

The *Plasma Shield* Solution...

Bringing The Timber Yard to life!

When Port Melbourne's iconic event venue, **The Timber Yard**, decided to air condition their internal event space, ACSM Air offered a solution to **reduce peak power demand**, **capital expenditure** and **ongoing energy use**.

With **Plasma Shield's** proven air decontamination ability, ACSM was able to design and utilise the alternative outside air calculation method in AS1668.2-2012, Appendix D for "particle and odour filtration". This achieved code compliant indoor air quality at outside air flowrates **75% lower** than conventional outdoor air intake rates.

This in turn enabled a 58kW_r reduction in peak thermal load for heating and subsequent savings in plant **capacity**, plant **space**, **cost**, energy **use** and **power supply** upgrade requirements.

With ACSM Air's expertise in managing the design and delivery, the project helped bring the Timber Yard to life.

SECTOR

Entertainment

LOCATION

Melbourne, Victoria

PROJECT SIZE

Approx 3,500 Square Metres

CHALLENGE

HVAC cost reduction & Peak Load limitation

SOLUTION

Outdoor Air Reduction via Optimal Decontamination Strategy (ODS) with the Plasma Shield solution

RESULTS - IMMEDIATE

Peak Load Reduction, Heating: **39%**
Peak Load Reduction, Cooling: **17%**

RESULTS - PER ANNUM

Energy Savings: **63,000 kWhrs or 24%**
Emissions Reduction: **27,310 kg CO₂e**
Energy Cost Savings: **~\$16,000 AUD**

*Using the **Plasma Shield** solution allowed us to innovate the design and installation processes, resulting in a purpose-fit space*

Sean Coates—Director, ACSM



Delivering healthier air, reduced energy and lower emissions, everywhere. Learn more at www.plasmashield.com.au

WEBLINKS: [What is an Optical Decontamination Strategy \(ODS\)](#) | [Savings Calculator](#) | [How the Science Works](#)