GLAS-CRETE

REINFORCED CONCRETE
AND
GLASS CONSTRUCTIONS

J.A.KING & CO., LTD.

BRIDGE HOUSE,
181, QUEEN VICTORIA STREET,
LONDON E.C.4.

Telephone.
CENTRAL 5866
4 Lines

Telegrams.
KINOVIQUE,
Cent. London

GLAS-CRETE.

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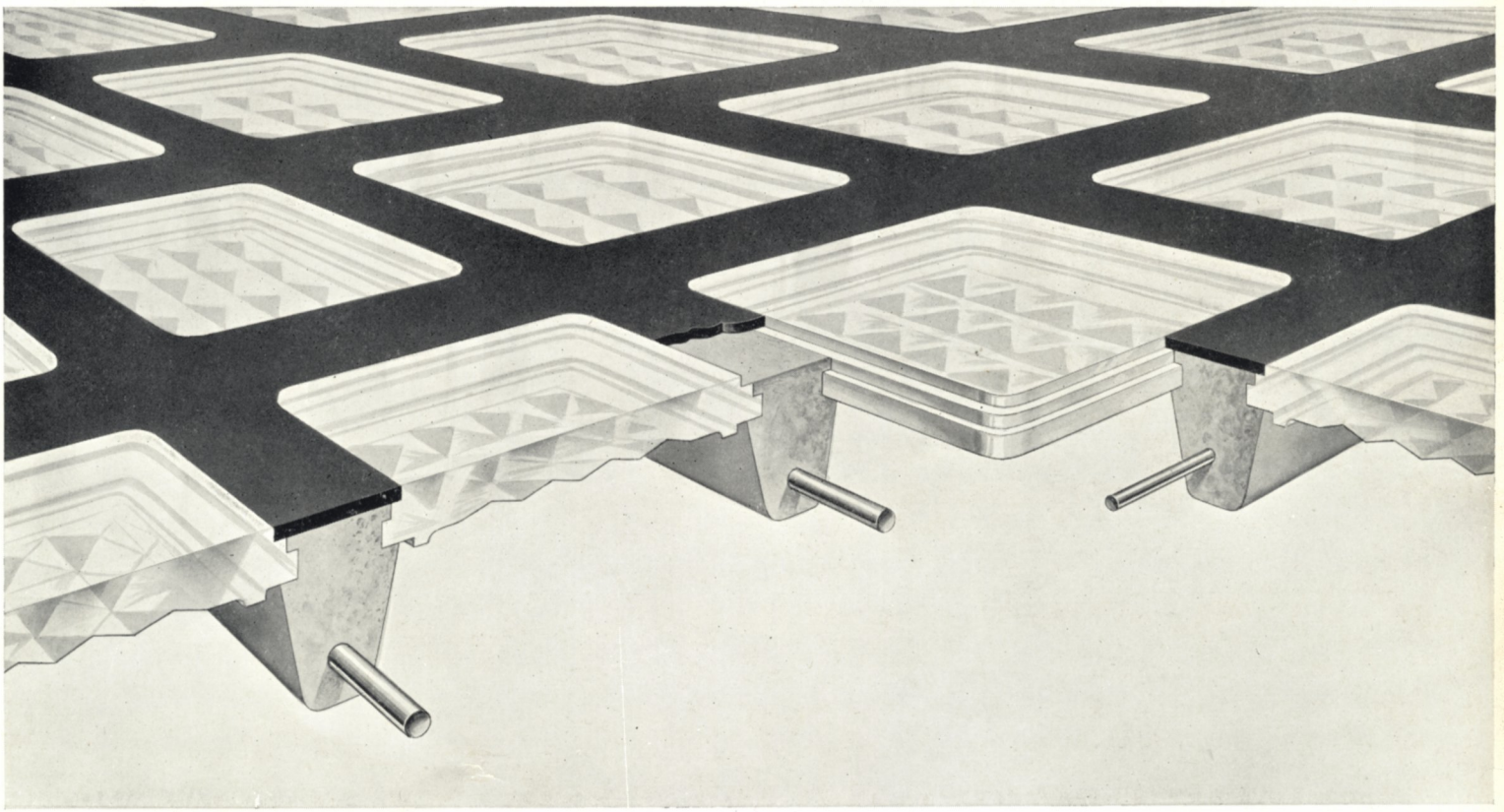
GLAS-CRETE PATENT CONSTRUCTIONS

ROOFS, FLOORS, CANOPIES, LANTERNS & DOMES



Asphalte top surface provides a construction which is absolutely watertight under all conditions.

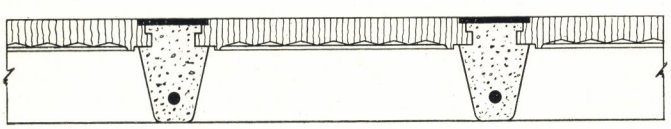
All joints between glass and concrete sealed.

All expansion joints between panels of lights sealed.

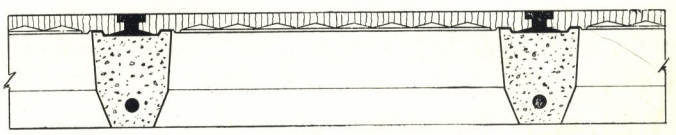
All joints between lights and main roof asphalte sealed.

All glasses insulated with our special insulating material to take up expansion.

FULL GUARANTEE GIVEN



Glasses Cast in Concrete.



Glasses Embedded in Bitumen.

J. A. KING & CO., LTD., 181, Queen Victoria Street, LONDON, E.C.4.

Telephones—CENTRAL 5866 (4 lines). Telegrams—"KINOVIQUE, CENT, LONDON."

BRANCHES :

BRISTOL—ROWNHAM HILL, ASHTON GATE. (Bristol 63700).

LEEDS—4, OXFORD PLACE. (Leeds 22712).

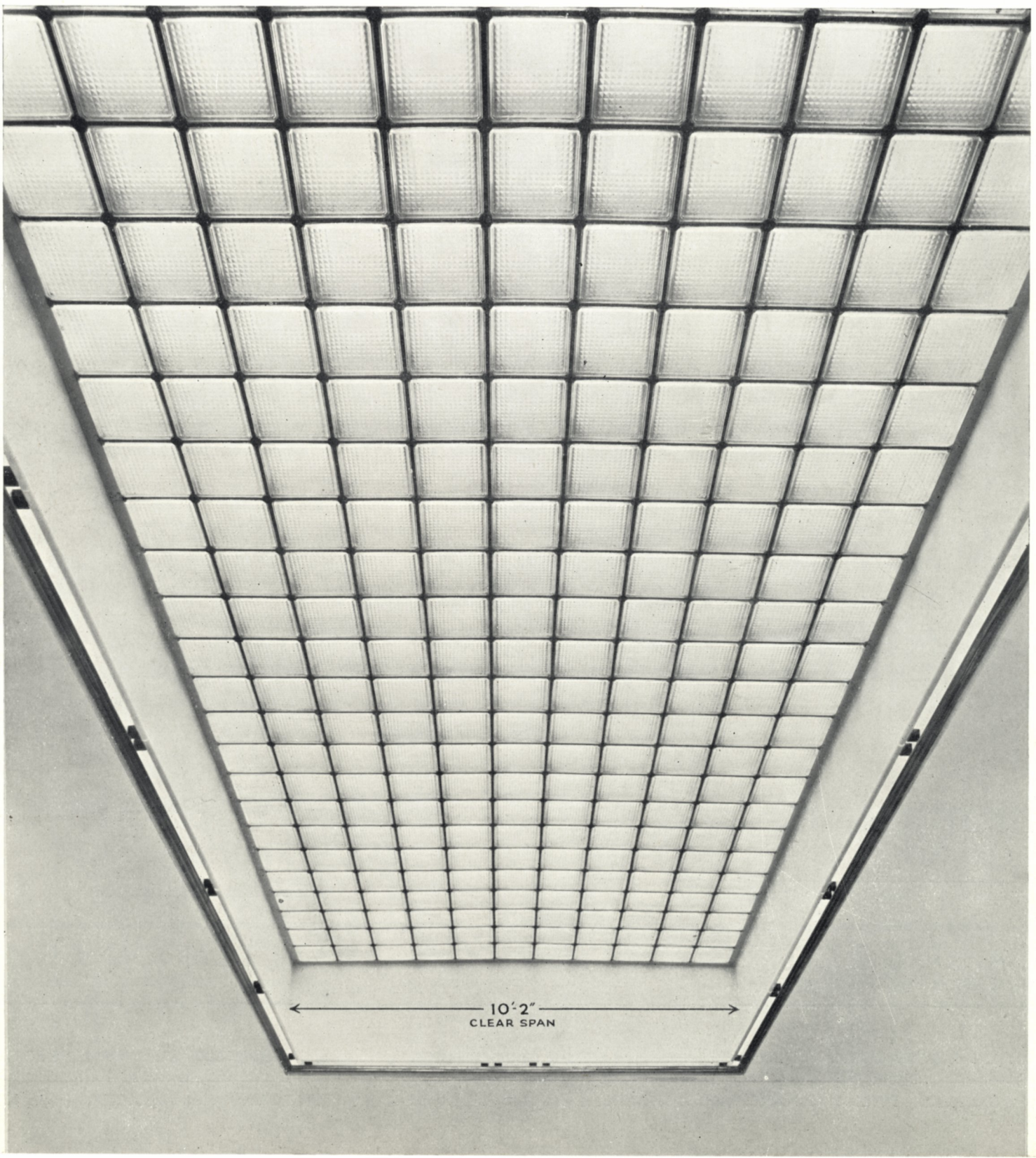
SHEFFIELD—272, ATTERCLIFFE ROAD. (Sheffield 26189).

NEWCASTLE-ON-TYNE—11, ELMFIELD PARK, GOSFORTH.

LONDON WORKS—CLAYTON ROAD, HAYES, MIDDLESEX. (Hayes 10).

GLAS-CRETE DOUBLE CONSTRUCTION

Artificial lighting is provided by neon tube which can be seen around the opening in the ceiling and at night the soffit glasses reflect all the illumination from the artificial lighting, thus producing a brilliant effect and entirely replacing the dark area usually given by other types of roof lights.



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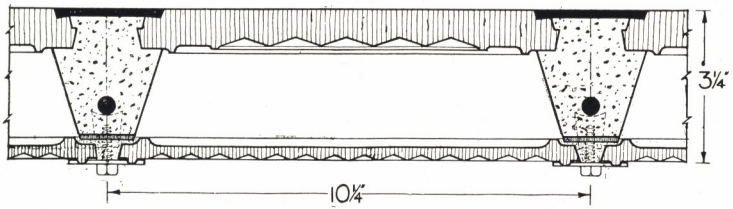
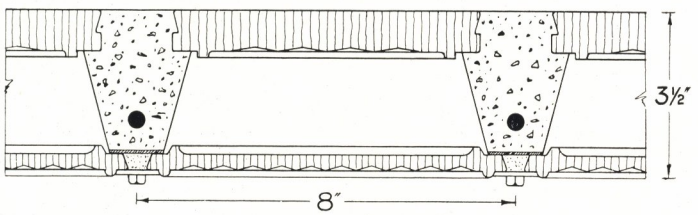


TYPE 34D/281 - 10¼" Centres - 3¼" Thick overall
,, 34D/325 - 10¼" ,, - 3¾" ,,
,, 34D/350 - 10¼" ,, - 4" ,,
,, 34D/400 - 10¼" ,, - 4½" ,,



TYPE 32D/300
8" Centres 3½" Thick

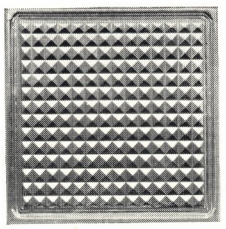
This Double Glazed Construction forms a roof light and lay light combined, and insulates against sound and temperature and eliminates any possibility of condensation.

The top section shows the Special Asphalte Finish (Patent), which can be embodied in all the Types Nos. 32 and 34.

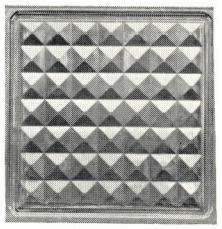
At night a brilliant appearance is produced by the modelling on the soffit glasses reflecting the internal illumination.

In setting out double construction lights allow 1" all round openings for fixing soffit glasses.

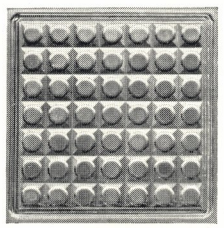
TYPES OF SOFFIT GLASSES



34 D

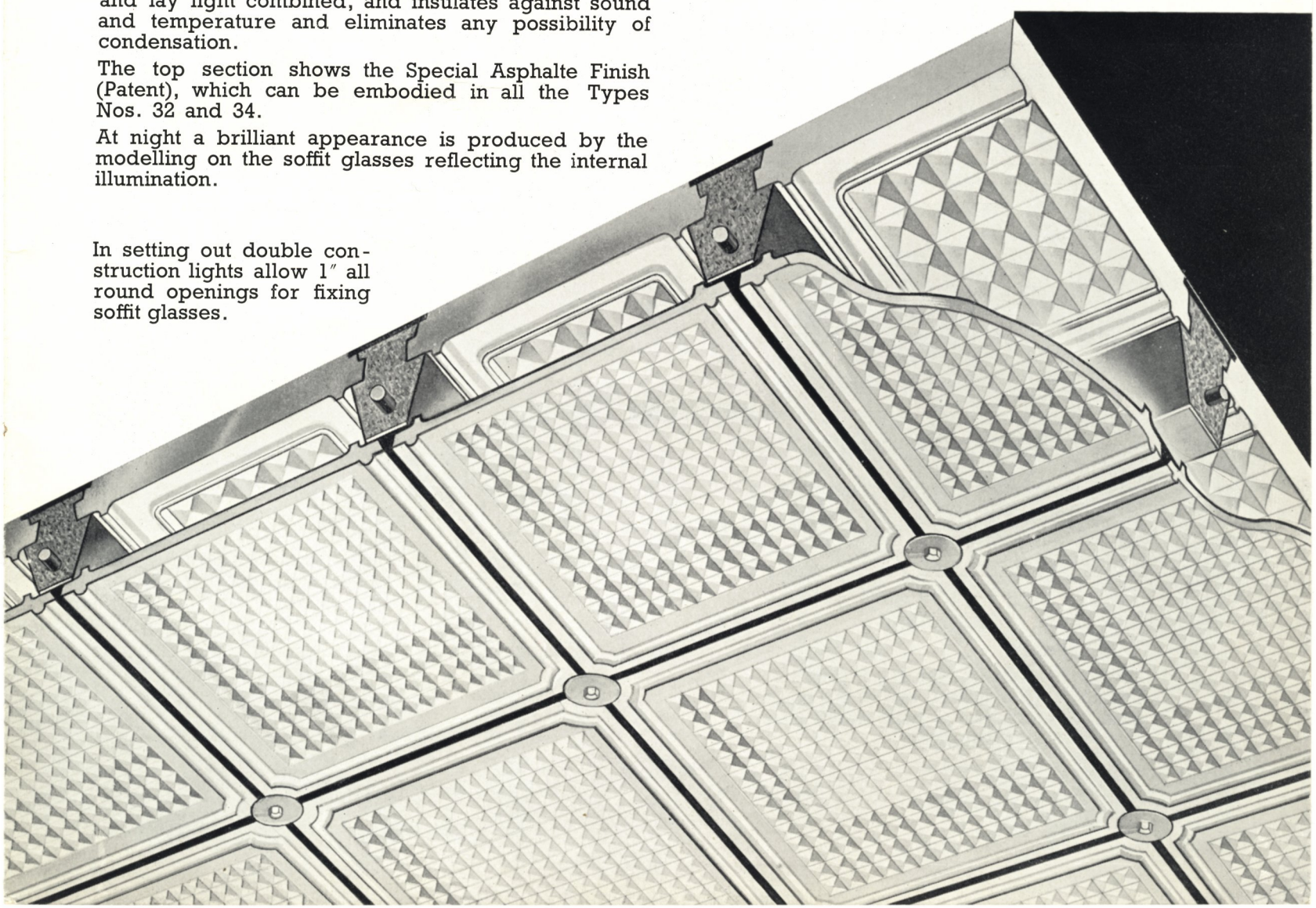


34 DD



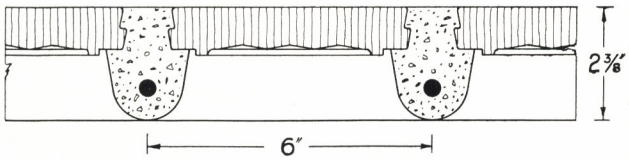
34 DB

34 AD



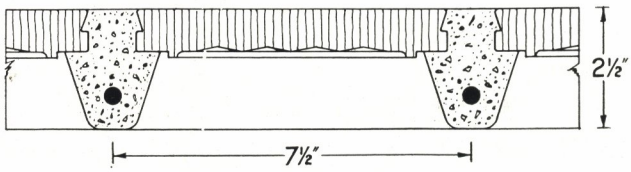
GLAS-CRETE SINGLE CONSTRUCTION

ROOF AND FLOOR LIGHTS



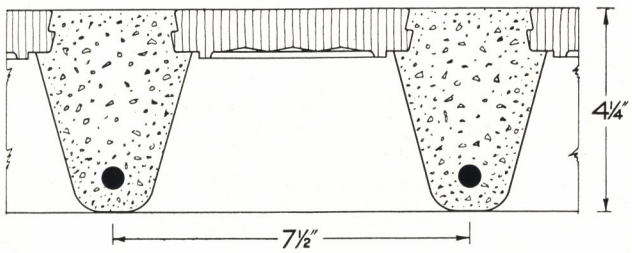
TYPE 17/238

6" Centres 2⅜" Thick



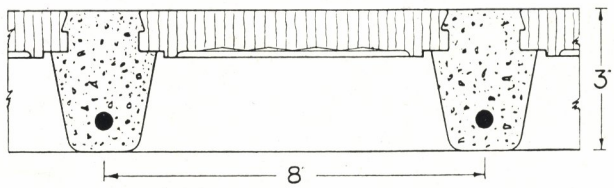
TYPE 32/250

7½" Centres 2½" Thick



TYPE 17/425

7½" Centres 4¼" Thick



TYPE 32/300

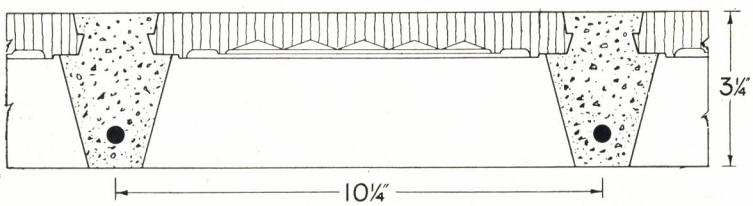
8" Centres 3" Thick

TYPE 32/350

8" Centres 3½" Thick

TYPE 32/400

9" Centres 4" Thick



TYPE 34/281

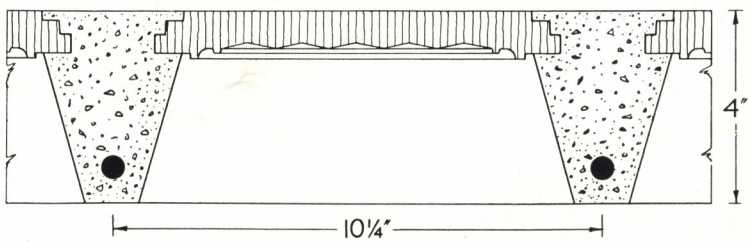
10¼" Centres 2¾" Thick

TYPE 34/325

10¼" Centres 3¼" Thick

TYPE 34/350

10¼" Centres 3½" Thick

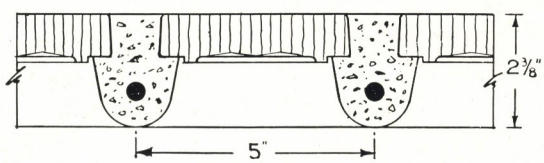


TYPE 34/400

10¼" Centres 4" Thick

PAVEMENT LIGHTS

FOR PEDESTRIAN TRAFFIC

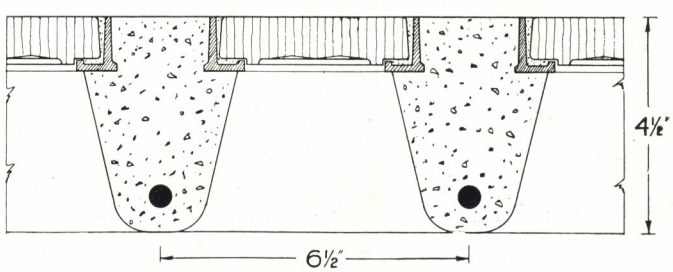


TYPE 16/238

5" Centres 2⅜" Thick

This type alone is used for Public Foot Traffic, as the lenses are of the maximum size consistent with safety from slipping

FOR MOTOR TRAFFIC



TYPE 16/425 R

6½" Centres 4½" Thick

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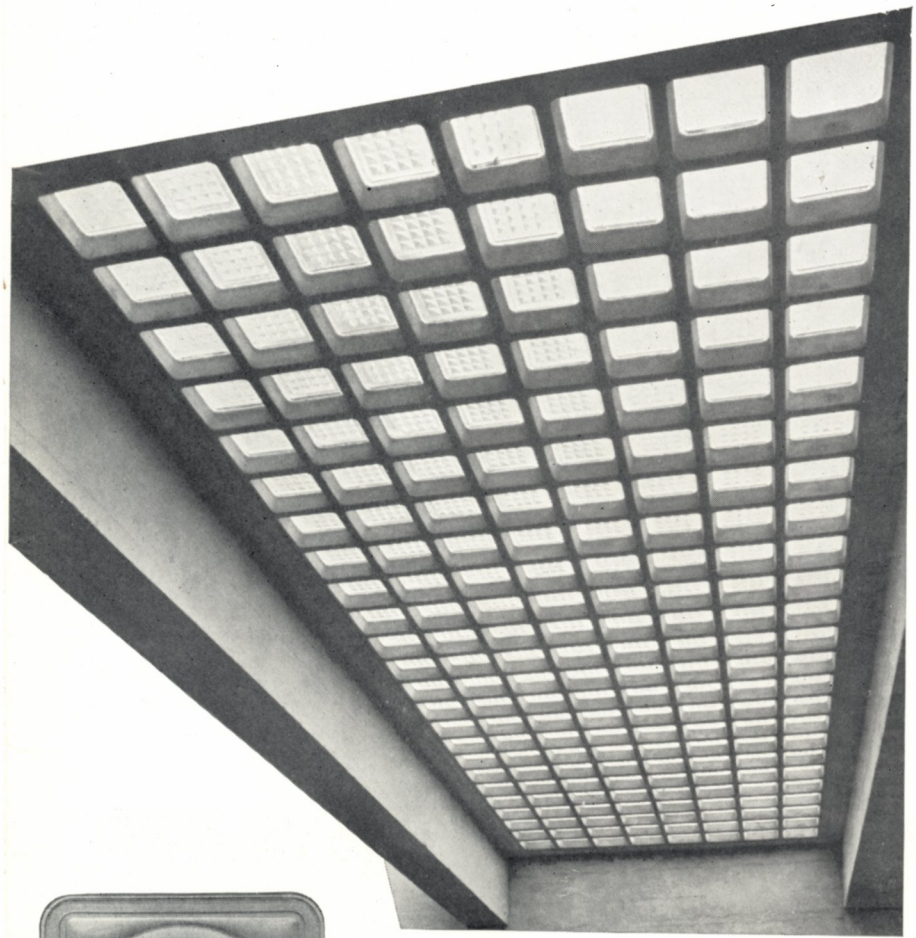
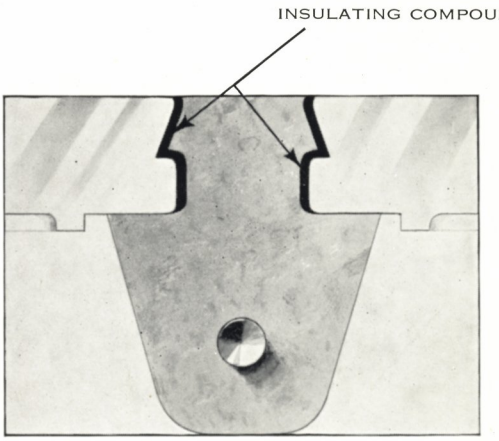
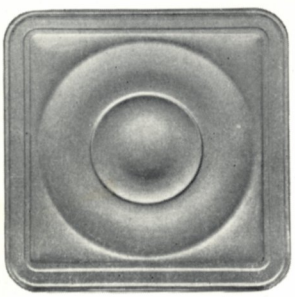


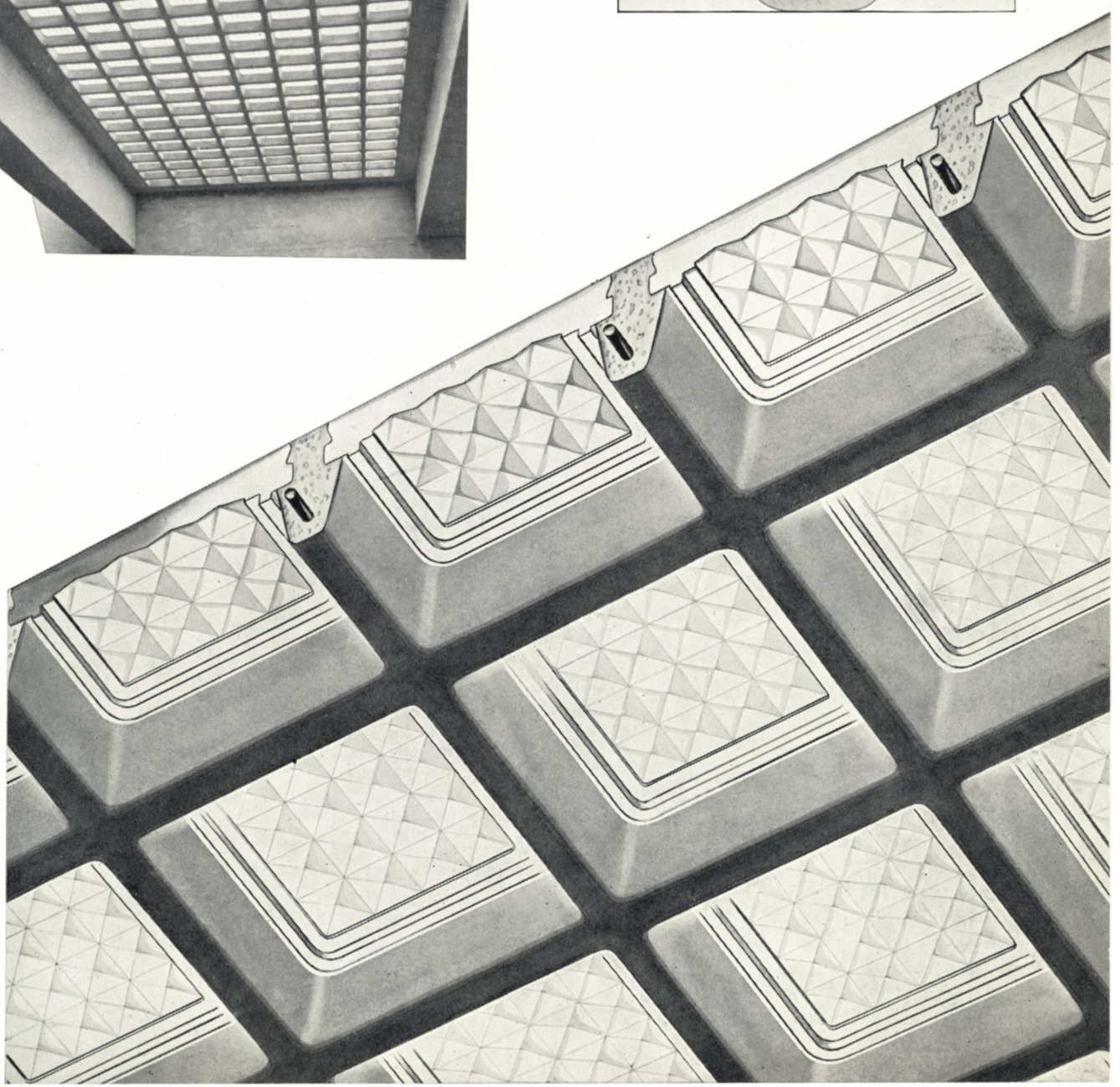
All Lenses are insulated to their full depth with our special insulating compound to allow for expansion and contraction of the glass.





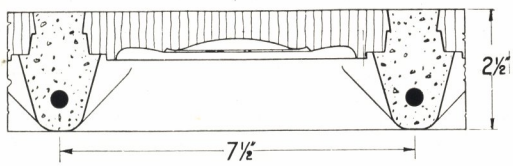
Lens No. 34 RS
Alternative pattern to diamond type shown in illustrations.

The design of each of our lenses is such that the rays of the sun are not focussed but are refracted and diffused to obtain the best possible results consistent with the production of a pattern which can be easily cleaned.

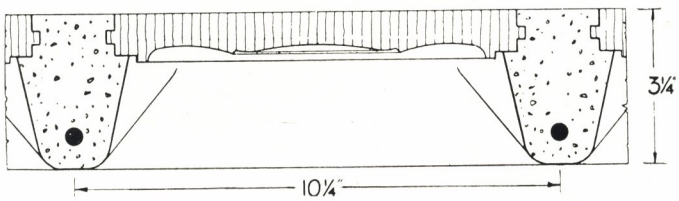


GLAS-CRETE PATENT CONSTRUCTION

TYPE R.

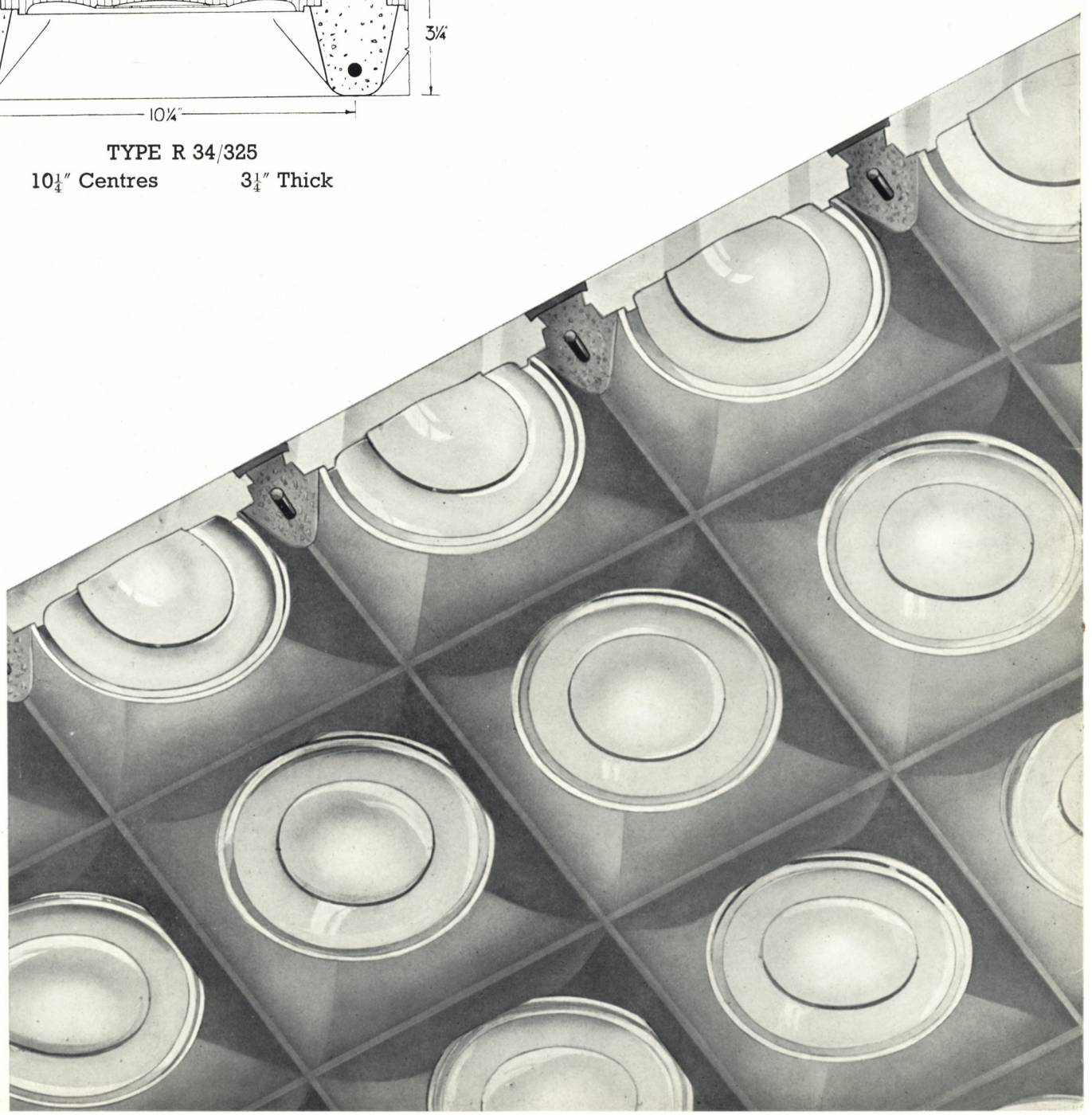


TYPE R 32/250
7½" Centres 2½" Thick



TYPE R 34/325
10¼" Centres 3¼" Thick

This construction is in the form of circular lenses resting on small concrete members which form a square mesh. The spandrel corners are sharply cut away on the under-side to allow the maximum of light to be transmitted.



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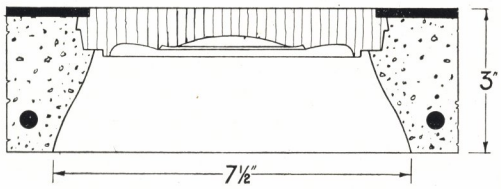
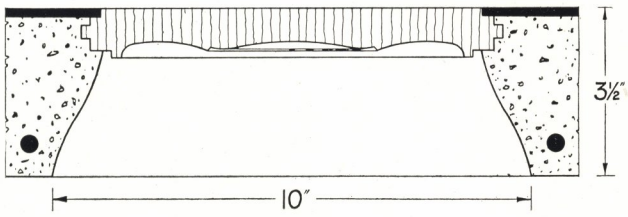
TYPE RC.



TYPE RC 32/300

8½" Centres 3" Thick



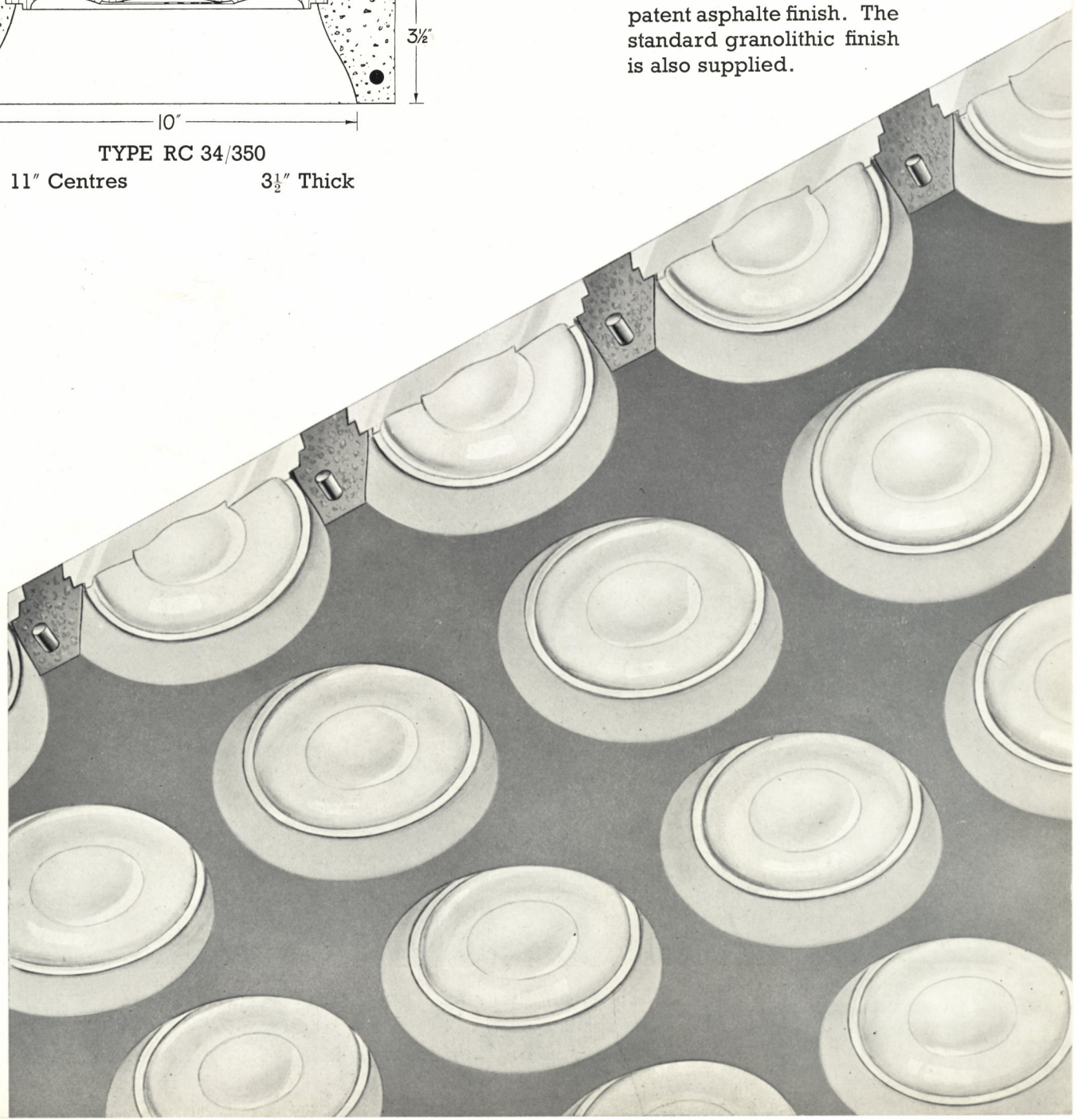
TYPE RC 34/350

11" Centres 3½" Thick

Centres of reinforcement shown here are the minimum in each case. The lenses can of course be spaced out to suit individual requirements.

This construction is well suited for domes and all curved work.

These sections show our patent asphalte finish. The standard granolithic finish is also supplied.



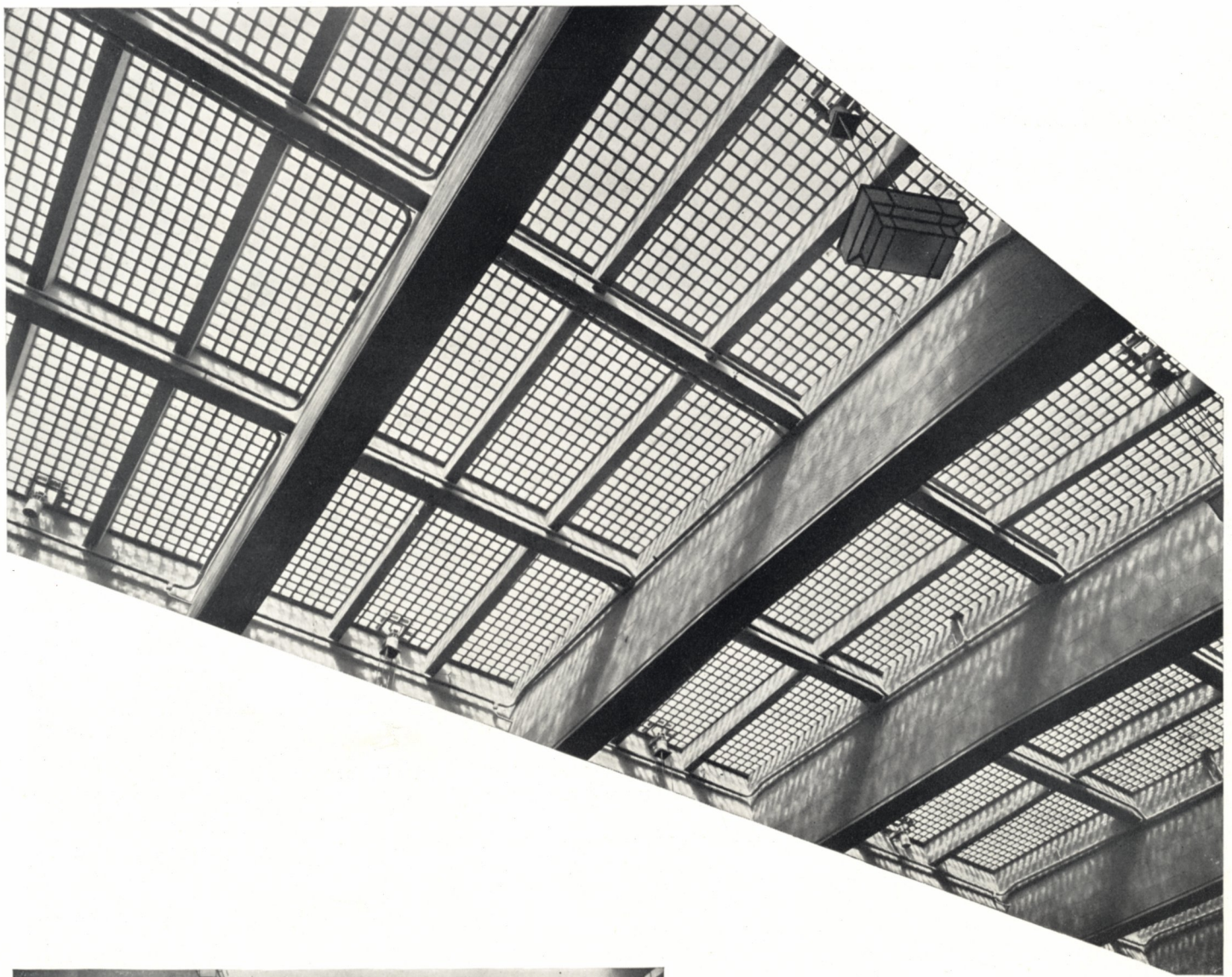
ROOF LIGHTS

ROOF OF TURBINE HOUSE,
FULHAM POWER STATION

13011 Feet Super of Glas-Crete Patent Construction, Type 34, Double Glazed, Asphalte Finish. Size of Panels 24′ 0″ × 7′ 6″

Messrs. Preece, Cardew & Rider
Arthur J. Fuller, Esq.,
Consulting Engineers,
in association with
Messrs. S. H. White & Son, Engineers

J. A. KING & CO., LTD.



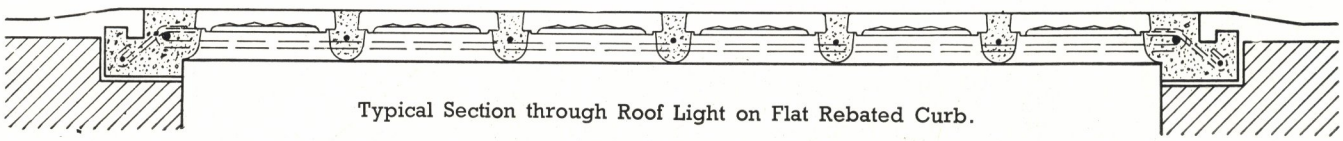
Interior view of Leyton Public Baths.

Glas-Crete Roof
of
Public Baths, Leyton.

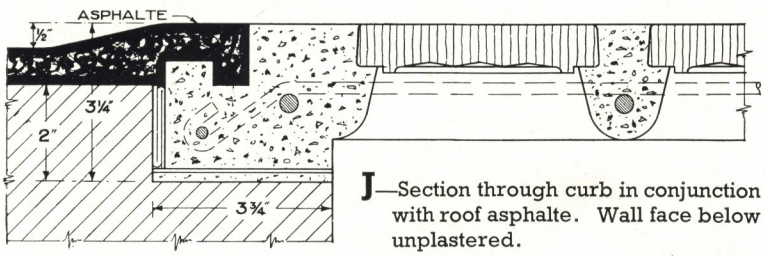
Area 5,920 Feet Super

Construction Type 32/300

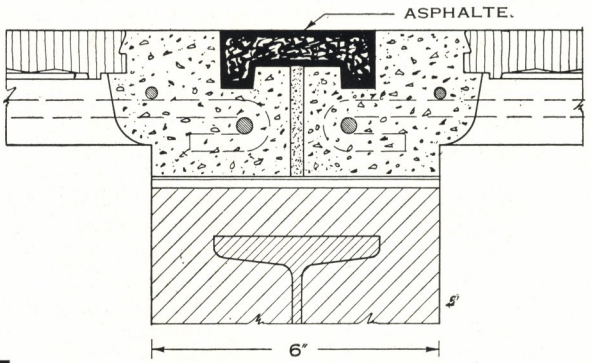
ROOF LIGHTS



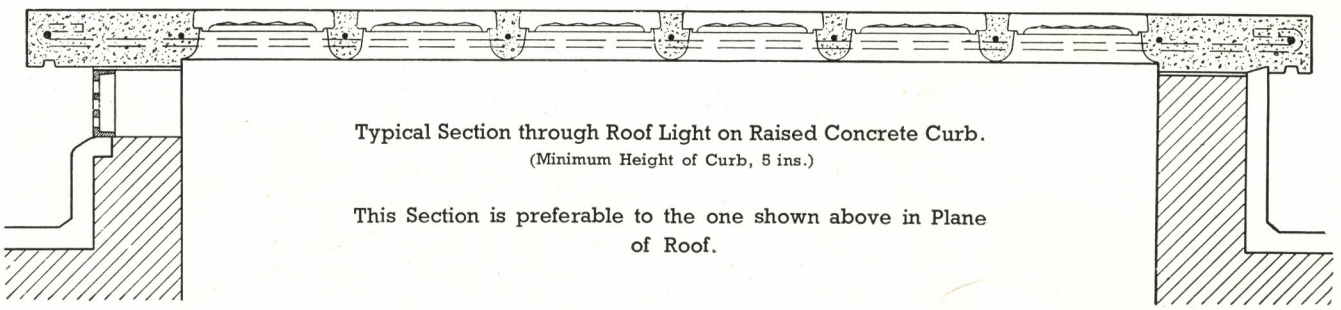
Typical Section through Roof Light on Flat Rebated Curb.



J—Section through curb in conjunction with roof asphalte. Wall face below unplastered.

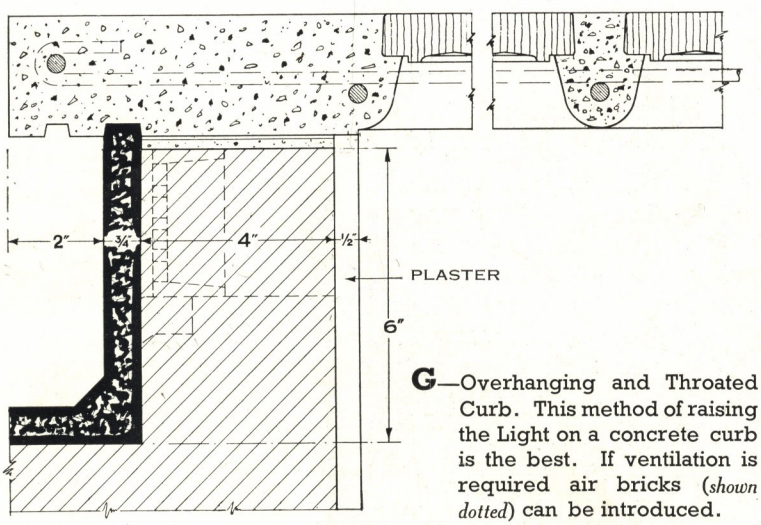


L—This joint between adjacent panels is the best practice and should be used wherever possible.

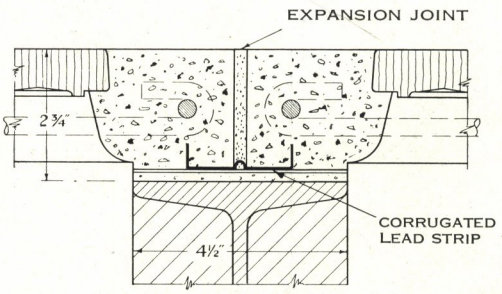


Typical Section through Roof Light on Raised Concrete Curb.
(Minimum Height of Curb, 5 ins.)

This Section is preferable to the one shown above in Plane of Roof.



G—Overhanging and Throated Curb. This method of raising the Light on a concrete curb is the best. If ventilation is required air bricks (*shown dotted*) can be introduced.



H—Expansion joint between adjacent panels bearing on a beam. The height of top of light above beam level varies with the construction used.

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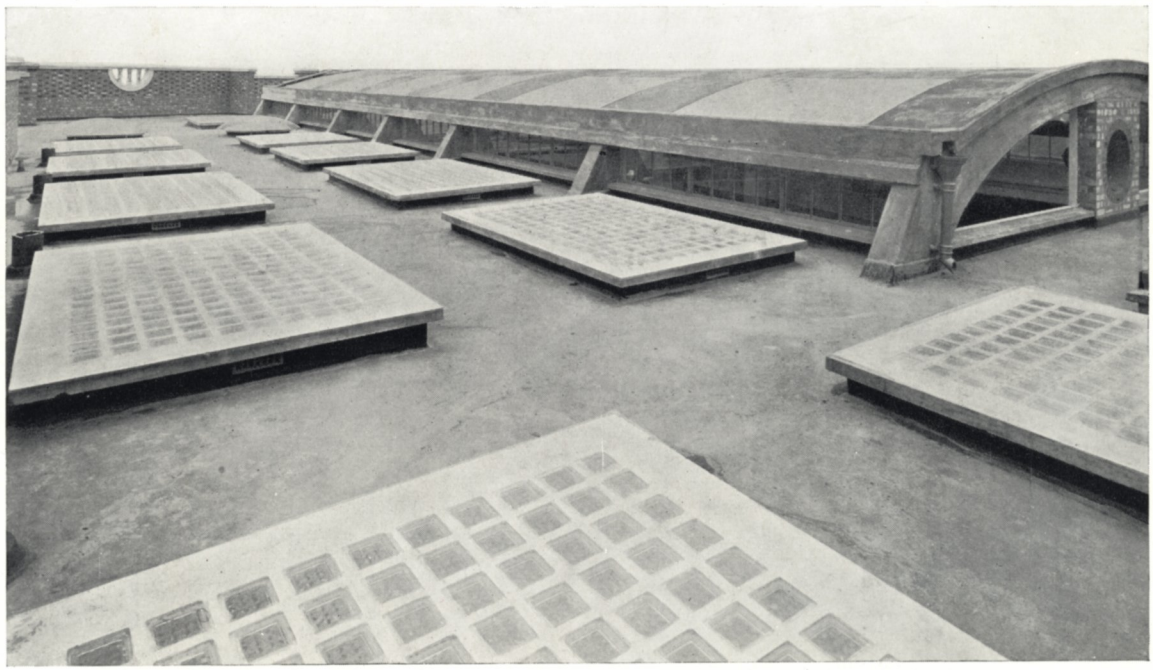


Example of
Glas-Crete lights on raised
concrete curbs.

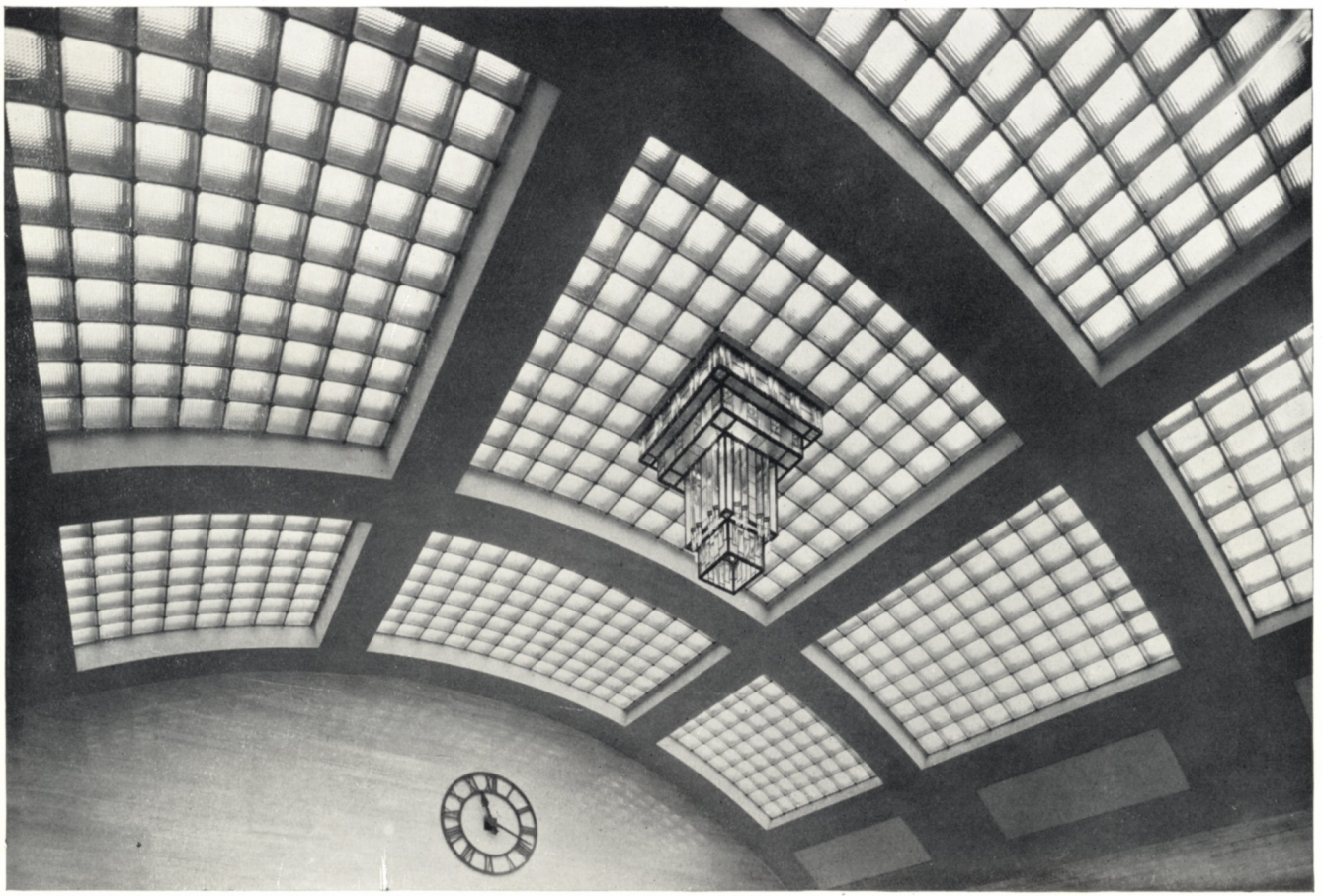
See opposite page
section G.

Example of lights flush
with asphalte.

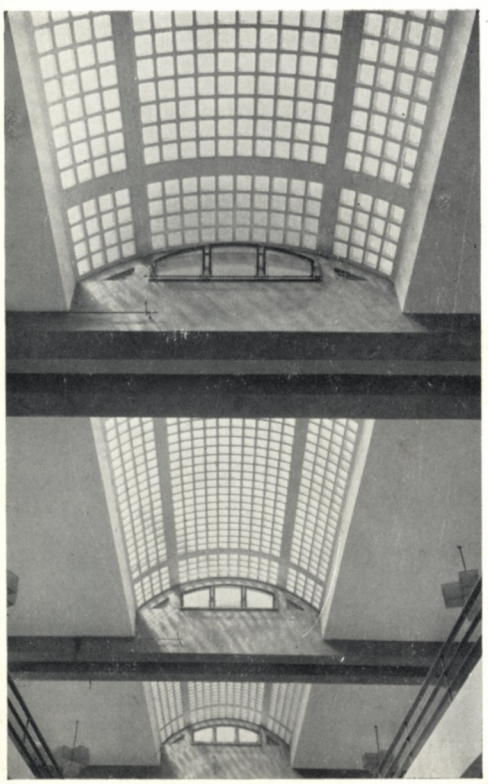
See opposite page
Section J.

Both illustrations
on this page are of the
Roof of the
Leyton Public Baths,
Cathall Road, E. 10.

BARREL LIGHTS



Barrel Light over Booking Hall at Southampton Central Station, Southern Railway.

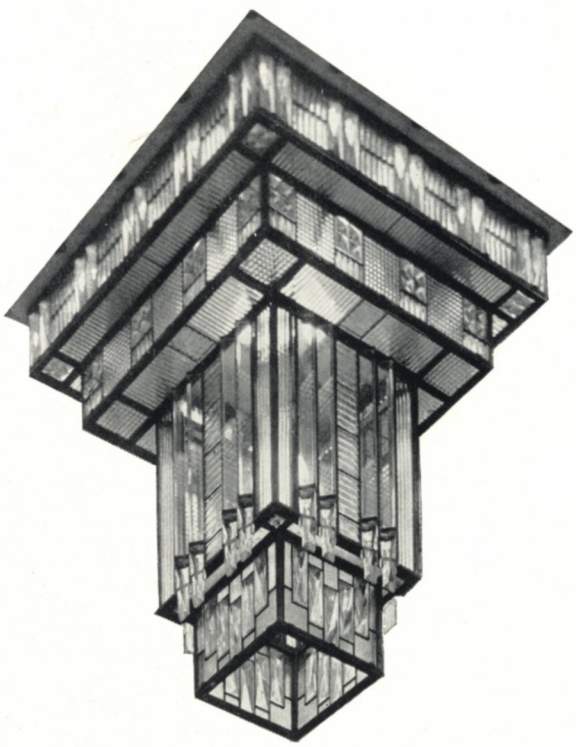


Construction used was Type 34 double glazed. The pendant lamp in centre (shown in detail photograph) is of bronze framing and electro-copper glazing incorporating our "Cristol" high relief glass units.

Other work at the above was the construction of canopy to Main Entrance, and roof lights to Tea and Refreshment Rooms, Lavatories, and Loading and Fish Docks.

LEFT.
Barrel Light over Tea Room at Wallasey Bathing Pool.

Construction used—
Type 32/300.



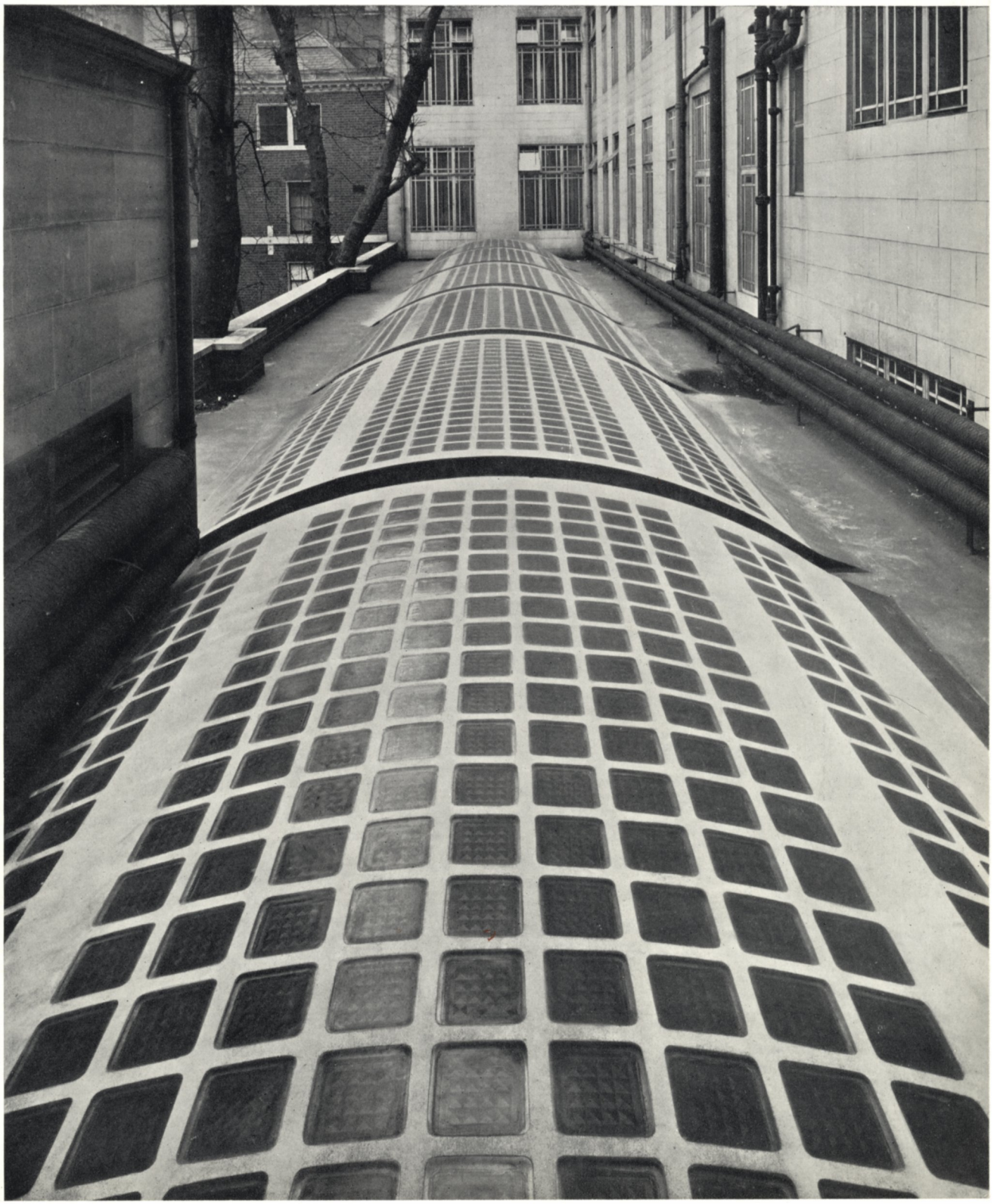
DETAIL OF PENDANT LAMP

formed of our "Cristol" high relief glass units set in Bronze framing.

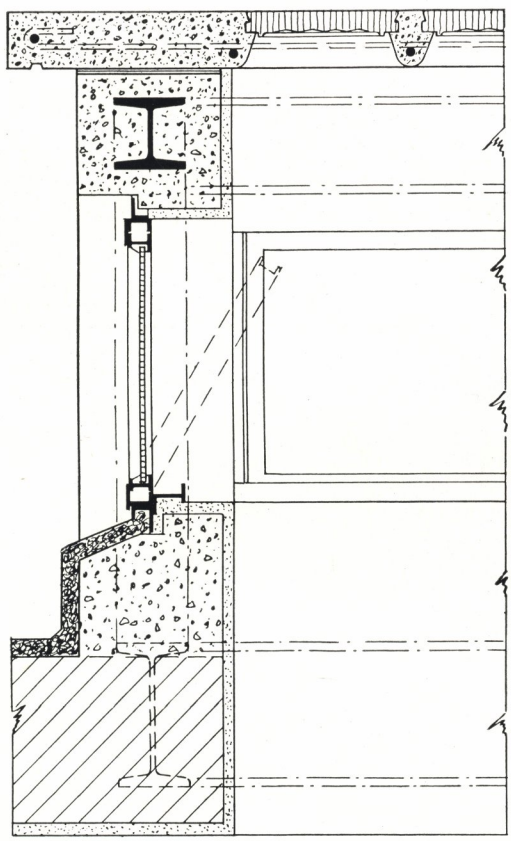
J. A. KING & CO., LTD.

Barrel Roof Lights at 3, St. James Square, W. 1.

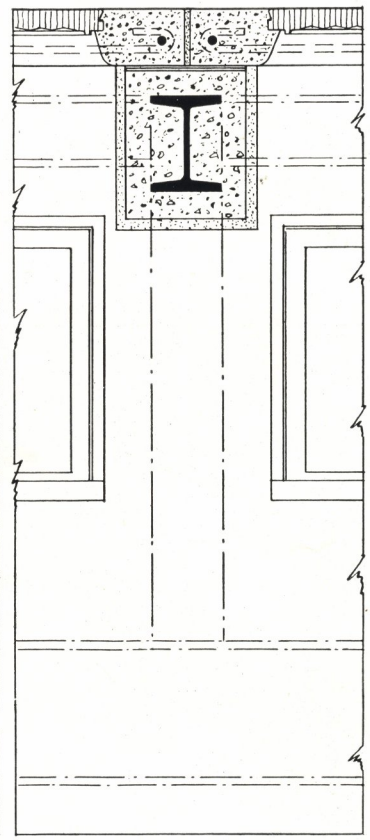
This illustration shows the neat and unobtrusive appearance of this method of top lighting. Views from the surrounding windows are entirely uninterrupted. Construction used—Type 32/300.



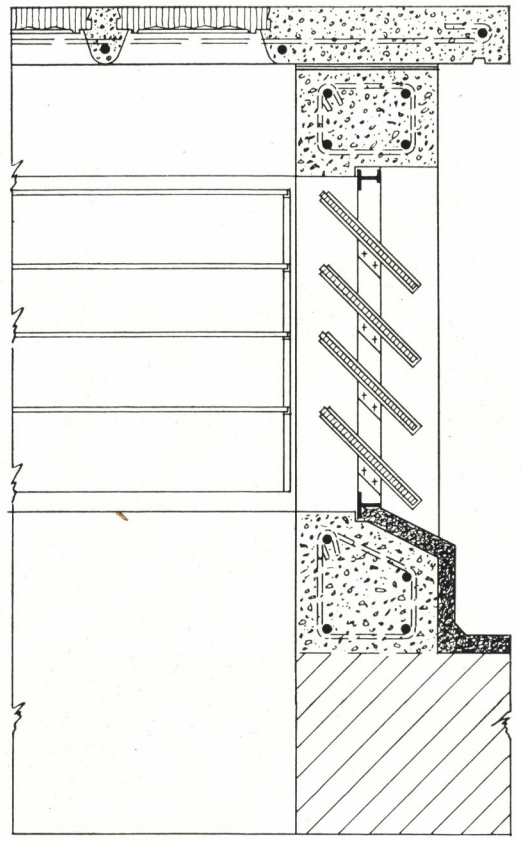
LANTERN LIGHTS



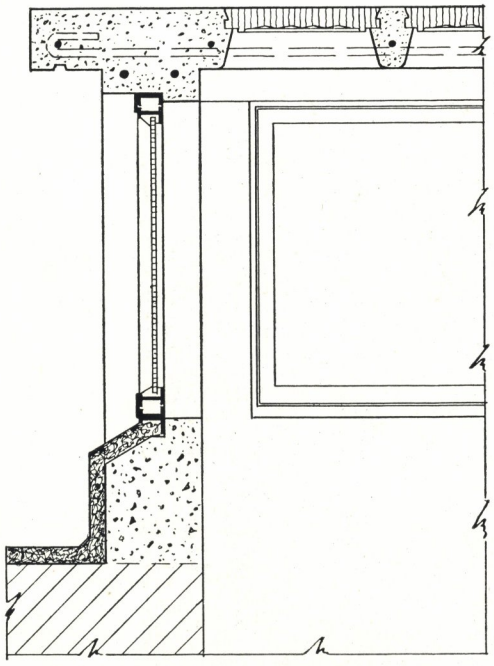
Bottom Hung Sashes in framing of cased steelwork.



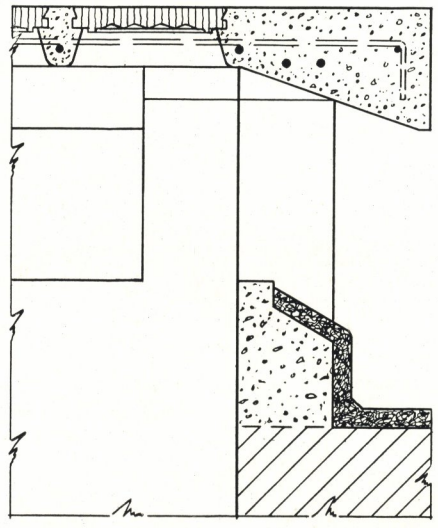
Where beams are necessary this section applies.



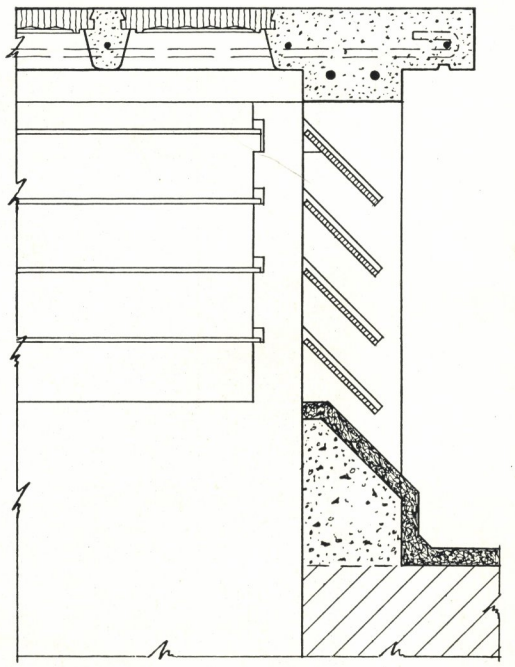
Glass Louvres in framing of reinforced concrete.



Centre hung or fixed sashes in the vertical sides.

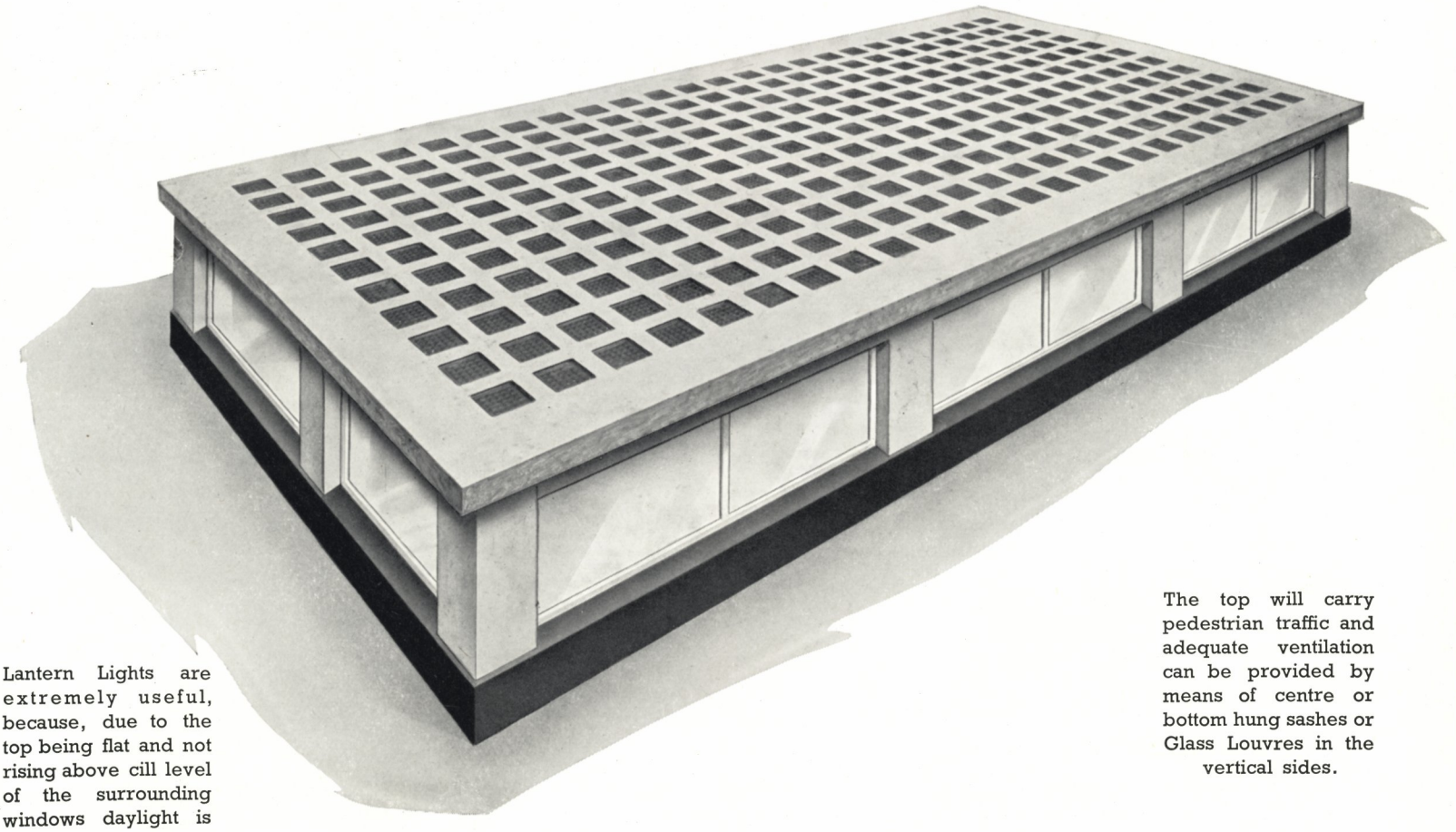


Detail of Lantern where maximum ventilation is required, e.g., garages.



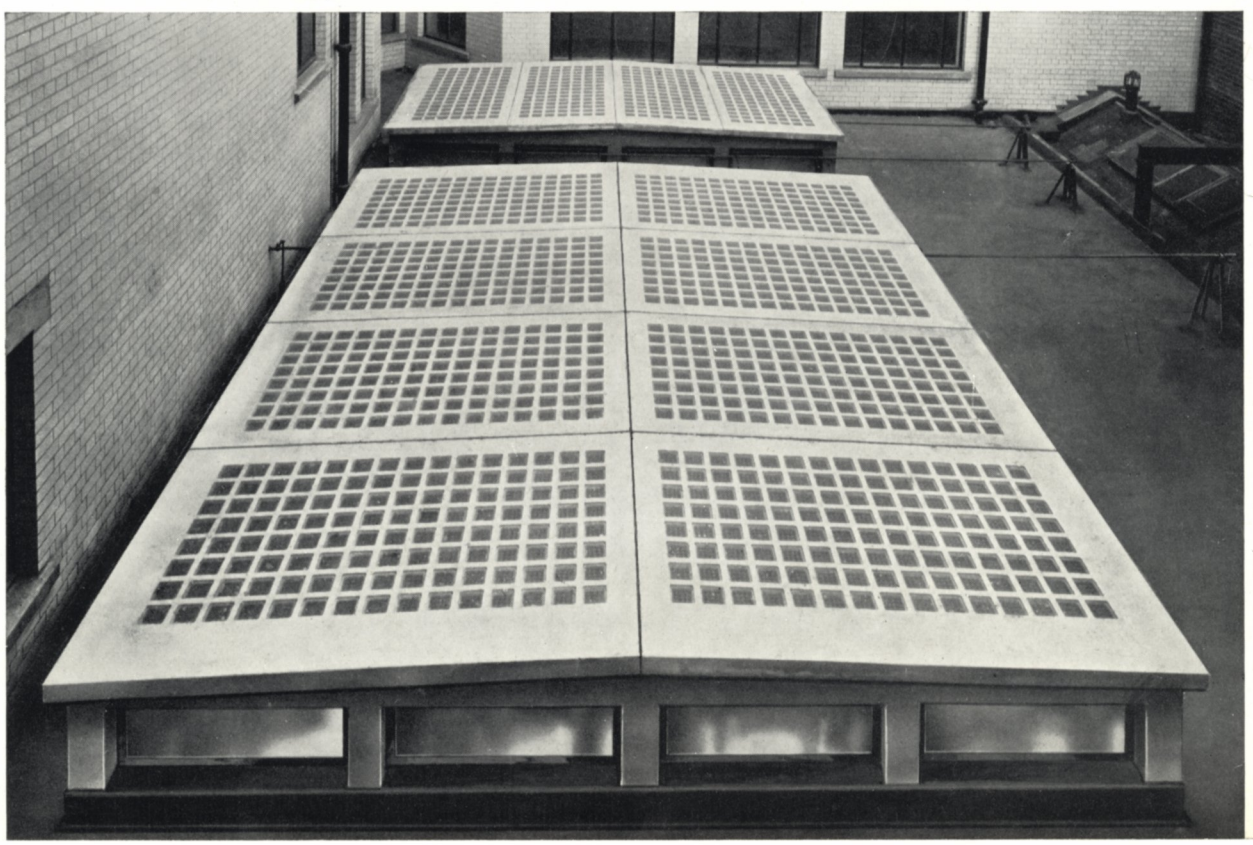
Glass Louvre blades inserted into grooves formed in the concrete mullions.

J. A. KING & CO., LTD.



Lantern Lights are extremely useful, because, due to the top being flat and not rising above cill level of the surrounding windows daylight is not obstructed.

The top will carry pedestrian traffic and adequate ventilation can be provided by means of centre or bottom hung sashes or Glass Louvres in the vertical sides.



Lantern Lights, Dorland House, London.

J. J. Joass, Esq., F.R.I.B.A., Architect.

GLAS-CRETE CANOPIES

Main Entrance
to
Wallasey Bathing Pool.

Engineer and Surveyor:
L. St. John Wilkinson, Esq.

Construction used
Type 17/238.

Palace Court, Bournemouth.

Architects:
A. J. Seal & Partners.

Construction used
Type R 32/250.

Bournemouth "Echo"
Building.

Construction used
Type 17/238.

J. A. KING & CO., LTD.

Southampton Central
Station,
Southern Railway.

Construction used
Type 17/238.

Projection of Canopy
8′ 6″

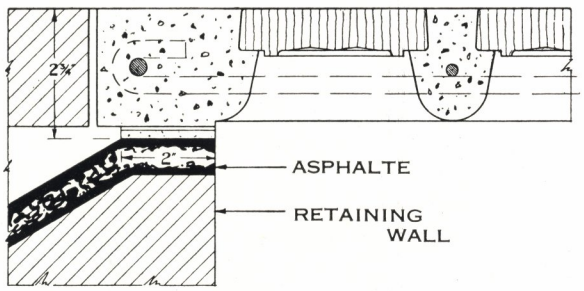
"Cresta" Garage,
Worthing.

Architects:
A. J. Seal & Partners.

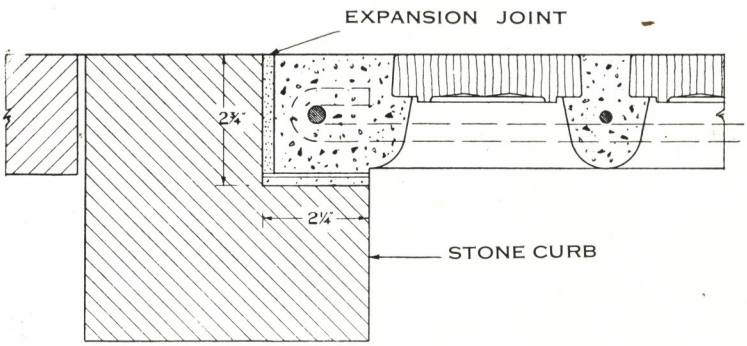
Construction used
Type 32/250.

Projection of Canopy
7′ 6″

PAVEMENT LIGHT DETAILS

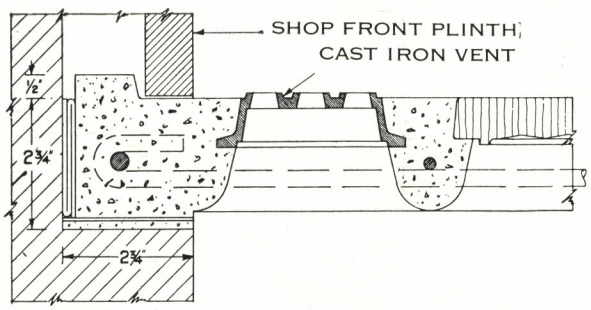


A—To ensure a thoroughly watertight job when flagstones adjoin the Light this Section should be adopted. Any water finding its way between the flags and Light falls on the sloping face of the asphalte and is carried away from the building.

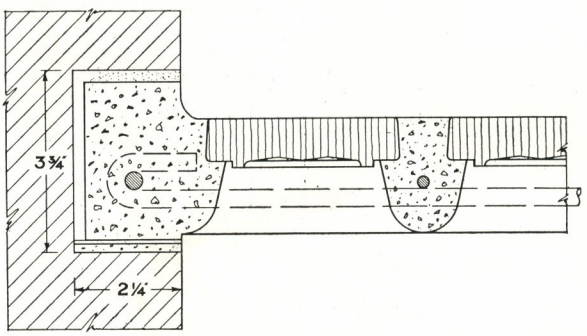


B—Where a stone curb is required this Section gives the rebate necessary to take the Light, $2\frac{3}{4}$" deep × $2\frac{1}{4}$" wide.

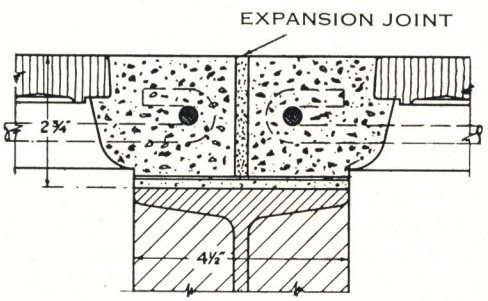
NOTE:—The height of rebate required for other types of constructions would be the thickness of the required type, plus $\frac{3}{8}$" for bedding.



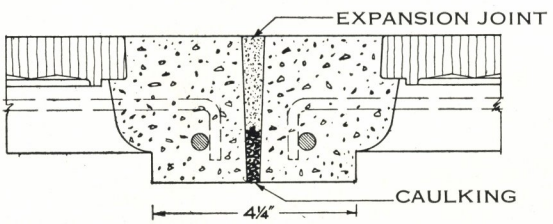
D—A typical Section through the plinth of a shop front showing a substantial concrete water bar behind plinth. Cast Iron Ventilators are shown in the back row.



F—Shows the chase required in a stone or brick wall. The provision of a concrete water bar ensures a watertight job.



H—The cased R.S.J. shown above is typical. A reinforced concrete beam or uncased joist can be used but the width required for the double bearing must be $4\frac{1}{2}$" minimum.



M—This Butt Joint is used for expansion purposes and also when large precast Lights have to be divided for handling purposes. Not used beyond a 4′ 0″ clear span.

IMPORTANT.

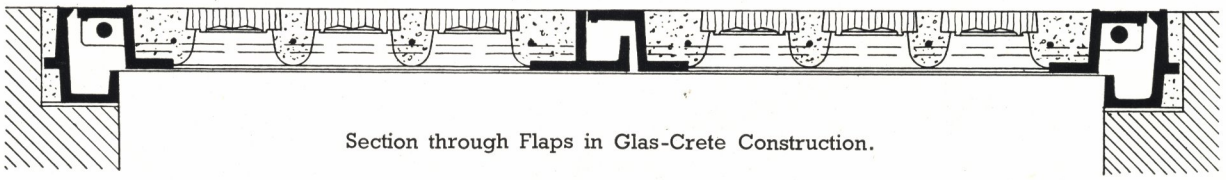
SMOKE EXTRACTS.

To meet the requirements of the London County Council Fire Brigade Authority regarding smoke extracts in certain buildings we adopt a special method of construction for pavement Lights which, although they will safely carry pedestrian traffic, can be broken with a fireman's axe when necessary to form exits for smoke. These Lights are indistinguishable from our ordinary Glas-crete.

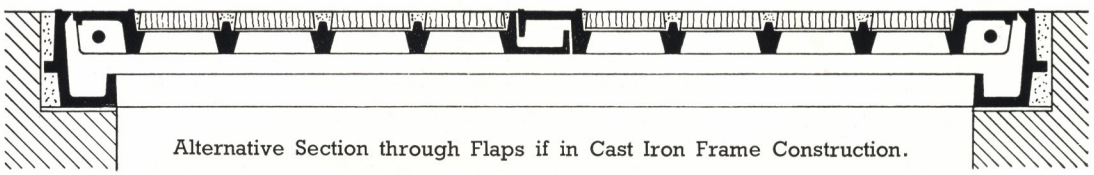
J. A. KING & CO., LTD.

A fine range of Glas-Crete Pavement Lights at Messrs. Parnells, Victoria. Lights having vitreous tile finish also supplied.

CELLAR FLAPS



Section through Flaps in Glas-Crete Construction.

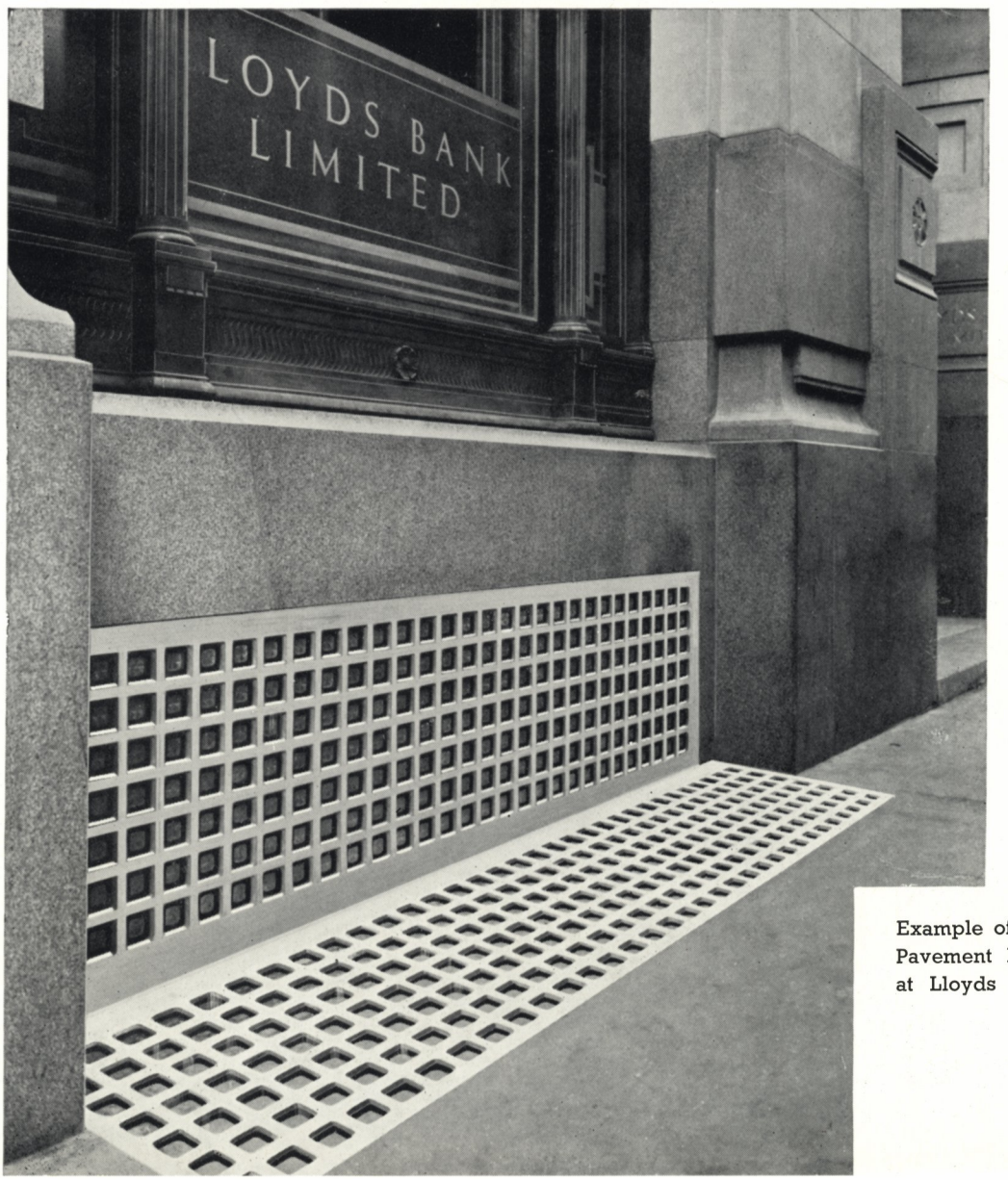


Alternative Section through Flaps if in Cast Iron Frame Construction.

For both the above types of construction the depth of rebate required is $4\frac{1}{4}''$ and the width $3\frac{1}{2}''$ for hinged sides and $3''$ for remaining sides.

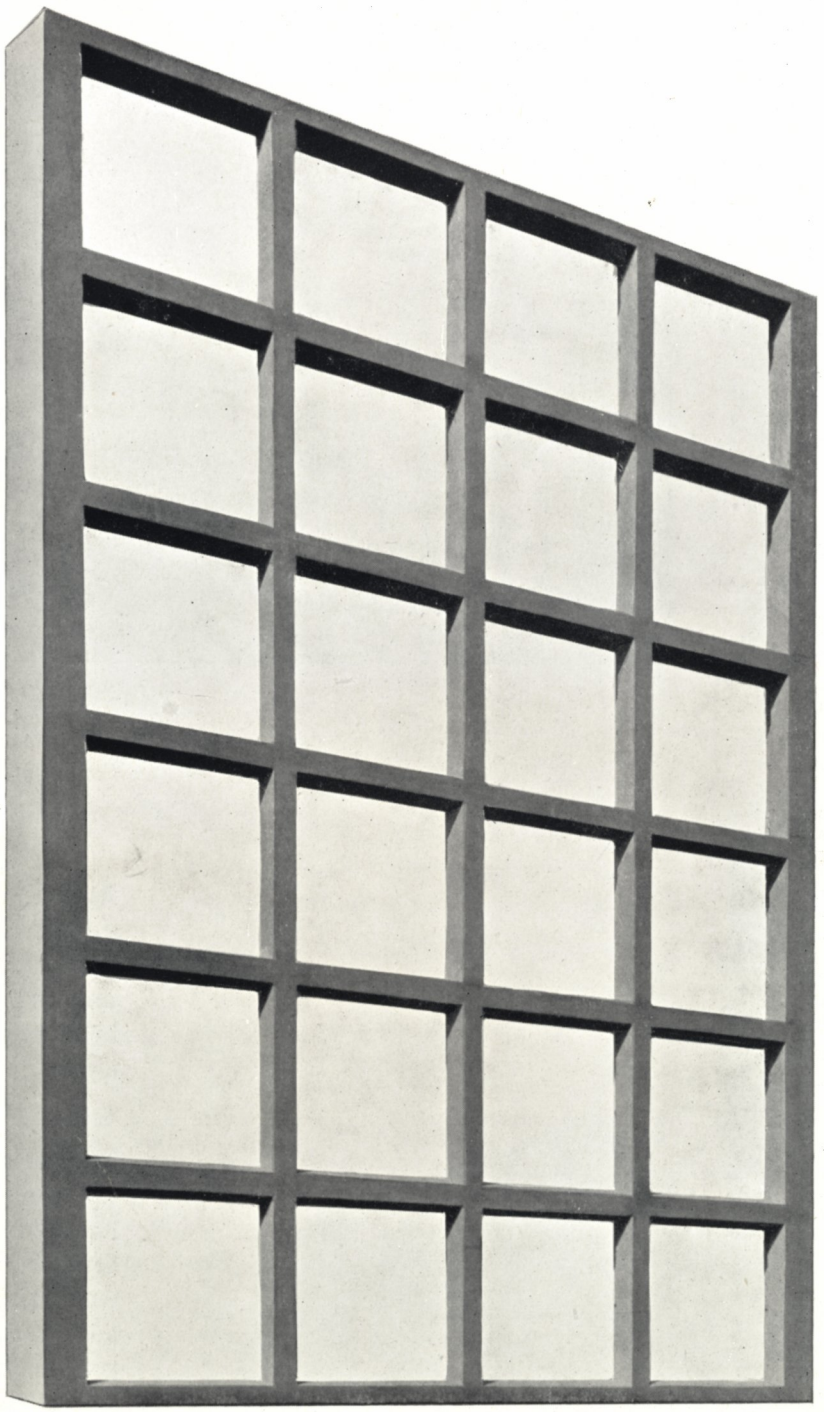
Cellar Flaps should be fitted with Counter Balance Gear if the area of one leaf exceeds 6 feet super.

All Flaps serving as Fire Escapement must be fitted with Counter Balance Gear.



Example of Stallboard and Pavement Light combined at Lloyds Bank, Cornhill.

GLAS-CRETE WINDOWS

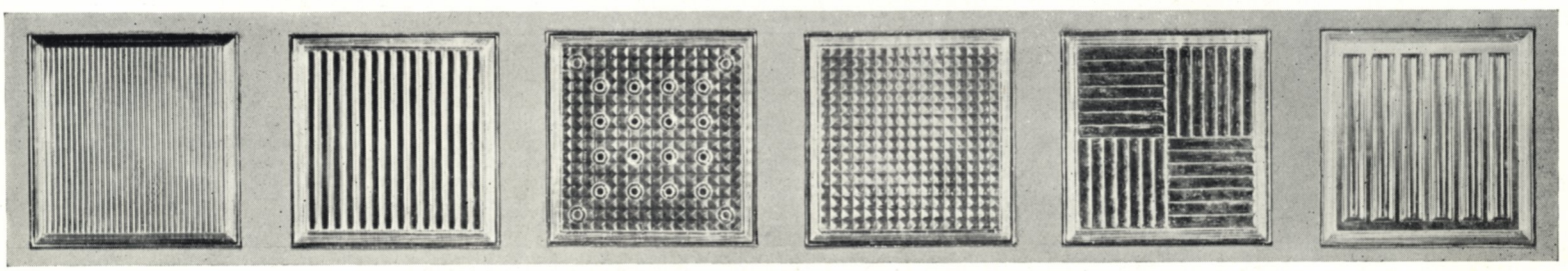


Require no painting.
Do not
Rust or Decay.
Improve with age.

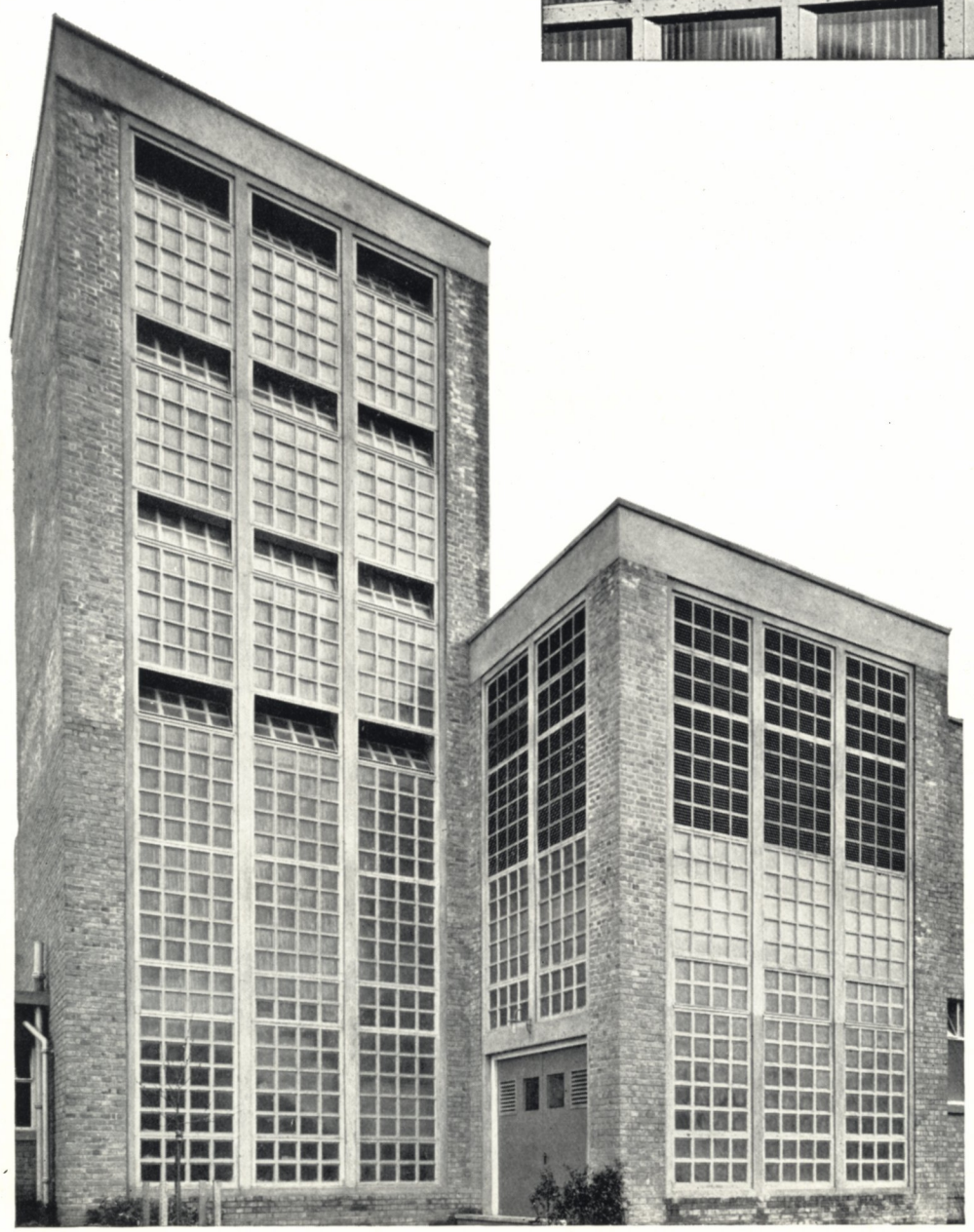
Used for
Hotels, Flats,
Hospitals, Factories,
Domestic and
Ecclesiastical
Buildings.

TYPES OF LENSES USED FOR GLAZING.

600 A | 600 D | 600 C | 600 | 600 B | 600 E



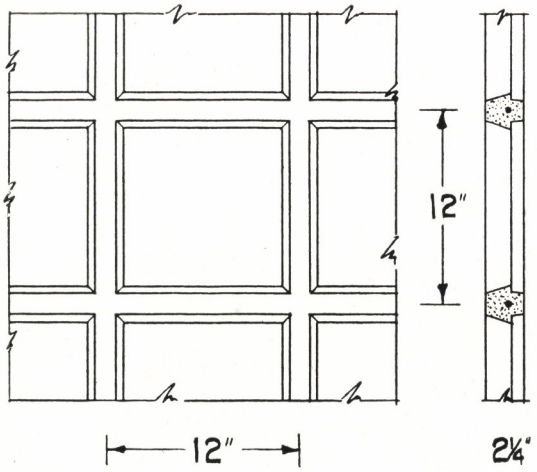
GLAS-CRETE WINDOWS



Although we supply several patterns of white pressed glasses, any type of glass can be used and, as the glazing is usually carried out on the inside, repairs are more easily effected.

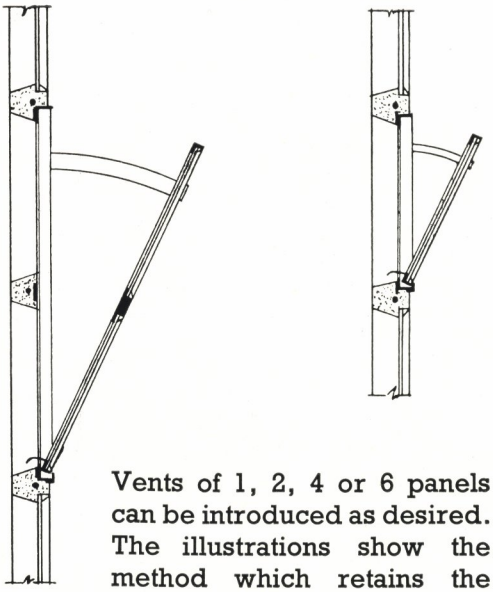
The complete window is made up of a number of panels of handleable size and can be built in as the surrounding work rises, or can be fixed afterwards. The former method is usually the better, but if the latter method is adopted the reveals and cill should be grooved to form a good key with the frame.

J. A. KING & CO., LTD.

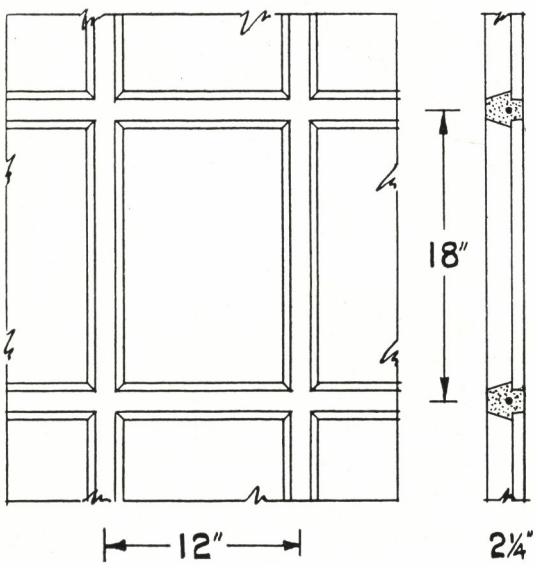


TYPE 600

12" ×12" Centres of Ribs
10⅛" ×10⅛" Glass Size
9¾" × 9¾" Clear Opening

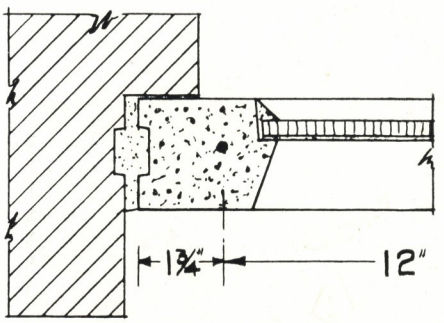


Vents of 1, 2, 4 or 6 panels can be introduced as desired. The illustrations show the method which retains the external appearance of the window whether the vent is open or closed.

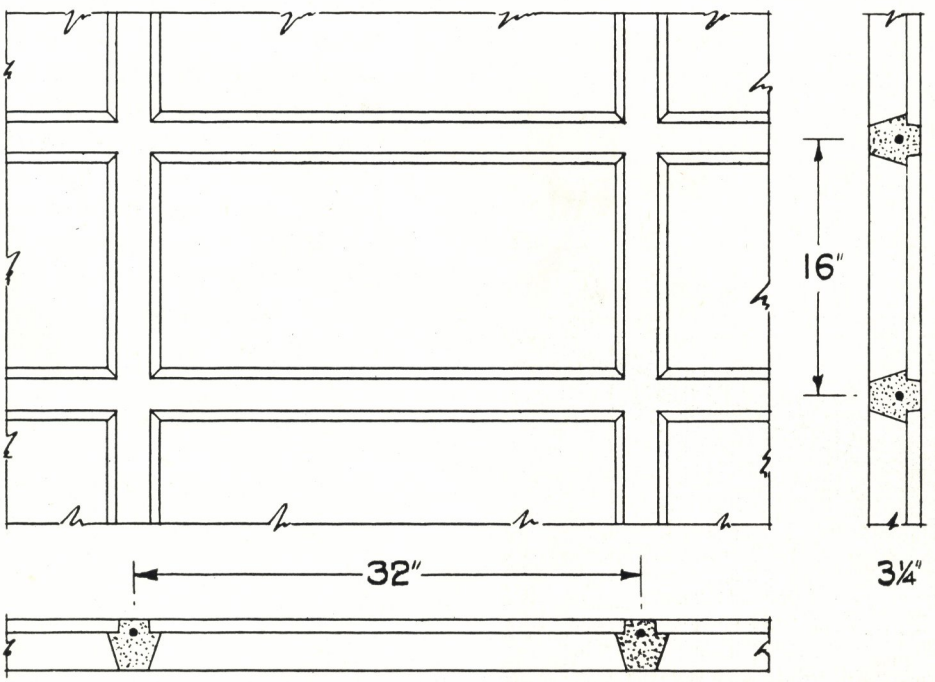


TYPE 601

18" ×12" Centres of Ribs
16⅛" ×10⅛" Glass Size
15¾" × 9¾" Clear Opening



Plan through Jamb



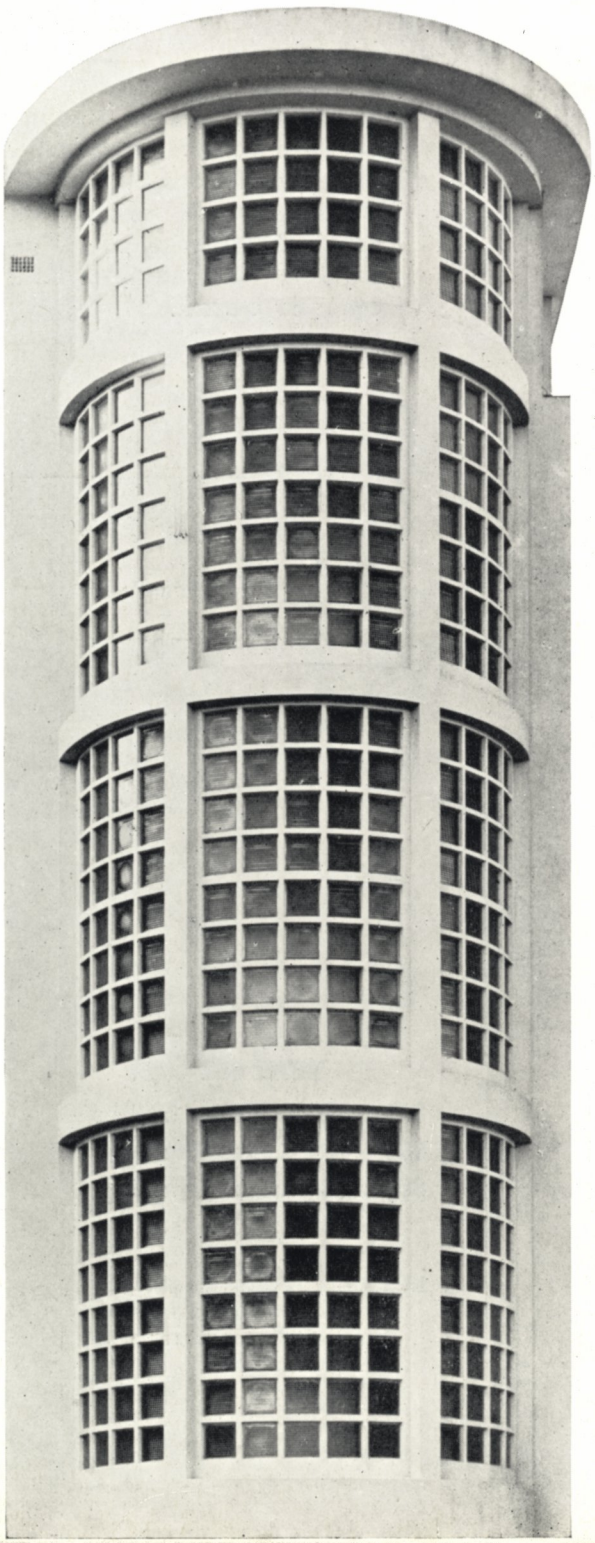
TYPE 602

32" ×16" Centres of Ribs
29½" ×13½" Glass Size
28¾" ×12¾" Clear Opening

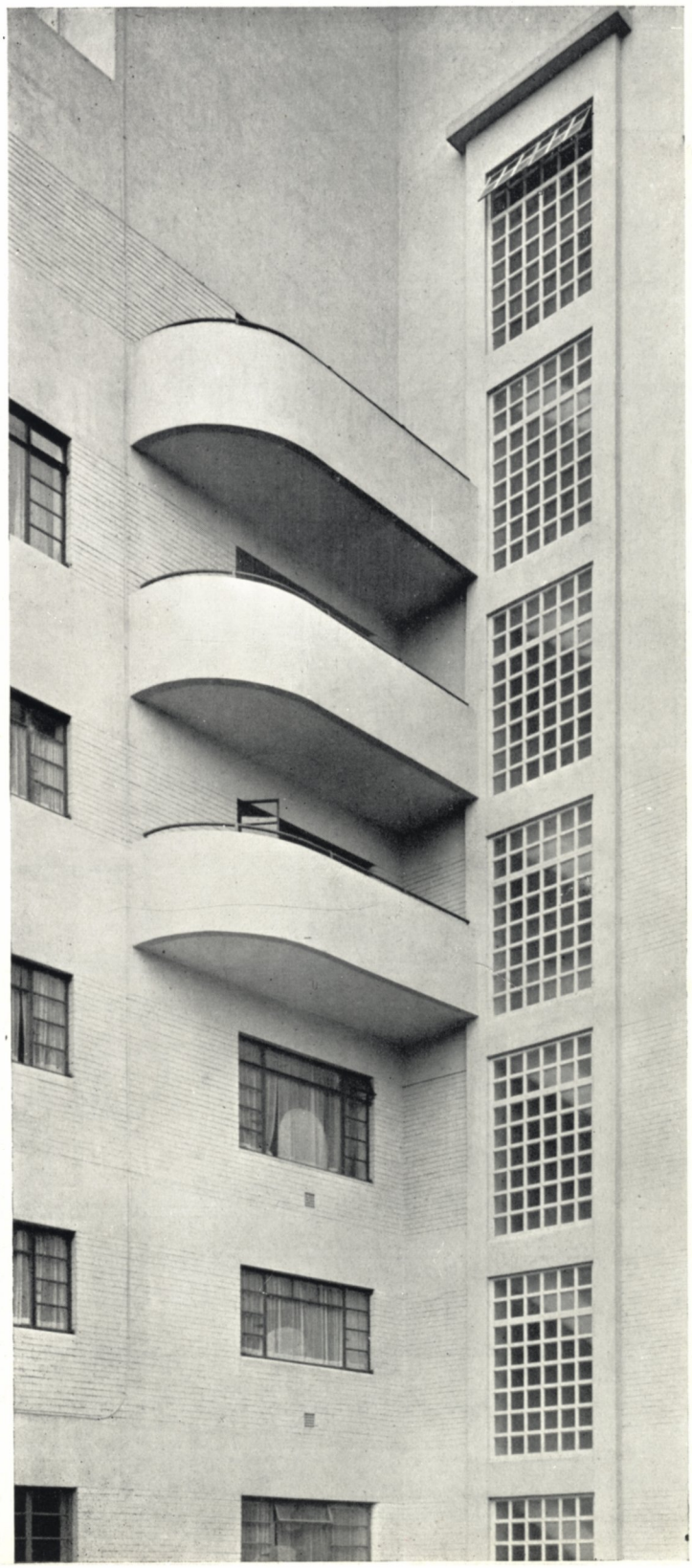
NOTE.—In all cases the Centres of Ribs can be increased but the glass size remains the same.

GLAS-CRETE WINDOWS

GLAS-CRETE Windows are of pleasing appearance and are eminently suited to all classes of buildings. When used in conjunction with large areas of plate glass they form an effective contrast.

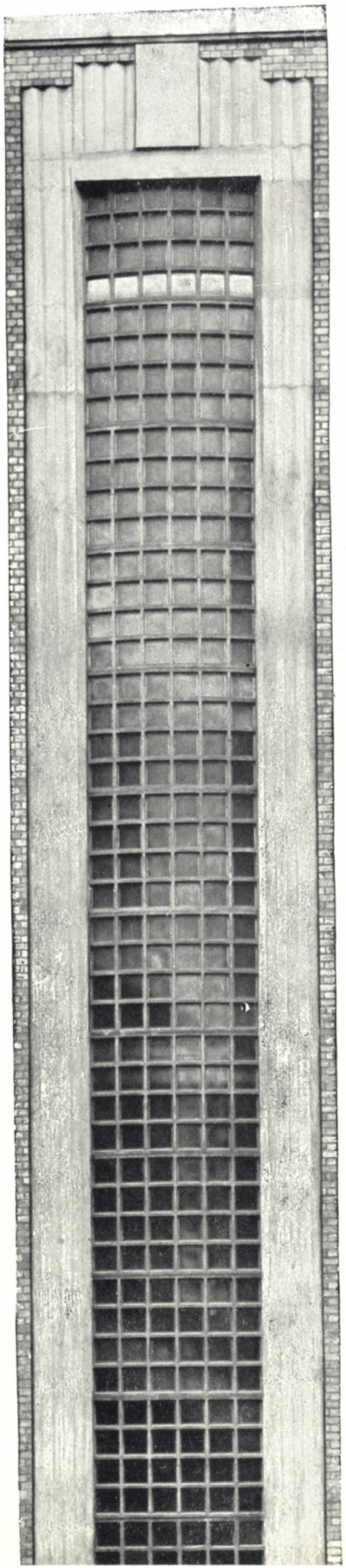


LEFT.
House at Harbour Heights, Bournemouth.



RIGHT.
Staircase Window at Palace Court, Bournemouth.

J. A. KING & CO., LTD.



LEFT.

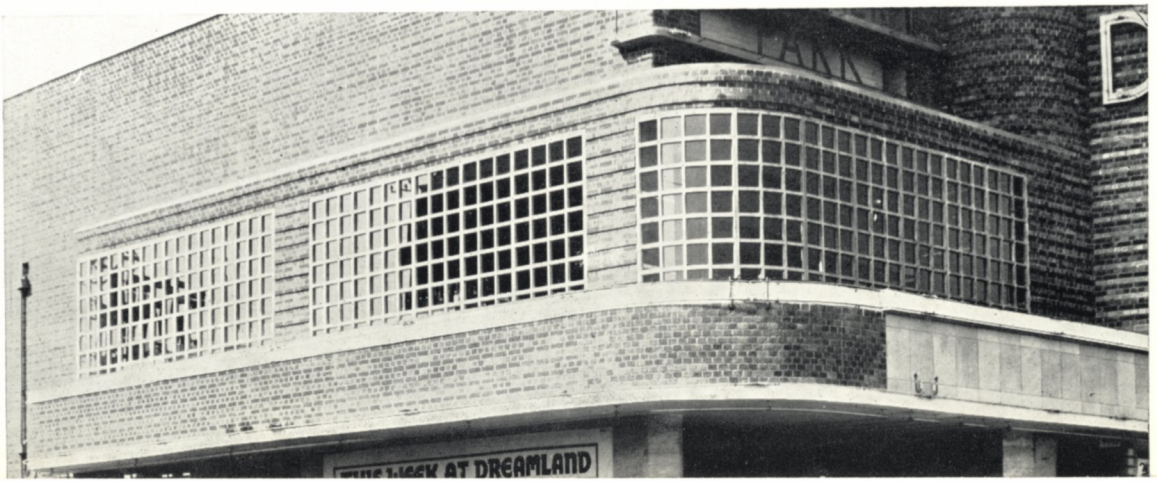
Staircase Window at
Addenbrookes Hospital,
Cambridge.
Height 53 feet.

RIGHT.

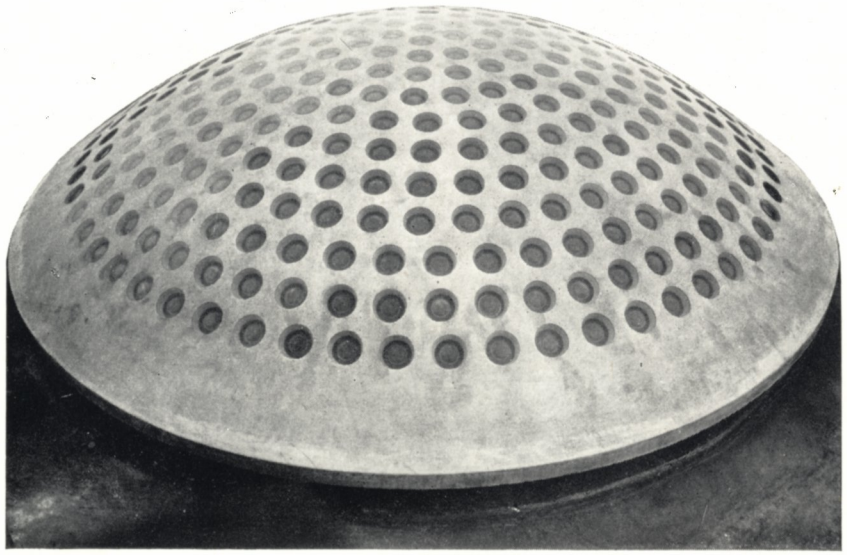
Hall Window to House
at
Sydenham Hill.

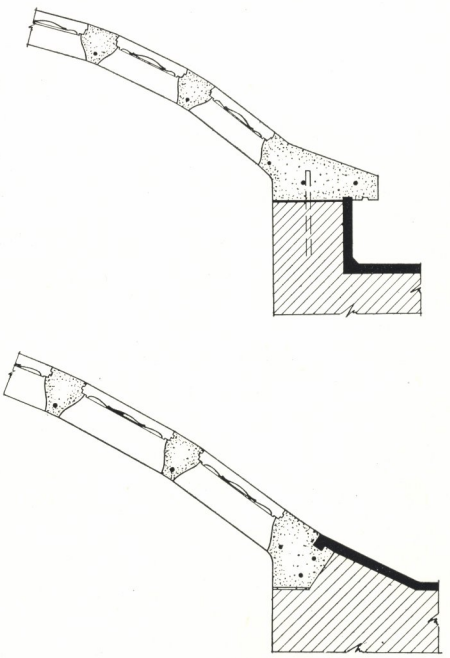
Glas-Crete Windows provide a distinctive feature to any type of building, whether it be Public, Commercial or Domestic.

BELOW. Windows to Cafe at Dreamland, Margate.



DOME LIGHTS





Alternative methods of forming curbs to Domes and Barrel Lights.

ABOVE.
Reinforced Concrete and Glass Dome over stair well at Ferensway, Hull.

BELOW.
Dome over waiting hall at Royal Ophthalmic Hospital, City Road, E.C.

Architects:
Campbell Jones, Sons & Smithers.

The reinforced concrete ribs support the glazing which is double rolled rough cast glass in electro copper glazing.

DOUBLE GLASS WALLS & PARTITIONS

For
Public Buildings, Hotels,
Offices.

All glass surface both sides.

No exposed iron to rust or paint.

Heat and Sound insulating.

Maximum translucence.

Decorative.

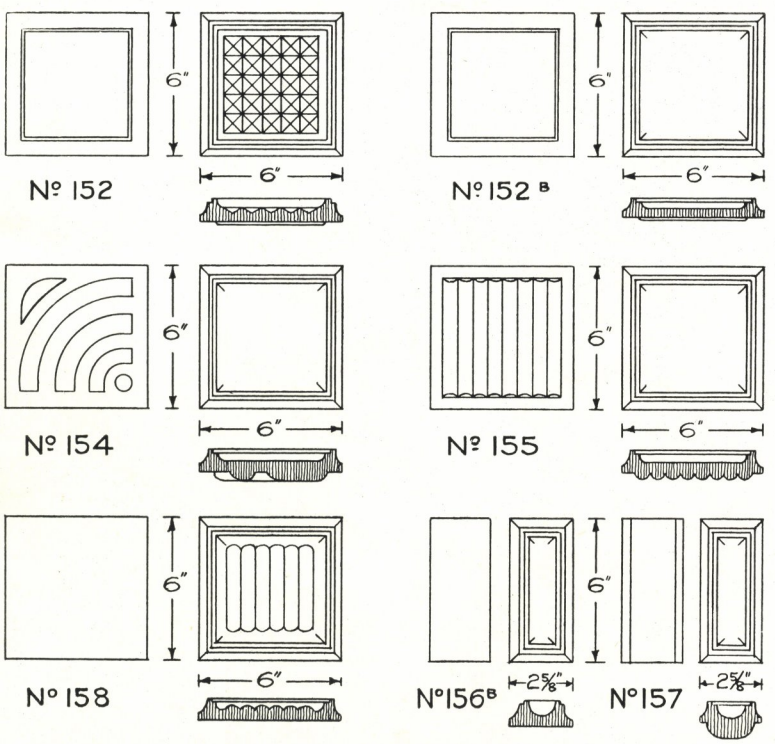
Hygienic, easily cleaned.

For
Hospitals, Clinics,
Laboratories, etc.

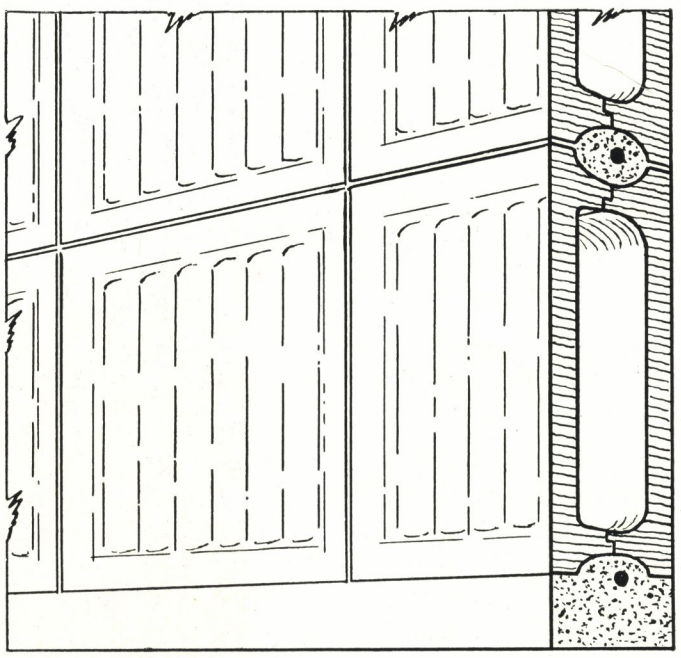
The lenses are 6″×6″ and 8″×8″ and the construction when finished is $1\frac{3}{4}$″ thick.

As several patterns of lenses are available, decorative effects can be obtained.

The construction can be built in situ or made in precast panels and delivered ready for fixing.



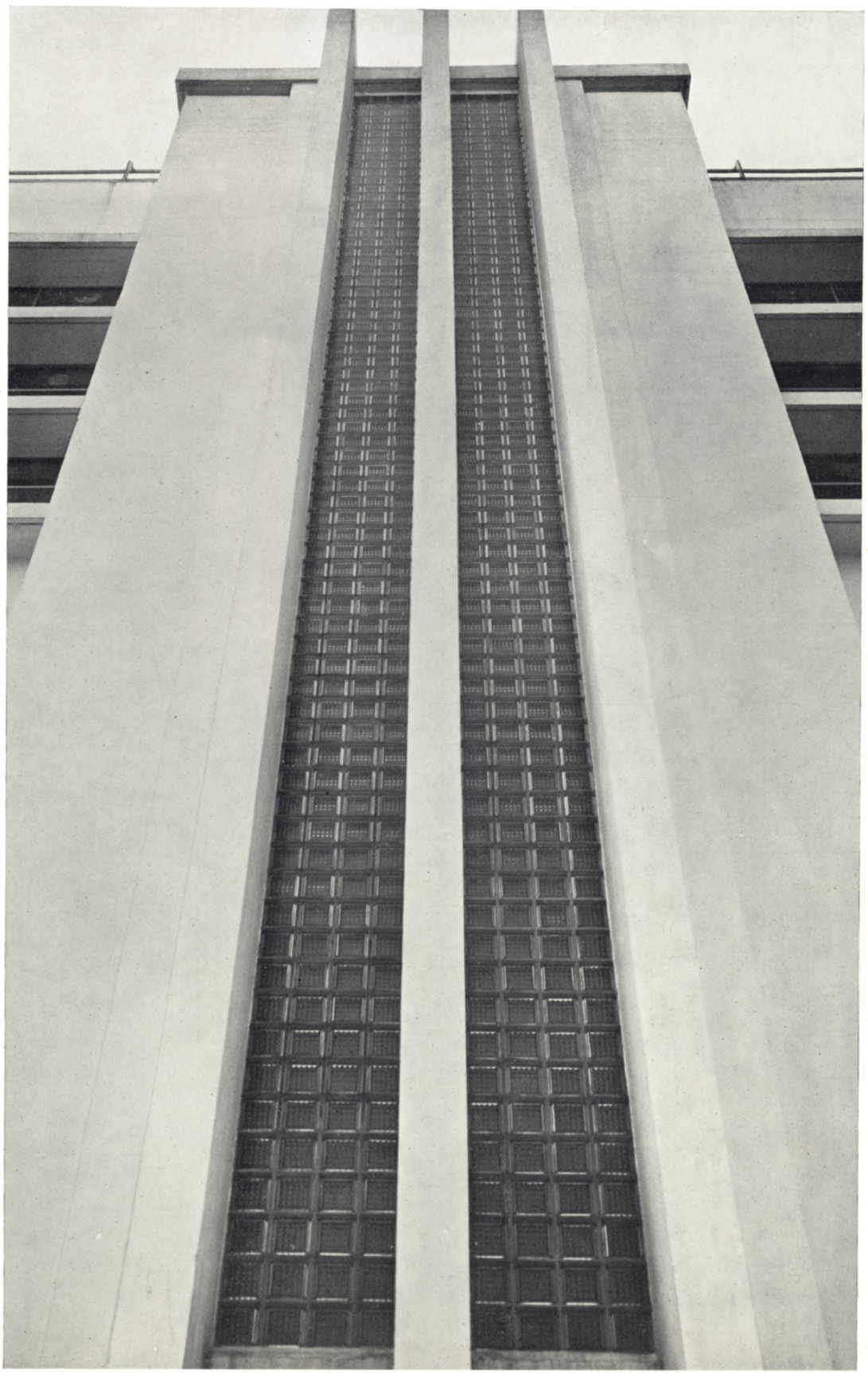
Types of Lenses used.



Detailed Section through hollow glass partition wall.

DOUBLE GLASS WALLS & PARTITIONS

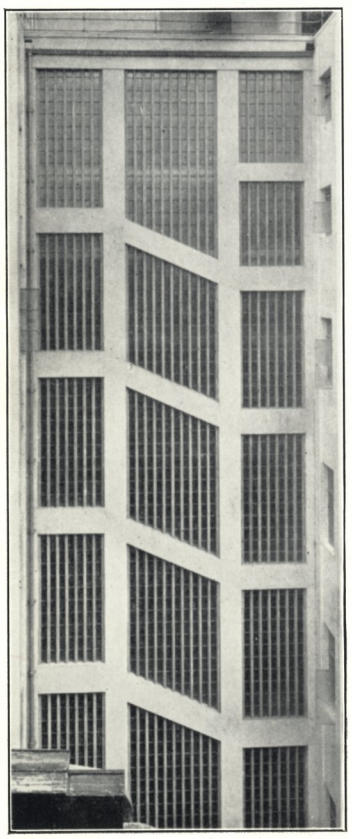
Double Glass Windows at Co-operative Wholesale Society's Soap Works at Irlam.
Height 35 feet.

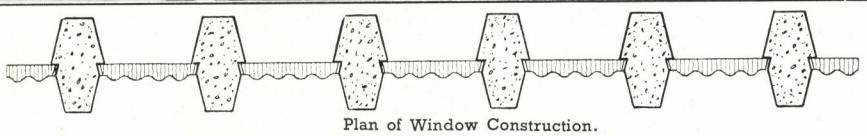


GLAS-CRETE "CRISTOL" (PATENT PENDING) WINDOWS

Messrs. Simpsons,
Piccadilly.

Architect:
Joseph Emberton, Esq.,
F.R.I.B.A.



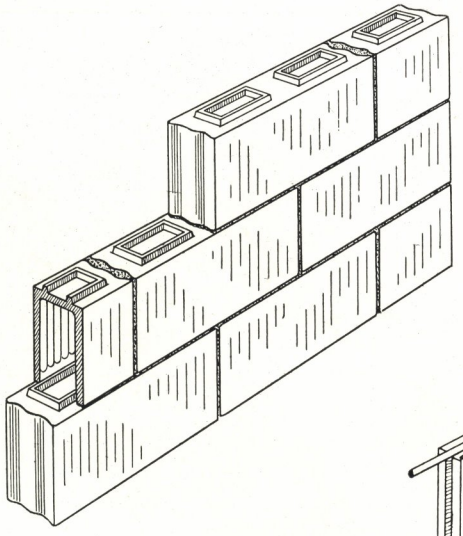


Plan of Window Construction.

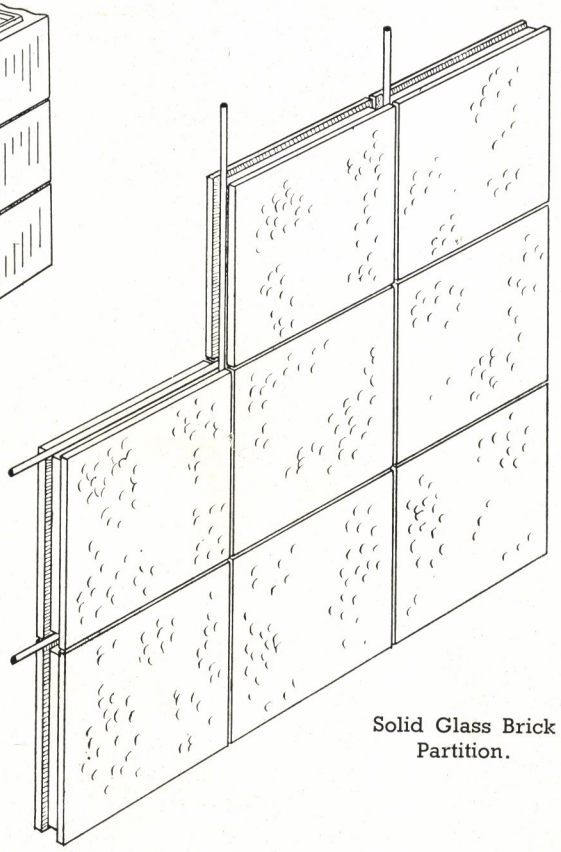
This staircase window which is 95 ft. high by 24 ft. wide is constructed of reinforced concrete mullions and glazed with our special high relief "Cristol" glass units.

The canopy at roof level is in Glas-Crete Type 34, single construction, and the lower canopy over main entrance is in Type 34, double glazed construction.

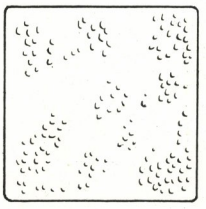
GLASS PARTITIONS



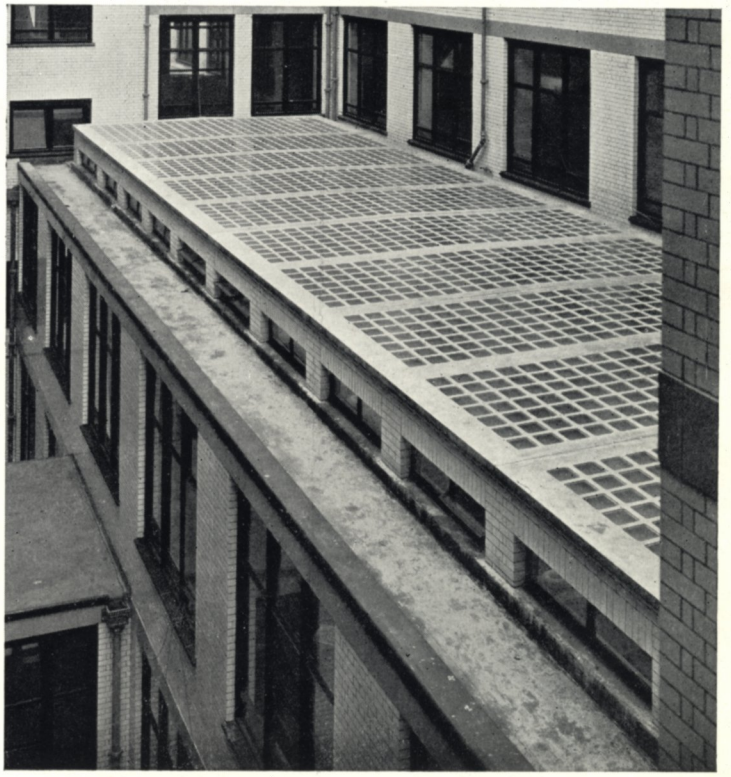
Hollow Glass Brick Partition.



Solid Glass Brick Partition.

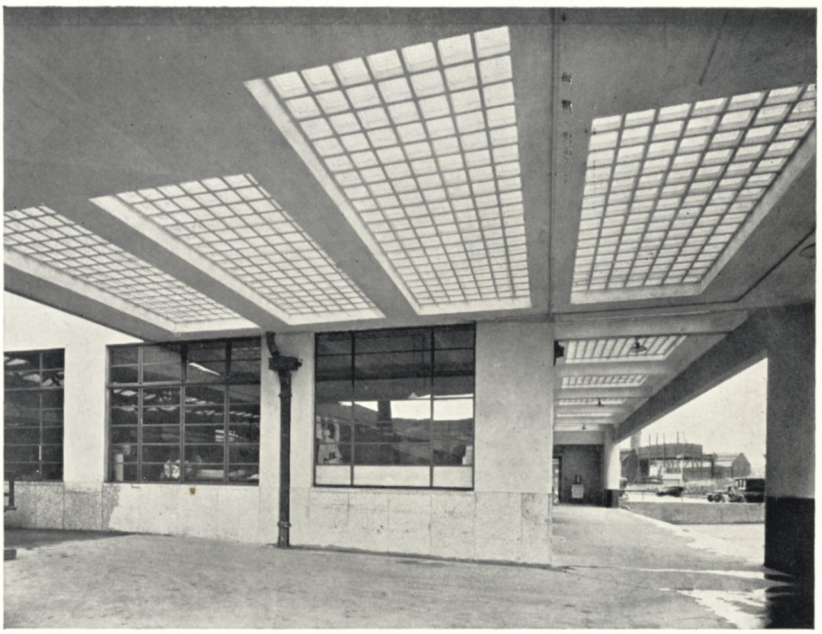


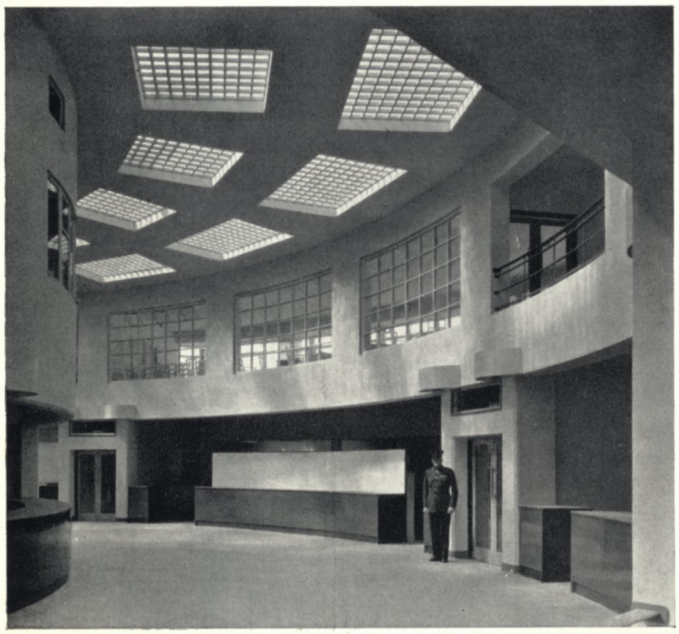
6″×6″

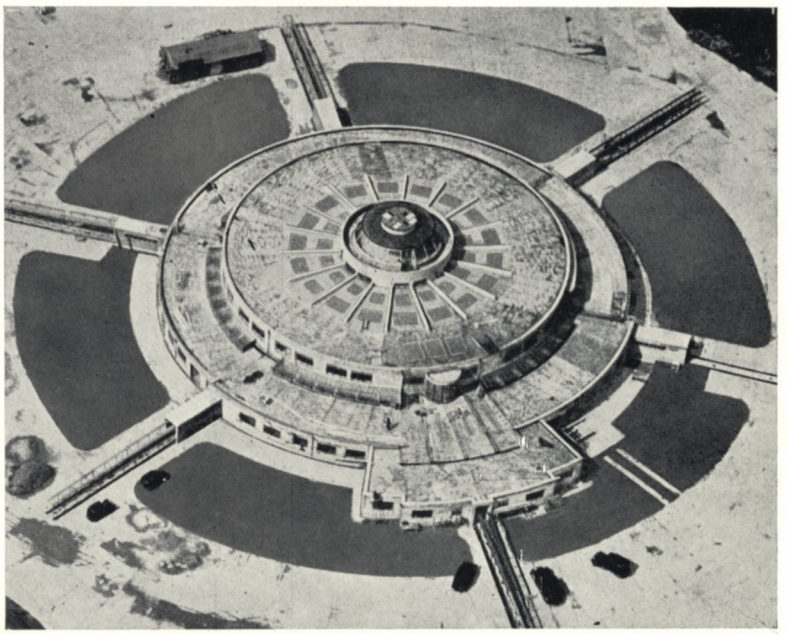


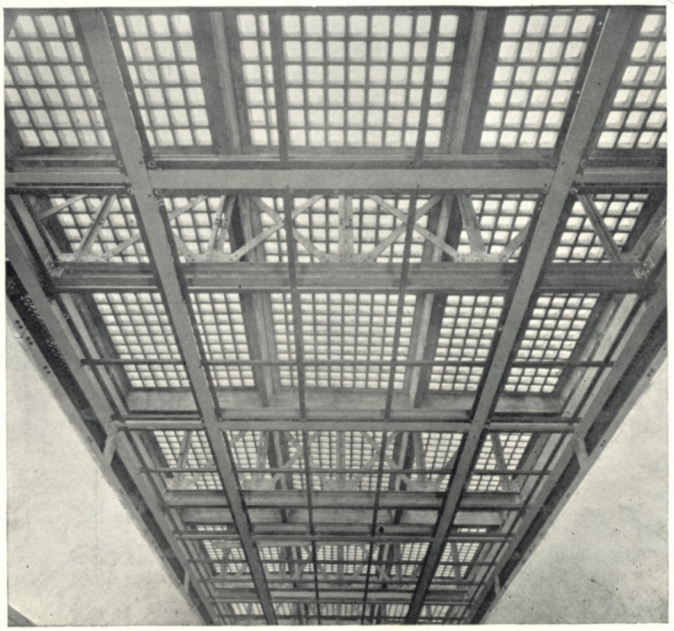
Double Glazed Construction at Prudential Assurance, London. Messrs. Joseph, Architects.

GLAS-CRETE EXAMPLES









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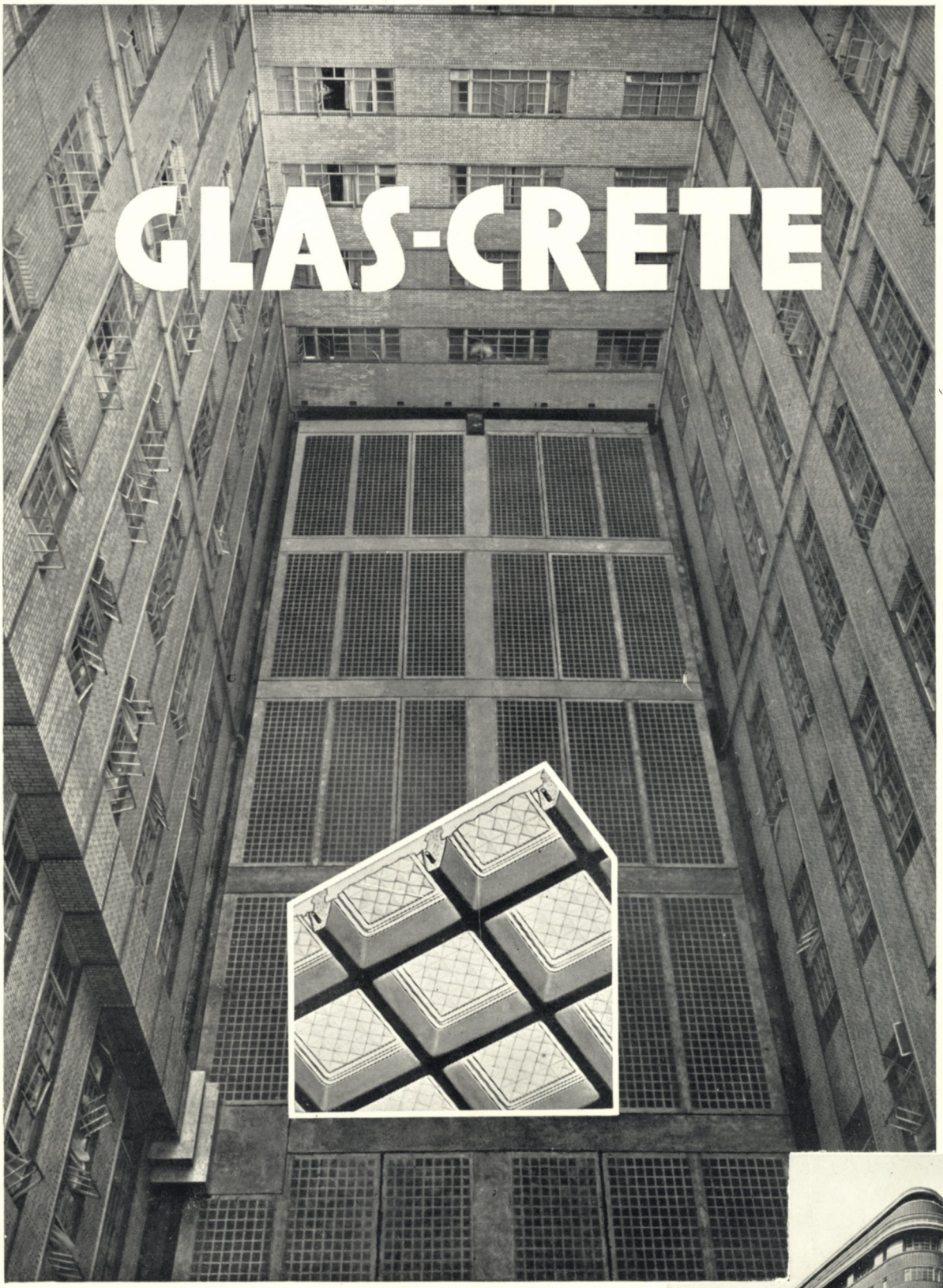

One of three large lighting areas
roofed at first floor level with
GLAS-CRETE
at "Mount Royal" Flats, Oxford Street, W.1.
Architects: Sir John Burnet, Tait & Lorne.


HOWARD, JONES,
ROBERTS & LEETE,
LTD.
BURY STREET, E.C.3