



AU | 2026

Data Centre Vapour Protection

Product Guide

Protection starts below
critical infrastructure

Protection starts below

Moisture protection for critical environments

Understanding the risk

Concrete is porous. Without an effective vapour barrier, moisture vapour can migrate from the ground into the slab and the occupied environment above. For data centres, moisture management forms part of a wider strategy to protect controlled internal conditions, floor systems and long term facility performance.



Why data centres



Large slab footprints

Large projects create extensive areas where continuous below slab protection must be maintained.



Controlled environments

Moisture vapour can place additional pressure on flooring systems and environmental control.



Project benefits



SPECIFIERS

Clear verified performance data and a complete system approach.



CONTRACTORS

Compatible components and defined installation principles.



ASSET OWNERS

Long term protection beneath valuable critical infrastructure.



PROJECT TEAMS

Access to Danley engineering and specification support.

DANLEY AU

Supporting data centre projects across Australia and New Zealand with below slab moisture protection and Danley engineering support.

A complete sealed system

The membrane, seams, penetrations and perimeter work together to create continuous protection beneath the slab.



System components



Stego Wrap

381 micron vapour barrier installed beneath slab on ground applications.



Stego Wrap Tape

Low permeance tape used to seal overlaps, seams, penetrations and repairs.



Stego Crete Claw Tape

Connects Stego Wrap to the slab perimeter as concrete is placed.



StegoTack Tape

Bonds and seals Stego Wrap to concrete, masonry, wood and metal



Installation principles

- 1 Completely cover the concrete placement area.
- 2 Overlap joints by at least 150 mm and seal with Stego Wrap Tape.
- 3 Detail seams, penetrations and repairs using compatible system components.
- 4 Confirm the perimeter sealing method with the project design team.



SYSTEM PRINCIPLE

Protection is only as continuous as the details joining the membrane together.



Performance for critical facilities

Verified Stego Wrap 15 mil technical data

Technical performance

0.0086

Water vapour permeance
in perms

2,266 g

Puncture resistance

12.4 kN/m

Tensile strength

180 m²

Approximate roll coverage



Specification essentials

- 381 micron multi layer vapour barrier.
- ASTM E1745 compliant Class A vapour barrier.
- Manufactured from prime virgin polyolefin resins.
- Less than 0.01 perms.
- Compatible seam and perimeter tape system.
- Danley technical and project support available.

PROJECT SPECIFICATION SUPPORT

Planning a data centre project?

Danley Engineering can assist with product selection, specification guidance, technical documentation and installation detailing for the Stego Vapour Mitigation System.

AUSTRALIA

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