



Philips LED Case Study: PUDNEY & LEE

Background

Nationwide distributor Pudney & Lee represents some of New Zealand's leading consumer electronics accessories – so when building a new office complex to accommodate their expanding company, they wanted the latest in lighting technology.

“I'd been reading a lot about the efficiency and benefits of LED lighting, so I was very interested in seeing if we could incorporate it into the new office fit out as a way of making the building more energy-efficient,” says Graham Pudney, Managing Director Pudney & Lee.

According to the government's energy efficiency and conservation authority (EECA), switching to energy-efficient lighting provides one of the best returns on investment for companies looking to reduce their energy use.¹

“Getting the lighting right is more important than most businesses realise. It makes up around 30% of their building's energy use, and Philips' research has found that investing in good workplace lighting can contribute to greater employee well-being and performance by reducing employee stress, absenteeism and industrial accidents,” says Ken McDonald, Project Manager, Philips Lighting.

How did they do it?

A number of Philips LED solutions were presented to Pudney & Lee, who selected the Philips Smart Panel. Philips then compiled a lighting design incorporating the Smart Panel for Pudney & Lee's open plan office space, meeting rooms and corridors. These energy-efficient LED luminaires provide high quality, uniform light, which is essential for general office environments. The panels have a slim profile, so don't add bulk to the ceiling.

“These are one of the first Philips SmartPanel LED solutions to be installed in New Zealand – they really are the latest and greatest, and genuinely live up to their name,” says Ken McDonald.

With Philips LEDs able to provide different shades of white, Pudney & Lee were able to tailor the 'warmth' of the light to different settings. For task and work areas, a cooler white was used, while in hallways and communal areas (like the bathrooms and tea room) a warmer, more yellow light was used. As well as breaking up the spaces, the warmer light helps to create more relaxed spaces for staff.

In the bathrooms and main entry, Philips Greenspace LED Downlights were used. With a simple and elegant design, the downlights provide high-quality energy-efficient lighting. The diffused cover enhances the light's uniformity and reduces glare.

Compared to CFL downlights, Philips' Greenspace LEDs can provide energy savings of up to 60%, which provide a significant cost savings over their 30,000-hour lifetime. The

energy-efficiency of the lighting can also be improved with smart controls, which can achieve additional savings of up to 30%.

“Rather than hounding people to remember to turn off the lights, we installed Philips OccuSwitch sensor technology. These turn the lights off once there has been no movement in the room for a certain amount of time – maximising the life of our lighting and keeping our running costs down,” says Graham Pudney.

The energy efficiency of the lighting and technology was enhanced with good lighting design.

“We really wanted energy-efficient solutions that were also cost effective, so we ensured that the lighting design and layout made best use of the large amount of natural light in the building,” says Philips’ Ken McDonald.

As well as providing natural light, these windows act as the building’s first port of call for staff looking to cool down. Rather than constantly running the office’s air conditioning, staff are encouraged to first open a window.

The result

“We knew a bit about LED, so had high expectations, but it turned out even better than expected – we were blown away by the quality of light LED provides – people really notice the difference,” says Graham Pudney.

The extent of the energy savings was also surprising – even to the electrician installing the lighting.

“Our electrician put a clamp around a circuit with the SmartPanel LEDs, and he found that they were drawing much less power than traditional lighting” says Graham Pudney.

Pudney & Lee were so convinced by the LED lighting that they’ve used it exclusively throughout the building, from the lights over the sinks in the bathrooms to the exterior security lighting. Staff are also looking forward to avoiding the regular fluorescent tube replacements that CFL lighting brings.

“We’ve been really pleased that Philips has been able to bring Pudney & Lee a lighting solution that is not only environmentally friendly and leading edge technology, but is also a sound commercial solution,” says Ken McDonald.

ⁱ <http://www.rightlight.govt.nz/business/save-money/better-business>

