



## Transforming the fitness experience

*When a client's architectural brief is to create not just a place, but an experience – to excite, amaze and inspire like never before – it's a wonderful opportunity to challenge and go beyond traditional concepts.*



It's an opportunity that Director Ross Brown and the Stephenson&Turner team welcomed with relish when invited to design the company's fourth fitness centre for Les Mills New Zealand. Les Mills Hutt City – which officially opened on 2 September – redefines the genre, providing its members with an energising and constantly dynamic environment in which to achieve the results they're looking for.

"It's everything we wanted," says Les Mills New Zealand's Chief Executive Reece Zondag. "It reflects everything about the Les Mills brand – it has huge passion and personality, it's fun and interesting, and it's an incredibly vibrant and exciting place to be."

Formerly a Mitre 10 location, the Pretoria Street building has been transformed inside and out. From the moment you enter the doors and see the welcoming 'Hi' on the reception desk, you're transported to a place of extraordinary light, movement and sound.



Huge, expansively lit walls are saturated with colours and patterns that can change within the hour; lighting at ground level creates the illusion of floating elements – whether they're performance stages, walls or lockers; and music and lighting can be changed, with a single switch, to match the mood of the moment – from low temperatures and high-energy lighting for sweat-intensive Body Attack classes to warmer temperatures and more subtle effects for the Body Balance blend of yoga, Pilates and tai chi. Exercise and entertainment combine (in an experience Les Mills calls 'exertainment'), with huge video screens adding movement and light to the entire experience.

S&T's brief covered the gamut of Les Mills' fitness centre requirements: a welcoming reception area; RPM (biking) studio; group fitness studio; main gym area; women-only gym; and a 'cardio cinema', where cardio equipment is arranged cinema-tiered style with the focus on a large, top-quality video and audio system. Along with this came expectations of effective acoustics, wireless connectivity, easy-clean, hard-wearing surfaces, smart cross-area navigation, and ample and well lit changing spaces, with plenty of lockers and roomy showers as well as hairdryers and ironing boards.

S&T was also committed to meeting its own principles of sustainability and energy conservation.

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While fitting out an existing building makes this more difficult than starting from scratch, initiatives included: ensuring the most efficient airflow through the building; using zero ozone-depleting refrigerants in areas that are cooled; using flow restrictors in the showers; and installing a state-of-the-art building management system to control the mechanical systems according to the Centre's schedule. Energy-efficient or fluorescent light sources have been used wherever possible, and light dimmers are saving on energy costs and extending lamp life.

The gym is proving a huge hit with Hutt City locals and is well on its way to achieving its target of 3500 members by mid-June 2007.

"We're absolutely delighted with S&T's achievement," says Reece. "It's the culmination of a year's hard work – and it's fantastic to get things from ideas to paper and finally to construction. This is undoubtedly one of the best fitness centres in the world, and we're extremely proud to call it our own."



## S&T business partners win awards



### James Hardie Awards of Excellence

Stephenson&Turner-designed ceilings at Auckland International Airport featured in the recent James Hardie Awards of Excellence.

The Commercial Project and People's Choice Awards went to Forman Commercial Interiors, which was subcontracted by Hawkins Construction to install the specialty suspended ceilings in the airport's Pier A Segregation area.

Forman was required to meet stringent design requirements for seismic loadings using a complex support structure where wooden laminated and perforated panels were applied to a steel substrate. The work was made more challenging by a tight deadline and the need to keep the airport fully operational throughout. The Forman team delivered a superb performance, and we congratulate them on their awards.

Client: Les Mills New Zealand  
Architecture and Building Engineering Services:  
Stephenson&Turner



### NZIOB Awards for Excellence

Auckland International Airport also featured in the annual New Zealand Institute of Building's (NZIOB's) Awards for Excellence in the Building Profession.

This time project director Ted Senner, of Hawkins Construction, was the recipient – winning 'Highly Commended' in the 'Davis Langdon over \$50 million' award. Ted was responsible for ensuring the Pier A extension and refurbishment programme was completed on time and on budget.

The other winner was Gordon Murdoch of Fletcher Construction, the project manager for S&T's Youth Justice South project for Child, Youth and Family. Gordon was also awarded a 'Highly Commended', this time in the 'Holcim Projects between \$15 million and \$50 million' category.

Our congratulations also go to Ted and Gordon, two very well deserving winners.

## Manufacturing on a domestic scale

*When Fisher & Paykel Healthcare Corporation decided to expand its manufacturing facilities in East Tamaki, Auckland, it did it in style.*

The company built its first facility on the site (the O'Hare building) in 2001 – a huge building the size of four rugby fields. The second (the Stewart building) is almost as vast at three rugby fields, yet the design gives them both a distinctly 'human' scale. Although tall, the building roofs are layered, stepping down to create a welcoming entrance for visitors and staff alike – and the extensive use of glazed walls provides transparency as well as a visual connection that encourages communication and staff interaction and enhances productivity.

"It's arguably the largest low-rise industrial office complex in New Zealand," says Stephenson&Turner Director Michael Dixon. "It has a total area of more than 50,000 square metres, yet from outside the overall effect is of a much smaller site."

The Stewart building provides warehousing and manufacturing facilities for continuous positive airway pressure (CPAP) therapy products, which are used to treat obstructive sleep apnoea.



They demand a clean manufacturing environment, with stringent requirements for ventilation, electrical power, lighting, plumbing and drainage, fire services and fire engineering, security and data cabling services – all designed by S&T.

Director Michael Dixon says the project posed a number of challenges, including the design of fire protection.

"The warehouse has very high storage racking, so we introduced a system of early-suppression, fast-response (ESFR) sprinklers to avoid the need for in-rack sprinklers," he says. "The electrical system was also designed so that the facility can be easily altered as production requirements change."



With more than 10 years' experience on Fisher & Paykel projects, from the East Tamaki Fisher & Paykel Healthcare industrial complex to the company's electronics, appliances, laundry and refrigeration divisions, S&T was well placed to provide engineering services to the Stewart building. "The result is a great working environment for Fisher & Paykel staff – and a building with a stylish, elegant design that belies its essentially industrial use," says Michael.

*Client: Fisher & Paykel Healthcare  
Building Engineering Services:  
Stephenson&Turner*



## Iconic S&T building recognised

*One of Stephenson&Turner's earliest architectural projects in New Zealand has won the 2006 Enduring Award for Architecture from the Wellington branch of the New Zealand Institute of Architects (NZIA).*



The 14-storey Shell House on Wellington's The Terrace was completed in 1960 as the head office of the Royal Dutch Shell Petroleum Company. New Zealand's tallest building at the time, it was built using a number of groundbreaking techniques that cemented its place as an exemplar of architectural innovation.

The most striking feature is the building's aluminium and glass curtain wall, which echoed the design, in both proportion and colour, of Skidmore, Owings & Merrill's (SOM's) Lever House in New York, built in 1950-52. With a tight construction deadline, the process also used an innovative system that enabled maximum use of off-site prefabrication to spread the work over as many concurrent fronts as possible. The building's structure was also designed to minimise weight to achieve its tall, slender appearance.

The Award citation states: "Wellington's first podium and tower building sensitively modifying the principles of SOM's Lever House by utilising a steel frame and aluminium curtain wall to achieve a clean un-cluttered form, albeit with an alien south face of exposed aggregate concrete. An icon of its time (and still a valid approach) which has, sadly, seldom been bettered."

S&T has maintained enduring connections with Shell House ever since its beginnings. Our Wellington offices were located on its third floor between the date it opened and 1989, and we continue to be involved with work on the building today. It's a jewel in the S&T crown, and we're delighted to see its modern design (and indeed the building itself) continuing to impress in the 21st century.



## New select committee rooms open

*Walk past No 3 The Terrace in Wellington and you may not realise that some of the most important issues of the day are being discussed beneath your feet – in brand-new select committee rooms designed by Stephenson&Turner.*

The rooms were formerly occupied by Parliament’s temporary debating chamber, which was built and used about 10 years ago while Parliament buildings were being refurbished. This space has been transformed into two impressive select committee rooms and an acoustically separated public gallery. The rooms are divided by an acoustic moveable ‘wall’ mounted by glass suspended on a filigree of cabling. The wall enables the space to be opened into one large room should it be needed for larger meetings and Parliamentary functions – as well as for debating-chamber use again.

“Given that this is a fully internal space, it was a fascinating project for the S&T team,” says Director Dennis Chippindale. “Our aim was to ensure a calm yet dynamically lit environment conducive to the rooms’ use, and to give the space a uniquely ‘New Zealand’ identity.”

The design integrates New Zealand artists’ work wherever possible, with external walls providing dedicated ‘gallery space’. The carpet was designed by the late John Bevan-Ford and is based on a Māori feather cloak, and the light fittings in the ‘Speaker’s stair’ are by David Trubridge. Each element is carefully lit, providing a relaxed yet interesting space for both committee members and people making submissions.



*Client: Parliamentary Service  
Architecture and Interior Design:  
Stephenson&Turner*

## Creativity to the fore in Architecture Week

*The S&T team's creative flair beyond the realms of architecture has been recognised!*



The team entered the inaugural 'Can Construct' competition, organised by the Auckland branch of the New Zealand Institute of Architects (NZIA) as part of Auckland Architecture Week – celebrating 'The Joy of Architecture' – on 6-12 September.

Tasked with creating a sculpture out of food cans, S&T created a large pin form, which pushed out cans in the form of a Golden Mean symbol on one side and an Ionic column capital on the other. Judges Pete Bossley, John Balasoglou and Miriam van Wezel announced this ingenious design, which represented the foundations of architecture, as the winner!

## New retail building on The Terrace

*One of the last available spaces on The Terrace in central Wellington is to be filled with a single-level retail building.*

The purpose-built, high-profile retail space will be built at number 73, in a space currently used for parking and rear pedestrian access to an existing tower facing Lambton Quay. The design is being led by Stephenson&Turner Director Malcolm Gardiner, who says while a three-level structure was considered, the single-level option was chosen for its minimal structural impact on an existing (and occupied) three-level basement immediately below.

"With its high ceilings and extensive glass frontage, which wraps around next to the pedestrian and car parking entry to Lambton House, the space will provide excellent exposure for the tenants," he says. "It will suit either two separate retail businesses or a single, larger one."

*Client: Robt Jones Holdings Ltd  
Architecture and Building Engineering Services:  
Stephenson&Turner*

Malcolm says the building's owner, Sir Robert Jones, wishes to enhance the interface between retail space and public areas, as he has already done in other parts of the central business district, by repaving the asphalt footpath in coloured cobblestone paving. This, coupled with a full-width veranda, will create a superb environment for retailers and shoppers alike.

The building is due for completion early in the new year, and negotiations are already underway with a number of interested parties.



## Information in lights

Visitors and locals taking the air on Wellington's popular waterfront promenade can't help but notice the new New York-style electronic scrolling sign on the facades of the NZX Centre. The building is the former Odlin's Building – a landmark heritage structure that, after standing empty for years, has recently been strengthened and refurbished.

The sign, which totals 70 metres in length and displays the latest sharemarket prices, is believed to be the longest 'ticker' sign installation in the world. Stephenson&Turner provided technical assistance to Wellington City Council in reviewing the resource consent application and selecting the sign's supplier.

*Client: Wellington City Council  
Technical Assistance: Stephenson&Turner*

## New technology brings sketches to life – fast

*Stephenson&Turner’s 3D imaging capabilities have been transformed with the recent purchase of a dedicated ‘render server’. This awesome technology enables the team to complete remarkable 3D images of building and engineering projects in much faster times than were previously possible.*

“It used to take up to 32 hours to produce a single image; now we can do it minutes,” says S&T Associate Director and CAD Manager Jason Howden. “This means we can construct images and make changes easily – keeping our clients up to date and informed on initial and subsequent designs.”

The technology is state of the art for New Zealand – in fact, S&T is trialling it for the New Zealand market.

“It’s a fantastic tool for testing and proving our designs in ‘real life’ conditions,” says Jason. “For example, by siting buildings in their proposed landscape using satellite photographs, we can show our clients how their projects will impact on the environment – and if necessary develop mitigating strategies.”

The result is images that look so real you’d think they were – just take a look at the examples we’ve included here!



Les Mills – actual photos



Les Mills – 3D-rendered images



## ‘Virtual’ technology sets an example

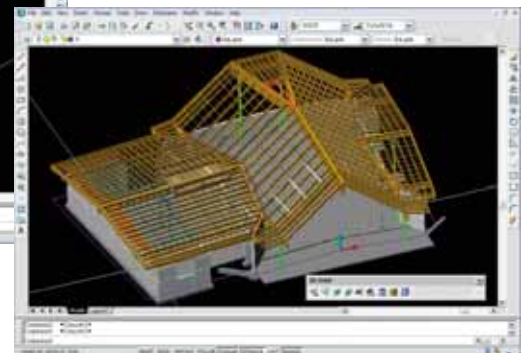
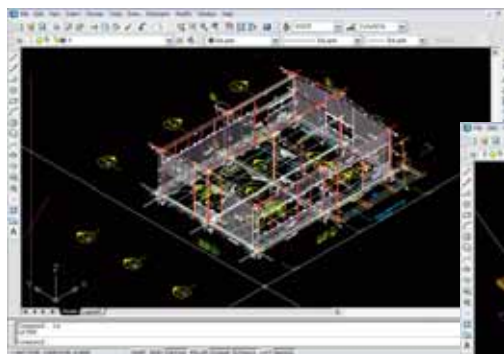
*Stephenson&Turner’s ‘building information model’ (BIM) approach to design came under the spotlight at four recent Timber Design Society seminars.*

Using leading-edge computer technology, BIM creates ‘virtual’ data-based models of buildings and their complex engineering requirements. S&T’s Ross Brown and Brian Minns spoke about its value in communicating design manufacturing detail for the Spring Hill Corrections Facility, a major S&T project for the Department of Corrections.

BIM is rapidly developing into the worldwide platform of choice for transferring design information clearly and efficiently. In the past, document duplication throughout the design and construction phases meant the intent was often diluted or at worst misrepresented, preventing full realisation of the project design.

As with all new technologies, education is the key to BIM’s success. While computer-aided design (CAD) offered consultants the opportunity to reproduce their drawings better and more accurately, BIM is a whole new challenge with an immense range of possibilities. It requires not only new skills but also new levels of communication among participants, with everyone contributing to the virtual building the process creates.

The Timber Design Seminar series provided an excellent opportunity to present and discuss these new developments directly with other design professionals, builders and manufacturers.



## Jim Irvine (1947-2006)

*It is with great sadness that we pay this tribute to Jim (James Stephen) Irvine, a Director of Argest Technical Services, who died on 11 August 2006, aged 59.*

Jim joined Argest in July 1990, when the company had just two employees and was largely responsible for building reviews and commissioning work. However, the passing of the Building Act soon afterwards changed Argest's role to one of compliance management – a challenge that Jim tackled with zest, becoming a key conduit on compliance-related issues between the law-makers, the Argest team and clients, all of whom were very much finding their way in this new legislative environment.

Jim also took an important role in the revised 2004 Building Act, making submissions to Parliament and communicating the industry's needs and the potential impacts of the new law.

A physically imposing man, Jim was a highly respected member of the Argest team, which today numbers 17.

His direct, no-nonsense attitude was always accompanied by a smile, and his strong loyalty to all things Australian (which included a morning-tea shout every Australia Day) saw plenty of friendly rivalry among the team.



Jim had enormous integrity, and was admired by everyone who worked for and with him. He was also an excellent leader, encouraging people in his team to take on new responsibilities but always being available to answer questions and provide support. His impact can be seen in the large number of long-term, nationwide contracts he developed.

To celebrate Jim's life and his role at Argest, we've planted a totara tree in Kaitoke Regional Park. The tree is among many hundreds planted by members of the S&T and Argest teams, together with Jim's wife Joy and his children Joanne and James, on 14 October 2006.

He is, and always will be, greatly missed.

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