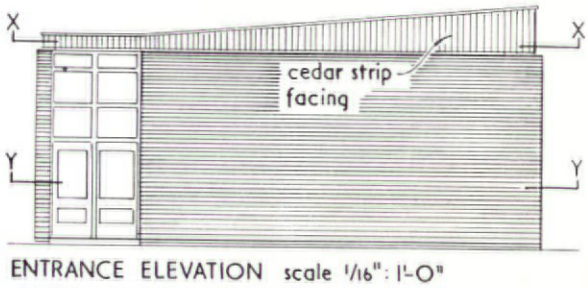




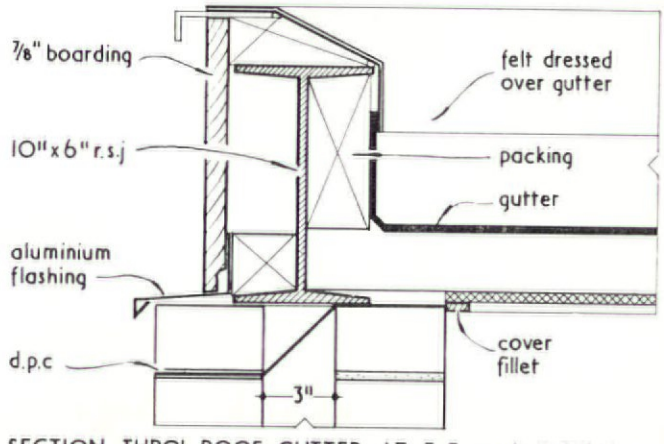
PLAN AT LEVELS X-X AND Y-Y. scale 1/8"= 1'-0"



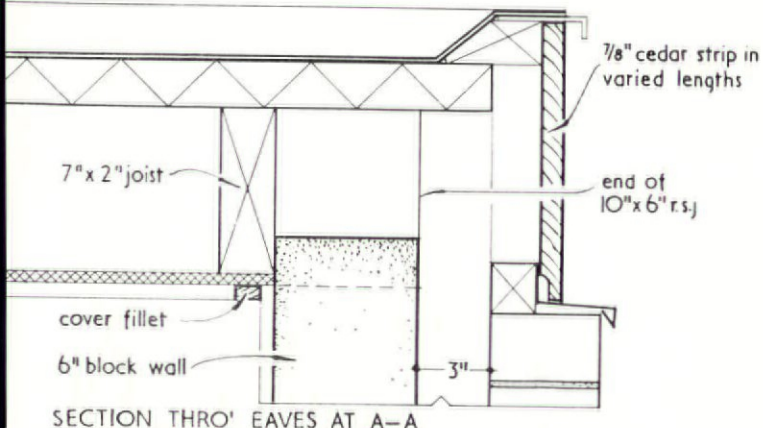
SECTION THRO' LOUVRES AT B–B.
scale 1/8 full size



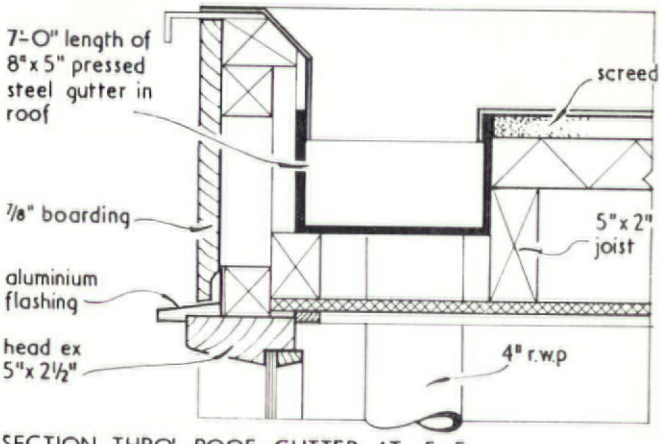
ENTRANCE ELEVATION scale 1/16": 1'-0"



SECTION THRO' ROOF GUTTER AT E-E. scale 1/8 full size



SECTION THRO' EAVES AT A–A
SHOWING. VERTICAL BOARDING. scale 1/8 full size

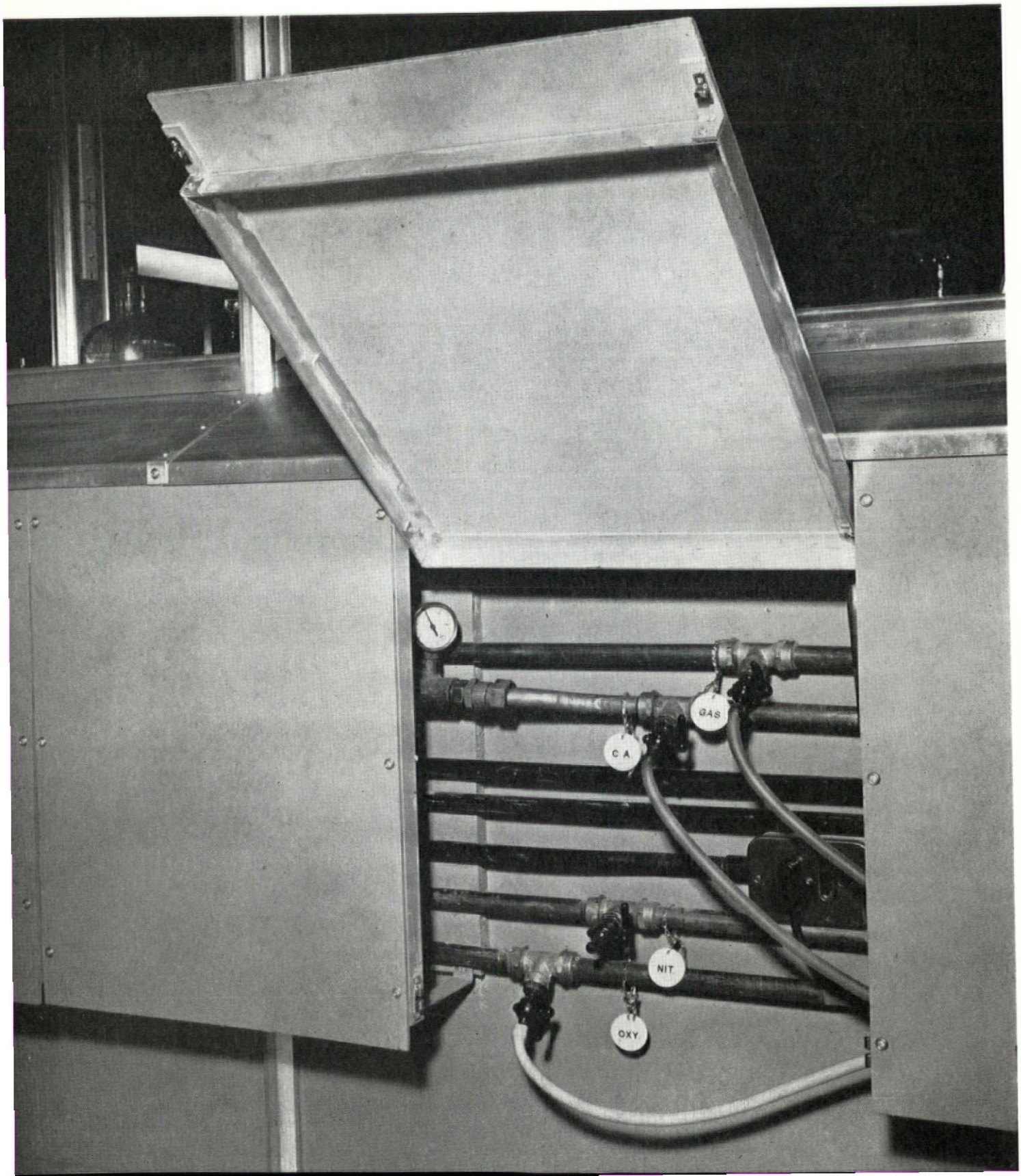


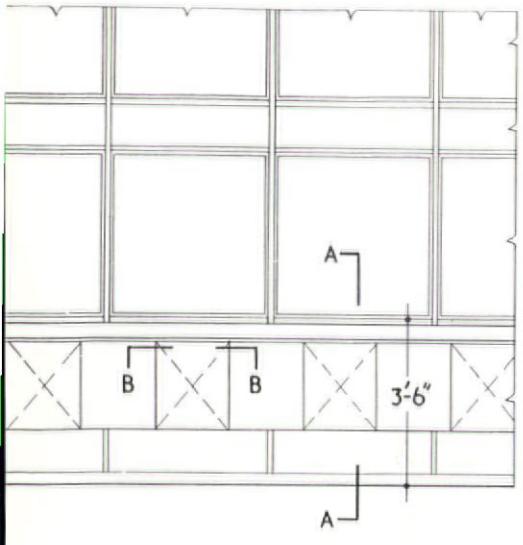
SECTION THRO' ROOF GUTTER AT F–F.
scale 1/8 full size

SERVICE DUCT: FACTORY AT WARE, HERTS

DESIGNED BY PETER DUNHAM, WIDDUP AND HARRISON

An interesting version of a laboratory wall duct in association with a system of aluminium framed partitions. The main laboratory services (electricity, gas, compressed air, nitrogen and oxygen) are provided with outlets at 3 ft. 4 in. intervals along the wall and access to these outlets is provided by a hinged flap.





ELEVATION. scale ¼" = 1'-0"

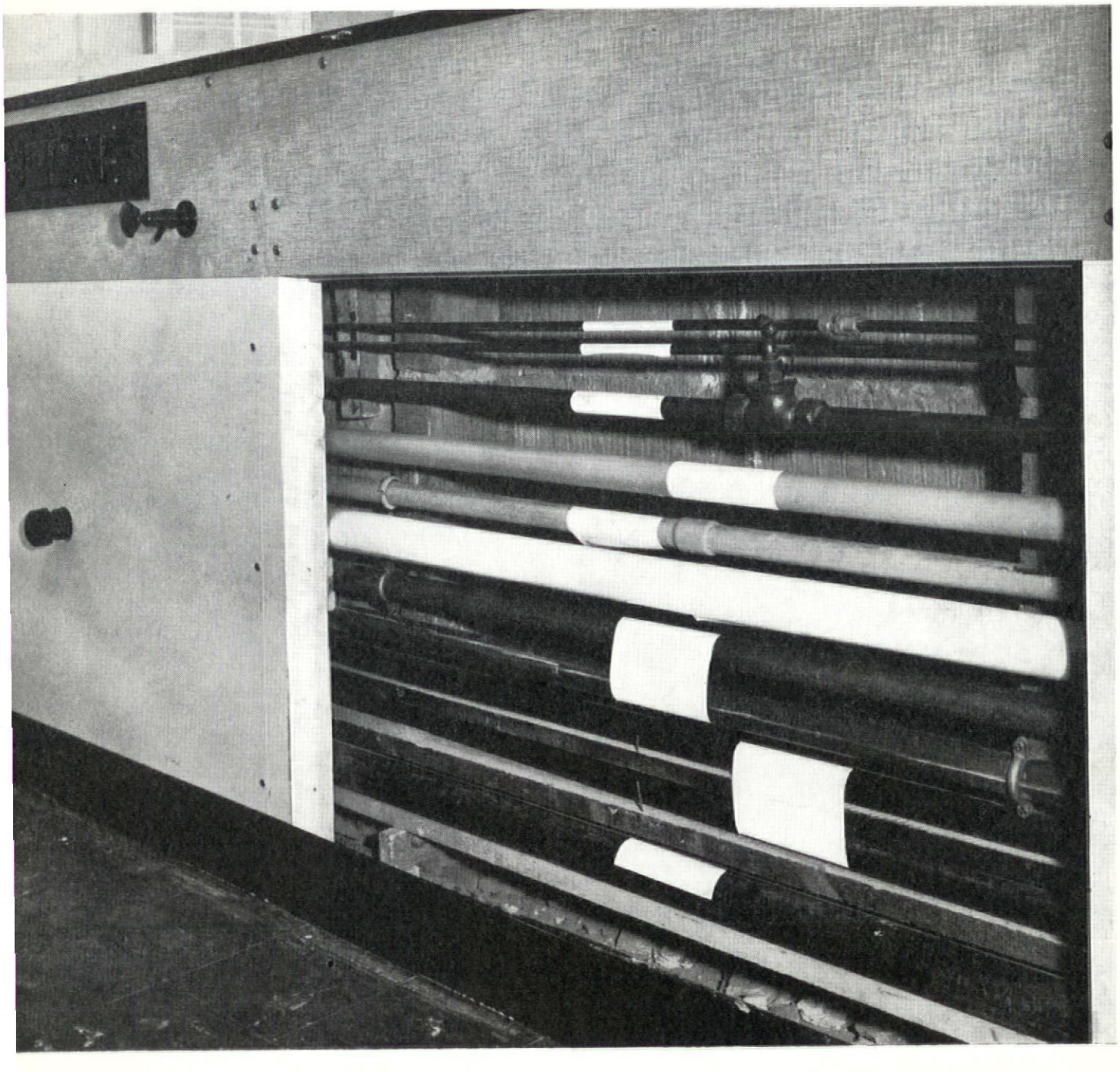
SECTION A-A. scale ⅜ full size

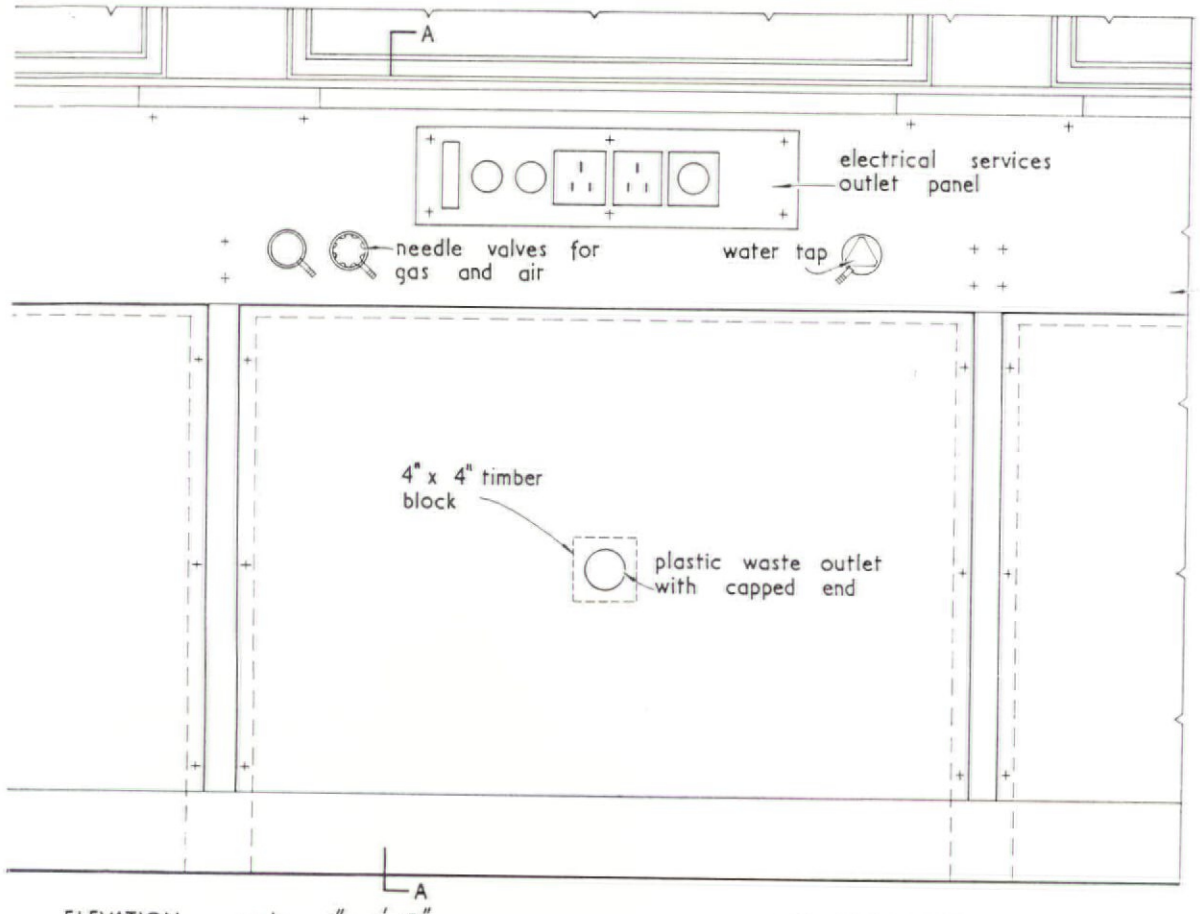
PLAN AT B-B. scale ⅜ full size

SERVICE DUCT: LABORATORIES AT ENFIELD, MIDDLESEX

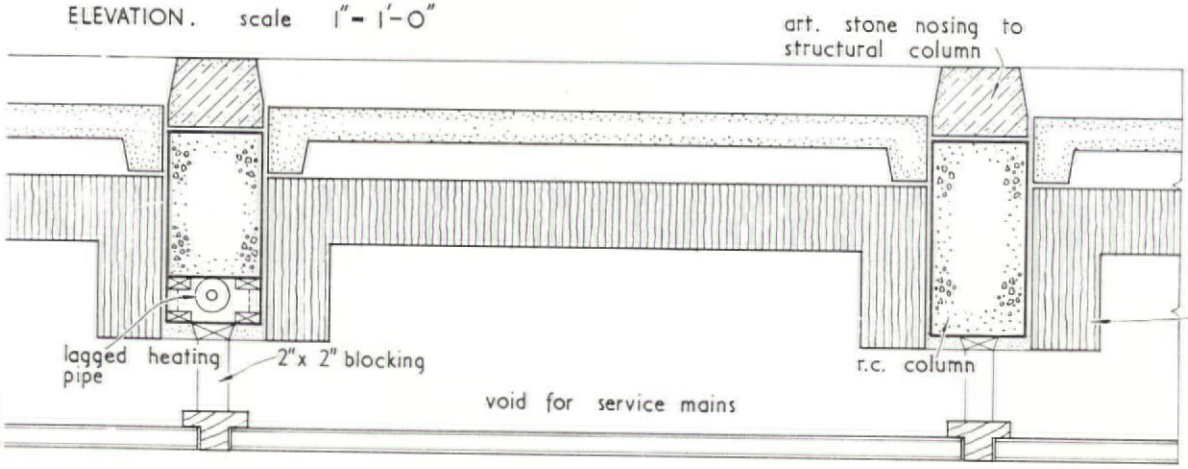
DESIGNED BY G. A. JELLICOE

The interest lies in the materials used. The sill is afrormosia, the panel below (which is above bench height) is melamine plastic-faced plywood. Behind it is a 6-in. by 6-in. m.s. duct for the electric cables. The lower panel is hollow-core plywood, painted, and the skirting is steel to match the steel partitions used in the laboratory. The pipes (reading from top) are two ½-in. dia. copper-alloy pipes carrying oxygen and hydrogen respectively, next six steel pipes carrying tank water, high-pressure gas, low-pressure gas, compressed air and two pipes carrying the flow and return of recirculated cooling water for use with laboratory furnaces. Pipes are painted blue for water, yellow for gas and white for air in accordance with BS. 1710:1951. Last are three polythene pipes (supported on layboards), two carrying 'mixed bed conductivity water' (a high purity demineralised water) and the lowest carrying the laboratory waste. The return of the lightweight concrete block walling serves the double purpose of providing easy fixing for the pipes and extra cover for the columns to satisfy fire regulations.

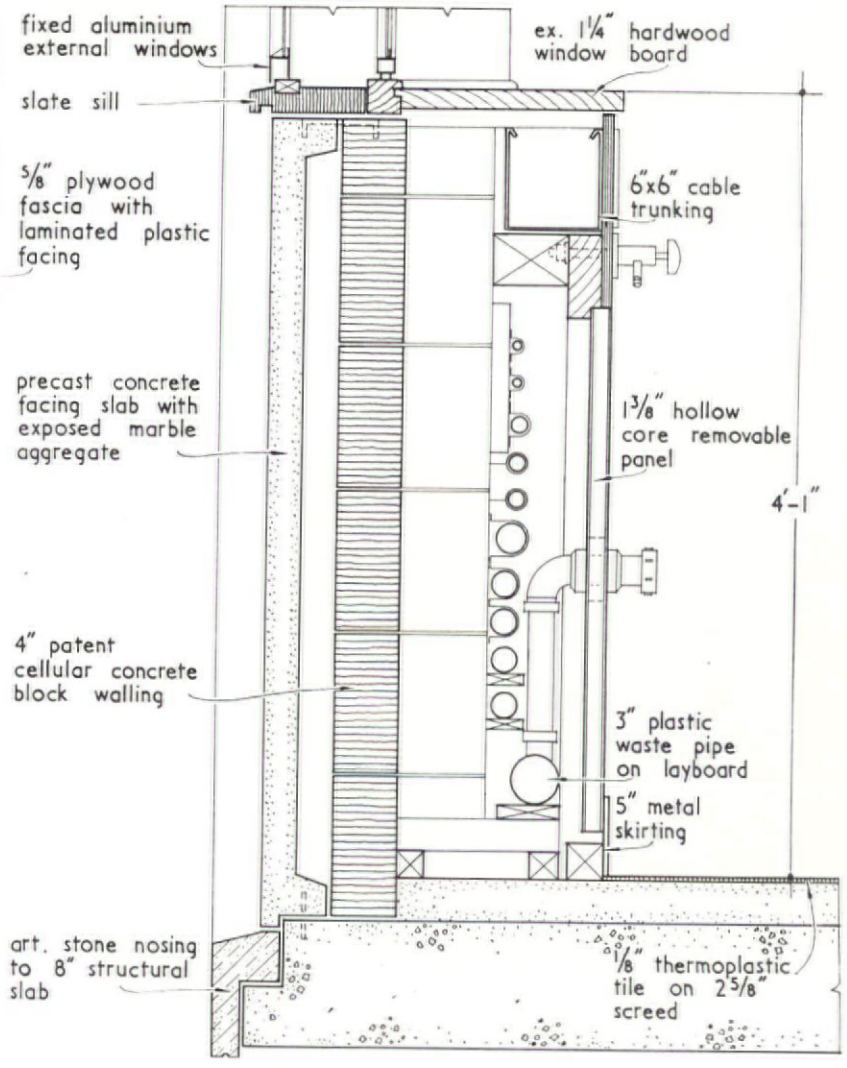




ELEVATION. scale 1"= 1'-0"



PLAN. scale 1"= 1'-0"



SECTION A-A. scale 1"= 1'-0"

This is a combined index for Volumes 1, 2, 3, 4 and 5. The references printed in roman type refer to the present Volume (Volume 5), and those printed in italics refer to Volumes 1, 2, 3, and 4.