



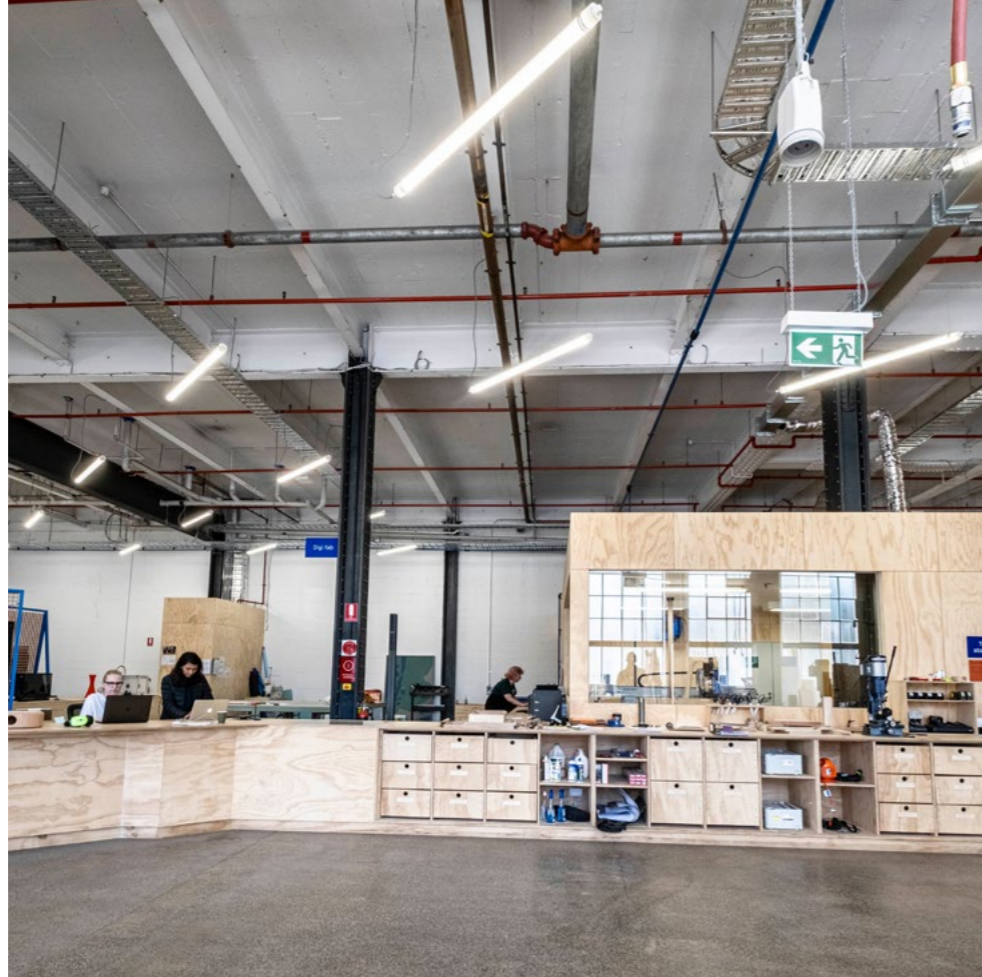
Advanced
LIGHTING TECHNOLOGIES

MAKING IT HAPPEN

CASE STUDY

FOOTSCRAY'S INNOVATIVE
FAB9 MAKERSPACE





Hans Chang, CEO of FAB9, explains why the time was right to open a makerspace in Melbourne:

“With a manufacturing industry in transition, a burgeoning and vibrant start-up ecosystem and a culture of design and independent making, the city was the ideal environment for FAB9’s first location.”

FOOTSCRAY’S INNOVATIVE FAB9 MAKERSPACE

The FAB9 Makerspace in Footscray offers thinkers, entrepreneurs, hobbyists and designers the opportunity to work with high-end prototyping and manufacturing equipment in a safe and collaborative environment. Advanced Lighting Technologies supplied much of the interior lighting to this innovative and unique facility, including luminaires designed to thrive in challenging environments from German innovator PRACHT.

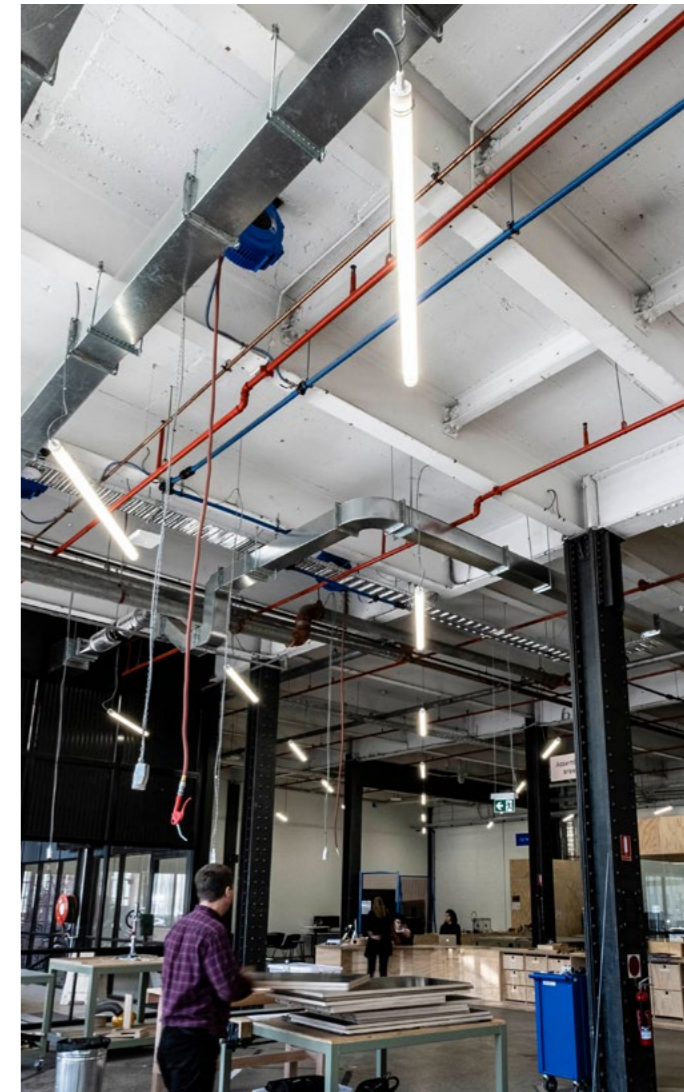


THE FACILITY

So, what is a makerspace? Loosely defined, a makerspace is a collaborative workspace that allows creative-minded people to share, learn, explore, experiment and work on projects in a controlled environment. The first makerspace opened in the United States in 2010, with the movement quickly spreading around the world before arriving in Australia.

Located in Footscray, in Melbourne’s inner-west, FAB9 inhabits part of the ground floor of a building aptly-named “The Dream Factory” – a converted warehouse built in the 1920’s which now houses design, technology and socially driven tenants. The site has been used for manufacturing for over one hundred years, so it seems only fitting to now house a makerspace.

In their own words, FAB9 empowers makers – the facility has been purpose-built so designers and makers of all skill levels can access the training, tools and prototyping equipment needed to turn their ideas into physical realities.



REQUIREMENTS & CHALLENGES

FAB9 is made-up of five distinct labs. Each lab is designed for working with different equipment and materials. The high-end prototyping and manufacturing equipment available to FAB9's members includes table saws, belt sanders, 3D printers, laser cutters, a CNC router and a wide range of power tools and hand tools.

Providing adequate light to ensure a safe and productive environment for both members and staff was of the utmost importance. Due to the precise nature of activities occurring at FAB9, an average horizontal light level of 400 lux was required across all workshop areas in the facility.

Even with regular cleaning and dust-extraction technology in use, the type of work being undertaken at FAB9 means sawdust, fumes and other particles becoming airborne is inevitable. Any lighting solution being considered would need to withstand such an environment.

The architects weren't going to be satisfied with just functional lighting however - the proposed solution had to complement FAB9's industrial aesthetic, with the luminaires to be suspended from the ceiling at a 45 degree angle, giving this makerspace a modern and distinctive look.



THE SOLUTION

Advanced Lighting Technologies have been providing lighting solutions to organisations around Australia for decades, not just during the recent rise of LED technology. We're proud to offer luminaires from some of the world's leading lighting companies, including innovative European manufacturer, PRACHT.

PRACHT luminaires are renowned for providing effective illumination under extreme conditions. Featuring precise German engineering and quality construction, PRACHT's versatile product range includes fittings that can operate in severe temperatures, and offer high levels of protection from dust, moisture, chemical fumes and even vandalism.

The PRACHT Tubis BL was chosen as the primary luminaire for FAB9's workspaces. The Tubis BL offers high-end specifications, performance and German engineering at an economical price.

Thanks to PRACHT's innovative and unique approach, the Tubis BL features age-resistant silicone seals, shorter than usual to minimise vulnerability and increase protection.

In fact, the Tubis BL offers the highest ingress protection available (IP69K), meaning it is completely dust and water-tight. The Tubis BL can even be pressure-washed and sanitized at high-temperatures without jeopardising the electrical components within.

The Tubis BL is also acid and alkali resistant, making it suitable for use in industrial or agricultural applications where fumes could be an issue. Both the luminaire cover and housing are made from a high-quality PMMA blend, and feature a tubular shape designed to inhibit the gathering of dust and other particles.

Advanced Lighting Technologies' Victorian Sales Manager, Peter Rees worked closely on the project and offered praise for the solution:

“The BL Series from PRACHT offers German engineering at an economical price. The Tubis BL ticked all the boxes at FAB9 – dust-tight, uniform illumination and a visually-appealing aesthetic at an affordable price-point.”



PRACHT TUBIS BL

- 24W – 54W
- UP TO 6,500 LUMENS
- HIGHEST INGRESS PROTECTION AVAILABLE (IP69K)
- 50,000 HOURS OPERATIONAL LIFETIME
- 70MM DIAMETER TUBE MADE FROM HIGH-QUALITY PMMA
- ACID/ALKALI/UV RESISTANT

Visit adlt.com.au for additional technical information.

ADDITIONAL LUMINAIRES

In addition to the PRACHT Tubis BL, Advanced Lighting Technologies also supplied a number of other luminaires for specific applications at FAB9, including:



PRACHT LUNA BL

Another member of the PRACHT BL family, the Luna BL, installed in the CNC lab.



ARCLUCE CORE

Core2 Spotlights from Italian company Arcluce installed over the presentation area.



CREE CR TROFFER

Specification-grade CR Troffers from leading manufacturer Cree Lighting, also installed in the CNC lab.

Advanced Lighting Technologies also supplied LED downlights and flat panels from Cree Lighting for use in the administration area.



THE RESULT

In a manufacturing environment, choosing an appropriate luminaire for the conditions is essential, and the PRACHT Tubis BL provides the perfect solution for FAB9 – offering high performance, cost effective lighting.

Comfortably meeting the required average horizontal light levels across all workspaces, the Tubis BL also provides excellent colour rendering, important for applications where precise, intricate tasks are performed. To properly supervise their members, FAB9's staff also needed the high levels of visibility provided by the Tubis BL.

The tubular nature of the luminaire means dust gathering surfaces are minimised, reducing the regularity of cleaning requirements, while the PMMA housing shields the LEDs within, minimising glare and distributing up to 6,500 lumens of even light across workspaces.

The CNC router lab is an enclosed space with lower ceilings, unsuitable for suspending luminaires. In this area, the PRACHT Luna BL and Cree CR Series LED troffer combine to offer uniform illumination, meaning FAB9 members can clearly and safely see the projects they're working on.

Advanced Lighting Technologies are specialists in architectural, commercial and industrial lighting. Whatever the application, whatever the budget - we'll have a solution that fits your needs.

By installing the Arcluce electrified track system and Core2 spotlights, FAB9 have the flexibility to instantly transform their assembly area into a space suitable for classes, workshops and presentations. Whilst in their administrative areas, Cree downlights and panels supplied by Advanced Lighting Technologies offer pleasant, low-glare lighting, suitable for working over long periods of time.

As explained by Mr Chang, FAB9 set out to create an environment conducive to creativity and collaborative learning, so a quality lighting solution was a high priority:

“We've invested heavily in high-end equipment to ensure our members have access to the best machinery and technology available - it's comforting to know the lighting they're working under meets the benchmark as well”





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