

Case Study

Kathmandu

Helping Kathmandu reach new heights.





Kathmandu[®]

**Distribution
Centre**

33 Kennaway Road, Heathcote

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Kathmandu is a retailer of travel and adventure clothing and equipment. Founded in Christchurch over a decade ago, it now has 44 stores in New Zealand, 83 in Australia and 6 in the UK, with an online store in each region.

With that sort of growth, it was inevitable that Kathmandu's original National Distribution Centre (NDC) in New Zealand, with floor space of 3,600sqm and a stud height of just 6 metres, would eventually prove too small. It also had no canopy, making it impossible to complete any outside work during poor weather. Despite these restrictions, up to 3,000,000 units were going in and out of the facility annually and for the last two years of its operation, the facility was constantly 100% full.

Something had to change, so three years prior to the end of their lease on the original NDC, Kathmandu began drawing up plans for a new domestic distribution model for New Zealand.

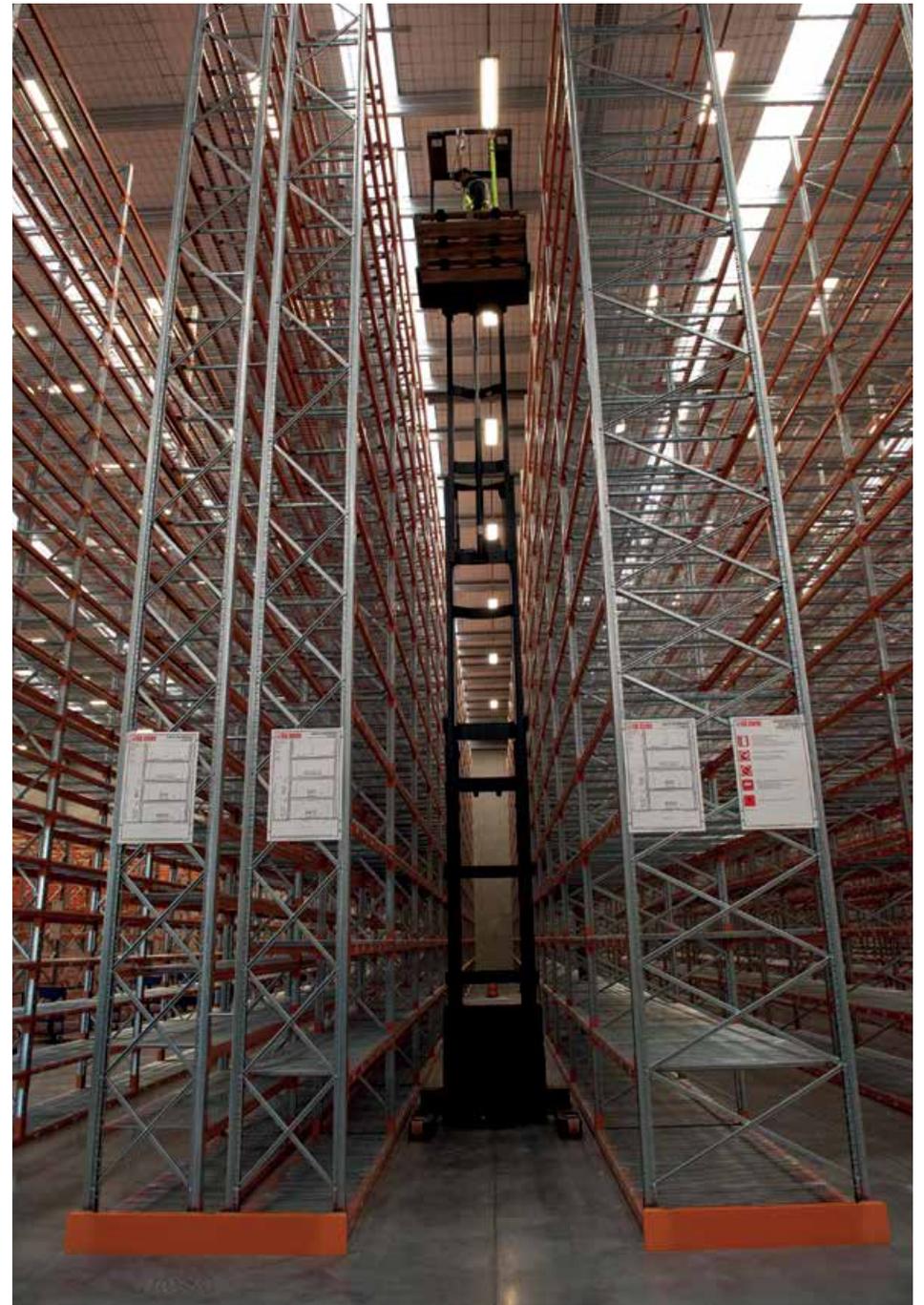
They worked through the specifics of what the new NDC would look like in terms of footprint, height, storage methodology, work areas, canopy and yard size. At the end of this process, they had a good idea

of what they wanted in terms of a racking solution for the new building and called for tenders.

Dexion had provided the racking for Kathmandu's original NDC in New Zealand, and were invited to tender for the new distribution centre. Once briefed, Dexion began looking at the best options for the new facility.

On 4 September 2010 and then on 22 February 2011, Christchurch was hit by devastating earthquakes. The first caused widespread damage but the second was absolutely catastrophic, the intensity and violence of the ground shaking among the strongest ever recorded in an urban area.

With the health and safety of its staff Kathmandu's first priority, the tender process was temporarily put on hold while their management team reviewed the new facility's design requirements and location. Beyond purely logistic and seismic considerations, there was however a very human factor that would ultimately drive their decision. Kathmandu had fiercely loyal local staff, many of whom had been with the company for over 15 years.



“One fact that reassured everyone was how well the Dexion racking in the existing NDC stood up to the earthquakes, because it was, quite literally, still standing after both quakes.”

As well as staff having to deal with the aftermath of the earthquakes, a proposed relocation of the facility, and the resulting job losses, would have been an especially cruel blow.

If Kathmandu were going to stay in Christchurch, they would have to prove that their new NDC could withstand not only the inevitable continuing aftershocks, but also the risk of another earthquake. With staff working in and around the racking, safety became the key issue on the table. This prompted Kathmandu to re-engage with Dexion and begin the process of designing a storage system strong enough for any eventuality.

Jeff Darby, Dexion's National Supply Centre & Realisation Manager, summed up the re-defined scope of the project this way: “The Kathmandu management team were steadfast in wanting to be able to stand in front of their workers, hand on heart, and tell them that they'd be putting them in the safest environment they possibly could.”

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From left: Peter Halkett, CEO Kathmandu Ltd, Gerry Brownleem Minister for Canterbury Earthquake Recovery and the Minister of Transport, Stuart Guerin, Kathmandu Distribution Centre Manager.

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earthquakes, because it was, quite literally, still standing after both quakes. After quick clean ups, the facility was operational and servicing its retail network again.

While all Dexion components are continuously independently tested in Sydney at the University of Technology, Kathmandu's specific situation required even greater rigor. This led to creating sophisticated computer models to simulate earthquakes and their effect on different racking and storage configurations.

As a result of all this testing, the Dexion team, working closely with Kathmandu, came up with a number of solutions, all specifically engineered with seismic considerations in mind. For example, the soil at the site of the new facility was reclassified and this had a major impact on the recommended solution. This was where the Dexion team turned to a high-tech solution.

Describing the process, Stuart Guerin, Kathmandu's New Zealand Distribution Manager, said: “Dexion were superb at

taking the time to teach us what we needed to know about racking design and why some installations had failed in the recent earthquake events. Ultimately, they were able to give us multiple options on how we could make the racking solution as safe as possible for our people, but also commercially viable at the same time.”

The final solution for the new 5,000sqm facility includes over 1,600 selective pallet racking locations for general bulk storage and ‘Base Camp’ product, and over 8,000 pick-faces in Longspan shelving designed specifically to support a mezzanine floor as future growth demands. There are also over 16,000 carton storage locations in narrow aisle, high-bay shelving providing case picking, plus a conveyor system to transport cartons from the pick-face to despatch area, and a 1,100 sqm all-weather canopy.

The solution includes rack protection to minimise damage that could compromise the system's structural integrity, and mesh decks on every pallet level to prevent product falling through to the next level. Overall, the facility's design has increased efficiency in processing

apparel products and enabled Kathmandu to increase their storage density whilst maintaining immediate accessibility to products for picking efficiency.

Stuart Guerin said, “This was a big change for us and has proved to be a far more efficient storage method in terms of processing moves in and out, and has also yielded benefits in improved storage utilisation per square metre of warehouse. Unit throughput has increased and we are showing continuing improvements in operational efficiency.”

“The additional safety measures in the facility also provide ever more confidence to our staff should seismic events occur in the future. And with the added space and the design of the racking solution, we've minimised the risk of MHE and pedestrians to be in the same area at the same time.”

Since the move to their new NDC, Kathmandu has been constantly improving its service to its New Zealand store network. The extra space and operational efficiencies gained from the improved racking design have enabled

“Delivery Improvement” work streams to be implemented. As a result, Kathmandu can react to demand spikes faster, which is absolutely critical for continued retail success.

So thanks to some smart partnering with Dexion, Kathmandu is continuing their steady ascent.