

TECH. DATA &

TIMELESS DESIGNS



DEFINING ARCHITECTURE SINCE 1963

For over 30 years, we have developed strong industry knowledge, and product innovation, inspiring and empowering specifiers to achieve architectural brilliance. From the initial design phase to project completion, we offer tailored technical advice, in-depth compliance guidance, and project-specific recommendations to help you navigate complex regulatory requirements and achieve the best possible outcomes.

Contact our team to discuss your project, 1800 007 175 or HELPDESK@FV.COM.AU

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ABOUT

Data centres are proliferating globally as we enter a new era of technology propelled by the expanding computer, cloud and artificial intelligence. At the forefront of innovation, businesses want their data centres to reflect their progressive brand identity.

In contrast to other nations, our data centres are often located within urbanised cities rather than rural areas. Space issues arise from this, and more value is placed on complimenting the built environment surrounding the data centre. Cladding's thin system and wide range of design options make it an advantageous material choice.

Furthermore, data centres use 2% of the world's electricity, and that percentage is predicted to rise. These enormous constructions must incorporate ecologically friendly and energy-efficient materials to ensure lower maintenance costs and fulfil the company's corporate social duty.

This document delves deeper into the relevant standards set forth by the National Construction Code (NCC) and Australian Standards that data centres must comply with, as well as other factors that should be considered when selecting a wall system.

REQUIREMENTS OF THE NCC

The NCC 2022 outlines essential cladding system standards to guarantee performance, safety, and compliance across Australian structures. The NCC lays out stringent requirements to reduce risk and improve building resilience in critical areas like fire compliance, weatherproofing, energy efficiency, and structural integrity. To guarantee codecompliant, high-performing facade solutions, architects, builders, and developers must thoroughly understand these requirements.



WEATHERPROOFING •

For wall systems to maintain the integrity of the enclosed building, they must be able to withstand wind load actions and stop water intrusion. Reduced thermal performance and structural damage result from failure to do so. The NCC mandates weather-resistant cladding materials, joints, seals and fixings.

Ventilated rainscreen wall systems facilitate continuous airflow within the building cavity, ensuring moisture can escape and optimising structural thermal performance. Sustaining sufficient airflow promotes a stable internal temperature and minimises maintenance, ensuring longevity and resilience.

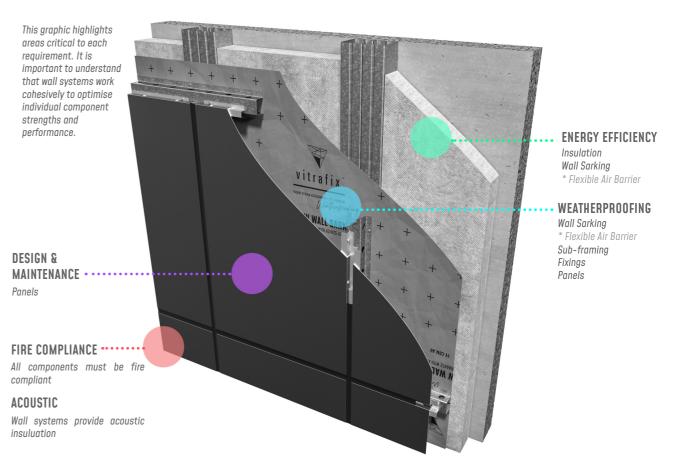


FIRE COMPLIANCE •

Fire compliance is typically the core requirement that influences the choice of building material for data centres. The NCC 2022 C2D10 stipulates that external walls of Class 8 buildings must be constructed from materials that meet non-combustibility standards. This protects building inhabitants and surrounding areas by lowering the risk of fire and the speed at which fires spread. Vitradual has also been independently tested and shown to meets AS 1530.1 and AS 1530.3 standards for fire testing.

Fairview provides end-to-end support, assisting architects during the material selection process. Our extensive range of non-combustible cladding and systems ensure architects meet fire-resistance level (FRL) standards.

WALL SYSTEM COMPONENTS





A crucial factor to consider when designing data centres is aiming for the highest energy rating. The NCC mandates that businesses intentionally include thermally efficient materials in their buildings. Properly chosen wall systems minimise heat transfer, lowering the need for unnecessary mechanical cooling and guaranteeing that the building's thermal performance satisfies Class 8 building requirements. By lowering their carbon footprint and dependency on energy-intensive equipment, these energy efficiency measures aim to reduce operating expenses and their adverse environmental effects.

ADDITIONAL CONSIDERATIONS



ACOUSTIC •

Controlling the noise pollution that data centres produce requires an exterior that is well-insulated. This is particularly crucial in places with dense populations.



COMPLIANCE

All materials must be in compliance and supported by the relevant documentation. At Fairview, all wall systems have undergone unified system testing and are backed by industry-leading warranties and certificates.

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NON-REGULATED CONSIDERATIONS

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DESIGN & AESTHETICS •

Data centres are expressions of innovation, with their architectural design reflecting the cutting-edge technology

they house. Aluminium cladding, widely favoured for its sleek, modern aesthetic, reinforces this high-tech identity, offering a refined yet industrial appeal. Its lightweight durability allows for bold, expansive façades that create a sense of precision and technological advancement. Reflective and anodised finishes further enhance this effect, dynamically interacting with light to produce striking visual depth and movement. These design choices not only emphasise the futuristic presence of data centres but also establish them as architectural landmarks that embody efficiency, progress, and digital transformation.

MAINTENANCE

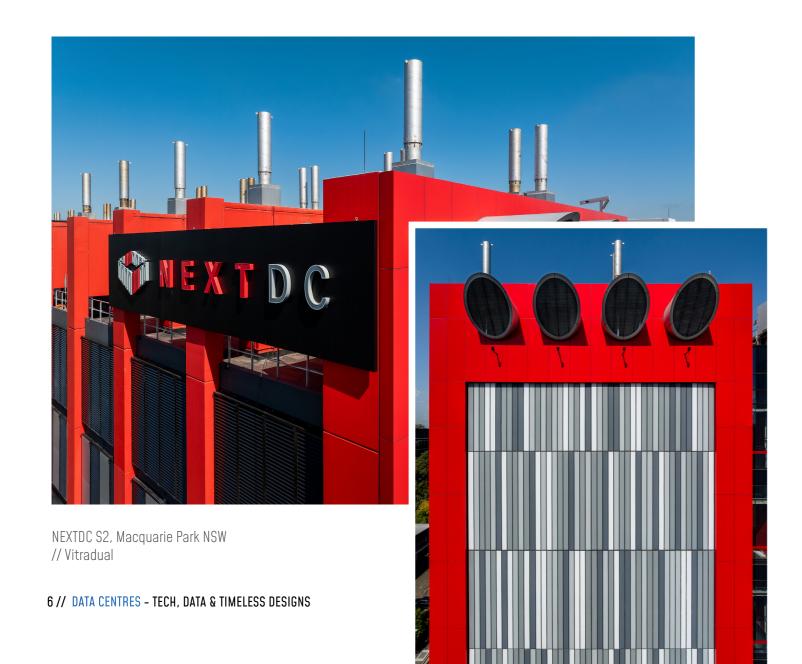
To lower long-term maintenance expenses, materials that are simple to clean and impervious to corrosion or discoloration are frequently chosen.

BUILDING FOOTPRINT

Slim-profile cladding systems reduce the overall footprint of external walls, allowing architects to maximise internal space without compromising structural integrity.

CORPORATE PARTNERSHIP

Cladding colour choice plays a vital role in establishing brand identity for data centres, transforming these typically functional buildings into recognisable assets.





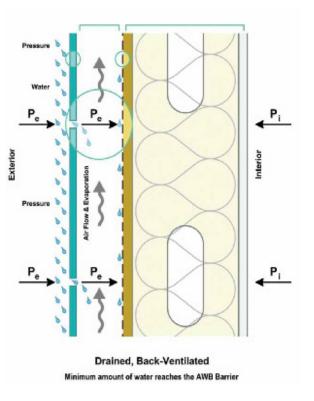
As the world increasingly turns to more sustainably designed builds, Fairview is investing substantially in the development of rainscreen cladding systems for both our natural and metal product ranges. Rainscreen facade is a two-level construction system which provides superior waterproofing, long term durability and thermal efficiency.

When rain and wind forces moisture towards the building, the majority is deflected off the outer layer of the facade, the primary weatherproof layer. The moisture that permeates the outer layer is then managed through ventilation and drainage in the cavity between the primary weatherproof layer and the secondary weatherproof layer. Rainscreen systems therefore utilise air flow and ventilation to insulate buildings and minimise exposure and damage caused by the elements.

Rainscreen facades combine an open cavity at the top and the bottom of the wall.

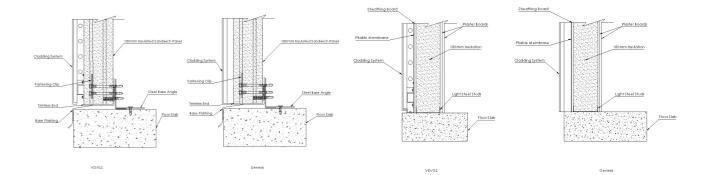
The top air cavity is protected with an overhang to minimise moisture entering.

Warmer air within the cavity rises and draws cooler air in from the base of the wall, helping the evaporative drying in the cavity for moisture and condensation control.



INSULATED WALL

STUD WALL





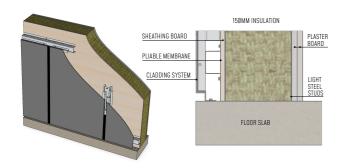


NON-COMBUSTIBLE CASETTE CLADDING

Vitradual is a solid aluminium façade cladding system that offers a fully NCC-compliant, non-combustible solution. It delivers exceptional impact resistance and can be fabricated, curved or rolled to meet complex design requirements.

With an extensive colour range, Vitradual is perfectly suited to data centre applications where brand and visual identity is key. Finished with premium PVDF coating, the panels ensure long-lasting durability and aesthetic performance.

The panels are infinitely recyclable, supporting a circular economy and future-focused construction.





KEY FEATURES

Vitradual's versatility is achieved due to the combination of high-quality considerations and industry leading components. Vitradual is one of the few large format cladding panels that are deemed non-combustible when tested to AS1530.1 and AS1530.3.

Material Engineered aluminium panel.

Finish The highly recognised PVDF or FEVE Paint System known for its high

durability, providing the optimum resistance to weather and industrial pollution.

Fixing A cassette style concealed fixing system which is the same to fabricate System and install as traditional ACPs.

Application

Type A, B, and C constructions where non-combustible materials are required such as mixed-use developments, residential construction and largescale government infrastructure projects, like hospitals.

Warranty

15-year warranty, subject to standard

terms and conditions.

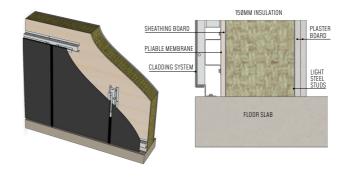


vitracore G2°

ENGINEERED ALUMINUM PANELS

Vitracore G2 is an engineered panel designed for high performance as a facade material, that is half the weight, 5x more rigid and has 70% greater resistance to oil canning than its solid panel counterparts.

Providing an almost unlimited range of colours and finishes, Vitracore G2 is the ideal solution to high demand industry requirements for innovative and functional facade demands.



KEY FEATURES

Vitracore G2 was the first engineered aluminium panel to be awarded the status 'deemed non-combustible' under the National Construction Code (NCC) part C2D10(6)(g) and is fully tested as required to AS1530.1 and AS1530.3.

Material Pre-finished solid aluminium panel.

Finish Vitradual uses only the highly

recognised PVDF or FEVE paints known for their high durability, providing the optimum resistance to weather and

industrial pollution.

A cassette style concealed fixing Fixing system allowing for a sleek, modern System

and flat finish.

Type A and B constructions where non-**Application**

combustible materials are required such as mixed-use developments, residential construction and largescale government infrastructure

projects, like hospitals.

15-year warranty, subject to standard Warranty

terms and conditions.



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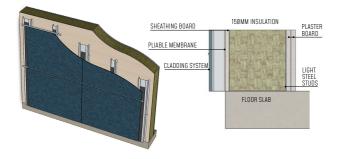




PREFINISHED COMPRESSED FIBRE CEMENT PANELS

Genesis is a prefinished compressed fibre cement façade system that is CodeMark Certified, durable with a design life exceeding 50 years and versatile with design options to suit any project. Genesis offers a seamless blend of form and function.

Crafted with sustainability in mind and backed by an independently verified Environmental Product Declaration, Genesis is manufactured with advanced materials that minimises the environmental impact.



KEY FEATURES

To elevate the range, Fairview introduces Genesis Signature with a suite of premium CFC options that are unmatched in Australia. Crafted with precision, architectural elegance and technological innovation, Genesis Signature redefines the standard for fibre cement façades.

Genesis

Low maintenance Cost effective Robust durability Easily cut & installed onsite

Energy efficient

Genesis Signature Unique textured finishes Premium surface finishes

Rich colours

High resistance (HR) coating

Energy efficient Extended warranty



CONTINUED PRODUCT RANGE

At Fairview, we partner with you every step of the way. From the initial design phase to project completion, our team provides tailored technical advice, in-depth compliance guidance and project-specific recommendations to help you navigate complex regulatory requirements with confidence. Let us help you specify the perfect product for your project and deliver exceptional results.

Contact our team to discuss your project requirements, 1800 007 175



Stryum is a premium interlocking panel with concealed fixings. Installed either horizontally or vertically for maximum flexibility and express installation, creating a multisensory design experience.



Clayton Terracotta Façade System combines the charm of terracotta with modern production techniques. Clayton comes in a range of terracotta cladding textures and colours to create warmth and a tactile sensation.



Smartbric by Fairview is an innovative Ventilated Rainscreen brick facade system. Smartbric brick cladding panels ingeniously combine the option of a grouted traditional brick facade or a modern Rapid mortar-less brick and cladding combination.



As part of the complete service offer, Fairview's Vitrafix provides a complete range of supporting accessories, including weatherproofing, sub-framing, and fixing options.

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