

# The sad history of the tower block

*The Grenfell Tower fire is only the latest tragedy in the troubled story of high-rise living*

## When were tower blocks first built?

There are reports of apartment blocks ten storeys high in Ancient Rome and of even higher residential buildings in 11th century Egypt. But the modern tower block owes its existence to mid-19th century inventions: steel construction frames; reinforced concrete; and Elisha Otis's safety elevator, invented in 1852. The first commercial skyscrapers were built in the 1880s in Chicago and New York; the first residential high-rises followed around the turn of the century, reaching up to 15 floors. The Ritz Tower, built in New York in 1926, was 41 storeys and 165 metres tall, and started a fashion for large, luxurious high-rises. By the early 1930s, New York had about 150 of them. And after WWII, residential tower blocks spread across the world.

## Why did so many spring up after the War?

From the 1940s on, they were used to house urban populations displaced by slum clearances and war damage. A key inspiration behind this movement was the Swiss architect Le Corbusier, who propounded the utopian idea of the "Tower in the Park": grand, efficient, space-saving high-rise blocks surrounded by green spaces. In Britain, the first residential tower block was The Lawn in Harlow New Town, completed in 1951. Ten storeys high and set in a small meadow, it had 40 residential units, each with a south-facing balcony and an indoor lavatory. From the 1950s to 1980, the British authorities demolished about 1.5 million homes, mainly terraced houses, and replaced them with new estates, including some 6,500 local authority tower blocks. Many were built in the modernist, and specifically the brutalist, style – with simple, block-like forms and raw concrete facades. This pattern was repeated across the West, and in the Eastern Bloc. But despite initial enthusiasm for them, they soon became deeply disliked.

## Why exactly were these blocks so unpopular?

In this country, many were simply very badly built, with cheap materials, at great speed. Many decayed very quickly: concrete cracked, roofs leaked, steel corroded. And as they were often prefabricated and mass-produced, these faults were replicated across the country. The most notorious example was the 22-storey Ronan Point development in Newham, east London, which partly collapsed in 1968, only two months after it had opened. An exploding gas stove on the 18th floor caused one entire corner of the tower to crumple, killing four residents and injuring 17: newspaper was found to have been stuffed into the joints instead of cement. High buildings are intrinsically difficult and expensive to maintain, and poor design has meant many tower blocks have also had to be extensively renovated: 600 blocks in England have, like Grenfell Tower, been fitted with cladding to make them better insulated and more pleasant in appearance. But many would argue that, practical problems aside, the whole idea of using tower blocks for social housing was misplaced.



*Cruddas Park, Newcastle: a "Tower in the Park"?*

## What were the basic problems?

Many studies have linked tower blocks to crime, stress, mental health problems and family discord. As a 2013 Policy Exchange study explained, whereas terraced houses open onto a public street surveyed by residents and passers-by, multistorey housing "offers a plethora of semi-private, semi-public unpoliceable spaces such as corridors and stairwells" – hence the very high crime rates. And despite Le Corbusier's vision of "streets in the sky", there are few public spaces in tower blocks where communities can form: children are less likely to go outside; green spaces are often neglected. Many were built on the edge of towns, with poor transport links, adding to the sense of ghettoisation. They now tend to house the poorest. According to 2001

census figures, children living above the fifth floor were eight times as likely to be living in overcrowded conditions, and seven times more likely to be from ethnic minorities.

## So the experiment failed?

High-rise estates have become synonymous with urban decay, from Glasgow's Red Road Flats and South London's Aylesbury Estate, to Clichy-sous-Bois in Paris and Cabrini-Green in Chicago. Many have had to be demolished or redeveloped. There are exceptions. Expensive, well-kept premises such as London's Barbican Estate, or the glass-fronted towers fringing the Thames, are still popular with the rich (and mostly childless). A few less expensive blocks are said to be popular with their residents, notably the more stylish ones – admired by critics and tastemakers – that have been partly gentrified by private owners: for example, Ernő Goldfinger's Grade II\* listed Trellick Tower in Kensington.

## But do people like the idea of living in tower blocks?

No. Not a single respondent in a 2002 Mori poll wanted to; 89% wanted to live on a street. As Simon Jenkins put it in the Guardian, "they're anti-social, high-maintenance, disempowering, unnecessary, mostly ugly, and they can never be truly safe" (see box). About half the blocks built in the UK have been demolished, and since 1980, few have been built for social housing. Today, the main justification for them is that we need to build high to house more people.

## A question of safety

Tower blocks are inherently vulnerable to fire: they contain many people; fire and smoke move upwards; and both evacuation and firefighting are hampered by the heights involved. Firefighting platforms on London Fire Brigade's vehicles only reach up to 32 metres; Grenfell Tower is 67 metres high. For these reasons, since 2007 regulations have required new buildings of more than 30 metres be fitted with sprinkler systems.

Large, state-of-the-art high-rise buildings have a variety of additional protections: alternative escape routes, including specialised evacuation lifts; fireproof refuge rooms; fan systems to enable residents to use stairwells without being choked by smoke. But there is no requirement to retrofit older blocks with such features, though coroners investigating two earlier fires, at Lakanal House in Camberwell in 2009, and Shirley Towers in Southampton in 2010, recommended that sprinklers be fitted. In theory, safety measures ensure that fires inside individual flats are contained for 30-60 minutes; but, as at Grenfell, subsequent modifications, or the failure to observe basic rules, may render such measures useless. When Britain's tower blocks were surveyed in the 1990s, more than half failed basic fire safety standards. Not much, it seems, has changed.

## And is that actually the case?

Not really. True, the tightly packed megacities of East Asia, such as Hong Kong and Seoul, wouldn't be viable without vast tower blocks. But in London, because so much space is taken up around them, they compare unfavourably with other forms of housing: the most densely populated areas are, in fact, places such as Earl's Court, which have a mix of high terraces and mansion flats. The architectural pressure group Create Streets estimates that if all London's multistorey estates (some 360,000 dwellings) were knocked down and replaced with terraces peppered with low-rise apartment blocks, all existing homes could be replaced and an additional 260,000 homes created.