Parramatta EELS Club

Centre of Excellence

CHILLER | BMS | AIR HANDLING UNITS AND FAN COIL UNITS | DUCT WORK | MSSB

Client: Kane Construction | Contract Value: $2.6M | Completion: 2025

ON -TIME, ON-BUDGET DELIVERY

ZERO CLIENT DEFECTS

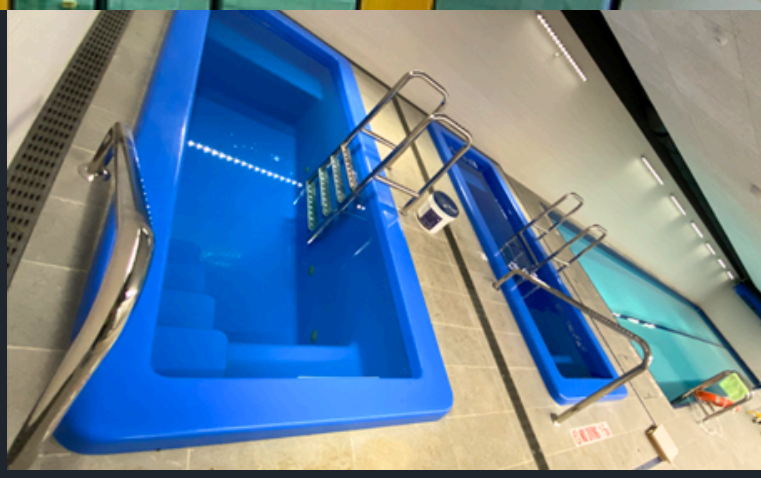
The Parramatta Eels Centre of Excellence, located in Kellyville, is a new state-of-the-art facility designed to be the largest rugby league facility in Australia. It will house elite training facilities for the NRL and NRLW teams, as well as the Eels Academy. The facility will also include a community centre with a 1,500-seat grandstand and community gym, fostering a "one-club" environment for all levels of the club. The project involves the design and implementation of sophisticated mechanical services for Buildings A and B. These services encompass an extensive range of HVAC systems designed to provide optimal environmental conditions, improve energy efficiency, and align with sustainable building practices. The scope includes the installation of advanced ventilation systems, variable refrigerant flow (VRV) air conditioning units, direct expansion air-cooled systems, and heat recovery systems to maximize energy utilisation and indoor air quality.

Kane Construction selected VAE to deliver the mechanical services for the Kellyville Park PNRL Eels Centre of Excellence and Community Facilities due to VAE's comprehensive service offering. VAE provides an end-to-end solution that includes design, construction, commissioning, and post-installation support, effectively reducing the need for multiple contractors. This streamlined approach enhances project delivery efficiency and ensures a single point of accountability for all mechanical services, including the Building Management Systems (BMS).

Additionally, VAE's adherence to rigorous quality control processes, strict compliance with Australian standards, and a steadfast commitment to health and safety best practices assure the client of a well-executed and reliable project. These strengths position VAE as a trusted partner capable of meeting the high standards required for such a prestigious development.

Scope of Works

- Variable Refrigerant Volume (VRV) systems
- Split air-cooled and direct expansion air conditioning units tailored to specific zone requirements.
- Roof top packaged pool plant system with heat recovery for effective climate control in aquatic space and the gym.
- Energy recovery ventilators for enhanced efficiency and reduced energy usage.
- Provision of energy recovery, exhaust, and outside air systems.
- Use of axial, centrifugal, and inline fans to achieve effective air distribution across all facility zones.
- Deployment of a centralized BMS for the control, monitoring, and optimization of HVAC systems.
- Kitchen exhaust systems and integration with relevant equipment
- Integration with other building systems, such as lighting, fire detection, and energy metering.
- Provision of user-friendly interfaces for real-time adjustments and system monitoring.
- Implementation of vibration isolators and acoustic treatments to minimize equipment noise and maintain comfort in sensitive areas.



Custom Design & Delivery

- **Tailored HVAC Solution:** Installed a dedicated rooftop package unit for the gym, with fabric ducting designed to blend seamlessly with the black ceiling aesthetic.
- **Custom Design Integration:** Colour-matched grilles and air diffusers to align with the Parramatta Eels' signature colour scheme, enhancing the space visually.
- **Seamless Project Support:** Delivered a complete laundry exhaust solution, helping Kane maintain project timelines without delay.
- **Technology Integration:** VAE's Technology team supported the smooth integration of all third-party systems onto the Building Management & Control System (BMCS).

Solution Outcome

- **Optimised HVAC Layout:** Consolidated six rooftop units into three, freeing up space and improving system efficiency within the plantroom.
- **Enhanced Safety & Compliance:** Redesigned plantroom layout to ensure compliant emergency access and egress, meeting fire safety standards.
- **Improved Maintainability:** Created clear, accessible pathways to support safer and more efficient maintenance and service operations.
- **Smart Energy Monitoring:** Developed a real-time power usage interface using existing meters, helping the client manage demand and reduce operational costs.