New housings for Public Call Offices (PCO)

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To meet growing pressure from developers and local authorities, BTL, supported by BTHQ, have developed a range of PCO housings to replace our previous sole offering – the Kiosk No 8. They are called the 'Croydon' range to acknowledge the contribution of BTL South Area staff who translated the sketches and ideas into hardware (and added some of their own).

The range comprises a kiosk, an internal booth for concourses and like situations, and an external booth for quiet environments. There is also a wall-mounted version of the internal booth. These housings all have a family resemblance and are jointly recognisable as 'British Telecom' rather than 'Post Office' property. There is no anti-vandal model in the range, since the requirements for such a housing are not compatible with a 'civilised' design. So it was decided that the 'Oakham' booth would continue to fulfil that need.

The Croydon range was designed by engineers with long experience of PCO installation and maintenance. Although essentially practical, general reaction to the appearance has been very favourable.

The basic structural materials are hollow rectangular metal sections (HRMS) and sheet steel – chosen because they are easy to obtain, cheap, rugged and can be fabricated in large or small quantities in various workshops – including our own – throughout the country. A paint finish was chosen because it can be maintained in good condition by our own staff without requiring specialist treatment. Anti-graffiti paint is an option.

The main members of the Croydon family all use the same back module. This is logical since all perform the same functions – mounting the same equipment, and leading-in and terminating electrical, telephone and earth cabling and wiring.

The module consists of two 120×60mm HRMS posts, connected by a 3mm steel sheet back panel. Welded to the back panel are horizontal sections of 'Unistrut' to which the equipment fixings can be bolted. Intermediate fixings are obtained using short lengths of Unistrut as movable ladder bars between the primary sections. In this way fixings may be made at any point for any type of equipment and they can be easily repositioned at any time in the future.

A plastic-faced wall board hides the Unistrut in the upper part of the module and can be used itself for the screwed fixings of lighter items.

The lower section of the module has a services termination chamber with removable covers to house electrical switchgear and earth terminations. The whole base area of the chamber is available for UG cable lead-in. All cabling is completely concealed. Alternative high-level cable entry can be provided.

The corner post bases contain welded-in threaded plates which connect to a base frame in the concrete foundation, making it very strong and rigid for a free-standing booth. Alternatively, 'feet' may be used where only shallow depth exists or – if wall support is available – the module can be bolted to a floor and tied back to the wall. The kiosk may be bolted to a concreted-in base frame or to a paved surface. Precast, domed, non-slip slabs can be provided to give good drainage and this avoids the central wear, which creates a puddle for users to stand in on wet days. Alternatively, surrounding paving can be continued straight through.

Cheery glow

Booths may be 'suited' by sharing adjacent support posts and side screens, but this is not so with kiosks because of the large stock of alternative components needed. Kiosks and booths can be installed back to back. The kiosk may have side or front door opening with left or right hinging.

All housings have steel ceilings with a central opal acrylic lighting panel. This hinges down to allow standard (No 12) fluorescent lighting unit tubes to be changed without using steps. The installation is double insulated.

Above the ceiling is an acrylic and aluminium dome, which has either opaque black characters for a payphone or translucent green characters for a cardphone. The dome is internally lit from the sides of the lighting fittings and at night gives a warm cheery yellow glow to advertise the presence of a payphone.

The dome also houses the (standard) door closer, its spindle projecting down through the ceiling. New geometry for the closer arms makes for easier opening and prevents doors from being torn off their hinges in high winds.

Restraining straps across the standard (No 2) hinges are not necessary.

In the kiosk, six identical panes of glass are set in rubber channel and held by angle iron glazing beads pop-rivetted into place. The rivets are drilled out when necessary. The glass in all housings is bronze tinted, 6mm armoured. In the booths, glass is set in rubber and stainless steel channel, which is removed for re-glazing.

Standard wallboard layout

In the present Croydon design a single, full-width, polycarbonate notice cover is provided at the top of the wallboard, retained by heavy steel bars top and bottom. The sides are unframed but protected from prising or levering by being set back some 75mm between the steel corner posts, which also protect the sides of the wallboard. The wallboard is the same width as that in the K8 and K6. So, not only are the equipment layouts consistent in all the housings, but new-style notice frames being developed for use in existing kiosks can be used in Croydon housings.

Wind swept

Another feature of the kiosk is the 100mm space left below each fixed side and the door, so that rubbish can blow out in the wind. This reduces the level of acoustic protection for the user, but the gain in cleanliness and ventilation is considered to outweigh the increase in noise level. As there will be less difference between the protection offered by a kiosk and that by a booth, we may well be able to use a high proportion of the cheaper booths. Booths attract less vandalism than kiosks.

The colour scheme adopted for the range is: outside back panel, rear corner posts and dome in yellow; all other framing and wallboard in black.

The slim framing and large areas of glass give a light and airy appearance and the high level of illumination (32 watts) ensures good visibility of occupants to discourage fouling or other abuses.

Initially about 50 kiosks have been ordered by BTL for trial, and 25 for BTHQ. Seven internal booths have been installed at Bristol Temple Meads station, as a trial for British Rail. If accepted by BR the booth will become standard for use on BR installations throughout the country. Milton Keynes Development Corporation is currently considering the wall-mounted booth for the first indoor PCOs in the covered shopping area. They have also shown interest in replacing all Milton Keynes kiosks with Croydon housings, but this has been resisted on grounds of cost and availability.

The first kiosks have been erected in Leicester Square and Oxford Street, in London and it is BTL's intention to use them on other prominent sites, gradually extending their use as opportunity offers.

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A suite of Croydon internal booths at Temple Meads BR station

The Croydon kiosk illuminated