



ALUMINAIRE HOUSE, first built at Architectural League Show, New York, later taken down and re-erected as a country home at Syosset, Long Island. Entirely dry construction: light steel and aluminium frame; units designed for standardisation.

ALUMINAIRE HOUSE 1931

CONSTRUCTION. Six 5-in. aluminium tubes carry the entire weight of the structure to six concrete footings. No extensive foundations are required. Steel channel girders, attached to the columns, support light-weight steel beams; over these is laid battledeck light pressed-steel flooring. On this deck is insulating board, and a top surface of plain coloured linoleum. The stairway is of steel with linoleum treads.

WALLS. Walls are non-supporting; their function is to screen and insulate the room; built with light steel frame, wood nailers and a covering of insulation board. This makes a wall 3 inches thick, that has proved more effective in insulation value than the usual 13-inch wall of masonry. On the exterior the insulation board is covered with building paper, to serve as water-proofing, and corrugated aluminium, fastened with aluminium screws and washers, as an external facing. The narrow corrugations give the thin

sheet a necessary stiffness. The highly polished surfaces of the aluminium reflect heat rays of the sun and add to insulating value of the wall.

INSULATION. Half-inch insulation board on light steel-angle framework, for sound and heat insulation to roof, walls and exposed ceilings.

HEATING. Oil-burning "Garwood" boiler; convection heating; circulated air by fan blower; thermostatic control; garage heated by unit heater. Hot-water heated by oil-burner boiler, with thermostatic control to ensure constant hot-water at controlled maximum temperature. Electric kitchen range. Electric refrigerator.

WINDOWS. Steel windows, projecting type, standard design, low cost. Glazed with ultra-violet glass. The projected sash may be reversed so that the window may be cleaned from the inside of the room.

DOORS. Steel-framed, steel-faced doors; steel angle door frames; chromium steel door handles.

FLOORS. Surfaced with Armstrong linoleum in plain colours.

FURNITURE. Most of the furniture is built in as an integral part of the house, including dressing-tables, medicine-cabinet, and bookcases. A china cupboard, almost entirely of glass, separates the large duplex living room from the dining recess. All fittings within the house that are touched by the hand are of white metal, the hand-rail of aluminium, and chromium-plated hardware for windows and doors. The card table has glass top with chromium-plated tubular legs and rubber feet. The bathroom stool is of aluminium tubing.

FINISHES. Exterior: polished sheet aluminium with slight corrugations that break glare and take up expansion and contraction of surface. Interior walls are surfaced with a glazed fabric in plain colours (Du Pont) which is easily cleaned, and does not hold dust. Bathroom walls of black vitrolite. Walls of w.c. of "Lumarith," a non-inflammable celluloid which admits light but is not transparent. Panels of "Lumarith" are set in a frame of polished aluminium.

SPECIAL ARRANGEMENTS. The framework of the house where exposed is of polished dur-aluminium. This framework might have been built completely of light steel girders, channels and 2 in. angles.

LIGHTING. Luminous tubes (Claude Neon) in living room.