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Publication date Seventh of each month
Publishers The Standard Catalogue Co. Ltd.
26 Bloomsbury Way, London, WC1 HOLborn 6325.

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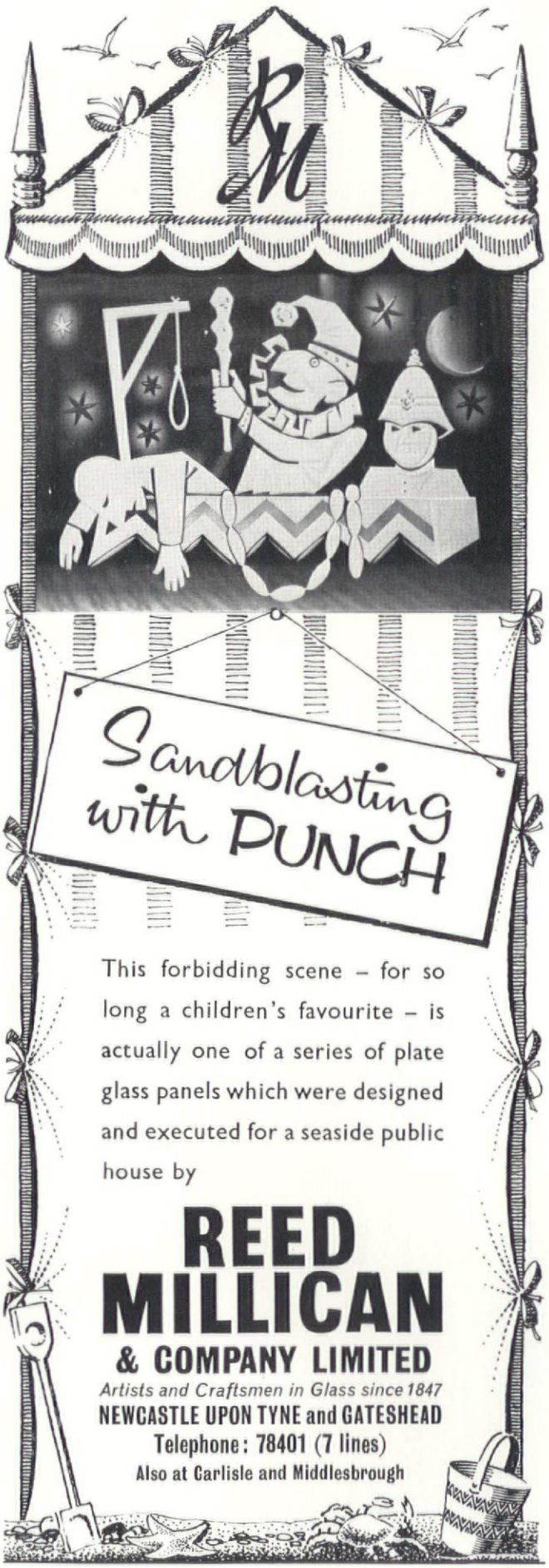

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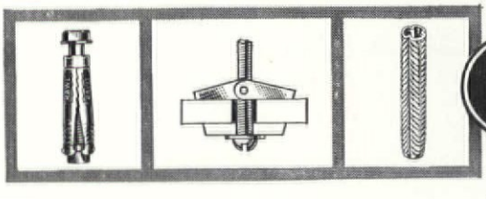

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Book notes

The classical language of architecture

John Summerson. University Paperbacks, Methuen & Co. Ltd. 8s. 6d.

This book is the outcome of six talks given by Sir John Summerson on the BBC during the months of May and July 1963. It is in essence a primer on classical architecture, delivered and written in an impeccable and simple style. Summerson begins his account of classicism with Rome and then he jumps to the architecture and thinking of Alberti and Bramante in the fifteenth and sixteenth centuries. He is at great pains to explain the 'mechanics' of classicism to the non-professional student with these simple models. As a result of its high speed over-simplified approach, the book as a printed text tends to lack order; the sequence of illustrations themselves reveal at once the random nature of the account. From St Andrea Mantua we quickly arrive at Castle Howard and St Paul's, only to find ourselves confronted a page or so later with Giulio Romano's Palazzo de Te at Mantua, a great favourite of the author's, being here given a full page. So we run on from Woolaton Hall to the Altes Museum of Schinkel, passing on the way St Peter's, Rome, and the Dulwich Art Gallery. The latter building permits a small piece on Soane and the information that the Greek revival started in England. On a number of other matters Sir John is quite as outspoken, for instance, on page 12 he writes 'It is quite certain that the Doric order derives its form from a primitive type of timber construction.'

For the professionals, perhaps the addenda are the most welcome part of the book. A glossary of classical terms together with orders after James Gibbs' as models are not amongst our usual stock-in-trade and occasionally perhaps we need such references. Even more unusual, succinct and unique is the 'Notes on the Literature of Classical Architecture', upon which, curiously enough, I believe one could found a most lucid history of classical architecture since Vitruvius.

K. Frampton

The Chicago School of Architecture

Mark L. Peisch. Columbia University Studies. 12s. 6d.

The Chicago School of Architecture

Carl W. Condit. University of Chicago Press. 63s.

These two books, the one soft cover by Mark Peisch and the other hard cover by Carl Condit, have been confusingly published at the same time by the houses of two American universities. Fortunately the approach to the subject in each case has been entirely different and on no occasion are the illustrations of one book duplicated by those of the other. Indeed, only on very few occasions are the same buildings included in both books. This leads to the conclusion borne out by the books that there were at least two very different schools of architecture in Chicago, flourishing in conjunction with each other, the one stemming from Wright and the other from Le Baron Jenny.

Mark Peisch's book is subtitled 'The Early Followers of Sullivan and Wright', and deals mainly with the work of a group of relatively little known architects who, upon eventually emerging from a considerable apprenticeship in Wright's Oak Park studio, were destined in their independent work to be more or less overshadowed by the genius of their 'master'. This study of a 'school' of architecture deals with work of unfamiliar figures such as Walter Burley Griffin (the planner of Canberra), Hugh Garden, Purcell, Elmsie and George W. Maher. In effect, it is a book built around the distinguished career of Griffin who in his youth, at least, followed with his own talent the path blazed by Wright. In his middle-age, however, he slipped from Wright to the school of grand manner town planning established by Burnham and produced Canberra. Amongst the book's marginal charms is a revealing portrait of Sullivan, made a year before his death.

Carl Condit's book, an expansion of his earlier study 'The Rise of the Skyscraper', is a different matter altogether. It is subtitled 'A History of Commercial and Public Buildings in the Chicago Area 1875–1925'. This is a rigorous study of the heroic Chicago tradition, as most of us have come to know it, from Gideion's writings.

However, this study is more limited and at the same time more exhaustive than anything that has been attempted hitherto. This is exclusively the history of Chicago building of the period and as such, it throws up both names and buildings which were hitherto unknown; buildings such as Holabird and Roche's Mandel Brothers building of 1905, almost as distinguished on a small scale as the famous Carson, Pirie, Scott store and firms such as Schmidt, Garden and Medwin, who kept the Chicago Tribune tower entry of 1922. The Chicago tradition was firmly established and fully developed in the twenty years of building that followed the great Chicago fire of 1871. Yet this book does much to show the extent to which this tradition persisted long after the loss of the grand old man of architecture, Root, in 1891, and the disastrous Chicago Exhibition of 1893; from Holabird and Roche's Mandel Brothers annexe of 1905

/continued on page AD/7

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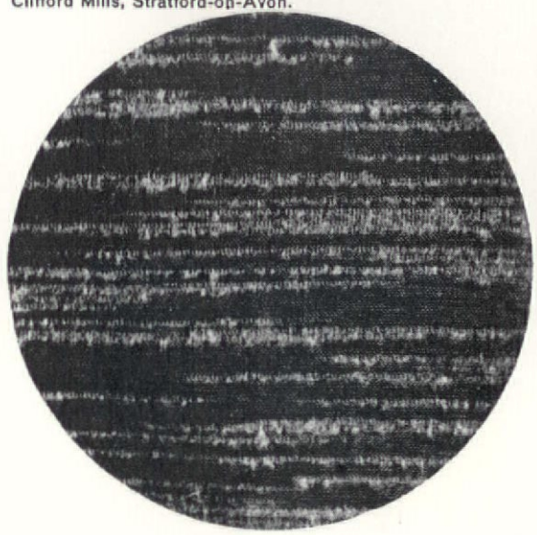

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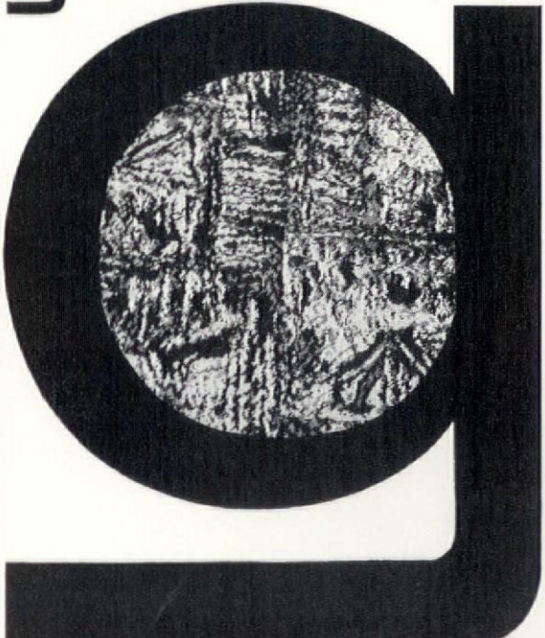

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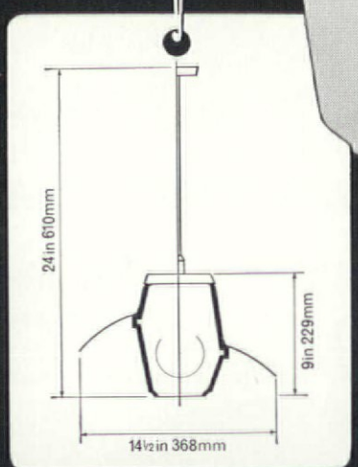

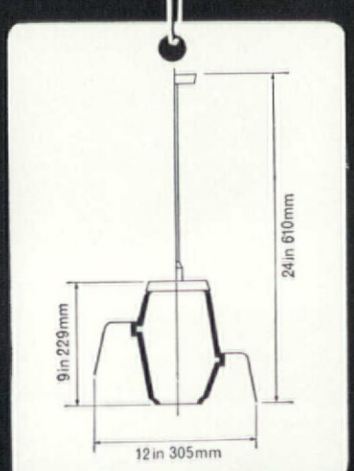

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right up until the present, something of this great tradition has remained alive.

K. Frampton

The Comprehensive Industrialized Building Systems Annual 1965

Edited by A. F. L. Deeson. House Publications Ltd. 48s.

A comprehensive illustrated catalogue of industrialized system building is a welcome addition to the reference shelves of all who have been faced with the task of obtaining and comparing the mass of information available on this subject. The Annual is concise, clearly presented and well indexed. Each system is presented on a separate page and described briefly to a standard plan. The description is, perhaps, too brief. Lack of technical detail and comparative cost data make it impossible to assess directly the relative merits of the various systems. Another fault is the absence of an ordered arrangement for drawn details, plans and photographs. The illustrations, while giving a general impression of the system, fail in several cases to give a clear idea of the construction or the appearance of the finished building. Twenty-one systems are not illustrated. This book should prove most useful both as an aid in the selection of a short list of systems for a particular application and as a guide for all who wish to familiarize themselves with the current expression of industrialization in the building industry.

B. J. Jolly

Exposed concrete finishes, Vol. 2

Gilchrist Wilson. C.B. Books Ltd. 50s.

The second volume completes the author's survey of finishes to concrete, and covers the whole field of precast concrete. Much of the information has already been published elsewhere, but is now brought together in one volume. The book will provide a valuable source of reference, setting out the best in present-day practice.

Chapters 1, 2 and 3 are devoted to paving, flooring and block walling respectively, and include information on general construction as well as the actual surface finish. Specification notes are included in all three chapters.

Chapter 3 includes useful information on shrinkage and control joints, although it is felt that the advice on joints will remain the ideal, seldom achieved in practice owing to structural requirements and general details.

Chapter 4 deals with cladding panels of all types. Information is included on weathering, tolerances, quality of concrete, structural design and joints, in addition to the actual surface finish.

The effect of tolerances in the supporting structure on the fit of panels is mentioned, but more emphasis on this point would be helpful.

The data on joints is from the latest B.R.S. and C. & C.A. tests, and covers both open and sealed types. There is also a useful summary of the joint sealants currently available. The more expensive synthetic rubber-based materials are recommended, but no indication of cost differences is given.

An appendix is provided which lists, county by county, firms supplying precast products. This will soon fall out of date, and should be accompanied by a warning that users should assure themselves that the firms invited to tender are in fact capable of carrying out the work to the required standard and in the time required.

V. F. Dowsett

Alphabet 1964

R. S. Hutchins. James Moran Ltd. 42s.

The first edition of a new annual, *Alphabet 1964*, presents nothing original in an already well documented field of study. Its appeal lies in the fact that a wide variety of applications of lettering are presented in one book. Fourteen different areas of study ranging from the Trajan letterform to computer characters are documented, each section being written by a specialist in that field.

The choice and quality of the illustrative matter is good for a book in this price range. As a bonus for students of typography, each chapter is set in a different typeface and printed on a paper suited to the characteristics of that face.

A. S.

Lettering today

John Brinkley. Studio Vista. 63s.

Described as a 'survey and reference book', Studio Vista have added another informative and well presented volume to their range of books on graphics. Unlike the book reviewed above, John Brinkley has selected only four areas of work, but being interrelated they give *Lettering today* a unity which was sadly lacking in *Alphabet 1964*.

The four sections (calligraphy, advertising and packaging, books and magazines, and architecture) are well written in common sympathy by specialists in their particular field who, together, form a critical assessment of the current trend in lettering.

Of special interest to architects is the particularly praiseworthy section by Ken Garland dealing with lettering as applied to buildings.

Containing a selection from amongst the best work in Europe and the United States, this excellently written, illustrated and designed book is of value to designers and interested laymen alike.

A. S.

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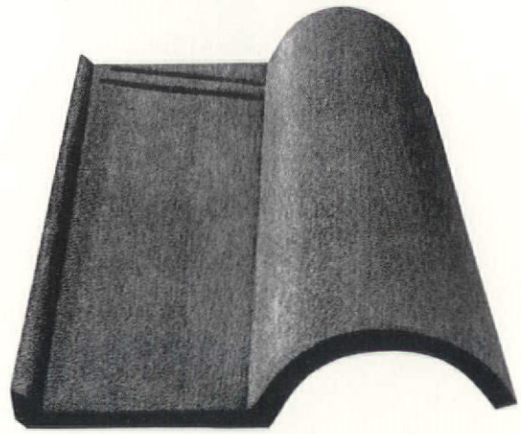

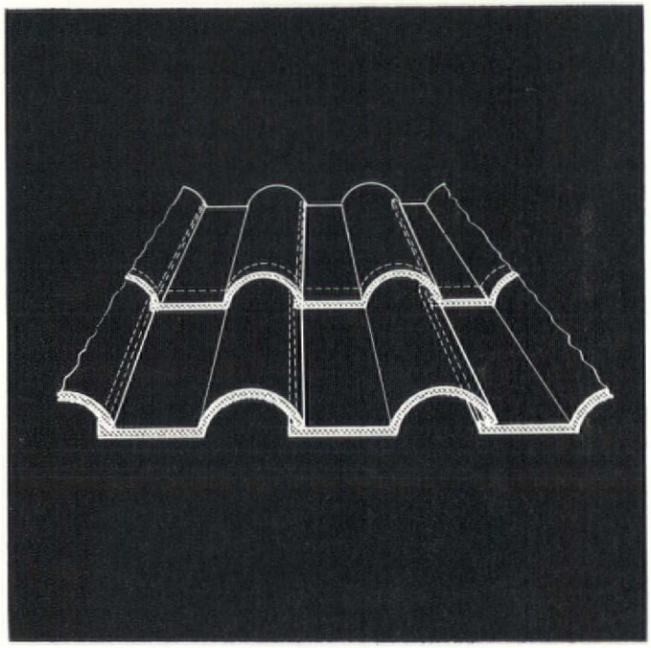

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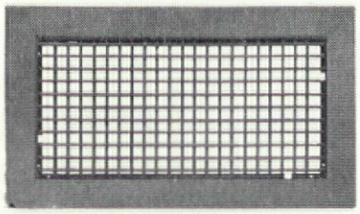
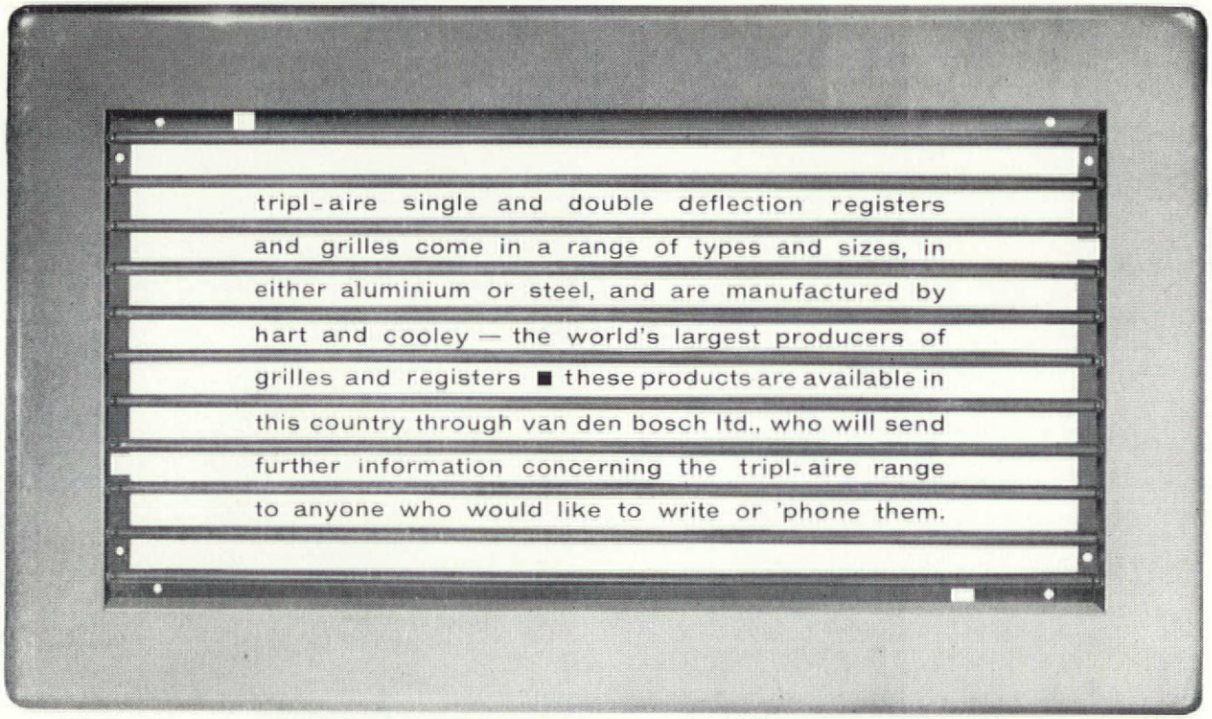


Reading between the lines



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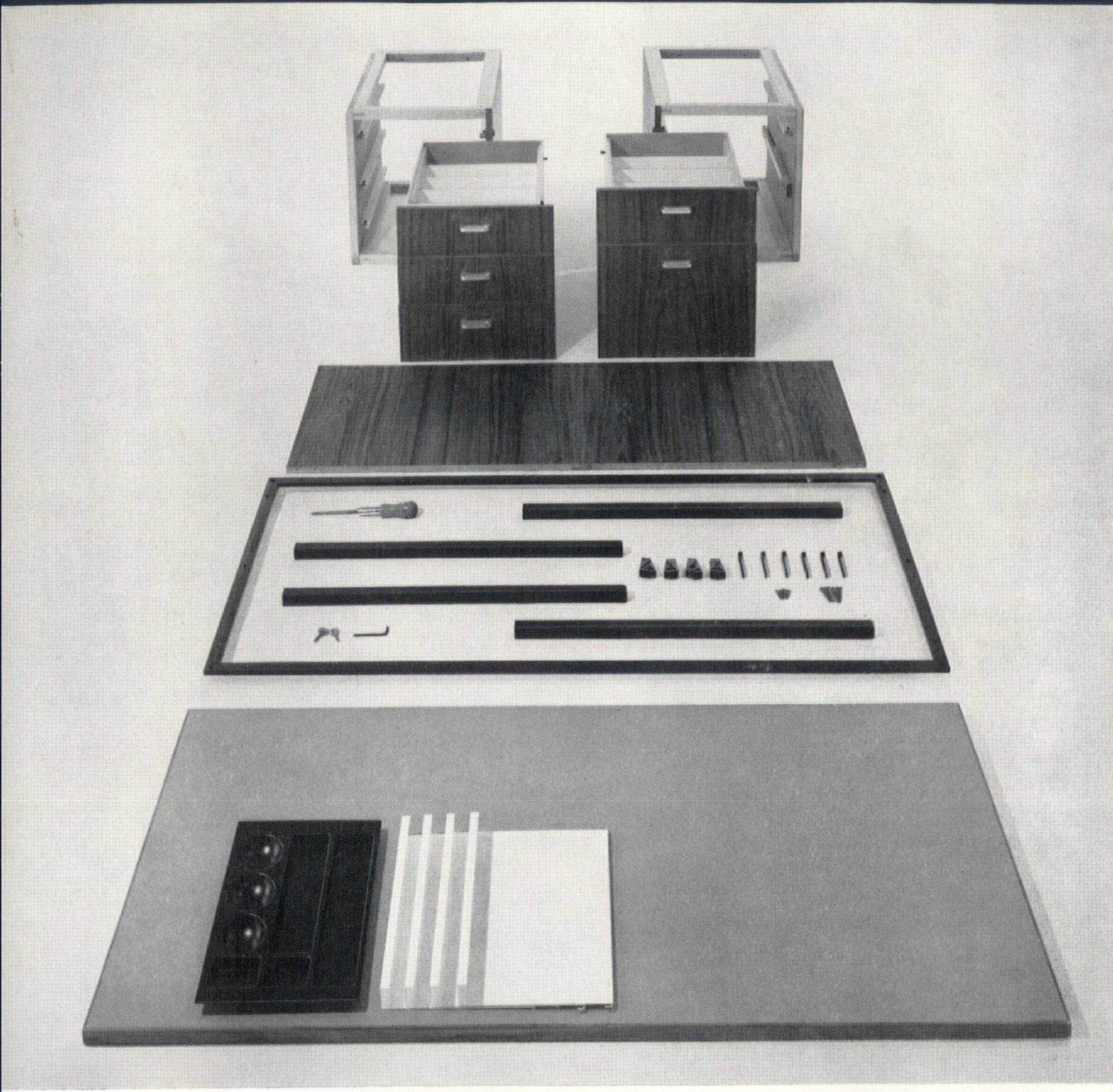

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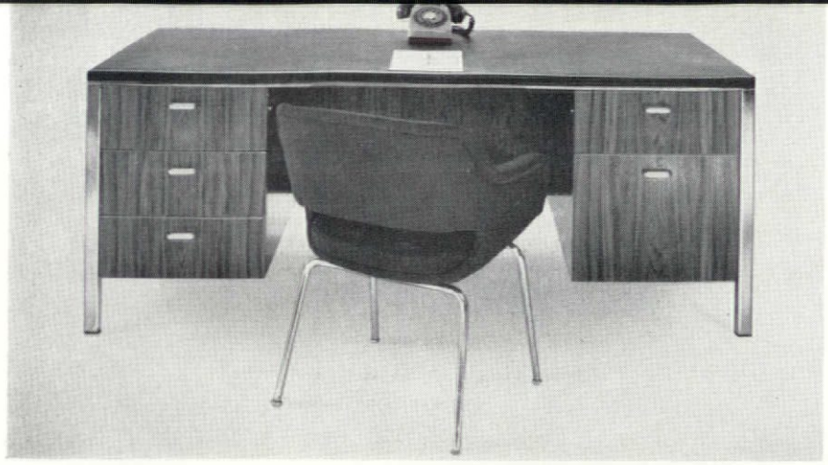

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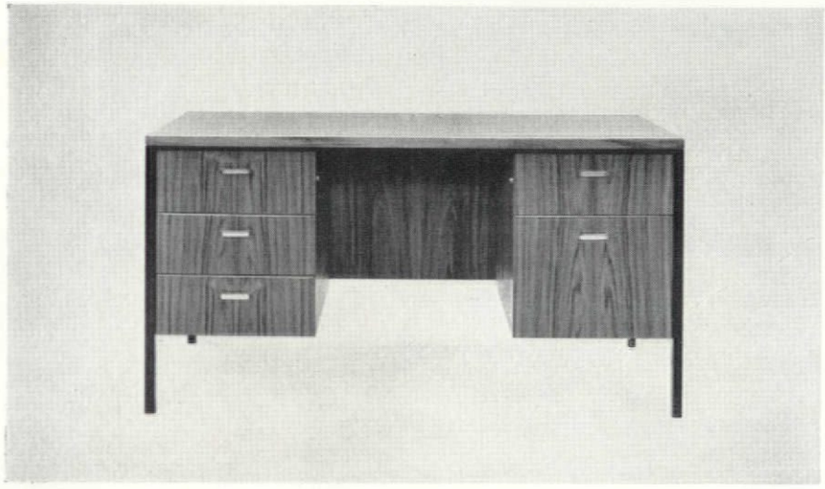
Executive desk with storage unit EUD - ESW/B2 - UF



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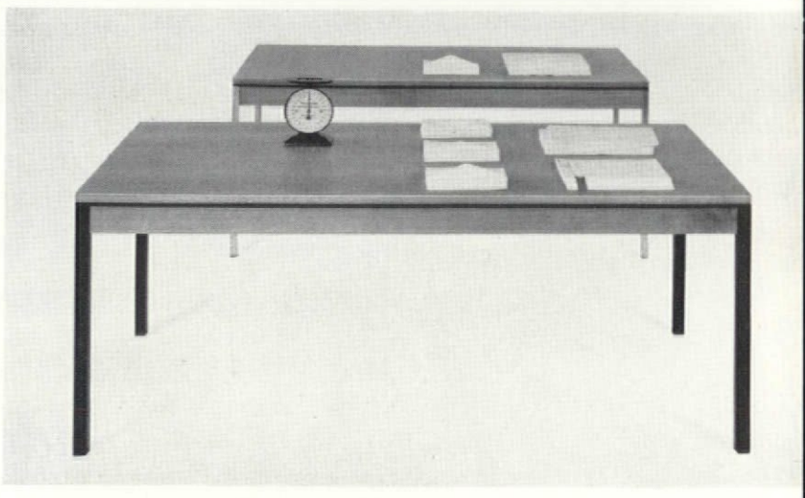

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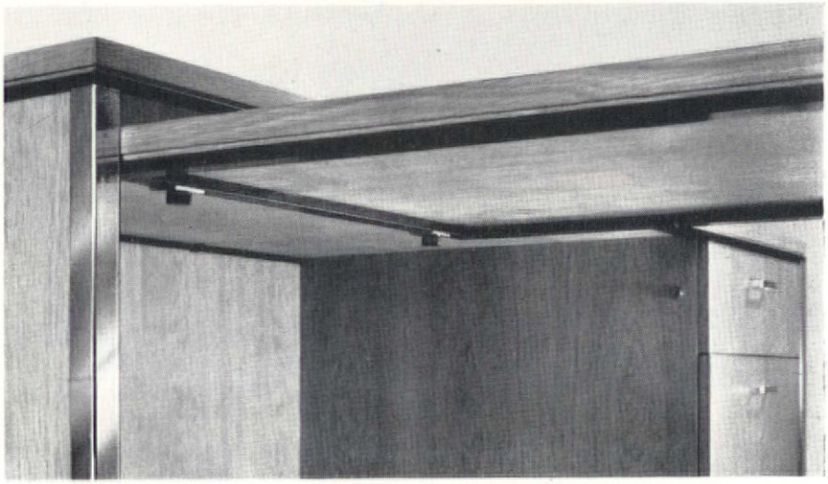

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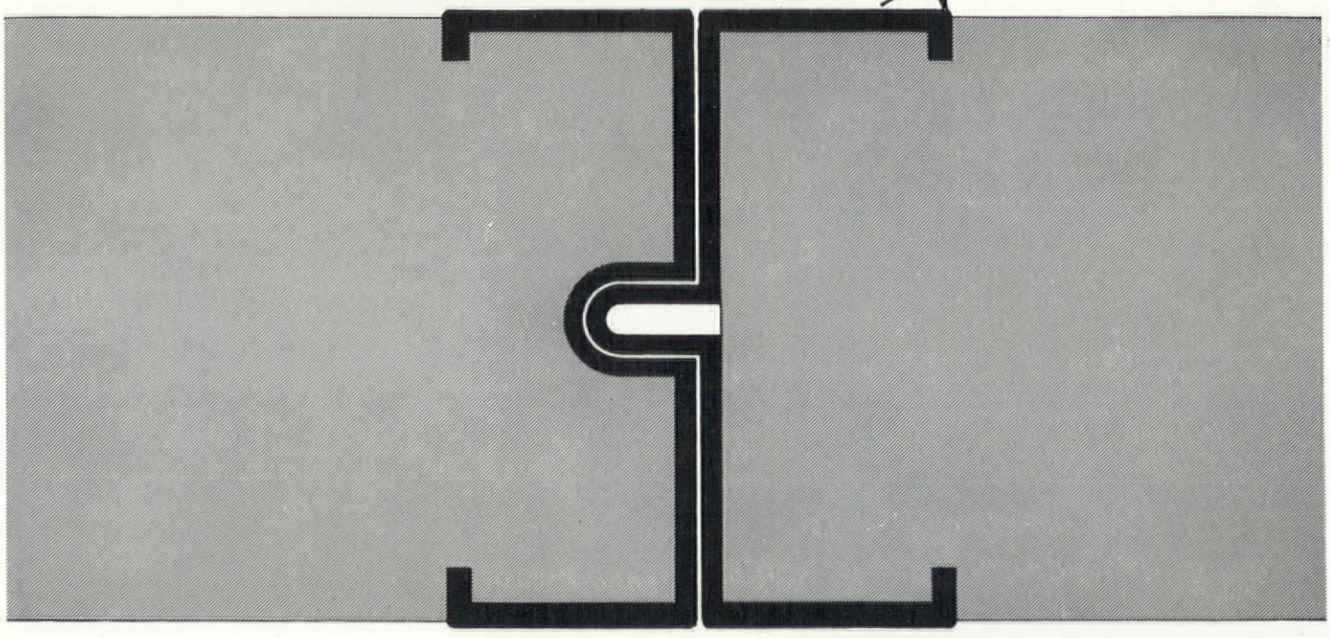

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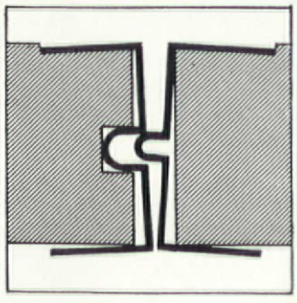

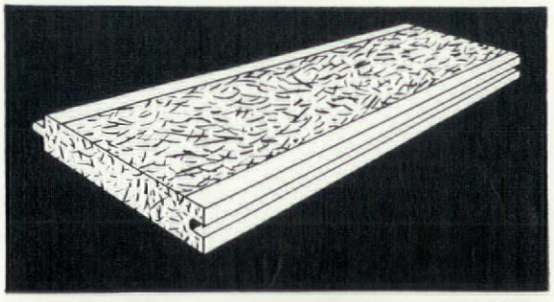

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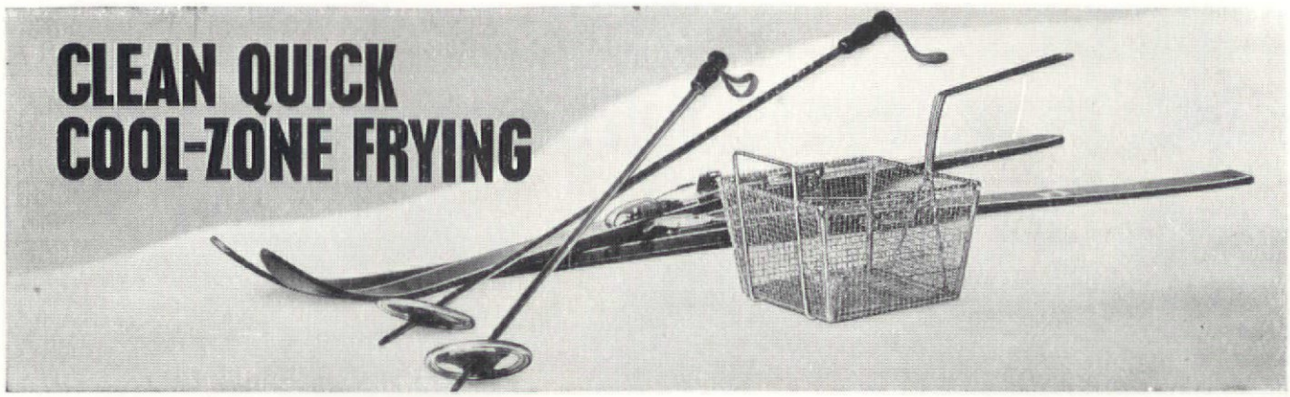

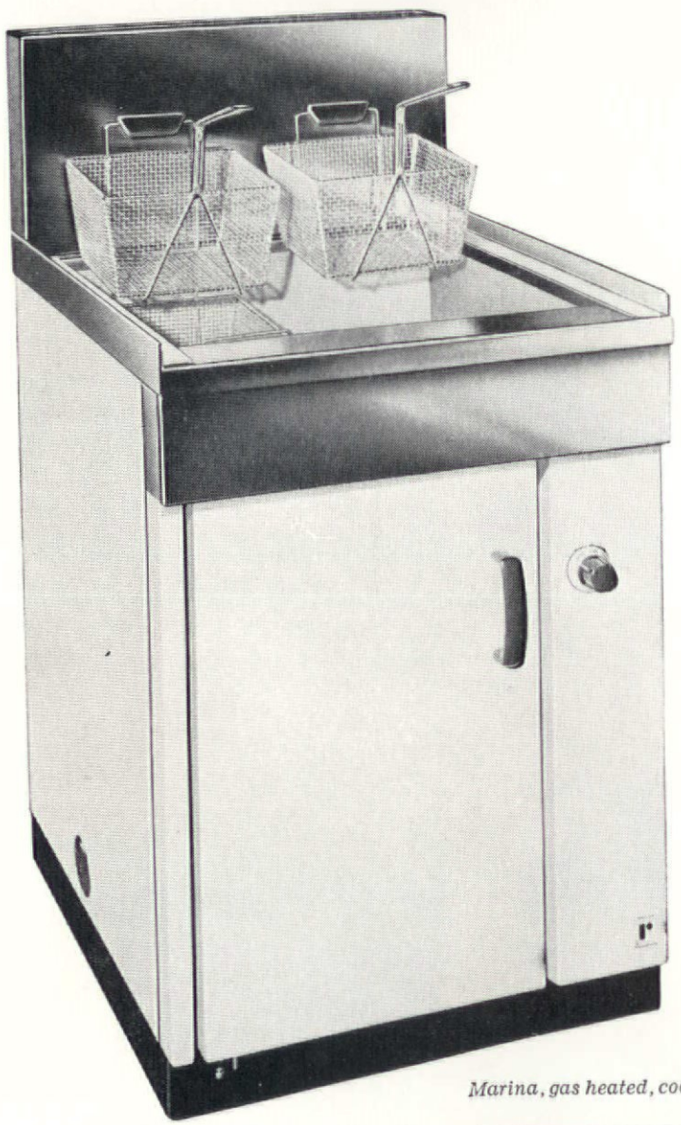

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3M TRUSTEEL

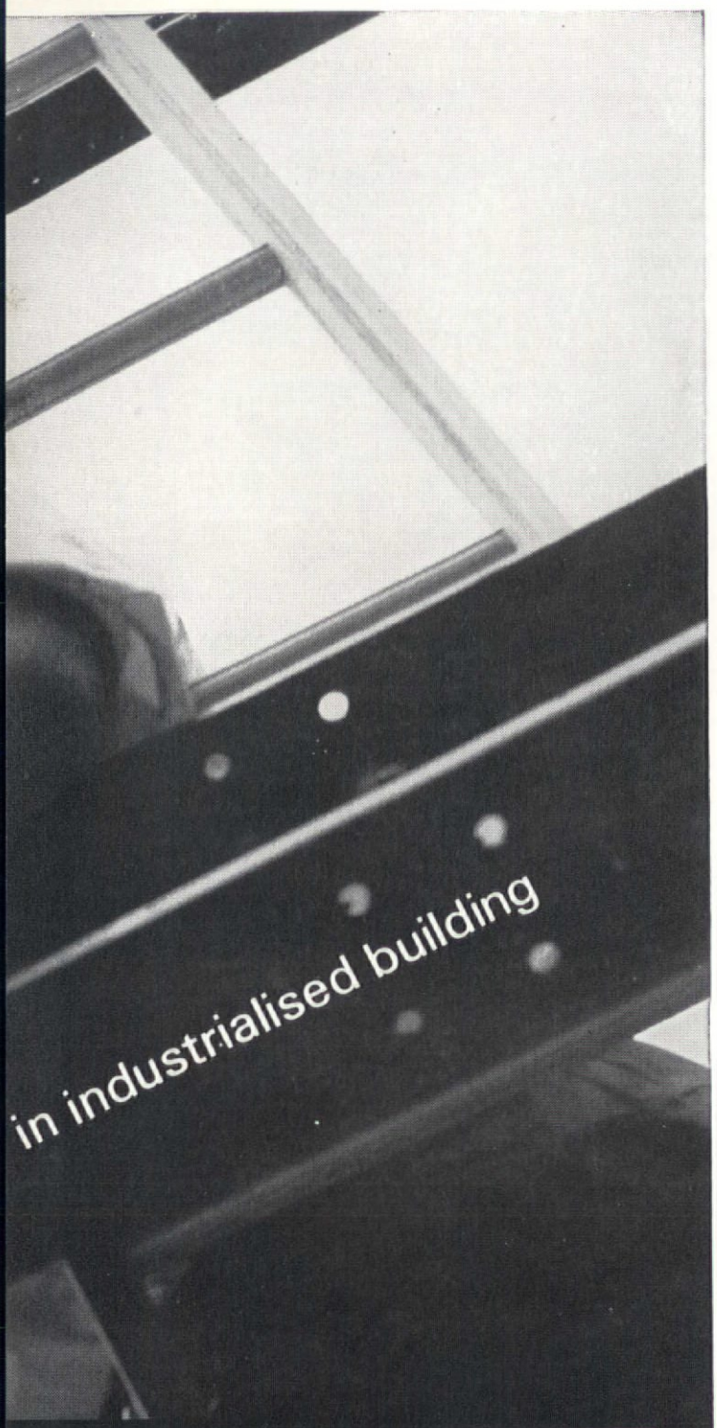


Britain's most exciting new concept

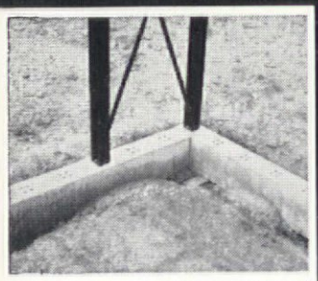
Intersection of main stanchions and main beams showing use of 2-way connector unit.

The **3M** Trusteel System is founded on nearly 20 years experience in the field of steel framed housing in the United Kingdom. It allows Architects considerable freedom of design and offers substantial savings in site labour. Construction is largely independent of weather conditions since the majority of the components are factory made.

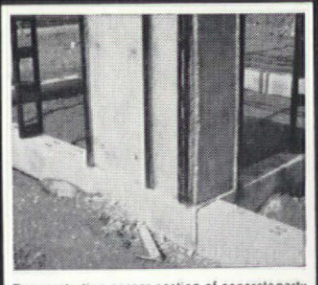
3M Trusteel Trusteel Corporation (Universal) Ltd, Gate House, The High, Harlow, Essex.
Telephone: Harlow 21511



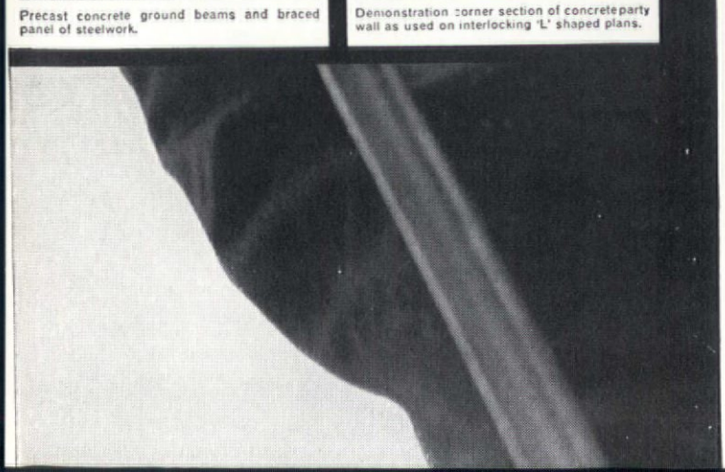
in industrialised building



Precast concrete ground beams and braced panel of steelwork.



Demonstration corner section of concrete party wall as used on interlocking 'L' shaped plans.



The System and Its Scope

3M Trusteel is designed primarily for use on low-rise housing. The System is based on the International 4"/10 cm. module and is capable of variations in 12" increments in both directions on plan, giving **3M** flexibility with standard components.

Trusteel Corporation will prepare framing plans to suit sketch designs prepared by the Architect on the **3M** planning grid. The Architect then completes the working drawings in collaboration with Trusteel, while Trusteel prepares the steel erection drawings and component schedules.

Ministry recommendations on dimensional co-ordination and preferred dimensions have been followed and **3M** Trusteel can therefore accommodate all types of dimensionally co-ordinated building components. The modular steel frame, which is fully protected against corrosion, eliminates all load-bearing walls. The recommendations of the Parker-Morris Report on flexibility and extendibility to suit the needs of a growing family can, therefore, be met.

Foundations

Foundations are pre-cast reinforced concrete ground beams or an in situ concrete slab. The pre-cast beams bear on in situ concrete pads or on short-bored piles, depending upon subsoil conditions, and are supplied with pre-fixed locations for all stanchions. Alternatively, an in situ slab is poured between edge shuttering, and stanchion fixings are drilled on site, utilising a re-usable steel jig for correct location.

Trusteel Frame

The steel frame consists of a range of standard components of modular sizes employing a simple arrangement of modular connector units to provide design flexibility. Frame components, all of which are light enough for manhandling, are fabricated from special corrosion-resistant steel and are given additional protective coatings under highly controlled conditions. A major feature of the frame design is the patented screw-gap in all main members, allowing flooring and lining materials to be fixed direct by means of self-tapping screws. Extended tests over a 16 year period have proved the durability of this form of construction.

Floors and Ceilings

Ground floors consist of thermoplastic tiles or similar finish applied to a solid concrete slab or to pre-cast concrete planks spanning between the ground beams. If preferred, light steel floor beams, spanning between the ground beams, are used in conjunction with chipboard flooring or tongued and grooved boarding.

First floors are of chipboard sheets or pre-formed panels of tongued and grooved boarding fixed direct to the floor beams by self-tapping screws. Ceiling panels of Asbestolux, plasterboard or fire-resistant chipboard are fixed direct to the steel beams. The ceiling panels have either filled or vee joints and are papered, skim-coated or plastic coated, according to preference.

Cladding and Lining

Any required cladding material may be employed, either traditional or factory-made, including proprietary panel cladding systems designed in accordance with the M.P.B.W. dimensional co-ordination recommendations. Recommended claddings include factory-made window/wall units complete with inner lining and insulation, storey-height pre-cast concrete panels and non-load bearing facing brickwork used in rectangular panels. Separately applied dry linings utilise plasterboard, chipboard panels, or asbestos-based board, all direct-fixed to the Trusteel stanchions.

Party Wall

The **3M** Trusteel party wall system utilises no-fines concrete poured in storey high lifts between permanent plasterboard shuttering. If preferred, re-usable steel formwork which clips to the party wall stanchions may be used. The system is both cheaper and faster than traditional methods. Concrete is poured in storey-high lifts and the dry lining fixed to the stanchions after the formwork is removed. This system is both cheaper and faster than traditional methods. Alternating, traditional brick or blockwork party walls can be built independently of the steel frame or a dry party wall system consisting of pre-cast concrete panels can be employed.

Roofs

Roofs are pitched, mono-pitched, or flat. Pitched and mono-pitched roofs are 22½° for traditional interlocking tiles or battens, or 10° to accept large pre-formed sheet roofing materials. Suspended ceilings are fixed direct to the Trusteel ceiling steelwork, or, if the pitch is to be expressed internally, are fixed direct to the underside of the steel rafters. Any large sheet materials or composite decks may be used for flat roofs.

For winter working, the roof can be erected and weather protected immediately the frame has been assembled, obtaining dry working conditions very quickly.

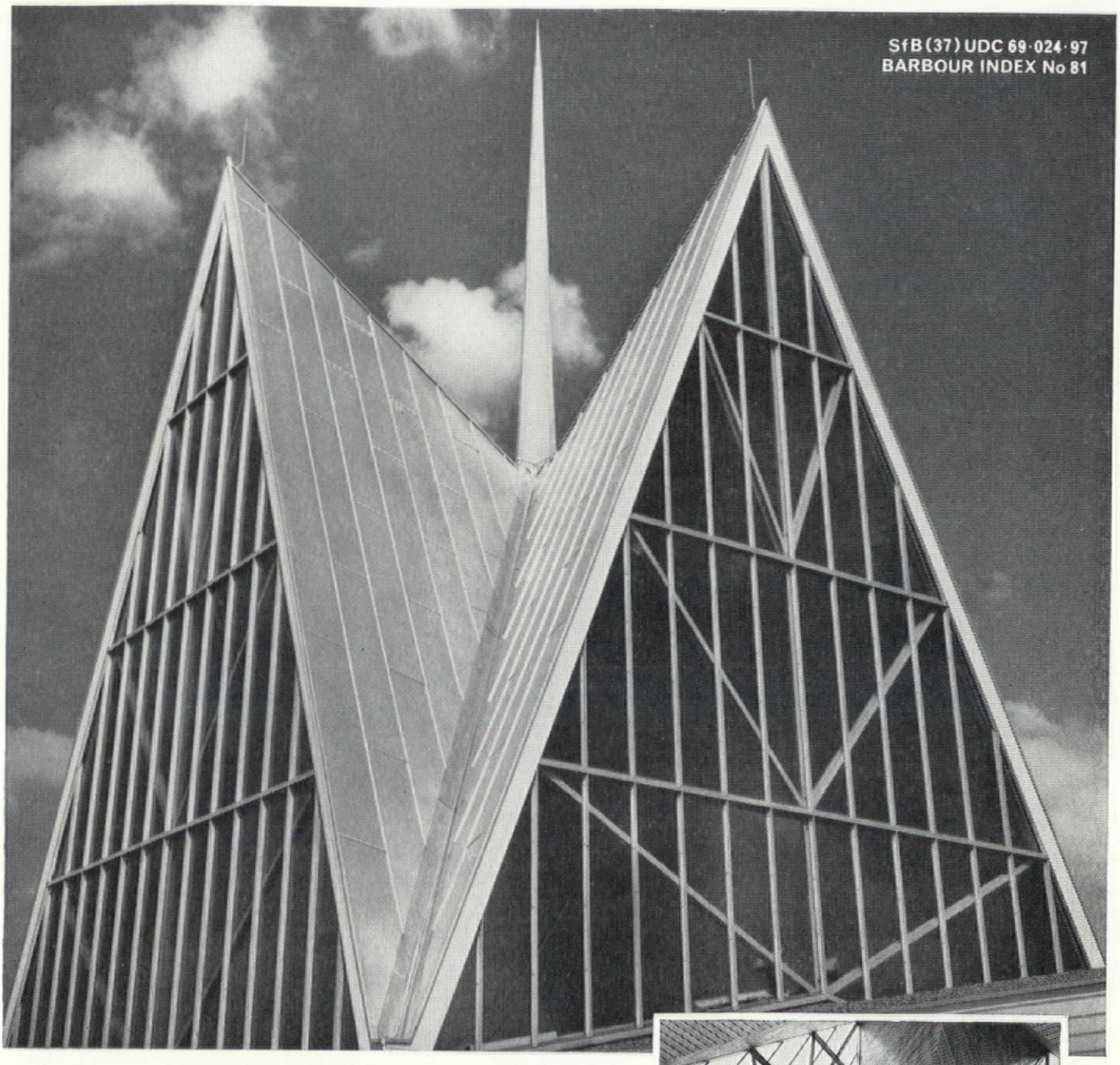
Partitioning

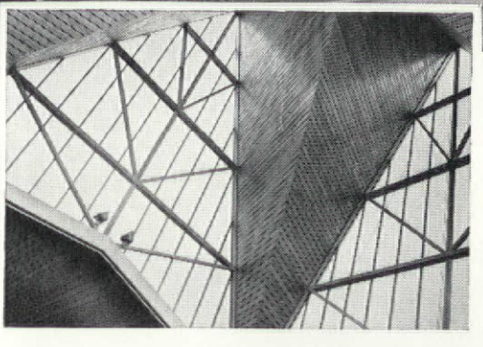
3M Trusteel accommodates any proprietary partitioning system designed in accordance with M.P.B.W. recommendations on dimensional co-ordination. All internal partitions are non-loadbearing and are therefore easily demountable to suit changing spatial needs. Strawboard-based panels or sheet faced partitions complete with doors, frames and service drops can be utilised. Alternatively, plasterboard-based materials may be used in conjunction with standard doors and frames.

Drainage and Services

3M Trusteel will accommodate any required material for drainage components. Most heating systems in general use can be easily incorporated and pre-formed kits are available for hot and cold water services and electrical installations to reduce site installation time to a minimum. For special sites, comprising large numbers of similar house types and providing access for heavy lifting gear, a steel-framed "heart unit" is being developed.

SfB (37) UDC 69·024·97
BARBOUR INDEX No 81





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Messrs. Harris & Sutherland, 127 Victoria Street, London, S.W.1.
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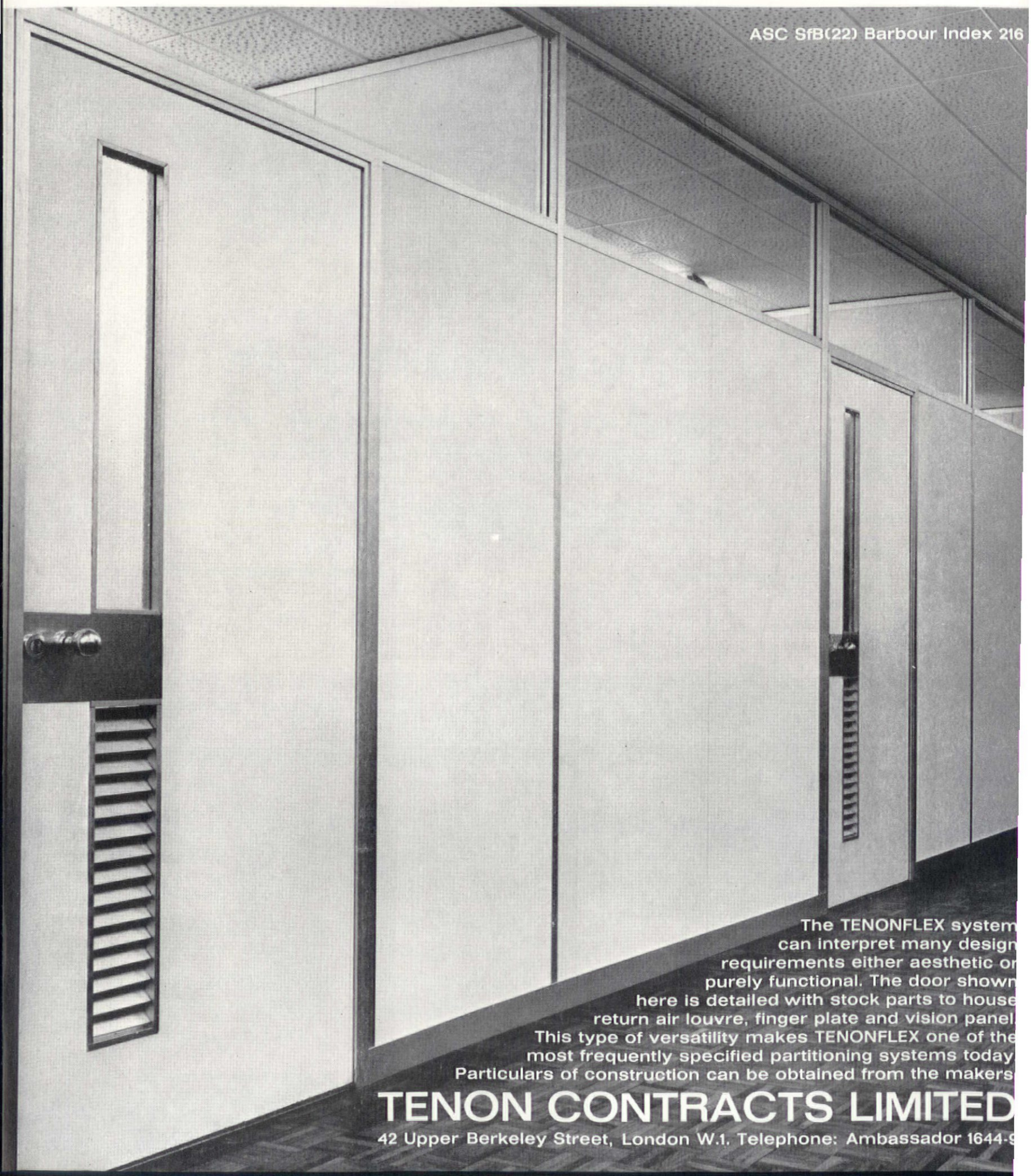

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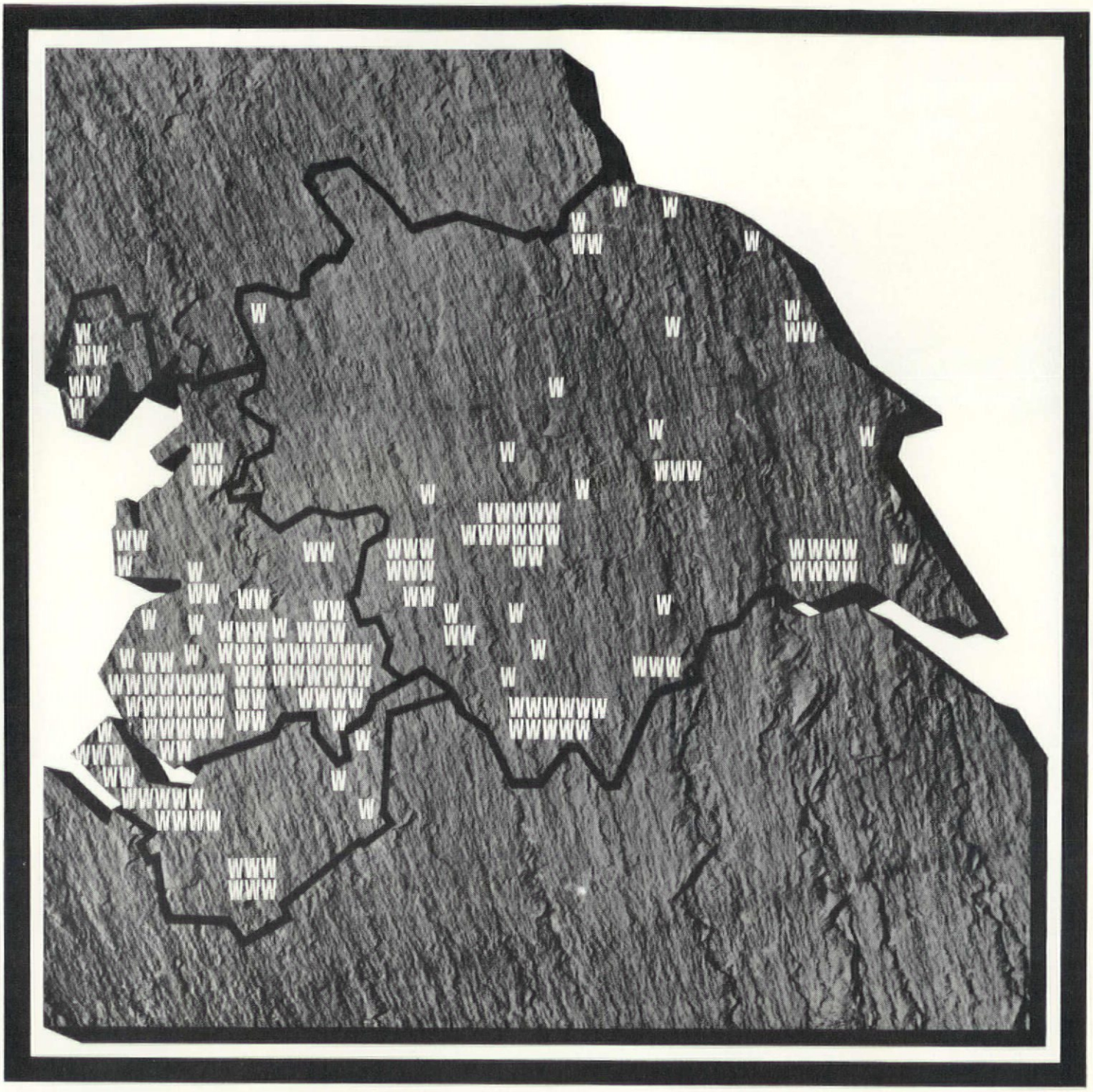

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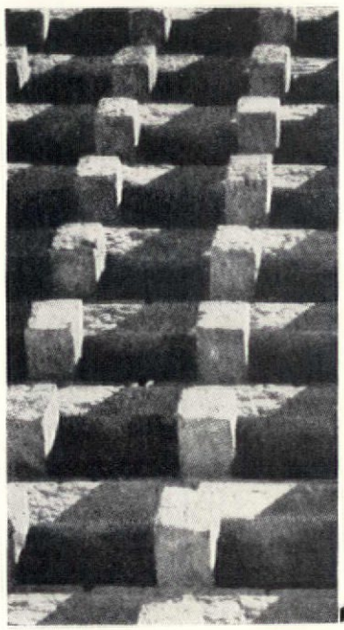
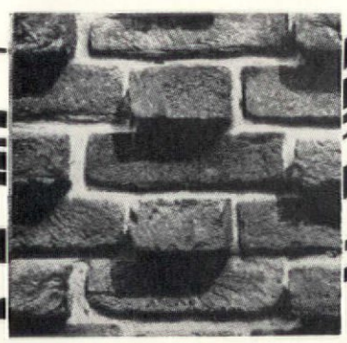
"Brick as an element in design"

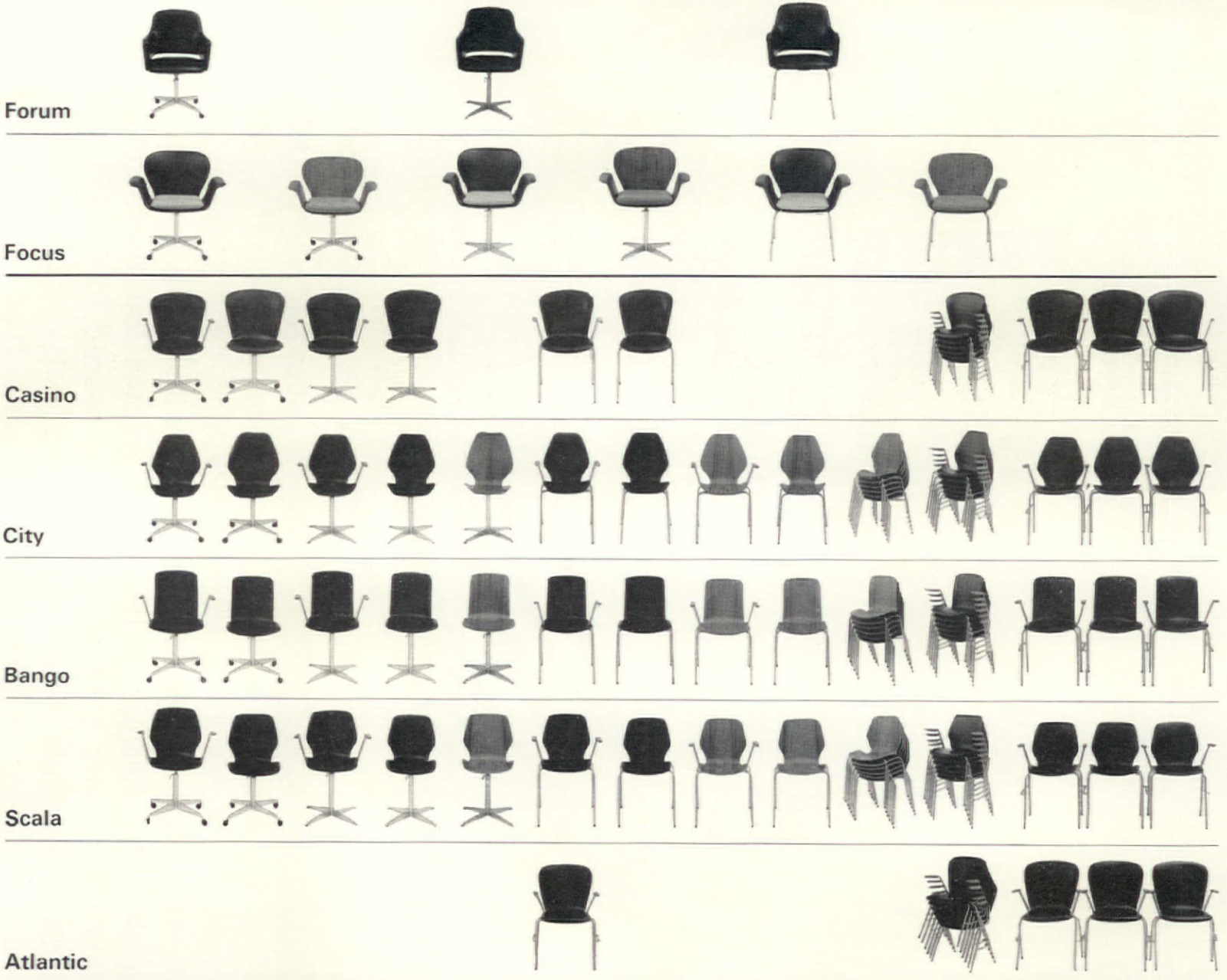






A new reference book on brick

A brick is more than a building stone. Everyone who turns critically through the pages of "Brick as an element in design" will come to this conclusion, rapt by the magic of the simple, yet individually lifeless, appearing bricks. How architects throughout the world awaken the brick to vigorous life. A textbook which with photographs of the overall formation and detailing of buildings, gives more instruction and information than could many words. Price 63 shillings, incl. postage. Available from leading booksellers or The Standard Catalogue Co. Ltd., 26 Bloomsbury Way, London, W.C.1.



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Quantum Range consists of seven chairs made from moulded plywood supported on steel frames.

All the shells can be supplied upholstered and most of them are also available in a variety of natural wood finishes. The shells can be mounted on swivel bases with or without castors and arms, or on leg frames, with or without arms and linking device.

Each chair in **Quantum Range** is a distinct design on its own and can be used alone or in conjunction with the other chairs. The many models available give **Quantum Range** a high degree of flexibility as regards design, function and price. The components are to a large extent interchangeable.

Please write for a catalogue or see **Quantum Range** in our showrooms.

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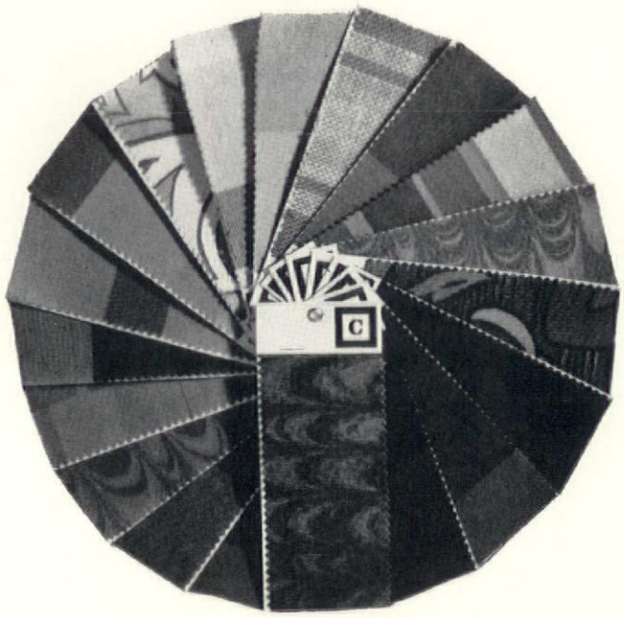
AD Page 18B/Code 17B



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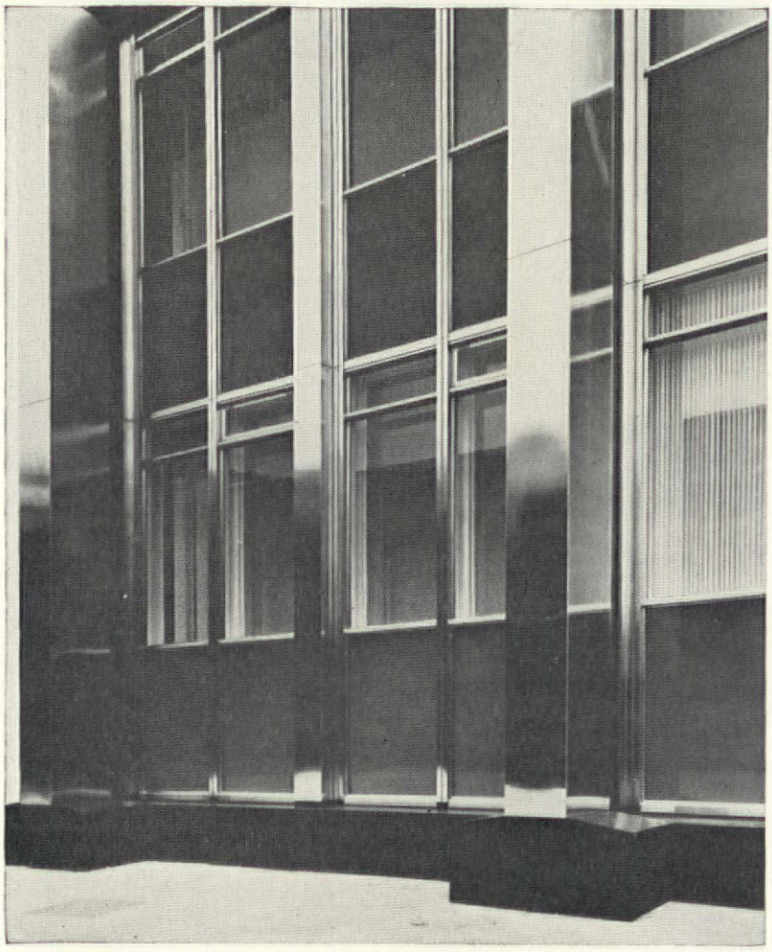

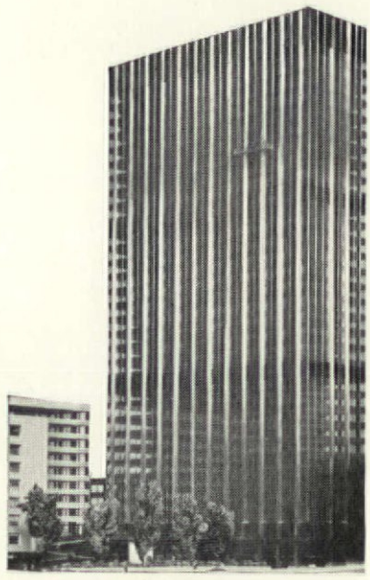

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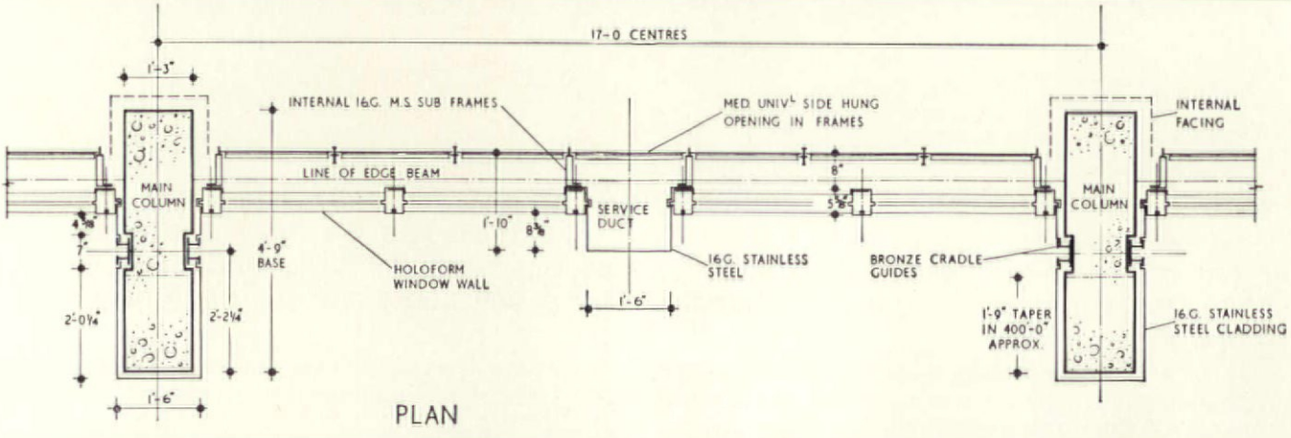
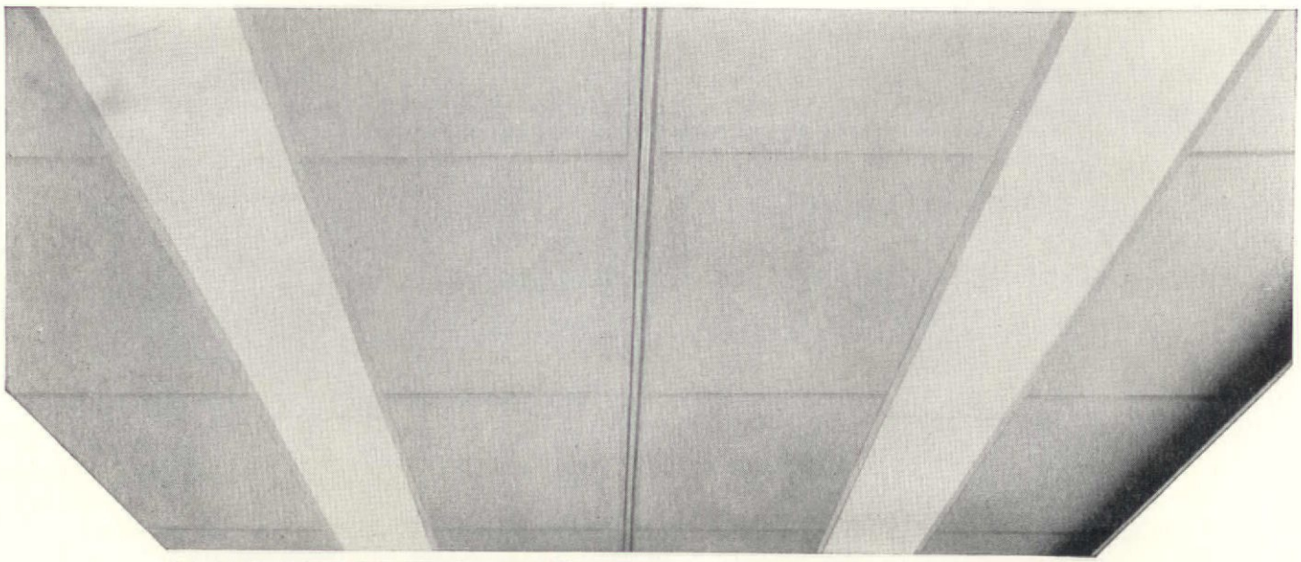


PLAN

F540



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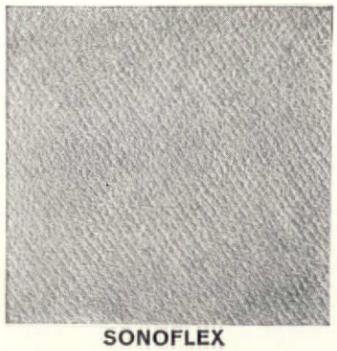

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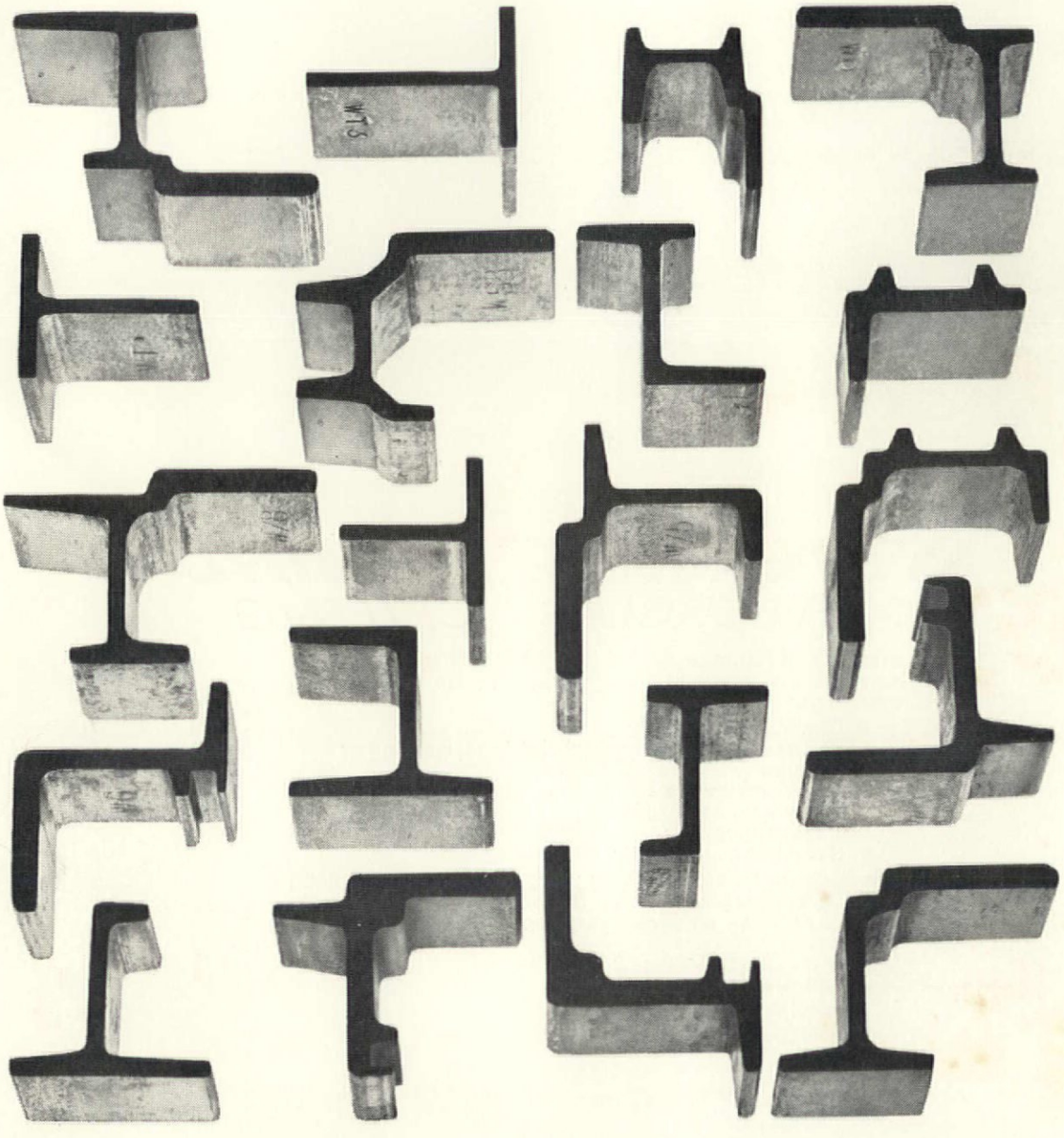

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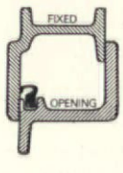

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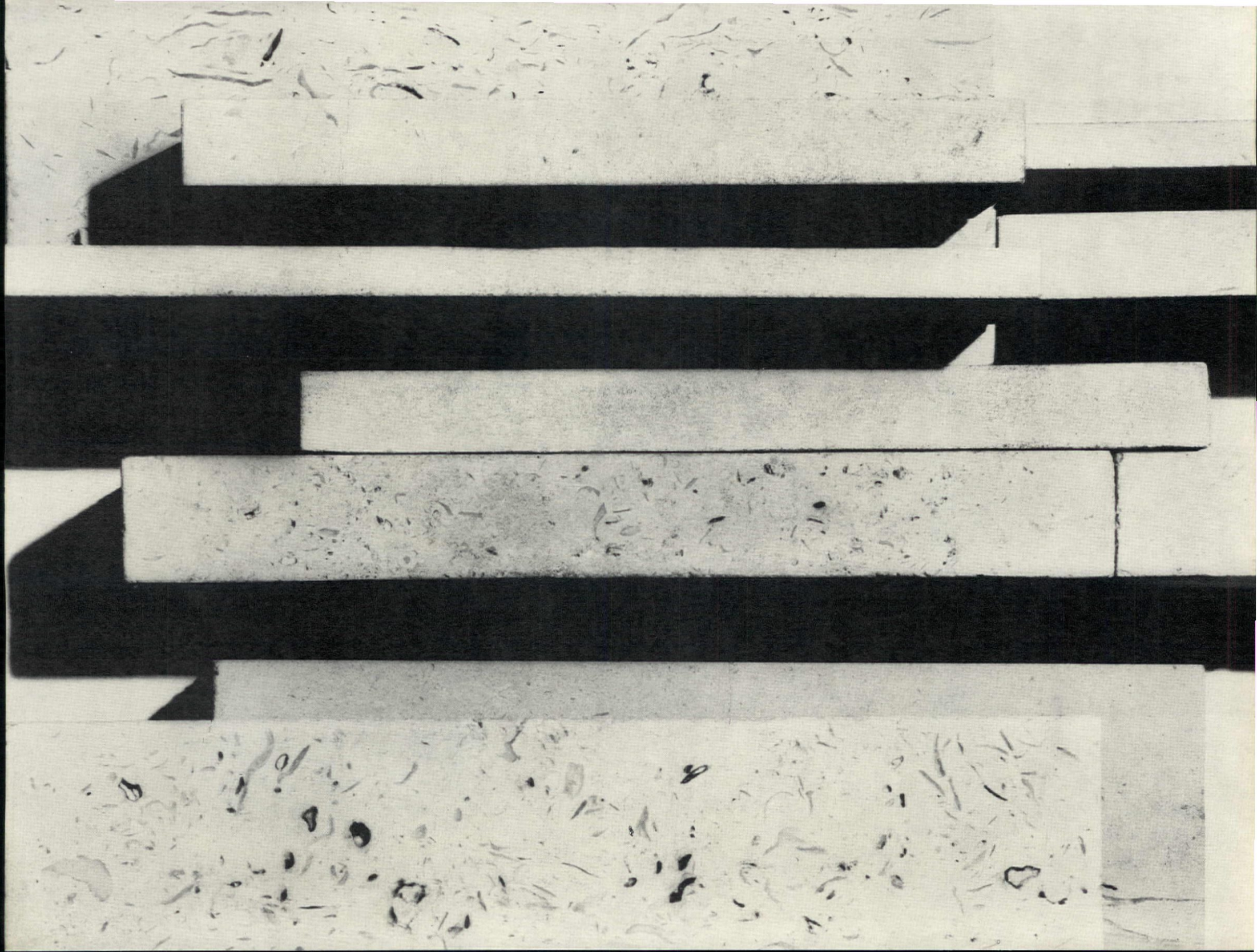



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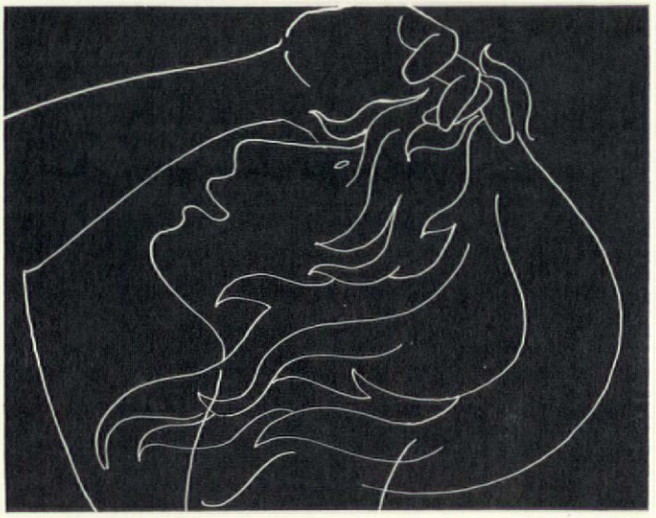

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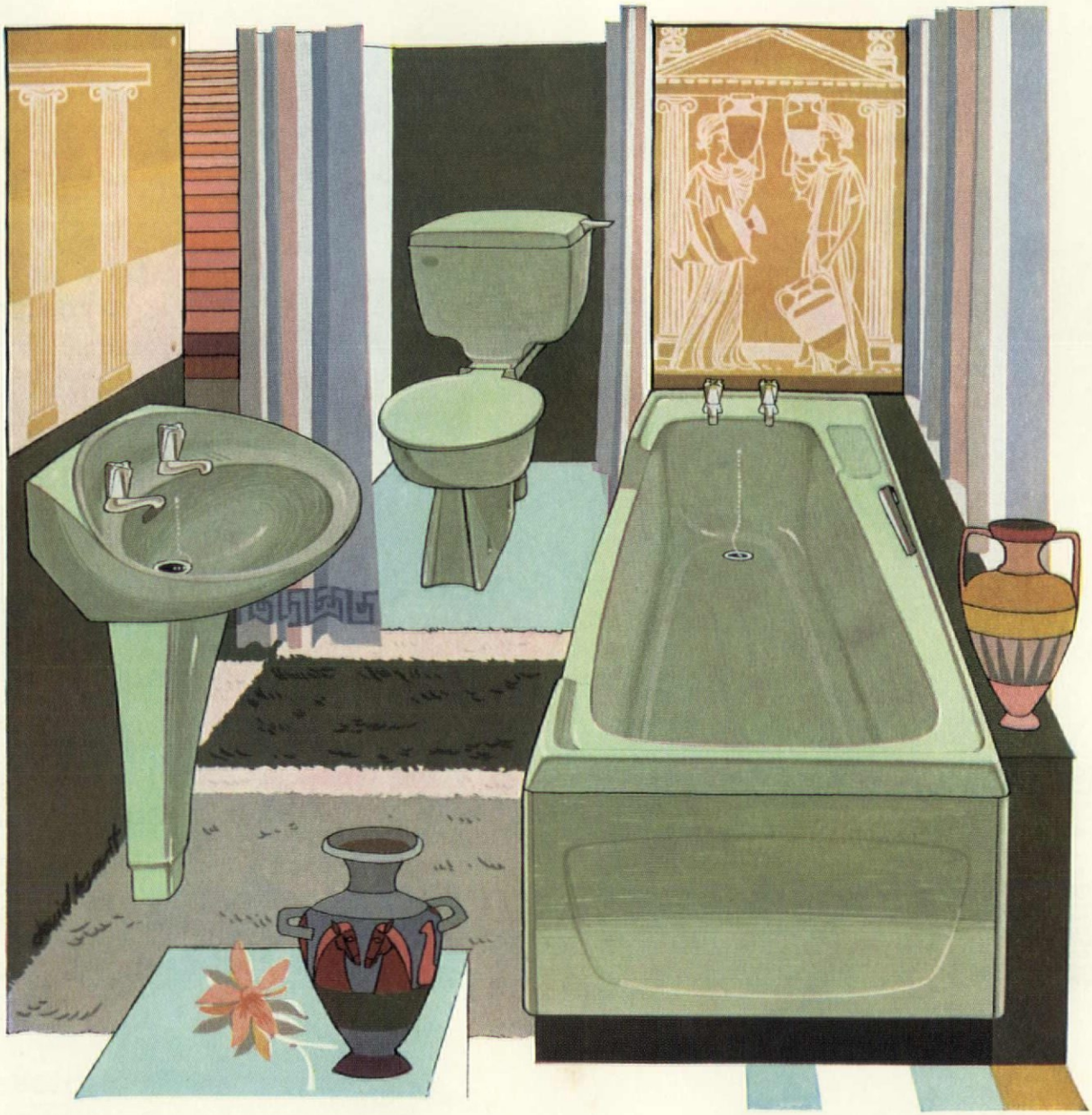

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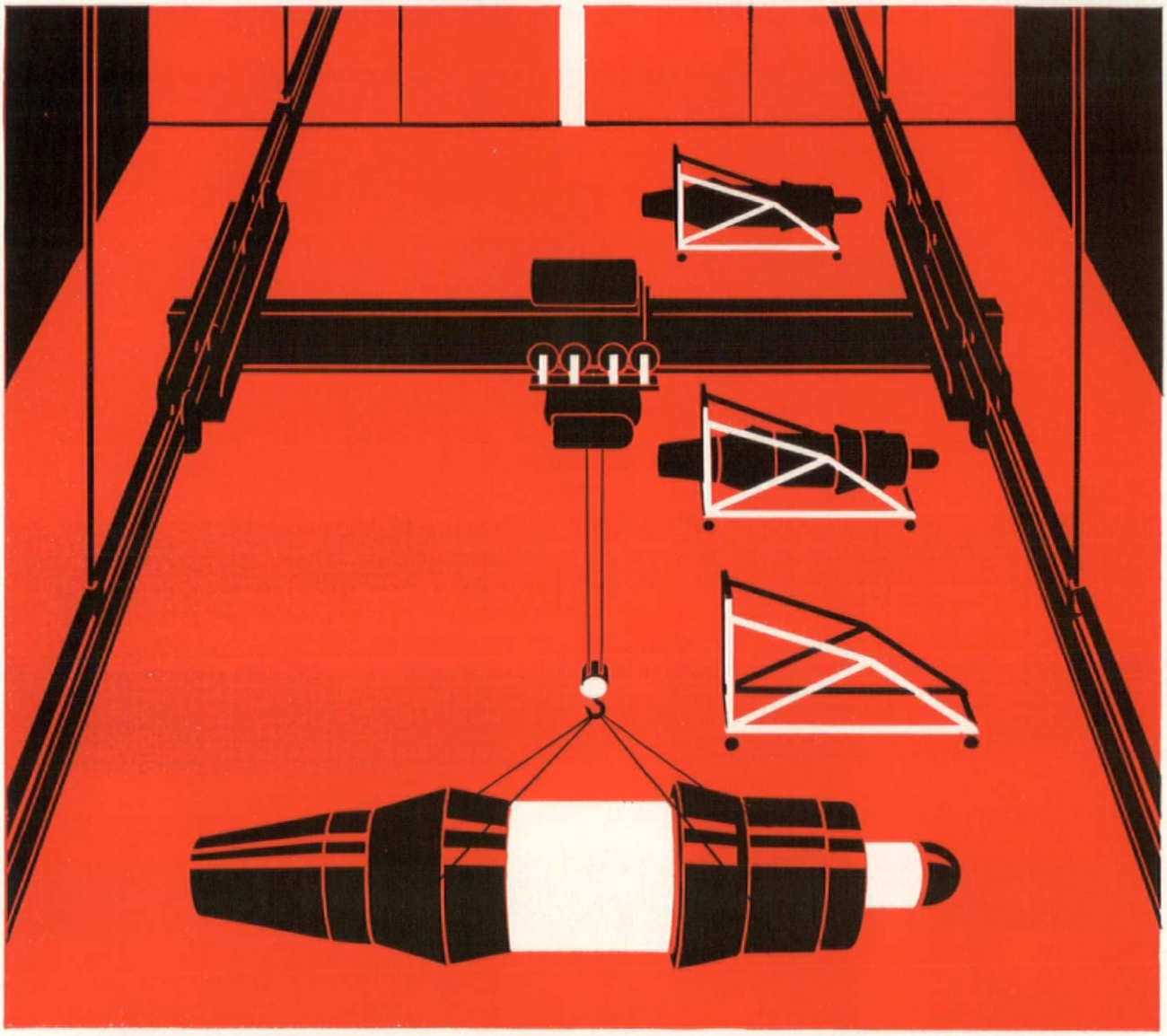
monorail eye view



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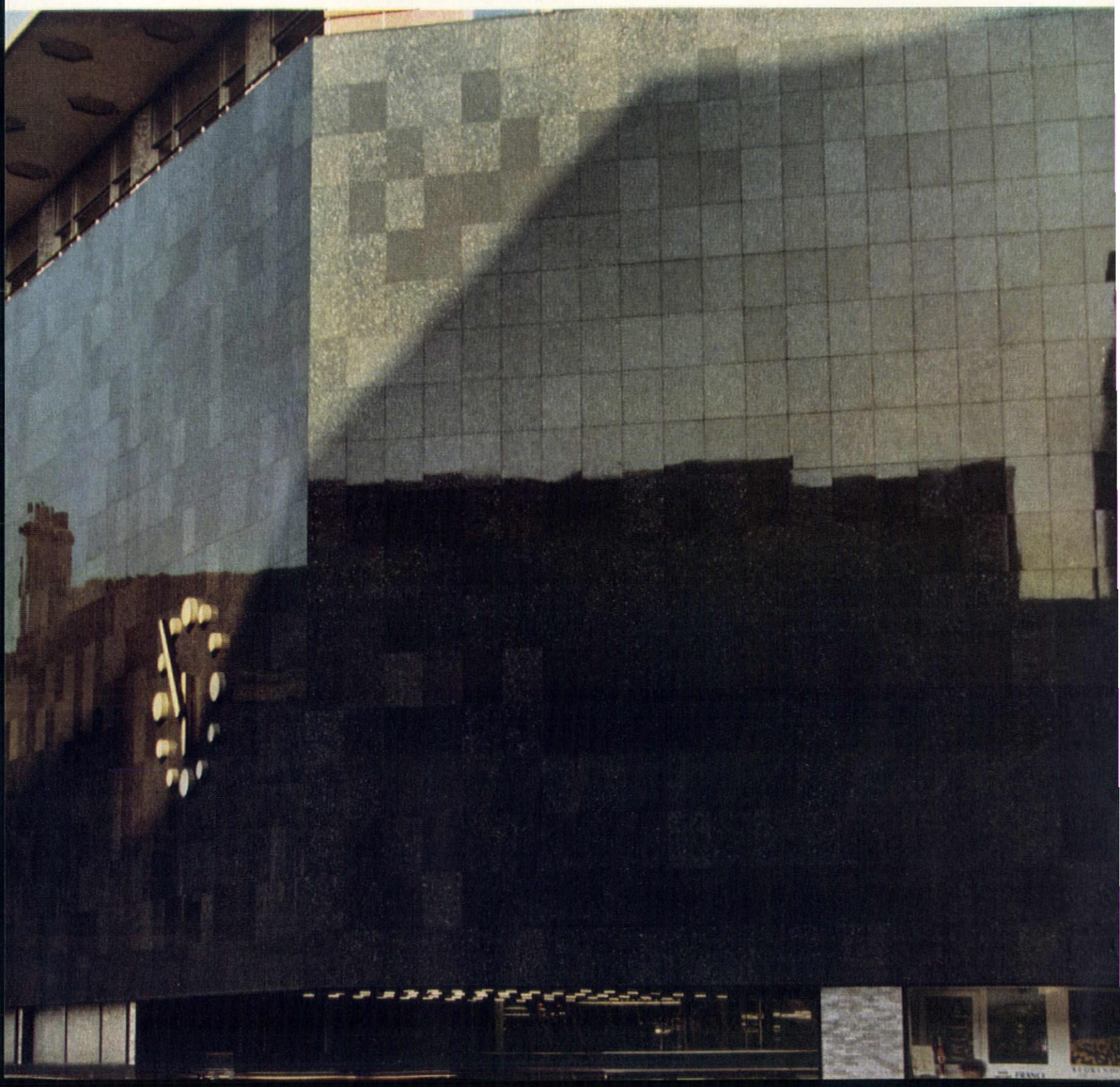

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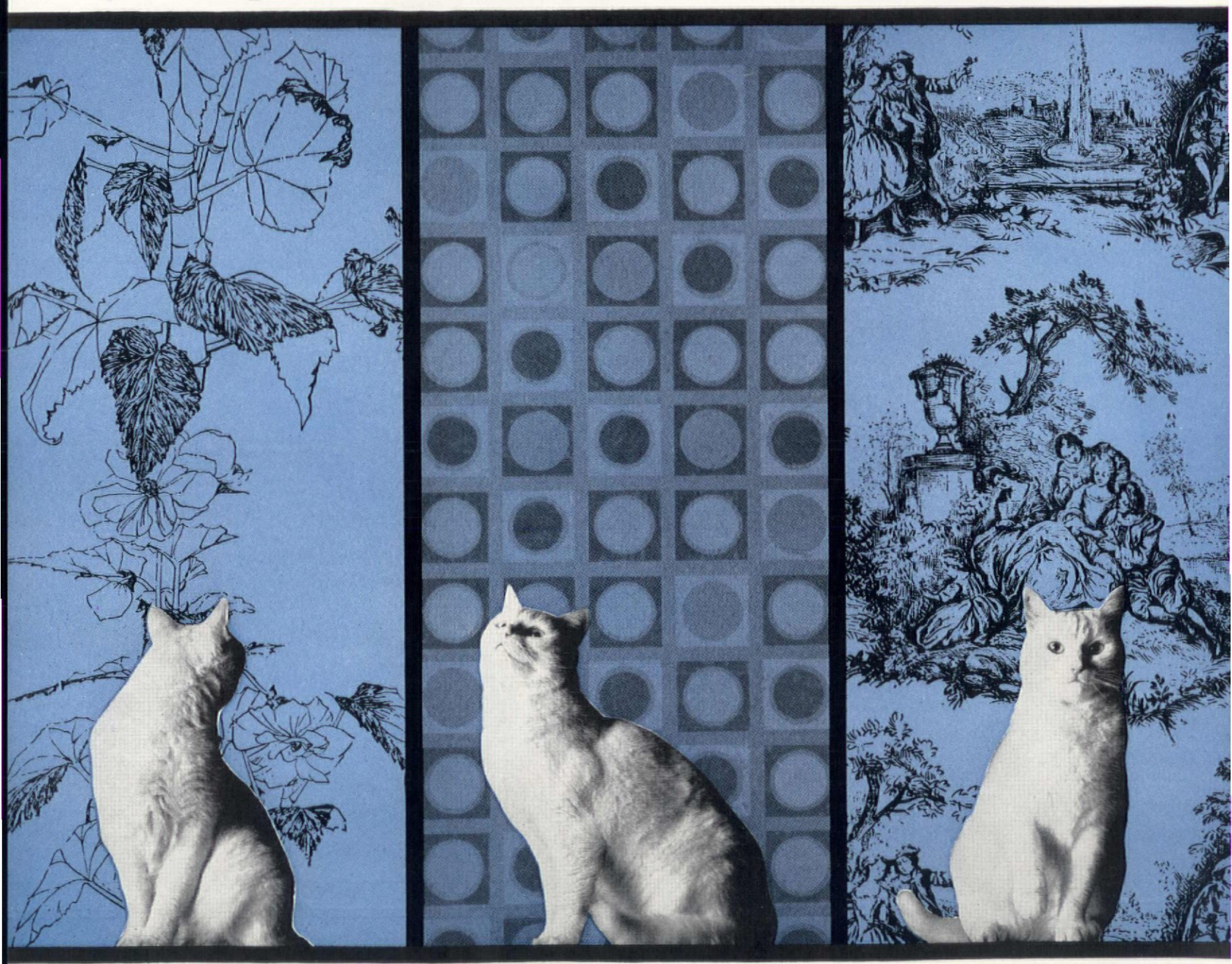

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Roker Park has been one of the leading centres of soccer since it first opened its gates to League football in September, 1898. The selection of this ground to house the World Cup games in 1966 has given impetus to the development schemes which have been under consideration for a number of years. A new grandstand at the Fulwell end has been roofed with Fort Sheets, and will accommodate nearly 20,000 spectators in comfort, whatever the weather conditions.

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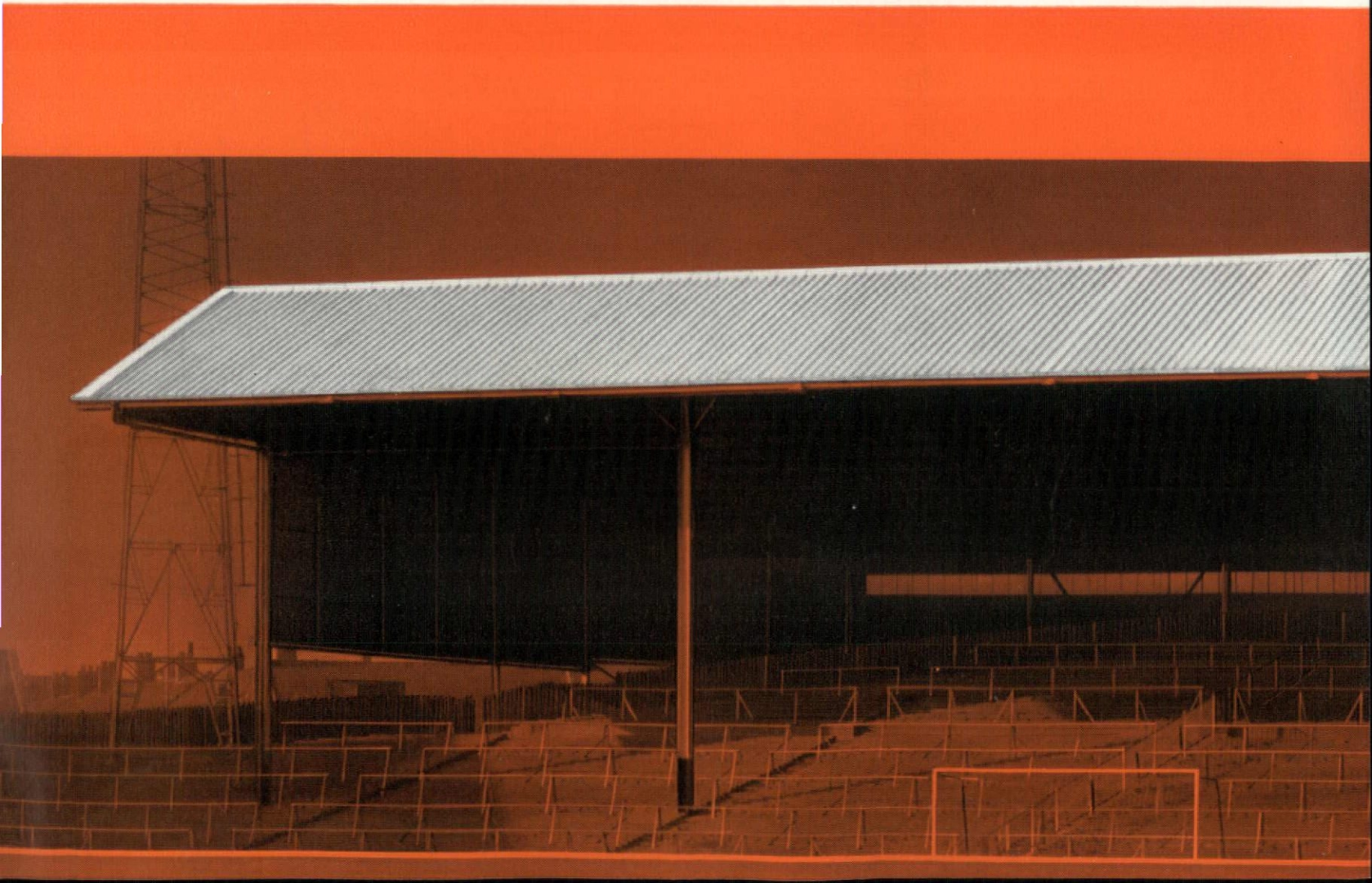

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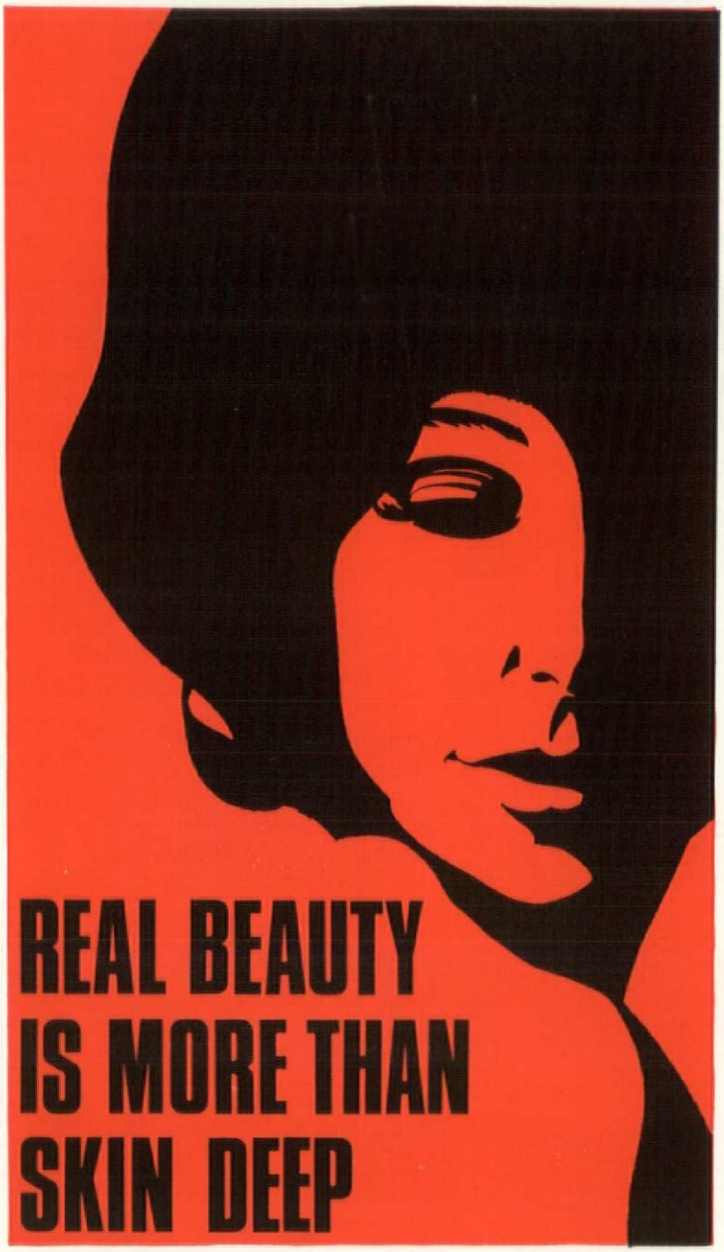
UNIVERSAL fort SHEETS





So it is with doors. Even if you use the best paints in the world, they will not give satisfactory results on an inferior base. Therefore, always be sure that you use the best foundation available—a Gliksten "Silkstone" Door. It has a perfect surface to bring out the full beauty of paint, and the edges are completely knot-free. The "Silkstone's" flush, unbroken surface ensures a perfect finish. The "Silkstone" is supplied in a special off-white primer which prevents the absorption of moisture on the site, and provides excellent adhesion for final painting. The "Silkstone" only requires the usual two finishing coats.

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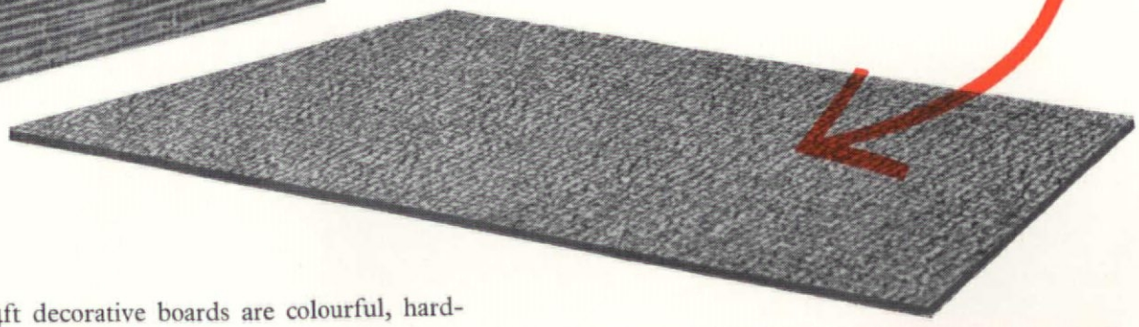

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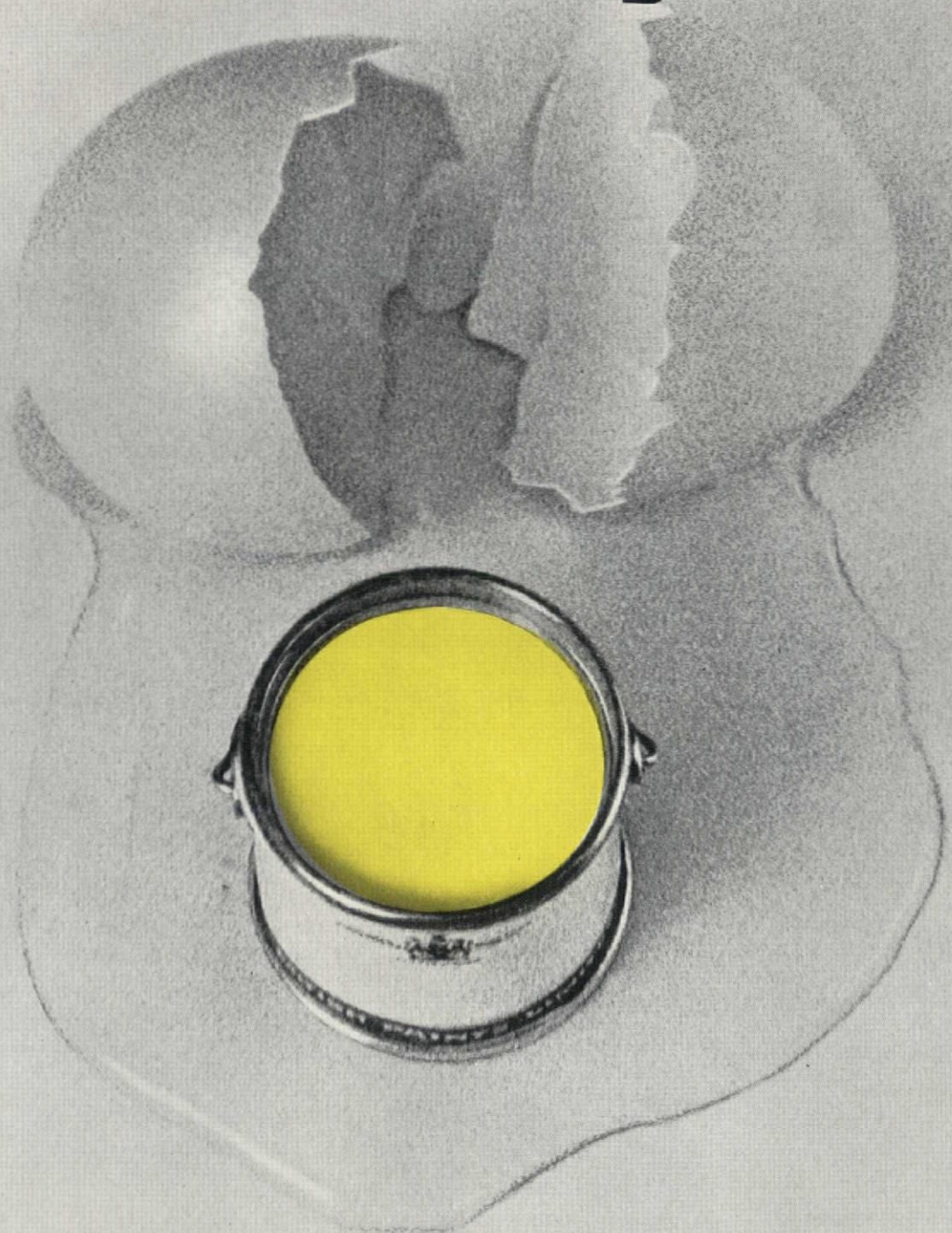

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British Paints Chemists have produced an entirely new paint for craftsmen. It will be known as **NEW FORMULA LUXOL**. It is emphasised that this paint is not a compromise, not a re-birth. It is an entirely new creation with a promise of performance surpassing anything the professional decorator has ever known before.



New Formula Luxol

New Formula LUXOL incorporates many improvements, making the best use of the most advanced manufacturing techniques and the latest developments in high performance raw materials. In the light of present knowledge New Formula LUXOL is the outstanding paint of the decade.

High opacity

New Formula LUXOL offers the best of both worlds—outstanding opacity without the loss of easy brushing properties makes it unique.

Non-sag, non-run

Using normal painting techniques 'curtaining' is almost impossible with New Formula LUXOL. Its full-bodied structure ensures a good even coat of uniform thickness without excessive brushing-out and adherence to difficult surfaces, such as mouldings, is excellent.

Even-flow application

Surprisingly easy brushing qualities are an outstanding property of New Formula LUXOL. To provide a paint offering so high a degree of opacity and at the same time to improve the brushability to the extent that has been accomplished, is a notable achievement.

Durability

In the light of present knowledge it would not, we believe, be possible to make a tougher, longer lasting finish of the conventional type.

Colour retention

The new oils and pigments now used to produce New Formula LUXOL are selected especially for their known colour stability. A truly permanent colour has yet to be made but New Formula LUXOL is as permanent as science can make it.

Appearance

The depth and richness of gloss provided by New Formula LUXOL add dignity and elegance to the surfaces which it protects. The shell hard surface is highly resistant to dirt, which is easily removed.

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thermal
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IB.121 "TURNALL" Asbestos Insulation Board

High quality insulation board in sheet form. Classified non-combustible in accordance with B.S.476/53, and manufactured in accordance with B.S.3536/62. Smooth surface, light colour, ready to decorate.
Standard Sizes:
Lengths: 4ft to 10ft (x 1ft)
Widths: 2ft and 4ft.
Thicknesses: $\frac{1}{4}$in., $\frac{3}{8}$in. and $\frac{1}{2}$in.
Thermal Conductivity:
0.80 Btu in/ft² h deg F.
Write for Data Sheet B.C.S. 35.

"TURNALL" Asbestos Wood

Fire resistant building board in sheet form. Classified non-combustible in accordance with B.S.476/53 and manufactured to B.S.3536/62. Smooth surface, light in colour, ready to decorate. Suitable for ceiling, door and partition linings, beam and column cladding, cabinet and duct construction.
Standard Sizes 8 ft x 4 ft and 10 ft x 4 ft.
Thicknesses $\frac{3}{16}$ in. $\frac{1}{4}$ in. $\frac{3}{8}$ in. and $\frac{1}{2}$ in.
Thermal Conductivity 1·9 Btu in/ft² h deg F.
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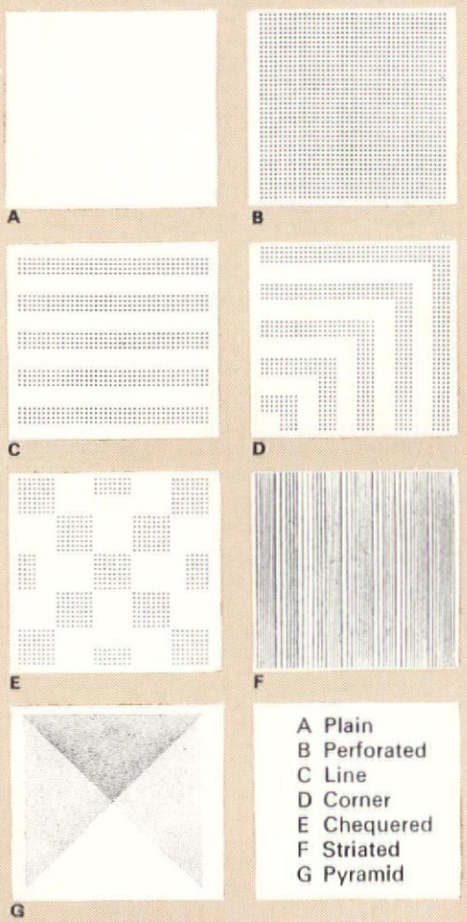
"TURNALL" Asbestos L.D.R. Panels

Low density (36 lb/ft³) rigid building board. Makes excellent lightweight partitioning and infill panels. Industrial uses include—high temperature ducting, cladding for combustion chambers, fire proof doors, partitions etc. Good thermal and acoustic properties with fire protection up to 2 hours.
(B.S.476/1953 : F.R.O.S.I. No. 1885 : F.R.O.S.I. No. 2172).
Available in lengths 8, 9 and 10ft at 2 and 4ft widths.
Thicknesses from $\frac{3}{8}$in. to $1\frac{3}{16}$in. (x $\frac{1}{8}$in.).
Panels can be supplied faced both sides with veneers, metals, plastics—or primed for painting.
Write for Data Sheet B.C.S. 24.

IB.121 "TURNALL" Asbestos Ceiling Panels

Made in a range of 4 perforated and 3 solid patterns, all with chamfered edges. Designed for suspended ceilings, they can also be fixed direct to the undersides of floors and roofs.
A very high degree of acoustic control is achieved when used with glass fibre or mineral wool infill.
Patterns A B C D E and F (Size 2ft x 2ft) are interchangeable.
Pyramid Pattern G (Size 4ft x 4ft) for ceilings where a large scale motif is preferred.
Plain Pattern A is also available in a wider range of sizes.
Up to 2 hours fire protection depending on the method of fix.
Write for Data Sheets B.C.S. 5, 50 and 57.



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Applied by multi-jet gun to the internal surfaces of roofs and walls. The material can be smoothed or shaped as required.
Up to 4 hours fire resistance, with good thermal insulation ('k' value 0·26), sound absorption and anti-condensation properties.
Density is approximately 12 lb/ft³.
Decorates easily with brush or spray.
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"TURNALL" Asbestos Partition Board (Fully-Compressed) Plain and Perforated

Combines all the working and handling advantages of compressed wood fibrous boards—high impact value and laminar strength, plus the fire resistant properties of asbestos. The smooth surface finish is suitable for all high quality work.
Nominal thickness is $\frac{1}{8}$in. Density 102 lb/ft³.
Tested to B.S. 476/1953 Part 1 (placed in Class 1—very low flame spread).
Write for Data Sheet B.C.S. 28.

"TURNALL" Asbestos Partition Board (Semi-Compressed) Plain and Perforated

This board offers most of the advantages of the Fully Compressed board at less cost. Density is 82 lb/ft³. Fire resistance tested to B.S.476/53 Part 1 (placed in Class 1 very low flame spread).
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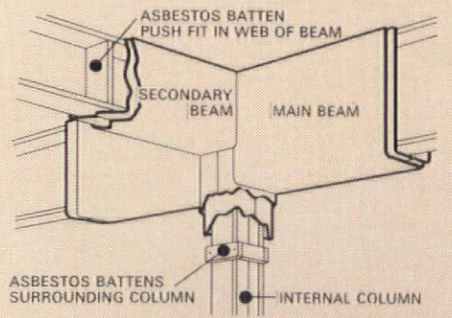

Moulded from low density asbestos material, into 'L' and 'U' sections. Strong, decorative, easy to fix. Classified non-combustible in accordance with B.S.476/53. Up to 3 hours fire protection for steel beams and columns, depending on method of fix.
Asbestos fixing battens available—
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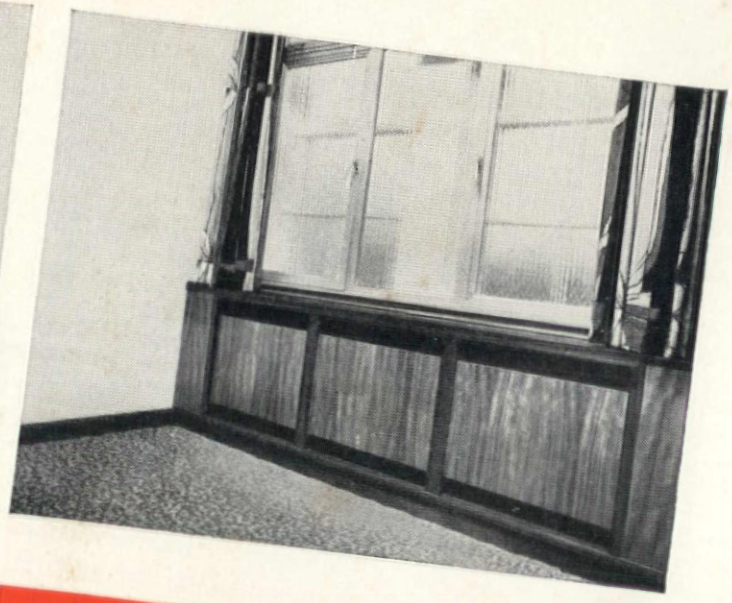
weyroc goes into the Bank





Weyroc, veneered with European Walnut, is used for radiator fascia panels at a bank in Staffordshire.

Weyroc baffle strips—set back at a depth of $1\frac{1}{2}$" and painted black—conceal the top sections of the radiators.

The rigidity, stability and smooth, close-textured surface of Weyroc make it particularly suitable for high quality veneered panels.

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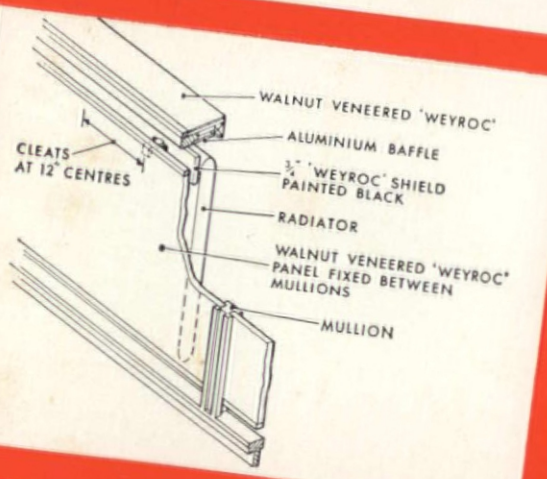

Veneered weyroc

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BARBOUR INDEX FILE No. 252

AP196

UK news

Ian Brown

Approach to architecture

In response to pressures for consideration of the problems of architecture specifically as Architecture, instead of the hundred and one peripheral interests with which the RIBA concerns itself, three eminences, Lasdun, Stirling and Lacey gave separate talks at Portland Place on the sources and forces which each felt crucial to his rise to fame. Two of 'one off' to one of 'system' will seem either a discerning stab at equilibrium by someone in the current feud, or a stab of some other sort, depending on the point of view. Stirling's aside about CLASP—that it might yield to treatment if used out of context—misjudged a mite the mood of an audience hungry for something more than the latest great untruth. Architecture, said Lacey a week later, requires a greater range of aptitudes than that involved in the traditional process of creating a building primarily as an expression of the architect's personality. But he acknowledged the danger that if we start with people we may not in the end achieve architecture. Lasdun, the first to talk, could not accept that he was a prima-donna architect, nor that the user opinion was other than a limited blessing. Give the client (which means, more and more, the people) not what he wants but what he never imagined he wants until he gets it. Oh for a method-Mies with the conscience of Professor Donnison!

Oxford Circus interchange 1

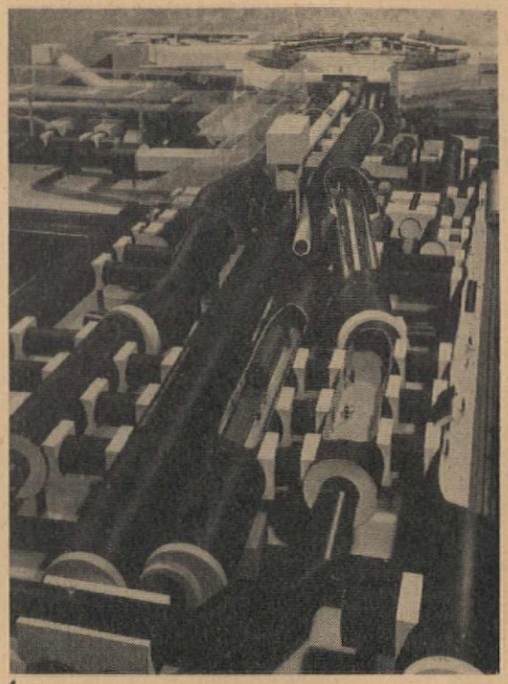
Addicts of goldfish bowl boiler houses, compulsive habitues of art service ducts, slaves of Paolozzi latest phase, will doubtless have occasionally doubled their doses with on-the-run, or at-the-shuffle peeks at the pictures of new undergrounds, choicely situated on our tube walls. Work boosting the flow in the entrails of the great wen has tended to cloy the flow on the surface for some years at Oxford Circus. Orson-eyed seers of a maze-man future can take heart, or to the woods, as suits their book, at the wizardry of the anonymous weavers of London's nether parts. Seen thus, with the humus cleared away, one can almost forgive the falling ceilings, the unsynchronized escalator handrails, and those lifts at Goodge Street.

Library 2

From Yorke, Rosenberg and Mardall a distinguishedly neuter library for Warwick University. One of its first permanent buildings, it has been designed to meet anticipated requirements for many years. In the early stages the two upper floors will be used for teaching, and will be converted later as required. The ground floor of the main building is largely staff working space, storage and seminar rooms. The first floor contains the main public areas, approached at this level by a bridge over the road separating the library from the science buildings. From this floor there is access by stairs and lifts to the upper library floors. These are designed to be open usable areas giving maximum use flexibility. The structural frame is *in situ* r.c.; columns in external walls are at 20ft centres and carry 3ft deep beams taking the floor loads.

City of London University 3

With the elevation of Northampton College of Advanced Technology to university status, following upon the Robbins report, the City of London has taken it in as the nucleus of its own university to be newly formed. £5 million expansion plans for a 4½-acre site at Northampton Square, with a target student accommodation, were recently announced. A model of the project (architects, Richard Sheppard, Robson & Partners) embodies an electrical engineering building, a refectory and a communal block. The university which is to be overtly vocational and geared to the turnout of management level technologists, had its £¼ million ICT computer complex inaugurated last month. Its differences from other universities will extend to its outside associations, its method of research and its way of operating. The economics of computer operation would forbid long vacations. There would be no 'medieval torpor or port sodden complacency'. A veritable machine for learning in. What hope of a space age building to suit?



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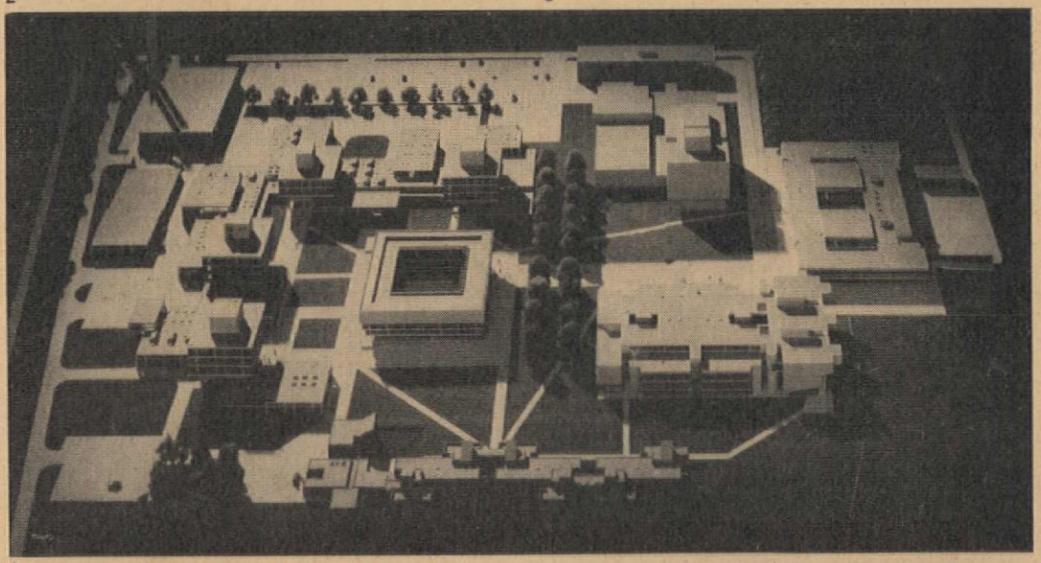


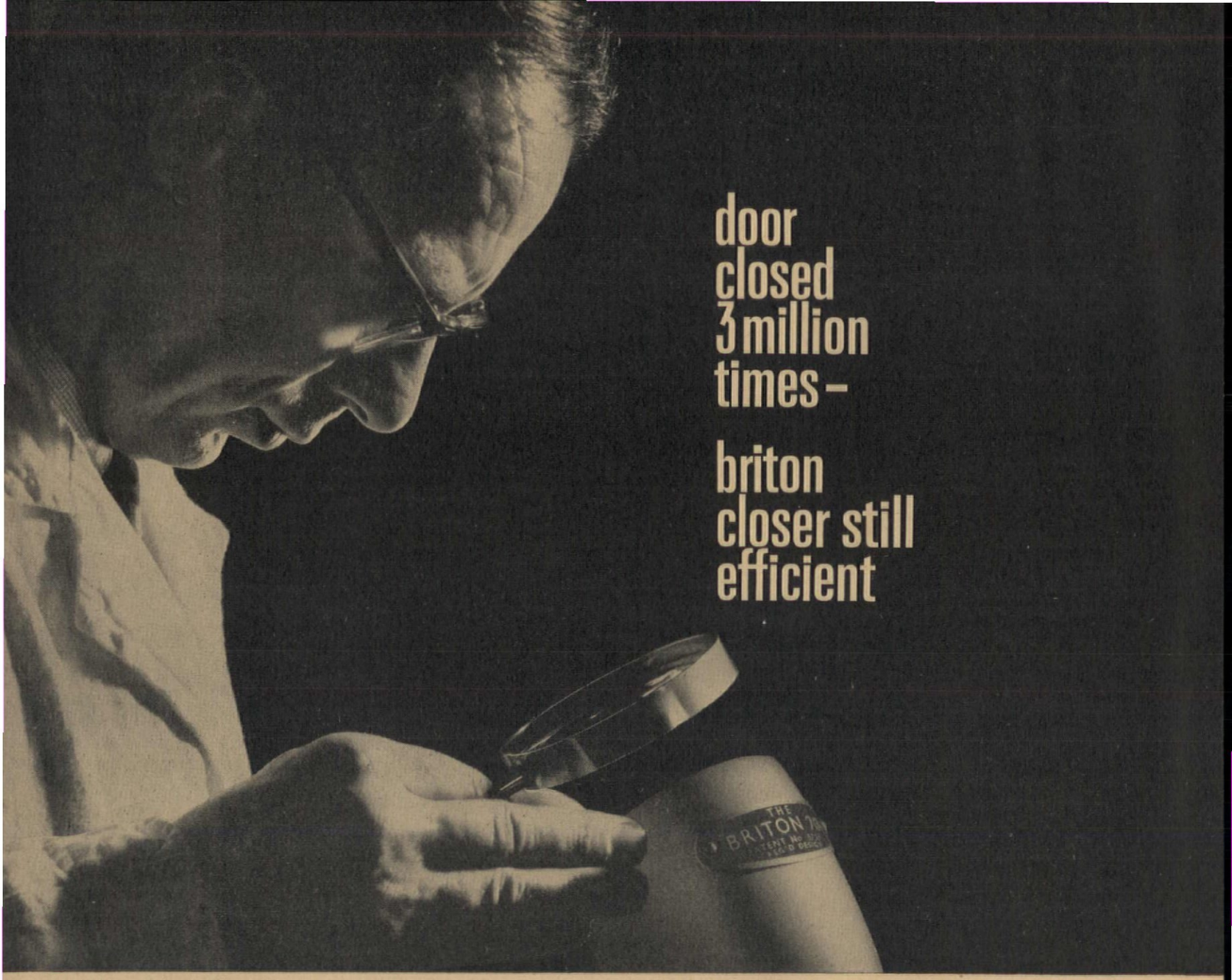
4

Brunel University at Uxbridge 4

Development plans for Brunel University, also elevated via the Robbins report from CAT status, were announced recently. Architects for the project are Richard Sheppard, Robson and Partners, with Stillman and Eastwick Field as associated architects for the engineering-teaching complex, mooted as one of the largest in Europe. The university is to have a high residential component, with an ultimate student population of 5000. The concentration of residential accommodation on the campus, as opposed to far-flung halls of residence is a positive attempt to focus on Brunel the loyalties of students who will be, under the sandwich system operating, intimately involved with outside firms. Vehicular and pedestrian access to what is a flat, featureless site will be by physical separation rather than complex sectional levels. The central pedestrian campus is planned for linear growth. Brunel is described as 'a major urban element, an open, free community, unisolated and unenclosed'. Some protection for pedestrians between the blocks might not have come amiss.

Hotel for Folkestone 5

Affonso Reidy's Pedregulho building and Ailaud's Cités de l'Abreuvoir et des Courtilieres, the latter with cylindrical towers at the west end, have offshot, in straightened guise, a project for the Leas at Folkestone, by Chamberlin, Powell and Bon. The twin towers, the long straight block and the boomerang-shaped



Endurance testing is a pre-requisite for all Newman products and is carried out in the group laboratories, illustrated below. Typical tests require Briton door closers to operate consecutively three million times, or a floor spring to be tested to destruction under normal and simulated tropical conditions. To ensure the highest standard is maintained at all times tests of a great variety are carried out on Automatic Doors, Glass door rails, Flexible Doors, Panic Hardware and Window Controls, and also on products of our competitors.

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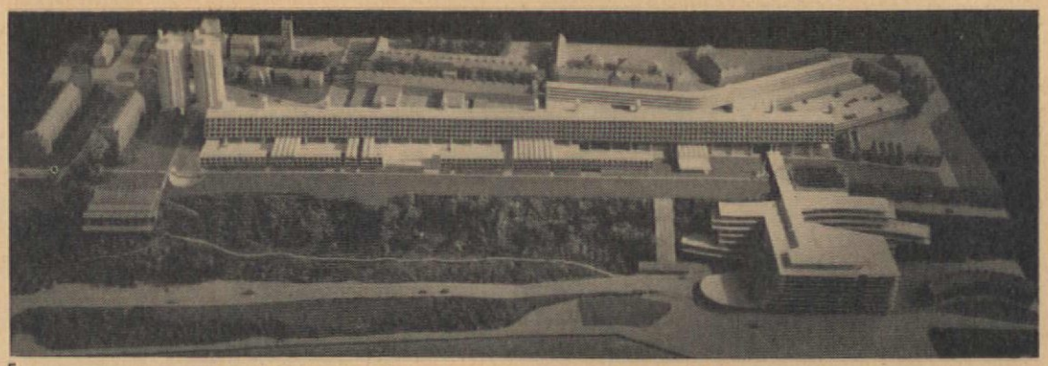
NEWMANS



building behind are largely hotel accommodation. Decks of carparking under the long block, and a multi-storey island just south of the boomerang serve all parts. The exotic appendage at the other end of the towers is a marina and floral hall. Under the characteristically CPB nissen hut roof-forms in front of the long block are terraces, a restaurant, more hotel rooms and service rooms. A new road runs between the long and the boomerang block, forking off under the east end of the former into a 'Road of Remembrance'. Hotel rooms can be deployed as self-contained one-room flats, at the flick of a switch, so to speak. Integral with the development, in the area just behind the long block will be 100,000ft² of shopping space. The lucky residents, 2000–3000 of them, will have a view of France on fine days. All in all a palatable aperitif for the incoming continental.



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Spec house 6, 7

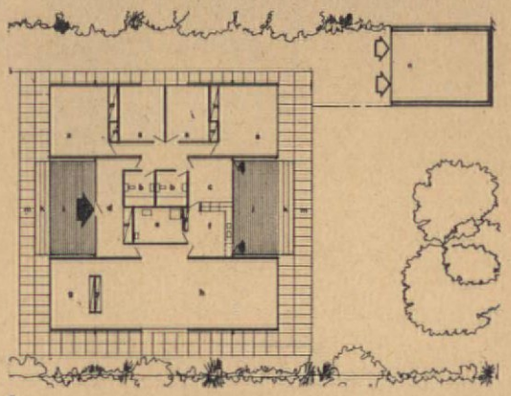
Copsey Developments Limited's £15,000 house at East Grinstead (architects Peter Foggs and David Thomas), part Farnsworth part Craig Ellwood, is not going to solve the housing shortage, but for its size will do much to father a purer strain of influence than, for all the talk, we have been wont to get. The tie bars are a bold stroke (this is a speculative development!) but that door . . . ! Net area of the house 2000ft,² excluding the two-car garage, with living room 14ft × 36ft, four bedrooms, two bathrooms, entrance hall 21ft × 6ft, utility room, kitchen, playroom, study, and two terraces each 21ft × 9ft 6in. Vertical cedar boarding inside and out; windows plate glass in Marley neoprene gaskets. External walls have a layer of heavy building paper and 1½in polystyrene between the cedar faces.

Barbican 8

Construction on the City of London's Barbican scheme (architects Chamberlin, Powell and Bon) began on five multi-storey blocks containing 573 dwellings (various) for 1400 people, and a 200-bedroom hostel for students, all rising above a podium walkway 18ft above street level. Underneath will be two floors of commercial accommodation, 270,000ft², and a basement garage for 517 vehicles. The development is on two adjacent sites, seven acres in all, bounded by Barbican and Beech Street, Aldersgate Street, Whitecross Street, Fann Street and Cripplegate Street and Golden Lane. The five multi-storey blocks, apart from the hostel, contain 201 one-room flats, 167 two-room flats, 131 two-room maisonettes, and 62 three-room maisonettes. My computer calls that 561, but there may be a loose floorboard somewhere. The students' hostel will be 20 storeys. Lets hope no barrel vaulted roof dwellings grace the top of that lot. Why mess up good architecture with these grisly accretions?

Snowdonia power station 9, 10

Atomic Power Constructions Ltd announced the 'going to power' of one of the world's largest nuclear power stations. APC (amongst whom number the Fairey Co. Ltd) are designers and constructors of the station, Trawsfynydd; consultant architect, Sir Basil Spence. The chilling remoteness of this form—careless colossus turns the architect into a fair version of Orwell's Winston Smith.



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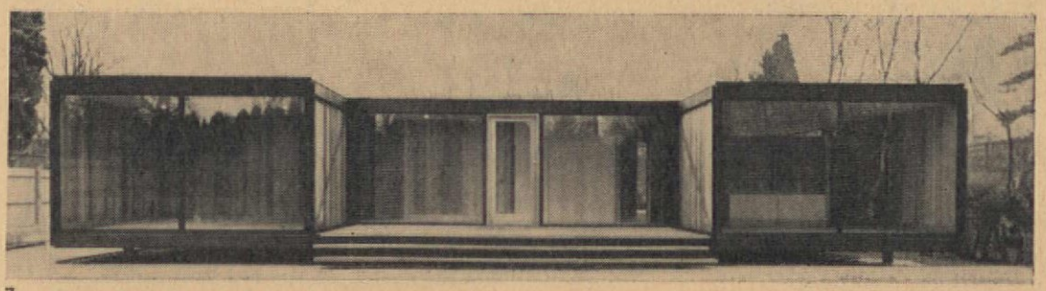

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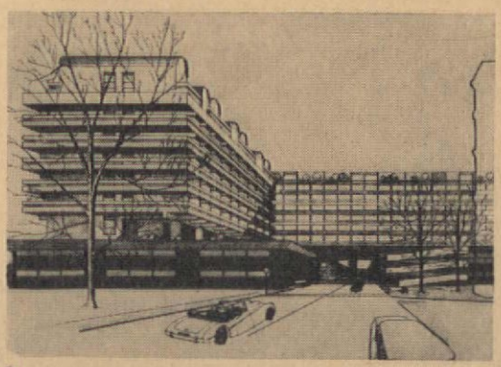

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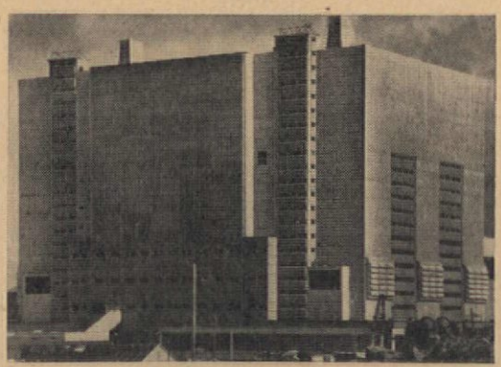

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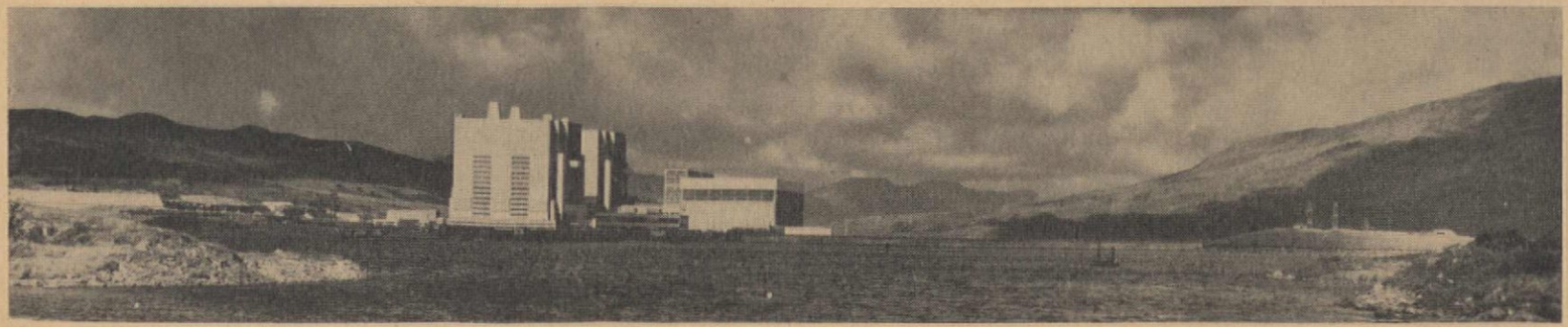

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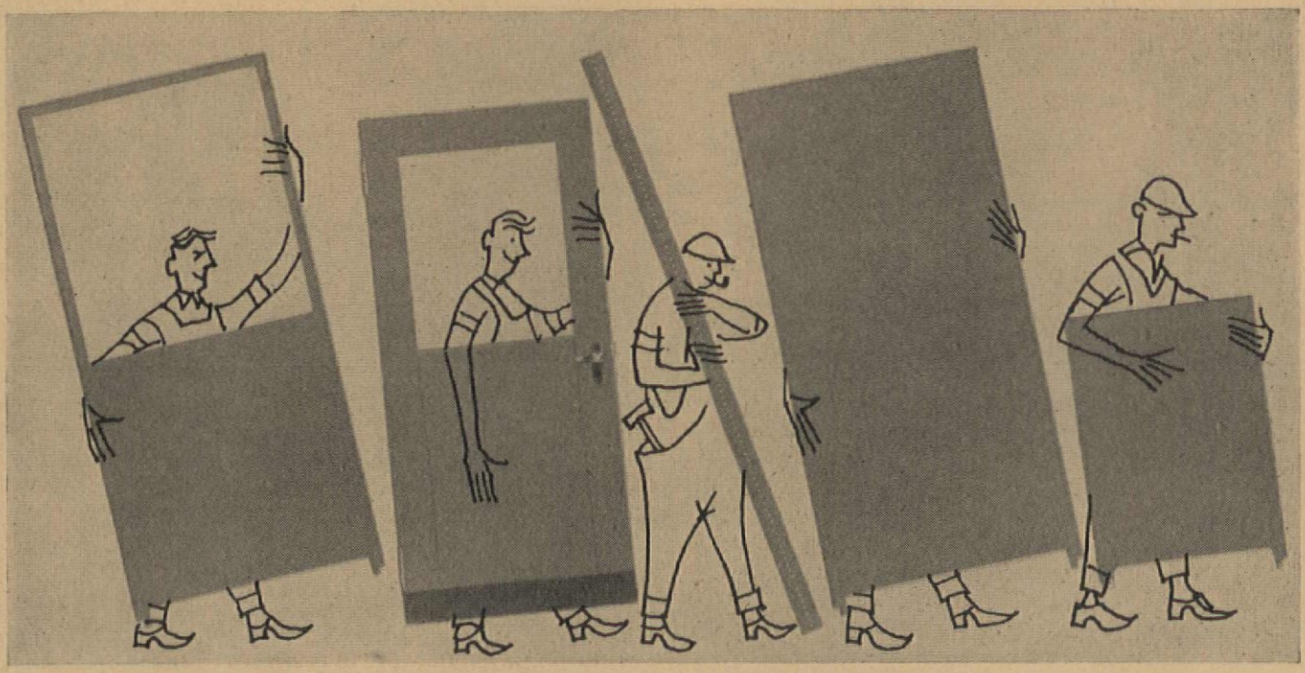

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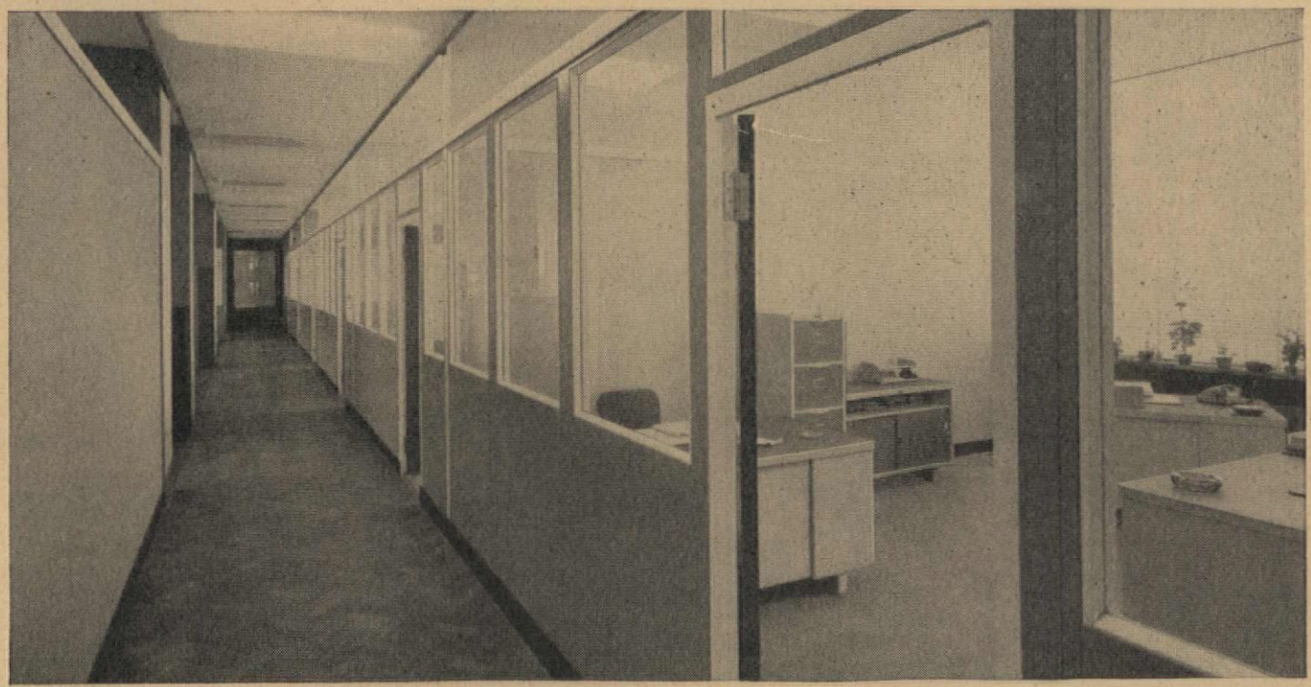

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World news

John Donat

Eire

Kennedy Memorial Hall 1, 2

The concert hall, by Raymond McGrath, has developed into a cultural centre including a new National Library, exhibition space and a smaller auditorium. The main concert hall is designed primarily for orchestral and choral music but can also be adapted for ballet and stage performances or for international conferences. It seats 1840 people, a colossal audience for a country of only three million people. The multi-purpose uses arise because facilities on this scale could hardly be justified for musical performances only.

Photo: Deegan

Germany

Comprehensive building system 3–6

Bauen + Wohnen show in their February issue a number of building systems. One designed by A. R. Boutwell and M. F. Mitchell is based on a post-tensioned tubular lattice structure for floors and roofs that can be folded up for easy transportation. The system, which is planned to an 80cm grid, includes complete prefabrication of bathrooms, kitchens, storage fitments, partitions and cladding, with neoprene 'bus window' glazing. It is also shown used for high-rise buildings **6.**

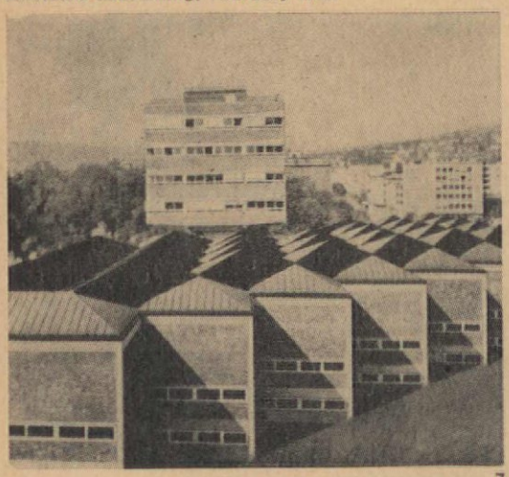
The other more conventional heavy-weight systems illustrated are really examples of rationalized techniques; this one at least justifies the use of that mis-used word 'industrialized'. The architects are talking with world horizons in view; an assembly line for a million or so might produce a successor to the Volkswagen. Then perhaps we might be able to start talking about a building *industry*.

Bauen und Wohnen, February 1965

Technical faculty, Stuttgart 7

Designed by Prof. Dr Linde von Jahren it looks curiously like a cut-price version of Stirling and Gowan's Leicester Engineering building. It has the same primary functional articulation: a generalized top-lit factory-roofed shed on the ground with a small tower containing smaller accommodation above.

Deutsche Bauzeitung, February 1965

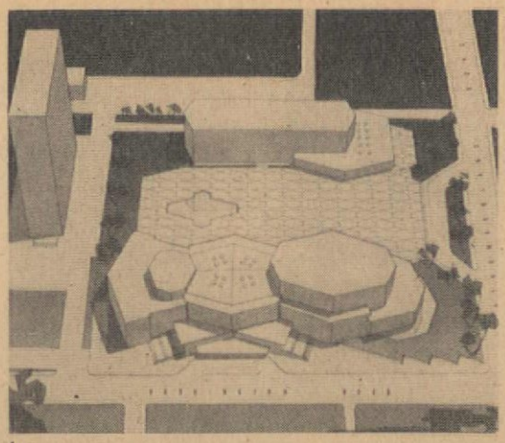


7

Italy

High density Necropoli 8–10

Attention focused on the world-wide implications of ever higher birth rates tends to deflect our interest from its inexorable counterform the Death Industry (already promoted to a fine art of popular persuasion in the USA). It is interesting to see architects in Italy and Uruguay tackling the problem of creating meaningful places for



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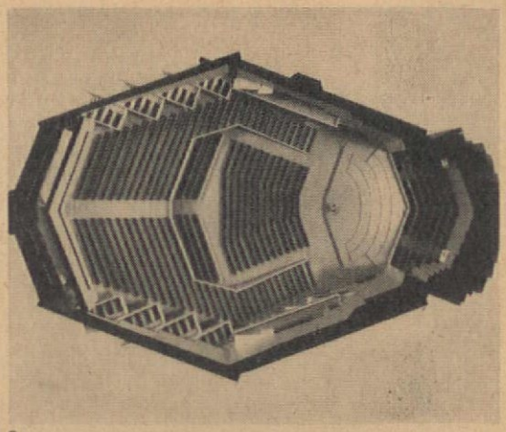

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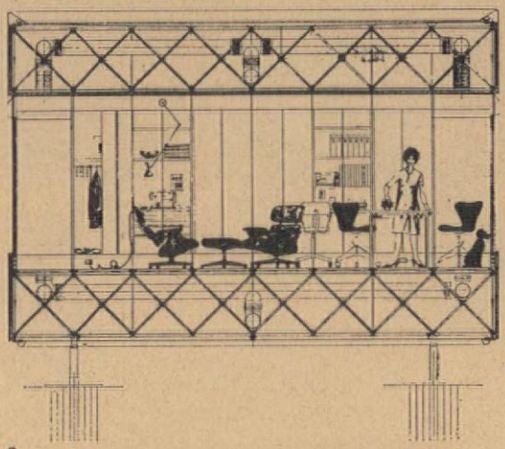

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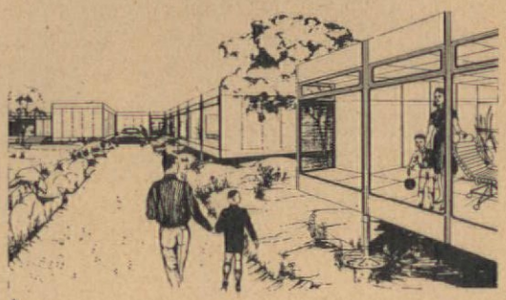

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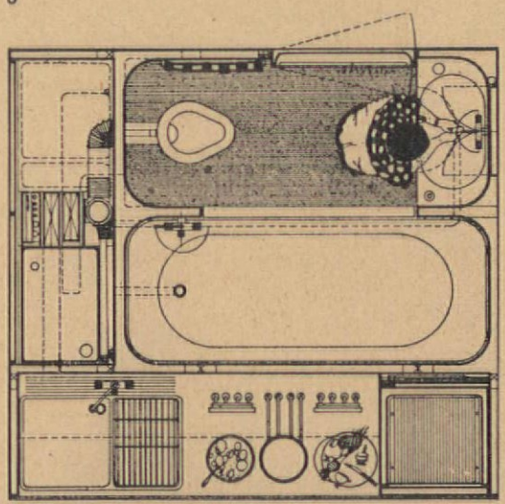

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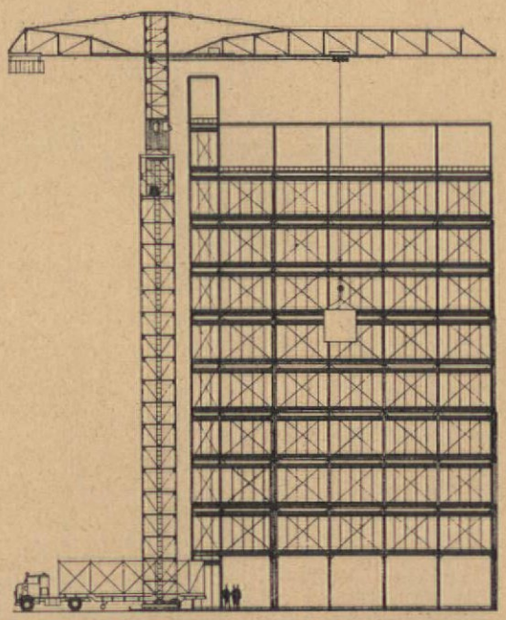

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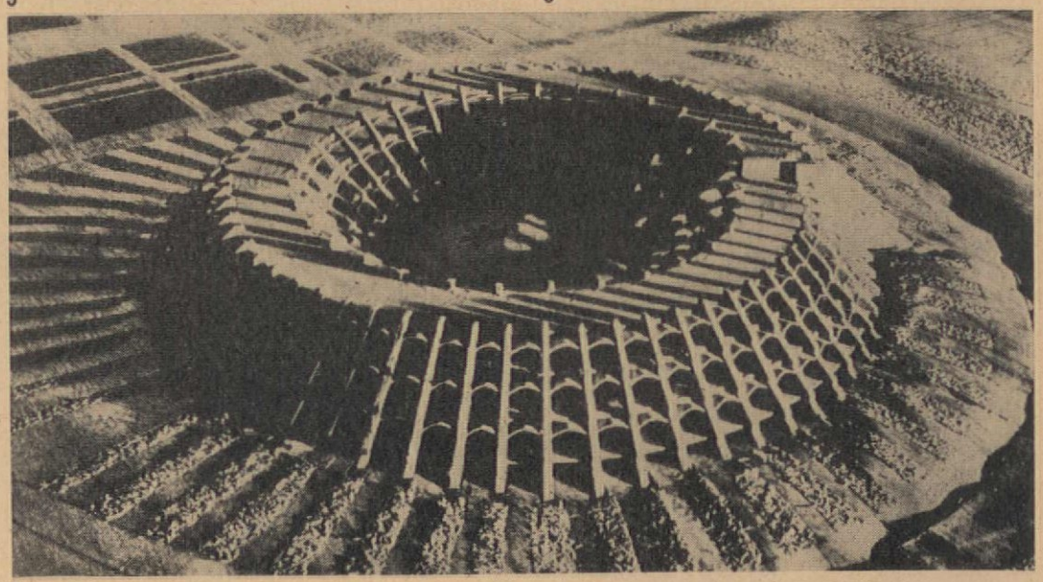

8

In the best buildings nowadays you'll find Sisalkraft building papers all over, and under, the place. Sometimes they are keeping things in, like heat. More often they are keeping things out—like damp and dirt; cold and fire; wind and wet. Occasionally they are keeping things apart: preventing bonding or chemical interaction. Shown here are five of the Sisalkraft papers widely used as building membranes*. For details of these and all other building grades of Sisalkraft, just ask British Sisalkraft Limited.
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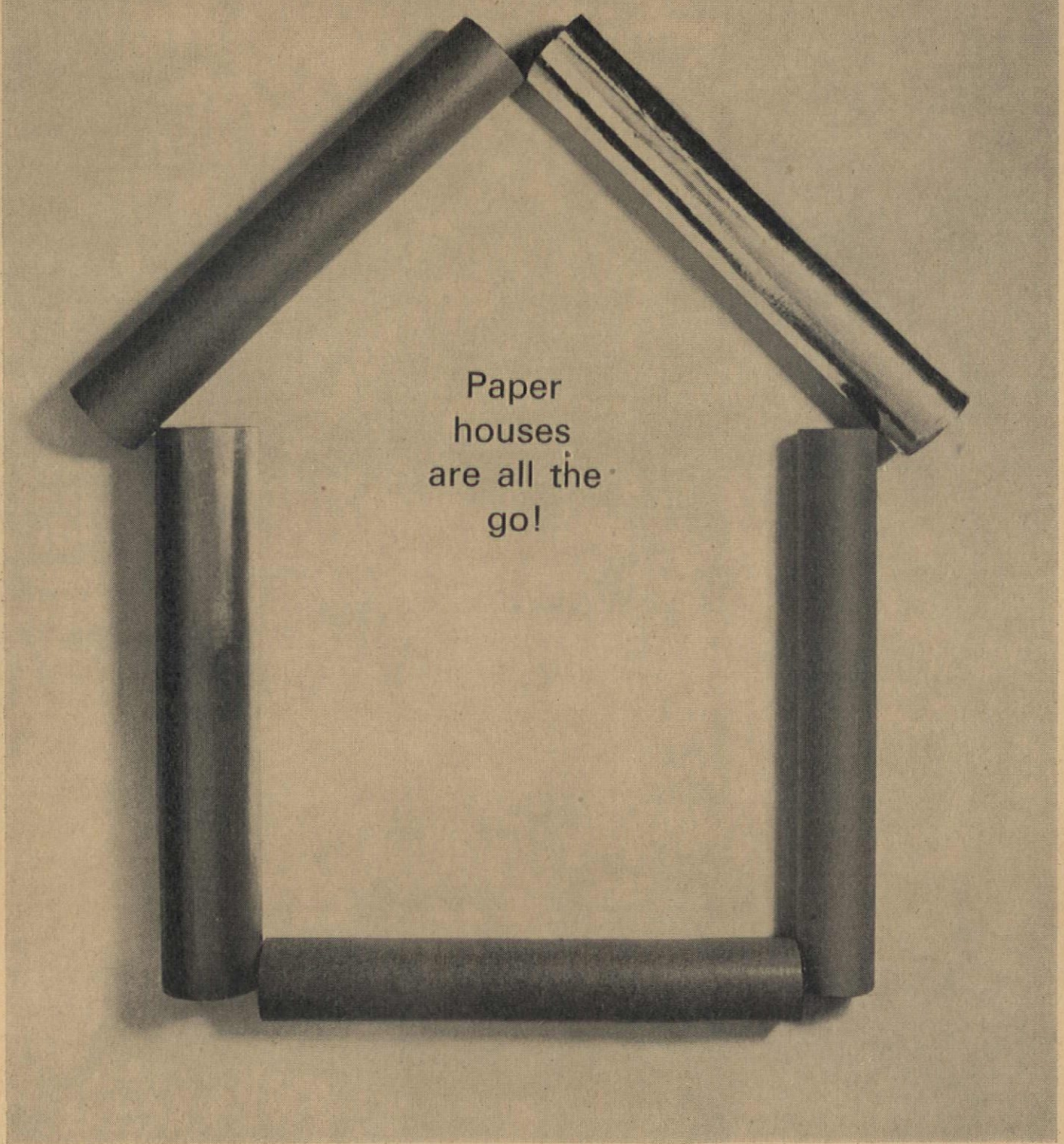


departed loved ones on a gigantic scale. 'Choral magnificence and religious solemnity' is the aim of a grittily Roman project by Castiligioni and Fontana **8.** Four twenty-storey square-plan towers grouped in rigid symmetry by Nanda Vigo and Cesare Tacchio **9** create their effect through sheer monumentality. In Uruguay, Nelson Boyardo **10** surrounds a court decorated with abstract concrete reliefs with an ambulatory that contains racks of funeral urns. All this seems a strange obsession when we are so incapable of housing the Living, but it will become an increasingly serious problem so long as the human race continues to honour its Dead.
Domus, February 1965

Australia

Sydney Opera House **11**

A recent photograph of the section of the Sydney Opera House shows how Utzon is packing his main auditorium, rehearsal rooms and experimental theatre into the profile of the great concrete sails. With each more detailed publication the design appears to become more and more complex, particularly to house extremely sophisticated mechanical stage equipment, air conditioning and acoustic controls that are swallowing up a fair proportion of the much publicized rising costs.
Photo: W. Brindle, Australian News and Information Bureau
See *AD*, March 1965

The Two Cultures in Architecture debate continues with a lecture given to the Architectural Research Group in Adelaide by George Molnar. Wittily illustrated and entitled 'Technocracy, the Enemy of Architecture?'. Molnar cogently argues the case for the Muse versus the Computor. Technocracy has no morals. The ultimate aim of architecture is Man. The ultimate aim of technocracy is technical perfection. Technocracy as an enemy of architecture is manifested in Gigantism, Structurism, Functionalistics, Obsolescence and lack of relationship to human scale or aspiration. Molnar concludes that human ends can be achieved by architecture using the discoveries of technical sciences, but that Technocracy using architecture never will.
Architecture in Australia, December 1964

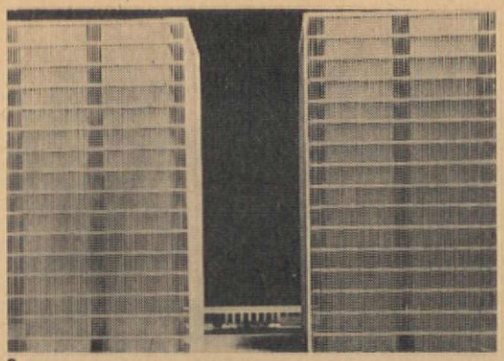


12

USA

Research House, Silverlake **12**

Richard Neutra's new house is to replace the Institute that was completely destroyed by fire in 1963. Its primary aim was to demonstrate that tight land economy principles could have contained Los Angeles within one third of its present size.
'The US has let its public environment run to overpowering disorder' proclaims Fortune in an introduction to a series of articles on 'The New Environment'. One of them proceeds to describe Los Angeles as 'Prototype of Supercity'. Alastair Cooke's verdict is nearer the mark: 'not the City *par excellence*, but *ad nauseam*.' It renders all the more poignant Neutra's prophesy of thirty years ago.



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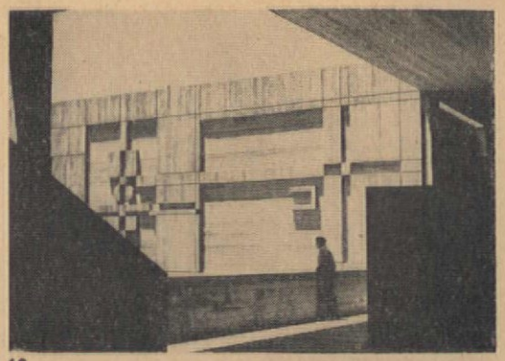

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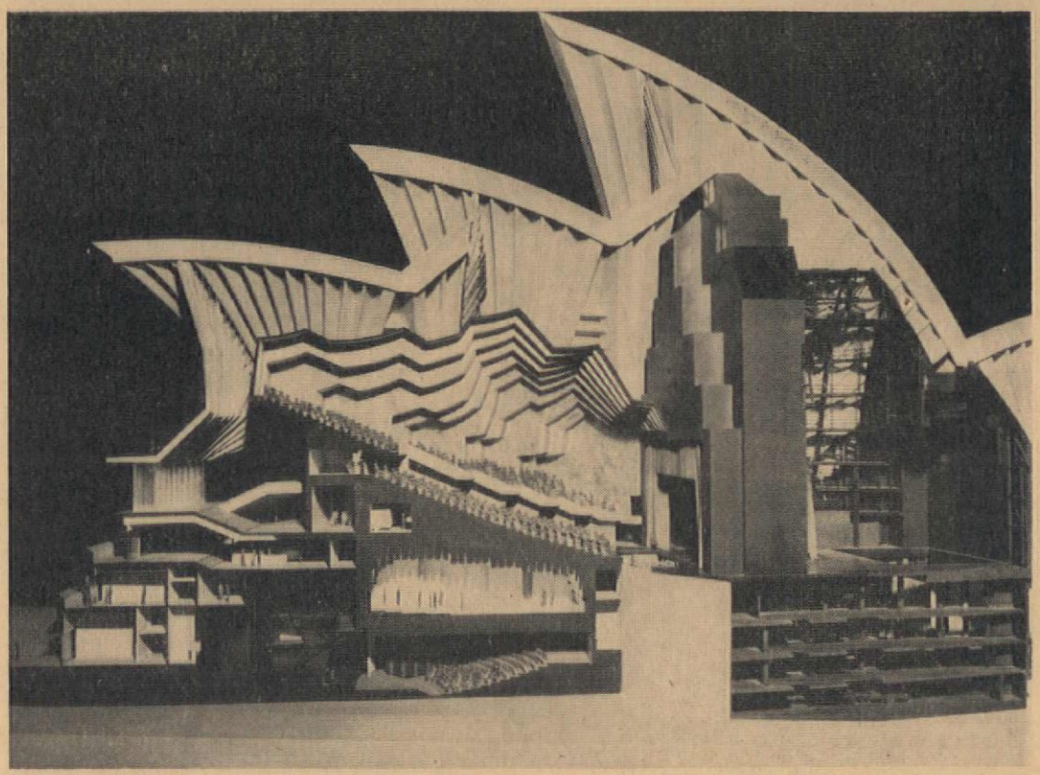

11

Clarification

'en loge'—mistranslated in Philippe Molle's article *AD* January 1965 p.8

Students at the ENSBA are not fortunate enough to draw their sketch designs at home, but are obliged to draw them *en loge*, that is to say closed in a cubicle during six or nine hours, without possibility of reference to books or other documents.

The organization of a recent simple first class project is typical. Students receive the list of the subjects for the following school year in October —in this case 'A science library'.

One week before the sketch design, a lecture was given by an architect best known for his luxury housing projects. This particular lecture was badly attended as it was announced at short notice. These lectures are not regular practice, and in any case the students cannot ask questions as there are, theoretically, 300. The studio director may also give a short talk if he has experience in the subject, but this seems rare.

On 25th February the sketch design was done in nine hours with students enclosed in individual cubicles at the school. *Theoretically* they were not supposed to see other students' work, or have documents with them. A programme was distributed giving approximate room sizes. No site plan was given.

On 30th April the Final Project was drawn (The eight weeks gap included two weeks holiday). The project had to be drawn in ink on a double eagle board 4ft 0in × 5ft 8in—a plan at ground level, one section and two elevations all at $\frac{1}{4}$in × 1ft 0in. Zipatone, tracing paper, prints and TTS are not allowed (cf. progress since le Palais des Nations). Walls on plan and section had to be shown black and shadows drawn on plan.

Projects were judged by a jury of about ten staff architects. Time taken for each project used to be about forty-five seconds, but splitting of the first class into simple and complex projects has improved this to about ninety seconds. Models are very rarely presented and the sketch design is pinned beside the project to check on conformity. A recent presentation by a student of a project without shadows, and uncluttered drawings, with a study model stuck to the board, was not even admitted as suitable for judgement.

Projects are exhibited publicly for one day. If the professor of theory judges fit, he may give an informal explanation of the jury decisions to those students who happen to be present (this is difficult as the jury do not keep notes). No other explanation of the judgement is given.

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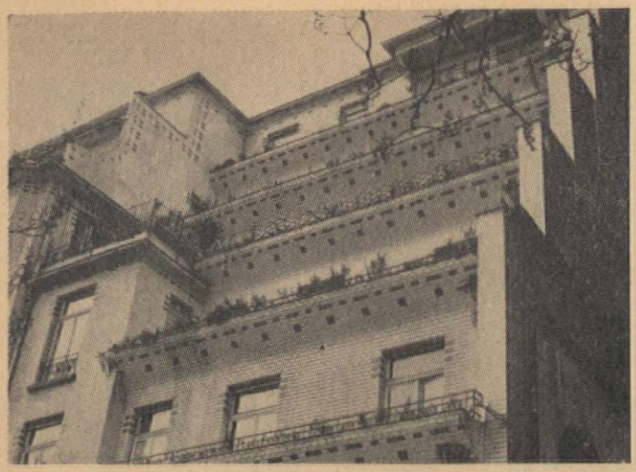

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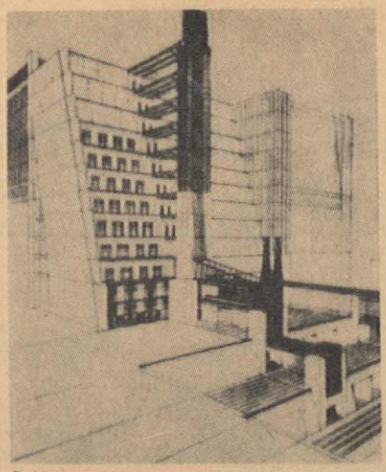

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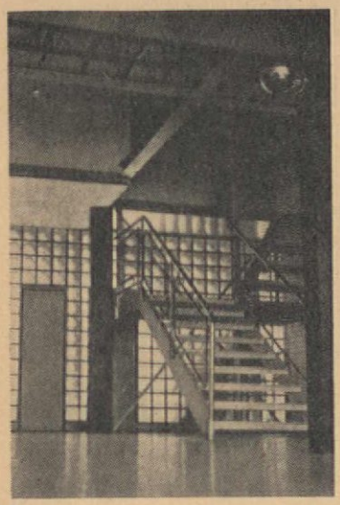

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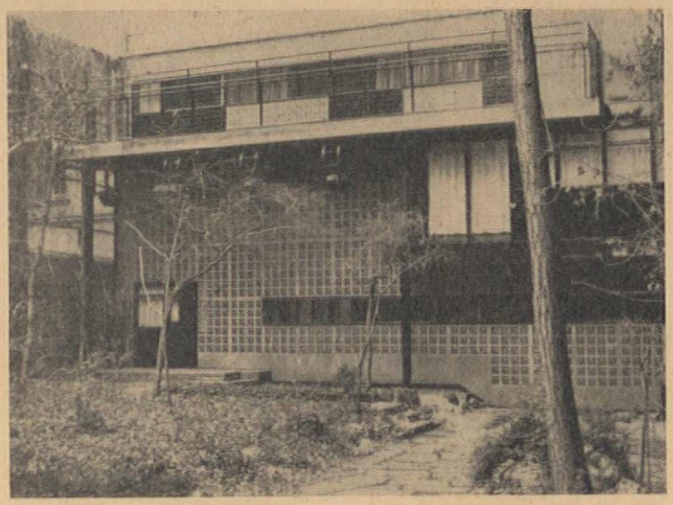
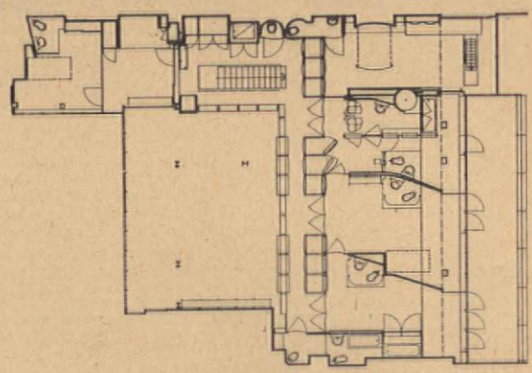


4

Paris 1912-1932

Henri Sauvage, Mallet Stevens and Pierre Chareau, not to mention Le Corbusier, Sonia Delaunay, Cassandre and Colin are all commemorated in the notable February issue of *Werk*—Paris 1912–1932. Henri Sauvage's two famous blocks of flats in the rue Vavin **1** and the rue des Amiraux are illustrated in some detail and pointedly compared with one of Sant'Elia's projects **2** which falls neatly between the two. So that influences and counter influences abound. Chareau's (and Bijvoert's) 'Maison de Verre' **4** also serves as a challenge to historians seeking to trace Le Corbusier's sources of inspiration—both the glass brick walls and the plan of this superb house (the upper plan of which is shown here **5**) must have provided considerable stimulus for his subsequent designs **3**.



5

Art

The new sculpture

1
Christopher Sanderson: Rome 1963 (1)

2
Isaac Witkin: Volution 1964

3
Roland Piché: Sunset and Deposition 1964

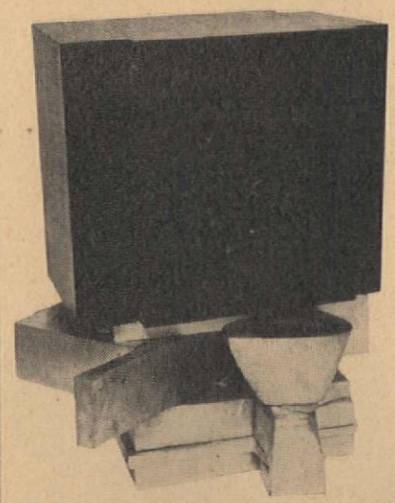
Every work of art communicates its message only partially, and its implications may be as ambiguous to the viewer as to the artist himself. Thus, whenever a new mode of visual expression asserts itself and the public expects it to be accompanied by credos and manifestos, they are most likely to be disappointed. The artist may be completely at a loss as to the reasons why he does certain things or why he wants to do them.

The sculpture show at the Whitechapel Art Gallery, which includes some of the best work done during the past two years by the younger generation, might well leave the viewer with many unanswered questions. The departure from the sort of work that represented British sculpture in the 1950s seems almost too great for this change to go by without any verbal ramifications from the artists themselves. This recent wave of British sculpture is a reaction to all the qualities implied in the use of bronze, expressionist/anguished imagery, nuances of texture and patina, and a humanly meaningful image in the more traditional sense.

By comparison with what went on before, the new era of coloured sculpture is impersonal in finish, expansive, bold, made to be displayed without pedestals, and often closer to painting than to sculpture. It dates back in origin to 1960. That was the year when Anthony Caro, who influenced this whole movement while teaching at St Martin's School of Art, turned from figurative to abstract sculpture. His first works in the new idiom were constructed in steel and then painted. Today the media used by David Annesley, Michael Bolus, Phillip King, Roland Piché, Christopher Sanderson, Tim Scott, William Tucker, Isaac Witkin and Derrick Woodham, are basically plastic, fibre glass, and aluminium. The superimposed colour does not negate the inherent quality of the material, since it is largely synthetic. The sculptures are often fundamentally two-dimensional as in the cases of Bolus and Tucker, where contour has supplanted volume.

Witkin's tubular and animalistic shapes, Woodham's concertina tubes and Tim Scott's simple combinations of round and flat forms, have certain organic qualities that cannot be associated with anything specific but none-the-less relate to nature. This is true to an even greater extent in the cases of King and Piché, whose work is still more diversely original. With King's work one can demonstrate that there is a stage at which there is no real division between an illusionistic form on a canvas and one that occupies the full three dimensions in space.

Jasia Reichardt



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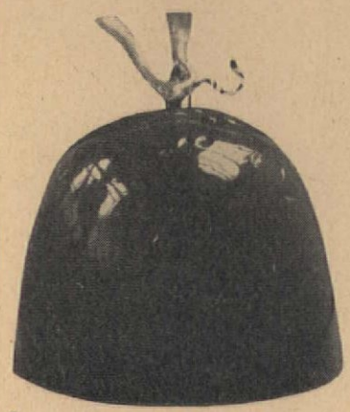

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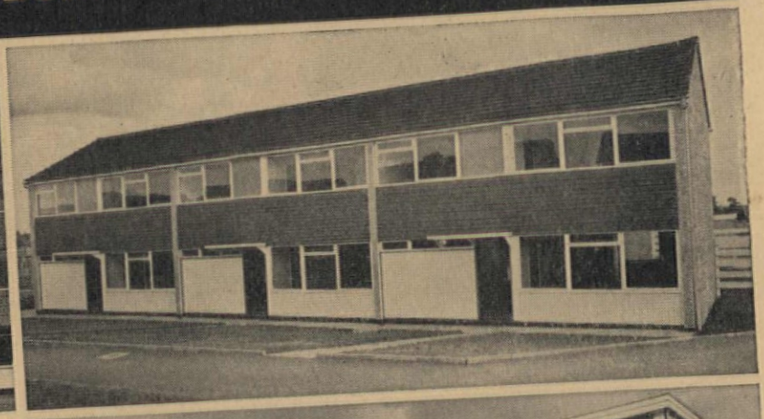
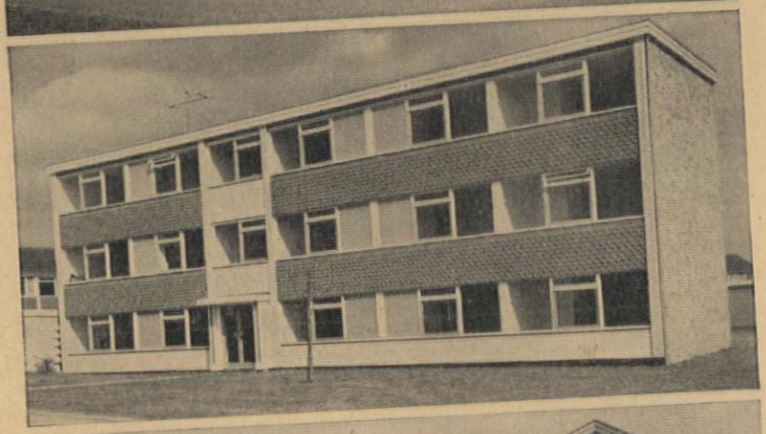
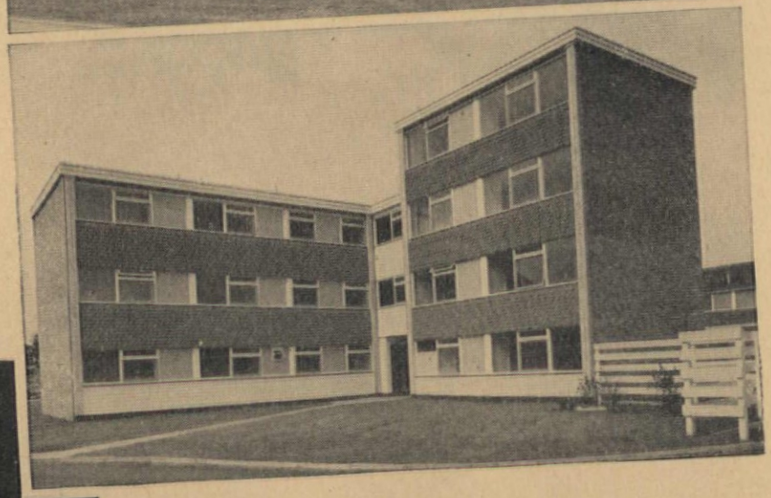
HALCYON Domestic Warm Air Heating





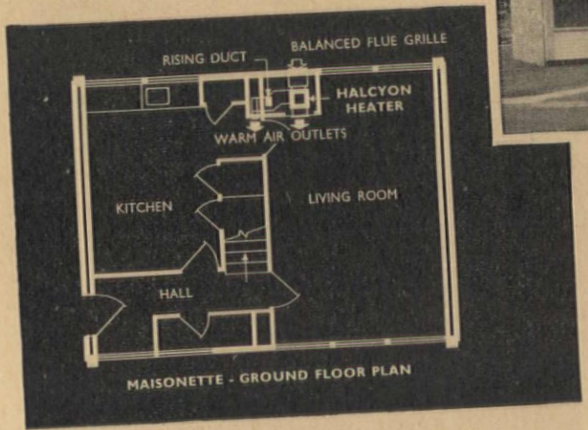




Sugg Halcyon gas-fired warm air heaters are being increasingly specified for installation in industrialised building, where prefabricated heater compartments may be deally sited to provide the maximum efficiency obtainable.

Halcyon heaters are installed in the Gregory Industrialised Housing development at Wigston, Leicestershire illustrated on this page. The flexibility of the Gregory system provides houses, one or two bedroom flats and three bedroom maisonettes in two or four storey construction which serves to indicate the versatility of the Halcyon warm air system.

Below: Typical ground floor plan of maisonette showing position of Halcyon heater.



MORE HALCYON WARM AIR HEATERS ARE SPECIFIED AND INSTALLED BY LOCAL AUTHORITIES THROUGHOUT THE BRITISH ISLES THAN THE COMBINED TOTAL OF ALL OTHER MAKES

Data sheets on all models available upon request

Barbour Index File No. 376

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Dans ce numéro

"Projects Awards"

Les éditeurs de 'Architectural Design' ont invité des architectes ainsi que leurs clients à participer à un programme annuel de 'Prix d'Architecture'.
Le concours est ouvert à tout architecte diplômé du Royaume Uni et les prix sont attribués à des projets encore au stade du dessin à la date du rendu. Les projets présentés peuvent être de n'importe quelle catégorie de bâtiment ou groupe de bâtiments.
Les membres du jury étaient cette année David Allford, Trevor Dannatt et James Stirling. Parmi les 170 projets rendus, ils ont choisi les six projets que nous publions aujourd'hui. Les prix sont attribués sur la base des critères suivants: besoins du client, solution conceptuelle et technique.

Voici les critiques et commentaires des jurés

James Stirling

Aucun des projets présentés ne sortait d'emblée de la masse, et ceci est dommage car, dans le cas contraire, un projet aurait probablement pu guider, sinon influencer l'architecture actuelle ou les tendances du futur immédiat. Même les six projets choisis sont décevants car leur tendance générale ne fait que renforcer le meilleur de l'architecture anglaise des huit dernières années telle que nous la connaissons par certaines réalisations venant tant de l'Architectural Association que du Poly. Les défauts de ce mouvement restent les mêmes: trop de choses se passent à trop petite échelle, composition inconséquente et même traditionnelle et le penchant récent pour une étude trop poussée en coupe menant à utiliser fréquemment des demi-niveaux. Le concours démontre par contre qu'enfin l'un des vices anglais, celui d'utiliser trop de matériaux différents, semble être surmonté.

Trevor Dannatt

Les projets représentent une quantité de types de construction d'échelles aussi variées que reconstruction urbaine et immeubles très modestes. Il est bon que les projets soient aussi diversifiés et leur envergure n'a en aucun cas influencé le jugement et l'attribution des prix.
Le projet de Norman Starrett (p. 112) se distingue déjà par sa qualité de composition et de présentation; l'on est convaincu qu'un édifice de premier ordre résultera de l'ensemble de ces dessins particulièrement soignés quant au traitement du terrain, à la programmation et à l'étude de détail.
Le petit groupe résidentiel de Twickenham (p. 168) propose sur un terrain extrêmement difficile une bonne composition et une excellente utilisation des niveaux, soit un ensemble séduisant parfaitement adapté à l'habitat.
A plus grande échelle, l'ensemble de Coulsdon (p. 174) propose un rapport particulièrement réussi entre maisons et garages d'une très heureuse conception architecturale sans l'obsession actuelle des galeries dénivelées pour piétons. Les plans et coupes sont intéressants et viables sans être surfaits dans leur conception spatiale. En somme un projet stimulant pour le développement de terrains de troisième ordre.

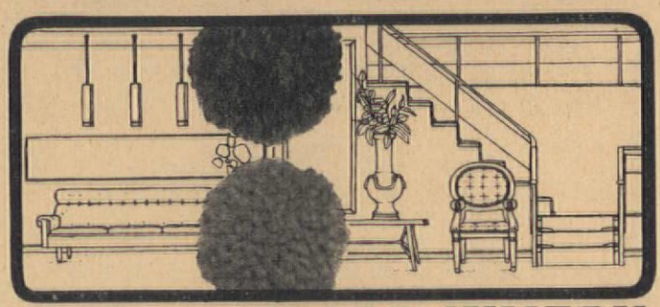
David Allford

Le niveau des projets présentés est décevant. Tant que des canons ne sont pas établis, est-il besoin d'avoir une telle variété d'expression stylistique, discordante, criarde et confuse? Où est la voix modeste? L'architecture anglaise a toujours dérivé d'autres architectures mais ces dérivés peuvent être développés intelligemment, c'est à dire avec honnêteté et dans un but précis. Ici nous avons souvent des dérivés de dérivés, au mieux une pseudo-autorité cachant une absence de convictions profondes.
La Piscine de Worthing (p. 166) est un projet intelligent, bien organisé et clairement présenté. Il s'intègre bien dans un terrain exigu. Les circulations, en relation avec les points de contrôle, fonctionnent bien. L'expression est sans détours et quelques indications 'modes' telles les angles tronqués ont une certaine réalité dans le cas présent.
Malgré les limitations du terrain, le groupe résidentiel de Twickenham (p. 162) présente un programme simple, organisé avec beaucoup de clarté. Voilà un très bon plan et une coupe qui romp la tyrannie des parcelles étroites grâce à une salle de séjour plus élevée. La seule vraie critique est à faire au corridor—hall d'entrée près des garages qui risque d'être déprimant.
La "Christchurch Gallery" (p. 170) est un projet modeste et simple, bien relié aux bâtiments existants auxquels il se rattache. La présentation en est excellente et promet un petit édifice agréable.
La résidence des infirmières Calway (p. 172) nous convainc qu'un problème complexe peut être élégamment résolu. Des projets primés, celui-ci ressort certainement, voici un bon projet de la tendance actuelle—une prose claire et nette se distingue vite de tant de poésie prétentieuse.
L'ensemble de Coulsdon, situé sur un terrain difficile entouré de zones de résidences suburbaines, est plein d'imagination et de possibilités. J'insiste sur le mot possibilités car le projet est pauvrement présenté et difficile à comprendre. Le projet semble se trouver à un premier stade de gestation et je suis alarmé de certaines qualités 'maigres' du dessin.
De loin le plus grand des six projets choisis, le centre d'achat et d'amusement vacancier (p. 176) séduit par sa conception. Les principes de développement linéaire de ce ruban central semblent bien organisés. Ce pourrait certainement être une endroit stimulant mais certains signes de mode risquent à l'éxécution de ternir la conception de l'ensemble, angles tronqués (de nouveau) et esthétique de laboratoires chimiques! Une fois terminé, il risque de perdre l'élément gaieté si essentiel à un centre d'amusement.

Le Club Méditerranée, Arhziv, Israel Page 193

Organisation communautaire et vacances individuelles sont deux conceptions qui semblent être opposées mais s'il est possible de les rapprocher, le Club Méditerranée a certainement trouvé la bonne formule. Il se distingue par le choix des sites merveilleux—Al Hoceima, Cefalù, Parga—par les constructions qu'il y intègre permettant ainsi aux gens de se récréer sans contrainte. La disposition des abris—un ensemble de bureaux, un restaurant et une cuisine, un bar avec piste de danse, une salle de musique, un abris pour les malades, un chapelet de parasols et 350 cases—est obsédante et surprend par sa géométrie; elle rappelle le centre civique des mêmes architectes à Bat Yam publié récemment (*AD* 11, 1964) Dans ce cas ils ont choisi l'hexagone. Il contrôle la disposition de l'ensemble, les plans de chaque construction et se retrouve même dans les éléments de structure. Les éléments standards comprennent un panneau hexagonal légèrement convexe et un panneau triangulaire de I mètre de côté; ils se composent de 'Canadex' (paille séchée et pressée liée avec du fil de fer) entouré d'un cadre de bois fixé par des tasseaux métalliques.





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WRIGHTON

In dieser Nummer

"Projects Awards"

Die Herausgeber von 'Architectural Design' haben Architekten und ihre Auftragsgeber eingeladen an einem jährlichen Programm fur 'Architektur Preise' teilzunehmen. Dieser Preis hat ein dreifaches Ziel: 1.
Zu diesem Wettbewerb sind alle Diplom-Architekten in Grossbritanien eingeladen, und die Preise werden an diejenigen Entwürfe verteilt die zur Zeit der Einsendung den Bauprozess noch nicht erreicht haben. Die Projekte können jeder Art von Gebäuden oder Gebäude Gruppen angehören.
Die Mitglieder des Entscheidungsrates waren in diesem Jahr James Stirling, Trevor Dannatt und David Allford; sie haben von den 170 eingesandten Projekten sechs preiswürdig gefunden. Die Entscheidung wurde anhand der Bedürfnisse des Auftragsgebers und der besten architektonischen und technischen Lösungen getroffen.

Nachstehend die Bemerkungen der Preisrichter

James Stirling
Kein Einzelplan konnte als echter Gewinner bezeichnet werden. Das war bedauerlich, da dieser sonst wahrscheinlich ein Führer für die Gegenwart oder die unmittelbare Zukunft sein könnte. Selbst die ausgewählten sechs Pläne waren in gewisser Beziehung enttäuschend, da ihr Hauptzug war, die allgemeine Richtung der besten englischen Architektur der letzten acht Jahre ungefähr noch zu verstärken, eine Richtung, die durch Arbeiten der A.A. und der Poly während der Zeit vorgezeichnet ist. Die Fehler dieser Richtung machen sich immer noch bei uns bemerkbar: zuviel Geschehen auf zu kleinem Maßstab, nicht folgerichtige und sogar zu traditionsgebundene Planung, und die Neigung der letzten Zeit zur Überbetonung der Abschnitte, gewöhnlich sogar mit Halbstockbauweise. Ein englischer Fehler jedoch scheint, wie der Wettbewerb zeigte, überwunden zu sein, und zwar die frühere Tendenz, zu viele verschiedene Materialarten zu verwenden.

Trevor Dannatt
Die vorgelegten Arbeiten zeigten eine reiche Vielfalt von Bautypen, von Stadtneuplanungen bis hinab zu bescheidenen Häusern. Es ist richtig, daß solche Vielfalt gezeigt werden sollte, und die Größe des Objekts hat in keiner Weise die Überlegungen bei der Zuerkennung der Preise beeinflußt.
Was das rein Professionelle in Entwurf und Darbietung betrifft, war der Plan von Norman Starrett (S.172) hervorragend, und man war überzeugt, daß aus diesen Plänen ein erstklassiges Bauwerk entstehen würde, in der Geländebehandlung, im Bauprogramm, in der Planung der Einzelheiten—in allem wohlüberlegt. Die kleine Häusergruppe in Twickenham (S.168) zeigte vorzügliche Planung und Nutzung der Niveaus auf einem sehr schwierigen Gelände—eine hübsche Wohngruppe, mit überzeugender Gestaltung für Wohnzwecke. Der Plan in Coulsdon (S.174) zeigte auf größerem Maßstab eine hervorragende Vereinigung von Häusern und Garagen und sehr hübsche Architekturbehandlung ohne die heute so oft übertriebene Anwendung von Decks.
Die Hauspläne und Sektionen sind interessant und wohnlich, ohne räumlich zu sehr belastet zu sein. Alles in allem ist es ein sehr anregender Plan für die Entwicklung von Hintergelände.

David Allford
Das Niveau war enttäuschend. Wenn keine anerkannte Regel herrscht, muß dann eine solche Verschiedenheit von stilistischen Ausdrücken sein, so hart, schrill und verwirrend? Wo ist die leise, ruhige Stimme. Die englische Architektur hat sich immer von anderen Quellen hergeleitet, aber das kann auch auf kluge Art geschehen—das heißt ehrlich und zweckvoll. Hier haben wir bestenfalls nur Ableitungen von anderen Ableitungen, eine vorgebliche Autorität, die den Mangel an wahrer Überzeugung verdecken soll.

Das Schwimmbad in Worthing (S.166) ist ein intelligenter, wohlgeordneter Plan, und klar dargeboten. Gut in das knappe Grundstück eingefügt. Gut angelegtes Wegenetz in der richtigen Beziehung zu den Kontrollpunkten. Der Eindruck ist offen und gradlinig, und selbst modische Dinge wie die gekappten Ecken haben Berechtigung unter gegebenen Umständen.

Trotz der Beschränkungen durch das Gelände in Twickenham (S.168) bot diese Häusergruppe ein einfaches Programm. Mit Klarheit organisiert. Sehr gute Planung und ein Aufriß, der die Vorherrschaft der schmalen Front durch ein Wohnzimmer von großer Höhe bricht. Wirklichen Anlaß zu Kritik gibt nur der Korridoreingang von der Garage, da dies bedrückend wirken kann.

Die Christchurch Galerie (S.170) ist ein ruhevoller und bescheidener Entwurf. Gut verbunden mit schon vorhandenen Gebäuden, mit denen sie zusammenhängt. Sehr gute Zeichnungen. Es verspricht, ein kleiner heiterer Bau zu werden.

Das Calvary-Pflegeheim (S.172) ist ein vielseitiges Problem, das überzeugend und elegant geplant ist. Von den 'klaren' Plänen ist dieser einer der besten. Es hat das Zeug dazu, ein guter Wegweiser zu werden—gute Prosa hebt sich vorteilhaft ab von soviel prätentiöser Poesie.

Der Wohnungsbau in Coulsdon ist einfallsreich und zeigt ganz bedeutende Möglichkeiten auf einem schwierigen Gelände, das von vorstädtischen Planungen eingeschlossen ist. Ich lege besonderen Nachdruck auf das Wort Möglichkeit, da der Plan mangelhaft dargeboten und schwer zu entziffern war. Er scheint sich noch in einem unreifen Zustand zu befinden, und in den Zeichnungen sind manche 'dünnen' Eigenschaften, die mich beunruhigen.
Der bei weitem größte Plan der sechs ist das Ferien-Einkaufs- und Unterhaltungszentrum (S.176). Von der Auffassung her wirkt es verführerisch. Die Grundzüge dieses geradlinig angelegten Mittelstreifens scheinen sehr gut organisiert. Es könnte ein angenehmer Aufenthalt sein, obwohl einiges dafür spricht, daß die Mode den ursprünglichen Plan beeinflussen wird—(wieder) gekappte Ecken und Ästhetik wie in einem chemischen Werk. Es ist möglich, daß es nach Vollendung die Fröhlichkeit verloren haben wird, die für ein Vergnügungszentrum erwünscht ist.

Der Club Méditerranée, Arhziv, Israel *S.193*

Gemeinschaftsorganisation und Urlaubsgefühl mögen als feindliche Gegenpole angesehen werden, aber wenn sie vereinigt werden können, ist der Club Méditerranée der wahrscheinlichste Ort, das zu vollbringen. Er hat einen hervorragenden Ruf dafür, daß er die besten Gelände zu wählen weiß—von Al Hoceima bis nach Cefalù und bis nach Parga—auf ihnen dann umgebungsgerecht baut und den Besuchern die Möglichkeit gibt, alles in vollen Zügen und ohne Beschränkungen zu genießen. Die Anordnung der Unterbringungsbauten in Arhziv—eine Schar von Büros, ein Restaurant mit Küche, eine Bar mit Tanzfläche, ein Konzertraum, eine Krankenstation, eine Reihe von Sonnenschirmen und 350 Kabinen—ist eigenartig besessen geometrisch, genau wie das schon veröffentlichte Projekt des Architekten für das Gemeinschaftszentrum in Bat Yam (*AD* 11, 1964). Diesmal hat man das Sechseck gewählt. Es beherrscht den gesamten Plan von der Gesamtanlage über die Pläne der einzelnen Gebäude bis zu den Bauelementen.

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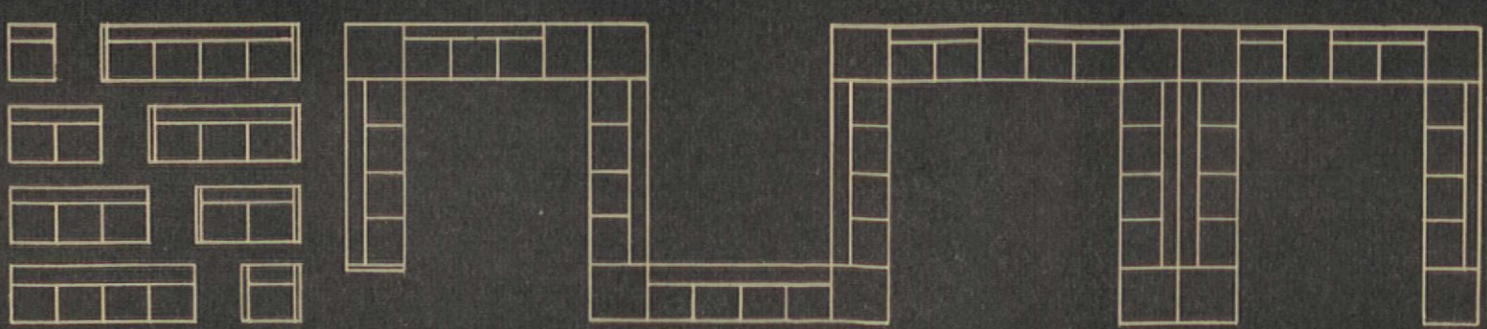


Training for the future*

Tomás Maldonado

The task that both architects and industrial designers have in common is that of giving structure and sense to human environment, but it has never been more difficult than in our time. Never has human environment been more chaotic and irrational. Never, in consequence, have we architects and industrial designers had so much, and at the same time so little, to do. Never have we been so much needed, and so little used.

Tasks on a national, regional and international scale claim our co-operation, but we are obliged to ignore them. Those who may doubt this may consider the kind of objects in which we actually invest our best capacities and energies: namely, in mansions for the privileged in search of status symbols; in monuments to celebrate the powers that be; in gadgets for the home.

It is already possible to see the essential characteristics of what our future tasks might become. In the next decades an active participation in the struggle against food and housing destitution will be expected of us.

The first point in this programme will have to be the index increase of calories and animal proteins per capita. The second point will be the amelioration in quantity and quality of all individual and social equipment. It is precisely on this front of action that we must look for the new tasks of architects and industrial designers. But we should not underestimate the role played by those who hinder certain tasks being put into our hands, the groups whose interests are in conflict with social and cultural progress. Nor can we disregard our own part in this misfortune. During these last twenty years we have lost, one by one, our real chances to exercise any influence on the course of events.

Many of the ideas inherited from the pioneers of architecture and industrial design have been proved difficult or impossible of application. Brilliant ideas, fascinating ideas, but totally unfit to effect reality. Other ideas have had such a success that one hardly knows whether this success is to be acclaimed or disclaimed. Personally, I believe in the second alternative. The concept of function has been abused in order to justify the most depressing cultural mediocrities. The idea of social housing has been confused with mere collective housing. So-called workers' houses (*maisons ouvrières*) are merely degraded bourgeois dwellings.

The slogan 'sun, green and space' has now become the publicity catchword of those who have contributed to put the sun to flight, to ravage the green and decimate space (I am referring to the speculators in real estate). The glorification of construction details in building has become the commonplace of the most perfectly commercial and the most commercially perfect architecture. The ambitious programme of industrialising building has ended in the construction of buildings whose architectural depravity and futility is without precedent.

In the realm of industrial design, the search for an unchanging and all-embracing idea of function has brought us to the very opposite of that for which we have looked: to the creation of products with a formalism that is as refined as is it sterile. All these facts, certainly negative, cannot justify the attitudes which—in reaction—have been adopted by many architects and industrial designers in recent years. Some have submerged themselves in what might be called professional amnesia.

Others have adhered to various forms of sublimation. One of these is the neo-romantic, neo-baroque, neo-expressionist formalism that produces monuments to document the designer's individuality.

These urban sculptures do not succeed in freeing themselves from the symbolic impositions of the usual clients: state, bank, industry, church and commerce. It is the architect's dream to create symbols of protest in cement, steel or aluminium; but the results provoke no one. They are ultimately spectacular scenographies, made to give splendour and brilliance to the tragedy (or comedy) of social stratification, prestige and promotion architecture.

Other architects cultivate a prophecy of the fantastic. But here, also, the protest lacks strength and remains ineffectual. There can be no clash with the present when you are aiming at the future alone.

Our actual problem, the problem of our generation, is not to go on imagining the future, but to prepare its construction; namely, to find the specific means for its realisation. Contemporary society, internationally viewed, is not affluent but indigent. Therefore, what interests us today is to try to establish what is to be the task of architecture and of industrial design in this age of struggle against food and housing destitution.

Present-day training does not in the least prepare architects and industrial designers for the task of assuming responsibilities of such compass. Analysis of the curricula of the schools betrays a most alarming state of affairs. In some countries, thinking of the architectural schools in France and of some in Italy, the most ultra-conservative traditions are still untouched and no change in the near future can be foreseen. In other countries reform consists mainly in a 'basic course' directly or indirectly inspired in the Bauhaus didactics, and in the acceptance of modern architecture, which the 'beaux-arts' teaching had always excluded. It has not been in any case radical. On the altar where Palladio was worshipped, Wright, Le Corbusier, Gropius, Mies van der Rohe, Fuller, Louis Kahn or Kenzo Tange are now being honoured. The idols have been changed but not the doctrines.

Many who are worried by this state of things believe that a return to the historical study of architecture would help to define a new scientific methodology, and so surmount these shortcomings. Personally I do not believe this is the case.

Others argue that the problems which afflict us in this field could be solved, at least in part, if the participation of students in the government of the university were ensured. No doubt such democratisation could help a progressive reform of the architectural schools, but the experience of Latin American architectural schools shows that it is not enough to have the power to introduce reforms. The reform of architectural schools will have to be not only a reform in structure, but also, and principally, in content.

Some architectural schools have in fact faced reforms in content, giving major importance to the scientific approach to architecture. The idea of architecture as only an intuitive creative process is from every point of view untenable nowadays. Designing is deciding, and deciding is no longer a merely conjectural activity. Nevertheless, in the schools where such an attempt has been made—with some exceptions—the results so far have not been entirely convincing. This could be explained by a certain naïve worship of science which has prevailed. Gilles Gaston Granger pointed out recently the danger of confusing science 'de jure' with science 'de facto', imaginary science with real science. This is exactly the error committed by many of the promoters of these reforms. For polemic reasons they have been led to take science more as a cause which is embraced, than as an instrument which is used. Nevertheless, everything considered, I believe that such growing pains are either being overcome, or will be so in the near future. In my opinion, the schools with this scientific approach are still the most promising experiment in the teaching of architecture.

Another train of thought of great influence today is formed by those who imagine that the best way to overcome the crisis is to create important departments of industrial design within the architectural schools, or by transforming these into schools of industrial design. This point of view is not only erroneous—clumsily confusing the most diverse categories and values—but purposeless. The fact that many architects act professionally as industrial designers does not authorise the pedagogical identification between architecture and industrial design. It would come nearer the mark to inquire into the reasons why the profession of the architect is no longer self-sufficient and this would help to ascertain in what measure the actual training given to architects is responsible.

In most countries the majority of architects do not have sufficient work to enable them to live with dignity and to feel socially useful; and when architects do not find occupation in their own field they look for it in alien fields or in fields they suppose to be bordering on their own. But in their case occupational mobility would hardly seem justified, especially if we bear in mind the vastness of the task that has to be faced today in the domain of social housing and equipment for the community. In these times of specialisation the Albertian ideal of the 'uomo universale' has, for the present at least, lost force.

Everything would seem to indicate that the architect's training is in some measure responsible for his under-occupation. In fact his under-occupation is not without a certain attitude of aloofness regarding certain occupations common to our time. He seems more interested to show his coherence with a past of splendour than to search for his own redefinition in the light of new conditions.

For example, when faced with one of these new conditions, the phenomenon of his absorption by the great administrative or productive organisations. As a rule he reacts with the rhetoric of humiliated individualism, with the irrational exultation of the architectural autonomy.

The result is always the same: sooner or later the architect will be repulsed from the centres where social and individual equipment is conceived, planned and manufactured. There is no doubt that decisions taken without his co-operation are in nearly every case deplorable. This soothes his conscience. He at least does not feel accomplice to the crime. This attitude is, in fact, a capitulation. The lack of adequate training has been a contributing factor in the whole situation. It is in the lack of specialised training that we must look for the cause.

The schools of architecture do not accept the need for greater specialisation. By specialisation I do not mean that which has been lately called 'vertical' specialisation; that is, the training of architects specialised in certain categories of buildings. There also exists a 'horizontal'

* Extracts from the Royal College of Art's 1965 Lethaby Lecture given in March by Dr Maldonado, Rector of the Hochschule für Gestaltung at Ulm.

specialisation; that is, the training of architects specialised in scientific, administrative, productive and distributive domains—domains on which the social efficiency of those buildings ultimately depend. *The time has come to put aside the prejudice that only one kind of architect can exist: the kind who designs buildings.* We should train other kinds too: architects trained to study sociological and economic conditions of housing not as sociologists or economists, but precisely as architects; architects with enough knowledge to be fused into the planning, standardisation and dimensional co-ordination offices; architects who will be able to take over managerial positions in the building industry, and who could from these vantage-points watch over the cultural interests of the end product: the human habitat.

The concept of a unified plan for reform is becoming more and more convincing. But it should not be mistaken for the tendency to identify architecture with industrial design. The unified plan for reform should be effected, not by the fusion of two systems which are presumed to be identical, but by the co-ordination of two systems which are at the same time different and interdependent.

This kind of plan may be difficult to imagine. Philosophical dualism still seems to influence our thought and behaviour patterns. It is difficult for us to accept the logical validity of integrated diversifications, of co-ordinate pluralities. This not only prevents correct appreciation of the connections between architecture and industrial design, but also leads to serious misunderstandings regarding the role of specialisation in those two fields.

Indeed specialisation is frequently understood to mean the fragmentation of a pre-existent unity into watertight compartments. This idea has apparently been corroborated for the present by what might be called 'specialism', plainly the most alarming phenomenon of our scientific and technological age. Specialism is the relinquishing of the traditional revolutionary role of critical intelligence.

Nothing could be more erroneous than to attribute to specialisation all the sins of specialism. The former is an unavoidable phenomenon, and for the moment irreversible. The latter, an ephemeral phenomenon. Sooner or later we shall have to find a way to attain specialisation without falling into specialism.

In the future, architects and industrial designers may have to give up their attitude of universal readiness, the belief that they are in a position to act creatively in no matter what field of human environment; but under no circumstances must they give up the exercise of universal curiosity, the capacity to perceive the relationships between the diverse and divergent fields of human environment.

To avoid this and to achieve a specialisation without specialism, we should have the courage to conceive more subtle and better differentiated pedagogical institutions than those which exist today. The mixture of up-to date science and out-of-date education is the cause of many of our present hardships. Resistance to change, especially in education, is still strong. But this resistance must eventually yield.

In the next few years a new type of pedagogical institution will gain ground: a school of human environment, of human ecology, to which both architecture and industrial design will belong. This should not be just another designation for the same old content, but a fundamentally new concept, which will enable us to meet the new demands of an emergent world.

Project Awards Jurors' comments

James Stirling

No single scheme emerged as an outright winner; this was unfortunate as presumably it would have been a guide to the relevant present or the immediate future. Even the six selected schemes were to some extent disappointing as their main asset was to reinforce the general direction of the best English architecture over the last eight years or so, a movement indicated by work from the AA and Poly during this period. The failings of this movement are still with us, too much happening at too small a scale, inconsequential and even traditional planning, and the recent inclination towards over-elaboration of section usually with half levels. However, as the competition showed, an English vice which at last seems to have been overcome was the previous tendency to use too many materials.

Trevor Dannatt

The work submitted showed a wide variety of building types ranging in scale from city reconstruction to quite modest buildings. It is right that such diversity should be shown in the submissions, and size has not affected the consideration of schemes for awards, either way.

We did not feel able to make a grand project award since no scheme came up to the standard we should like to see attained for such an award, that is, a building design satisfying material requirements, showing consonance of space, form and structure set in motion by a conception of more than local validity.

One or two of the schemes in the six chosen came near to the major award but failed finally to convince through lack of information about certain aspects of their design.

For sheer professionalism of design and presentation the scheme for the Calvary nursing home (N. Starret) was outstanding and one was convinced that a first-class building would result from these designs overall, in site handling, in programming and in detail planning—well considered in all aspects.

The small group of houses at Twickenham (Phippson) showed excellent planning and use of levels on a very awkward site—an attractive domestic group, convincingly suitable for living.

On a larger scale the development at Coulsdon (Team 4) showed an excellent relationship between houses and garages and a very attractive architectural handling, without the current obsession with decks. The house plans and sections are interesting and livable, without being spatially overwrought. Altogether a very stimulating scheme for the development of rearland sites.

David Allford

The standard was disappointing. Whilst there is no accepted canon, is there bound to be such a variety of stylistic expressions—harsh, shrill, confused? Where is the still small voice? English architecture has always been derivative, but derivations can be used intelligently—that is with honesty and purpose. Here we often have derivations of derivations, at best a pseudo-authority hiding a lack of real conviction.

There was no scheme outstanding enough for a grand award. Six schemes were given awards:



1965 Project Awards jury
From left to right: David Allford, James Stirling and Trevor Dannatt

Swimming pool

An intelligent, well ordered scheme, clearly presented. Well integrated with a smallish site. Well functioning route pattern related to control points.

Nice balance in relationship of elements and their structural articulation—children's pool, main pool, diving pool, public seating, buffet.

Expression is straightforward and such fashion notes as clipped corners have some reality in the situation.

Houses at Twickenham

Despite the site restrictions a simple programme. Organized with great clarity. Very good plan and a section which breaks the tyranny of narrow frontage plan situations by a large height living room. The only real criticism is the corridor entrance hall by the garage which could be depressing.

Picture gallery, Oxford

A relaxed and modest scheme. Well related to existing building with which it connects. Very good drawings. The promise of a small, joyful building.

Calvary nursing home

A complex problem very convincingly and elegantly planned. Of the 'straight' schemes this was outstanding. It could be a good main stream building—clear prose stands out among so much pretentious poetry.

Housing at Coulsdon, Surrey

An imaginative scheme of considerable potential on a difficult site locked in a ring of suburban development. I stress the word potential here as the scheme was poorly presented and difficult to read. It seems to be at an early stage of gestation and there are certain 'thin' qualities which alarm me in the drawings. Conceptionally the scheme is convincing. Traffic segregation—grouped garages and pedestrian access routes well organized. Ingenious plans, but as yet lacking the clarity of intention shown in, say, the scheme for Twickenham.

Central entertainment and shopping precinct, Cayton

By far the largest scheme of the six. Conceptually seductive. The fundamentals of this linear pattern centre strip seem well organized. It could be an exciting place to be in, though there are some signs that fashion may erode the concept when it is realized—clipped corners (again), chemical engineering aesthetic. When realized it may lack the essential gaiety of a pleasure centre.

The publishers of *Architectural Design* invited architects together with their clients to participate in the second annual Project Awards programme.
The object of these awards is threefold: to encourage by competition a generally higher standard of architecture throughout the country; to give public recognition to the work of relatively unknown architects; and to present an assessment of architectural trends in Britain today.
The scheme is open to all registered architects in the United Kingdom, and awards are made for projects still only in the design stage at the date of entry. Designs submitted can be for any category or size of building or group of buildings.
This year's jury were the architects David Allford, Trevor Dannatt and James Stirling. From the 178 entries they selected six for Awards, but felt that no scheme emerged as an outright winner for the Grand Project Award.
In addition to the six winning entries, the jury selected a further sixteen schemes for publication.
The Award winning schemes and sixteen selected entries shown on the following pages, will be on view at the Building Centre from April 9th to 24th.

ARCHITECTURAL DESIGN PROJECT AWARD

Winning entries and their designers

Picture gallery at Christ Church, Oxford
For Christ Church
Architects, Powell **8** and Moya **7**

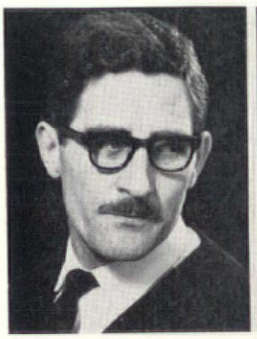
Beachfield swimming pool
For the Borough of Worthing
Architects' Design Group
Architects responsible,
M. J. Attenborough **9**, B. G. Jones **10**.

Housing scheme at Coulsdon
For Wates Ltd.
Team 4 Architects **6**
(Richard and Susan Rogers, Norman and Wendy Foster, Frank Peacock, Maurice Phillips, Anthony Hunt [Consulting Engineer] and Aline Storry)

Houses at Twickenham
For Dr M. Hudson
Architects, Peter Phippen **3** in association with Peter Randall **4** and David Parkes **5**

Calvary nursing home, Sudbury Hill
For the Trustees of the Congregation of the Little Company of Mary
Architect, Norman Starrett **1**; architect in charge, Michael Aukett **2**

Central entertainment and shopping precinct, Cayton
For Wallis' Holiday Camp Ltd.
Architect, Derek J. Walker **11**
(Derek J. Walker, Douglas T. Benneworth, G. Douglas Hemmingway)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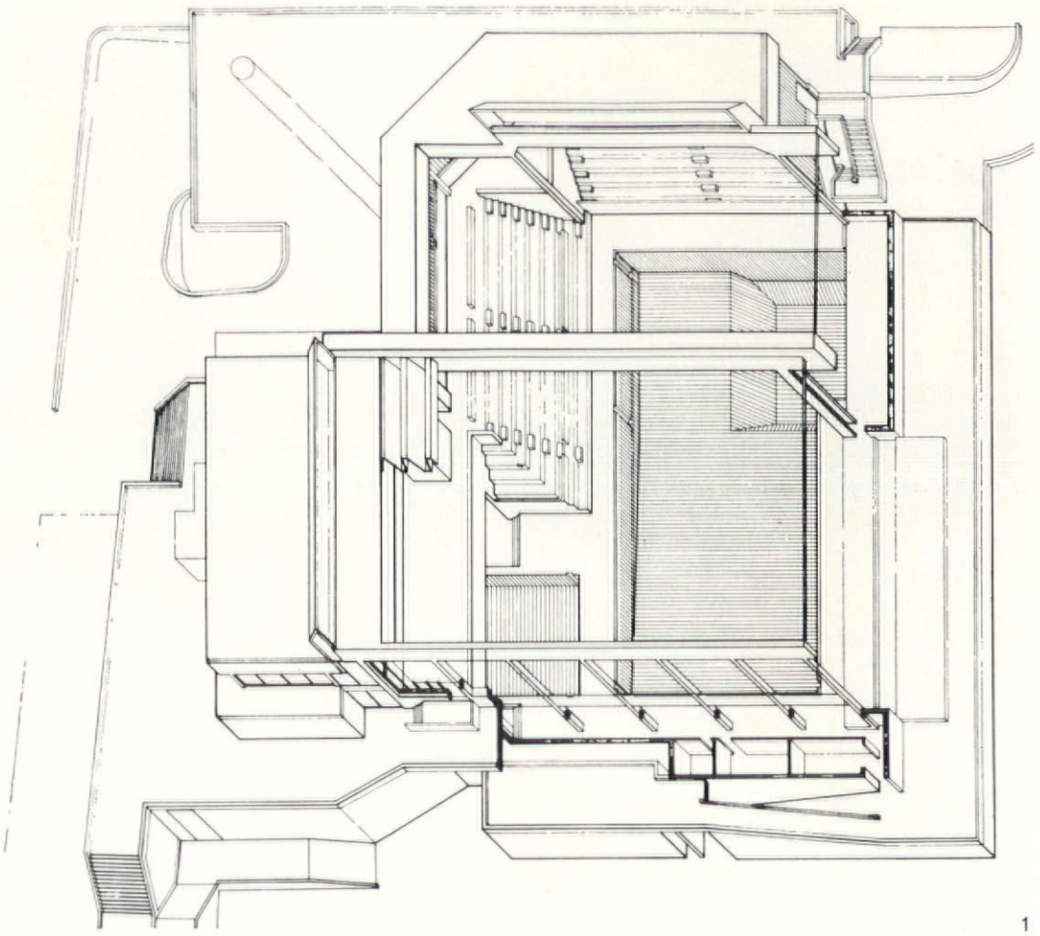
Beachfield swimming pool, Worthing

For the Borough of Worthing

Architects' Design Group; architects in charge, M. J. Attenborough and B. G. Jones



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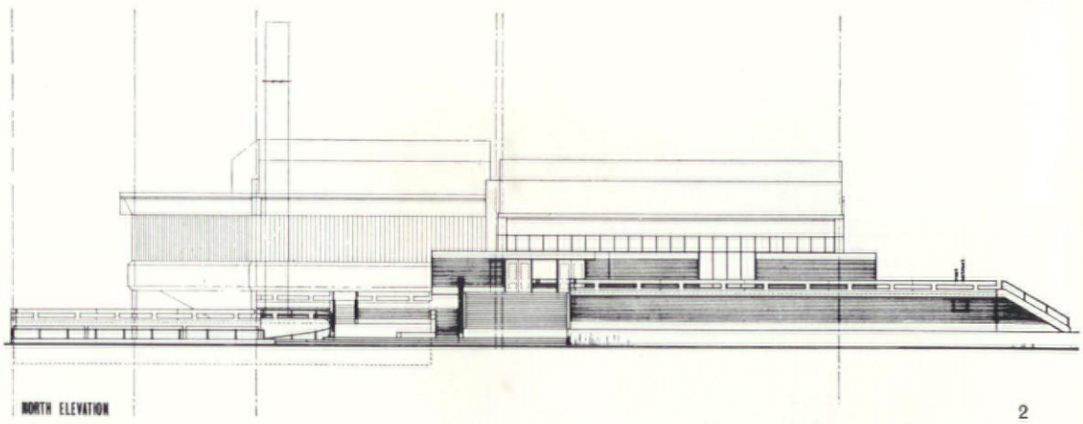

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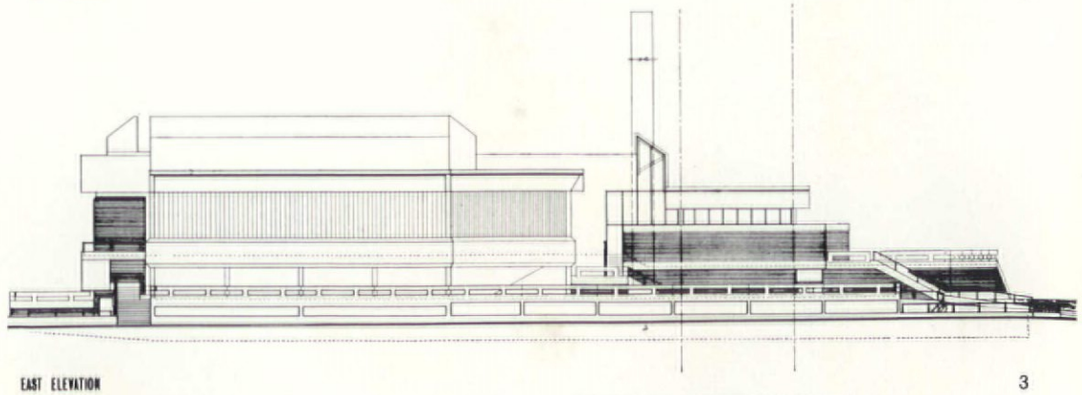

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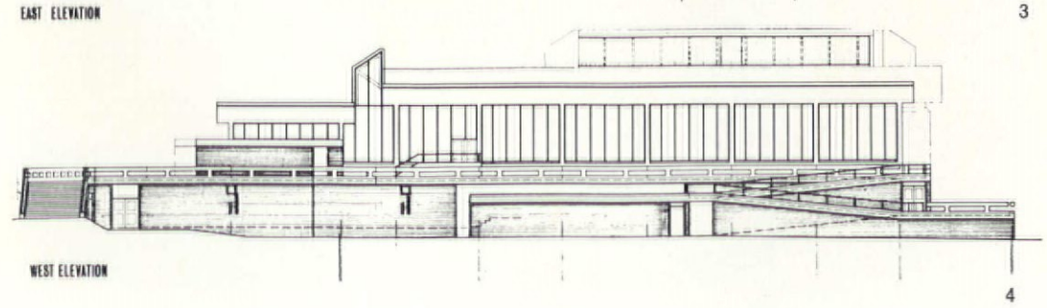

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The brief required a 110ft × 49ft swimming pool, with a separate pool for teaching non-swimmers and for children, seating for 500 spectators, cafeteria, car parking for approximately 76 cars. It was decided to position the main entrance at the level of the top tier of the spectator seats. Alternative access to the changing areas is provided at ground level, with an external ramp for easy access to cafeteria and pool seating.

To reduce the mass of the building to fit in with the existing two- and three-storey houses, the roof level has been divided into planes at varying heights related to the function of the spaces within.

A structural concrete service duct spans the width of the pool forming a main frame from either side of which precast concrete trough roof units span in the direction of the pool. This roof is carried on over the foyer and restaurant and also above the seats. The warm air for the pool is distributed through roof lights in these trough units. The main frame acts as the primary distribution duct. The concrete frame is to be of boarded shuttered finish contrasting with the smooth concrete of the roof units. Flooring and skirtings throughout, are of rubber tiles; walls of facing bricks both internally and externally; joinery of hardwood; Spectroglaze blockwork in the changing and precleansing rooms. Glazing to the pool hall of $\frac{1}{4}$in plate fixed double-glazing in anodized aluminium frames. Noise control will be by breaking up the roof soffit and incorporating acoustic material on the flat ceiling planes.

1
Axonometric of swimming pool

2
North elevation

3
East elevation

4
West elevation

5
Longitudinal section through main pool

6
Cross-section through teaching and main pool, shallow end

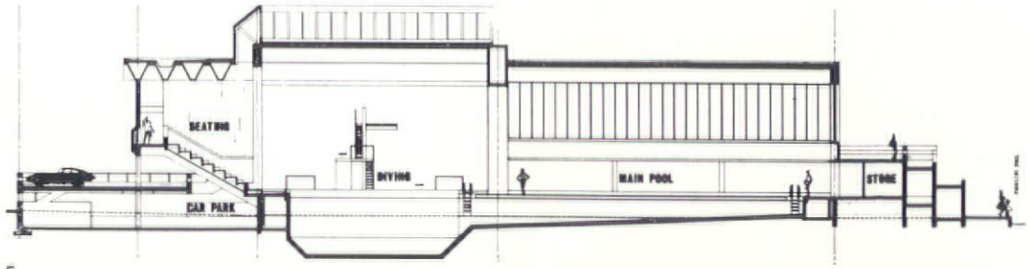
7
Cross section through main pool, deep end

8
Ground floor plan

1 women's change rooms
2 cubicles
3 men's change rooms
4 clothes store
5 women's showers
6 men's showers
7 footbaths
8 warm room
9 teaching pool
10 main pool
11 diving bay
12 sunbathing terrace
13 store
14 control room
15 first aid room
16 electricity sub-station
17 car park
18 plant room

9
First floor plan

1 pay desk
2 foyer
3 cloaks
4 offices
5 w.c.'s
6 kitchen
7 servery
8 cafeteria
9 seating terrace
10 main pool
11 diving bay
12 sun-bathing
13 staff room
14 staff room
15 staff lockers
16 terrace
17 car park



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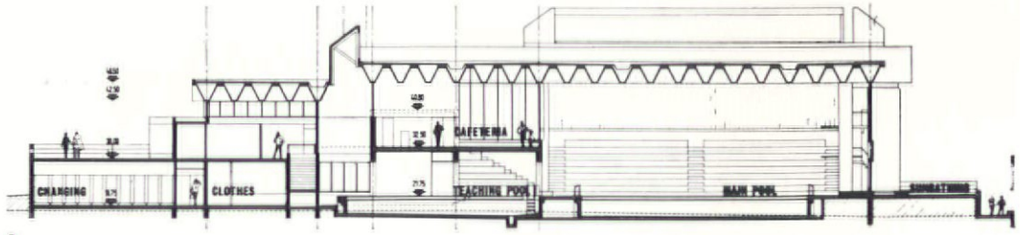

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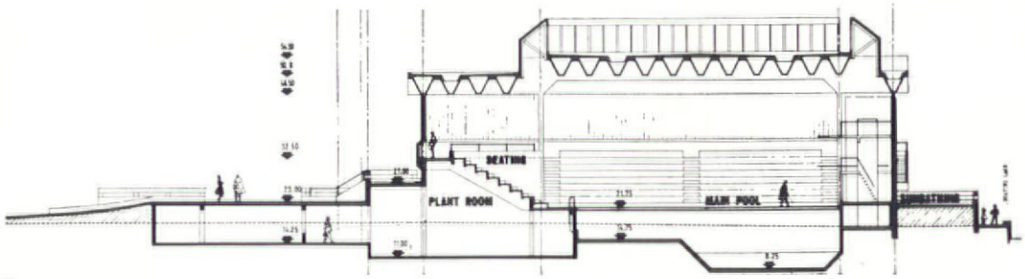

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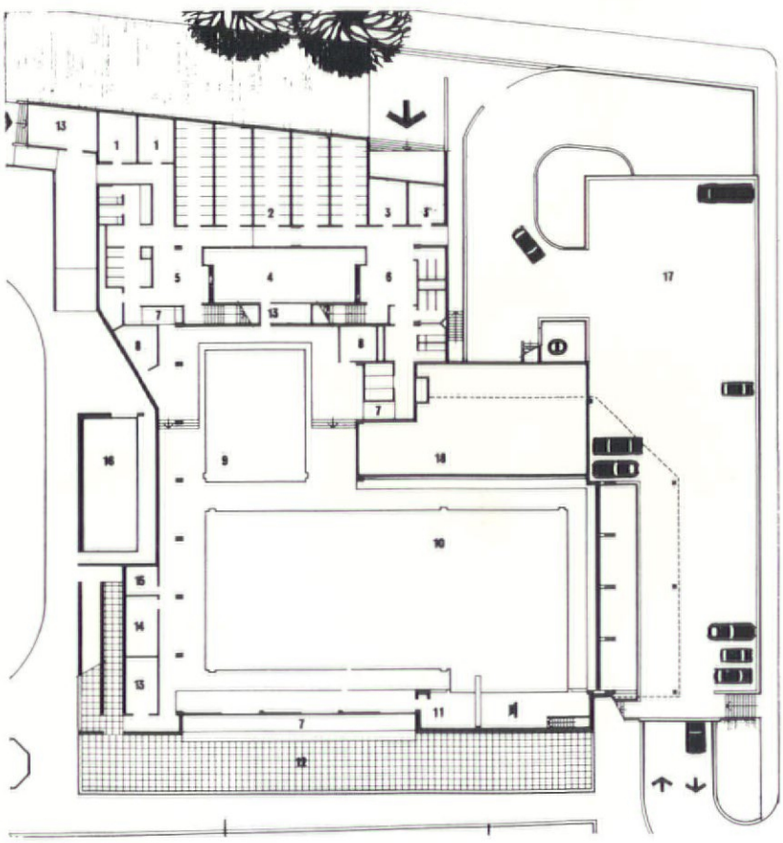
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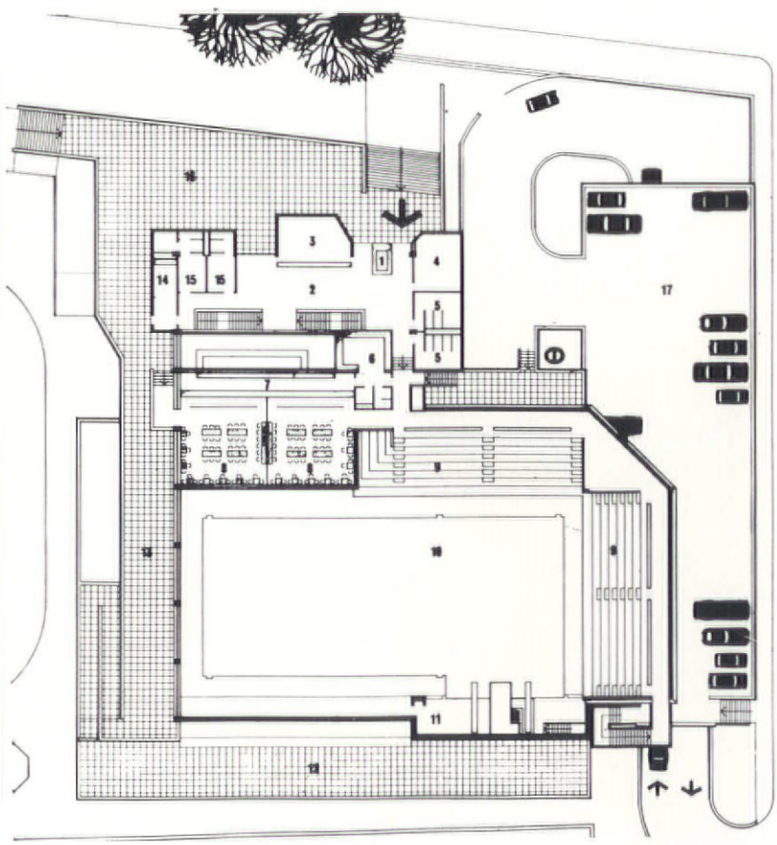
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Houses at Twickenham

For Dr M. Hudson

Architect, Peter Phippen in association with Peter Randall and David Parkes

The site is occupied by an existing house, and is bounded on two sides by roads, one of which is to be widened. The Local Authority would not permit access from this road.

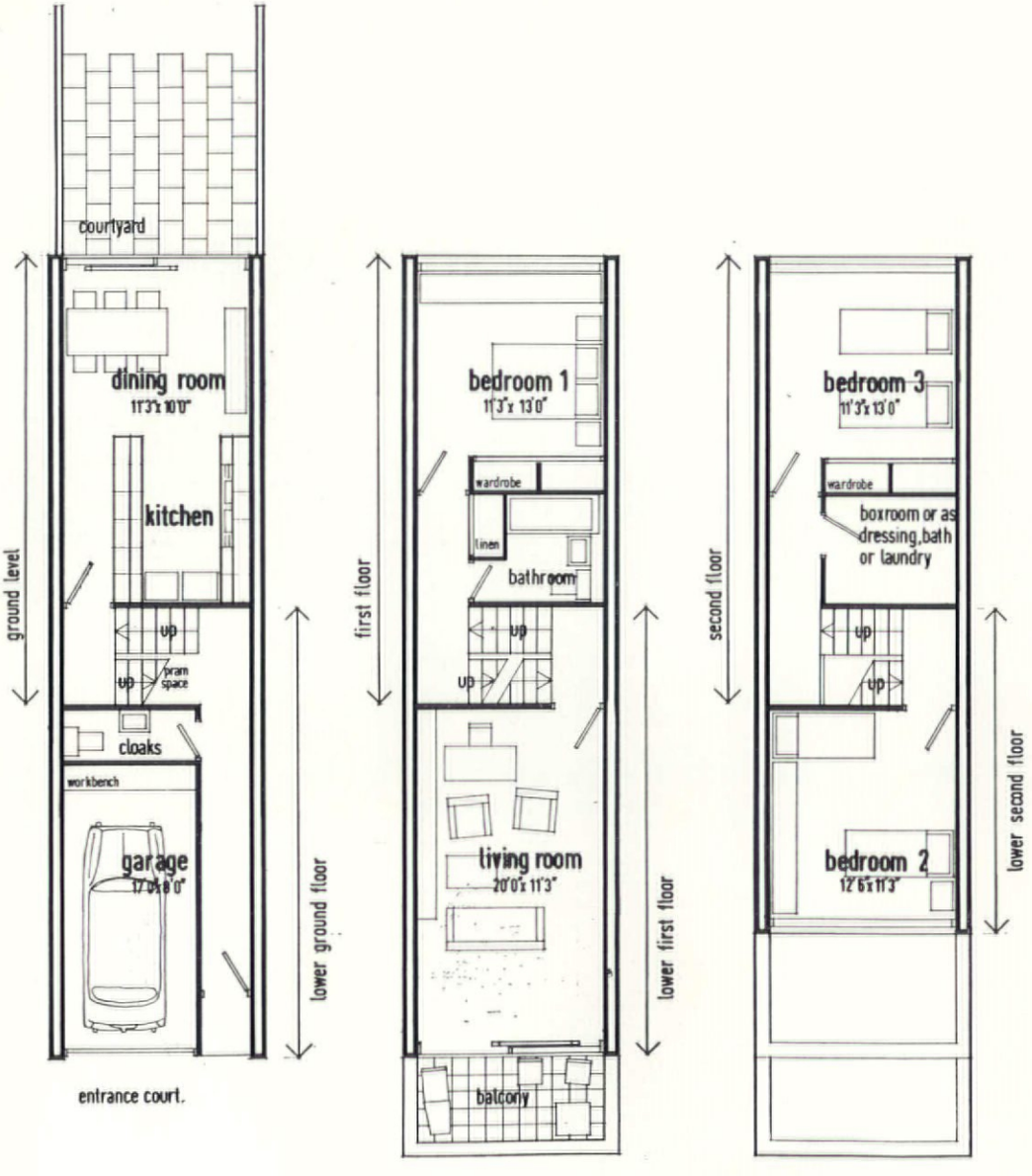
Density stipulations showed the best form of development to be three-storey narrow frontage houses, enabling each house to have a small private garden. It was also clear that the Planning Authority would only approve a scheme which contained its own garage facilities.

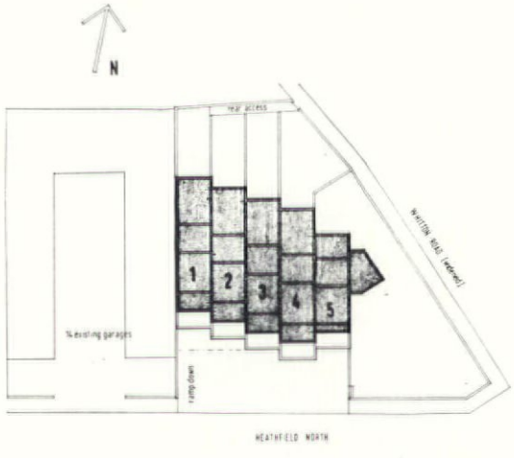
The particular problems posed by this type solution were: the necessity of all access being on the south; the building line and restricted site depth preventing the provision of a separate garage or a garden on this side; the difficulty of providing continuity of space and flexibility of use in the houses when spaces are separated by a staircase running through one storey.

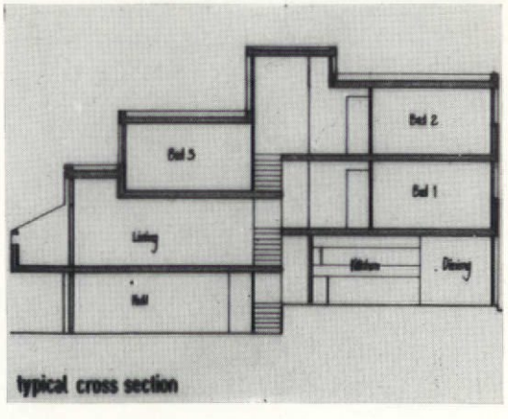
The solution adopted enables each house to have, in addition to a garden with direct access from the dining/kitchen area, a large private balcony and a garage within the house proper. This is made possible by the use of half levels. Because of the set back of the bedroom directly above, the living room has a 10ft 6in floor-to-ceiling height over its front area enabling light to penetrate deep into the house. The staircase is lit by a rooflight and living spaces will be separated from the staircase by glazed partitions which can be curtained off as and when privacy is required.

It should be noted that with this type of dwelling very high densities of up to 140 habitable rooms per acre can be achieved while preserving private gardens and direct car access to each house.

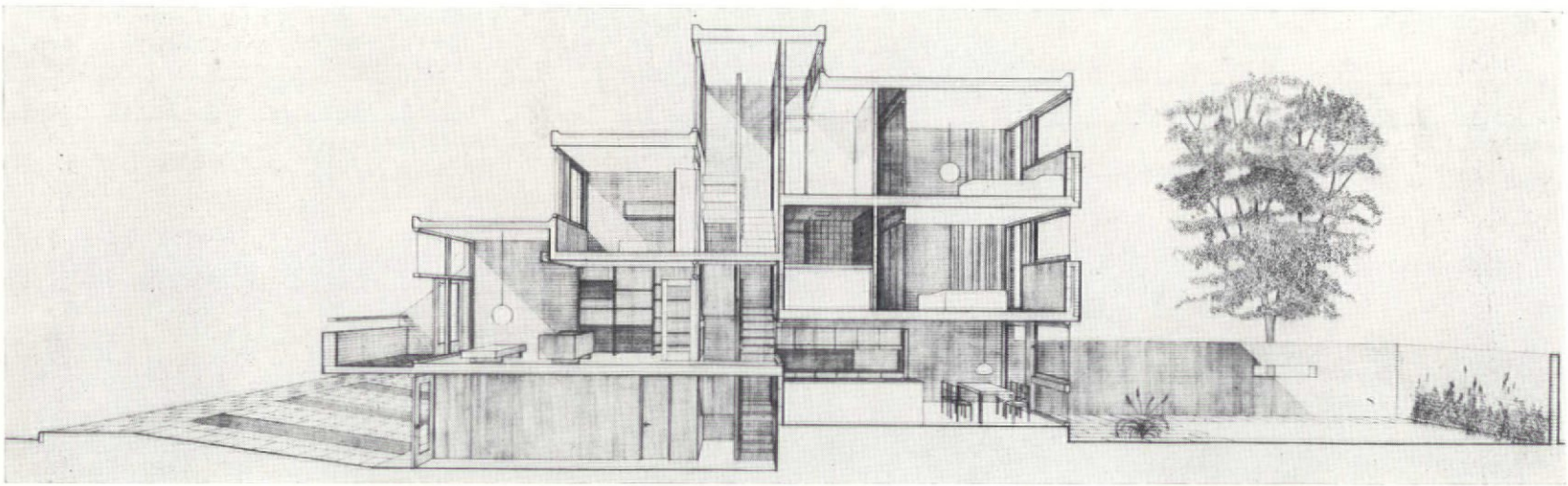
Construction will be traditional with loadbearing brick cross walls stiffened front and rear and adjoining the staircase by concrete tie beams. The floors proper will be of timber construction.

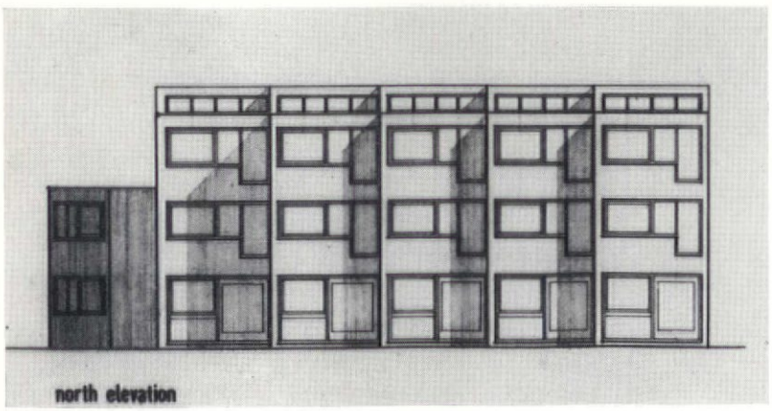




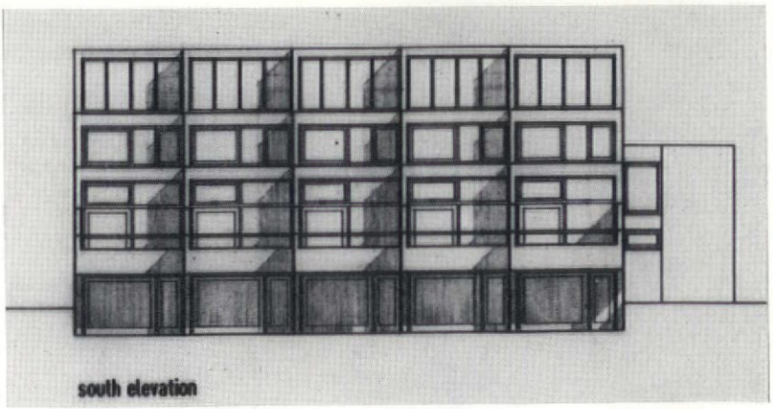








north elevation



south elevation

Picture gallery, Oxford

For Christ Church

Architects, Powell & Moya



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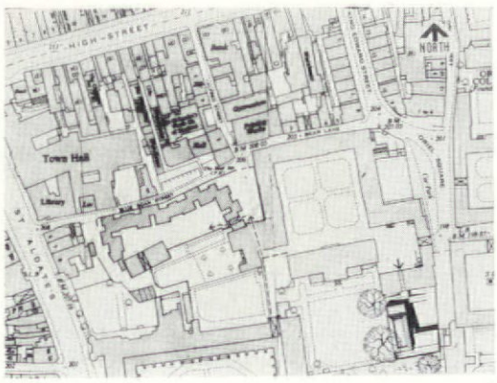

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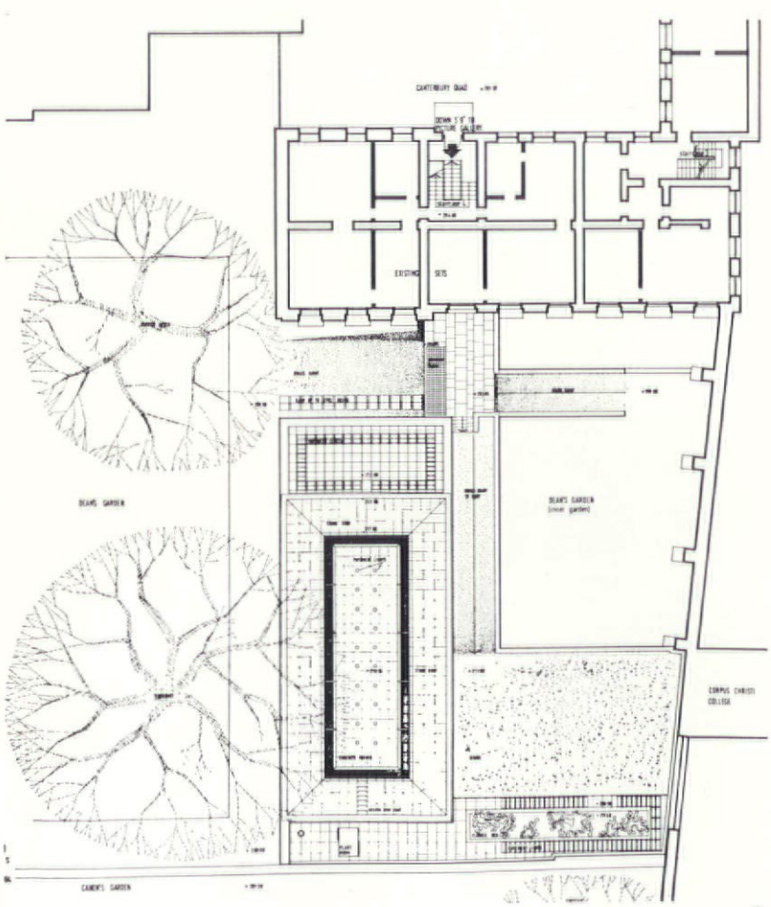
The building is required for Christ Church's collection of paintings—mostly Italian of the fourteenth to seventeenth centuries from the Guise and from the Fox-Strangways Collections—and its collection of nearly 2000 drawings, which are from the fifteenth to seventeenth centuries. The number of paintings to be exhibited will be limited by the size of the site and prints by that of the gallery. Easily accessible storage is therefore provided for those pictures which it is impossible to have on permanent exhibition. For reasons of conservation, and again because of limitation of space, only a small number of the drawings will be exhibited at a time. The remainder are to be stored in solanders which will be kept in a study.

The gallery has been designed with a restricted height so that it keeps in scale with the surrounding garden walls and does not overshadow the ground floor rooms on the south face of Canterbury. As little space as possible in the Dean's garden is to be lost, and open spaces in and around the gallery remain as part of the garden, which is overlooked by the gallery but is not accessible from it. As the ground floor rooms in Canterbury are not to be disturbed, the entry to the gallery is through the semi-basement.

The external walls are of concrete faced with rough rubble stone to match that of the existing garden walls and with smooth Portland stone dressings and quoins. Generally, these walls have a wide cavity for the air conditioning services and an inner skin of 4in thick lightweight insulated concrete blocks, plastered internally.

The internal walls have a painted vermiculite plaster finish and the ceilings either plastered or fair-faced concrete with exposed aggregate finish. The floor finish throughout the gallery is to be blue-grey York stone flags.



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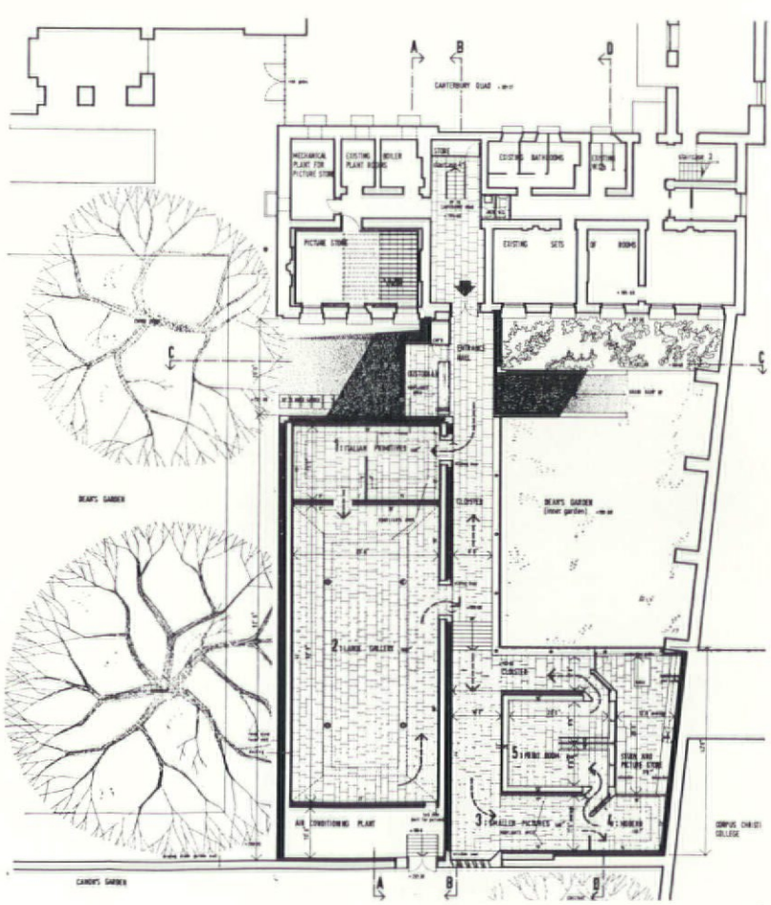

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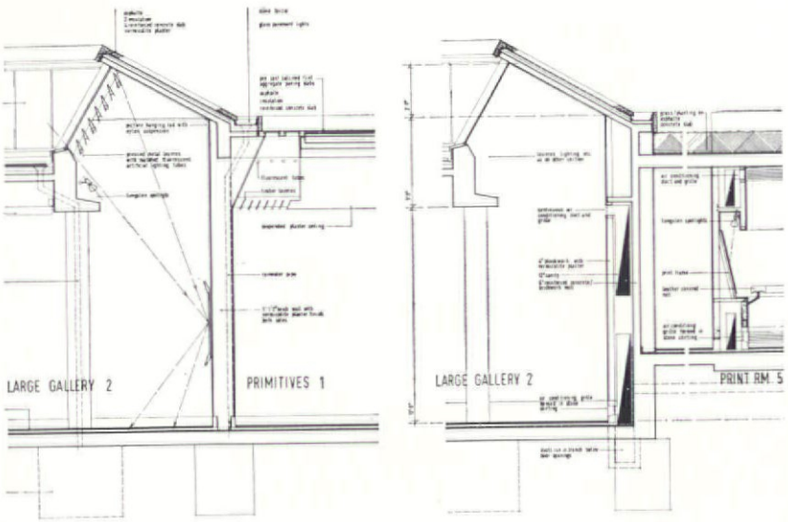

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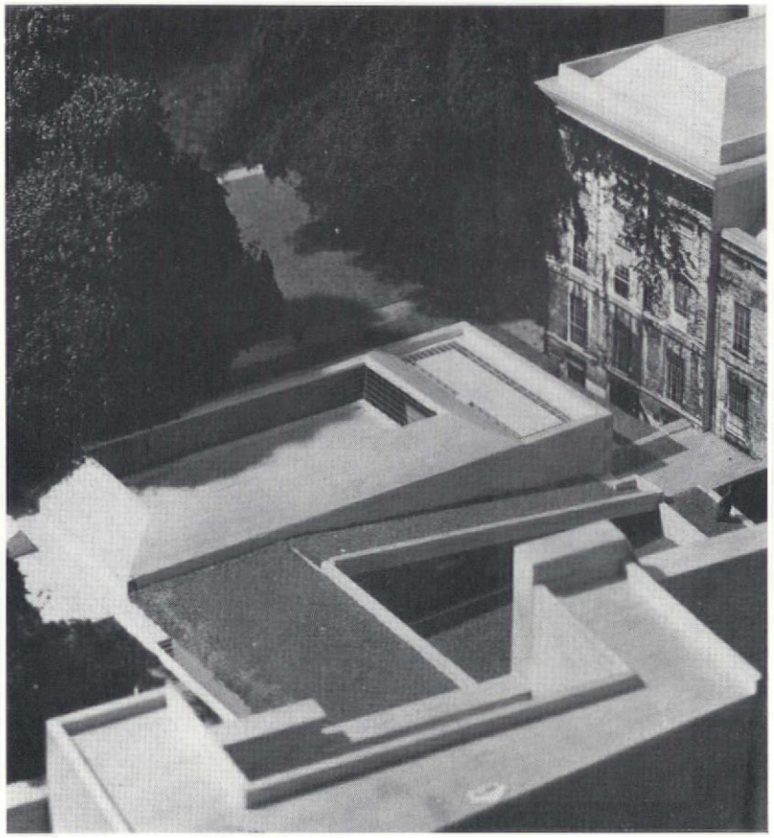
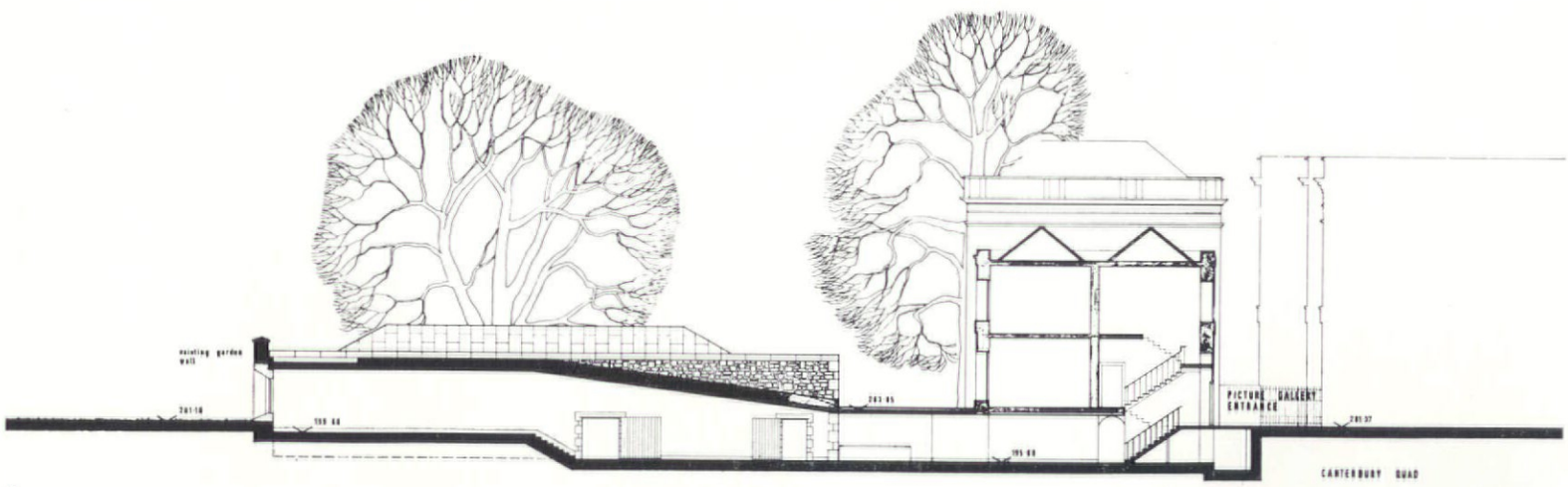


6

1
Sketch of gallery as seen from inner garden
2
Location plan
3
Roof plan
4
Gallery plan
5
Sectional details of top lighting
6
Model showing planted areas of roof
7
Long section
8
Cross section



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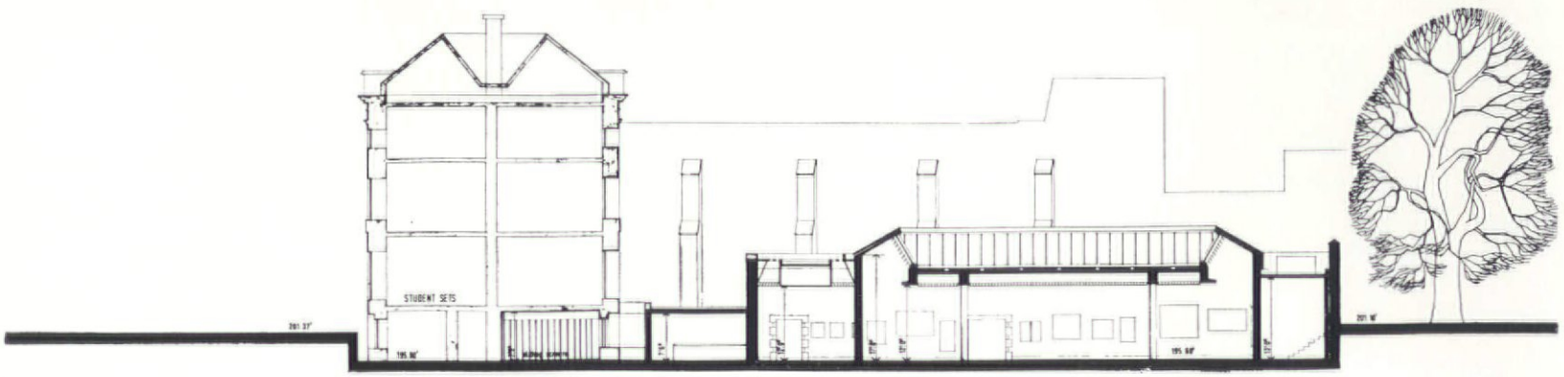

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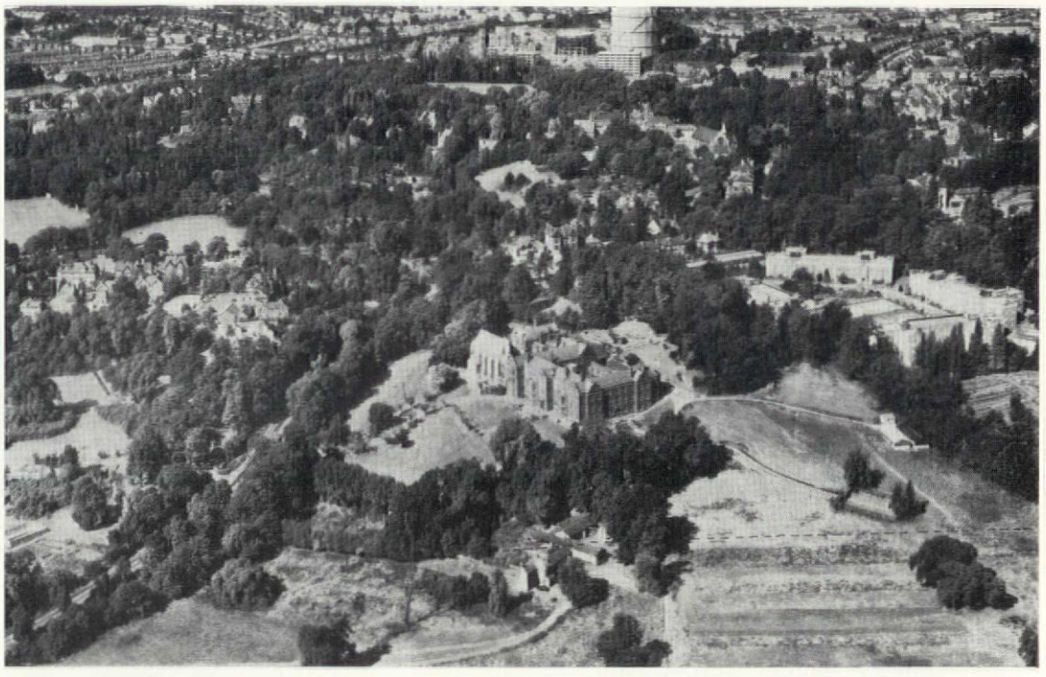
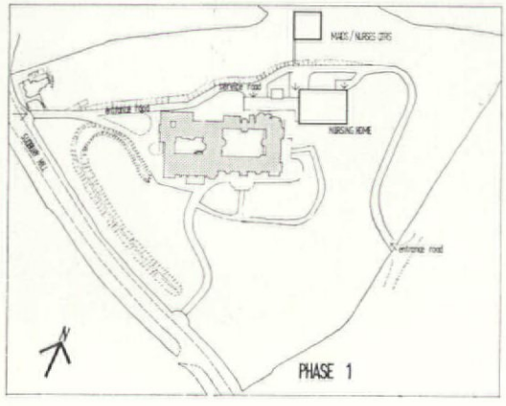
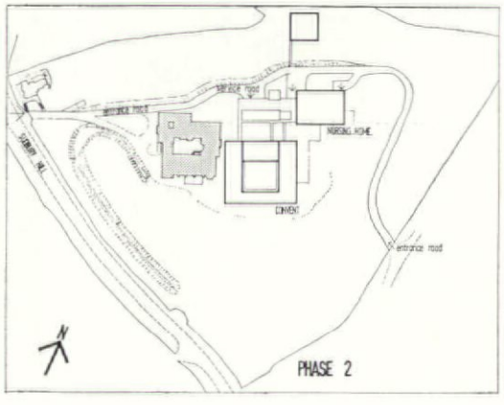


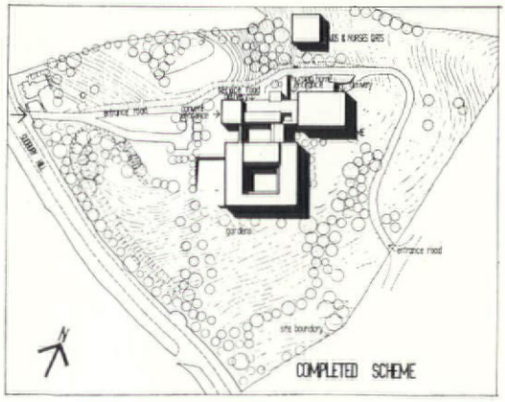


Calvary nursing home

For Trustees of the Congregation of the Little Company of Mary

Architect, Norman Starrett; architect in charge, Michael Aukett





The Little Company of Mary is a nursing order with convents and hospitals throughout the world. The convent at Harrow exists to provide a mother home for the order for Great Britain and Northern Ireland; to be also a retreat for Sisters, a training convent for novices, and a nursing home for the aged and infirm. The existing building is dramatically landscaped into the highest and best part of the site, so it has been decided to demolish and rebuild on this same terrace.

The form of the convent stems from the idea of the chapel as the core enclosed by the convent quarters and refectory with processional ways. The sectional solution proceeds from the requirement that Sisters' quarters should be on the entrance, chapel and refectory level, with novices over, and community rooms on the lower level with direct access to gardens. The Sisters' and novices' community rooms are to be separated, thus evoking the three-sided courtyard at lower ground floor level, opening to the sloping lawns below the hill.

Clear separation of functions is expressed in the three pavilion forms of (i) convent quarters and chapel; (ii) entrance, visitors' parlours and visiting Sisters' quarters; (iii) nursing home; linked by the connecting functions of kitchen services, processional ways and corridors.

The convent itself is visualized as a building of clear form poised on a fluctuating base modelled to the existing ground levels.

Within the convent, functional grouping of Sisters' and novices' quarters, community rooms and chapel, and of the refectory, are so related as to provide processional movement around the two courtyard gardens. Meals are taken in silence and privacy and the sheltered refectory garden is intended to give this atmosphere. On section, the refectory garden and the lower courtyard community garden are linked by a way through under the chapel so that there can be both movement and visual connection between the two.

The nursing home is to be built first, complete with kitchen, etc., laundry, heating and ventilating plant. Its 'race-track' plan provides compact scale and circulation. The artificially ventilated service core is enclosed by an r.c. wall, with 10in solid r.c. floor slabs spanning to perimeter beam and columns generally on bay-width of a two-bed ward. Precast concrete spandrel panels are supported on perimeter structure. Solid structure of core and floors gives high sound insulation.

In the convent, the cellular form of quarters allows r.c. crosswalls profiled to cantilever section. Solid 10in r.c. floor slabs provide sound insulation. Precast concrete exposed aggregate panels are self-supporting between bays externally. The structure is carried on r.c. columns at lower ground floor level, giving freedom for varying room sizes and fenestration. The chapel is basically an r.c. lid, lined with polished wood, supported on columns, within which the nave is formed in facing brick walls and glazed screens with corridors arranged as floating galleries.

The entrance pavilion, processional ways and corridors have r.c. roof, columns and floors. The kitchens, etc., lay chapel and refectory are in loadbearing brickwork with r.c. roof; the chapel and refectory roofs are lined with polished wood.

Finishes are basically *in situ* and exposed aggregate precast concrete; facing bricks; with aluminium double-glazed windows for exposed situation.

Key to plan level 310.5 and 308.25

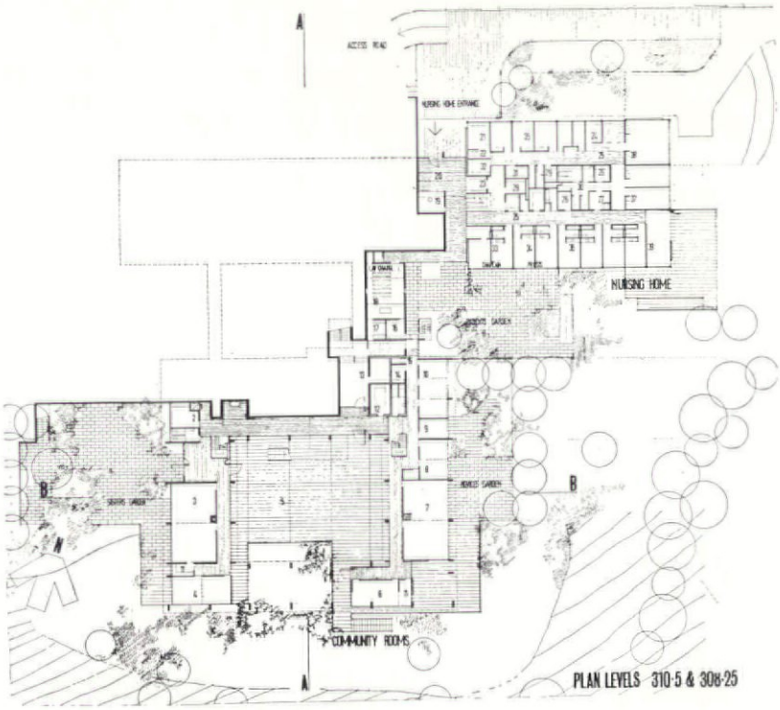
1 lift
2 boots
3 sisters' community room
4 sewing room
5 courtyard
6 novices' dining room
7 novices' community room
8 sewing room
9 novitiate mistress
10 music room
11 pantry
12 novices' changing
13 access to garden
14 linen
15 linen hoist
16 altar boys
17 sacristy
18 lay chapel
19 reception
20 entrance hall
21 ward pantry
22 food lift
23 bed lift
24 ward pantry
25 nurses' station
26 sluice room
27 utility room
28 utility room
29 flower room
30 geriatrics' bathroom
31 hairdressing
32 linen
33 chaplain
34 priest's rooms
35 single-bed ward
36 ward with bathroom
37 two-bed ward
38 four-bed ward
39 dayroom

Key to plan level 320

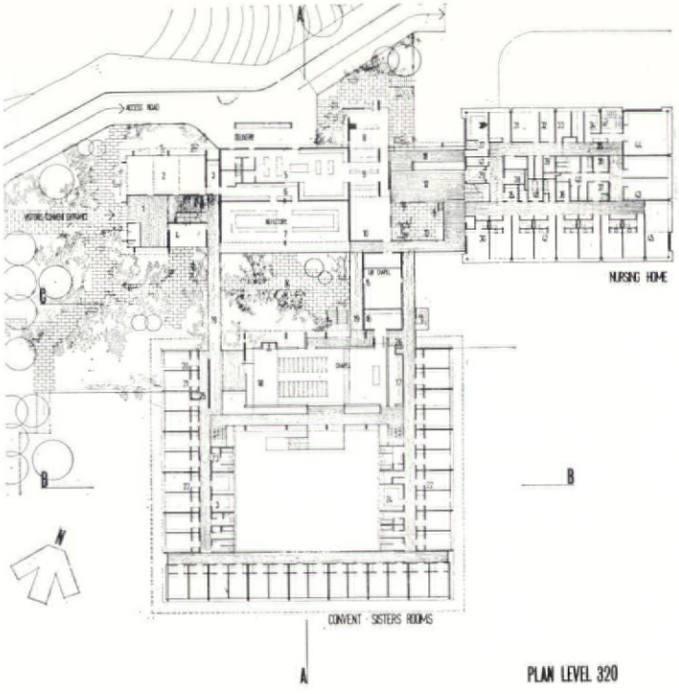
1 entrance
2 parlour
3 pantry
4 parlour
5 kitchen
6 servery
7 refectory
8 nurses' dining room
9 serveries
10 patients' cafeteria
11 corridor for trollies
12 patients' lounge
13 patients' courtyard
14 convent courtyard
15 lay chapel
16 sacristy for priests
17 working sacristy
18 chapel
19 processional way
20 mother superior
21 mother bursar
22 sisters' room
23 bathroom
24 box room
25 sisters' lift
26 linen hoist
27 trolley hoist
28 ward pantry
29 bed lift
30 mother superior
31 physiotherapist
32 doctor's room
33 dressing room
34 ward pantry
35 nurses' station
36 sluice room
37 utility room
38 utility room
39 flower room
40 geriatrics' bathroom
41 linen room
42 single-bed ward
43 two-bed ward
44 four-bed ward
45 dayroom

Key to plan level 329.25

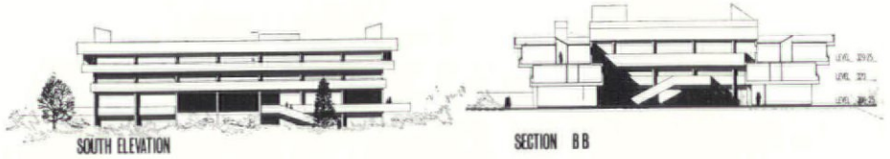
1 mother provincial
2 visiting sisters
3 chapel tribune
4 lift
5 novices
6 bathroom
7 hairdressing rooms
8 pantry
9 telephone
10 balcony
11 night sister
12 linen hoist
13 ward pantry
14 trolley lift
15 bed lift
16 ward pantry
17 nurses' station
18 sluice room
19 utility room (dirty)
20 utility room (clean)
21 flower room
22 geriatrics' bathroom
23 linen
24 single-bed ward
25 single-bed ward and w.c.
26 four-bed ward
27 dayroom



PLAN LEVELS 310·5 & 308·25

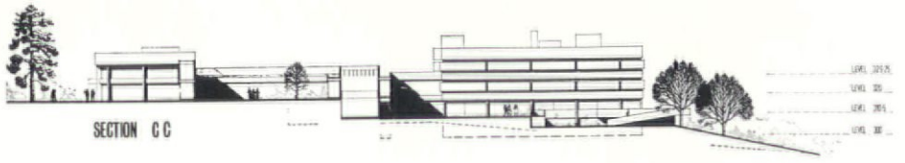


PLAN LEVEL 320



SOUTH ELEVATION

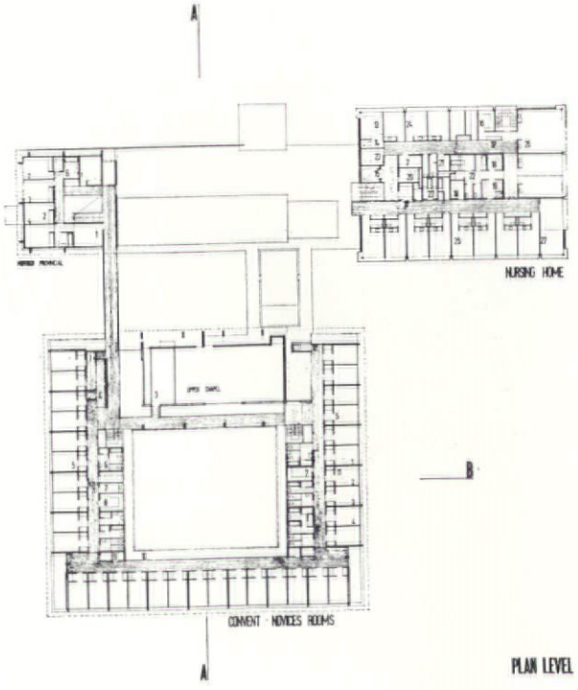
SECTION BB



SECTION CC



WEST ELEVATION

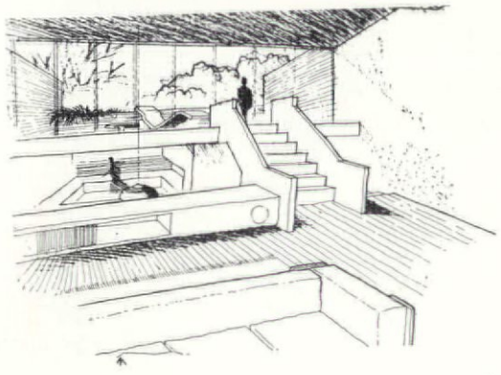


PLAN LEVEL 329·25

Housing at Coulsdon, Surrey

For Wates Ltd.

Architects, Team 4



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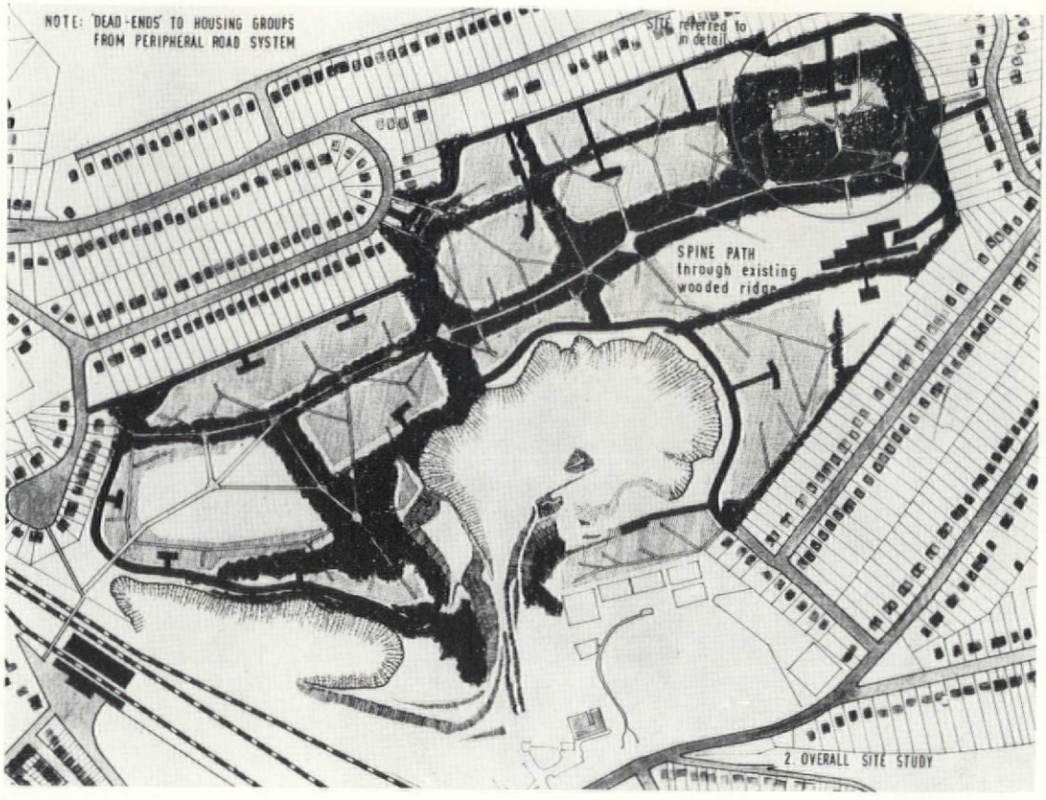

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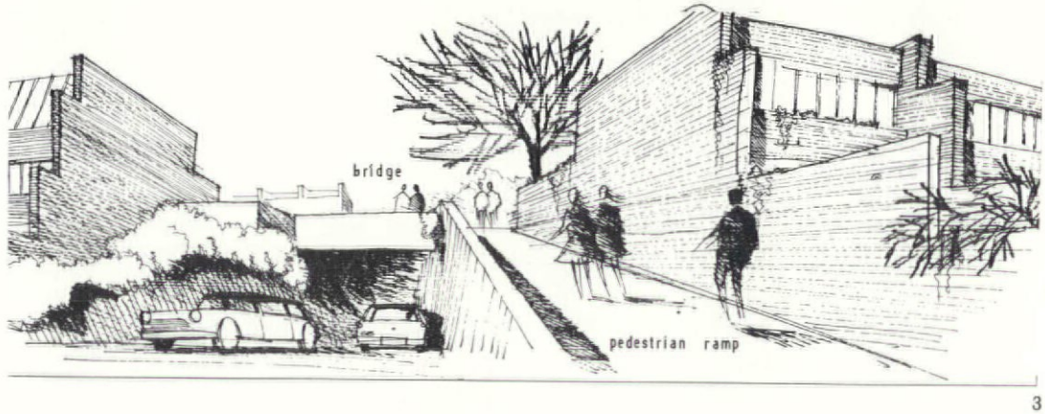
The total site of 69 acres, is at Coulsdon, Surrey, 15 miles from the centre of London. The allowed density is 38 persons to the acre. But only 8·78 acres on the one corner is to be developed immediately by Messrs Wates Ltd. This area is well covered with trees, bounded by existing paths and divided by a bank which runs from north to south with a maximum drop of 12ft. The 75 houses proposed for this site are of three and four bedrooms, and are intended for the middle income group. 1·25 cars are being allowed for each house. There will be a club house run by a housing association.

The nature of the site suggested that vehicles and pedestrians could be easily and most successfully segregated. The wooded strip along the centre of the overall site is to be preserved and developed as a pedestrian spine, with a network of footpaths leading off it to every house. There will be a series of interconnected open spaces, for play areas, walks through the trees and paths direct to the station, the schools and shops. Vehicles will be confined to a road running around the periphery with feeder roads leading off into the centre of the housing clusters. The four main access points to the site are designed as locks, where vehicles are slowed down by cattle grids to 5mph and then allowed to pick up speed to 25–30mph, but are discouraged from speeding by the curves in the periphery road. Access from this road to the first housing cluster, which is built up around its parking area, is through a cutting in the bank, under a viewing platform, so that although there is no conflict between pedestrians and vehicles at any time, cars can be driven up to the door of each house. In this way an 'urban' core is made for each group of houses, where cars can be parked and serviced and a tight sense of community developed. The houses are arranged in strings on either side of this vehicle court, and full advantage is thus taken of the 70ft statutory open space required between facing terraces. The layout is open-ended so that it can, if necessary, be extended at any time, or built up in segments.



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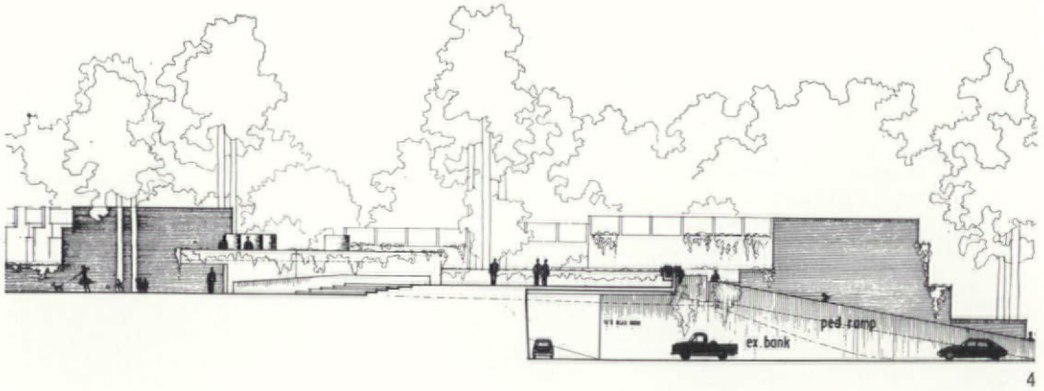

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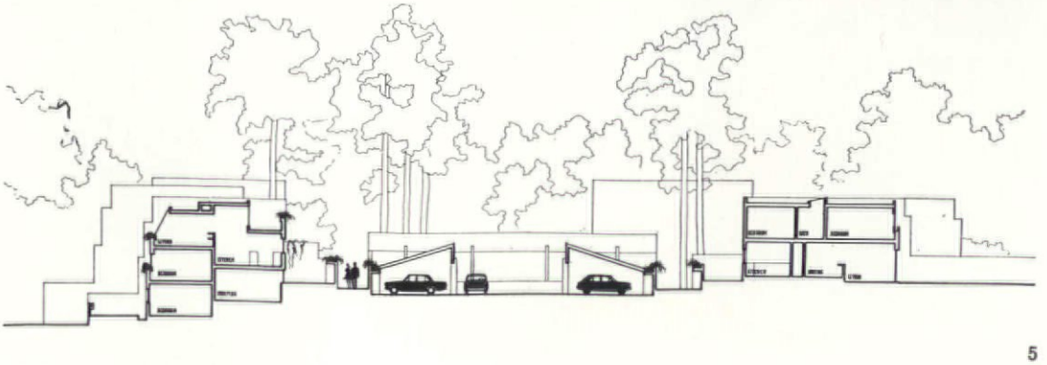

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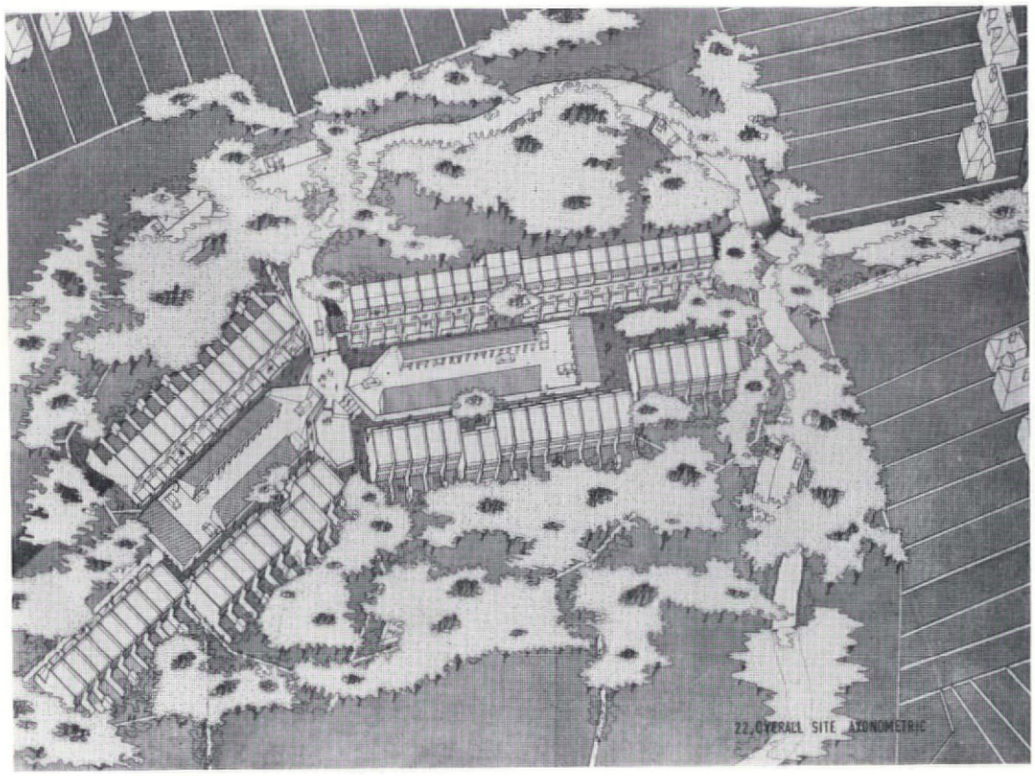
There are two house types:
Type A, 2 storeys, 3 bedrooms, is traditional in its planning. The living room opens onto a private garden court with woods beyond and the kitchen onto the vehicle court and paved areas.
Type B, 3 storeys, 3/4 bedrooms, is built down the side of the natural bank. The living room takes up the slope and is at the top of the house with private terraces, allowing the residents to feel close to the trees on the wooded side. The kitchen, as before, overlooks the paved court. Children have direct access to the back court and the woods.
The elevations relate to the areas they face. On the hard side there are holes in walls, restricting views and reflecting an urban character, whilst on the soft treed site glazing stretches from party wall to party wall.
External walls are cavity construction—hard red brick externally, concrete block internally. Blinker wall and garden walls are 9in facing bricks. Exterior hard areas have concrete paving stones. The roofs are of timber joists finished with three-ply felt. Floors have timber joists finished in tongued and grooved boards. Internal partitions are stud and plaster board. Interior walls are plastered. Window members are out of 4in×2in, treated with red solignum. Car ports have enclosing walls of 4½in facing brick with 9in piers, 4in×4in posts supporting 3in×2in joists, the roofs are of concrete interlocking tiles.



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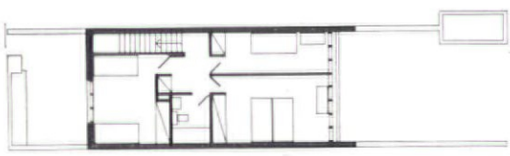
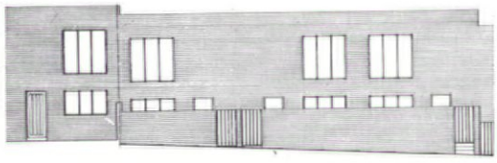
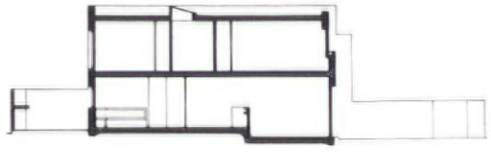
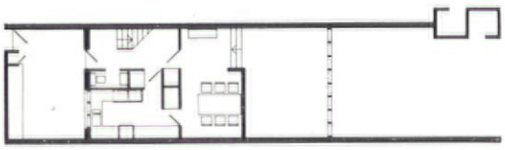

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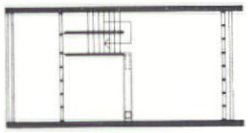


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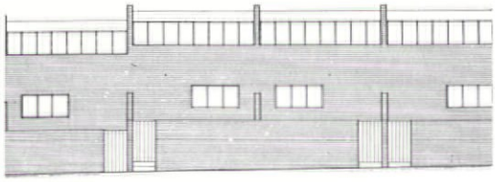

1
Sketch showing the staircase and terrace as seen from the living room in house type B

2
Site plan of the overall development with the pilot scheme circled

3
Sketch showing the pedestrian ramp and the underpass for cars entering the central area of the housing cluster


4
End elevation of the housing group

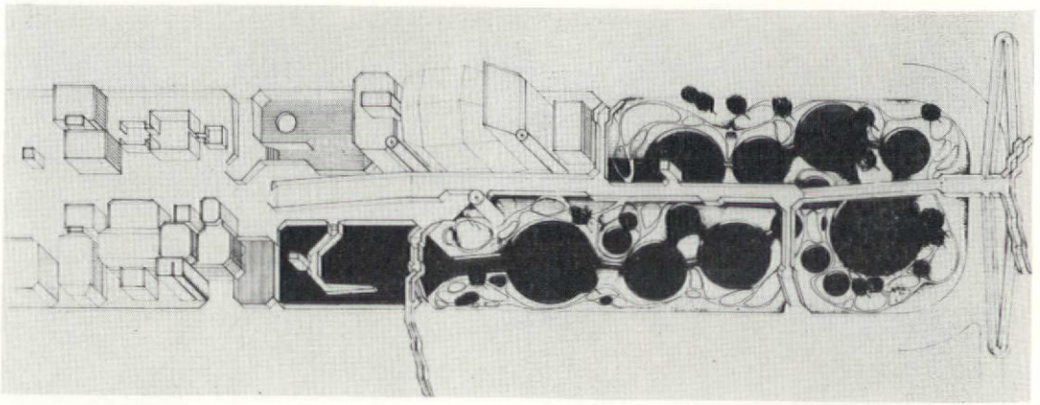
5
Cross-section

6
Axonometric of the housing development

7
House type A, plans, elevations and section

8
House type B, plans, elevations and section

ARCHITECTURAL DESIGN PROJECT AWARD



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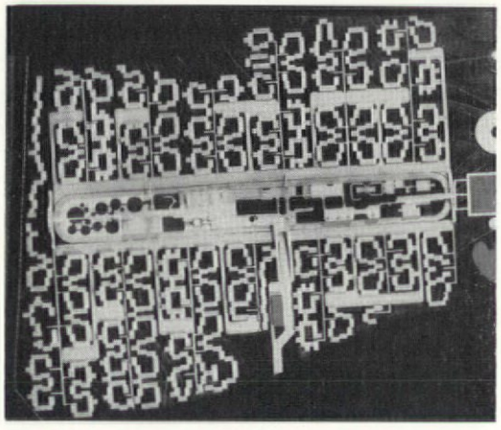


Central entertainment and shopping precinct, Cayton

For Wallis' Holiday Camp Ltd.

Architects, Derek Walker, Douglas Benneworth, R. Stuart Mosscrop

1
Site plan

2
Axonometric of north end of shopping spine

3
Plan of shopping spine
1 pool and gardens
2 theatre and cinema
3 boating and gardens
4 theatre court
5 crêche and garden
6 pub
7 kiosks
8 grillroom
9 cafeteria
10 fish restaurant
11 camp service and maintenance
12 indoor pool and dancing
13 dance hall, lounge, promenade and bowling
14 administration and accounting
15 ramp down
16 pedestrian ramps up to roof garden and children's play areas
17 coach park
18 shopping precinct
19 shopping and roof garden
20 shopping and roof garden
21 supermarket
22 amusement arcade
23 teenage club, basement bowling
24 pub
25 coffee bar and dancing
26 parking

4
Axonometric of centre and south end of shopping spine

5
Model of centre of south end shopping spine

The central spine at Cayton Bay was part of a much larger layout for a holiday village, and was to serve 750 units of accommodation with a seasonal population of 5250 people.

Since the company owned much of the land between the coast and Cayton village, all space for outdoor recreational activities had to be accommodated beyond the building line.

The spine was to generate both the vehicular and pedestrian networks and give a magnetic comprehensive service to holidaymakers for both shopping and entertainment.

Administrative control and security demanded one combined entrance and exit. This was confined by the Local Authority to Mill Lane.

An underpass pedestrian link was to be made between the motel and the main village, with a further subway across the A165 motorway to the beach.

Part of the site has been used for a number of years as a holiday camp catering for 500 caravans. The new venture was to provide a more permanent solution to the basic low budget, self-catering holiday. The clients accepted readily the horizontal segregation of pedestrian and vehicular movement—for this purpose a semi-Radburn system was adopted with bridge and underpass links to the central area.

A linear form was adopted for the central spine for the following reasons:

(*a*) It gave easy access to the central area to all holidaymakers—100yds being the maximum walking distance to the entertainment and shopping areas.

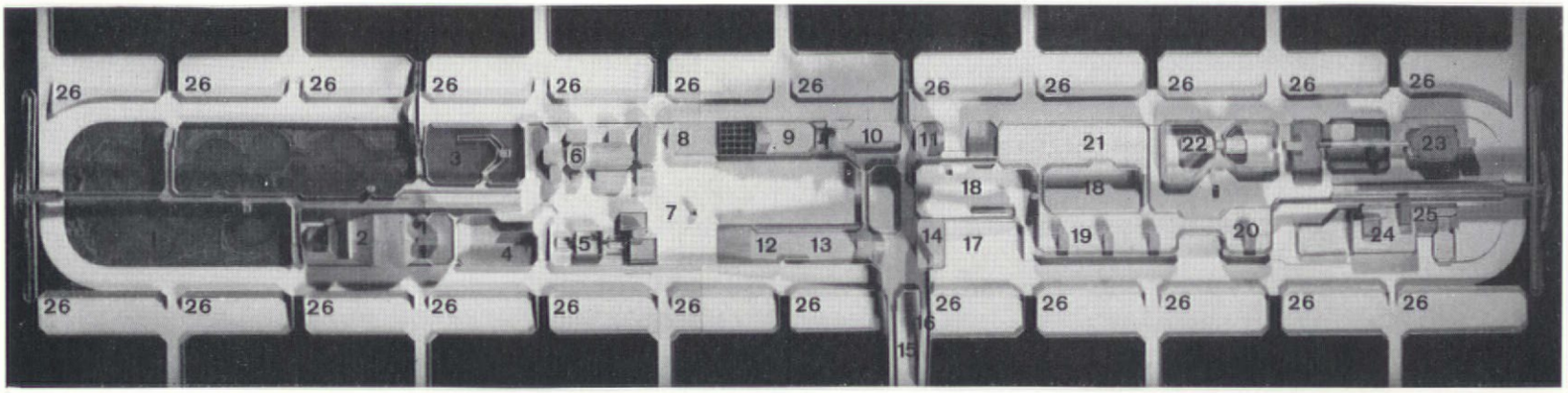
(*b*) It developed an interesting series of interlocking and variable piazzas, encouraged the 'promenade' and, within fairly narrow confines, provided an interesting pointer to the outdoor recreation facilities on the southern boundary of the site.

(*c*) It allows all servicing, parking and vehicular movement to be confined to the perimeter road with its ancillary parking and service areas, and leaves the areas between buildings free for the pedestrian.

(*d*) The gradual slope of the site splits the central area into two basic levels with a ramp connection. It is a basically low-rise development and the build-up of form occurs on the entrance axis where the towers of the administrative and camp service buildings are connected to the restaurants and reception halls. Pedestrian walkways link these areas at high level and a series of ramps and bridges serve a roofscape split into gardens, sunbathing areas, cafeterias and barbecues. Two pedestrian flows are thus established: the deck level with entrances to all shopping and entertainment areas with promenade access to the recreation area, and the deck level for the more static attractions listed above. The multi-purpose piazza surrounded by the strong perimeter road gives a basic anatomy to the site and recognizable pattern to the pedestrian network which lead from the central area to the courts. The inhibiting factor in the design of the entertainment buildings was the necessity to utilize them for a variety of functions over a fourteen-hour day. All buildings will be air-conditioned and the interior design is of extremely flexible nature with much of the internal equipment electronically controlled. A very rigid discipline has been imposed on all graphics and display in the spine area and design of this has been left to the architects.

All construction on site has to be carried out between the months of October and April, determining to a major extent the materials used in the construction; pre-cast units are extensively used in the structure, with facing panels in Cornish granite, knuckle boarding, and patent glazing.

The project is phased over a seven-year period and building of the central spine will be started next winter. Fifty of the courtyard units have already been completed and the intention is to phase the spine buildings from north to south.



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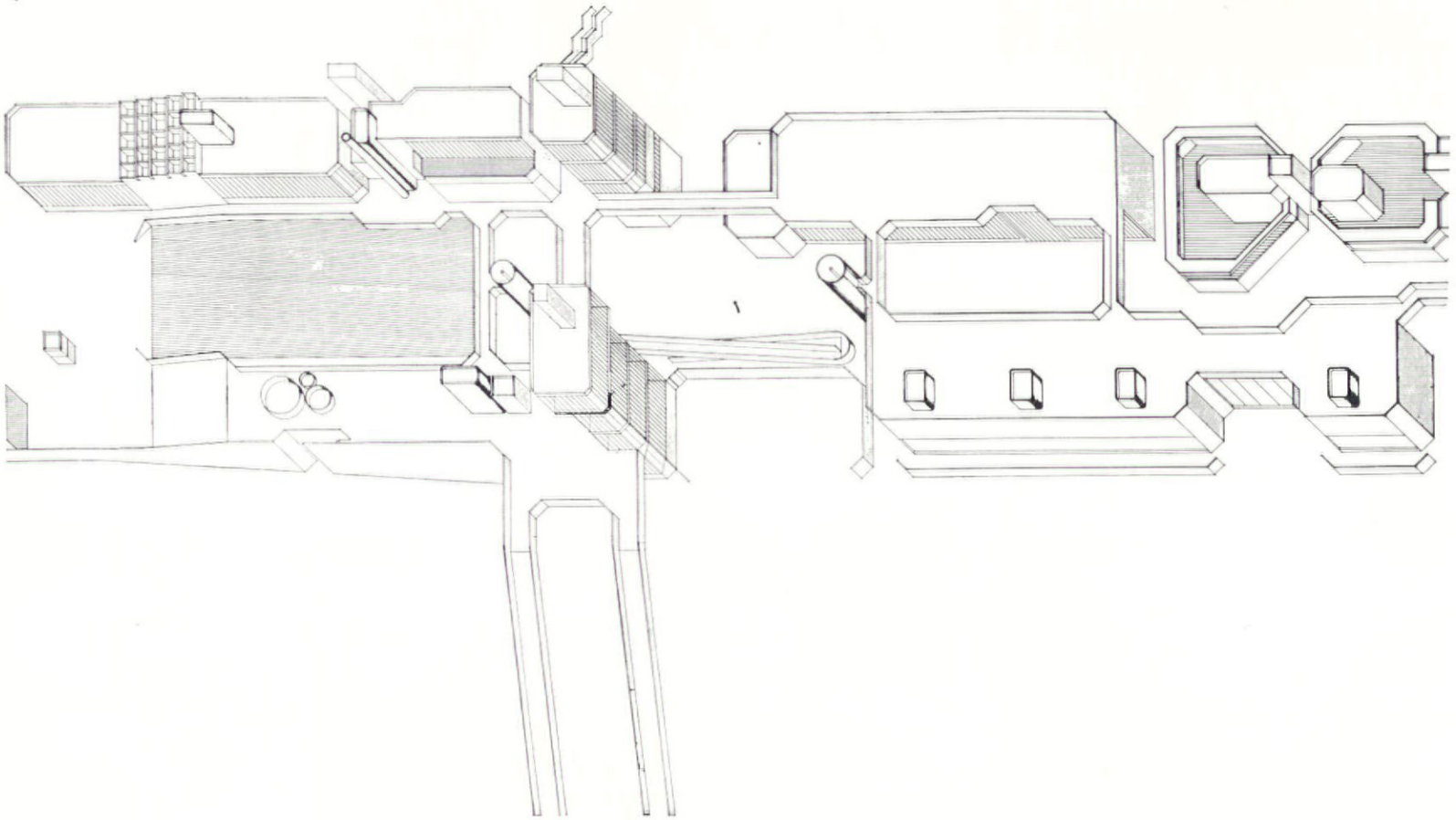

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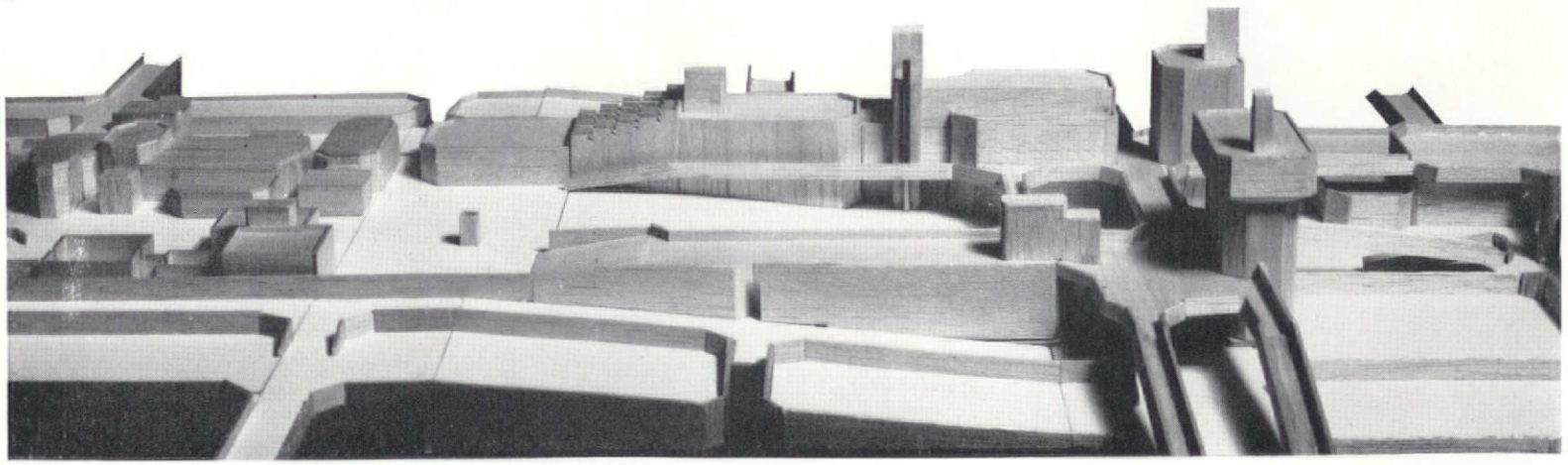


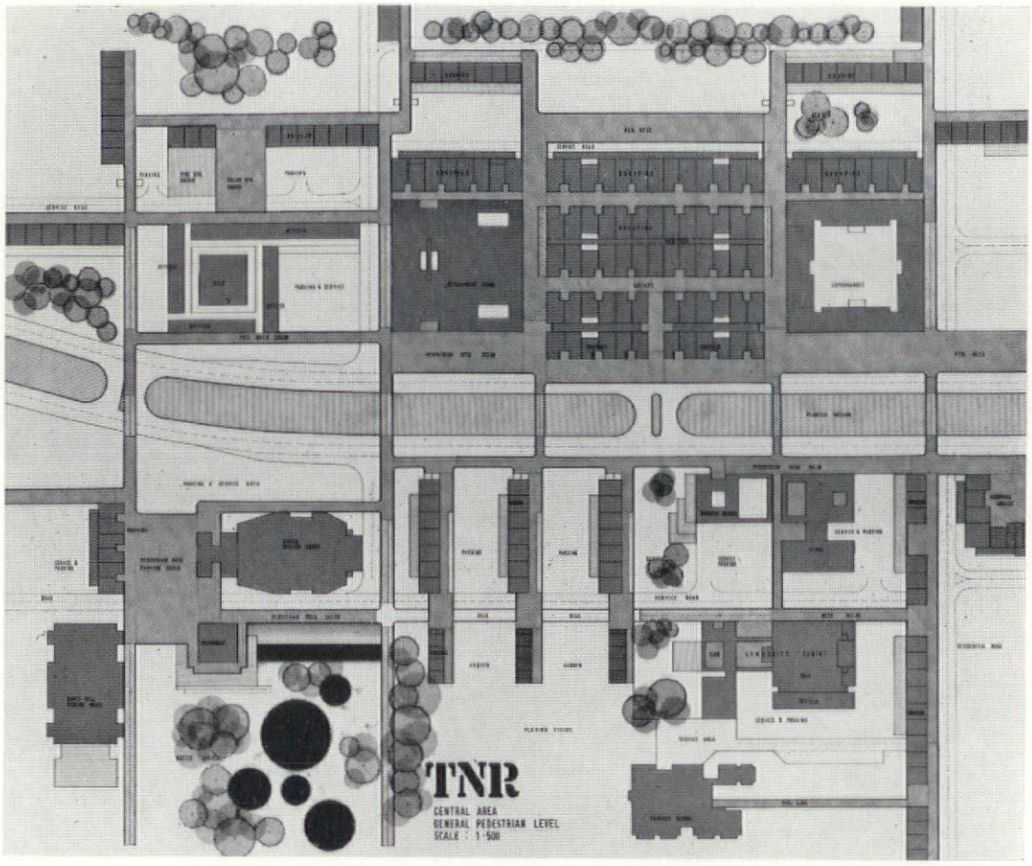
Selected designs

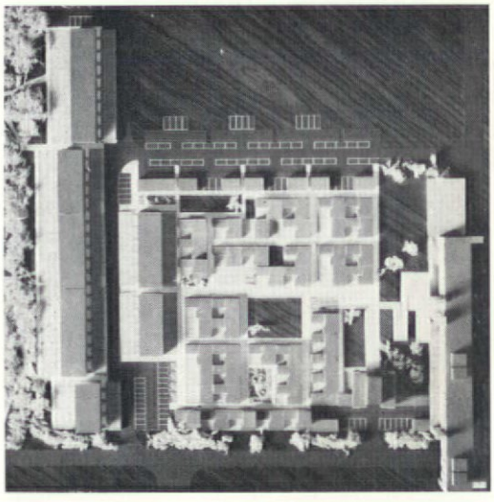
Temple Newsam re-development, Leeds

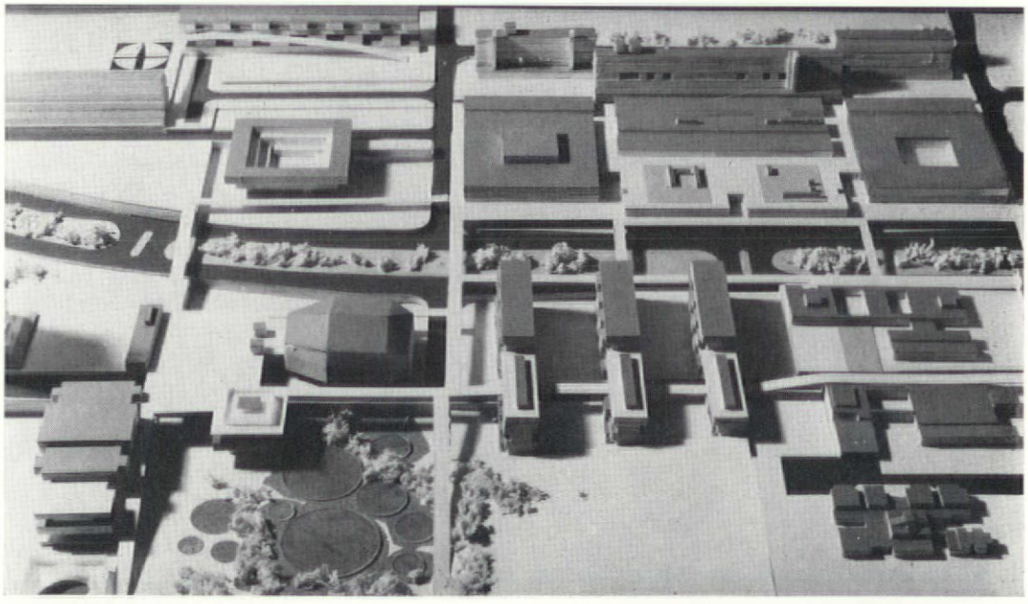
For Temple Newsam Estate

Architect, Derek Walker
(Derek Walker, D. T. Beneworth and G. D. Hemingway)









The architects were required to prepare a master plan for the 462 acres, with a population of 25,000, which would be geared to corporation development and have a balance of non-subsidized housing.

The existing buildings on the site consist mainly of scattered farm groups, detached houses and the village of Colton, which contains sparse amenities and no buildings of architectural merit. The aim is to develop the site as a total residential unit, within the concept of social balance and self-containment. Self-containment in this context implies that the demands of the resident community should be met so far as it is possible from within its own area. It is recognized, however, that the proximity of Leeds, and the proposed shopping centre at Seacroft, will provide opportunities for certain of these demands to be met.

The form of the plan was largely determined by the following factors: the site is virtually a large cul-de-sac surrounded on two sides by woodland and plantations of the Temple Newsam Estate. The road access to site had to be formed over a major trunk road, the position of access pre-determined by the fact that it had to link in to the existing road network.

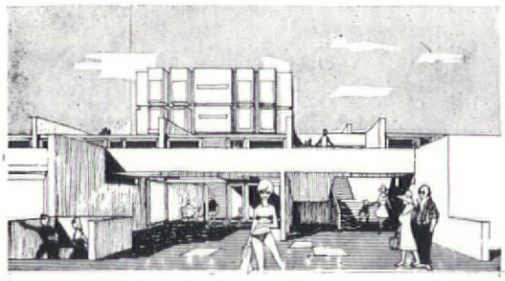
The site as a cul-de-sac is subject to a syringe system of traffic, with an estimated flow in and out of some 9000 vehicles at peak periods, geared mainly towards the city of Leeds. The road pattern is generated by the proposed freeway which crosses the site from a link in the form of a flyover from the junction of the new Leeds/Selby Road, and Colton Road.

While complete separation by levels is desirable and possible in the central area, it is unlikely to be an economic possibility in the housing areas, except at points of exceptionally high density, major road footpath crossings, or steeply sloping ground. This has led to the creation by us of a new form of building running north–south, termed route buildings. Off-ground dwellings are provided in the form of continuous slabs running north–south and following the lines of the distributor roads. Garaging for the slabs is at ground level adjacent to the distributor roads, with lift and service access to the dwellings over. Use of the garage roofs is made for children's play space generally where the route buildings bridge the distributor roads. A continuous 15ft 0in wide pedestrian walkway or street is located 17ft 0in above ground level, linking all dwellings to the central area. This level contains in addition to individual dwellings, local shopping facilities, hairdressers, launderettes, committee rooms, and youth clubs, etc. The heights of the slabs vary according to subsidence conditions from 4–6 storeys.

Millendreath holiday village, nr. Looe, Cornwall

For the National Union of Mineworkers

Architects, Marshman and Warren



1

The holiday community is for about 2000 people on a 60-acre site. Facilities provided in each flat unit had to be kept as high as possible, also enabling families to be housed together whilst still offering dormitory accommodation for children.

All the flats are sited with a view of the sea and across the valley. Flats have been kept close together thus providing a communal atmosphere and affording the maximum protection to pedestrian ways. The atmosphere is similar in many respects to traditional Cornish villages with their steep streets and closely knit pedestrian areas plus expansive views.

Children can play freely anywhere as no vehicles enter the site. Dance halls, dining room, etc., are approached at first floor level, serviced at ground level.

Each flat provides accommodation for two people, with its quality of amenity up to hotel standard.

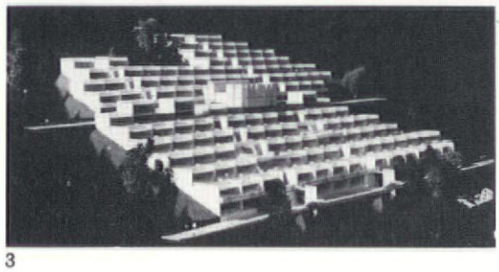
Due to the possibility of slip, the flats are cut into the slope and have a reinforced concrete rear wall and floor. The reinforced concrete roof which in part serves as an access way is supported on load-bearing concrete block crosswalls and covered with asphalt and pavings. All external concrete will be heavily textured and will be formed with light aggregate and cement. The front wall will be a preformed timber curtain wall unit with glazed metal ventilating units inserted.

The main dining halls and ancillary buildings will be of light steel frame with reinforced concrete foundations. The floors will be clad in pre-cast concrete panels supported on steel lattice edge girder, with continuous timber windows and aluminium insets.

Heating will be by solid fuel district heating system.



2



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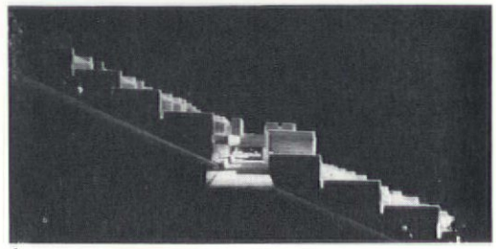

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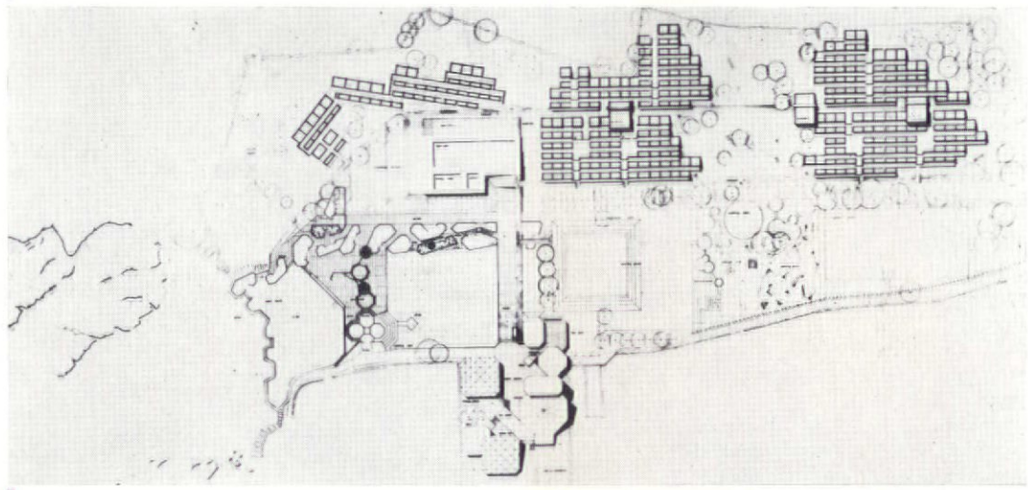

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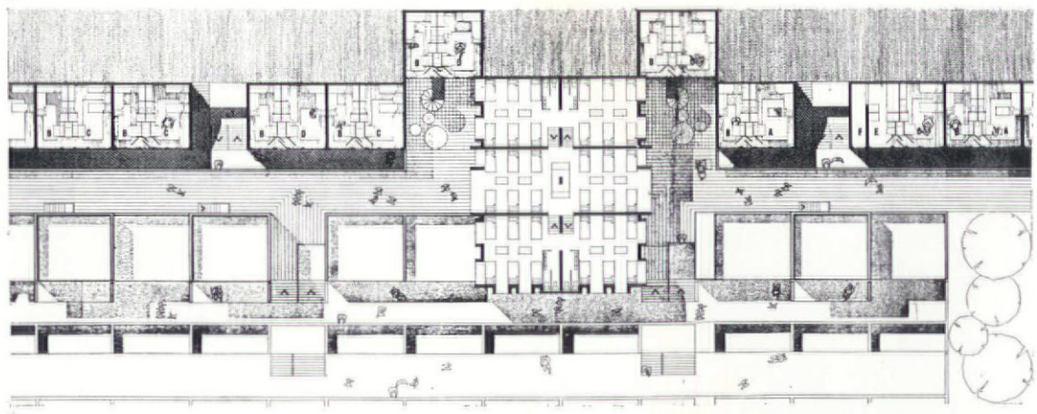

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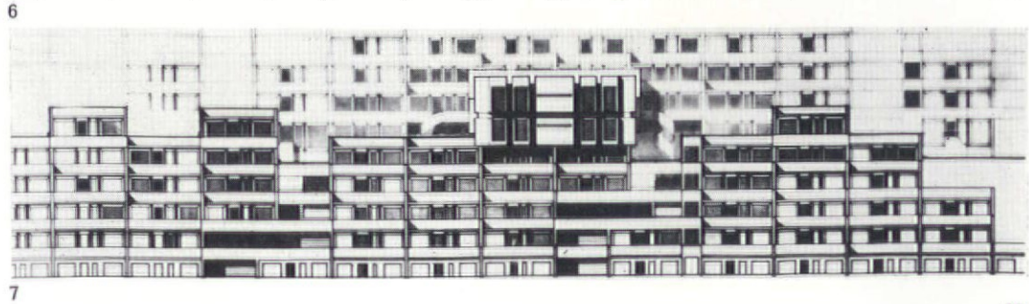


7

1
Sketch showing public circulation area

2
Model showing view from the sea

3
Model of the flats: view from the valley

4
Model of flats: view from upper walkway

5
Layout plan of the part of the site to be developed

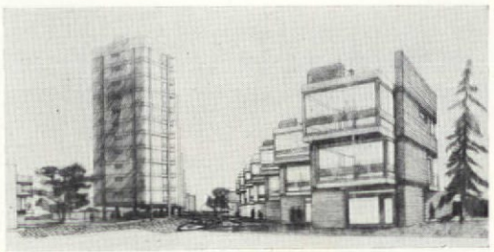
6
Typical plan

7
Detail elevation

Houses and marina, near Teddington, Middx.

For T. G. Smith Esq.

Architects, Covell, Matthews and Partners; architect in charge, J. R. G. Wheatley



1

The site, well wooded and over four acres, has a short riverside frontage approximately one mile downstream from Kingston Bridge.

Development was to provide 70–80 high quality houses and flats, generally two or three bedroom types. The site's amenities and characteristics were to be preserved, and maximum use was to be made of the river's vicinity. A garage was to be provided for each dwelling; and there was to be a clubroom, a small shop, and development to exploit the river in terms of yachting, boating and similar activities.

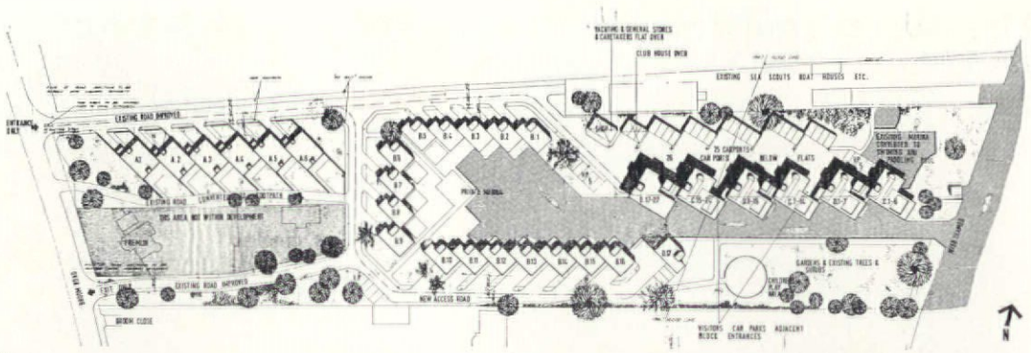
The site presents some difficulty in planning as its depth is nearly five times its river frontage. It was therefore decided to bring the river into the site and to form a marina for the exclusive and private use of residents. Around the marina, 17 three-storey houses were sited, each with a mooring for one or two boats. Similarly, the 51 flats have been arranged in three diagonal orientated 'paired' blocks, 6, 7, 8, 9, 10 and 11 storeys high. These are at the entrance neck to the marina, and boat moorings will be made available, access being below the flats which throughout are raised up on open pilotis.

This solution deals with dangers from high floods, which in 1947 reached a line 300ft back from the river bank; were similar flooding experienced, residents could reach dry ground via bridges linking first floor lift-halls with car port roofs.

The accommodation is further diversified by six terraced patio houses, with three bedrooms and double height living rooms. They are set in a densely wooded part of the site, for residents requiring less direct contact with the river, although each has its own mooring.

The focal points of constructional interest will of course be the multistorey flats and the marina itself. The flats will be r.c. framed, built on broad diameter piled foundations, probably about 50ft deep. The shape of the ground floor pilotis will be such that the flow of flood water will not be impeded. The structure supports small swimming pools on the roof-gardens of each of the five penthouses. Linked with the foundation structure of the flats and three-storey houses, is the r.c. retaining wall of the marina, 7ft deep.

The facing material for the houses will be white galts with dark grey bricks at floor levels. The flats will be faced with white galts built within the exposed r.c. frame.



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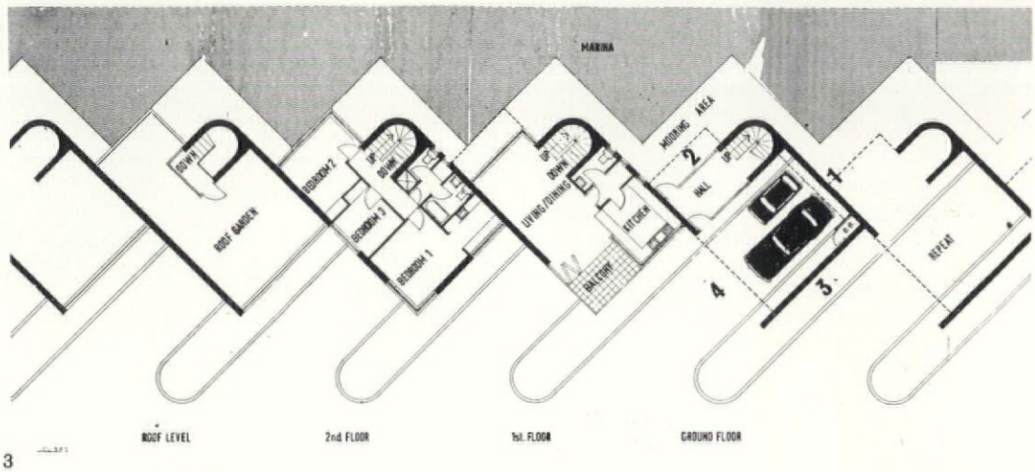

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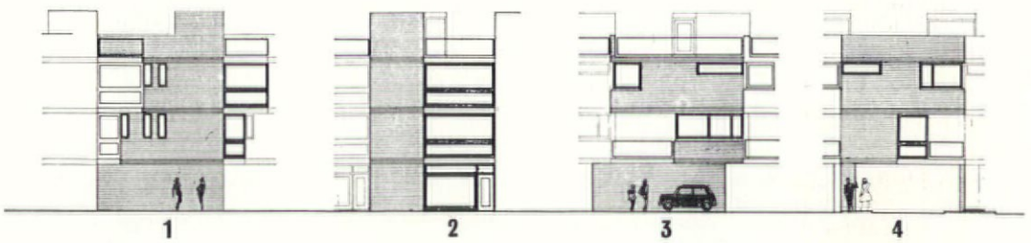

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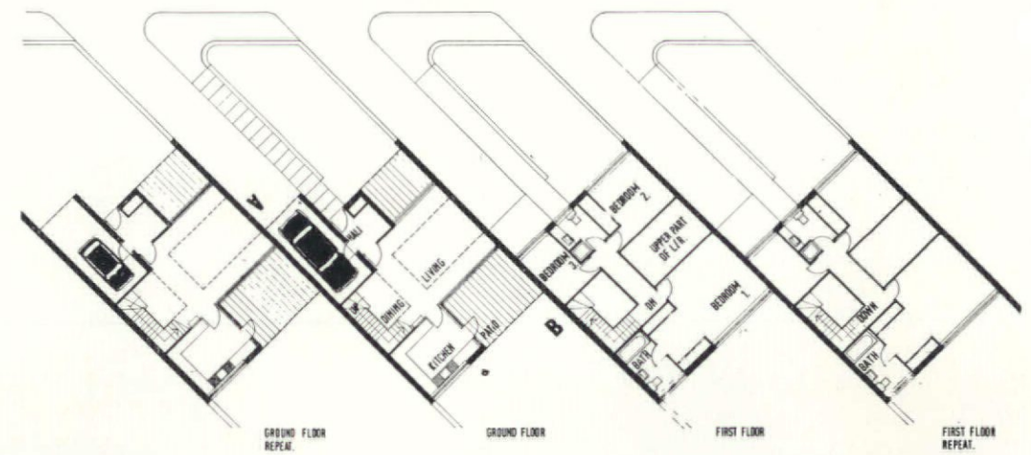

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6

1
Sketch showing marina-side houses and flats from the west

2
Site plan

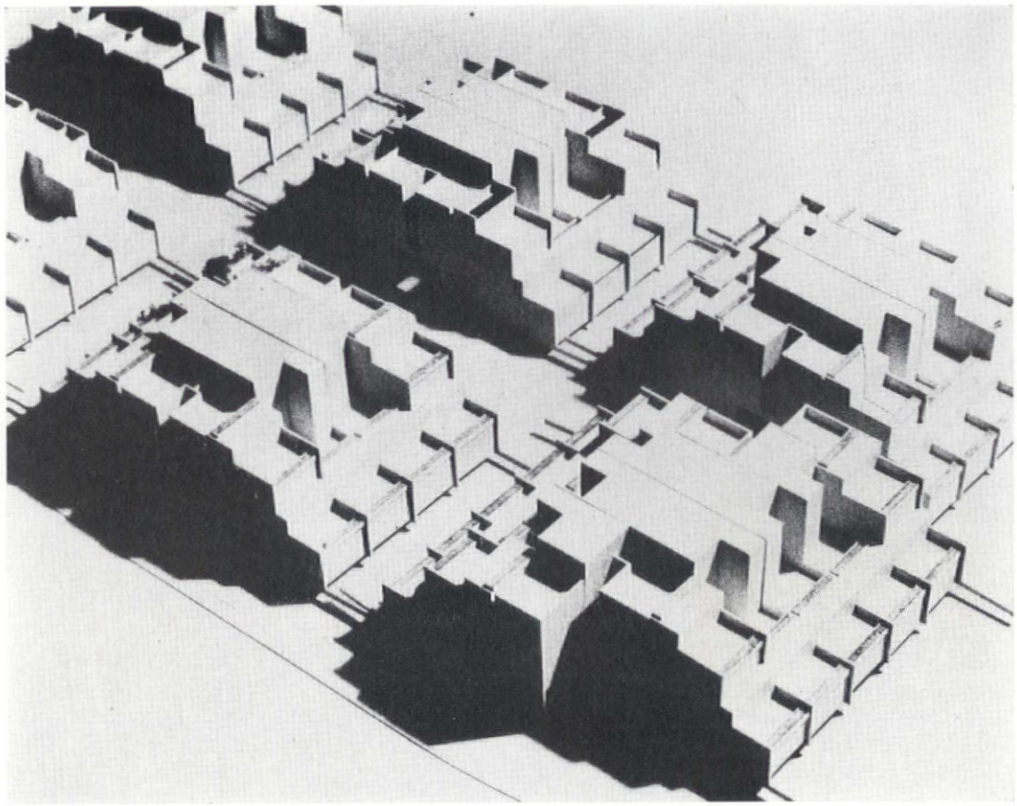
3 & 4
Plans and elevations

5 & 6
Plans and elevations of two-storey patio houses

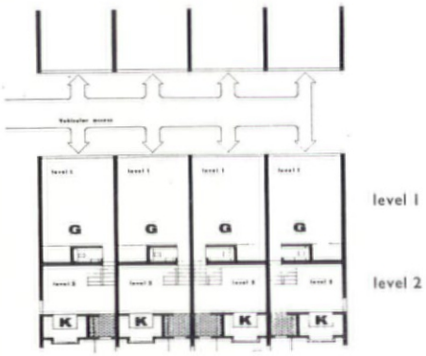
Housing at Ealing, Middx.

For Romulus Constructions Ltd.

Architects, Ian Fraser and Associates; architect in charge, R. W. Patterson

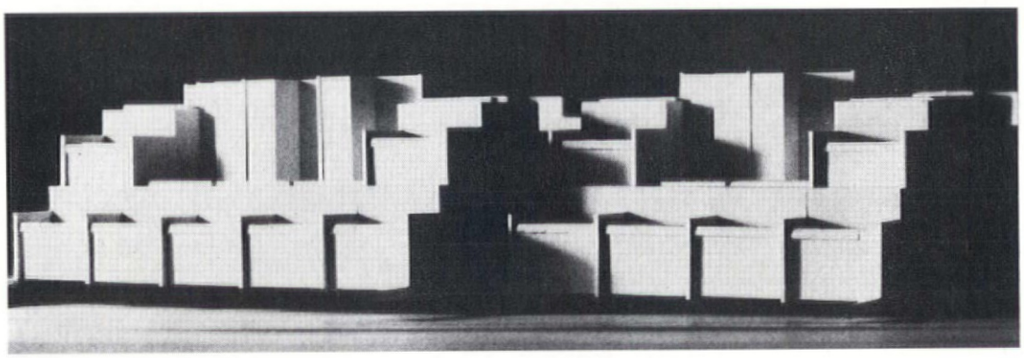


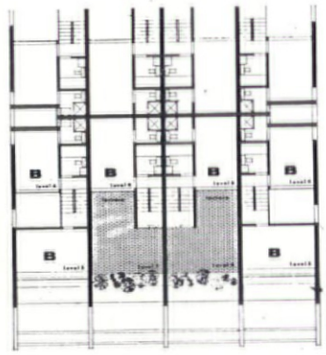
An analysis of the building costs and demand showed that optimum use would be made of the site by building approximately 55 houses. This represents a density of 100 persons per acre. The problem was to maintain the accepted characteristics of houses at this density. The essential characteristics have been taken as direct access and storage of private motor cars, private external space, and a clearly recognizable unit. The houses are grouped into clusters of 8, 10 and 5. The 8, 10 and 5 clusters span the access roads. The structure consists of cross walls with all external surfaces in facing bricks with brick paving to the roof terraces. The space between the buildings consists of hard surfaces for vehicular and pedestrian access, formal planting between the blocks and all the existing large trees and lime arbours are retained and supplemented by large-scale additional planting.



level 1

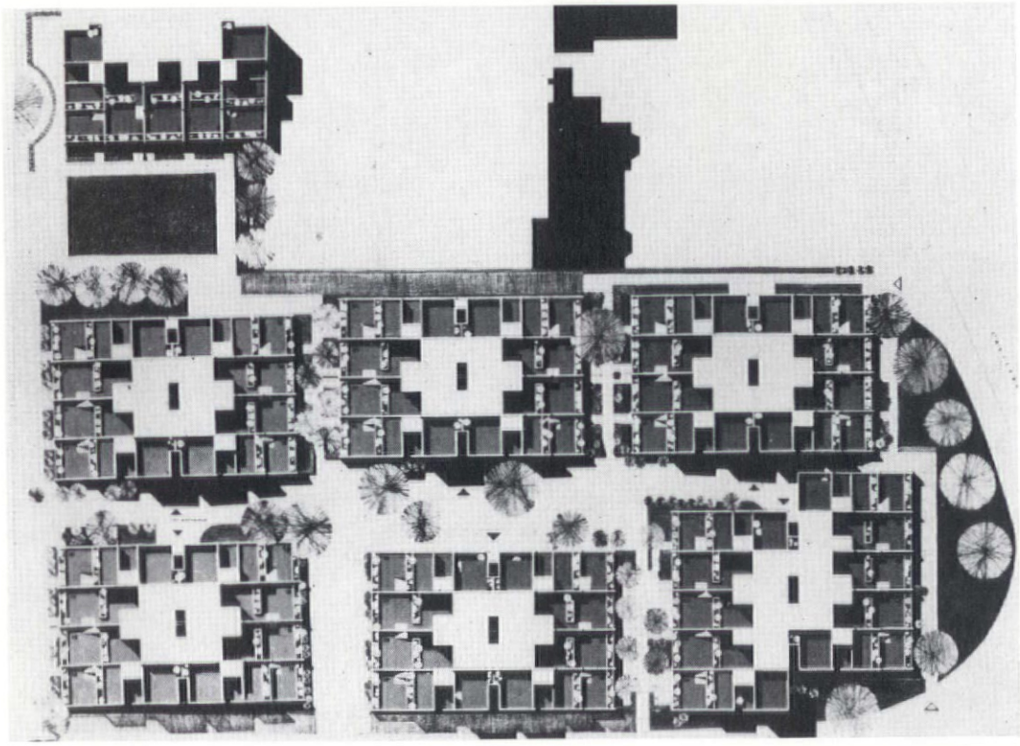
level 2

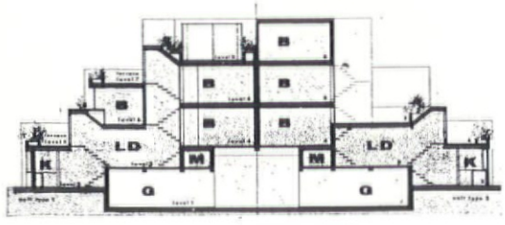


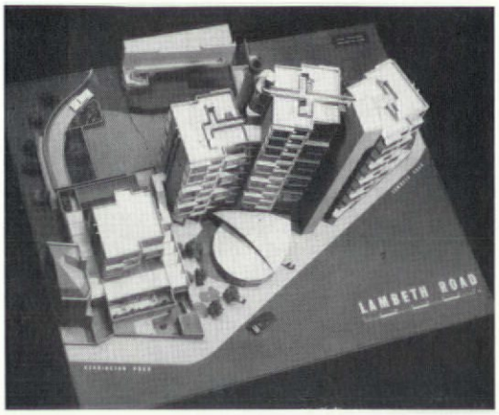


level 4

level 5







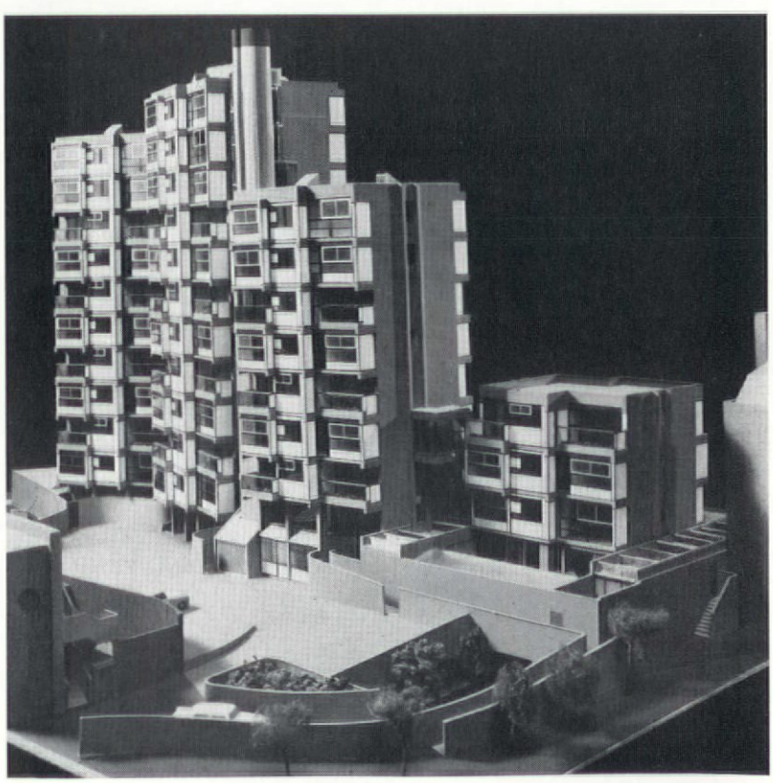
Mixed development, Lambeth

For Lambeth Borough Council

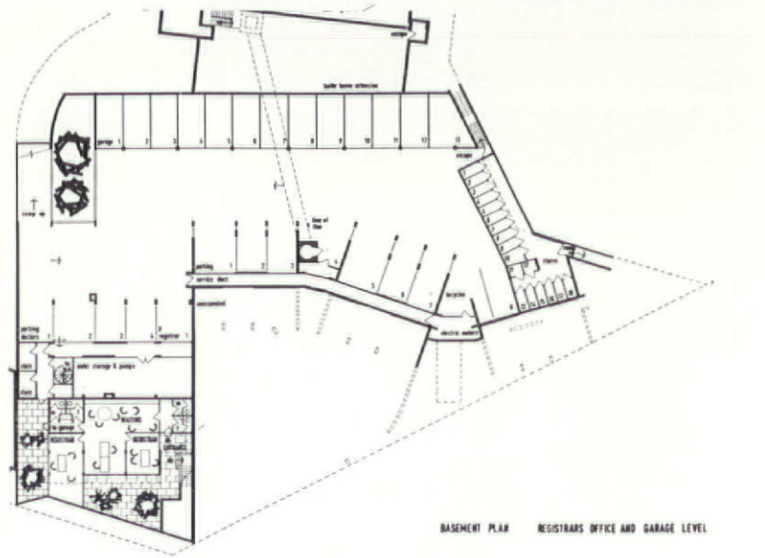
Architect, Edward Hollamby; architect in charge, G. B. Finch

It was considered that this site, on the corner of Lambeth and Kennington Roads, was a prominent one and that the density of building that would result from the brief could be organized as a dramatic group. This could also produce a building that would be strong enough in form to control to some extent, the existing jumble of buildings surrounding the site. A proposed hostel on the adjoining site has been considered in the total layout. It was also thought that the dwellings should be raised up from proximity to the road as much as possible and that the view over the park should be considered.

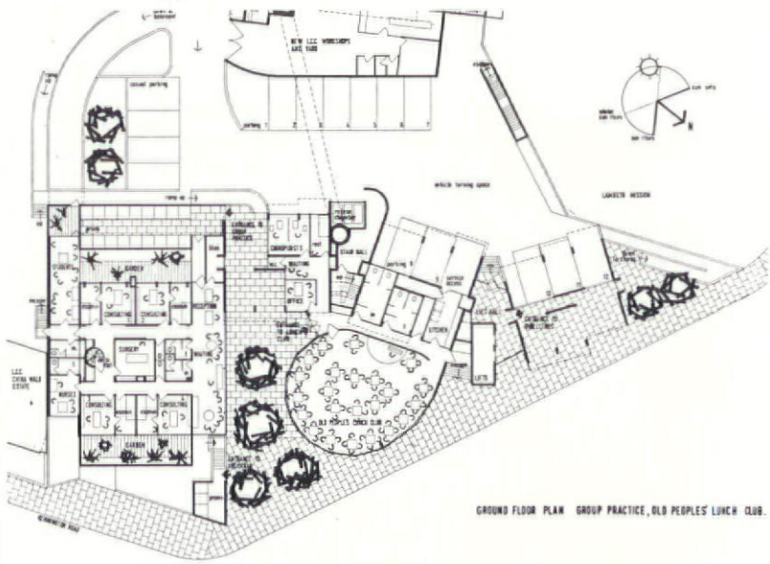
Access had to be arranged from Lambeth Walk. In order to plan the ramp down to the underground garage the adjoining LCC workshop is to be relocated. An old people's luncheon club, shops, and registrar's office is arranged at ground level with a doctor's group practice centre and two- and three-room dwellings above. The housing is planned with a through dining/living area to take advantage of the sun and the view.



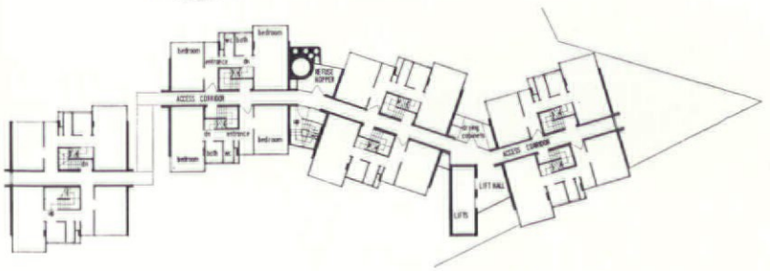


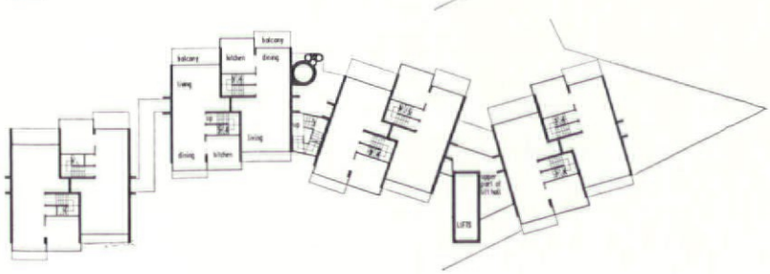


BASEMENT PLAN REGISTRARS OFFICE AND GARAGE LEVEL



GROUND FLOOR PLAN GROUP PRACTICE, OLD PEOPLES' LUNCH CLUB.

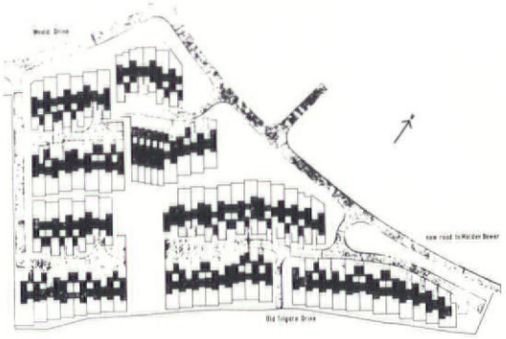




Housing at Crawley

For the Crawley Co-partnership Housing Association

Architect, Peter Phippen in association with Peter Randall and David Parkes





The brief was established in consultation with the architects, helped by a questionnaire compiled with the assistance of a sociologist. Particular points brought out were:

(*a*) Members all wanted to 'own their own homes'.

(*b*) They required more privacy and more space than was normal in Municipal and New Towns Commission housing.

(*c*) They required at least partial central heating.

(*d*) They wished to live in an area with a more controlled environment comprised of landscaped areas and the added advantage of a residents' club, which would provide a day nursery and facilities for members and older children to meet in a warm and friendly atmosphere in the evenings.

The site acquired by the Association comprises 6·75 acres adjoining the town boundary. It falls gently to the south and is bounded by Forestry Commission land on that side. The west boundary is formed by self-build houses in conventional semi-detached form. The remaining two boundaries are made by roads.

The site forms an environmental area bounded by local distributor roads on two sides. Complete vehicular and pedestrian segregation was not considered practicable; access to the area has been limited to three points spaced around the periphery. Access to the houses proper are from drives. The ability to drive directly to each house was a specific objective of the scheme, agreed by clients and architects at an early stage. A surface obstruction at the point of entry will reduce speeds. The drives will be deliberately detailed as spaces where vehicles and pedestrians meet.

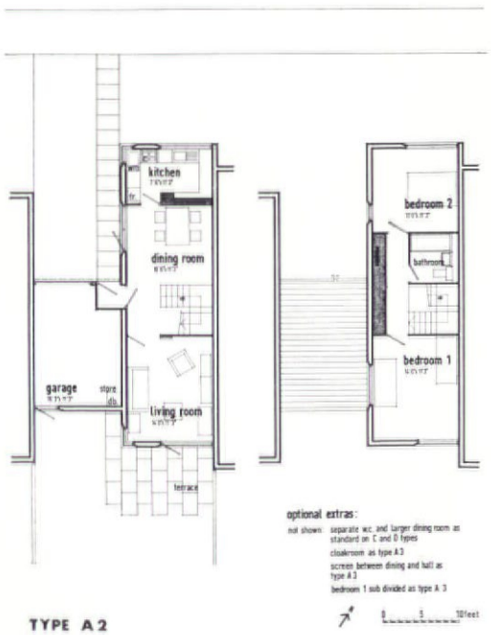
Houses are of two kinds, depending on their orientation in relation to the road. Houses entered from the north have garage and parking on that side, with private sitting area and garden to the south. Houses entered from the south will have garage, parking space and sitting-out space on that side, with a kitchen garden on the north. All houses create a partly-enclosed entrance space where visitors and guests can enter and leave in privacy. All gardens open onto a pedestrian network of footpaths connecting to play-spaces and the residents' clubhouse.

The whole site will be designed to a high standard of amenity. Garden walls will be built of the same material as the houses, while fencing, paving and planting will all be carefully designed as part of the overall design.

The houses, with the exception of the three-storey E Type, are all based on a 24ft 0in frontage divided into two equal bays: one long bay two storeys high and one short bay one or two storeys high depending on the accommodation required. The short bay produces attractive setbacks at front and rear. These, together with the separate garage at the front of the house in the majority of types, creates small-scale private partly-enclosed areas immediately adjoining the house, providing the maximum amount of daylight and affording good views from the principal spaces in two directions. This also means part of the outside of the house can always been seen from within, which will increase the apparent size of the dwelling. The length of party walls—and subsequent sound transmission—is also reduced by this arrangement.

The houses are designed to give maximum flexibility of use. All houses, with the exception of A and E types, have a space on the ground floor which can double as study or bedroom and which opens onto the living room or can be closed off with access from the staircase hall.

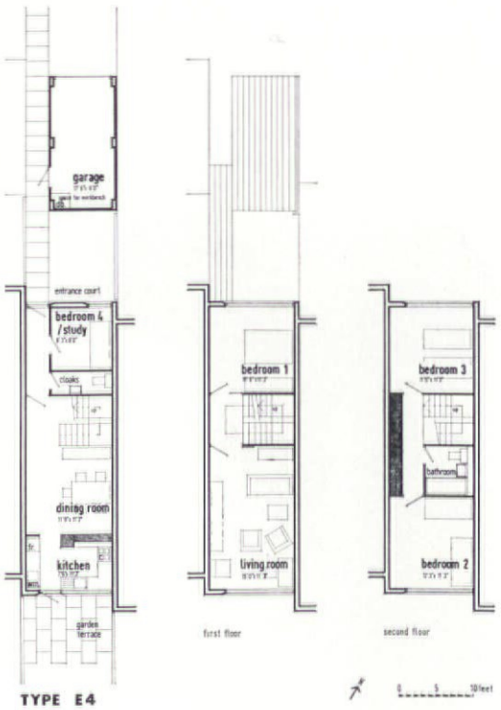
The main bedroom in House Types A, C and D can be subdivided to form two minimum single bedrooms. In this case, the second bedroom is always sufficiently large to function as the principal bedroom.



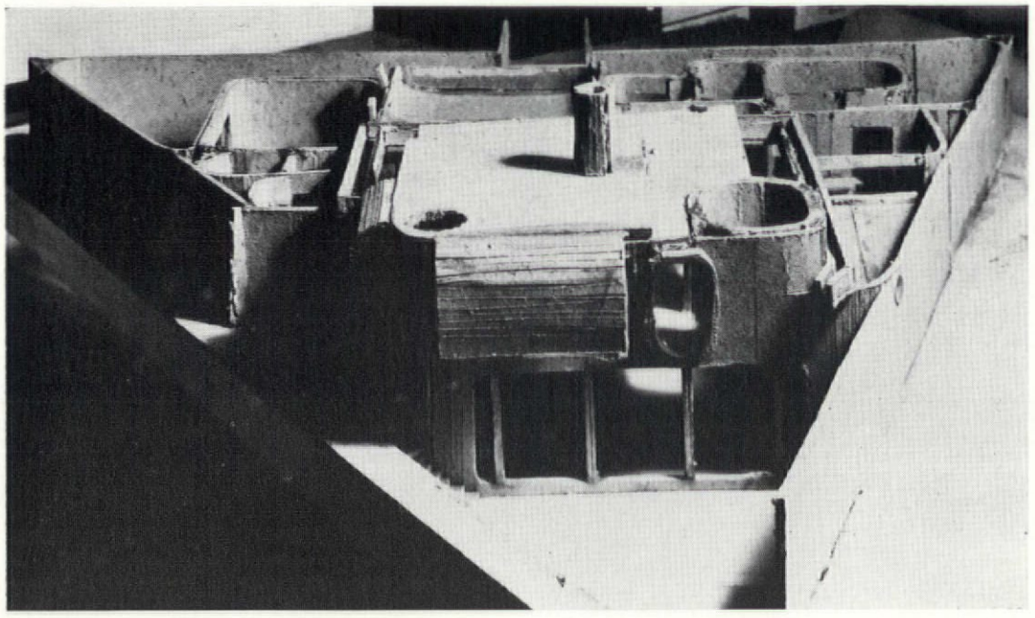
TYPE A2

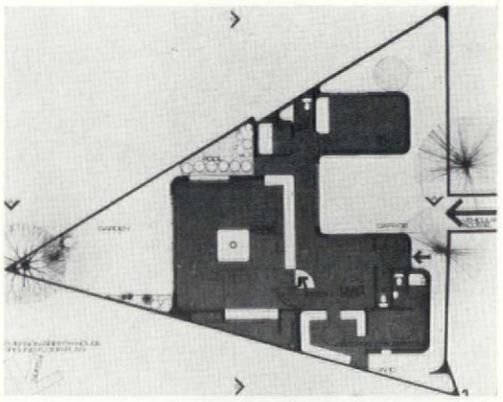


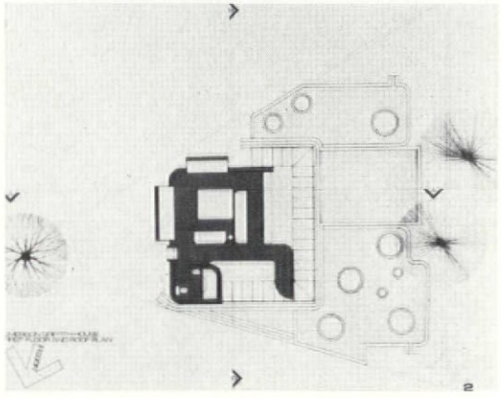
TYPE D3



TYPE E4





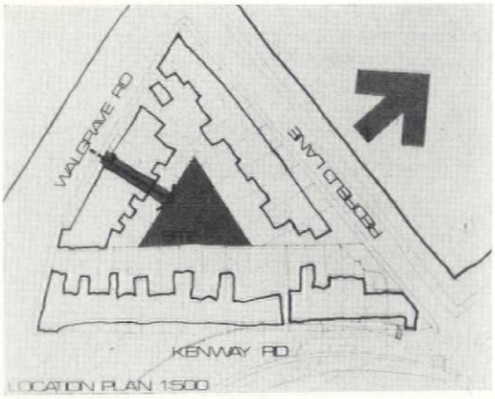


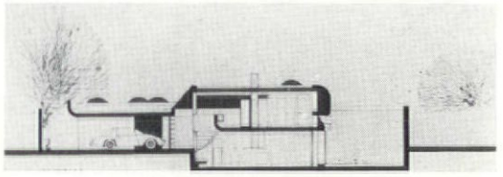
Griffith residence, Earl's Court, London

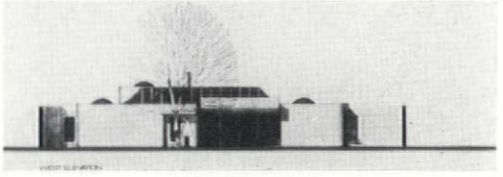
For Emmerson Griffith Esq.

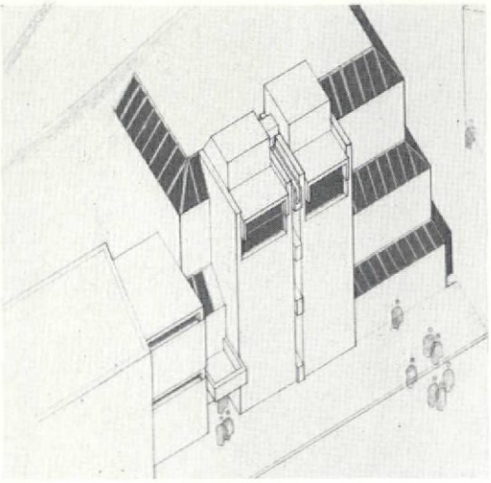
Owen Luder Chartered Architects (Owen Luder, Dennis Drawbridge, Rodney Gordon)

The house is for a bachelor, and the location a backwater of land in Earl's Court. The site is triangular, approximately 90ft along each side, bounded by 9ft high walls and overlooked on all sides. After appeal to the Minister, permission was granted to build a single storey house.
The very nature of the site and the difficult lighting problems dictated an interesting approach to house design, and have been a vehicle for experimentation of form. By excavating 4ft in the centre of the site and sinking the living room, the main bedroom was slung as an open mezzanine over this area to form a fulcrum to the free form of the house. The approach is mainly from the inside outwards, there being no external elevation.
The amorphous nature of the house suited the fluid use of concrete. Most of the shuttered structure will be left as it is struck, although certain areas will be plastered.







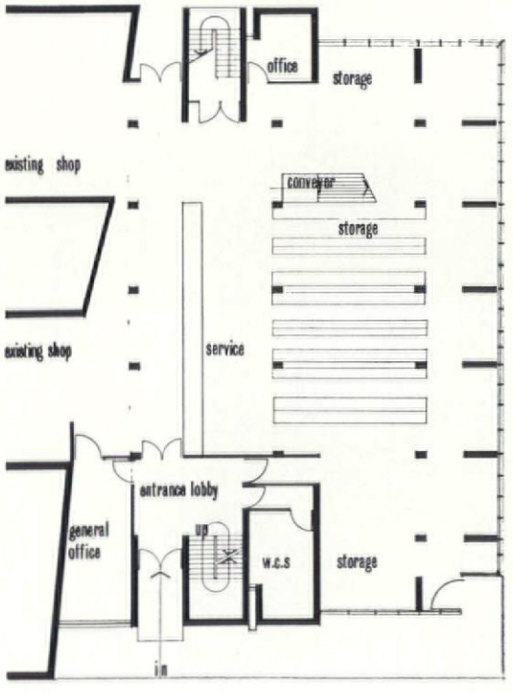


Warehouse, shop and offices, London SW

For Lewis & Co. Ltd.

Owen Luder Chartered Architects (Owen Luder, Dennis Drawbridge, Rodney Gordon)

The clients are builders' merchants who wish to extend their existing premises in Balham New Road to accommodate more storage, new offices and extensions to their trade-shop.
The service road bounding the site divides a natural site from residential accommodation and the light angle on the site demanded the set backs illustrated. This was to be a simple exercise of economic construction yet proving that modern architectural terms fit these requirements.
In situ concrete frames will be used with brick in-fill, patent glazing, high level lighting to storage areas and universal section metal windows.



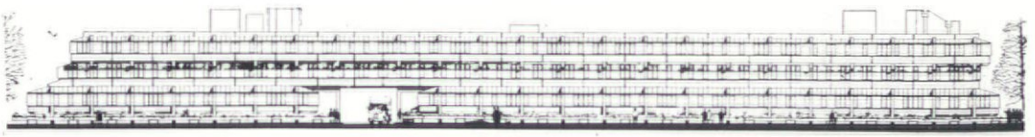
Office block, Bromley Common

For the E. Alec Colman Group of Companies

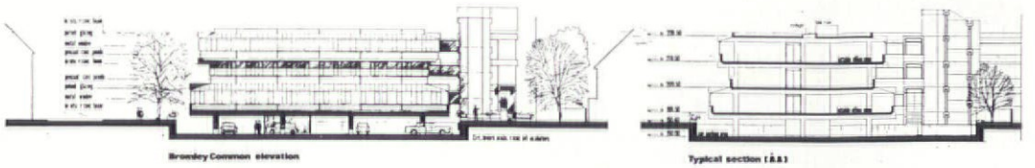
Owen Luder, Chartered Architects (Owen Luder, Dennis Drawbridge, Rodney Gordon)

The architects were asked by their clients to produce the maximum amount of office accommodation within the planning limitations of a three-storey block. The scheme produced 86,000ft² net of offices and car parking accommodation for 170 cars. The main interest of the design lies in the section which permits the high coverage of lettable office space. The first floor office is 72ft across, the middle floor is set back to 52ft allowing the perimeter of the ground floor to be top lit. The top floor is again set out to 66ft and the centre is top lit. This straightforward solution to the clients' requirements produced an interesting building form arising from what appeared a difficult limitation insisted upon by the local council, namely a three-storey development. The car parking is contained in a semi-open basement.

The construction is *in situ* reinforced concrete with pre-cast concrete panels, metal glazing and patent glazing sections for the top lighting.

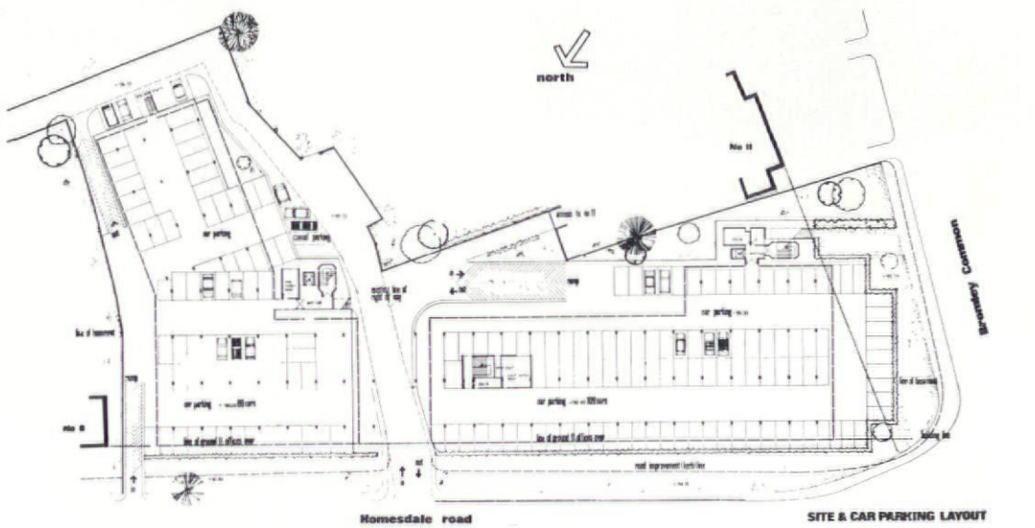


Homesdale road elevation

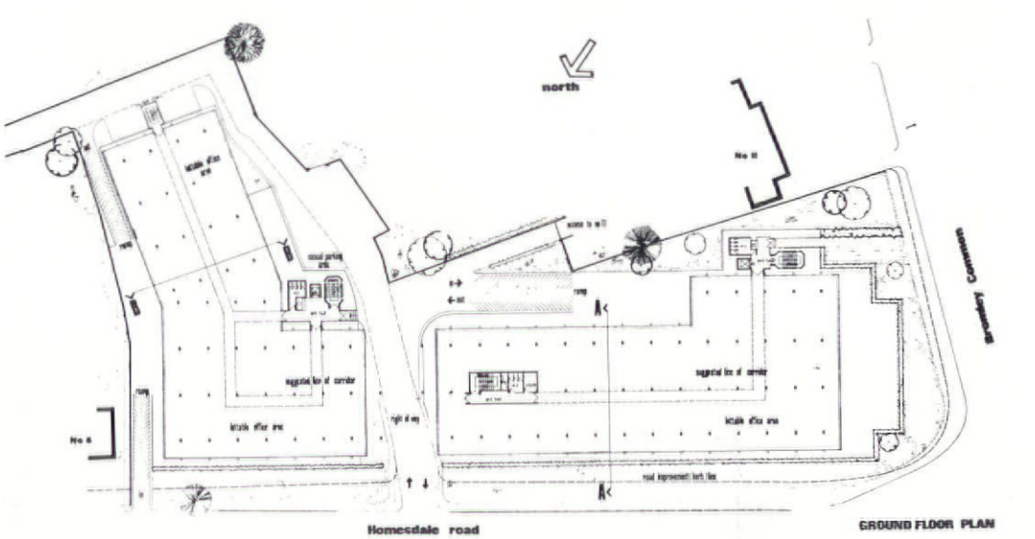


Bromley Common elevation

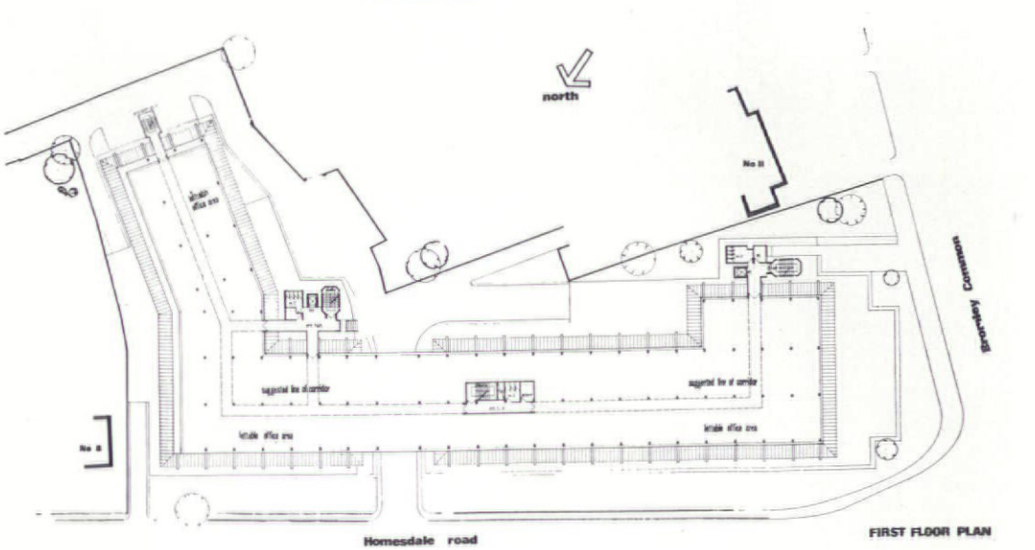
Typical section (A.A.)



SITE & CAR PARKING LAYOUT



GROUND FLOOR PLAN



FIRST FLOOR PLAN

High Street development, Gateshead

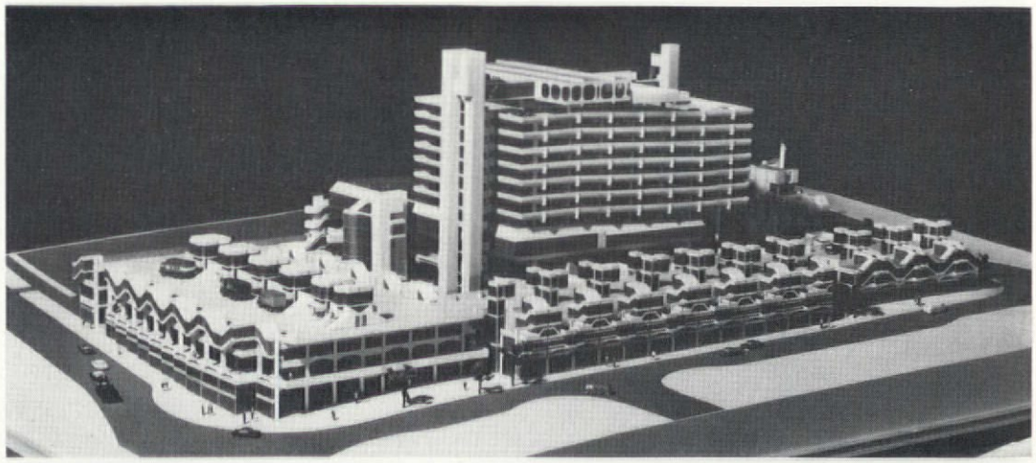
For the E. Alec Colman Group of Companies

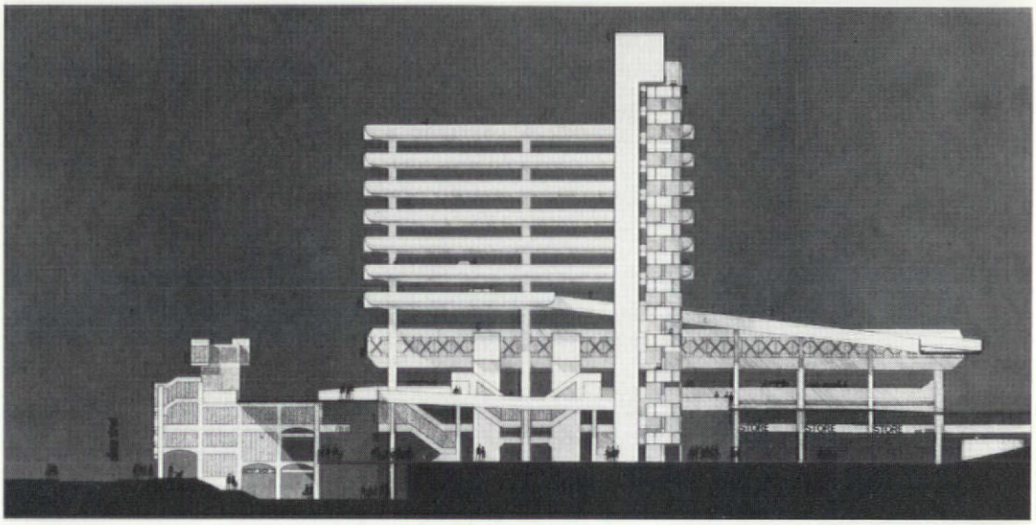
Owen Luder, Chartered Architects (Owen Luder, Dennis Drawbridge Rodney Gordon)

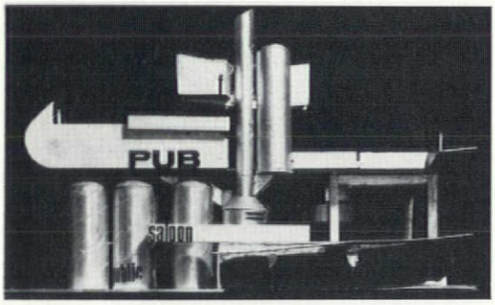
In March 1961 the Gateshead Corporation invited a short list of development companies to submit designs for the redevelopment of a substantial site in the centre of Gateshead between the High Street, West Street and Ellison Street. The scheme illustrated has been chosen. It comprises a shopping precinct which makes use of a very steep slope forming a diagonal across the site. There are 53 shops, two supermarkets, a large department store, a public house, bowling alley, restaurant and car parking accommodation for 490 cars. The estimated contract price is approximately £1,300,000.

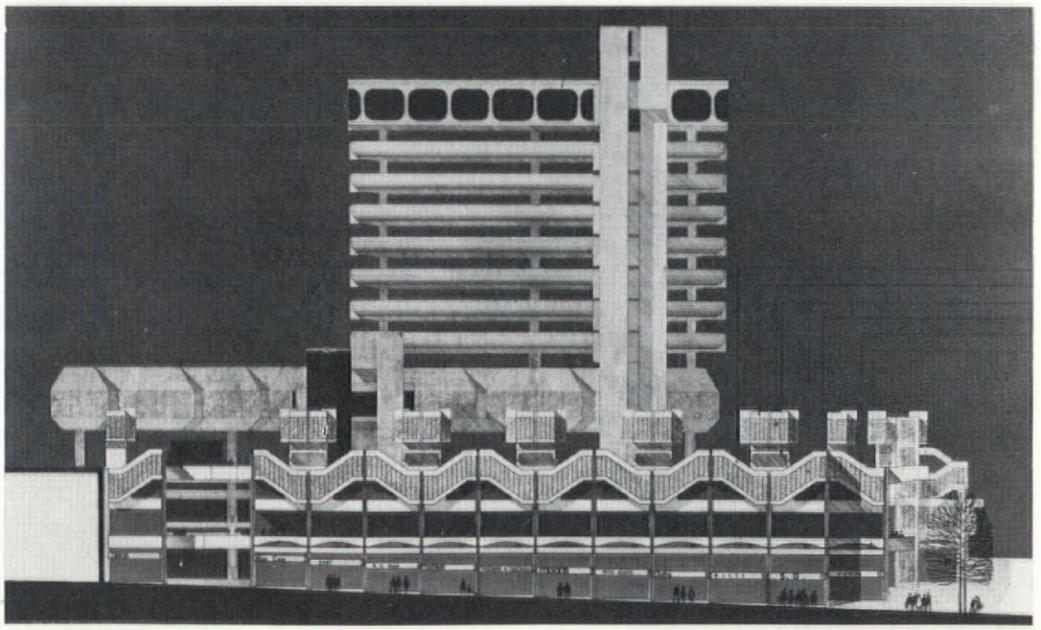
Vehicular circulation has been channelled to an upper level in order to free the ground levels completely to the pedestrian. The sections are designed with shop sale space passing through the two natural shopping levels with storage accommodation above and these areas are so organized that they can be divided horizontally and vertically, still giving the smaller units storage space above.

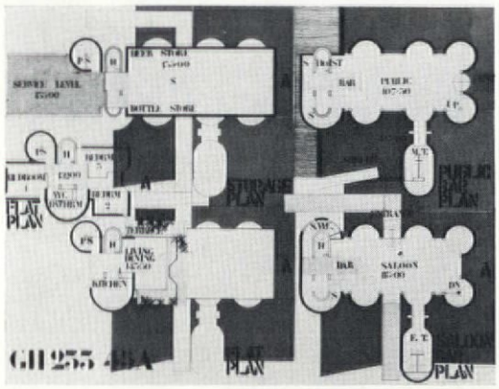
The structure is of *in situ* concrete, in-filled panelling, Thermolite Ytong and fibre-glass; glazing in metal frames and profolit.

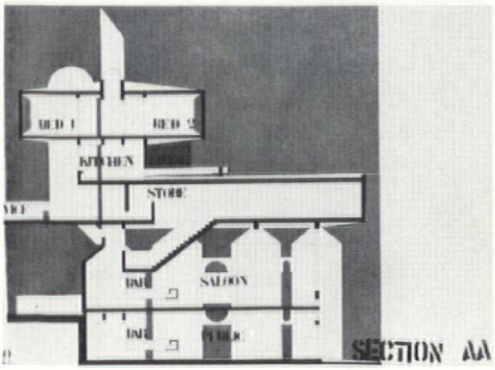


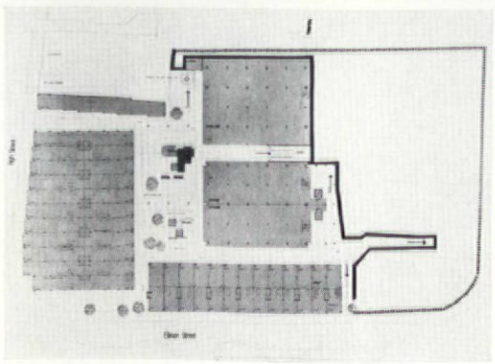


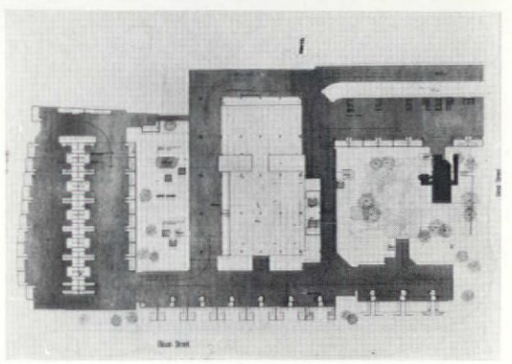








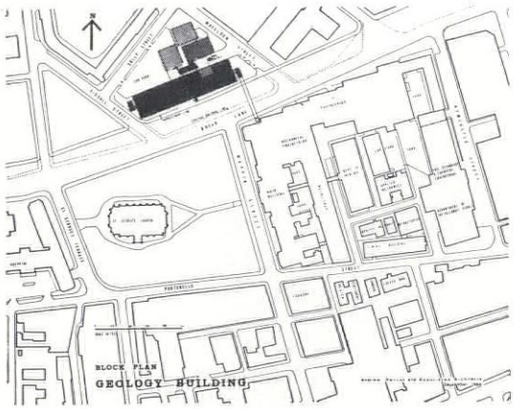


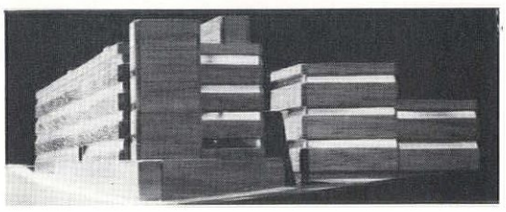


Geology building and technology library

For the University of Sheffield

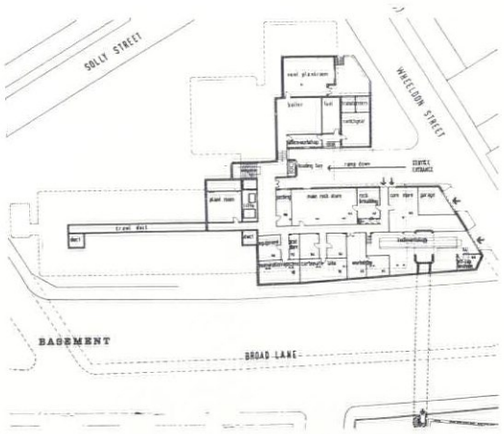
Architects, Andrew Renton (Principal), Humphrey Wood (Associate) and Kenneth Morrice (Job architect)

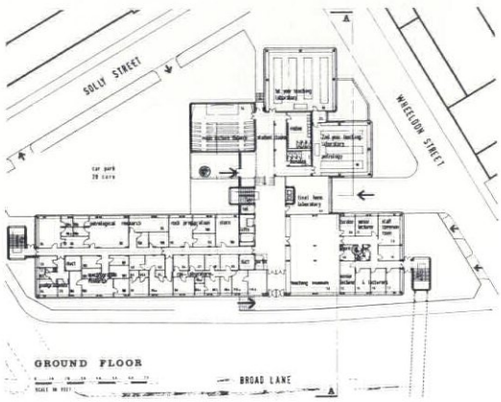




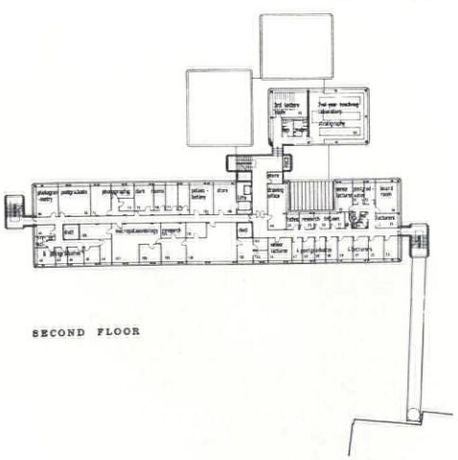
The new building is to house lecture rooms and teaching and research laboratories for the Geology Department and temporary reading places and bookstacks for a technology library which in due course will be moved elsewhere.
The site is bounded on all sides by roads. The main road on the south will form part of the city's inner ring road system, so requiring a pedestrian bridge over it to link the new building with the existing university buildings in St George's Square.

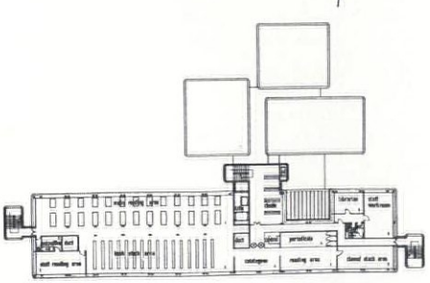
Massing derives from the requirements of the brief and the character of the site; also recognizing the relationship between the site and St George's Square, and creating enclosure where lacking. It expresses the separate functions of the various elements—small volumes in the research area, large volumes in the teaching area—and the severe three-dimensional restrictions imposed by the shape of the site, and the daylighting angles. The two main elements of the building—the long four-storey block and the large interlocking blocks of teaching laboratories and lecture rooms—are linked by the main stair structure.
A reinforced concrete structure incorporating exterior twin columns with service ducts between, central riding ducts, provision for services above corridors, between ceiling ribs and below window level, form the essential three-dimensional pattern of the design.
The area devoted to research has the largest demand for services. Over the three floors, fume cupboards are arranged according to requirements, and a network of horizontal ducts gathers the fumes to central points common to all floors from which the extract air may be drawn up to roof level and discharged. The fresh air supply is in the same duct spaces over the central corridor. Rooms requiring conditioned air have been placed on the south side. There is no regular pattern of sink distribution, and drainage is designed to run out to the external faces of the building to avoid the ventilation ducting. The space below the windows also accommodates heating pipes and all bench services. A separate ventilation plant is provided for the lecture rooms and teaching laboratories.
The structural frame of the building is clad externally with precast concrete panels of exposed aggregate finish, shaped to form the perimeter wall ducts around the research block and the teaching laboratories; and flat panels are used as permanent shuttering to the *in situ* walls of the lecture theatre and staircase towers. Windows are of aluminium patent glazing inclined outwards at the bottom.

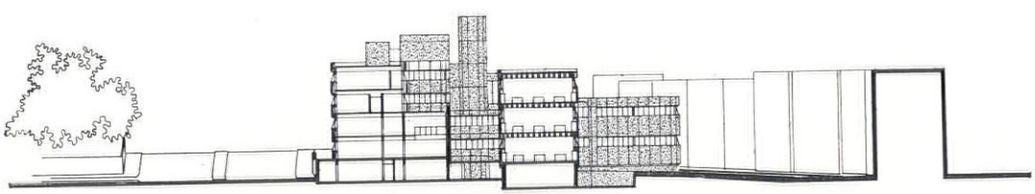




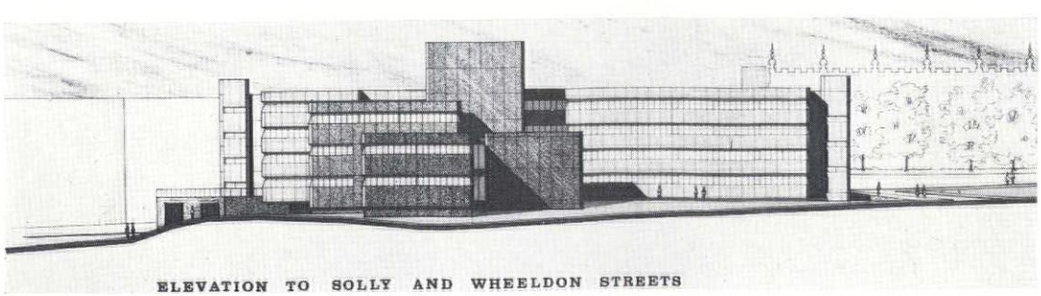








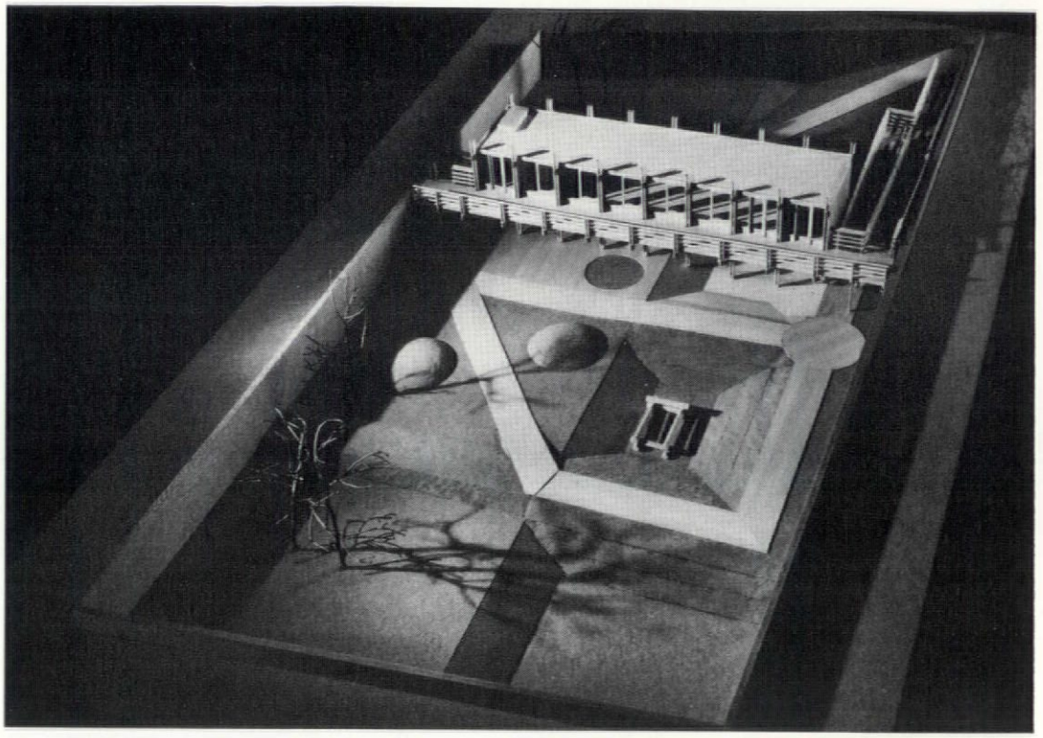




Kindergarten in Paddington

For the Save the Children Fund

Architects, Robert Howard and Philip Pank



The building is for a playgroup of 25 children aged between 2½ to 5 years old, who stay for three hours in the morning or the afternoon. They do not stay for a midday meal, but only biscuits and orange juice. As much time as possible is spent outdoors and a large amount of hard surface paving, preferably covered, is required.

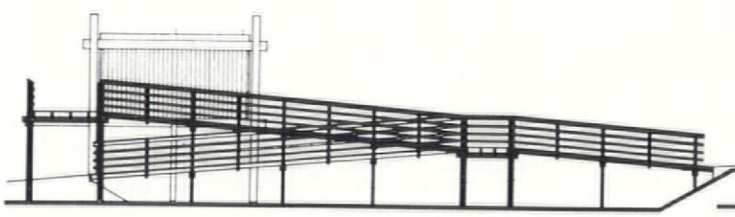
The general ground level of the site is the old basement level—about 6ft below pavement level with a 4ft high wall all round. This provides a private world sealed off from surrounding noises and sights, making it possible to create a child's scale universe. Existing differences in levels have been emphasized. The nursery itself has been stood on a forest of doubled stilts with its finished floor level at pavement level and a wide access balcony stretching across the site as a bridge.

At one end a staircase at the other a ramp give tricycling access to the ground. Paths cut diagonally across the site and under the forest of posts. A circular sandpit is let into the paved terrace under the nursery.

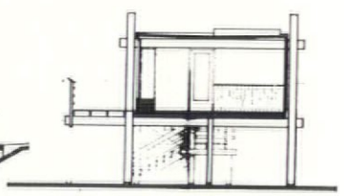
The doubled posts support 12in × 4in floor and roof beams. The roof consists of prefabricated Bev/Dek panels spanning 8ft 0in, so the building is planned on an 8ft grid with purpose made floor to ceiling cedar clad wall panels on the north elevation and horizontal sliding cedar window units on the south side. Lockers beneath the windows contain gas warm air ducting.

In order to keep the interior scale of the nursery down to child size the ceiling height is at 8ft 0in with the 12in × 4in beams projecting down, and the sill height of the windows is the same as the locker height, 13in high. At the far end of the nursery a playdeck at 4ft 0in height, with ladder up and slide down, gives a child-sized enclosure. The office is strategically placed next to the entrance and the nursery, looking south over the playground.

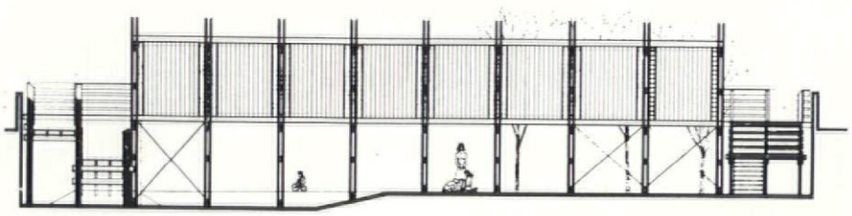
All timber is treated with Solignum.



WEST ELEVATION

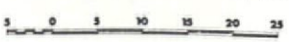


SECTION A-A



SOUTH ELEVATION

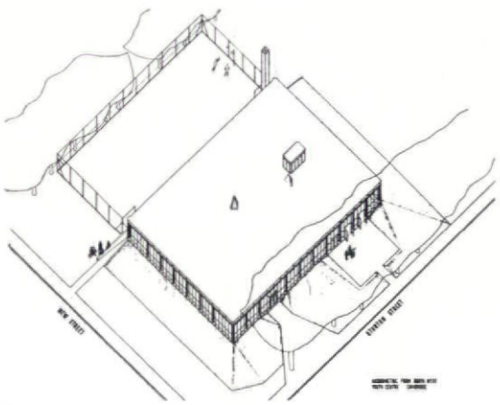
FLOOR PLAN



Youth centre, Cambridge

For Cambridge City Council

City Architect, Gordon Logie; Deputy City Architect, C. Fretwell; Group leader, J. C. Williams; Architect in charge, John Barrow



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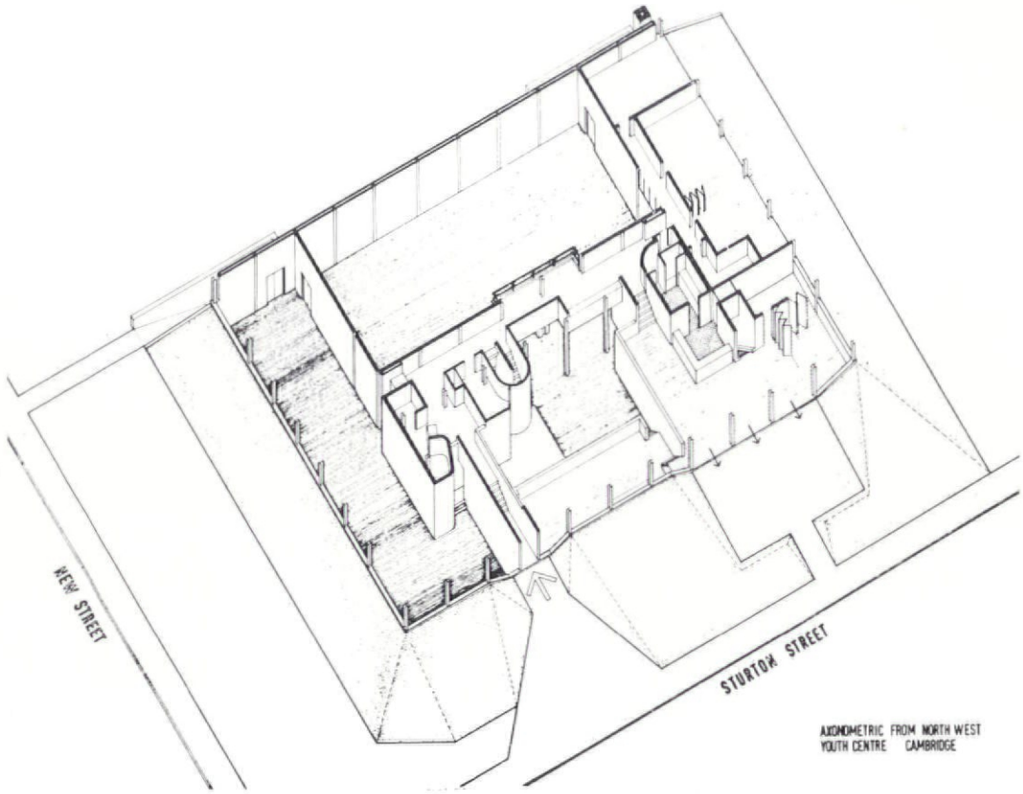


2

1
Axonometric projection of the centre seen from the north-west

2
Axonometric drawing of the building showing internal partitioning

3
Plan of upper level

4
Plan of lower level

The club is to cater for an average nightly attendance of 300 young people, and planning is to be based on the principles outlined in the *Ministry of Education Building Bulletin* No. 20. The building is also to be used by day, at the weekends and during holidays. The site is three-quarters of a mile from the city centre. Its proximity to the future inner ring road system will allow easy access from the residential districts.

The site, in a 'twilight area', is bounded by light industry and nondescript terrace housing. It was decided to create the club as a simple, memorable form. By night, it will brightly announce itself as a place of enjoyment.

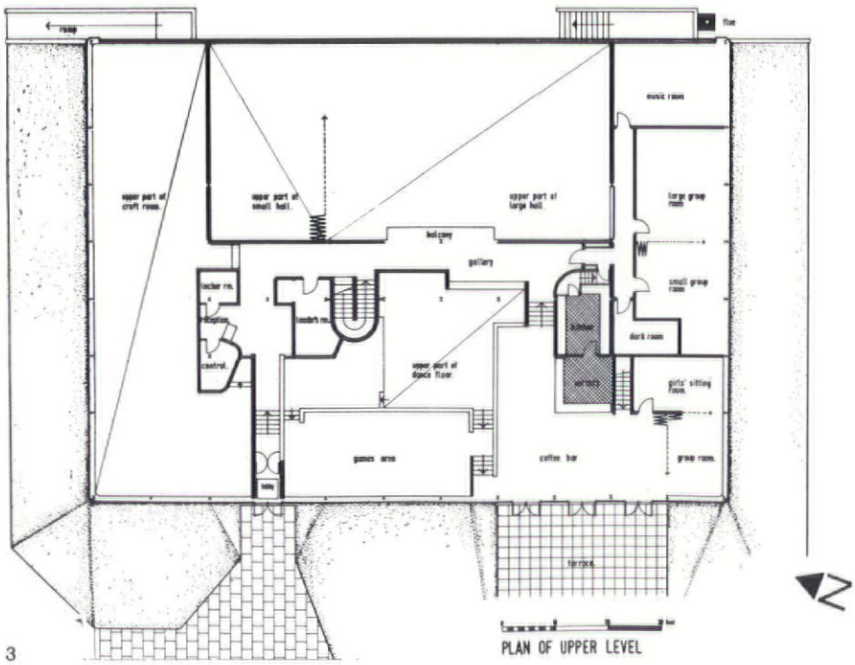
Approach to the building will be mainly from the north-west, partly from the south-west.

The internal planning creates an irregular route with activity areas of all kinds grouped alongside. It leads to the social area which is the 'honky-tonk' heart of the building. By sinking the building 4ft into the ground easy access is gained to a route at the upper level.

The structural frame, supporting only the roof, is of exposed steelwork.

The layout of columns and beams is intimately related to the spatial divisions of the building. The first floor r.c. slab is supported on load-bearing brick walls, independent of the frame. The roof is built up of timber joists, flaxboard lining and decking, with asphalte finish. External facing brickwork is light buff colour. Glazing is aluminium patent glazing. The fascia is of pressed metal. Internal brickwork, generally, is fairface painted.

Heating is by oil-fired, low-pressure hot water boiler serving fan convectors, radiators and warm air plenum ventilation.



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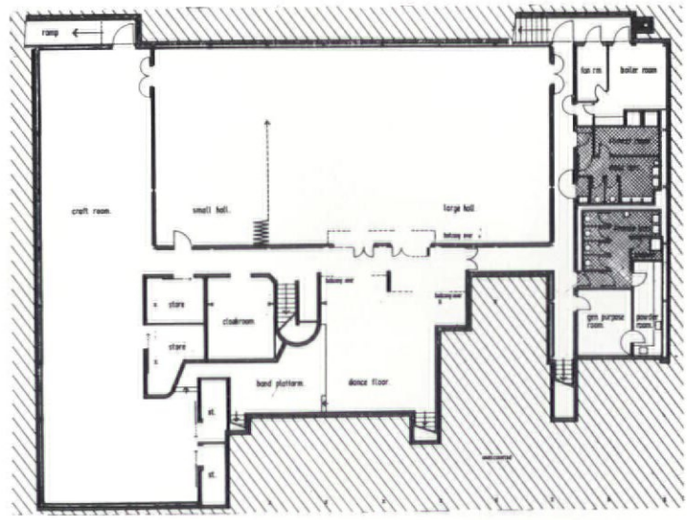


4

Electrical sub-station, Sheffield

For the Central Electricity Board, North Eastern Region

Architects, Jefferson, Sheard and Partners; associate, W. E. Milnes; assistants, Miss C. Hancock and J. Woods



1

The clients required a building to house a grid supply point, i.e. the point at which electricity on the national grid (275kV) is reduced to 33kV and made available to the Area Board for distribution.

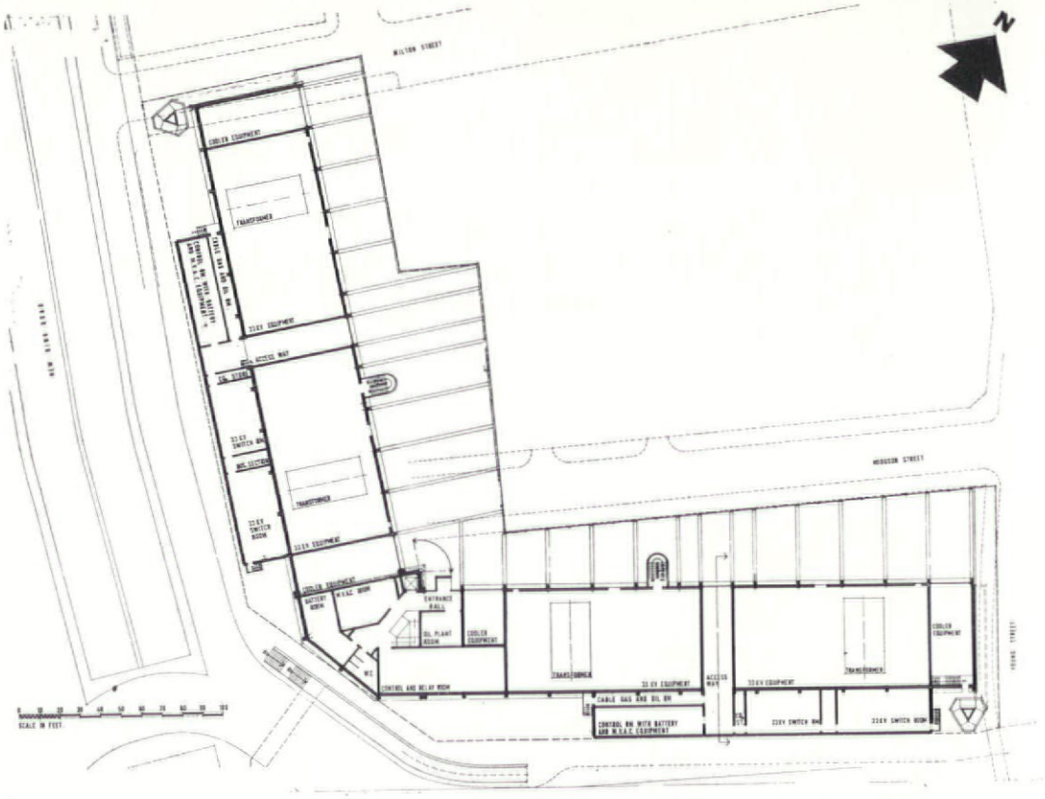
The confined site of somewhat awkward shape determined the need for a multi-storey solution to this problem and has dictated the plan form of the building, which comprises two similar, although not identical, wings linked by a central control section. Its location at the intersection of principal roads close to the centre of the city highlighted the importance of the appearance, whilst the close proximity of the local authority residential areas made adequate sound insulation and security equally important.

The great weight of certain equipment, together with the need for high standards of sound insulation, resulted in the decision to use concrete. The frame of the building is *in situ* reinforced concrete and large precast concrete cladding panels are used for the upper two storeys.

Blue engineering brick panels are used at ground floor level and to the control rooms of the Area Board.

The sections of the building requiring special standards of insulation (i.e. those housing the ACB switchgear) are expressed on elevation by projecting panels.

Heavy equipment will be brought to the rear of the building by lorry and must be lifted directly to the upper storeys through mechanically operated access hatches at first floor level. This has been achieved by cantilevering the first floor at this side of the building.



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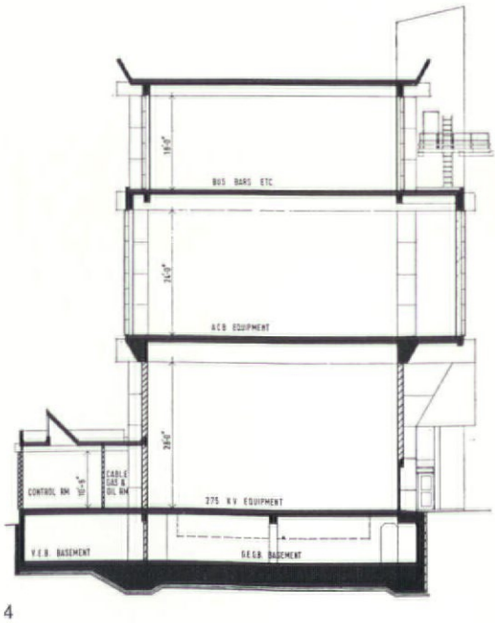


4

1
View of model from the south

2
Ground floor plan

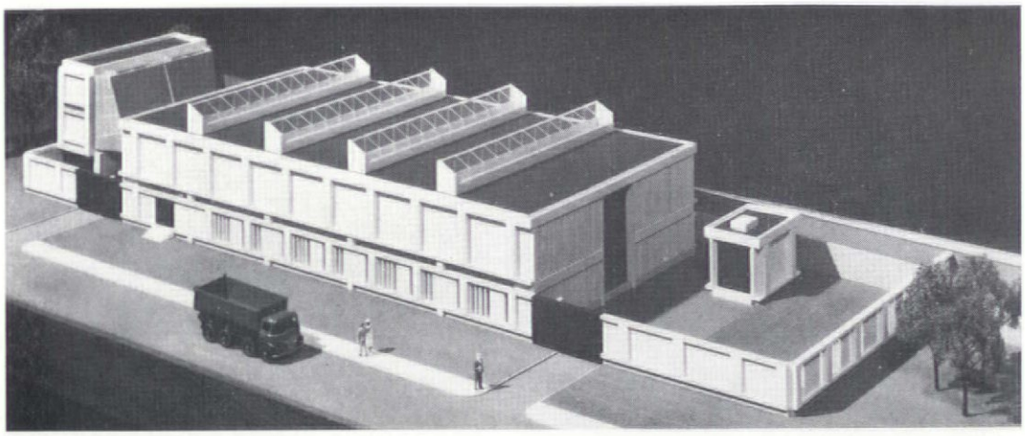
3
View of model from the east

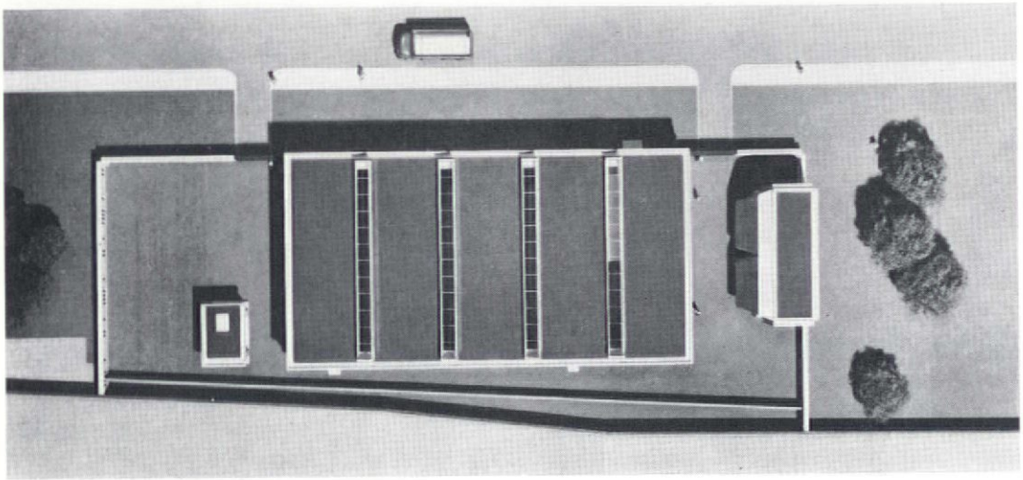
4
Section through control room on north-west wing

Hammersmith pumping station

For the London County Council

LCC Architects' Department. Architect to the LCC, Hubert Bennett





The Hammersmith pumping station is one of a series for pumping storm water relief sewers. It will be automatic in operation, supervised from a central station by means of distant indicating apparatus, and will in consequence be unmanned.

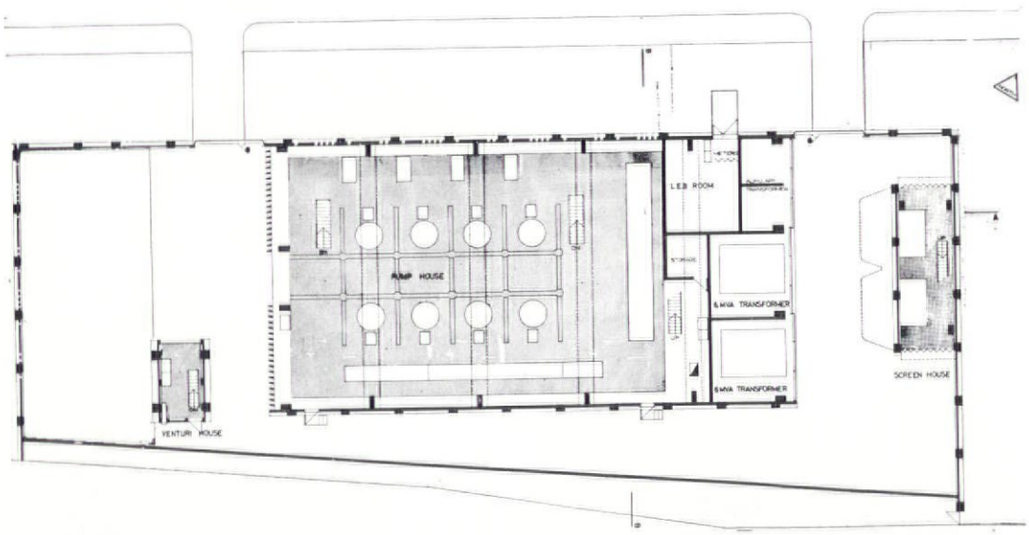
The disposition and function of the apparatus below ground divides the superstructure into three buildings, which, taken in the sequence of the flow, are the screen house, the pump house and the valve and venturi house.

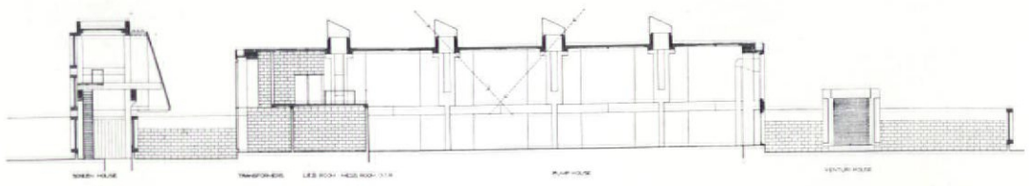
Heavy screens are placed in the sewers to prevent the flow carrying any large solids into the pumps and thereby causing damage. In the screen house is installed equipment which elevates this debris and loads it into hoppers at first floor level which in turn are periodically discharged into lorries. The main requirements of this building, apart from housing the equipment, were to provide good high level and cross ventilation and to position the hoppers so as to facilitate the loading of lorries.

The eight pumps are set in the pumping well 50ft below the level of the pump house floor. The pump motors, control panels and other equipment are mounted at ground level, and windows will be provided so that they can be seen from the pavement. As it is an unmanned station and security is an important factor, all windows are fixed lights in narrow widths of unbreakable glass set directly into concrete. Also included in this building are an LEB sub-station, transformer chambers and mess room facilities.

The valve and venturi house contains access to underground venturi chambers, and lifting gear for maintenance of the valves.

All structure and cladding will be precast concrete units with *in situ* joints. The main beams over the pump house spanning 59ft have, in order to cut down their handling weight, been designed in two units which are assembled on site with spacing pieces between to give them lateral stiffness. The voids between the units have been covered with fibre glass units for roof lighting and ventilation. The high level cladding units on the pump house, when jointed together, form a beam giving the structure lateral stability. The panels have their stiffening members on the outside, leaving the interior surfaces flush. As the pump house is heated, its panels are of a sandwich construction with expanded polystyrene between concrete skins. Roofs are made up of a series of tee-beam units covered with a lightweight screed and asphalt.





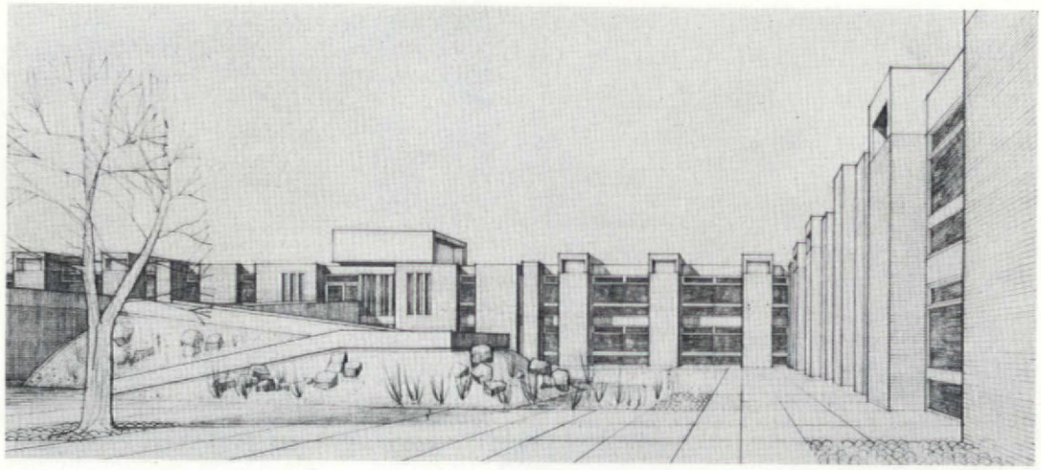


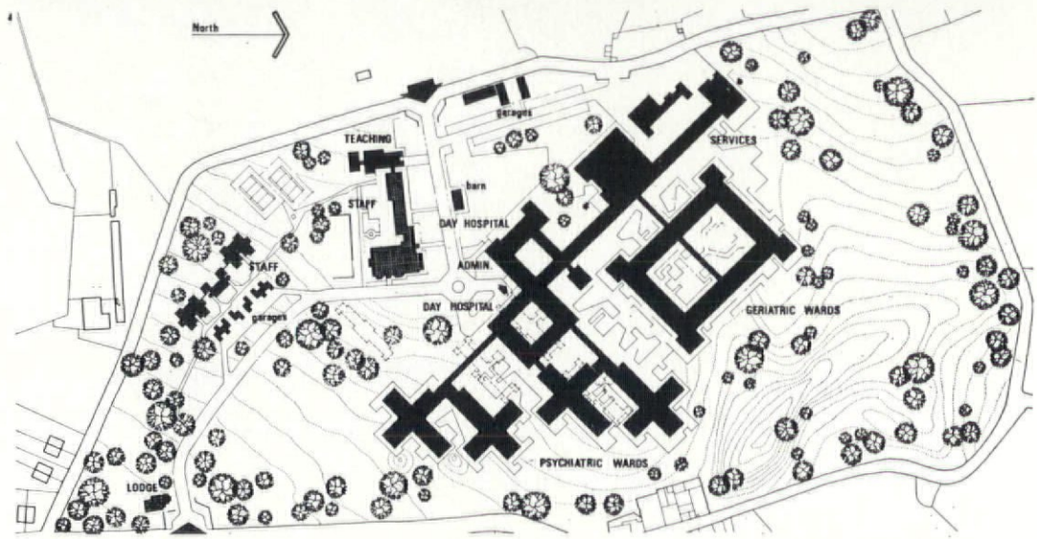
WEST ELEVATION OF SCREEN HOUSE

Northowram Hall Hospital, nr. Halifax, Yorks.

For Leeds Regional Hospital Board

Architects, Abbey & Hanson, Rowe & Partners; in association with P. B. Nash (Architect to the Hospital Board). Architect in charge, Geoffrey A. Rowe



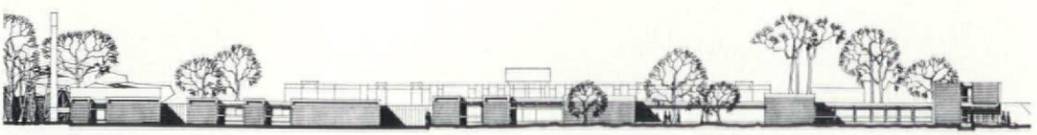




Sectional Elevation



Elevation of Geriatric Wards



South West Elevation

The hospital is to be built in three phases in the grounds of Northowram Hall, of 1863, which is eventually to be demolished. It will serve medium-stay patients, geriatric and psychiatric, and will closely emulate the present-day mental hospital with heavy geriatric content. The main problem will be staffing and maintenance of morale (staff and patients) due to lack of acute patient turnover. For this reason activity must be introduced and energies diverted towards rehabilitation, establishing links with the community services.

The average length of a patient's stay will be measured in months not years, and the design of the hospital takes this factor into account. An institutional atmosphere is to be avoided, aiming at a village or community pattern.

Phase I is for the geriatric wards for 256 patients, administrative offices, day hospital with occupational therapy and physiotherapy departments, chapel, kitchen and staff dining rooms, small laundry, workshops, etc. Beds will be provided in 8×32 bed wards.

The retention of existing pavilion wards during the construction of phase I led to the siting of the eight geriatric wards to the north-west.

The site slopes gently down to the south-east and terraces will be formed where patients can sit out in fine weather commanding views of the surrounding countryside.

To avoid unnecessary communications, the geriatric wards are planned on two storeys in a quadrangular block, the connecting corridor across the courtyard being single storey only, fully glazed to the south.

The south courtyard is designed as a garden for patients to sit outside. In the north courtyard a gently ramped walk leads onto the roof of the central connecting corridor to give ambulant patients a place to walk in the open air within the shelter given by the surrounding ward buildings.

Ward units are planned as 'L'-shaped blocks with the nurses' station, sluice room, linen store and day room at the corner, making supervision as easy as possible.

The main hospital street will run south-west of the geriatric wards connecting up with the future psychiatric blocks to be constructed in phase II and III. This hospital street is sited in phase I along the contour line, and no ramps will be necessary.

The kitchen is sited on the south-west of the hospital street, and has access to its own service yard for intake of stores, etc.

The administrative block is a two-storey unit sited at the end of the existing access road which runs to the east of Northowram Hall. This will be widened and the existing delightful landscape around it retained and extended.

New staff living quarters will be planned in a wooded part of the site on a small service road off the main access road.

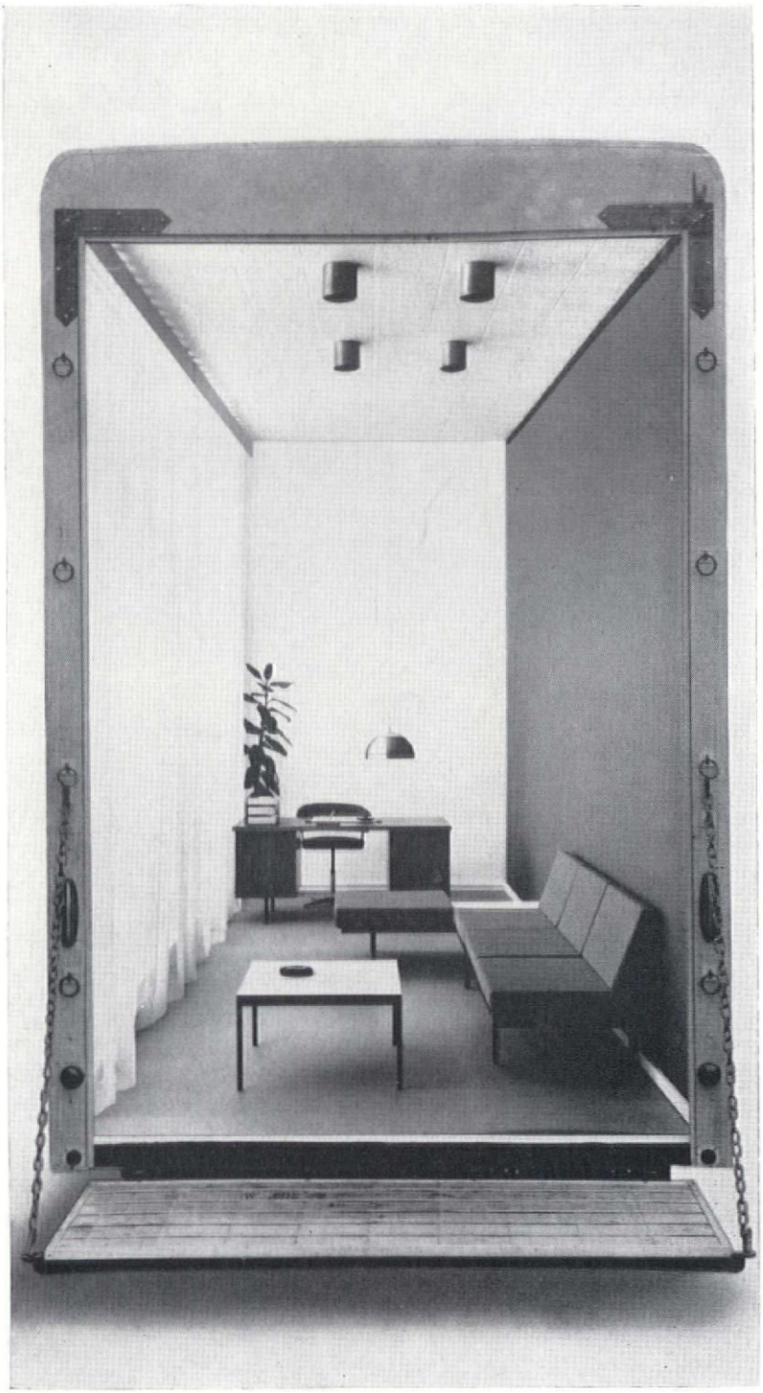
Northowram Hall will be reconstructed as a teaching unit, and the gardens and lawns around it will be retained and improved. Great importance has been attached to the treatment of the landscape on the beautifully wooded site and new buildings have been designed retaining the best trees.

The scheme conforms to the latest Ministry of Health recommendations on dimensional co-ordination. All elements are planned on a basic 4in module.

Double storey units will have a light steel frame using castella beams. The suspended floors and roofs will be in precast units. Single storey units will have load bearing walls, and the roofs will be supported on patent timber beams. External walls will generally be of local facing bricks and exposed aggregate slabs with white glass infill panels. Windows will be aluminium sashes in wood sub-frames.

Heating will be by low pressure hot water serving skirting heaters and radiant panels (high level). All service pipes will run at high level in the false ceilings.





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CONTRACT DIVISION

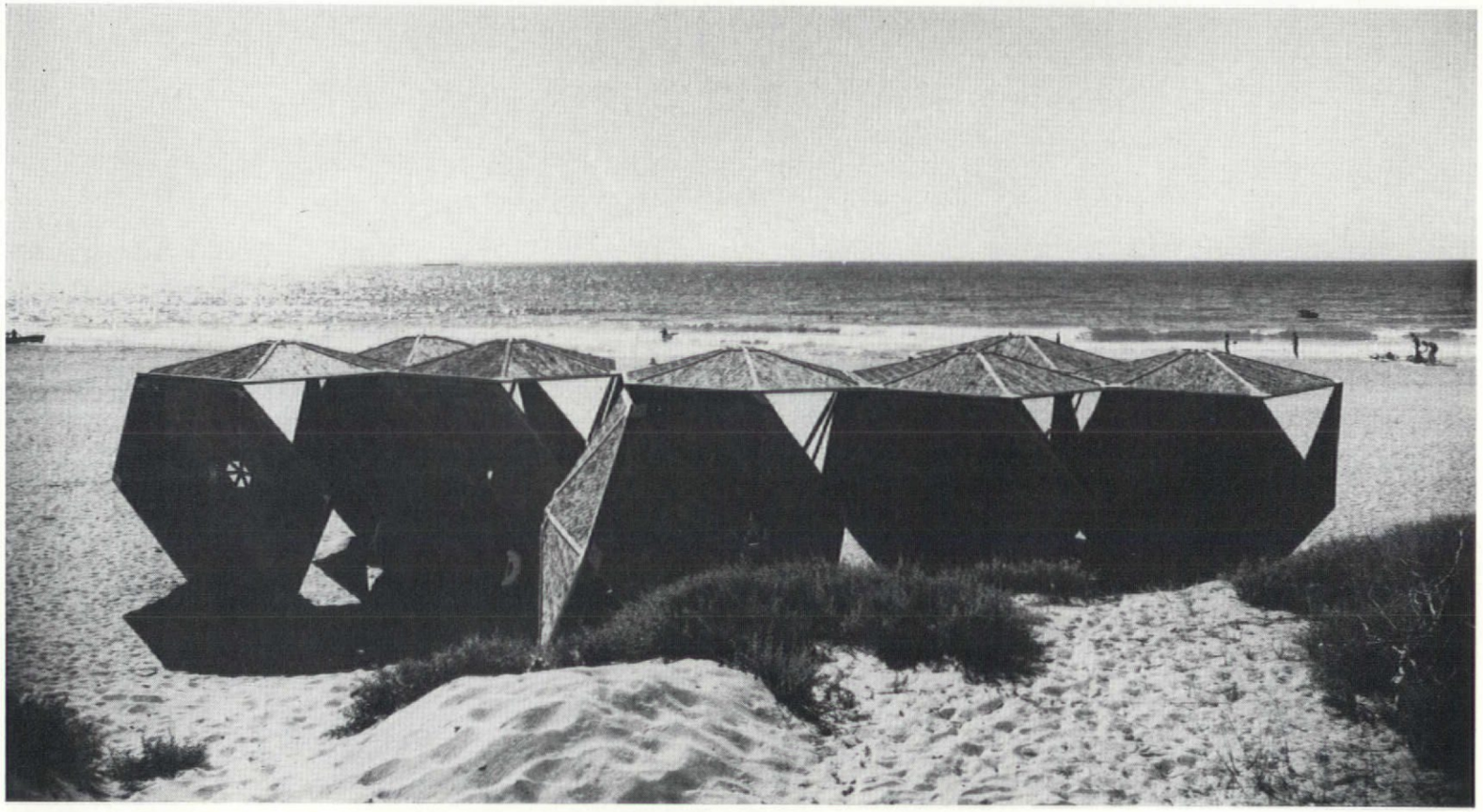
Club Méditerranée, Arhziv, Israel

Zki Heker, Alfred Neumann and Eldat Sharon

Communal organization and holiday free-from-all might seem inimical concepts, but if they can be combined the Club Méditerranée is the most likely operator. It has an impeccable record for choosing outstanding sites—from Al Hoceima to Cefalù to Parga—for building on them with great sympathy and then enabling people to enjoy them with vigour and without restraint. The village at Arhziv, in the north of Israel, is set on a beach of fine white sand, dominated by a promontory on which are the ruins of an Arab village, itself on the site of Biblical Achzib, and is within 12 miles of such famous Crusader strongholds as Montfort and Acre (or 'Akko).

The arrangement of the shelters—a cluster of offices, a restaurant and kitchen, a bar and dance floor, a music room, sick bay, a string of parasols and 350 cabins—is obsessively and oddly geometric, like the architects' already published civic centre at Bat Yam (*AD* 11, 1964). This time they have chosen the hexagon. It controls the layout of the whole, the plans of the individual buildings and even the structural elements.

The basic elements are a slightly convex hexagonal panel and a triangular panel, with sides 1 metre long, of 'Canadex' (dried and pressed straw bound with wire into standard sheets) framed in timber and secured with metal cleats. The cabin unit, accommodating two or three beds, is a truncated tetrahedron made with three hexagonal panels, as opposed to five structural elements in the normal box construction, with triangular opening panels for light and ventilation. The ingenious simplicity of the design and the repetition of these elements throughout the village has kept costs to a minimum (little more than that of tents) and has made it easy to dismantle and store each winter. The initial time allowed for design and erection in 1961 was five months. Yet the architecture is confidently infused with a strength of imagination, a pleasure in positive forms and in rich contrasts of light and shade. It is one of the architectural delights of Israel.



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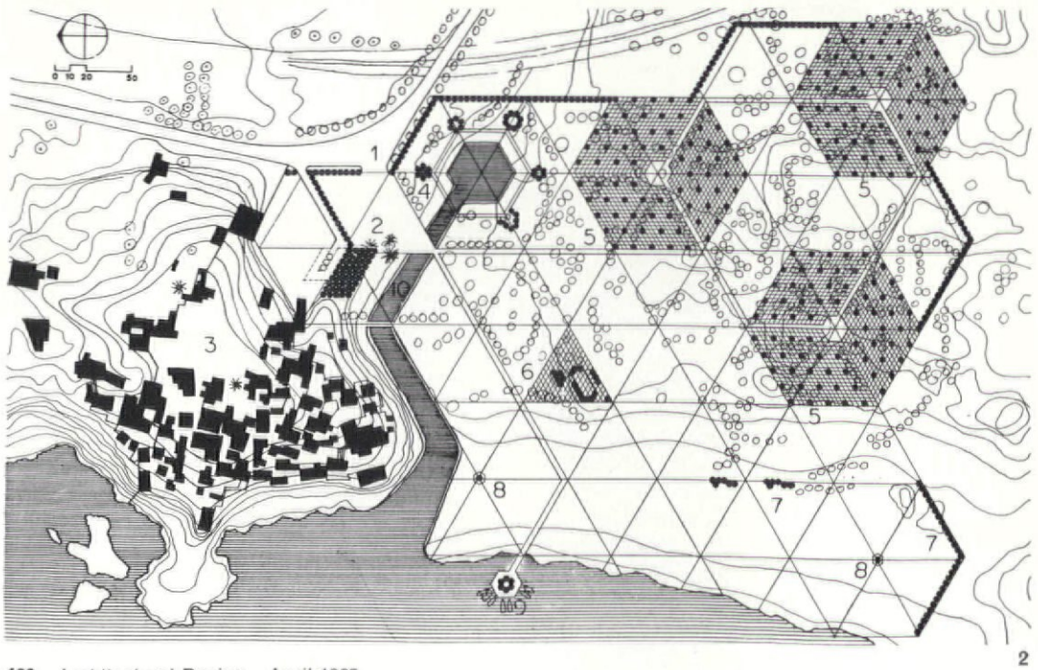


2

1
Parasols on the beach

2
Site plan
1 entry
2 restaurant
3 ruins of Arab village
4 administration, music room and sick bay
5 cabins
6 bar and dance floor
7 parasols
8 showers
9 mooring base
10 canal

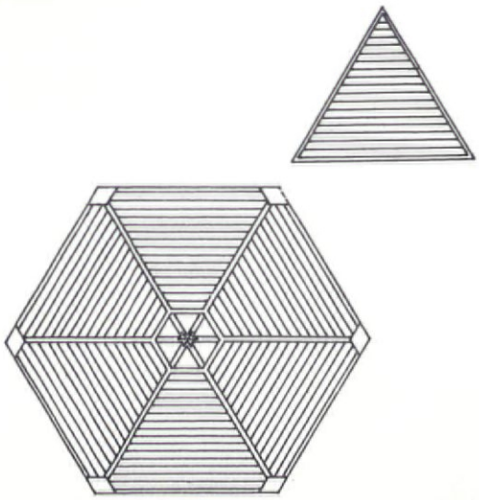
3
Basic hexagonal and triangular panels

4
Truncated tetrahedron made up with three hexagonal panels 1, and four triangular panels 2

5
Cabin unit with three beds

6
Close-up of structural elements

Photos: Bill Herz



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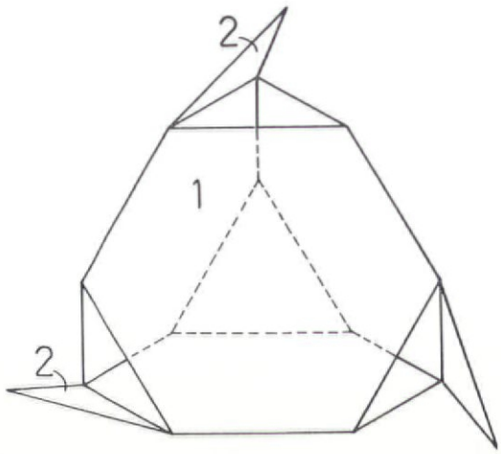

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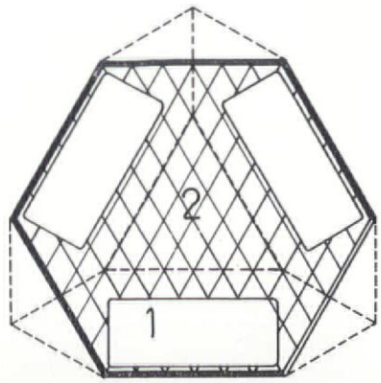

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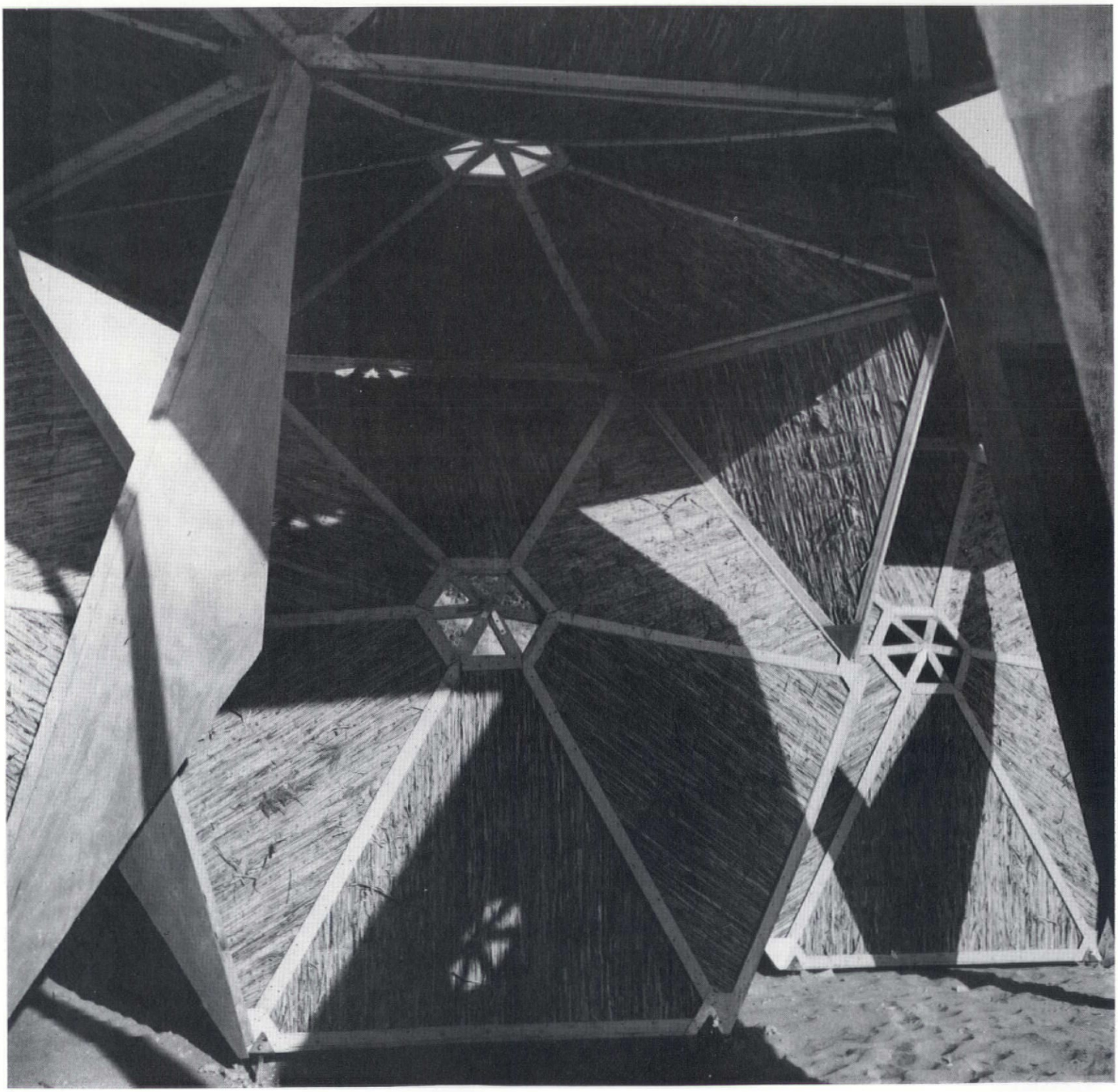

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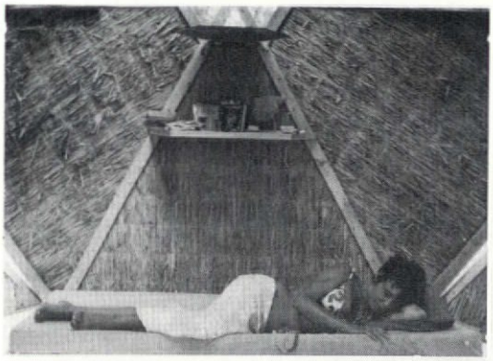

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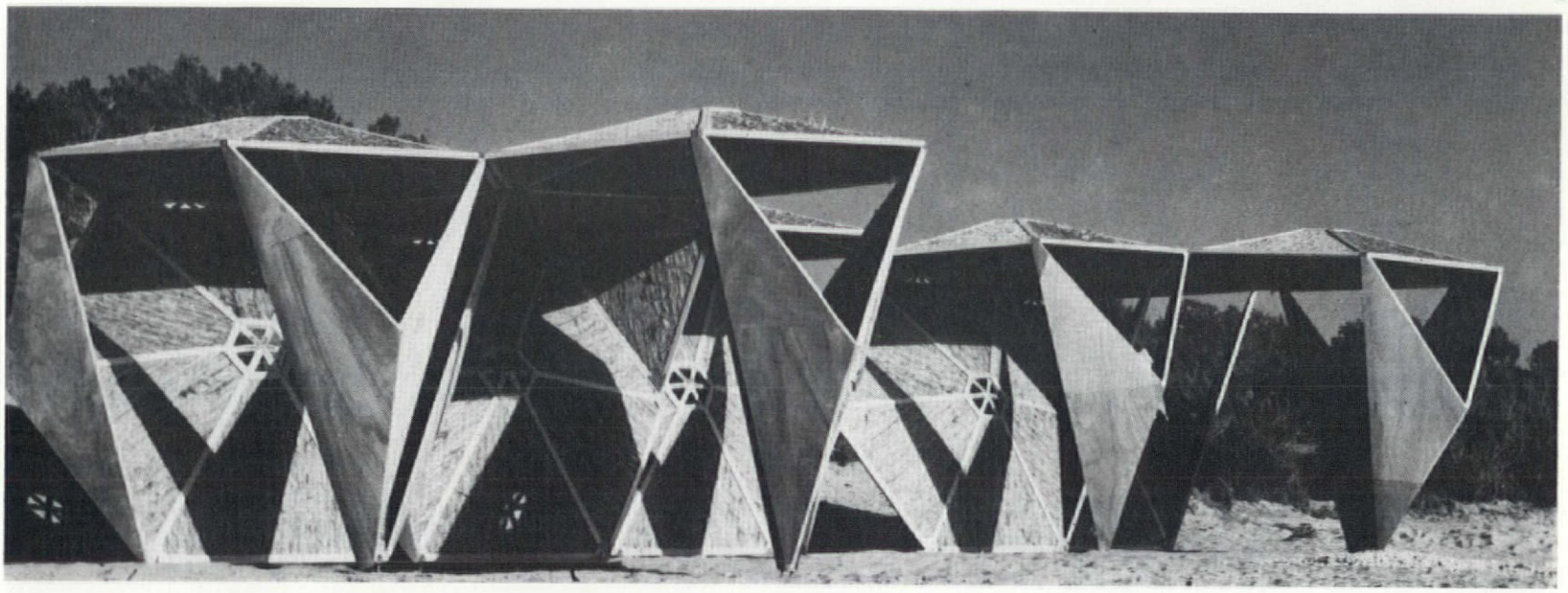

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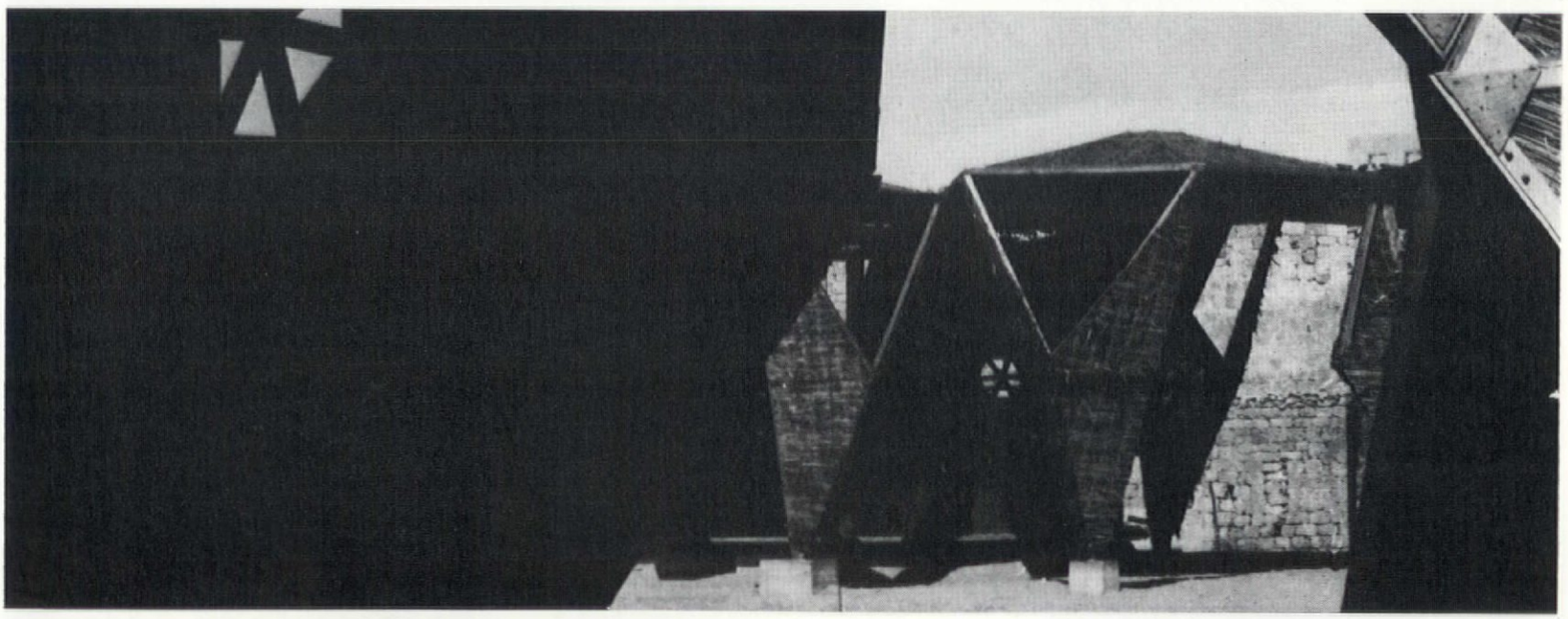

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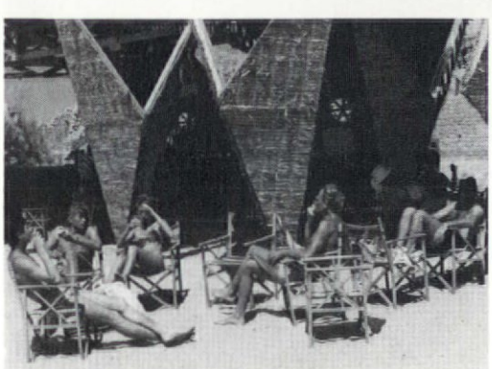

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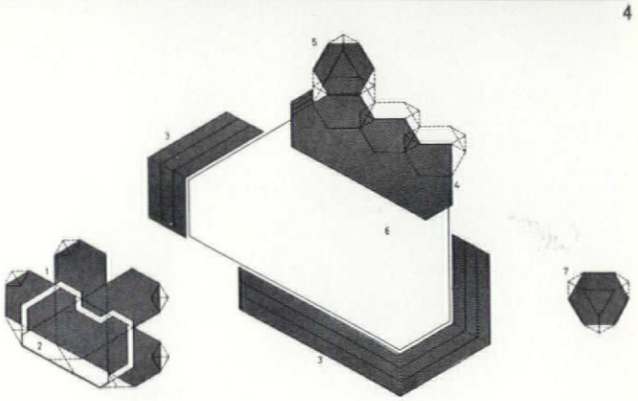

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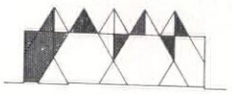

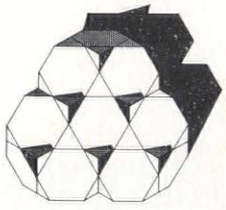

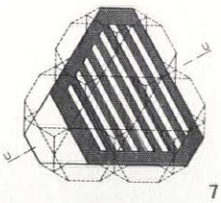

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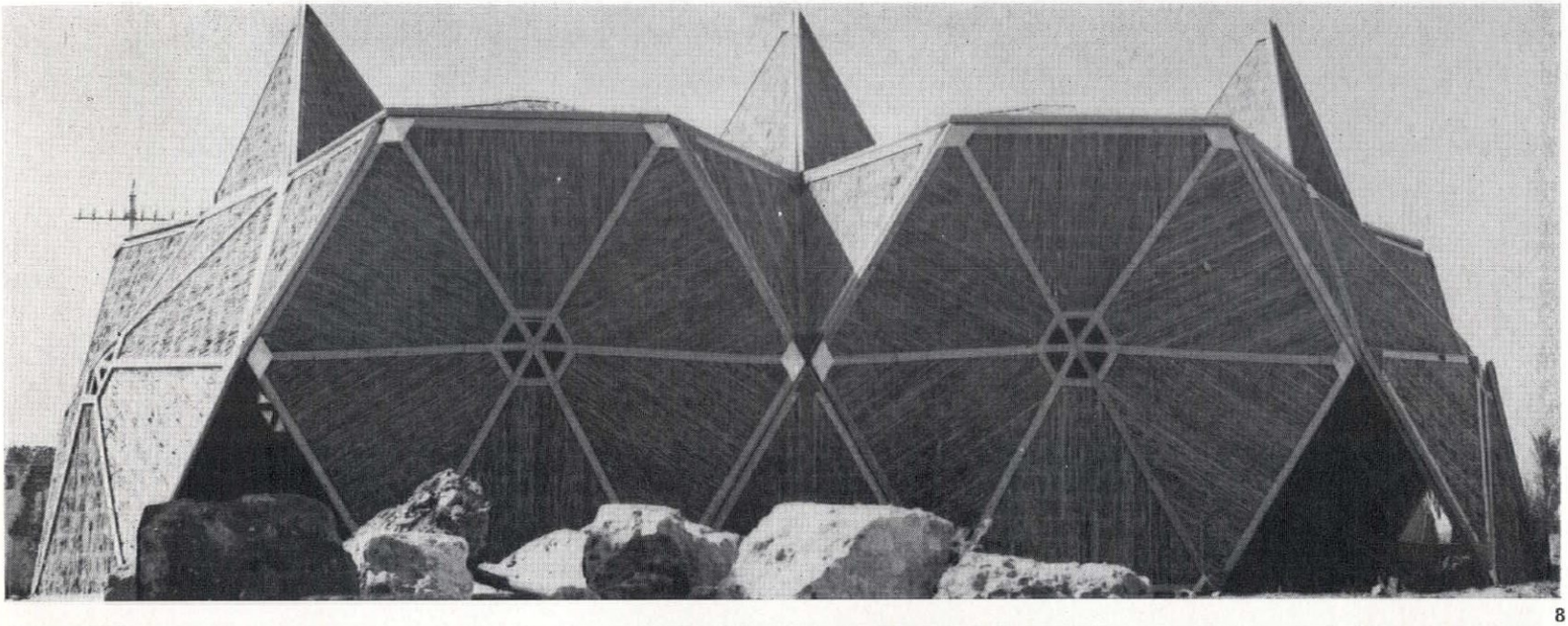

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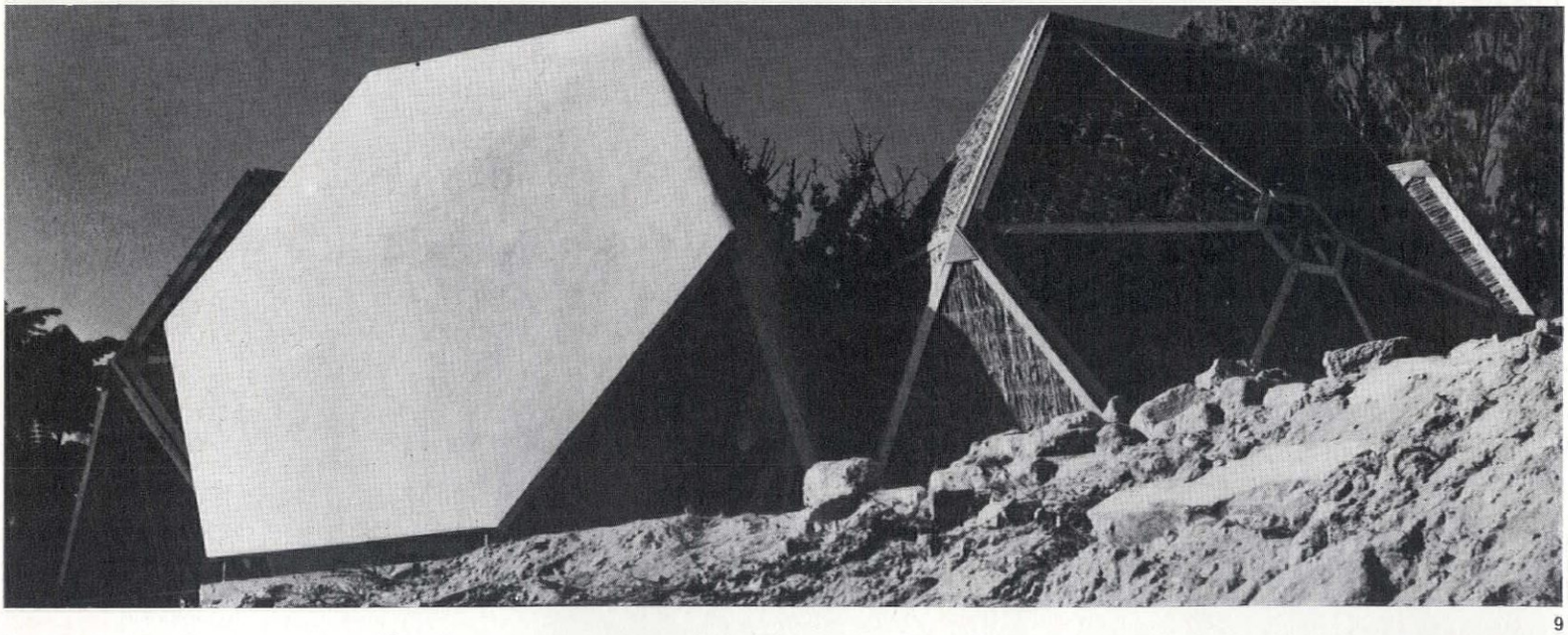


9

1
Interior of cabin

2
Parasols, plan and elevations

3
Parasols on the beach

4
View over the dance floor to the bar

5
The bar

6
Plan of the dance floor and bar

1 bar	5 orchestra
2 store	6 dance floor
3 benches	7 light tower
4 stage	

7
Plans and elevations of the music room

8
Music room exterior

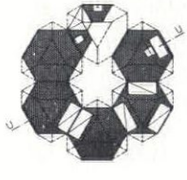
9
Sick bay with canvas covered hexagons

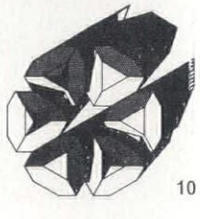
10
Plans, section and elevation of sick bay

Photos: 2 & 5 Club Méditerranée. 3, 4, 8 & 9 Bill Herz









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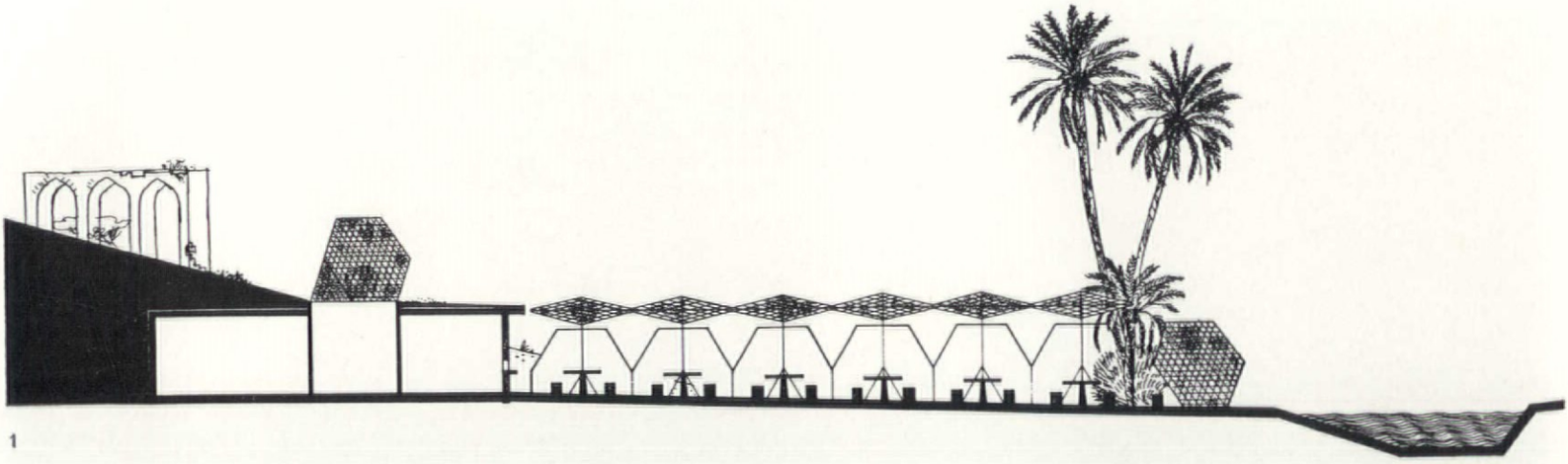

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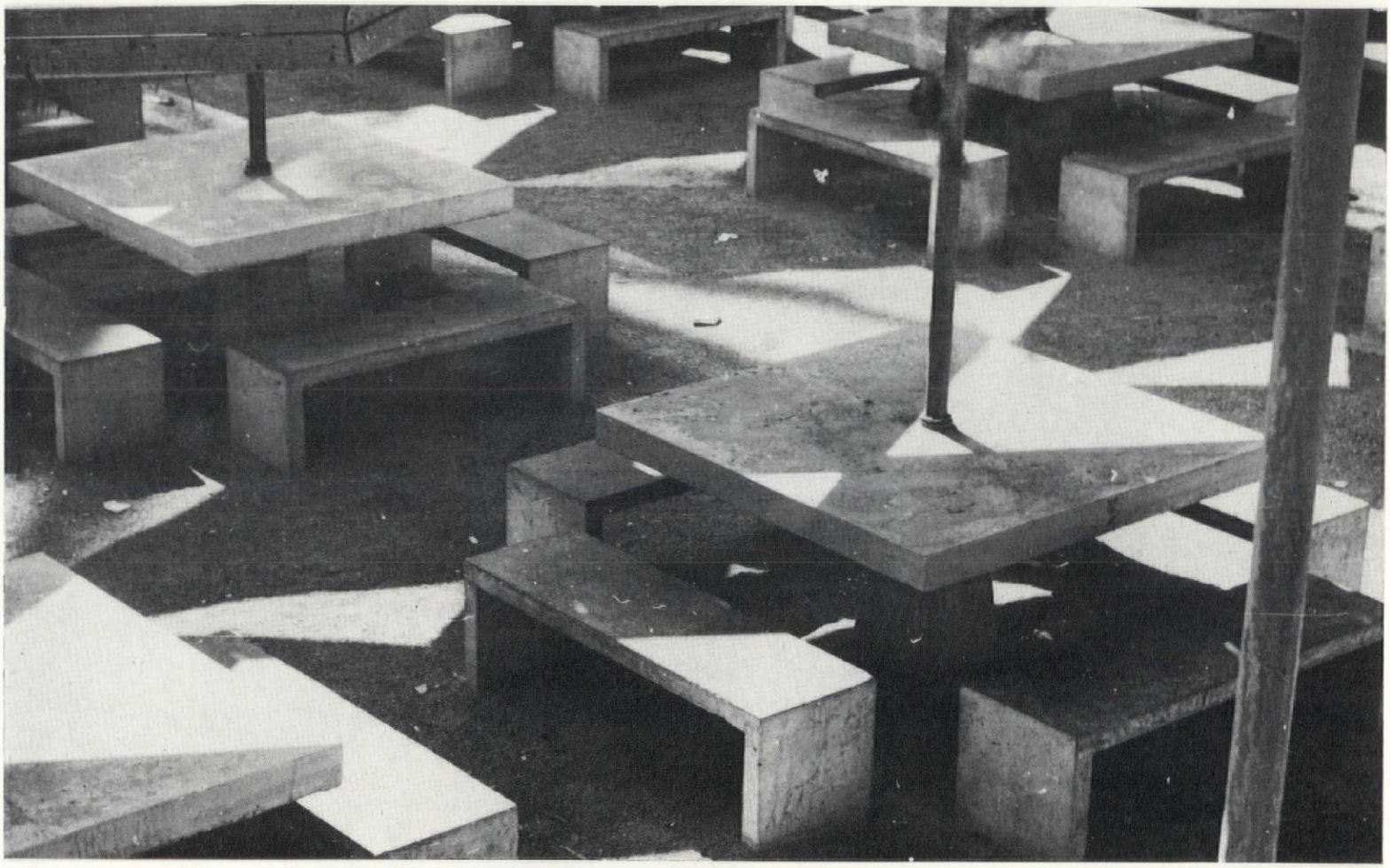

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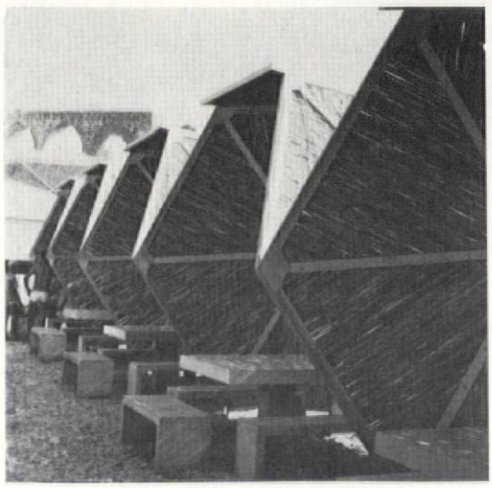

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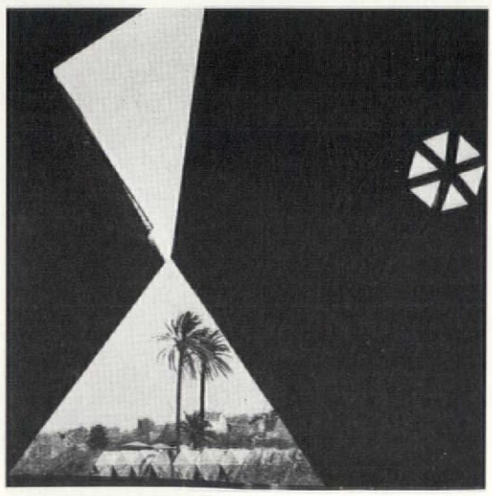


1
Section through the kitchen and restaurant

2
Prefabricated concrete tables and benches in the restaurant

3
Restaurant cubicles

4
View over the restaurant to the Arab ruins

Photos: 2, 3 & 4 Bill Herz



1

Borocourt Hospital, nr. Peppard, Oxfordshire

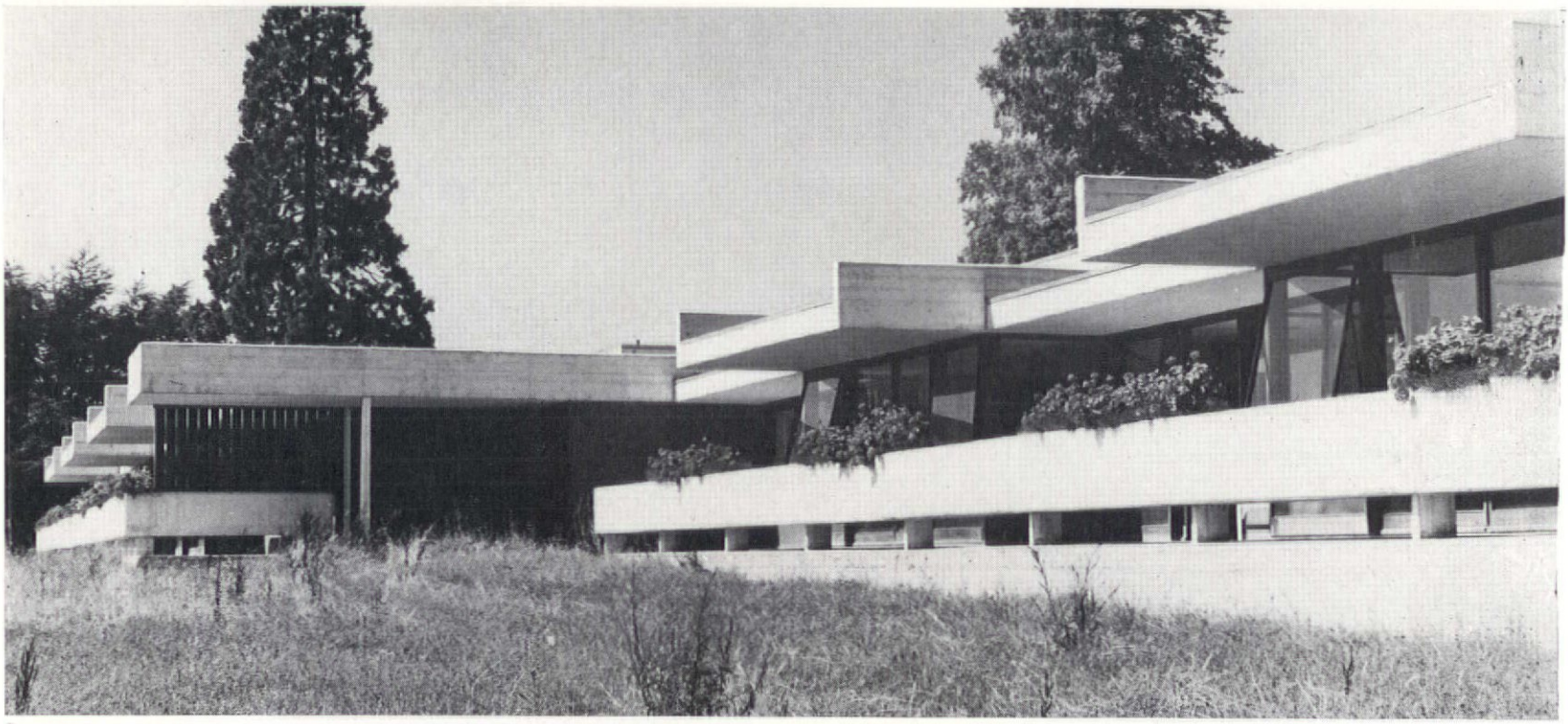
Architects, Powell and Moya
W. J. Jobson, (Architect to the Oxford Regional Hospital Board)
D. A. Stow, J. R. Cantwell, B. J. Throp, assistants.

Sub-contractors and Suppliers
Mechanical services: Z. D. Berry & Sons Ltd.
Electrical services: N. G. Bailey & Co. Ltd.
Roofing sub-contract: Permanite Ltd.
Flooring sub-contract: S. H. Ware & Co. Ltd. (Bulgomme-Silence, Vinyl Thermoplastic)
In situ and pre-cast terrazzo: Minoli & Co. Ltd.
Flush doors and joinery fitments: Veneercraft Ltd
General hardwood joinery: Golding & Ansell Ltd.
Ironmongery: James Gibbons Ltd.
Sanitary fitments: W. N. Froy & Sons
Metal windows: The Crittall Manufacturing Co. Ltd.
Plastering sub-contract: G. King
Plumbing sub-contract: H. V. Pearson & Sons Ltd.
Horticultural Works: J. Waterer, Sons & Crisp
Pre-cast concrete: Girlings Ferro-Concrete Ltd.
Glass louvres: N. V. Appleton Pty. Ltd.

1
View of the new hospital from the north-west, through the forest trees

2
The ward unit seen from the park

All photos John Rawson



2

This small Sick and Admission Unit, designed for the Oxford Regional Hospital Board, completes the first stage of a larger development which will eventually be built up around the existing Borocourt Hospital for mental defectives.

It is divided into four clearly defined parts: male and female wards which are well screened from one another, treatment block, entrance hall and link, and the aim has been to arrange these elements into a building of informal scale, so sited that it relates in the most economical and pleasing way with the contours of the site, at the same time exploiting the fine views and isolated existing trees.

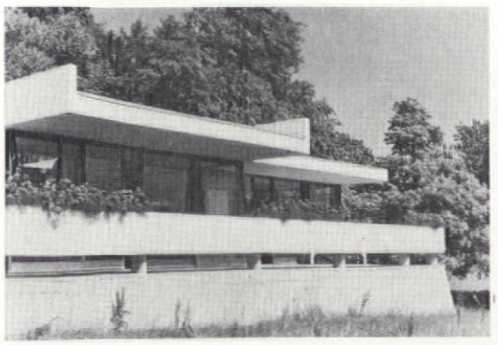
Each main ward unit provides thirty beds, divided into two six-bed wards, three four-bed wards, and six single rooms. Of these, one four-bed ward and one single room can be fully closed off, together with their 'island' ancillary rooms, from the main ward areas and, having their own independent entrance from the main corridor link, can function as isolation wards. Ease of supervision by the nursing staff is essential and the partitions between the groups of beds are solid only up to 3ft 6in and are clear glazed above this. The central corridor too is designed as a part of these ward spaces.

With the treatment block which is used also by out patients an attempt was made to arrange the rooms, their windows and the surrounding outside space and paths in such a way that the activities disturb the rest of the hospital as little as possible.

The most suitable structure for the wards was considered to be a long span concrete beam and column form incorporating embedded ceiling heating coils within the base of the roof slab.

In the treatment block a more enclosed type of external walling system was required which, together with a more regularly divided plan, allowed a simple combination of external load-bearing cavity walls and small internal columns to support the deep concrete roof beams.

All external concrete faces with the exception of a plinth and retaining walls, are white, bush-hammered. Where solid infill panels or external walls occur, these are formed as cavity walls, and the finish applied to most solid walling or panels is white spatter-dash render. Windows and glazed louvred screens are in oiled Afromosia of robust section with open lights of galvanized steel. The roof finish is a bituminous felt membrane under cork insulation, covered with three layers of roofing felt and finished with granite chippings. Internally, single skin solid partitions are of clinker block, framed in hardwood. Glazed partitions and joinery fitments are formed in Afromosia finished with an acid catalyst lacquer. All glass is polished plate or armour plate. The general floor finish in the wards, clinics and circulation spaces, is vinyl tile, while thermoplastic tiles are used in the consulting rooms and stores. An area of 'Bulgomme-Silence' flooring has been laid but has been restricted to the isolation wards. All service rooms, bathrooms and lavatories have pre-cast terrazzo tile flooring. Walls and ceilings are plastered and decorated with emulsion paint except where higher standards of hygiene are required, where glazed tiles have been used.



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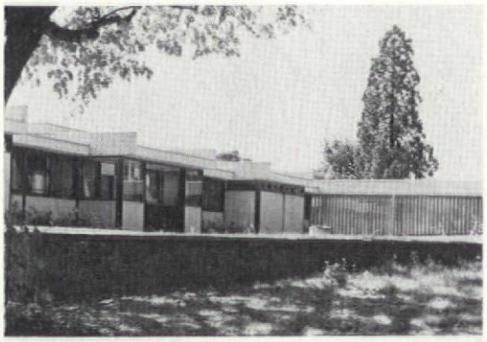

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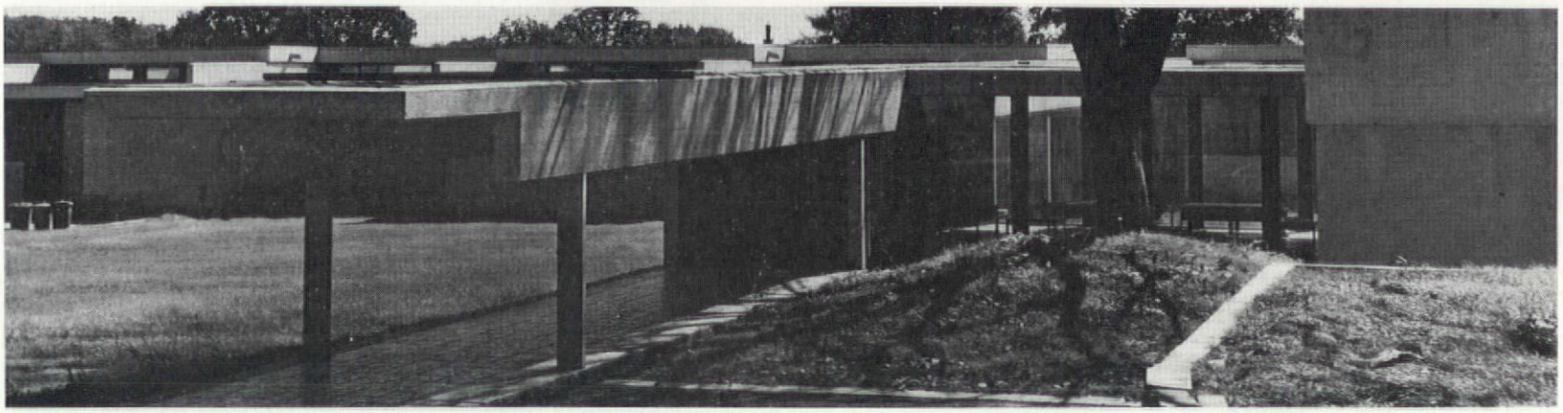

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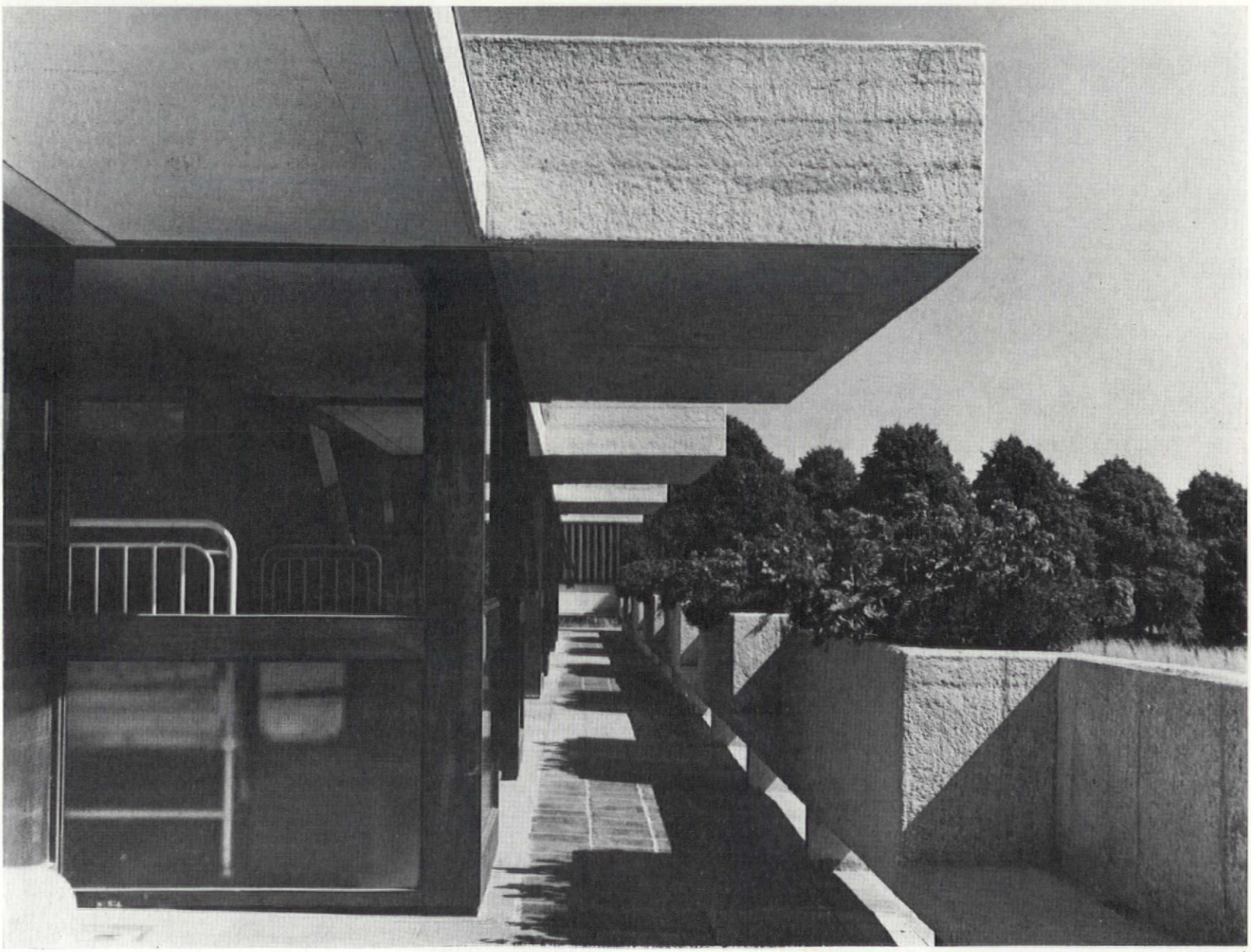

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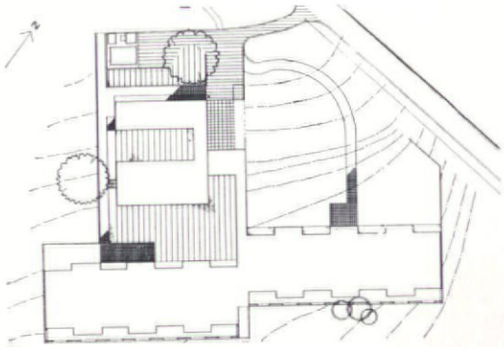


5

1
Ward block from the south

2
The treatment block, separated from the ward units by a gently ramped corridor

3
The entrance way, with the ward units seen on the left

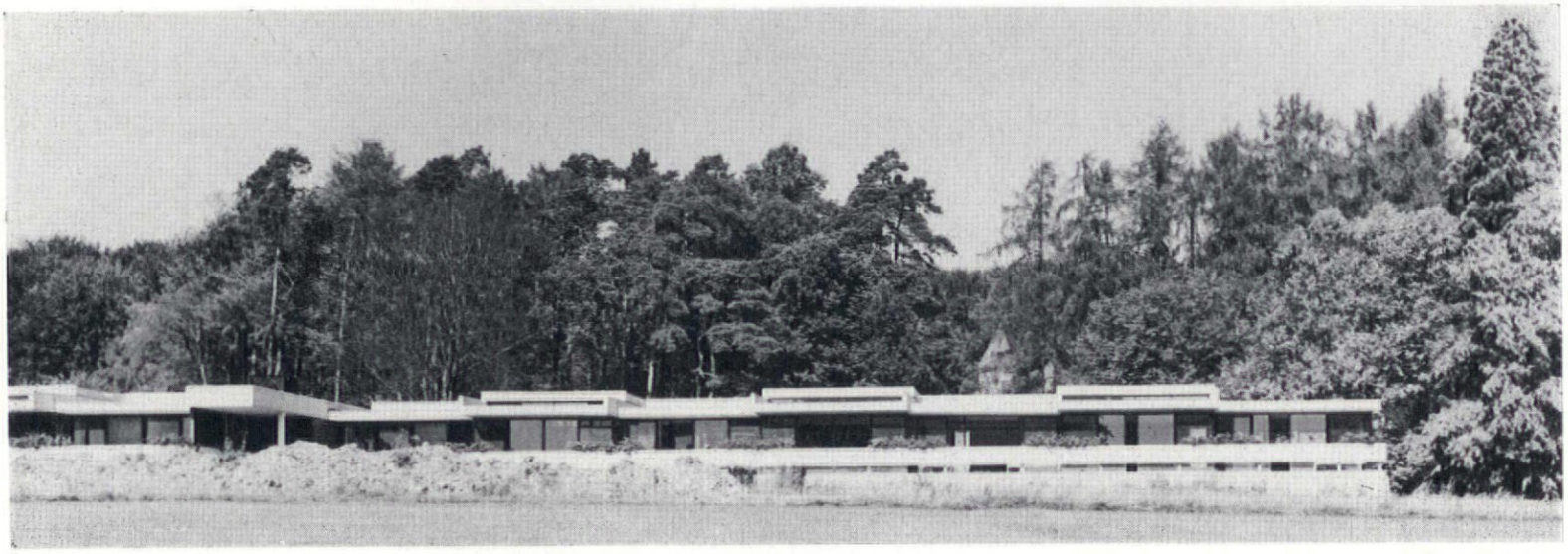
4
The four- and six-bed wards are arranged in such a way that sheltered terraces are formed outside the wards where patients can idle and sit in the sun. These terraces vary in depth and length, providing intimate day spaces.

5
Site plan

6
The hospital seen from the park with the forest beyond

7
Plan

1 calorifier room
2 switch room
3 cloakrooms
4 consulting rooms
5 assistant matron
6 sluice rooms
7 dirty linen
8 sink room
9 sterilizing room
10 supply room
11 cleaner
12 tea kitchen
13 w.c.'s
14 dental clinic
15 treatment rooms
16 laboratory
17 four-bed wards
18 six-bed wards
19 washrooms and w.c.'s
20 side rooms
21 protected rooms
22 day spaces
23 kitchens
24 sisters' rooms
25 bathrooms
26 stores



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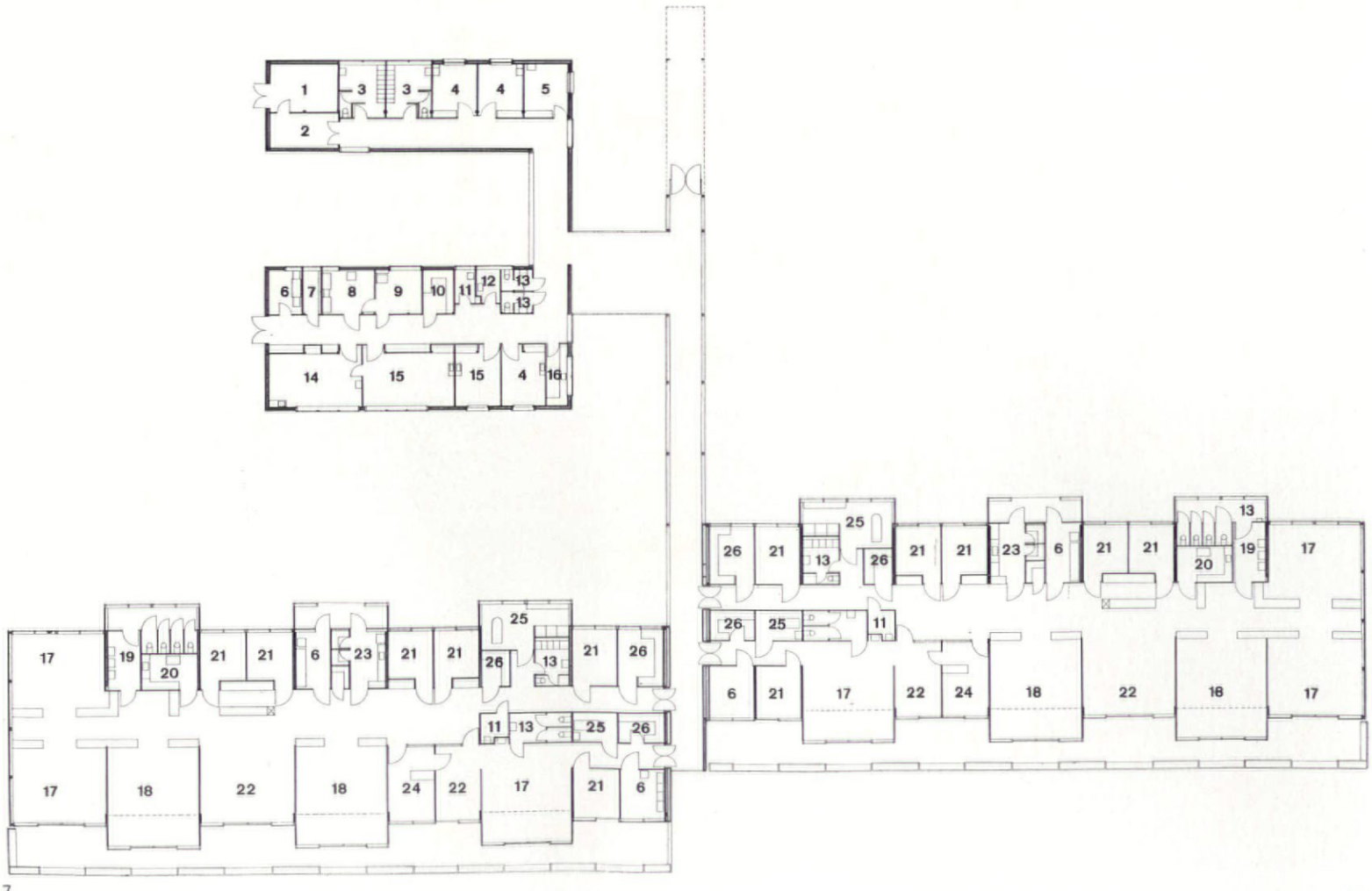

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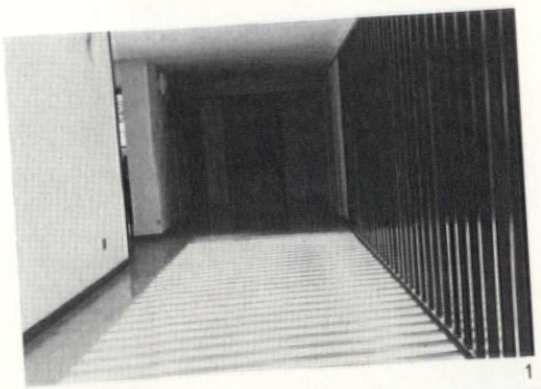


1

1
The link corridor

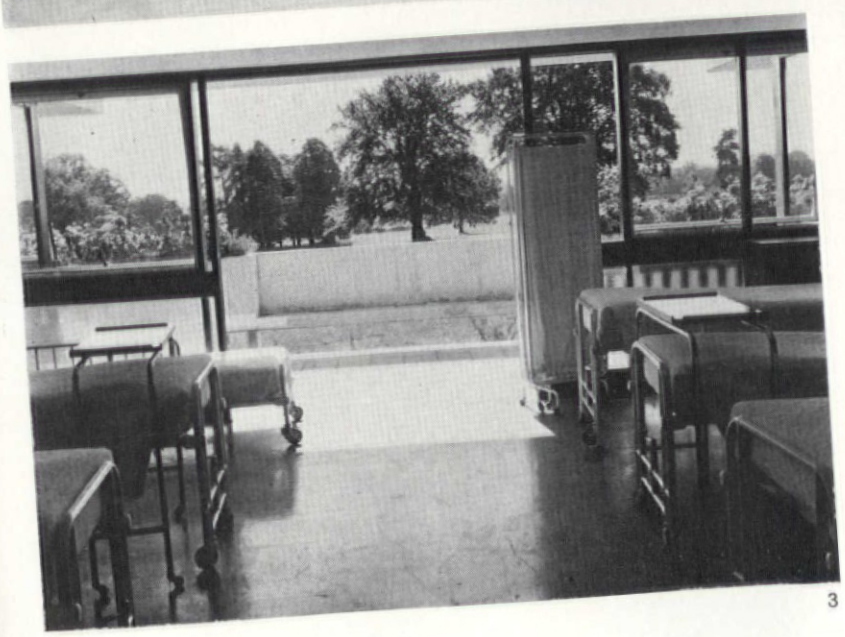
2
A typical view through the wards, showing how supervision has been facilitated by making no solid partitions higher than 3ft 6in. Extensive use has been made of top lighting so that the interior is naturally lit and ventilated over its full depth

3
The wards are divided from the terraces only by large, glazed sliding doors

4
The nurses' station, in the main corridor, overlooking an entire ward unit.



2



3



4



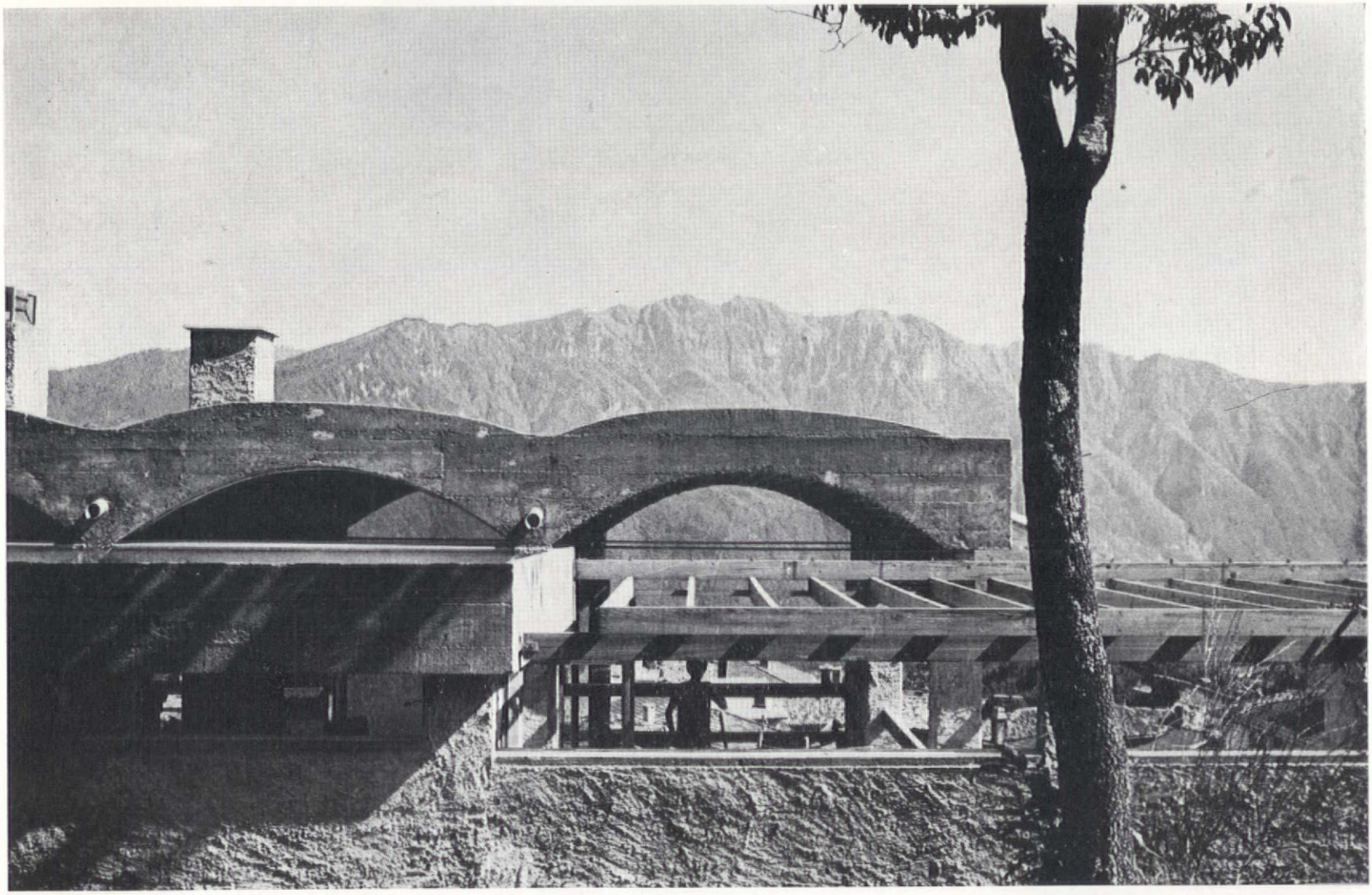
1

House at Carona, Switzerland

Atelier 5

Architects in charge, A. Pini, R. Gentner

1
View of the house from one of the mountain spurs
2
View over the house to the mountains



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The village of Carona is embedded between two spurs in the side of a mountain in Tessin, high above Melide and the road from Lugano to Morecote. Off the main route it has not been much induced to change. The browning walls and flaking tiles of the houses give an effect of immense permanence. It has been old and local and settled for years. Any building without the scars of time would look exposed in this setting. The site of this house, above the compact cluster of the village, on ground that rises in steep terraces between the embracing spurs is yet more revealing of its newness and difference. For though the architects were intent not to make too brash a display of its modernity, they were not tempted to design anything that looked archaic and odd, outdated like the mock peasant cottages and chalets that are scattered still in the valleys of Switzerland, belonging to no time or place. Instead they chose to relate their architecture to that of the village through a sense of common construction and organization. The rhythmic *travée* of old Tessin architecture is reflected in the evenly spaced supporting piers of the house; the simultaneous use of skeleton construction and solid, compact walling is a feature common to both old and new, while the rough natural plaster and the timber planks of the railings and stairs of the house are intended overtly to harmonize with the vernacular. The attempt is entirely worthy, but not unexpected. The unforeseen attraction of the architecture arises from the direct and determined way in which the great asset of the site—the view of the mountains opposite—is exploited and enjoyed. Instead of building the few rooms required at different levels against the slope of the mountain, the architects set them in a row on a simple viewing platform so that all could command the same wide and dramatic panorama. But to provide just that change of emphasis and surprise in each room they treated the openings in different ways; in the bedrooms they cut the windows from solid walls so that the view appears framed; in the dining and living space they made the walls of glass from top to bottom and end to end. Light penetrates everywhere. The glass, however, is not transparent. Most of the panels are of opaque 'Thermolux', which can be pushed aside when required. As a rule the drama of the view is revealed only in slits and panels so that there is an ever-changing sequence of glimpses as one moves through the room. Only from the veranda is it fully exposed. The rich and suggestive quality of the wall of light is further emphasized by the way in which it has been modelled to provide recesses for bookcases and other objects of furniture, so that they give an immediate foreground to the view and at the same time a sense of strong definition to the interior space. The furniture has not had to be ranged in front of a wall of glass.

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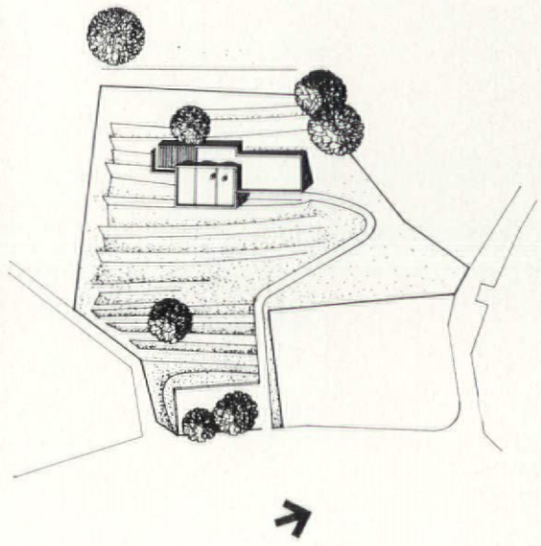

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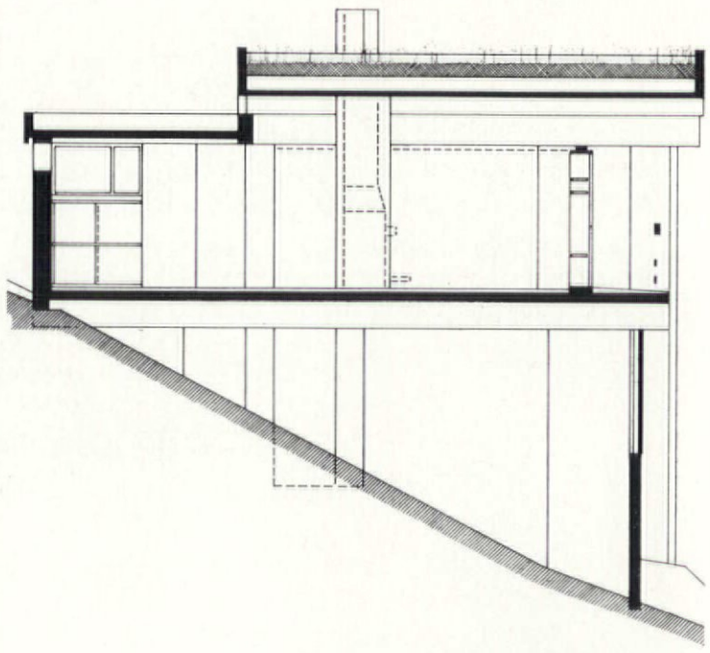

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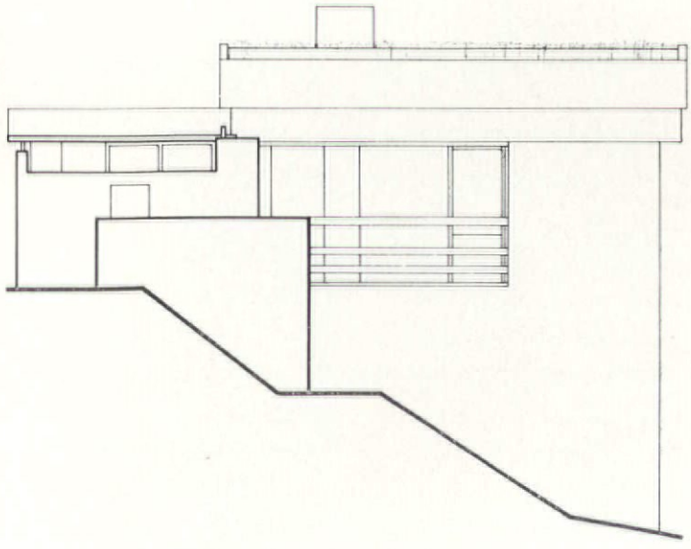

1
The house seen from the village, with the emphasis on the strongly expressed structural bays which are intended to provide a link with the vernacular architecture

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Site plan

3
Cross-section

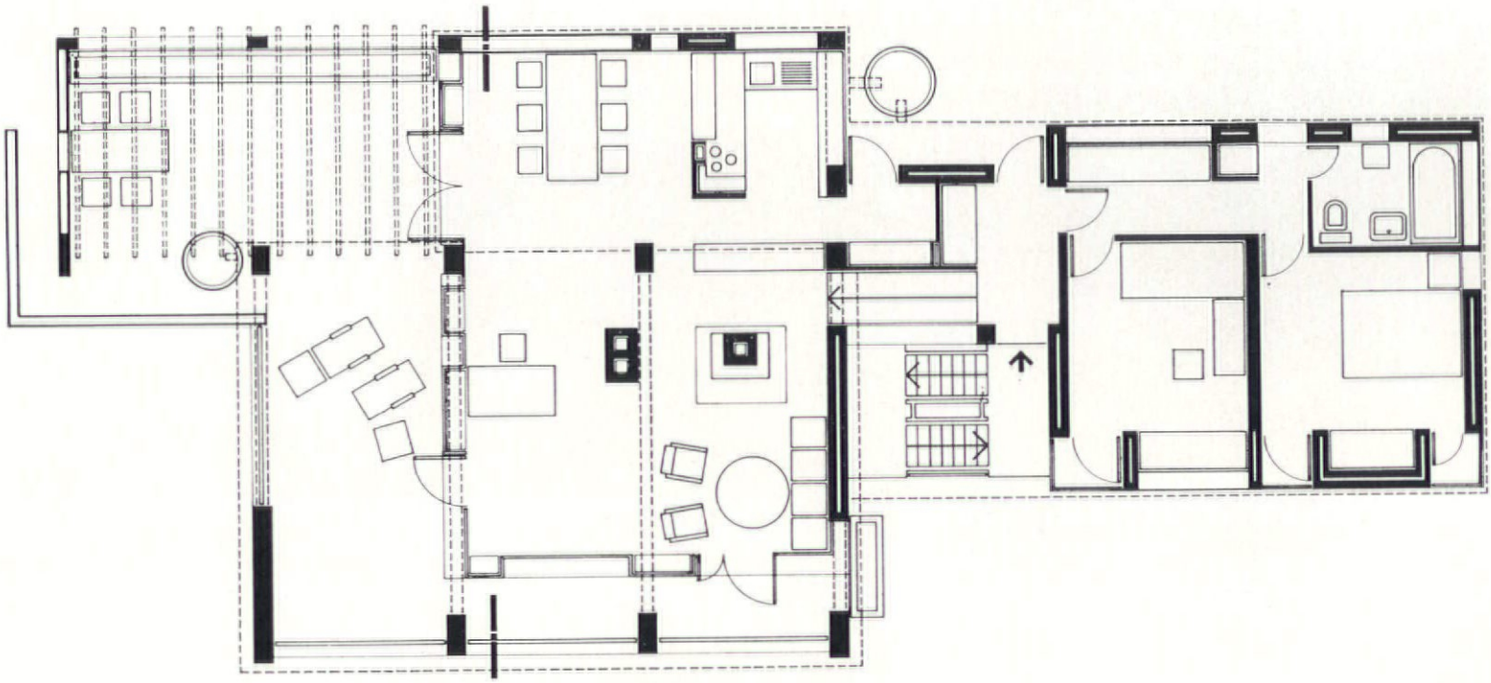
4
Side elevation

5
Plan

6
Longitudinal section

7
Front elevation

5



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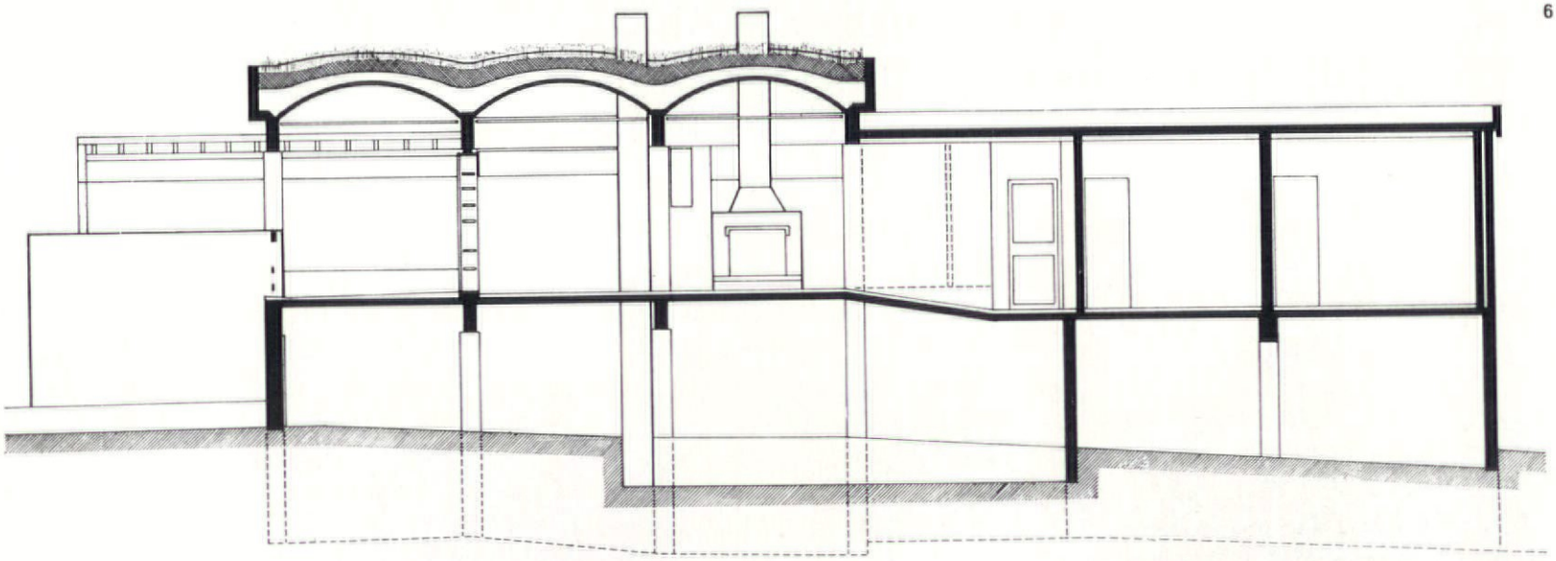

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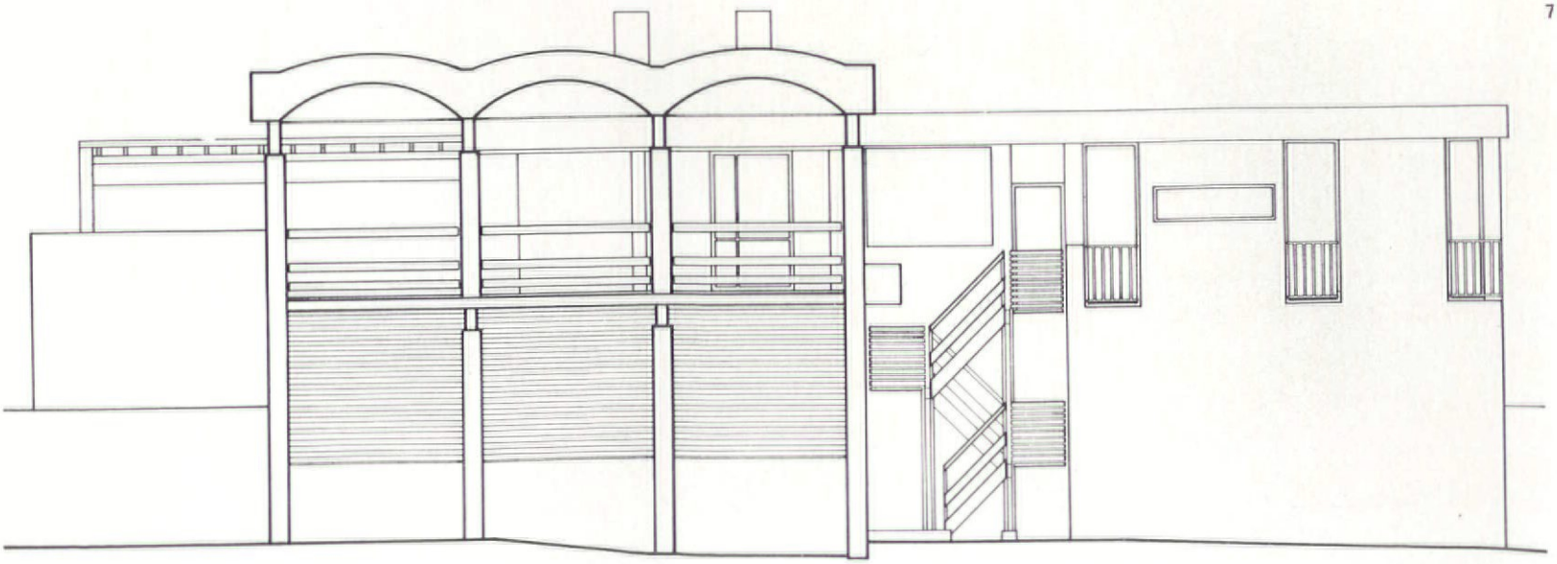

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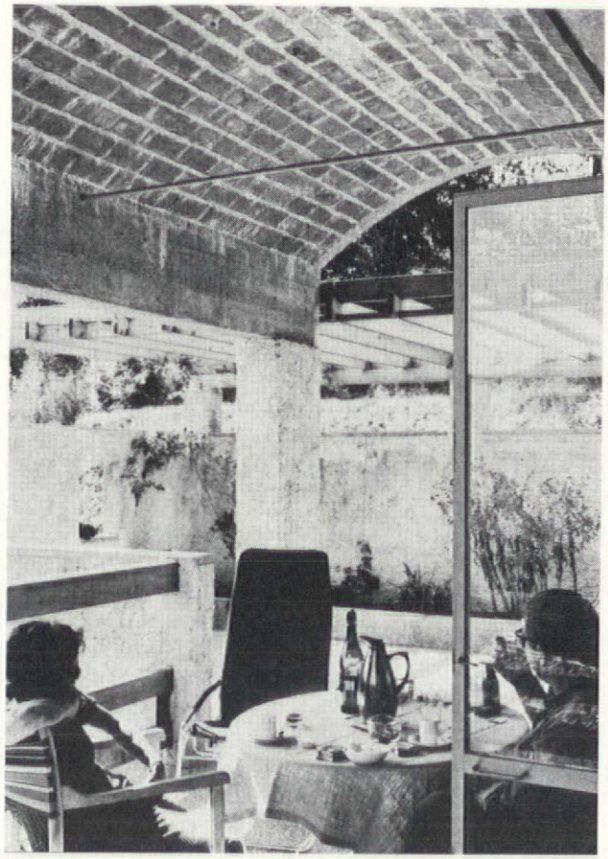
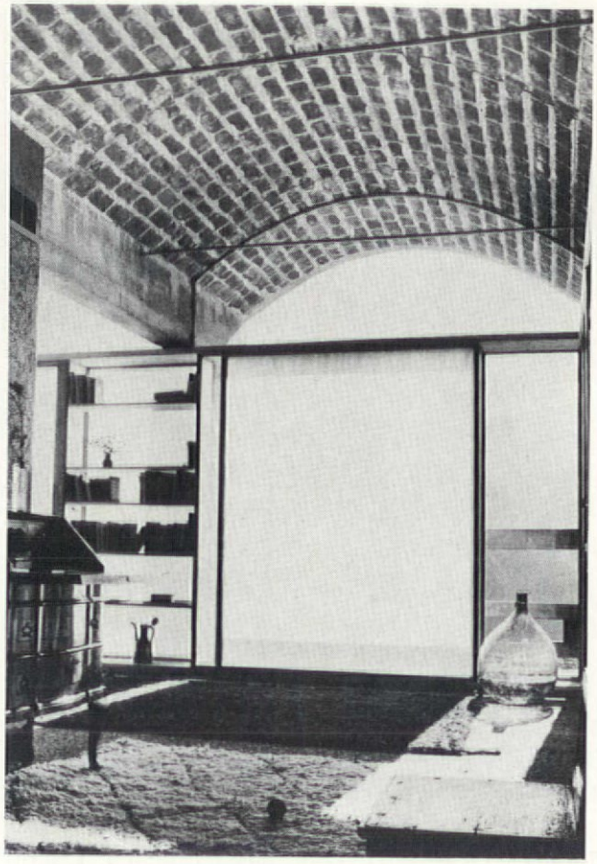
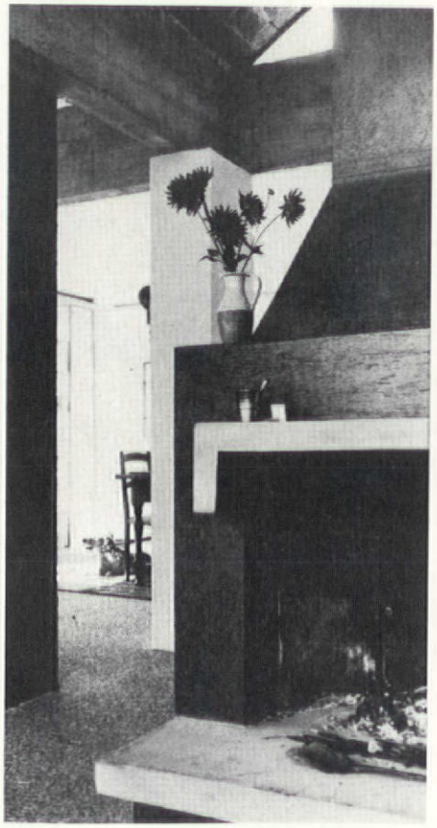
A sequence of photographs taken in the living and dining rooms and the adjoining veranda to show the rich variety of the space and the views beyond

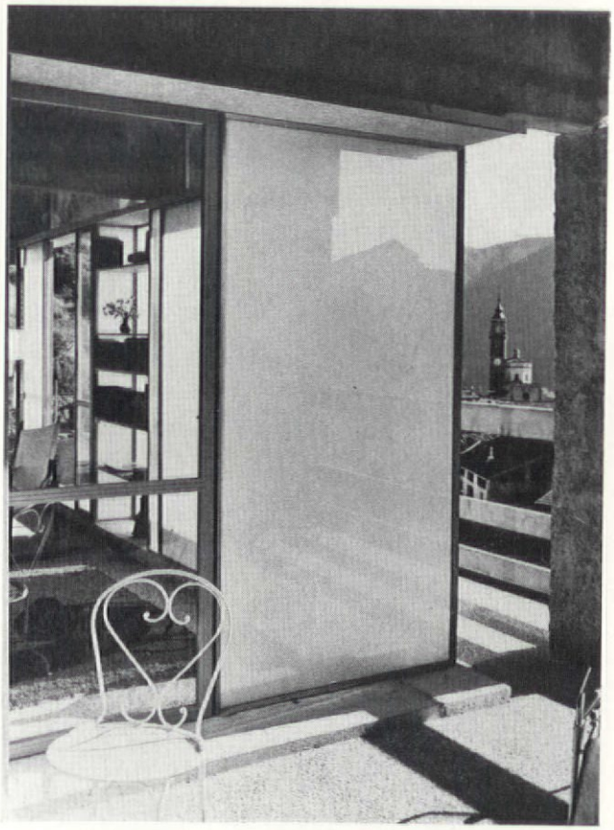












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BARBOUR INDEX
388



The new "Lincoln" Suite—designed to fit small spaces

"Think small", we told our designers.
They did—and came up with the "Lincoln" Suite.

From front to back the "Lincoln" closet projects only 25" (a good 3" less than average). And you can choose between a double trap siphonic or wash down bowl.

Small wonder the "Lincoln" Suite is opening up new areas (literally) in bathroom design.

The "Lincoln" is made of Vitreous China in eight wonderful colours, and white.

Best of all—the price is low.

All of which is, we think, pretty big news.

"Ideal-Standard" and "Lincoln" are trade marks of Ideal-Standard Limited.

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Want to know more? Write to :—IDEAL-STANDARD LTD., P.O. BOX 60, HULL.

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'LEAD ASBEX'

—incorporates a base of rotproof asbestos felt. The finest dampcourse made (Type 5F).

'PERMALEAD'

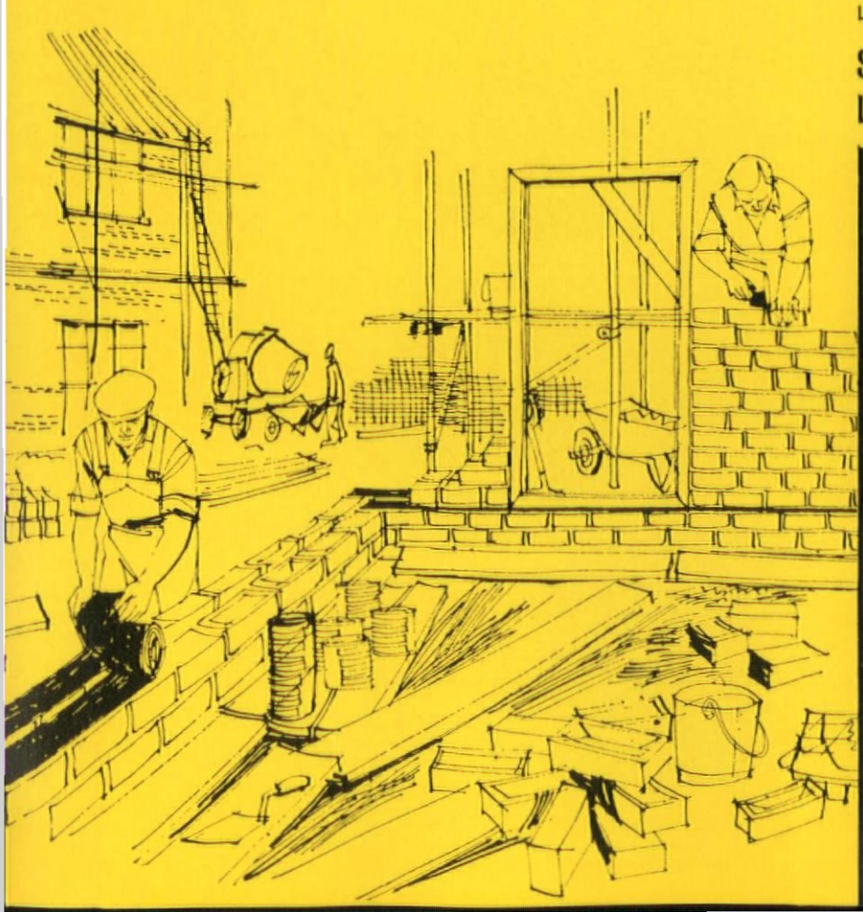
—reinforced with woven hessian (Type 5D).

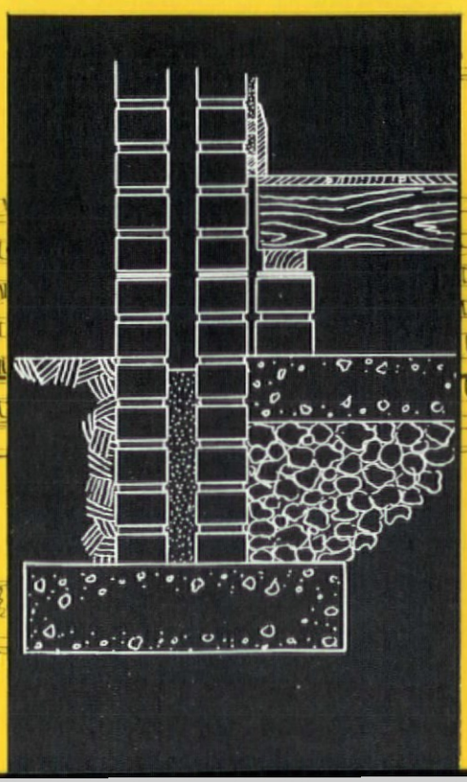
'LEAD BITU'

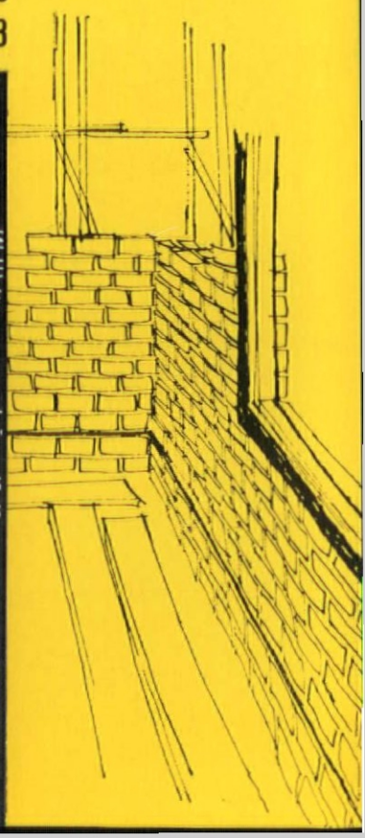
—manufactured with a base of fibre felt (Type 5E).

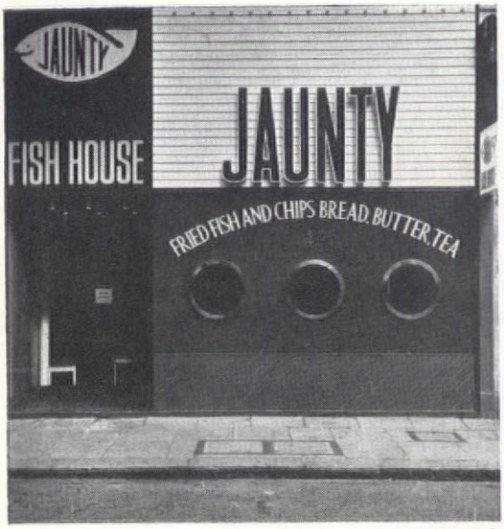
For finest flexible bitumen dampcourses specify a LEAD CORED dampcourse by PERMANITE.

Samples on request from Permanite Limited, 455 Old Ford Road, London E3









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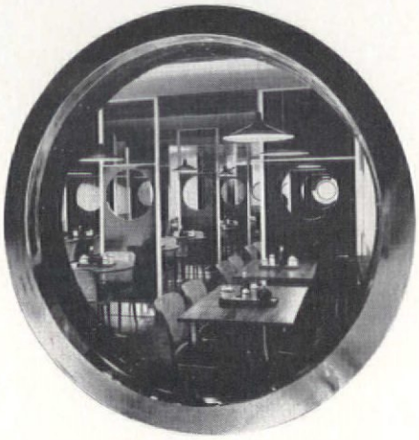

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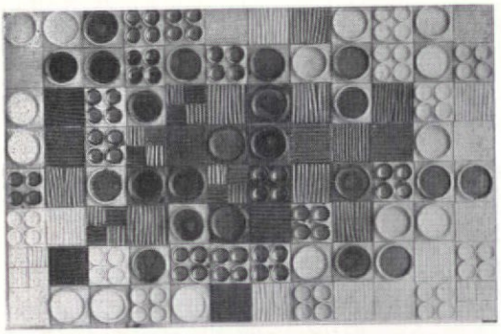

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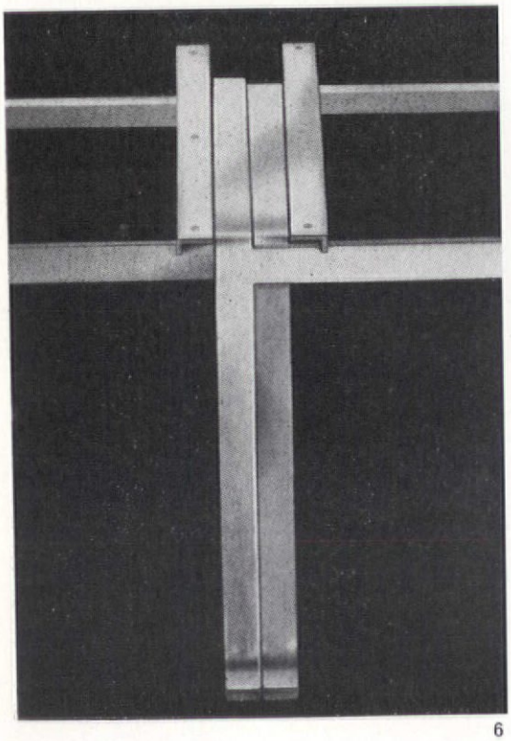

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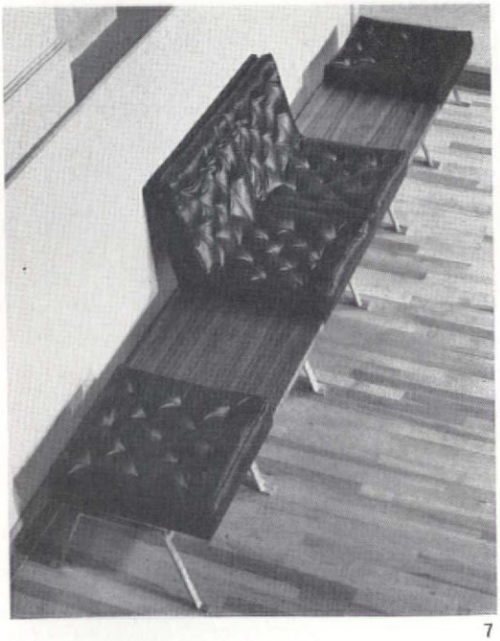

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Design notes

Fish restaurant

A high standard in steak houses is now well established in this country thanks to such as Lyons and Angus and Peter Evans; and fish has fared no less well, under amusing names like 'Contented Sole' (or 'Plaice') or 'Hook, Line and Sinker'. Now a new chain of cheaper fish houses is planned on a franchise basis by a leading catering organization, and their first unit, 'The Jaunty Fish House', was opened last autumn in London W.2.

Conran Design Group had the job of not only designing the premises (inside and out) but also the graphics, crockery, cutlery and staff uniforms, taking into account that the style of the shop must be adaptable to differing sites and franchises. Eighty people were to be seated and waitress-served at their tables and, since the restaurant only provides a one-price low-cost meal, a rapid turn-round of customers was to be encouraged.

The shopfront has a painted slatted fascia and stallrisers in white and green respectively, with bright blue centre shopfront panel into which are set three polished brass portholes.

Inside, the restaurant is divided by blue-painted screens, again with brass-trimmed portholes. The undulating ceiling is of polished pine slats, the wall finish is in rough plaster. The banquette seating is covered in dark green cirrus PVC to match the stove-enamelled table frames and the hanging lights. The floor is of grey lino tiles. Table tops are in oiled teak.

Conran Design Group, 5 Hanway Place, London W.1

Stoneware tiles

Marianne de Trey, a potter who makes oxidized stoneware at Skinner's Bridge Pottery at Dartington, recently showed some of her more individual pieces at Primavera, among which were a flexible and attractive arrangement of stoneware tiles for a wall panel **4**. These tiles work out about 15s each for a small number.

149 Sloane Street, London W.1

Remploy-Stafford seating

Remploy Ltd.'s metal furniture division graced the last Furniture Exhibition with a new range of self-linking **7** and stacking seats designed by Jack Stafford. Basic units are a chair, stool and table **5**, all with frames of strip steel finished in satin chrome or nylon coating. The chair and stool have foam interiors on sprung bases. The table is surfaced in melamine impregnated timber or Formica. The linking of them **6** is a matter of seconds. The chair costs from £23 10*s* 6*d* to £31 3*s* 10*d*, the stool from £14 1*s* 8*d* to £17 10*s* 11*d*, and the table £9 11*s* 5*d* and £9 14*s* 11*d*

Remploy House, 415 Edgware Road, London N.W.2



The simple fact is, this new Harcostar cistern is *better in every way* than conventional cisterns. Made from polyethylene, it's not merely tough : it can't rust or rot and therefore will last indefinitely. Not only that : it nests for storage, is suitable for any U.K. water supply, accepted by leading authorities and costs surprisingly little. Further economies follow from Harcostar's ease of handling and quick, simple fitting – which requires no special tools or fitments. This will become the *traditional* cistern before very long. Weigh up all its advantages and we think you will agree. Please write for full details :

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A JOINT HARVEY/
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EASIER TO FIT
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Metalon sunscreening

Metalon is a long-registered name for a metallizing process for textiles whereby a thin layer of aluminium is deposited on the cloth, so thin as not to impair the properties of the fabric; but its most important quality being its high efficiency as a heat and light reflector. Thus sun-screening becomes one of its major applications.

The new Metalon sun-screening polyester fabrics, originally developed in Holland but now being marketed in the UK by Bernard Wardle Fabrics Ltd., come in three weights: crepe (312), translucent taffeta (310), and transparent net (314), all with the silvered reflective backing which will obstruct from 40 per cent to 70 per cent of the sun's light and warmth (compared with a Venetian blind's 46 per cent at an angle of 45°); or, in winter, reflect back into the room 20 per cent of the heat that normally escapes through the windows.

Other advantages of Metalon for sun-screening are its anti-static properties; its washability; its low retention of heat—unlike metal blinds which retain heat and consequently act as a convector heater; its high strength and wear resistance coupled with supple draping and diaphanous effects; its colour-fastness; and its resistance to creasing and shrinking, and to moths and insects. It can be used for curtains (the less full, the better) and roller blinds, and is supplied 48in. wide in a dozen different colours: various shades of green, blue, charcoal and brown predominating, with yellow and red added in the taffetas and crepes.



1

Prices per yard are 50s 3*d* for the net, 54s 9*d* for the taffeta and 62s 3*d* for the crepe.

Ordinary curtain track can be used. But a special one is offered (also from Holland) which automatically opens or closes the curtains according to the sunlight falling on them.

Chinley, Stockport, Cheshire; and 25 Berners Street, London W.1



2



3

Settee

How good it is to find a settee both well designed and reasonably priced! Concept Interiors Ltd. (the firm founded to market contract furniture designed by Design Research Unit and manufactured by Stag or Christie Tyler) have just introduced a 4-seater settee **1** whose contract price ranges between £41 and £44 depending on the covering. The frame is in mahogany, the seat and back are filled with polyether foam. There is a matching chair with price range of £19 to £22.

7 Harley Street, London W.1

Fireside units

Last month we showed a couple of Meredew 'cubes'—one containing sewing things, the other newspapers. Now we have a Swedish one, a bar box in teak veneer with a black plastic lid. Heals sell it at £42 1*s* 6*d*.

Tottenham Court Road, London W.1

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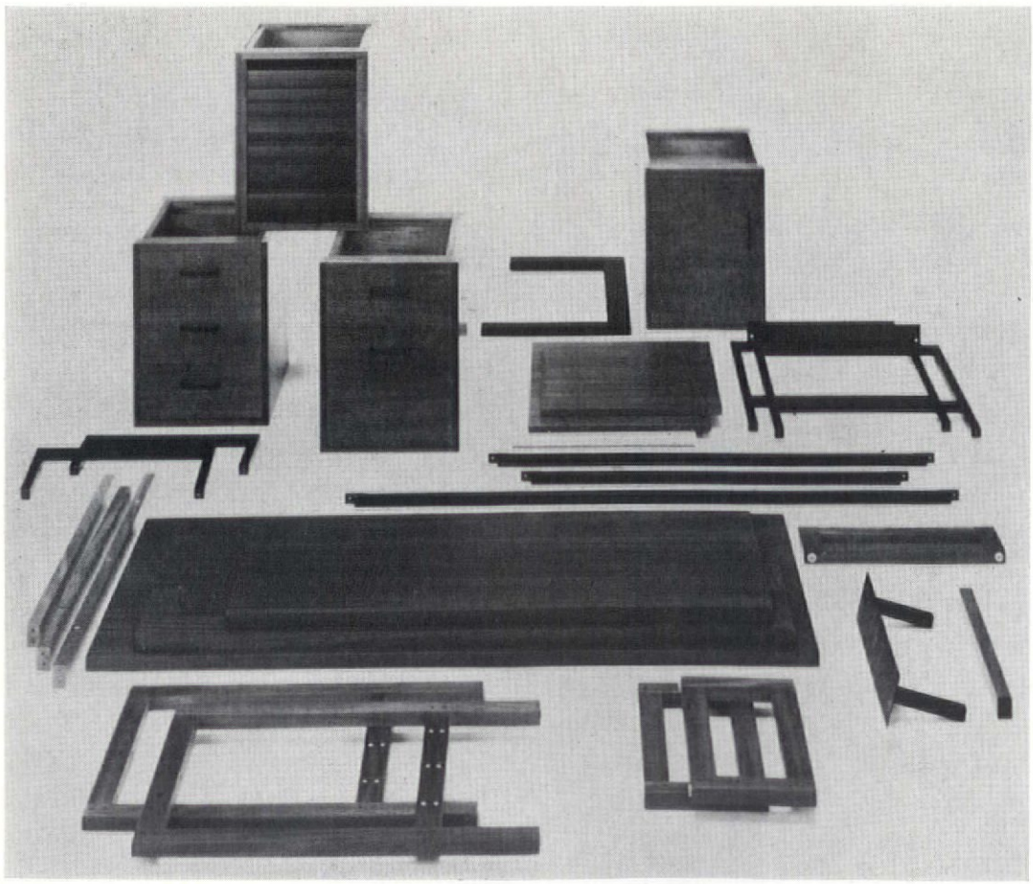


Desk that grows

The K.71 combined desk chair is introduced by the Bentwood Chair Supply Co. Ltd. for use in schools. Its great advantage is that it will grow with the child.

Construction is basically simple. There are a seat, desk top and back rest in laminated oak. These are supported by two U-shaped pieces of iron, down the four sides of which are a vertical line of holes. By means of these holes the seat, top and backrest can be located at any position, depending upon the size of the child.

When fully extended, the desk/chair measures 22in by 22in by 24in. It is packed in a carton and is easy to assemble.

Price is approximately £5.

Bentwood House, 564 Holloway Road, London N.7

Desk versatility

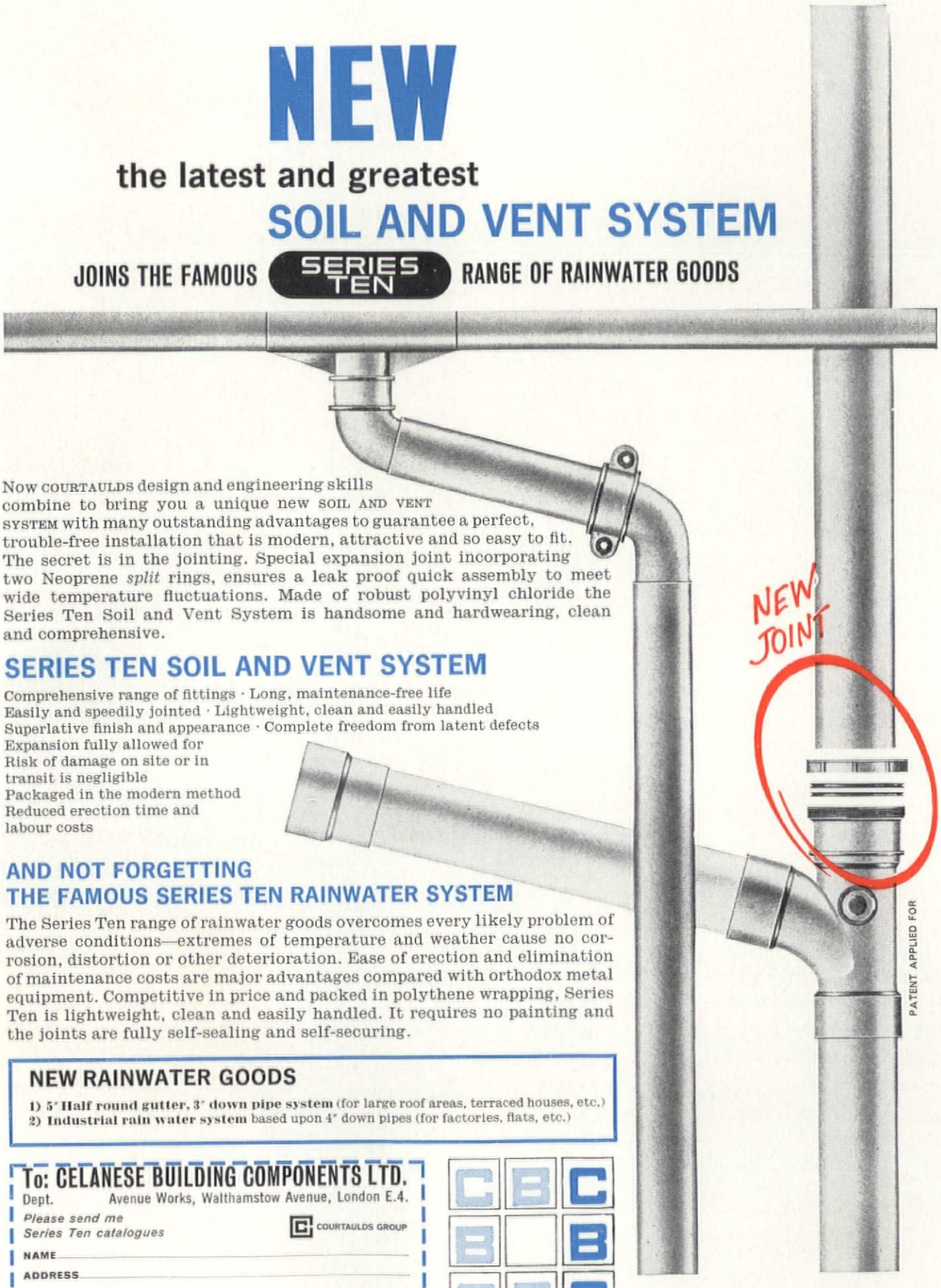
Recent newcomers to the build-up-your-own-type-of-desk field are Triangle Cabinets Ltd., whose system offers a wide selection of materials from which to assemble the final masterpiece: several designs for timber or metal leg ends; pedestals with drawers or cupboards, roller fronts or hinged doors; tops and infill panels of various woods or laminated plastic; and so on. The end result is a simple and workmanlike desk.

Centre Way, London N.9

NEW

the latest and greatest
SOIL AND VENT SYSTEM

JOINS THE FAMOUS SERIES TEN RANGE OF RAINWATER GOODS



Now COURTAULDS design and engineering skills combine to bring you a unique new SOIL AND VENT SYSTEM with many outstanding advantages to guarantee a perfect, trouble-free installation that is modern, attractive and so easy to fit. The secret is in the jointing. Special expansion joint incorporating two Neoprene *split* rings, ensures a leak proof quick assembly to meet wide temperature fluctuations. Made of robust polyvinyl chloride the Series Ten Soil and Vent System is handsome and hardwearing, clean and comprehensive.

SERIES TEN SOIL AND VENT SYSTEM

Comprehensive range of fittings · Long, maintenance-free life
Easily and speedily jointed · Lightweight, clean and easily handled
Superlative finish and appearance · Complete freedom from latent defects
Expansion fully allowed for
Risk of damage on site or in transit is negligible
Packaged in the modern method
Reduced erection time and labour costs

PATENT APPLIED FOR

AND NOT FORGETTING THE FAMOUS SERIES TEN RAINWATER SYSTEM

The Series Ten range of rainwater goods overcomes every likely problem of adverse conditions—extremes of temperature and weather cause no corrosion, distortion or other deterioration. Ease of erection and elimination of maintenance costs are major advantages compared with orthodox metal equipment. Competitive in price and packed in polythene wrapping, Series Ten is lightweight, clean and easily handled. It requires no painting and the joints are fully self-sealing and self-securing.

NEW RAINWATER GOODS

1) **5" Half round gutter, 3" down pipe system** (for large roof areas, terraced houses, etc.)
2) **Industrial rain water system** based upon 4" down pipes (for factories, flats, etc.)

To: CELANESE BUILDING COMPONENTS LTD.
Dept. Avenue Works, Walthamstow Avenue, London E.4.

Please send me Series Ten catalogues

COURTAULDS GROUP

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Description

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Trade notes

Alexander Pike

To obtain additional information about any of the items described below, circle their code numbers (A1, A2 . . . etc.) on the Readers' Service Card inserted elsewhere in this magazine.

A1 Magnetic fixings
Magnet Applications Ltd., 323 City Road, London, E.C.1.

Arelec rustproof nickel alloy magnets combine small size with high strength and have acclaimed loss of efficiency of 1 per cent in 10 years. Available in a wide range of sizes and with holding powers up to 175lb, they reveal for the designer new possibilities for the concealed fixing and flexible arrangement of quite heavy items. The smallest of these cylindrical magnets cost 1*s* 8*d* each with corresponding increases for the larger sizes. Other magnetic products include combined door stops and holders varying in price from 5*s* 10*d* to 19*s* 3*d*.

A2 New aluminium windows 1
Bull's Metal & Marine Ltd., Yoker, Glasgow, W.4.

As the building industry rarely benefits from techniques developed in other fields, it is interesting to note that a firm long established in the design and manufacture of marine windows is now producing windows for building. Proven techniques employed in the more demanding market for marine windows have been used for a range of horizontal sliding, double hung and horizontally centre hung types, purpose made and to Module 4 dimensions. The pivoting type has a completely concealed mechanism and adjustable side weather bars claimed to give excellent service weathering properties.

A3 Radio controlled garage doors 2
Bolton Gate Co. Ltd., Bolton, Lancs.

Controlled from inside the car by a push button on a small portable radio transmitter, the opening mechanism on the Bolton Berry door also actuates the garage lighting. Suitable for affluent clients—or fluent architects—a 7ft door costs £142, with other widths available up to 18ft.

A4 Vinyl rainwater goods
The Ruberoid Co. Ltd., 1 New Oxford Street, London, W.C.1.

The new PVC rainwater system by Ruberoid is based on mechanical joints and does not require jointing compounds. Attention has been applied to security of fixing and simplicity of design.

A5 Asphalte specification
14 Howick Place, London, S.W.1.

The Mastic Asphalte Advisory Council have prepared a model Specification for Mastic Asphalte in Building. It excludes references to proprietary names.

A6 American waste disposal unit
Anda Ltd., Kingsham Road, Chichester, Sussex.

The Hush Waste King Universal 3000 will soon be available in this country. Claimed to be silent in operation and with a vibration- and jam-free action, the $\frac{1}{3}$ hp motor operates on 240v. Cost approximately £20.

A7 Asbestolux catalogue
Cape Building Products Ltd., Uxbridge, Middlesex.

Cape Building Products have revised their entire range of technical literature and issued under one cover a combination catalogue, price list and handbook on the use of their materials. Surpassing their previous high standards, it sets an excellent example for other manufacturers.

A8 Land drainage 3
P. H. Muntz & Barwell Ltd., Alexandra Road, West Bromwich.

Available in coils up to 660ft long, Landcoil perforated polythene pipe has a bore of 2in and can be fed down the blade of a suitably shaped mole plough. Tapered slots filter out the larger soil particles whilst permitting the maximum amount of water to enter the tube.

A9 PVC water and gas pipelines
Chemidus Plastics Ltd., Brunswick Road, Cobbs Wood, Ashford, Kent.

Intended primarily for engineers, a well-designed handbook on unplasticized PVC pipes will have a strong appeal to those interested in graphic art.

A10 Decorative building boards
Adrian Marchant Ltd., Surbiton Studios, Britannia Road, Surbiton, Surrey.

Estocraft boards have cold cast metal finishes in a polyester resin surface on a backing of chipboard, plywood or asbestos board. Obtainable in sheets 4ft square finished in copper, brass, bronze, lead, aluminium, nickel silver and stainless steel at 12*s* 9*d* per sq ft.

A11 Incombustible flexible air ducting 4
Van den Bosch Ltd., Europair House, Alexandra Road, Wimbledon, S.W.19.

Bi-Flex Type INC is made from steel rings covered with aluminized asbestos fabric lined with Neoprene. For hot or cold air, gases, fumes, dust or airborne particles at temperatures from — 40°F to 200°F and capable of compression to 50 per cent of its original length. In 10ft lengths and diameters from 3in to 14in, the material provides scope for expressing ducting within a building.

A12 New vinyl flooring
Nairn-Williamson Ltd., Kirkaldy, Scotland.

Crestaclear tiles consisting of fine chips of coloured vinyl embedded in a transparent PVC binder are available in 2mm thickness, 9in square and 12in square at 36*s* 0*d* per sq yd.

A13 Portable air conditioner
Hygro-Robot Ltd., 68 Oxford Street, London, W.1.

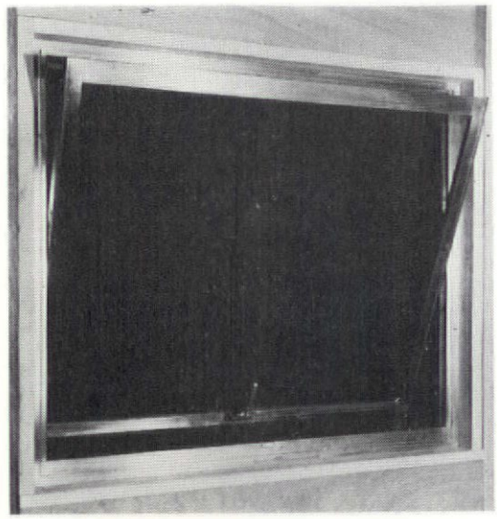
Suitable for rooms up to 2000 cu ft, the Executive Mk 11A works on the evaporative principle, has two speed controls and is claimed to be virtually silent. The unit has a consumption of 20 watts and is priced at 18 guineas.

A14 Fire-proofing of timber
Further information from the Embassy of Israel, 2 Palace Green, London, W.8.

A new method of fire-proofing timber, claimed to be permanent, suitable for timber in exposed positions and cheaper than any comparable method, is announced by the Israeli Government. The process, for which patents have already been registered in several countries, is equally applicable for the treatment of plywood, hardboard, cardboard, jute and sisal.

A15 Washable wall covering
ICI Ltd., Imperial Chemical House, Millbank, London, S.W.1.

Consisting of a waterproof film of self-coloured PVC on a paper backing and printed with PVC inks heat-fused into the surface, Vymura wall coverings are claimed to be strong enough to resist scrubbing and are obtainable in 119 patterns at 28*s* 0*d* and 34*s* 0*d* a standard roll.



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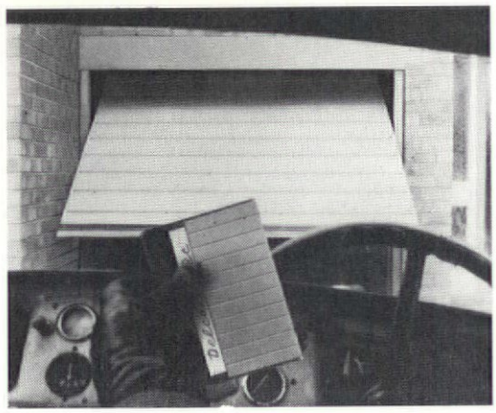

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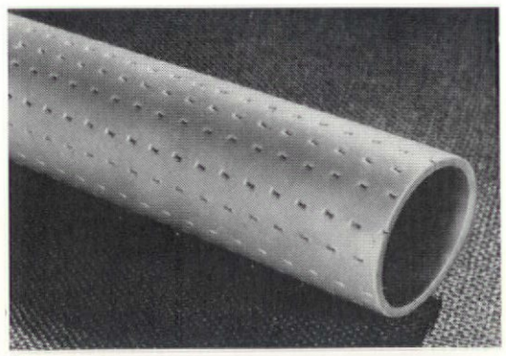

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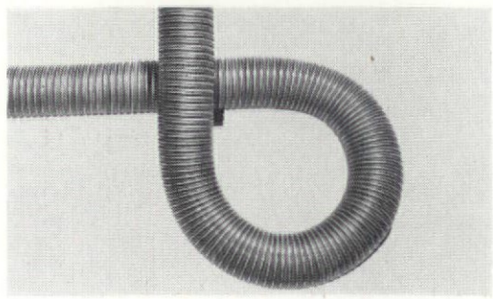

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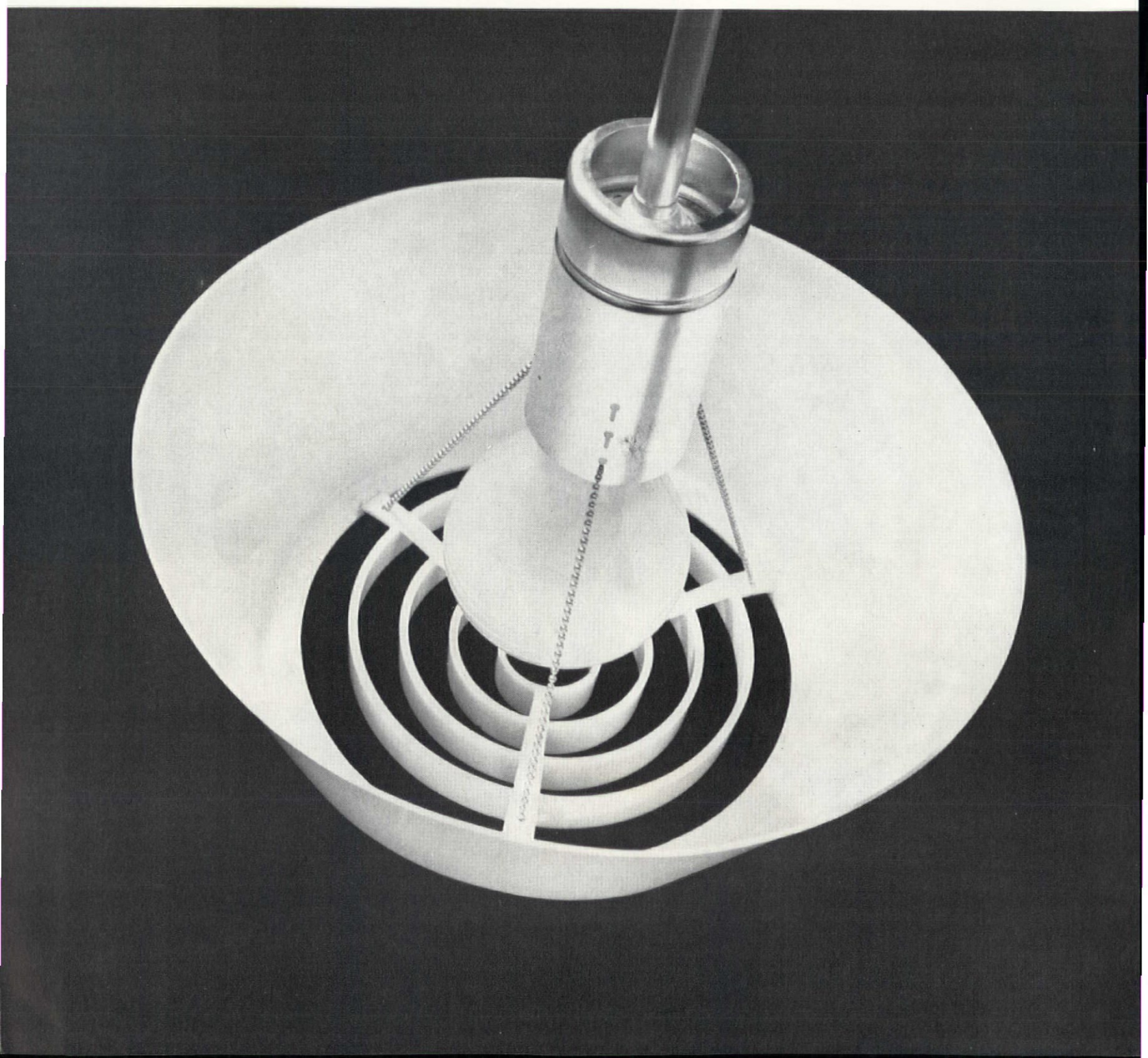

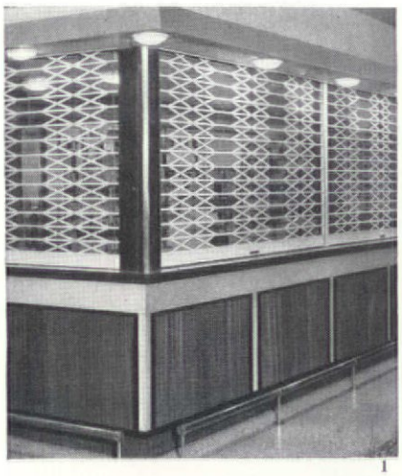

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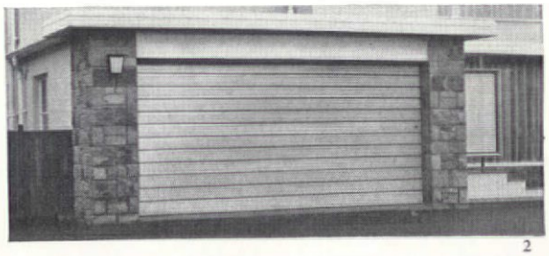

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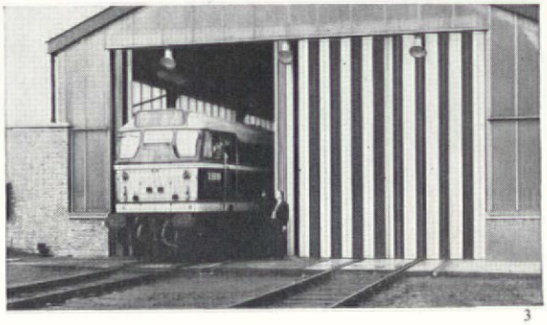

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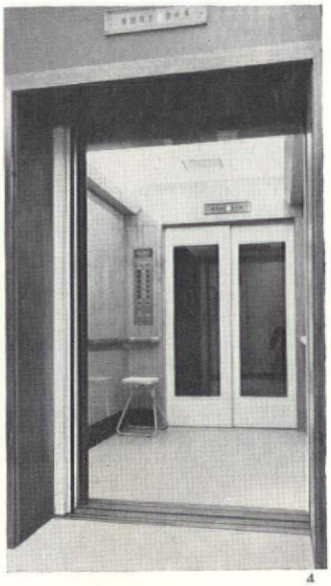

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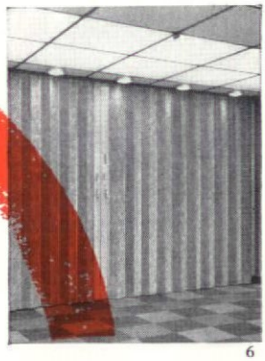

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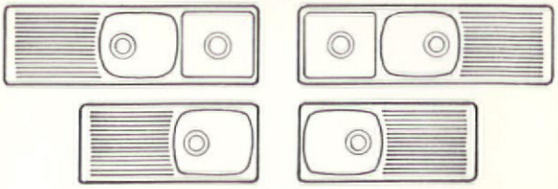

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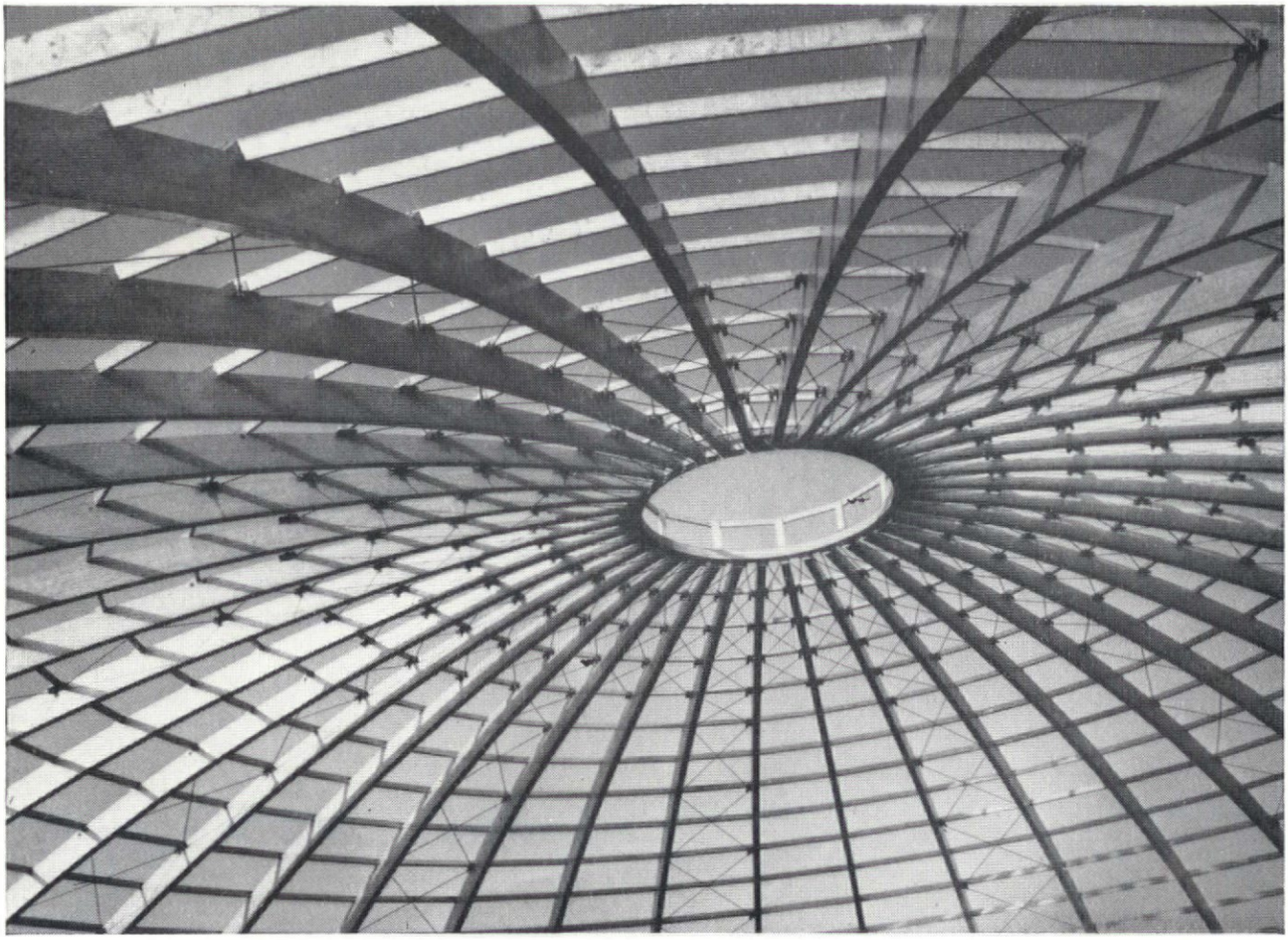

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Commissioned by Newcastle-upon-Tyne Education Committee at Wharrier Street, the dome has an overall diameter of 206 ft 6 in, and is the largest structure of its kind in Great Britain.

Laminated timber was used for this structure, for it combined a high strength/weight ratio, ease of fabrication, transport and erection, and low final cost. The laminations of the ribs are bonded with Aerodux resorcinol glue. Each rib is 104 ft long and 8¼ in wide, the depth varying from 26 in at the centre to 18 in at the base and 10 in at the apex thrust ring.

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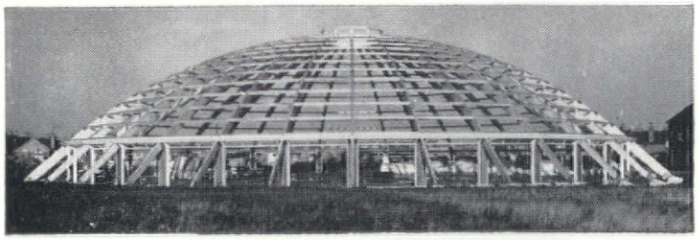

Full information on CIBA glues for wood will be sent gladly on request.

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Contractors: R. C. Williamson (Durham) Ltd.
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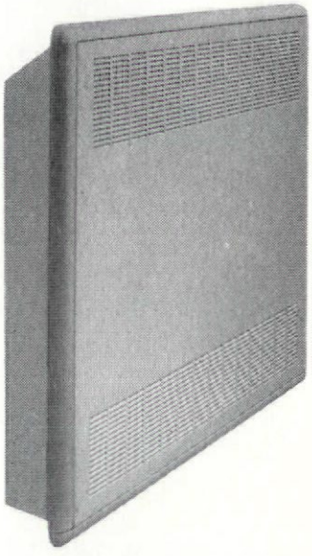
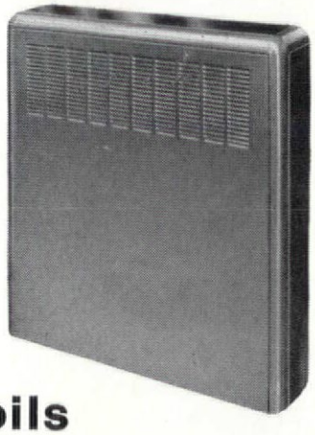
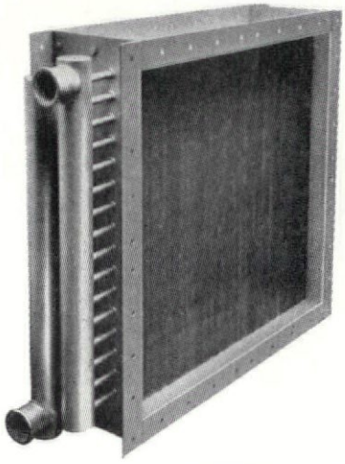




coils



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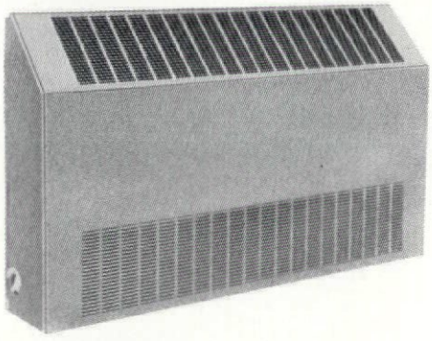



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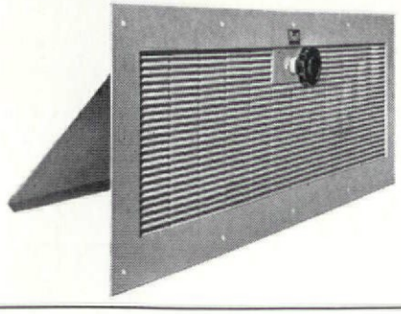

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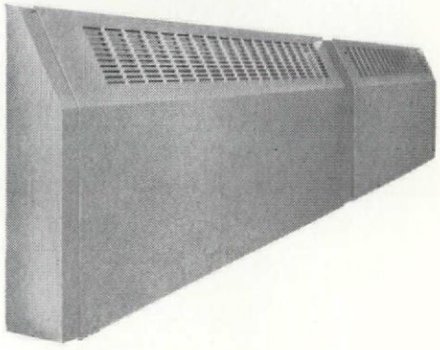

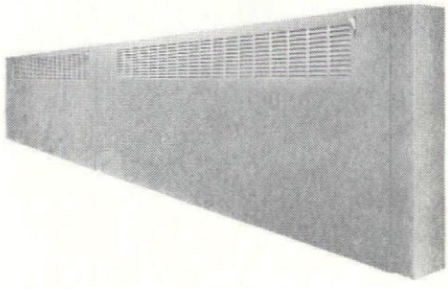

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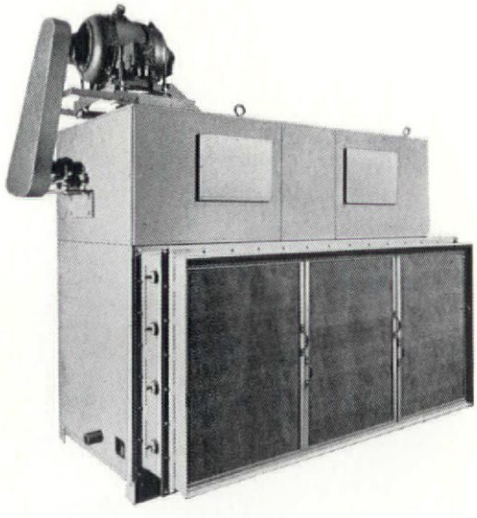

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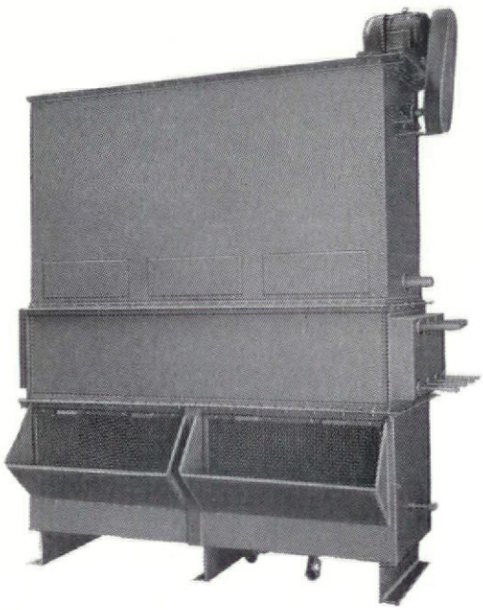

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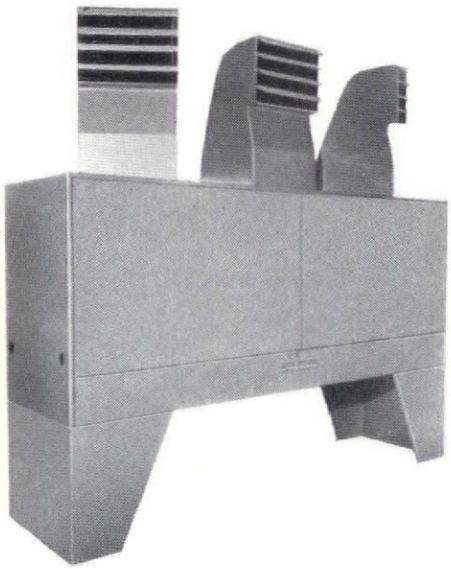

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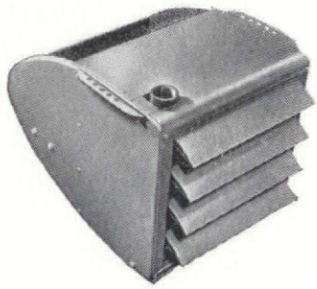

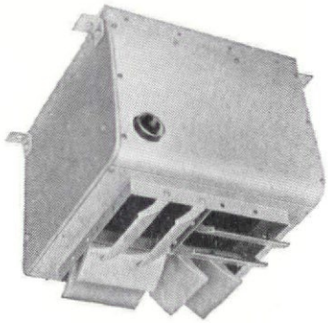

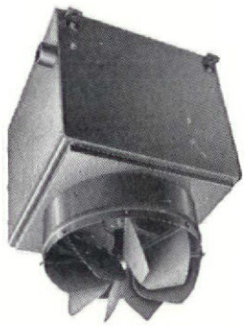

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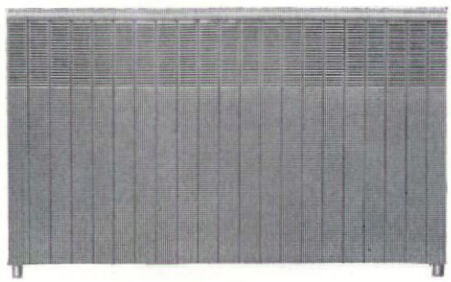

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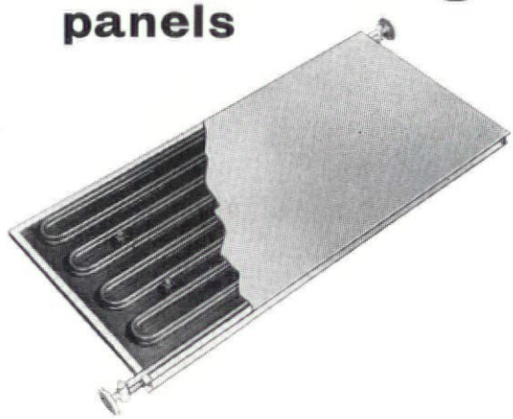

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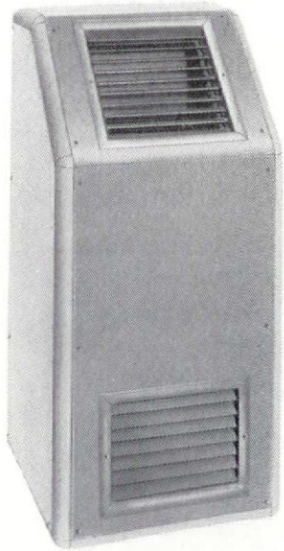

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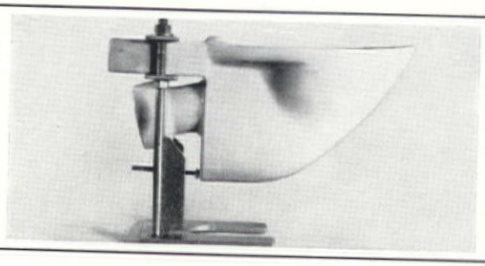

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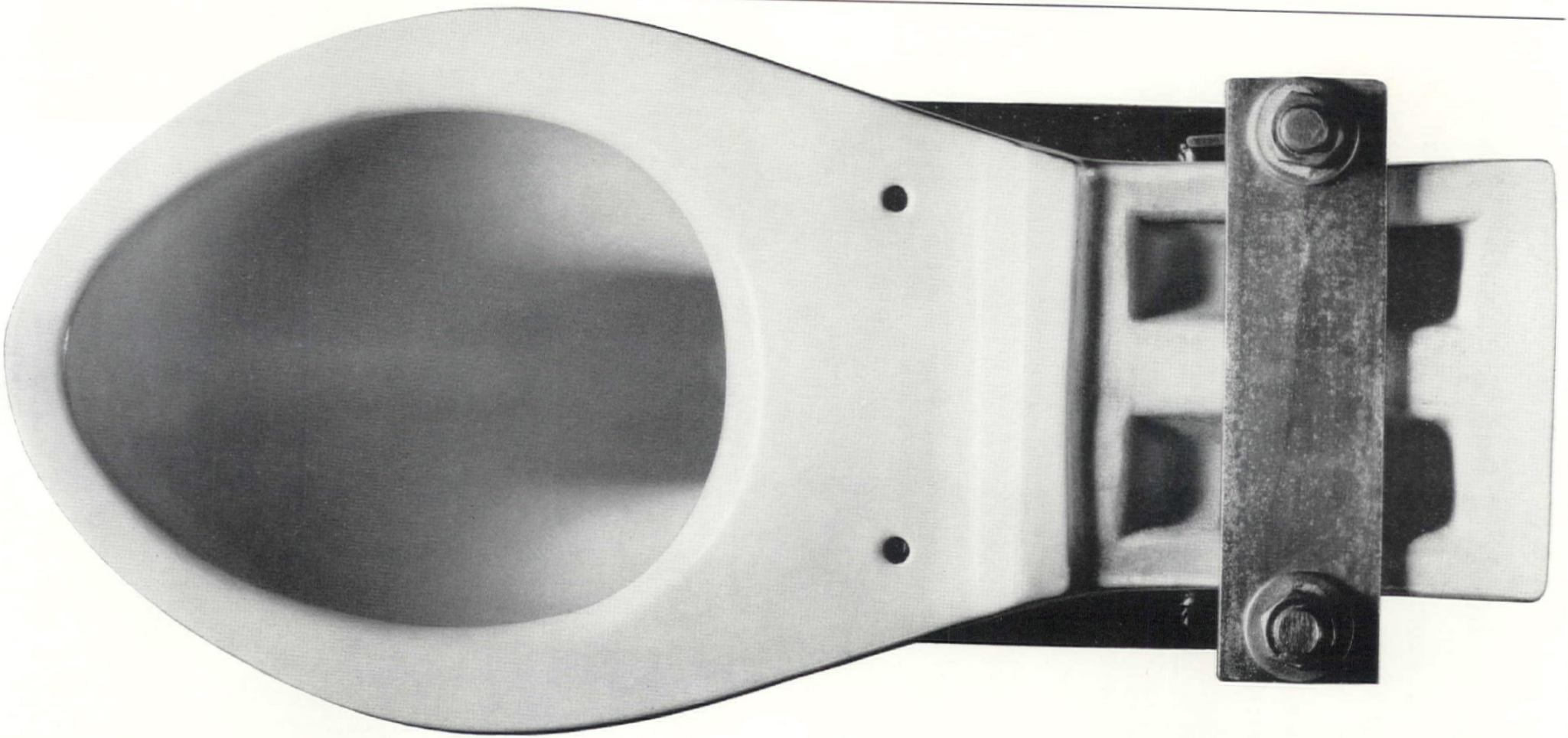



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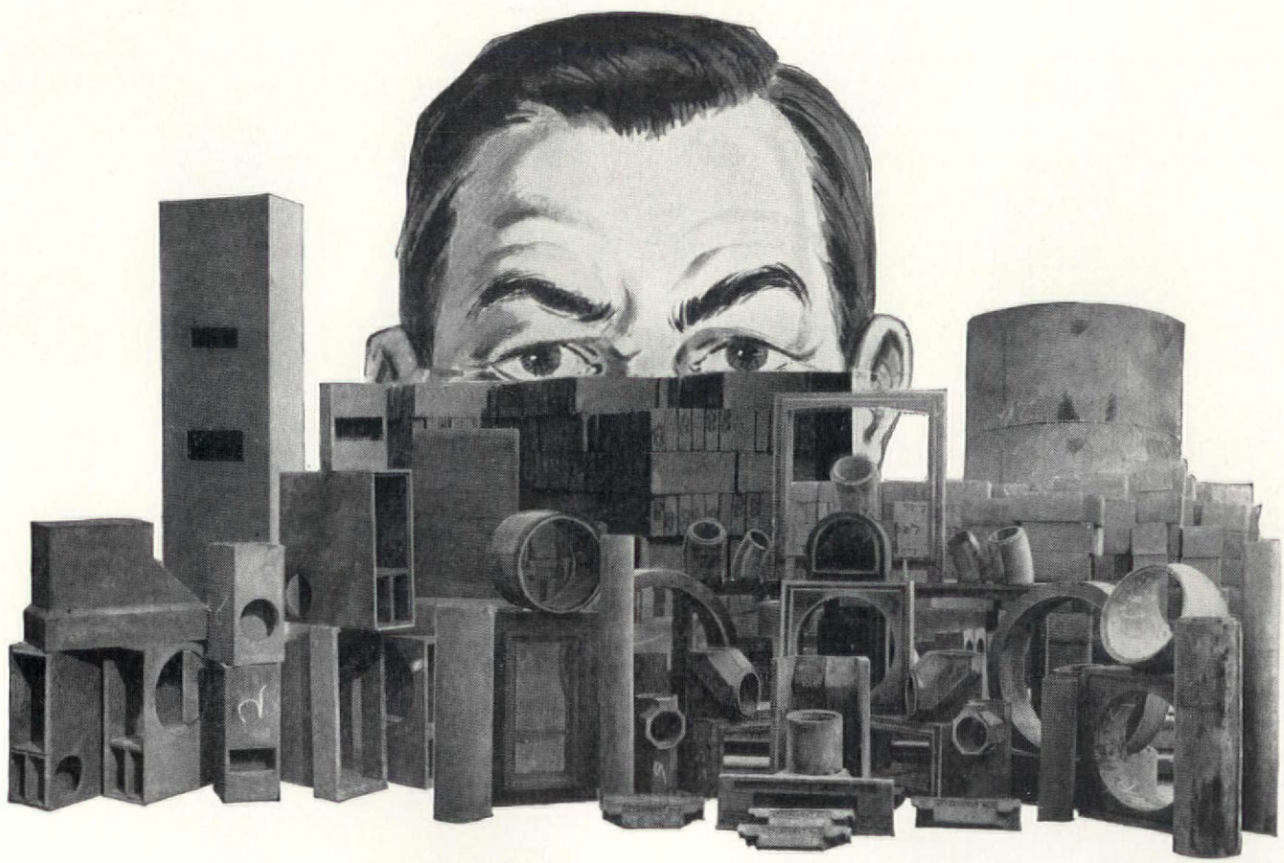

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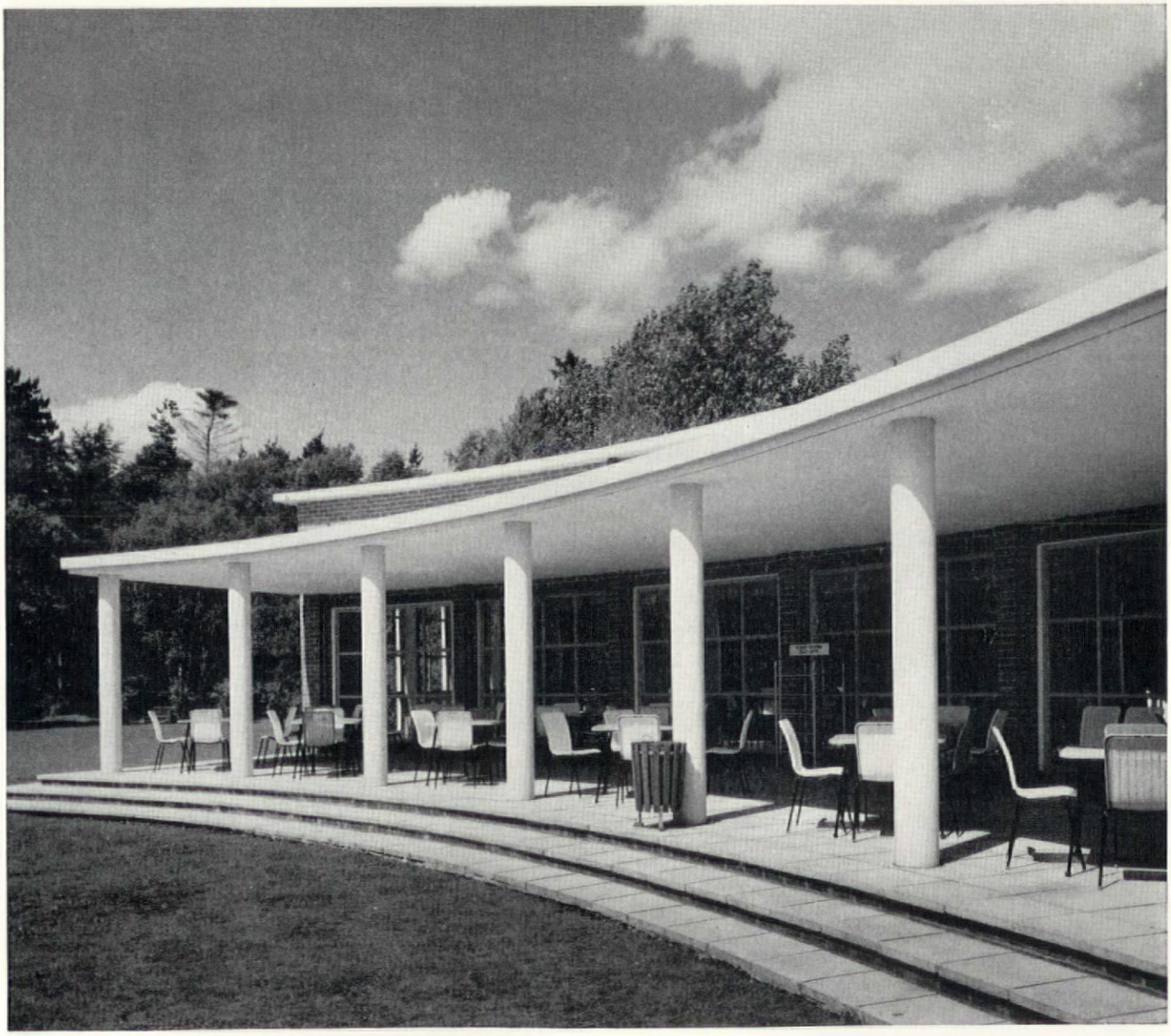

The outside Terrace of the Restaurant at the Royal Horticultural Society, Wisley Gardens.
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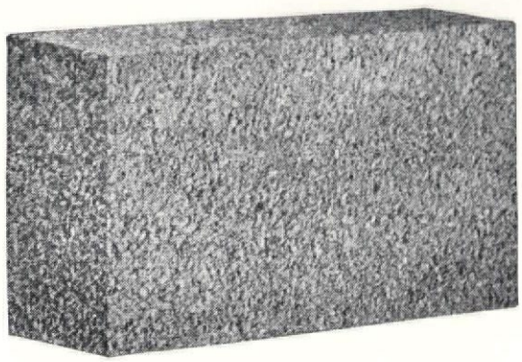

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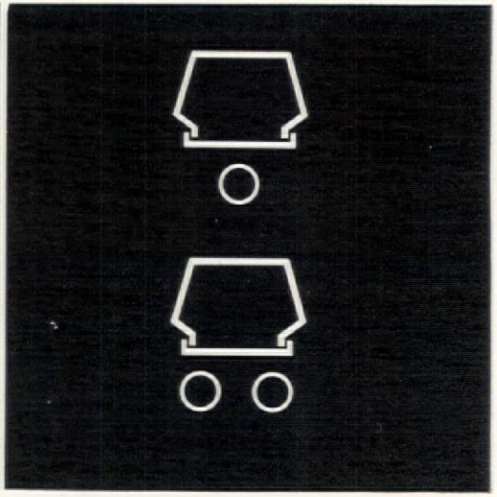

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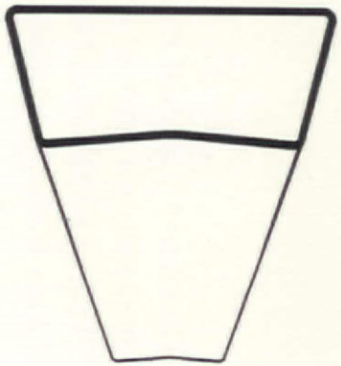

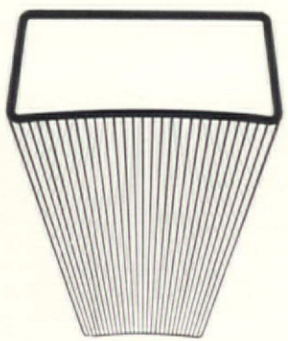

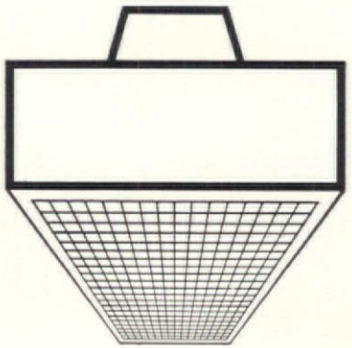

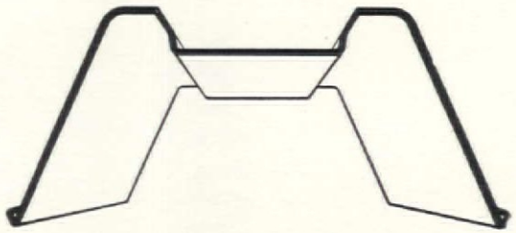

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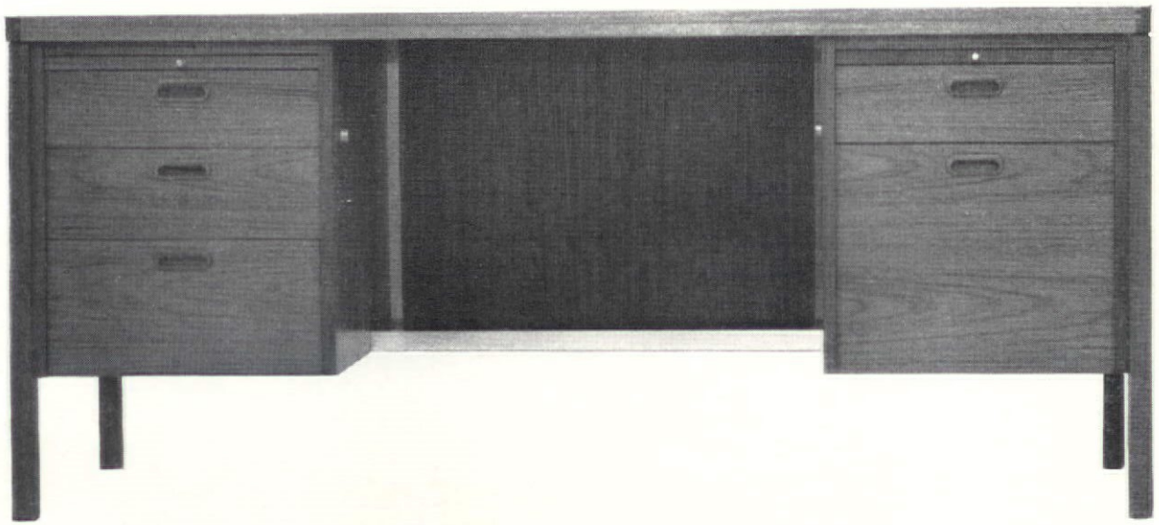

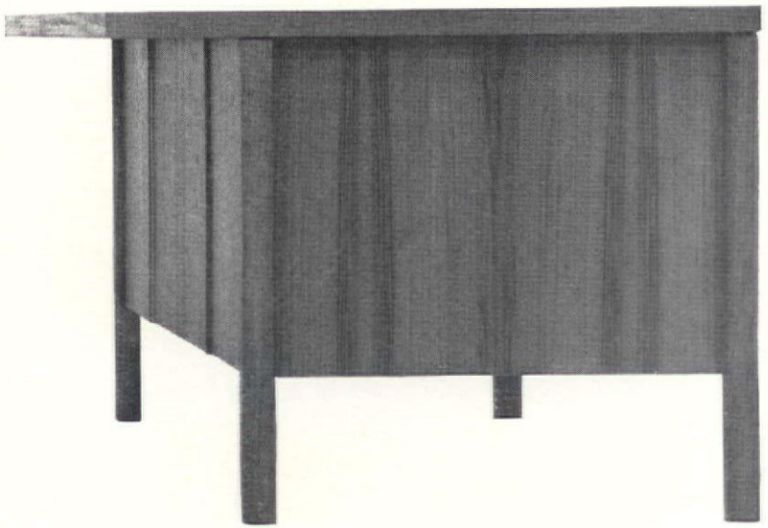

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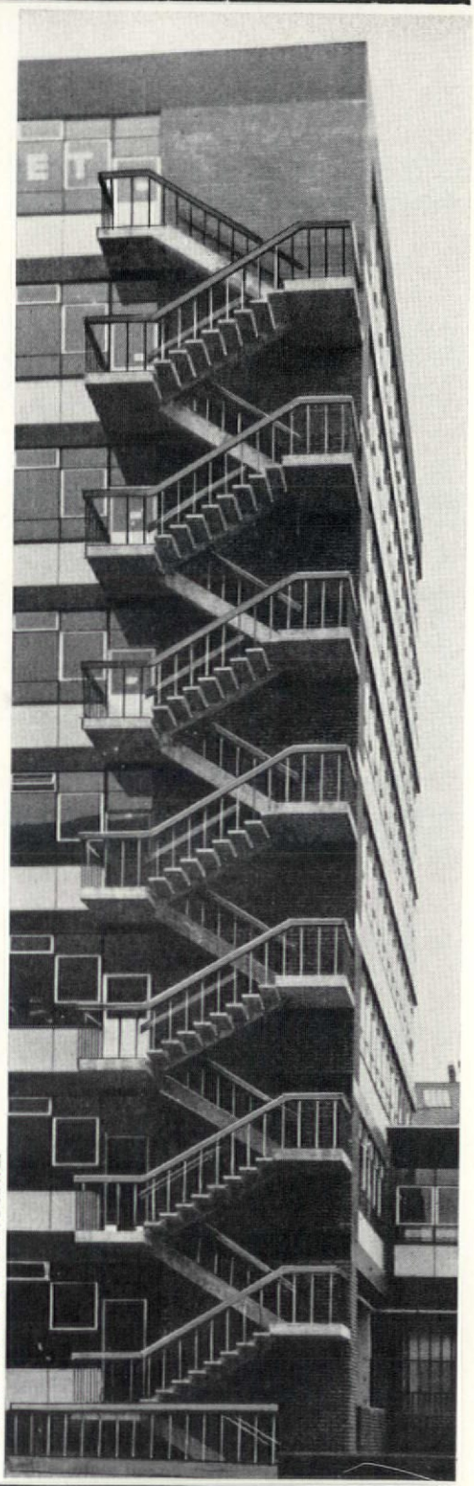

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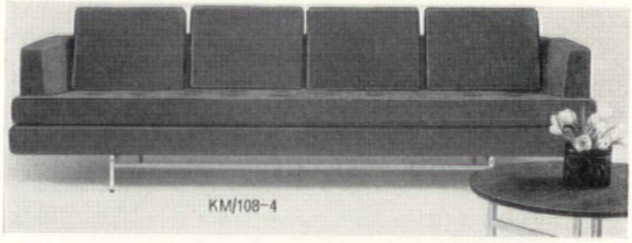

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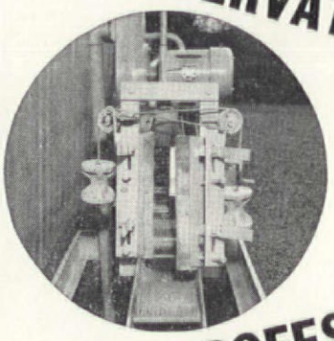

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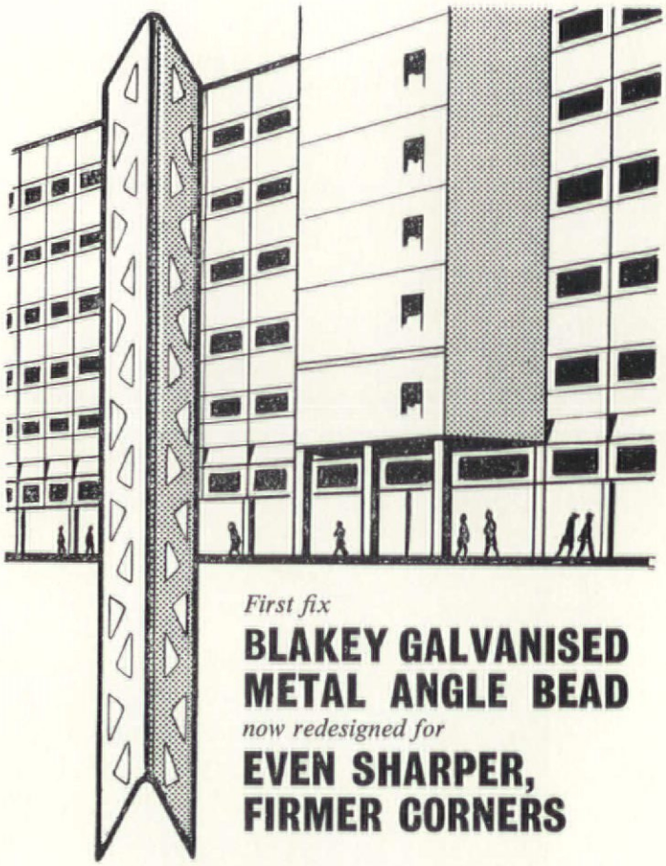

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STEPHEN JOSEPH.

A close co-operation between a theatre's artistic director and an architect with sympathy, understanding and imagination on both sides is the way we shall get a really good theatre.

R. HAMM, ARIBA.

Advice from the experts...

These extracts are culled from the current and recent issues of 'Tabs', a quarterly magazine devoted to theatre building and staging. Ask to be included on the free mailing list, complete the coupon below.

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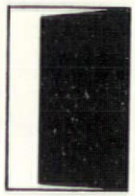

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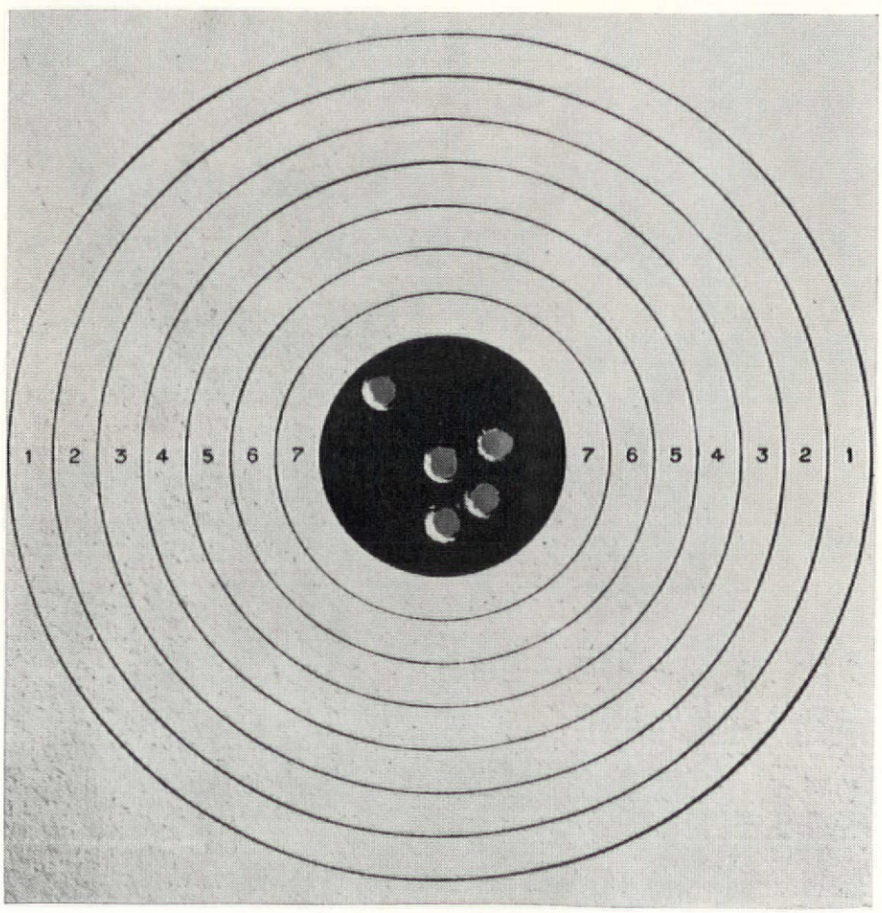

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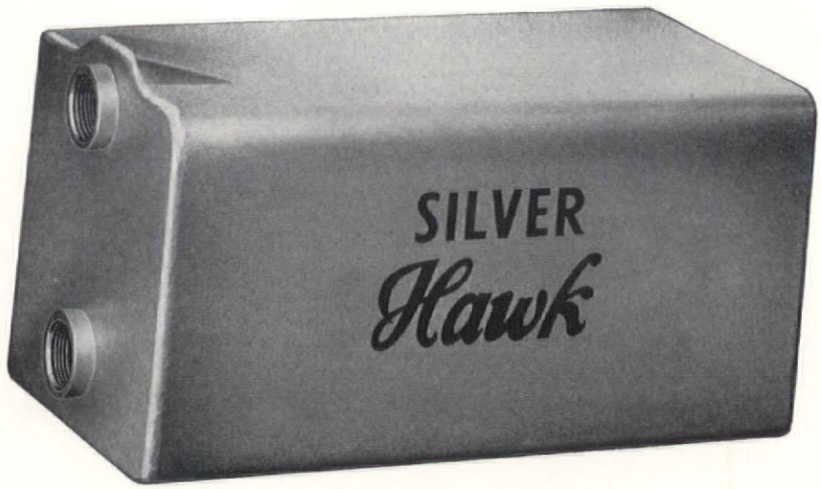

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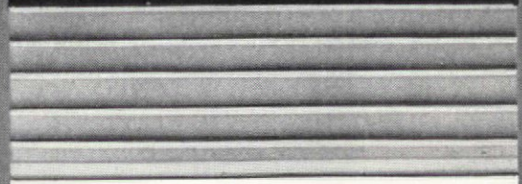

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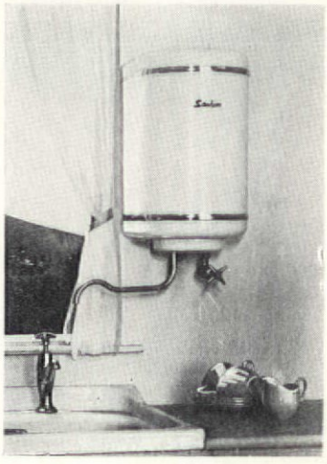

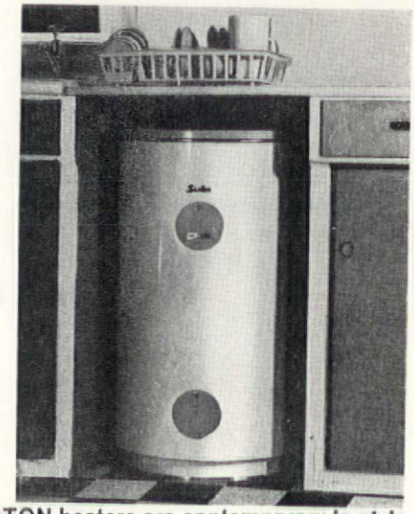

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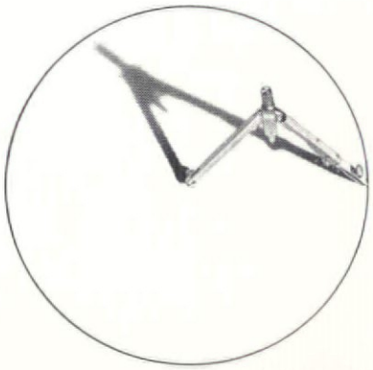

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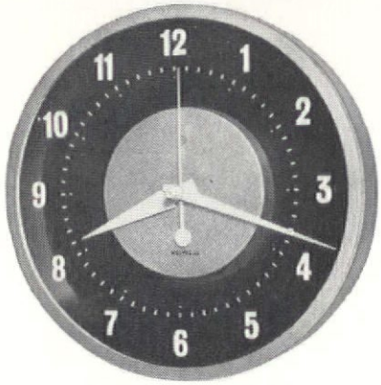

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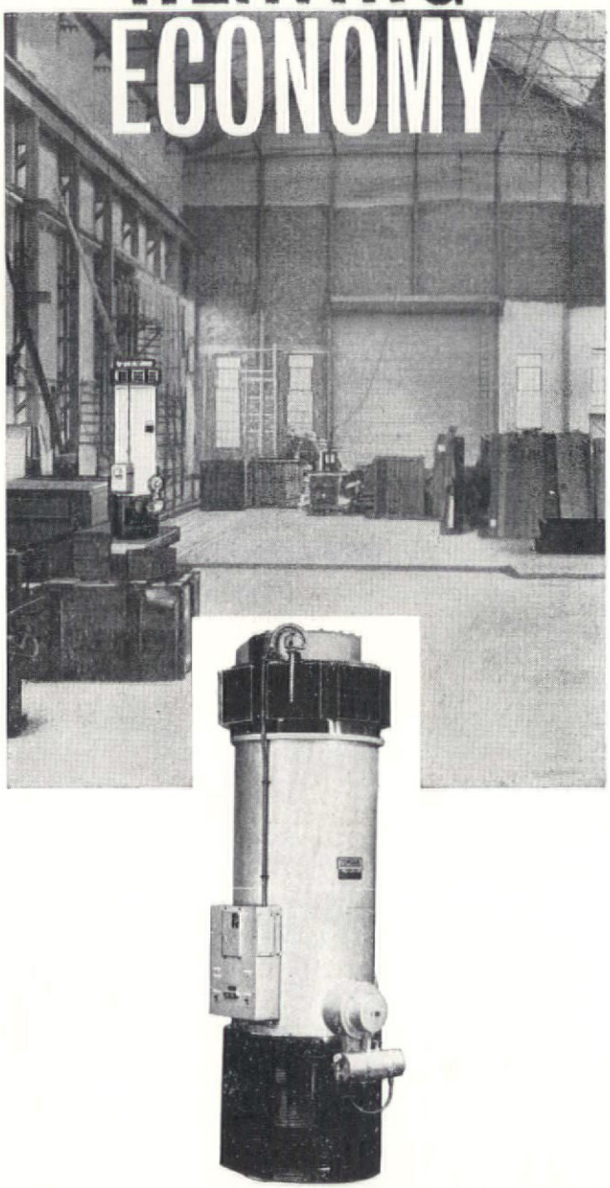

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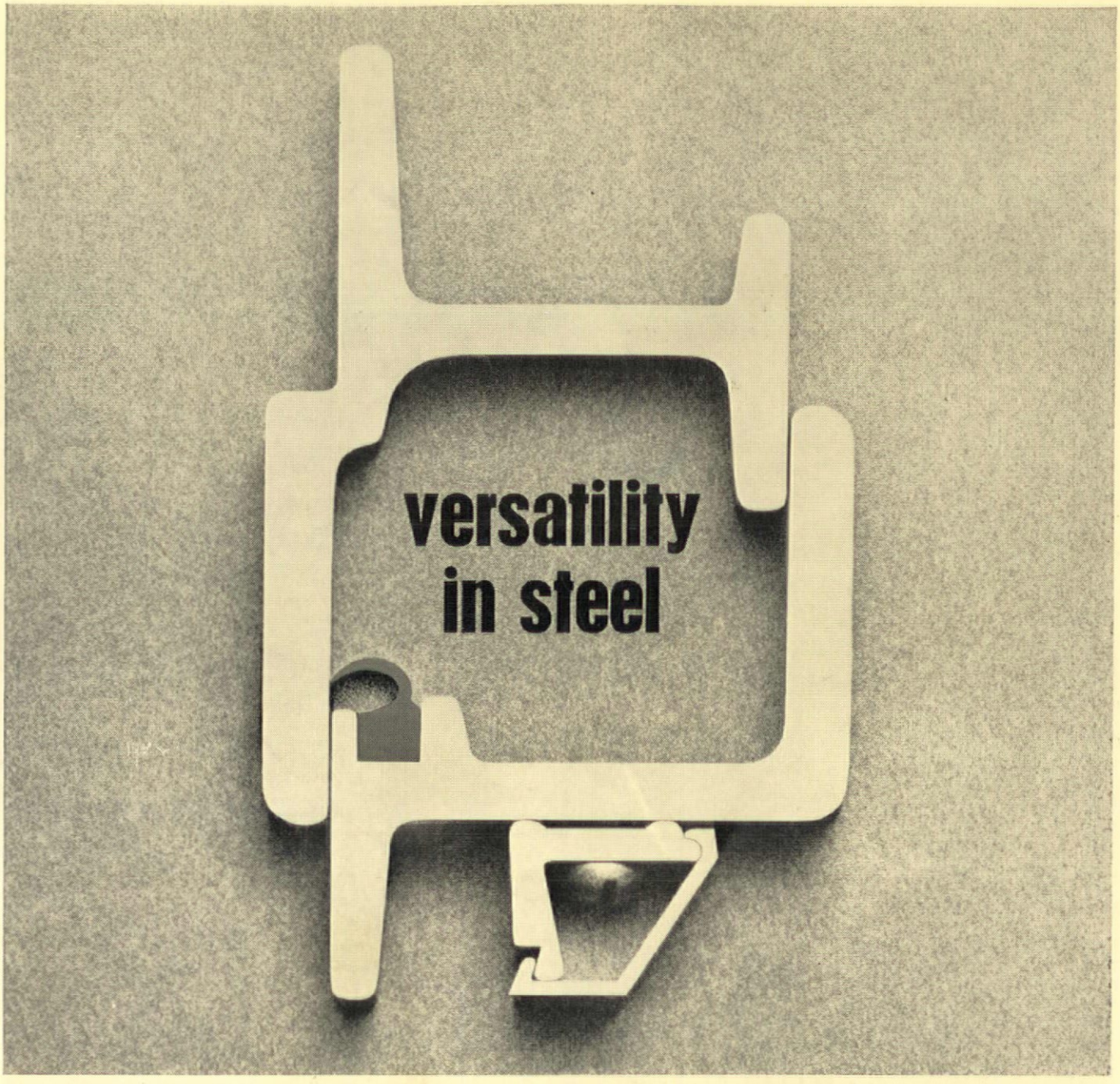

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