Brutal London

Construct Your Own Concrete Capital





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Contains 9 models to press out and build







Barbican Estate

Lauderdale Tower

Architect: Chamberlin, Powell and Bon Built: 1974 Height: 123 m, 42 storeys Aldersgate Street, Beech Street London EC2Y



Barbican Estate ⊲ Lauderdale Tower △ Defoe House, Shakespeare Tower, Cromwell Tower

In August 1940 the ancient Cripplegate district of the City of London was devastated by Luftwaffe bombing. Memorable photos from the evening showed nearby St Paul's Cathedral surrounded by massive clouds of smoke and flame from the inferno. The district was flattened, and remained a derelict wasteland, interrupted only by fragments of the medieval London Wall, for almost twenty years, as the City Corporation tried to work out what they might want to build on the site. Initial ideas were for offices and business units, but a decision was made to encourage largely residential development instead.

Architectural practice Chamberlin, Powell and Bon had already been working on a large development adjacent to the Barbican site, called Golden Lane. This estate was intended to be social housing for the people servicing the City of London – the firefighters, police, cleaners and charladies. Pleased with their work, and keen to ditch an earlier redevelopment plan, the City in the mid-1950s engaged the architects to work on the Barbican too. Unlike the social housing of Golden Lane, these buildings were to be luxury flats to house the professional classes: bankers, civil servants, lawyers and doctors.

The architects were dedicated modernists, as a glance at any of their other projects – such as Leeds University and Golden Lane – will show.



Lauderdale Tower from Lauderdale Place

But the Barbican offered them one of the biggest redevelopment schemes in Europe, and the chance to create a unified vision for the site. The estate is a hugely complex multi-layered structure, with roads and train lines below, and pedestrian access via a 'deck' level above. There's a school, a university and a YMCA (recently converted into flats). They designed eighteen low-rise blocks for the estate, including Frobisher Crescent, a modernist take on Georgian Bath, and Gilbert House, which stands on high stilts over another fantastic Barbican feature, the lake (which forms part of the estate's air conditioning system). Late to the design was the request for theatre space and a concert hall, which then grew into the Barbican Centre: three auditoriums, three cinemas, seven conference venues, a library and an art gallery. Fitting all of these many different functions into a relatively tight site, while still allowing it to feel open and spacious, was an amazing feat. Lauderdale Tower is one of three almost identical high-rise blocks built as part of the Barbican Estate, the other two named after Cromwell and Shakespeare. One of the visual tricks to help the site feel so open was the creation of these vertical features, which take the eye upward, and remove a lot of housing from ground level too. Lauderdale Tower is forty-two storeys high, and contains 117 of the estate's 2,014 flats. The towers are of a distinctive triangular shape, with one corner of upward-curling balconies, forming an almost skeletal form in silhouette - or an upended Toblerone, depending on your mood. They were the tallest residential towers in Britain right up until 2009, when a Docklands development overtook them.

Perhaps the most memorable thing about the estate, apart from how easy it is to get lost, is the texture of the concrete. This really is rough brutalist concrete, dolled up by hand with a pick hammer on every exposed surface to give it that familiar lunar-rock surface. This was a hugely expensive and time-consuming process, and the toll it took on the builders helped contribute to the enormous amount of industrial action that dogged the site throughout the 1960s. The tower blocks were finished in the mid-1970s, while the Barbican Arts Centre opened in 1982 – over forty years after the blitz raids that had devastated the area and enabled the rebuilding in the first place.



 \triangle Pick-hammered concrete surface \triangleright Lauderdale Tower from Lauderdale Place





Ledbury Estate

Architect: GLC Architects Department Built: mid-1960s Size: 16 blocks Bordered by Ledbury Street, Commercial Way, Bird in Bush Road and Naylor Road Peckham London SE15 1BA



Ledbury Estate 🖾 Sarnesfield House, from Old Kent Road 🛆 Sarnesfield House, Skenfrith House and communal area

The Ledbury Estate in Peckham is a great example of the kind of post-war building most overlooked by fans of modern architecture. The low- and high-rise blocks on the estate were built using the most ubiquitous form of construction of the era – prefabricated building systems. Used mainly for the rapid construction of council housing, these systems usually involved large concrete panels and components being manufactured in factories and transported by lorry to the site, where they were bolted together, like giant flat-pack furniture. Many companies produced these building systems, some of the biggest being Tracoba, Camus and Sectra from France, and Jespersen, Skarne and Larsen-Nielsen from Scandinavia. British construction firms such as John Laing and Taylor Woodrow-Anglian



Sarnesfield House and covered vents



Skenfrith House and Peterchurch House

did deals to offer these systems to their customers in the UK. Councils desperate to keep pace with the demands made on them by successive governments, who were promising voters ever higher numbers of new homes, turned to these building systems as the answer to all their problems.

Four high-rise blocks form part of the Ledbury Estate: Skenfrith House, Sarnesfield House, Peterchurch House and Bromyard House. They were completed in the mid-1960s for the Greater London Council at the high point in the system building boom, and were made using the Danish Larsen-Nielsen system. The concrete panels of these twelve-storey towers were faced with Norfolk flint, and the blocks were immediately recognisable from their unusual design: two concrete slab blocks stood face to face, and were joined in the middle by a tower containing the lifts and stairs. From the air these blocks form a distinctive 'H' shape. Despite their rugged concrete stylings, these towers are less truly 'brutalist' and more part of a Scandinavianinfluenced tradition of 'point blocks' like those at Alton East.

Larsen-Nielsen was one of the most ubiguitous systems used for building flats across Britain in the 1960s. The design of the Ledbury Estate flats could be seen repeated all over London. There are two taller blocks in Limehouse, reaching fifteen storeys, which have recently been refurbished and covered in an off-white render. And there are four more on Wick Road in Hackney as part of the Gascoyne Estate. These are ten storeys, and have been recently refurbished. The largest collection of them was to be found on the Morris Walk Estate in Woolwich, which was also London's first use of the system. Here the seven ten-storey towers had been designed for the London County Council back in 1962. In 2013 residents began to be moved out ahead of the largescale demolition of the estate, and the eventual construction of (mainly private) new homes.

The most famous – or infamous – use of the Larsen-Nielsen prefabricated system was at the Clever Road estate in Newham. The towers here were of a quite different design from our familiar 'H' blocks at Peckham. These were mighty twenty-three-storey blocks, without the separate lift and stair tower, showing just how flexible these building systems were. Here, one of the nine blocks, Ronan Point, suffered a devastating partial collapse following a gas explosion a month after completion in 1968. An investigation revealed corners had been cut in the construction of the block, leaving it partially unstable. The scandal led to a re-evaluation of every system-built tower block in Britain, and an expensive programme of retro-fitting to strengthen them that took fifteen years. In one tragic moment, system building stopped being the hero of our post-war dream of waving goodbye to slums and overcrowding, and became the main problem for the next decade.

Ledbury Estate has avoided being demolished, unlike Morris Walk, or re-rendered, like its siblings in Limehouse and Hackney have. The towers remain largely in their original condition, although, given the mighty upheavals in the capital's property market, how much longer this will remain the case is hard to judge.



Skenfrith House and Peterchurch House



National Theatre

Architect: Denys Lasdun Built: 1976 Size: 3 separate auditoria, with a temporary structure, 2 fly towers: the Open Theatre and the proscenium theatre, connected by horizontal bands of outdoor terraces South Bank London SE1 9PX

If you love Denys Lasdun's National Theatre, just imagine two of them, facing each other. Because in the initial commission, that was just what had been imagined: the National Theatre facing an opera house, both designed by Lasdun in the same style, and both on the site where the London Eye now stands. It was only when the government cancelled plans for the opera house in 1966 that the National Theatre became a lone building, and was instead built on its now familiar site next to Waterloo Bridge.



National Theatre $\ \, \lhd \ \,$ fly tower and lower auditorium $\ \, \bigtriangleup \ \,$ fly tower and upper auditorium



National Theatre and The Shed

The National Theatre is one of the greatest buildings in London from any era. Architect Denys Lasdun had served a long apprenticeship, designing housing estates before and after the Second World War for early modernist Berthold Lubetkin. He then moved on to design revolutionary 'cluster block' high-rise flats in the East End in the 1950s. But it was a different sort of architecture that would make his name. His trademark buildings would be not vertical, but horizontal. Lasdun became obsessed with creating 'landscapes' with his buildings. For example, you can see the emergence of all the long, low balconies of the National Theatre in his designs for the ziggurat student flats at the University of East Anglia.

One of the chief delights of the National Theatre building is the care and attention to detail with which it has been constructed and maintained both inside and out. The raw concrete shows all of the wood markings from the shuttering moulds used to form the walls, and inside the building concealed lighting is deliberately placed to highlight this. This 'luxury' concrete was made from coarse aggregate dredged from the seabed mixed with fine Leighton Buzzard sand. The contrast between the plush furnishings and rough grey concrete makes it feel as much ancient stone castle as modernist masterpiece. A refurbishment in the 1990s removed a road from the Thames-side approach to the building, and a more recent exercise added more windows where that road had been, and created new cafes and bars spilling out on the south bank too. This has only helped to make the building feel even more louche and exciting, a place to spend all day, meeting friends, working, eating and drinking. Some people even catch a show...

The main attractions, of course, are the three theatre spaces: the Olivier, with its revolving stage, the more traditional Lyttelton, and the new studio theatre, the Dorfman, which has replaced the Cottesloe (created by Lasdun at the last minute from some unused storage space). As well as seemingly endless corridors, offices and dressing rooms, the building contains huge workshops, where sets, props and costumes are created. Beneath all of that, there are car parks, which,





National Theatre from Upper Ground

in the event of the Thames bursting its banks, will flood to protect the building. This is the brilliance of the design: all it contains, and the many different ways it functions, helps to make the theatre one of the world's foremost cultural institutions.

After several decades of wrangling, the National Theatre opened in 1976. It caused a sensation, not least for its looks. Interviewed for *The Times*, Lasdun said: 'A lot of one's reaction to concrete is prejudice, because it is often used or made very badly. Here it is used with poetry and made with great feeling.' That concrete may not have enamoured it to Prince Charles or to chippy Thames riverboat tour guides. But the material made this complex, beautiful building possible, and helps give it that extraordinary character – a space-age castle of culture in the heart of London.

Board-formed concrete