



When architect Wayne Krygsman was renovating his home in the lower north shore Sydney suburb of Willoughby, he knew he was going to need some light in the open-plan ground floor space that incorporated kitchen, dining and living functionalities.

With a second storey added to his semi-detached house which only has windows on its west side, Wayne investigated a range of shafted skylight systems to introduce additional natural light to the internal areas of the ground floor so as to reduce his dependence on powered lighting.

"I clearly recognised that there was insufficient natural light in the kitchen/dining/living space, particularly in the morning as the sun rose from the other side of the house" he said. "It's all one big room and my wife wanted a solution which avoided the need to turn lights on in the morning when we needed to illuminate the functional bench spaces of the kitchen.

"Traditional skylight systems were not entirely out of the question but would have been expensive in this instance because our second floor additions were close to and above this space necessitating significant building works. It would also have severely restricted our options on where we located the light source.

"We also looked at reflective tube natural light solutions which allowed a bit more flexibility but they had size restrictions and were not particularly attractive or complementary to our modern interior design."

When Wayne attended an industry product show-case, he saw the **illum Shaftless™ Solar Skylight System** for the first time and knew straight away that it perfectly suited his needs.

Built by Australian hardware solutions business, Kimberley Products, illum is the world's first 'smart skylight' that operates and installs without the need of a light shaft, flexible tube or a large roof cavity. Using an illum skylight panel that is connected to an external solar panel, illum is designed to convert the sun's energy to light and auto-adjust brightness levels to match external conditions.

As there is no need to have shafts or roof cavities, illum can be installed practically anywhere by builders and DIY home improvers to introduce a natural light effect into just about all dark spaces, even in multi-level buildings.

"What I really liked about the illum system is that it gave us so much more flexibility than other solutions," Wayne said. "It allowed us to put the light source in any position that we wanted in the kitchen.

"We particularly wanted light over the bench-top in the kitchen which is used often but the structure of the house would have made it impossible for us to put a traditional skylight in place to achieve this. As soon as I saw the illum product being demonstrated, I knew it was the right choice because it offered us the flexibility to place it wherever we wanted."

After consulting with a specialist from Kimberley Products, Wayne decided that a single, large unit was the best option for his specific application. One of the rectangular illum PREMIUM™ (1200 x 300 mm) skylight panel's has been fitted and is connected by hidden cable to a standard 600 x 600 solar panel that has been fitted to the roof.

"I installed it myself and once I cut the hole in the ceiling to mount the illum skylight panel directly above our kitchen bench space, it was all very easy," Wayne said. "There was no drama and it has worked really well for us. I am really happy with the way it looks and operates.

"Every one of my friends and family that have visited us since it was installed has been amazed at the light it generates. The light quality is really consistent and realistic. It only dims when the sun is very low at either end of the day or if the cloud cover is heavily overcast. I think it is a better quality of light than a traditional skylight.



"Functionally, it works exactly like a traditional skylight providing an ambient source that matches the external light conditions from the sun and there are no running costs or maintenance required once it is installed.

"It comes on as soon as the sun rises and is really bright during the day. During the long summer days, it provides excellent light right up until dusk. That is a lot of utility power that we are not using. We are really happy with the illumination it gives and it does so without producing any heat from burning light-bulbs or a shaft."

Wayne said he can't fault the illum system for its technical engineering, quality of manufacturing, ease of installation, aesthetic appeal and value for money.

"The performance and finish of the product is fantastic and the price makes it really good value for the money you spend," he said. "A traditional skylight system would have been much more expensive to install and they come with a range of maintenance issues to keep on top of leaks, discolouration and the build-up of insects and cobwebs.

"We don't have to do any of that and because we use the space pretty much all of the time when we are home, it must be saving us a lot of money on power bills. It's not just the cost of running lights either.

"We are also saving money on heating and cooling as there is no loss of heat in winter and cool air in summer through the shaft and roofing because the system is shaftless. Meanwhile, when the summer heat gets really high, we are able to block out the heat with external shutters and internal blinds but retain strong light from the illum system.

"In addition, it totally complements our décor. We have white ceilings with white trims and white stone benches so it fits in perfectly with our interior design."

As a commercial architect, Wayne sees a range of opportunities for the technology to be adapted to new or legacy commercial and high rise residential developments or refits.

"There are tremendous possibilities for this technology to be used in commercial or industrial applications," he said. "Especially in multi-story buildings or dark spaces such as large warehouses or production facilities that are currently reliant on light through transparent plastic (or glass) roofing or powered lights.

"The illum system could allow for light to be brought down to a working height and that would be a good thing. When I showed the contractor who built my house what I had done with the illum panel, he was greatly impressed and said that he had a number of projects on the go that would benefit from using illum.

"I would absolutely recommend this product over traditional skylights or other light sources. People are all looking for more sustainable, naturally-lit, energy efficient housing and this product fits that bill very well. I am really happy with the product."