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Author:	Karl Fender, Director, Fender Katsalidis Architects
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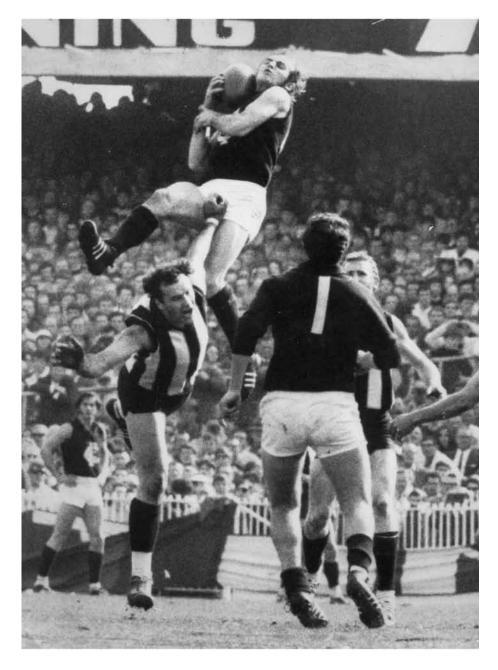
Karl Fender, Director, *Fender Katsalidis*

Tall buildings can amplify the positive physical and symbolic impact on a city. Fender Katsalidis has been at the forefront of high-density, high-rise residential buildings in Melbourne since 1995, and this typology has proven critical to the city's energy and evolution. Tall buildings – including Republic Tower, the first high-rise residential tower in Melbourne; Eureka Tower, the tallest (at the time) residential tower in the world; and the almost-completed 100-story Australia 108, which will be the tallest residential building in the Southern Hemisphere – have changed inner-city Melbourne from a 9–5 working environment, into the vibrant, 24/7 "Most Livable City in the World" that it is today.

The Height of Fascination. And Vice-Versa

What is it about extremes in vertical dimension that so fascinates? Whether ocean depth or mountain height, distance challenges the human comfort zone, which for many extends no further than their humble meter or two of physical presence above the earth's surface.

Strength, skill and courage alone can raise us a little above this corporeal zenith, but to soar, to rise way beyond, technological prowess is required. There is no doubting that humans love the challenge this presents. Conquering height is irresistible, intoxicating. It symbolizes success, and has become a measure of one's physical, social and cultural standing. Men on the moon, the towers of San Gimignano, the conquering of Everest, the construction of the Burj Khalifa: all are defining moments in human endeavor, achievements that changed the way humans think of themselves.

But even ephemeral achievements of height can leave a profound and lasting legacy. Australian Rules Football, a free-flowing, rough and tumble spectacle produces countless moments of high-leaping athleticism, but none have captured the imagination more than that of Carlton footballer, Alex Jesaulenko, at the Melbourne Cricket Ground in 1970.

Soaring impossibly high to grab the football above his opponent in that year's Victorian Football League Grand Final, Jesaulenko created a legend. The enormity of his extraordinary feat etched him into the cultural

Top: Carlton footballer Alex Jesaulenko takes "The Mark of the Century." Source: News Ltd / Newspix

Opposite: Eureka Tower stands as a proud landmark in the city of Melbourne. Source: John Gollings

annals of the game and added another famous chapter to Melbourne's sporting history. His feat encapsulated height. It defied gravity and normality, and required great skill. Emblazoned into civic memory, it remains part of the city's cultural milieu.

In the same way, soaring buildings embed the rewards of astonishing feats of human endeavor into the fabric of our cities. Like Jesaulenko, they add legend by defying the odds and displaying prowess beyond the norm. What greater visible demonstration of endeavor is there than to overcome gravity and the forces of nature by building to extreme heights? Advanced construction methods, sophisticated building materials, and accumulated engineering acumen make it possible.

Indeed, it seems today that height has no limit, and the commercial urge to 'go tall' is compelling and competitive. Sustainability through high-density, small-footprint, and populated activity centers, as well as economic reward and, of course, simply being noticed are just some of the alluring qualities of going tall.

Some regard the presence of tall buildings in a city as potentially damaging, however. Like Jesaulenko's mark, stand out height is relative to context. At say, five stories, an apartment building is considered to be quite low. But planned, for instance, adjacent to a single story residence, it will likely be considered outrageously tall, and a travesty of scale, by its neighbors-to-be.

While the impacts of tall buildings do incite public nervousness, with resultant outcry, it is often without real cause. The process of creating the marvel is often tempered by public fear of the new and unknown, and this has certainly been the case in the development journey of Melbourne over the last 50 years.

Melbourne, Then and Now: A Short History

Today, Melbourne is a thriving metropolis of 4.44 million inhabitants (Australian Bureau of Statistics, 2015). For the last four years, it has been voted the world's most livable city by the Economist Intelligence Unit's livability survey (The Economist Intelligence Unit 2014). Its central business district comprises a wealth of resident population,

commerce, retail, recreational, and cultural opportunities: all enriched by an abundance of parks and gardens. Melbourne is also renowned for its laneways, which provide surprise and delight, and main roads that in many instances are tree-lined boulevards. Across the city, which is home to Australia's second largest Asian population, you'll find residents from 180 countries and hear 233 languages and dialects spoken ("Demographics of Melbourne" 2015).

Melbourne is also the location for Eureka Residential Tower, the tallest (by floor plate) building in Australia. It is a true 24/7 city – vibrant and purposeful – which, given its age, is remarkable. To appreciate why, it's worth briefly looking at Melbourne's history.

In 1835, the first settlers of Melbourne sailed into Port Phillip Bay in a two-masted topsail schooner called the Enterprise. Soon after, John Batman, a grazier, explorer, and entrepreneur bought 243,000 acres of land from the Wurundjeri tribe of the Kulin Nation, paid for with blankets and trinkets. In his famous journal entry at the time, he declared, "This will be the place for a village." Two years later, the surveyor Robert

Hoddle laid out the street grid of Melbourne ensuring it would be enriched by a plentiful adjacency of parks and garden squares.

From its initial rural economy and population of just 177, Melbourne quickly transitioned into a major financial capital, following the discovery of alluvial gold in 1851. The influx of fortune seekers from around the world was immense, with the population reaching 300,000 by 1880. Coincident with the International Exhibition, Melbourne was elevated onto the world map as a major city and trade center.

By the mid-1950s, the post-war migrant influx had lifted Melbourne's population to around 1.5 million, although the popularity of home, garden and the automobile saw inner city population density decline in favor of the suburban ideal. At that time, nobody predicted just how far the suburbs would sprawl, and how hollow the city would become afterhours.

Like clockwork, the city's central business district would empty on the stroke of 5:30 pm, as workers embarked on the return journey to their suburban bliss. Many

would detour via the nearest hotel, to steel themselves for the lengthy, tedious drive home. But with the now archaic liquor licensing laws of the time mandating 6 pm closing, the city after that time was dead, its resources shut down and Hoddle's gardens left to the native fauna.

Melbourne Terraces: Rising to the Challenge

Only within the last twenty years have Melburnians began to reassess their options. With Melbourne's urbanized area extending roughly 50 kilometers in any direction from the city centre, daily commuters started to become increasingly disenfranchised with clogged arterial roads and relatively poor public transport options. Coupled with the emergent 'empty nester' syndrome, the desire for more convenient, smaller dwelling options began to emerge.

To be fair, Melbourne's collective housing mentality was forged on the great Australian dream of love, and perceived God-given right of home-on-land ownership. But the times were definitely changing. One obstacle, however, lay in the fact that inner Melbourne was substantially built out with

commercial and light industrial buildings. The built landscape of the time did not seem to suit residential expectations. Thus, it was seemingly against the odds that Melbourne Terrace—arguably the inner city's first major apartment complex in decades—was built in 1995 on Franklin Street, across from the food and produce stalls of the heritage-listed Queen Victoria Market.
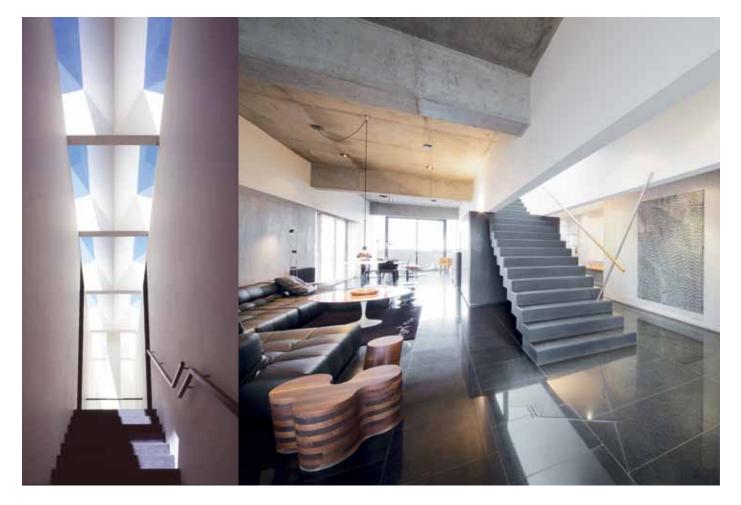
Prior to development, the site was a gravel car park, and the precinct, apart from the market, an underutilized corner of the city. It took the vision of architect, Nonda Katsalidis, and his two associates to recognize the location's potential and the need for an inner-city residential option. It also took their combined courage and financial resources to commit to developing the site themselves.

Eight stories high and comprising 92 apartments, the building was conceived as a series of connected terraces. In most instances, separate entry lobbies service two apartments per floor to individual addresses on the street below. Were it any higher, the city's building code would have required far more stringent and more costly fire controls. At 25 meters, however, a fire appliance can

access the building's façades by ladder and hose, which in turn allows a single open stair to pair with an elevator in a more open lobby environment.

Melbourne Terrace is obviously not a tall tower, but its effect on the city was profound. The project was launched into an unknown and untested market; however, it proved that there was a need for such a tower when all the apartments sold. For the first time in living memory, a residential enclave was brought into the city. Attracting professionals looking for image, comfort, and proximity to the workplace, it became home to a pioneer community and rewarded them with a lifestyle of convenience, simplicity, and elegance.

The building also set some compelling new urban design benchmarks. Its apartments were sculptural and conceived without reliance on superficial interior decoration. Entry lobbies were personalized at street level by figurative sculptures, bringing art to the public realm. Robust industrial materials, which improved untended with the patina of age, were sculpted and patterned as art surfaces in their own right. The building car park, which emerges from the sloping adjacent road, became the canvas for a ficus ivy wall—a welcome softening of a previously tough city street.

The emergence of Melbourne Terrace triggered change in the city precinct. It demonstrated an acceptance, albeit in a small way, of an inner-city residential

typology and hinted of a greater need. Accordingly, somewhat derelict surrounding warehouses were duly noticed and converted to multi-residential dwellings. In parallel, the City of Melbourne undertook a comprehensive landscaping program in the area, including the conversion of an adjacent street roundabout from car park to public garden complete with a major, commissioned sculpture.

Republic Tower: Raising the Bar

With this early foray into inner-city living vindicated by the precinct's rejuvenation, the developer gained the necessary financial outcome, kudos, and motivation to continue. Republic Tower—the Melbourne central business district's first modern residential high-rise tower—was thus conceived.

Located just around the corner from Melbourne Terrace, Republic Tower was completed in 2000. Its site had also stood vacant for years. It was encumbered both by a subway ventilation shaft, and a height restriction on redevelopment imposed by the City of Melbourne, which was made in consideration of an adjacent, two-story building that is heritage-listed.

At 32 stories and around 100 meters in height, Republic Tower could hardly have been considered excessively tall, but what it lacked in height, it made it up for in presence. As an ambassador for inner-city vertical living, it became, and remains today, a giant of its typology within the Melbourne central business district.

Following on from the limited yet robust materiality of Melbourne Terrace, this building's palette of materials was confined to concrete, stainless steel, and glass, with any chance of overt harshness dispelled by the urban-scaled sculptural presence of the building structure. Despite its complex, expensive-looking external appearance, the building's deceptively simple center core layout proved a developer's dream, delivering a 90 percent net-to-gross efficiency.

Although modest in height, Republic Tower should not have been built. It certainly received no support at the time from the City of Melbourne that wished to "respect" the scale and curtilage of the bluestone neighbor. And yet previous conforming schemes for the site generated by others had demonstrated how a sameness of scale

could absorb and neutralize the strength and character of the neighboring structure. By contrast, a taller slender tower with a responsively scaled and textured podium would mark the place, while providing an interesting, urbane ground level experience.
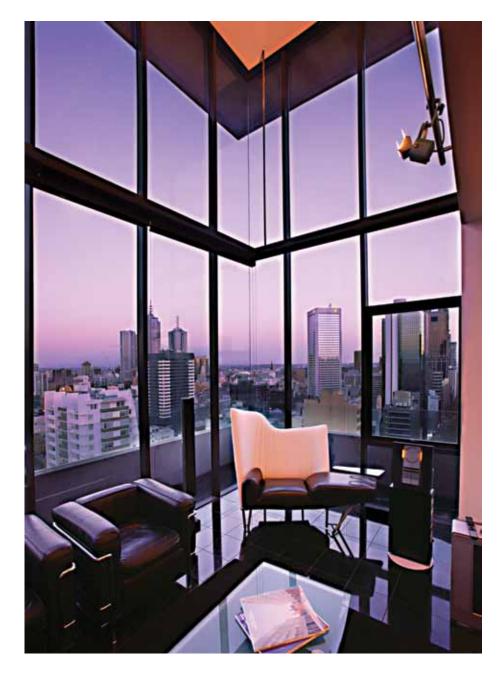
Fortunately, Rob Maclellan, the then Victorian Government Minister for Planning, agreed. With admirable political courage, he intervened and granted a planning permit, thereby ensuring that this opportunity to realize a positive, city-changing initiative would not be stymied by generalist by-laws (Architecture Australia 1997).

As well as the tower form bringing a significant urban-scaled sculpture to this corner of the city, Republic Tower created a holistic vertical living environment for its residents. All apartments enjoy expansive corner views; some even feature soaring two-story interiors. The residents' pool, gym, and spa facilities crown the building, democratizing its most valuable real estate and allowing all to share its magnificent vistas. A fine dining restaurant, café, and a bar sit at street level. Shaded by a vine-covered timber pergola—an unusual sight

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in the city—they cheerfully activate a once fairly desolate streetscape.

An even more unusual sight faces out from the building's Latrobe and Queen Streets corner. In an example of adversity fertilizing unexpected opportunity, a large but necessary ventilation shaft to the subway below has been embraced and utilized as a permanent field for large-scaled poster art which is constantly rotating. Much to the temporary chagrin of passing motorists, the changing-over-of-art celebration became a public event, with champagne-wielding art aficionados occupying the street for five minutes, three to four times each year, as the new art was unveiled. A modest affair, some might say, but one that added to the cultural pageantry of the city.

Fittingly, Republic Tower was lauded by the public and, to this day, remains a successful example of a catalyst for the acceptance of inner-city living. It helped water down the community's preconceived notion that high-density living would invariably be as undesirable as the Victorian Government public housing programs inflicted on Melbourne's less fortunate socioeconomic

strata in the 1950s. Mostly post-war immigrants seeking affordable housing, they were offered these as their only residential option: the buildings were small-windowed, low-ceilinged, and soulless apartments in 20-story prefab concrete edifices. Low-rise worker cottage precincts, which are now considered valuable and irreplaceable, were razed to make way for these barren buildings that were then set in open space with neither amenities nor sufficient facilities. Enclaves serving a single social strata, they became crime-ridden environments. They created social stigma and were an unmitigated social disaster. They still exist today in the inner suburbs and were without a doubt one of the reasons for public suspicion of proposed higher density, high-rise housing typology in Melbourne. But with Republic Tower helping to assuage this aversion, more examples of inner-city high-rise began to appear, and be filled. Thus, by 2002, it seemed that the public marketplace was ready for the Eureka Tower.

Eureka Tower: Beyond Expectation

Occupying an entire city block, the Eureka Tower complex brought mixed-use to part of the city's river precinct that was also neglected up until this point. In addition to its 300-meter residential tower holding 583 apartments, the site integrates a hotel, restaurants, retail, showrooms, commercial space, and a public parking lot. The residential tower also contains a democratically placed public "skydeck" at its peak, and an open-air palm tree courtyard at its base. From the latter, it provides an arcaded linkage from Melbourne's

restaurant-lined Yarra River to the previously disconnected residential communities behind. The building's crown is composed of a multi-story gold block punctuated by a thin red vertical blade. Legend already has it that the block symbolizes Melbourne's frenzied gold rush of the mid-nineteenth century, with the red blade representing blood spilt during the Eureka Stockade, a gold miners' revolt against the cruel constabulary of the time.

The residual nay-saying "experts" were certain this single release of almost 600 apartments would never get off the ground, but Melbournians disagreed. The project was enthusiastically welcomed by local owner/occupiers, its success proving that the Melbourne apartment marketplace had matured.

The project was a significant catalyst of change for this part of the city, capturing the public's imagination. From a thin riverbank experience, the area became a thriving hub of social interaction. It prompted further apartment tower growth in the area. It stimulated reaction from the City of Melbourne, whose planning department had been "caught short" for coherent, appropriate policy by the unanticipated, energetic growth. Most telling of all, it focused international attention on inner Melbourne real estate, and gave overseas investors and developers alike, the enormous confidence required to commit their funds. Into this booming environment, Australia 108 – the nation's tallest building (by floor plate height) – was born.

"The building's crown is composed of a multi-story gold block punctuated by a thin red vertical blade. Legend already has it that the block symbolizes Melbourne's frenzied gold rush of the mid-nineteenth century, with the red blade representing blood spilt during the Eureka Stockade, a gold miners' revolt against the cruel constabulary of the time."

Opposite Top: Republic Tower's swimming pool offers a panoramic view of Melbourne. Source: John Gollings

Opposite Bottom: The Republic Tower features rotating art pieces to the street corner. Source: John Gollings

Right: Eureka Tower. Source: John Gollings

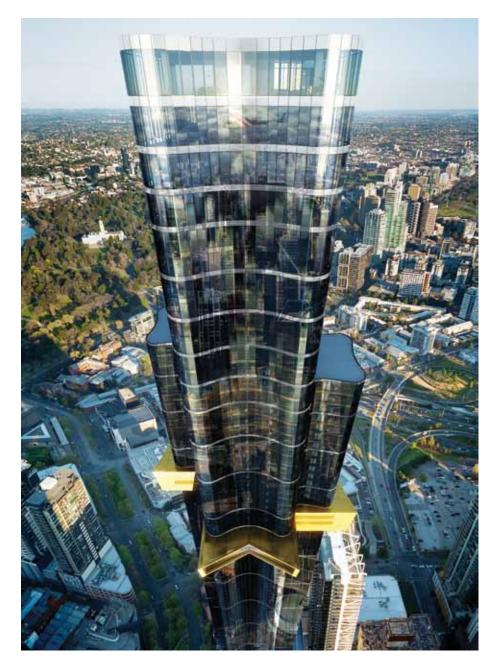Bottom: Eureka Tower helped Melbourne's CBD to "jump the river." Source: Fender Katsalidis

Melbourne Central Business District Dwellings 1982–2012		
Year	Residential Dwellings	Individual Residential Establishments
1982	203	203
1987	312	312
1992	569	381
1997	3,265	207
2000	6,108	262
2002	8,832	290
2004	10,167	313
2006	12,512	329
2008	14,550	342
2010	16,305	351
2012	18,158	354

Table 1: Dwellings include: Residential Apartments, Student Accommodation, Serviced Apartments and Houses/Townhouses. (Census of Land Use and Employment 2015). Source: City of Melbourne

Australia 108: The Sky's the Limit

Standing 318 meters in height, and weighing in at about 150,000 tonnes, Australia 108 is designed as a sculptural counterpart to Eureka Tower, with which it will form a visual gateway to the city's western coastal regions. To be delivered by Singapore's Aspial Development Group, the 100-story tower will deliver 1,105 apartments of all shapes and sizes when completed in 2019. The smallest one-bedroom apartments are just over 50 square meters, and the largest apartment – a multilevel penthouse – recently sold off the plan for AUD 25 million. The building comprises an engaging combination of orthogonal and softly curved forms, punctuated at two thirds of the building height by a dramatic, two-story gold "starburst." The planned form of this element, which houses the residential community's leisure and recreational facilities, is derived from the Commonwealth star on the Australian flag; this symbolism, like that of Eureka Tower, will help create legend and cultural richness within the city.

Car parking is contained in the tower's lower public realm podium, and is screened by a major palm garden set into the external edge structure of the building. The arrangement softens the harsh street edge environment, acts as a garden foil to the residents arriving home in their vehicles, and lifts the spirit of the extremely busy road below.

Eureka Tower may have put Melbourne on the map internationally as a confident, design-conscious city, but Australia 108

has added significantly to this reputation. These two buildings are now accompanied by many other significant residential developments that, together, provide downtown Melbourne with a thriving residential population.

A Typology Embraced, A City Transformed

Inner-city Melbourne's rapid evolution from commercial district to residential epicenter has also been aided by supportive local and state government policy. During his time in office former Victorian Premier, Jeff Kennett, championed Melbourne as Australia's events capital (Costar, B & Economou, N 1999). He brought sporting, recreational, and cultural events to the city as well as the attendant-built facilities, and residents have embraced wholeheartedly these enlivening additions to

their lifestyle. Furthermore, the tiny laneways of the city, which were once service arteries to commerce, have been transformed into a rich grain of discovery, with conversions into bars, restaurants, galleries and design showrooms enriching the city beyond recent imagination.

This vibrant transformation would not have been possible without a critical mass of local population, as seen in Table 1, and that population could only be housed vertically. Once skeptical, Melbournians now readily accept this high-density typology. The advent of the residential skyscrapers together with their commercial brethren has arguably changed Melbourne for the better. While there is much robust, ongoing discussion about appropriate controls to deal with unbridled growth, the psychology of

the city has been enriched and its physiology enhanced. The skyscraper-dominated skyline has become sculptural, powerful, and emblematic of an enviable, contemporary lifestyle. Melbourne now exudes confidence in its future.

References:

Australian Bureau of Statistics 2015, **Regional Population Growth, Australia, 2013-14**, cat. no. 3218.0 ABS, [Online] Available from http://www.abs.gov.au/ausstats/abs@.nsf/mf/3218.0/ [Accessed: 11th May 2015]

The Economist Intelligence Unit 2014, **A Summary of the Liveability Ranking and Overview 2014**, The Economist Intelligence Unit Limited 2014

'Demographics of Melbourne', 2015, Wikipedia, wiki article, [Online] Available from http://en.wikipedia.org/wiki/Demographics_of_Melbourne [Accessed: 9th May 2015]

Architecture Australia 1997, **Headlines**, Architecture Australia – September 1997 (Vol 86 No 5)

Costar, B & Economou, N 1999, **The Kennett Revolution: Victorian politics in the 1990s**, UNSW Press, University of New South Wales

Census of Land Use and Employment 2015, Melbourne Central Business District Dwellings 1982–2012, City of Melbourne [Accessed: 15th May 2015]