

# Grate Cares

An Expert Drainage Solution Tailored for Today's Aged Care Industry



## Building With Care

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Aged care exists for a singular purpose: to enhance the quality of life for those in its care.<sup>1</sup> It is a principle driven by respect and dignity for our most vulnerable citizenry, bound by a commitment ‘to [promote] an environment that provides residents with self-respect, social opportunities and continuous improvement in their quality of life’, as affirmed by Victoria’s Department of Human Services.<sup>2</sup>

While quality of service and patient care are crucial to achieving these goals, without a careful design and construction process, the safety, accessibility and equitability of care facilities will be compromised.

Faced with a rapidly ageing population – with the over-85 population set to triple – Australia has been overwhelmed by demand for quality aged care services.<sup>3</sup> With greater demand comes the inevitable push to re-furbish, expand and upgrade these critical facilities.<sup>4</sup>

To best support our Aged Care residents, the federal government has enacted strict laws to regulate design and building works on today’s care facilities. Complementing existing state-based legislation, the Aged Care Act (1997) outlines the expected standards for today’s care facility buildings, with federal Department of Health (DoH) certification contingent on meeting these strict regulatory standards.<sup>5</sup> For its part, the Building Code of Australia (BCA) forms the basis of the Aged Care Act’s regulatory framework for care facility design and construction.

To ensure full compliance with BCA and DoH requirements, the onus rests on architects and builders to not only mitigate access and mobility barriers, but to create a functional and empowering living environment for residents and staff alike.<sup>6</sup>



## The Importance of Quality Drainage Provisions for Aged Care Facilities

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Perhaps the least loved element of building design, drainage is nonetheless vital to the building function. After all, even a small compromise on drainage could see the effects of seepage and inundation on devastating display. Yet quality drainage is recognised not only for its importance to the key building functions, but indeed to the safety, wellbeing and autonomy of its occupants.

It’s become increasingly clear that traditional drainage solutions are ill-equipped to meet mandatory access and safety requirements of today’s aged care facilities. Step-downs, uneven floor surfaces, and high gradient falls are all-to-common features in the today’s care facility drainage areas (particularly shower spaces), yet are among the most conspicuous hazards for vulnerable residents.

What’s more, traditional drainage solutions present an unacceptable fall hazard for elderly, infirm and disabled residents. With roughly *one in three* seniors experiencing a fall incident each year, slips, trips and fall hazards remain the most common – and avoidable – causes of injury within Australia’s aged care facilities.<sup>7</sup>

The propagation of these recognised hazards presents a clear dereliction of duty, unduly heightening the risk of serious injury and even death.

For this reason the Australian Standard AS1428 (Access and Mobility Code) maintains specific provisions against the use of stepdowns, shower hobs and raised step kerbs<sup>8</sup> – critical to ensuring dignified and safe access provisions for all occupants.

## The Straighter Edge: Linear vs Traditional Drainage

Linear drainage is a cutting-edge drainage solution that delivers level-plane (i.e. flush with the ground surface), 'zero stepdown' drainage for both indoor and outdoor applications. Unlike conventional drainage solutions, lineal designs conform to the strict accessibility requirements of the AS1428, whilst maintaining excellent drainage flow.

Specially designed to eliminate the access and mobility constraints of traditional centralised drainage systems, lineal drainage solutions have evolved as a stunning architectural statement – the quintessence of today's vaunted open-plan designs.

So what real-world benefits can a lineal solution bring over traditional centralised drainage systems for today's Aged Care facilities?

- **Meeting the Grade:** Traditional drainage requires complex 4-way grading to maintain adequate drainage flow and water egression. Uniquely, lineal drainage solutions are designed to work with only a single gradient fall, eliminating a dangerous trip hazard and offering easy installation possibilities.

- **Superior Drainage:** A common sight around conventional drainage systems, ponding (or undrained water pools) poses a serious slip hazard, and offers fertile breeding ground for mould and pests. By extending the area of drainage and accommodating for large-format tiles, lineal drainage solutions promote consistent drainage flow and a reduced incidence of ponding.

What's more, while centralised traps are easily clogged (e.g. from hair, bandages, clothes, towels, etc.), the extended length of the linear waste channel resists both potential blockage and trapped water pools.

- **Universal Access:** Shower hobs remain an essential provision for centralised drainage solutions: without them, water can easily breach the drainage area and seep into internal living spaces. However, the elevated stepdown of the hob presents a major accessibility barrier.

Level-plane linear drainage, which sits flush with the floor surface, provides not only a natural water barrier (offering excellent drainage possibilities in and around the drainage area), but removes the necessity of the raised hob, allowing seamless and self-sufficient access for all residents (particularly for those using wheelchairs, walkers and frames).

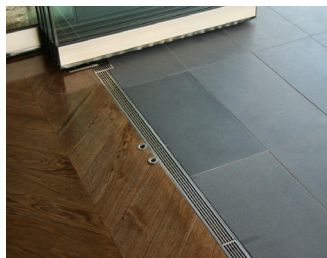


- **Open Plan Designs:** Lineal drainage solutions are specifically designed to eliminate traditional barriers (e.g. doors, hobs, water protective walls/barriers) and expand the area of drainage. With less need for a carer to assist entry, residents are offered more personal access into the shower space. For staff, this open design aids with cleaning and offers greater accessibility for carers when required.

- **Seamless Integration:** As a modular system, linear drainage can be tailored for any environment (inside or out), requiring little to no modification of the built area. This significantly reduces construction time and costs.

With the addition of a lineal vinyl clamp (providing a screw down flange to mechanically clamp the vinyl beneath), a lineal drainage also offers seamless integration into vinyl floor surfaces (common throughout today's care settings).

- **Aesthetic Appeal:** A lineal solution is a striking visual statement: a chic and ultra-modern look that can enhance the visual appeal of any drainage space.



## Stormtech: The Proud Pioneer of Linear Drainage Solutions

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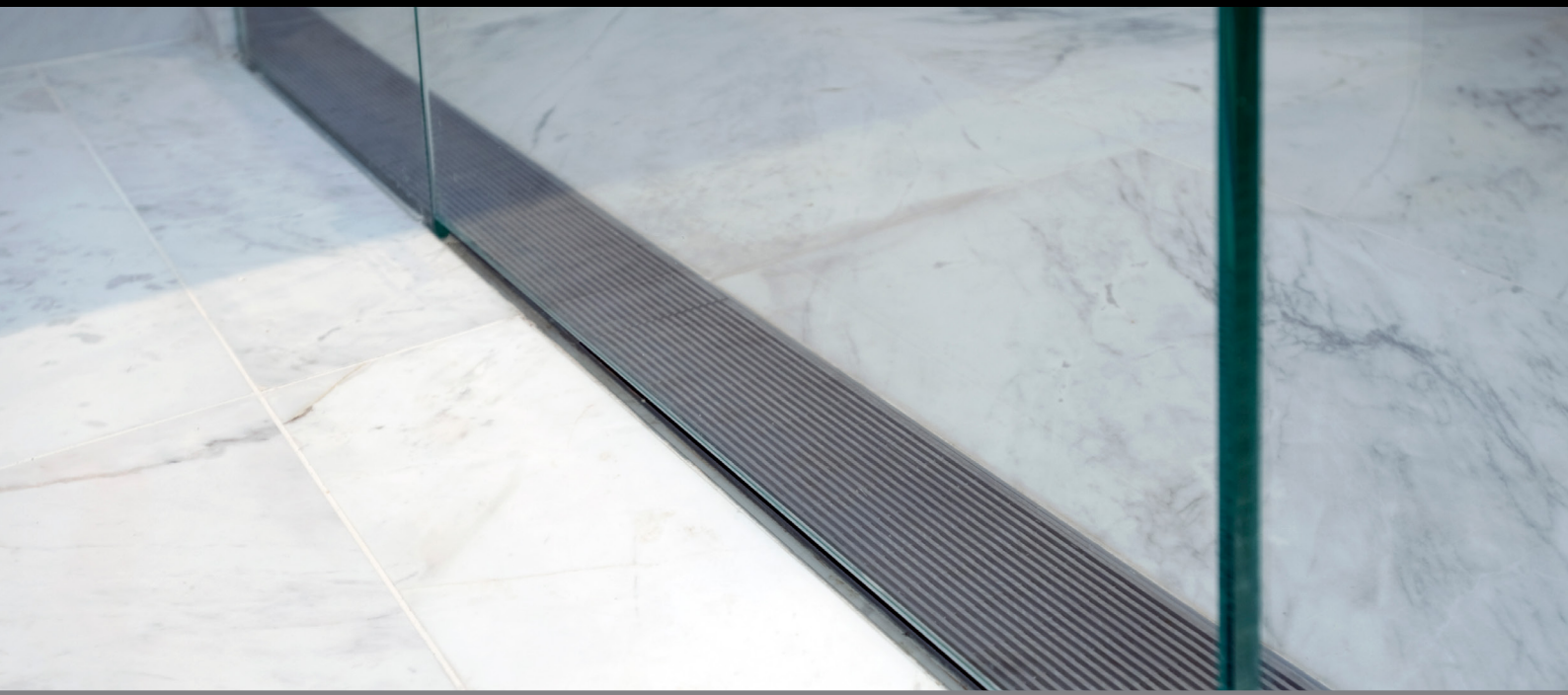
As Australia's premier drainage manufacturer and supplier, Stormtech is committed to delivering superior lineal drainage solutions for today's most exacting building projects.

As the creator and proud pioneer of this unique drainage system, Stormtech is recognised globally as an industry leader in design, consultation and manufacture of lineal drainage.

Stormtech is committed to delivering a cost-effective drainage solution that makes no compromise on quality.

Stormtech's ingenious modular design translates to rapid and cost-efficient installation possibilities for today's projects. Dedicated to quality tailored service, Stormtech offers custom design options on all fit-outs as part of regular service.

To learn more about Stormtech's lineal drainage solutions for the Aged Care industry, visit us at [www.stormtech.com.au](http://www.stormtech.com.au) or phone us on (+61) 2 4423 1989.



- [1] Department of Human Services Victoria, Aged Care Residential Services, June 2000, pg. 5
- [2] Ibid, pg. 5
- [3] Department of Health and Ageing (Commonwealth of Australia), Building Certification of Residential Aged Care Homes, 2008, pg. 11
- [4] Ibid, pg. 11
- [5] Patterson Building Group, The Important Things to Consider When Building Aged Care Facilities, 5 April, 2012, <http://www.patterson-building.com.au/blog/important-building-aged-care-facilities/>
- [6] Ibid, 2012
- [7] Department of Health and Ageing (Commonwealth of Australia), The National Slips and Falls Prevention Project, 2005, pg. 4
- [8] Standards Australia, Design for Access and Mobility (AS-1428), 2010, pg. 81



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