



Insights:

TEN KEY CONSIDERATIONS WHEN DESIGNING TALL BUILDINGS



CHAPMAN TAYLOR
MIXED USE



CHAPMAN TAYLOR

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registered in England, number OC302467.
Registered office 10 Eastbourne Terrace, London, W2 6LG.

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CHAPMAN TAYLOR HAS DESIGNED TALL BUILDINGS FOR A WIDE RANGE OF PURPOSES AROUND THE WORLD, AS WELL AS DELIVERING THEM. FROM RESIDENTIAL TOWERS TO OFFICE BUILDINGS AND MIXED-USE ENVIRONMENTS, WE HAVE ACQUIRED INDUSTRY-BEST EXPERTISE IN THE CREATION OF HIGH-RISE BUILDINGS AND IN THE VERY COMPLEX CONSIDERATIONS WHICH NEED TO BE TAKEN INTO ACCOUNT WHEN PLANNING, DESIGNING AND CONSTRUCTING THEM. IN THIS PAPER, CHAPMAN TAYLOR DIRECTOR **NICK THURSBY** LOOKS AT TEN KEY ASPECTS WHICH NEED TO BE BORNE IN MIND WHEN DESIGNING TALL BUILDINGS.

Tall buildings affect a wide area and need to be carefully located and integrated, allowing their scale, form and silhouette to have a positive relationship with the buildings nearby. When designing tall buildings, it is crucial to consider the height of the building in relation to nearby buildings – a tall building should never look as if it has been “dropped” in place without regard for the context, but rather it should be carefully integrated as a coherent element of the wider urban visual narrative.

Tall buildings should also be integrated appropriately at street level to help create a sense of place. To achieve this, the building’s design should aim to create the maximum possible active main frontage to the building. The uses and amenities within the building should complement those in the surrounding area.

Public and semi-public spaces should be landscaped to create a human scale as well as efficient pedestrian routes, with sufficient space allowed for views over the area and for daylight. Careful analysis of the microclimate, such as overshadowing, rain shadows and wind modelling, should all be fundamental prerequisites to any design scheme.

Outside the centres of great world metropolises, tall buildings will be usually be seen from long distances away and become a navigational tool for many. The architectural design of the top of the building should therefore be an instantly recognisable and attractive landmark on the skyline.





The decision to create a tall building is one which can have far-reaching consequences. Every tall building will have its own unique context and requirements, but there are broad design considerations which apply to all, ten of which are detailed below:



Being neighbourly – Tall buildings should have a positive relationship with surrounding features and other neighbouring tall buildings.



Stand out from the crowd – The architectural quality of the building, including its scale, form, massing, proportion, silhouette and cladding materials, is more important the higher up it is.



Do you like my hat? – The top of a tall building will be of particular importance because of its impact on the skyline, the local streetscape and views from a significant distance away.



Step softly – The effect of a tall building on the local microclimate should not be underestimated, nor should its overshadowing effect or its night-time appearance.



Easy to spot – Tall buildings create opportunities to offer improved accessibility while opening up views to improve the legibility of the wider cityscape.



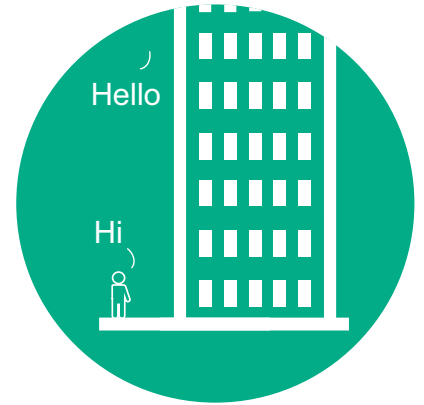
Responsibility – Creating a well-designed environment both inside and out, contributes to the quality of life of those who use and view the building.



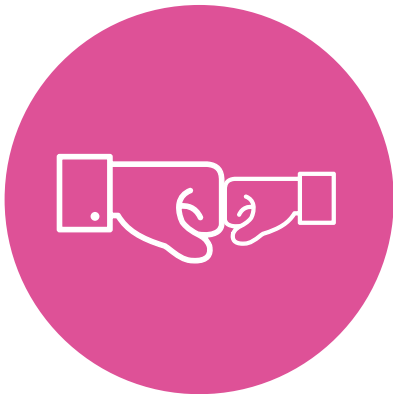
Lead by example – Tall buildings should set exemplary standards in design because of their high profile and local impact. Ideally, proposals should exceed the standards set by regulations and planning policies.



This is going to cost – Tall buildings are expensive to build, but it is extremely important not to dilute the design quality throughout the process of procurement, detailed design and construction.



Big friendly giant – The development should interact with, and contribute positively to, its surroundings at street level. It should aid safety, diversity, vitality, social engagement and a strong sense of place.



Respect one's elders – Tall building proposals must address their effect on historic buildings, sites and landscapes, both near and far.



RETAIL IS CHANGING, BUT IT WILL ALWAYS BE AT THE HEART OF ANY BUSTLING TOWN CENTRE. PEOPLE WANT INDEPENDENT BUTCHERS, DELIS, BOOKSHOPS ETC., WHILE CINEMAS, FOOD HALLS, BARS, RESTAURANTS, MARKETS

Chapman Taylor has many years' experience of working on tall buildings in a variety of conditions around the world. Our basic design philosophy is to combine efficient planning with dynamic forms to create functionally optimised and enjoyable buildings which are also visually impressive additions to their local skylines. Below are some examples:

M3M Financial Centre, Gurugram, India

M3M Financial Centre will be a 75,000m² office tower development, adding a 180m-tall landmark to the city's skyline – the tallest office building in India. The scheme, by M3M India Ltd, will create two office buildings served by triple-height shops and a restaurant in the podium.

It sits in one of India's fastest-growing business hubs, surrounded by an affluent residential neighbourhood and close to main routes to and from southern New Delhi and the international airport. Chapman Taylor has designed the architecture for this major commercial centre, which won "Best Mixed-Use Architecture in India" at the 2018 IPAX Asia-Pacific Property Awards.

Castle Park View, Bristol, UK

Castle Park View will regenerate a brownfield site in a prime location on the south-eastern corner of Castle Park. A 26-storey tower, the tallest structure in Bristol, and a 10-storey block will book-end the main building, which fronts onto a park.

The strong built form along the northern boundary will be reminiscent of the old castle wall which once stood on the site. The landmark building will provide 375 high-quality homes through a mixture of Build-to-Rent and affordable housing. Car/bicycle spaces and leisure facilities are also provided, along with a 24/7 concierge reception.

Chapman Taylor, acting for Linkcity, was responsible for the architectural design of Castle Park View, and we are now working with Bouygues UK on the construction phase and interior design, which is scheduled to complete in 2022.

Global Harbor, Shanghai, China

One of the largest mixed-use schemes in Shanghai, Global Harbor is an impressive and highly successful, 480,000m² GBA complex in the city's Putuo district, sited above a transport hub. Two 245-metre-high towers contain offices, apartments and a 5-Star hotel, and directly connect to a major shopping mall.

Chapman Taylor's design for Global Harbor was the winning scheme in China's prestigious Real Estate Design Awards, 2015-16.

Anchorage Gateway, Manchester, UK

Anchorage Gateway, a major residential scheme by Cole Waterhouse, will deliver up to 290 new apartments in Salford Quays within a 23,285m² building, designed by Chapman Taylor.

The design creates a 29-storey building, made up of ground, mezzanine and 27 levels of residential accommodation offering 290 one, two and three-bedroom apartments. The scheme also includes 372m² of commercial space, two shared residential landscaped terraces on both the mezzanine and level 19, a feature ground floor staircase and rooftop penthouse apartments that have extensive private terraces.

The regular, elegant form steps in its massing at the 20th storey, with the slimmer plane extending to the top. Each building "blade" is topped by an architectural "crown", within which external terraces will provide pleasant outdoor spaces for the warmer months, including a residents' rooftop garden with dramatic views over Salford Quays and the Manchester skyline.

The L-shaped building footprint maximises the opportunity for active street frontage, helping to foster a vibrant scene at street level. This will help improve the pedestrian experience of the site, which is used by workers, residents and visitors due to the nearby Metrolink tram stop.

42 Maslak, Istanbul, Turkey

An ambitious, mixed-use development on a sloping site in Istanbul, with two 42-storey residential towers at the heart of the development. The project incorporates office buildings, 442 apartments, 16 penthouses and service retail and F&B facilities.

The design theme is ‘artful living’ – an art gallery is incorporated in the development, and artworks are located in its public spaces. Even the construction vehicles were individually painted, becoming working pieces of art. It has culminated in a revolutionary project where people eat, sleep, live and socialise within a creative environment they can call their own.

42 Maslak is Turkey’s first commercial office project to receive LEED Platinum certification for the Core & Shell category.

Port Baku Tower, Baku, Azerbaijan

With a 130,000m² GBA Port Baku Tower is a Class A office tower with a large spa, indoor and outdoor swimming pools and sports amenities, a Bank, high-end retail, restaurants and parking for 1,200 cars

At 120 metre-tall it overlooks the Caspian Sea in Port Baku District and is an outstanding landmark on the city’s skyline, combining striking architecture with stunning views across the Bay of Baku.

Port Baku Tower 2, Baku, Azerbaijan

The architectural design for the 49,000m² Port Baku Tower 2 was conceived as a sculptural completion of the wider Port Baku development. The new mixed-use tower is an evolution of the original Port Baku Tower 1 design, completed in 2011, forming a “bookend” to the eastern aspect of Port Baku and creating a sense of enclosure to the central zone of the development.

The curving façades and inclined upper levels create an elegant addition to the Baku skyline, while the angled foyer space at the base of the new tower, with its 16m-high ceiling, creates an impressive entrance into the office building. The podium to the west of the tower mirrors the tower’s angled base and provides restaurant and retail offers to generate a vibrant circuit to draw people from the popular Fashion Avenue to the west.

Chapman Taylor acted as Lead Architect on behalf of Pasha Construction for this impressive and memorable Baku landmark.

USCE Tower Two, Belgrade, Serbia

Tower Two, in New Belgrade, will house Class A office space in a very prominent city centre location, perfectly located for easy access by car, bicycle or public transport. Set within a landscaped park, the project is designed to complement the existing Tower One and to create high-quality modern office accommodation for innovative companies seeking a highly sustainable development.

The scheme targets BREEAM Excellent certification for sustainability. A number of strategies have been followed to achieve an energy-efficient and sustainable design, including reduced south-facing glazing and incorporating vertical fins to further reduce solar gains, and a floor-by-floor decentralised ventilation system – this reduces riser space and allows individual control and metering of up to four tenanted zones and one landlord zone per floor. Natural ventilation is also used throughout the building, as is natural lighting – helping, along with a fluid layout which encourages movement, to create a culture of wellness for the building’s occupants.

Chapman Taylor worked with Buro Happold to develop a tightly integrated architectural and engineering concept.

As with some of the examples above, many of the tall buildings we design are mixed-use developments, and we bring extensive knowledge of the complex planning required to produce integrated and sustainable projects with the ability to provide seamless connections between the various functions. Our bespoke tower designs are always created to appropriately complement the wider cultural and physical context.



About the author

Nick joined Chapman Taylor's London studio in 1999 and worked on the award-winning Princesshay scheme in Exeter before joining the UK Concept Design team.

He was jointly responsible for establishing Chapman Taylor's Bristol studio in 2012 and, as a UK Board Director, is now responsible for the ongoing development and management of this part of the UK business. Nick also leads Chapman Taylor's Sustainability Group, responsible for researching best-practice environmental design initiatives and innovation.

He has 20 years' experience spanning all project stages.

