

VIPAC

Engineers & Scientists

Leading HVAC
Qualification & Pool Pump
Testing Services Australia



HVAC Testing



Established in 1973, Vipac Engineers & Scientists has organically grown to become one of Australia's leading engineering testing laboratories and consultancies. Proudly Australian owned and operated, the company specialises in HVAC, air distribution, and fan qualification, plus water heater and pool equipment testing.

Vipac has an air distribution laboratory – the only NATA-accredited facility of its kind in the Asia-Pacific – equipped with state-of-the-art test rigs, reverberation chambers, calorimeters, and enthalpy chambers. These enable testing of components including fans, ducts, dampers, VAV terminals,

louvers, diffusers, and complete HVAC systems under realistic or simulated conditions. The lab also provides CFD modelling, mock-up testing, and real-time monitoring.

Vipac's scope extends to performance and regulatory testing of hot water storage tanks, heat pump water heaters, and swimming pool equipment (pumps, skimmers, gas heaters). These are all conducted under MEPS, energy labelling, and GEMS frameworks.

As a registered Research Service Provider (RSP), Vipac facilitates eligible R&D tax incentives for innovative product development.



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Accreditation No. 676



Qualifications & Certifications

- > NATA Accredited
- > BSI ISO 45001, ISO 9001, and ISO 14001
- > Registered Research Service Provider (RSP): No. 15701 Services & Testing Provided



Services & Testing Provided

HVAC, Air Distribution & Fan Testing

- > Acoustic, pressure, airflow, thermal, and humidity testing.
- > Fan testing (centrifugal, axial, propeller, ceiling).
- > Smoke visualization and throw testing.
- > Reverberation chamber sound testing (ISO 3741).
- > Terminal, grille, diffuser, duct, damper, louver, and VAV performance testing.
- > Duct insertion loss, leakage, breakout noise.
- > Damper cycling, closure, degradation, and leakage tests.
- > Chilled beam and comfort assessments (PMV, PPD, ADPI).
- > Facade testing (AS 4284).
- > CFD analysis, mock-up testing, and simulation modelling.

Calorimeter & Enthalpy Chamber Testing

- > HVAC and heat pump MEPS & energy labelling testing.
- > AS/NZS and ISO performance testing.
- > Real-time data monitoring.
- > Seasonal performance factor evaluation.

Water Heater & Pool Equipment Testing

- > Electric, gas, solar, and heat pump hot water systems.
- > Pressure fatigue, hydrostatic, torque, and enamel tests.
- > TRNSYS thermal modelling.
- > Pool pumps: energy factor, star rating, PAEC.
- > Skimmers, outlets, gas pool heaters to AS/NZS and AS standards.

