GalvinEngineering
the mark of reliability

Water Solutions for a Healthier Environment

Mental Health
Solutions

Safety in Design –
Understanding the Challenges

Providing a safe and appealing environment in a mental health or behavioural-health facility has always been a design challenge.

Studies have shown that the optimal environment for patients of mental health facilities is one that mimics a homely environment. This concept is known as "normalisation". Normalisation has since become more common than the traditional clinical environments of the past which focused on safety aspects rather than aesthetic and design aspects.

THE MOST FREQUENT METHOD OF SUICIDE WAS HANGING, A METHOD USED IN 60% OF ALL SUICIDE DEATHS.
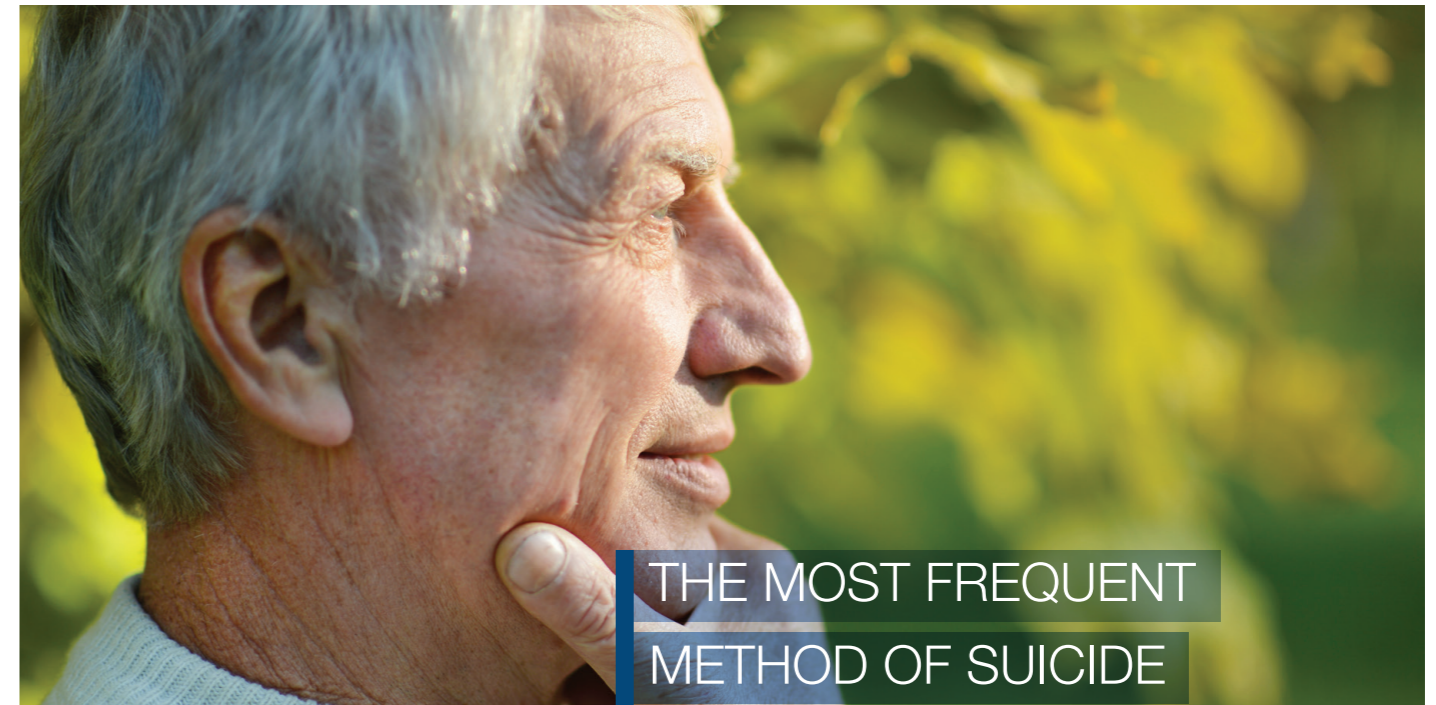
Where are the risks within a mental health facility, and what do these risks pose to patients and staff?

Bedrooms and bathrooms pose the most prominent risks. These private areas can also provide patients with ligature points and the ability for a patient to barricade themselves (with or without hostages) away from staff access and assistance.

Statistics show that the most frequent method of suicide is by hanging or strangulation; this method accounts for 60% of deaths by suicide in Australia (Australian Bureau of Statistics, 2021).

The mental health sector has experienced a decline in staff numbers, due to burnout and safety issues. This raises concerns about the ongoing support and rehabilitation of mental health patients.

It remains a duty of care to ensure that patients are cared for and accommodated in the safest environment possible.

What is the impact of mental illness?

Over 2 in 5 (44%, or 8.6 million) Australians aged 16–85 are estimated to have experienced a mental disorder at some time in their life, with 1 in 5 (21%, or 4.2 million) having experienced a mental disorder in the previous 12 months (Australian Bureau of Statistics, 2020-21).

Mental disorders accounted for 13% of the total burden of disease in Australia in 2015. (Australian Burden of Disease Study, 2018).

Mental and behavioural disorders were present in almost 63% or 1,974 of deaths of people who died by suicide. (Australian Bureau of Statistics, 2021)

Mental illnesses were the leading cause of non-fatal burden of disease (24%), with most mental illness burden attributable to anxiety disorders, affective disorders (such as depression) and substance use disorders. (Australian Burden of Disease Study, 2018)

How many people are accessing mental health services? In 2020–21 more than 3.4 million Australians (almost half of those who had a mental health disorder) sought help from a health care professional for their mental health. (Australian Bureau of Statistics, 2020-21)

Our mission in mental health

At Galvin Engineering, designing, manufacturing and supplying safe, green and smart water solutions for high risk and high care environments lies at the heart of what we do.

Galvin Specialised's unique range of products have been designed exclusively for mental health facilities, rehabilitation, and detention centres.

Our range of bathroom at-risk-patient protection products have been carefully selected from leading international manufacturers or locally manufactured in Australia. The suite of products is recognised as the most effective anti-ligature solutions available worldwide.

Galvin Specialised is committed to providing market-leading products to suit every application. We exclusively design and distribute an extensive range of established products, and are able to modify, adapt, source or create a solution for your unique situation.

The design of our products reflects a new vision and philosophy for mental health facilities that is rooted in hope, healing and recovery. Strong emphasis is placed on designs that incorporate home like, non-institutional, and patient-centred environments that imbue healing, familiarity, and a sense of being valued.

Our design guide addresses each of these key components and provides guidance on creating normalised, warm, and welcoming settings and structures at each of these levels, based on available evidence and best practices.

How can mental health care facility design help?

Most environmental psychologists agree that the physical environment can reinforce and encourage appropriate behaviour (Gabb, Speicher, & Lodl, 1992). The physical environment can reduce the possibility of suicide by avoiding elements that might support hanging or self-injury.

In 2012, Ulrich, et al compared a number of chemical or physical constraints used in two hospitals and showed that the presence of a bundle of design attributes can decrease patient aggression. These items included availability of private rooms, less crowding, movable furniture, better acoustics, nature window views, nature art, higher daylight exposure, home like design, and proximity and visibility of common spaces to the staff station.

Li et al (2008) and Stewart, Ross, Watson, James, and Bowers (2011), among several other researchers, suggest that building fixtures such as handles, doors, fittings, pipes, curtains, showerheads, grab bars, plumbing, HVAC, and lighting be eliminated to reduce risk of self-harm.

Dobrohotoff, and Llewellyn-Jones (2011) recommend high ceilings to hinder access to ceiling fixtures that can be used as anchor points for hanging. They also recommend collapsible curtain rails to reduce risk of hanging.

Mental health-facility design is a critical component of patient care. The design of mental health facilities affects how services are provided and the efficiency with which care is delivered.

Mental health-facility design has a psychological impact on users and staff. Facility design impacts the beliefs, expectations, and perceptions patients have about themselves, the staff who care for them, the services they receive, and the larger health-care system in which those services are provided.

Facility design can have a significant impact on the beliefs, attitudes, and behaviours of staff and on how staff identify and interact with patients and the environment.

Health-care design operates on both an architectural and interior design levels. The architectural level includes aspects of the external facility, which serves as a first introduction and impacts initial impressions and expectations.

Architecture also includes the external grounds and the internal architectural environment, including the size, layout, and configuration of space. The interior design level includes furniture, flooring, wall colour, texture, trim, use of artwork, and other aesthetic features.

Mental Health
Bathroom Solution

Mental Health bathroom design should be planned and centered around normalising the users environment with sanitaryware fixtures and fittings that are robust and designed to reduce the instances of self or carer harm. The design of our products reflects a new vision and philosophy for mental health facilities that is rooted in hope, healing and recovery.
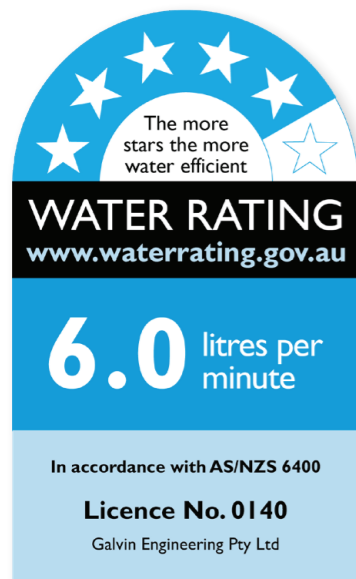
GalvinCare®

CP-BS Mental Health Anti-Ligature Safe-Connect Shower Head with Hand Shower

Product Code: 42020

- AS/NZS 3718 approved.
- Anti-ligature and safe-connect designed shower head.
- High quality chrome finish for easy cleaning, added durability and hygiene maintenance.
- Utilises a quick-connect fitting for a safe and reliable shut off and easy attach and release.
- Enables assisted and unassisted showering.
- Simple installation, facilitated from the front of the wall.
- Dual action allows for the carer or client to choose from a standard shower or a hand-held shower, and is easily diverted from one to another, without the use of a seperate diverter.

WATER RATING
www.waterrating.gov.au

The more stars the more water efficient

6.0 litres per minute

In accordance with AS/NZS 6400

Licence No. 0140

Galvin Engineering Pty Ltd

WaterMark
AS/NZS 3662 Lic WMK26191
SAI Global

AUSTRALIAN MADE AND OWNED

Shower Roses & Hoses

Designed for assisted-shower applications in behavioural/mental health facilities. GalvinCare® chrome plated brass anti-ligature Dual shower head with hand shower connector allows carers to bathe the patient with a hand-held shower, or, the shower may be utilised as a standard shower. If the hand-held hose is disconnected whilst bathing, it will automatically divert to the standard shower rose.

Wallgate Anti-Ligature Brushed SS Ceiling Mounted Shower with Removable Plate & Anti-Ligature Screw

Product Code: SNC-02-AUS

WATER RATING
9.0 litres per minute
Licence No. 1395
Magenat

WaterMark
AS/NZS 3662 Lic. 023197
Pro-Switch Pty Ltd

Wallgate
ROBUST. INNOVATIVE WASHROOMS

GalvinCare® CP-BS Lead Safe™ Mental Health Anti-Ligature Wall MTD Shower Rose 65 - STD

Product Code: 121.33.64.00

WATER RATING
7.0 litres per minute
Licence No. 0148

WaterMark
AS/NZS 3662 Lic WMK26191
SAI Global

Galvin Clear LEAD SAFE™

GalvinCare® CP-BS Mental Health Hand Shower with Anti-Ligature Wall Connection & Hose Assembly

Product Code: 40707

WATER RATING
8.5 litres per minute
Licence No. 0148

WaterMark
WMTS 040 Lic. WMK02448
SAI Global

Shower Controllers

Our range of shower roses and hoses specifically designed for behavioural and mental health facilities are made with anti-ligature and anti-vandal resistant features. These safety features ensure that the products are safe to use, while still offering the necessary functionality required in such facilities. Our range includes wall and ceiling mounted options, as well as independent and assisted showering options.

GalvinCare®

Electronic Mental Health Conceal Shower Mixer with GalvinCare® Handle & Controller

Product Code: TZ-FLOWTMSHWINR

- Anti-vandal and anti-ligature solution.
- Provides a precise delivery of water.
- Specifically designed for prisons, mental health facilities and other custodial establishments.
- Adjustable temperature control handle allows users to adjust from a cold water option to the set hot temperature.
- Beveled edges to provide tight fixing.
- Controller is preprogrammed and ready to use.
- The standard program can be modified to suits individual needs.

WaterMark
AS/NZS 3662 Lic WMK26191
SAI Global

GalvinCare® CP-BS Inwall Progressive Mental Health Anti-Ligature Shower Mixer (Warm & Cold)

Product Code: 50202

WaterMark
AS/NZS 3718 Lic. WMKA0034
SAI Global

AUSTRALIAN MADE AND OWNED

CliniMix® Lead Safe™ Inwall Thermostatic Progressive Shower Mixer with GalvinCare® Handle (Warm & Cold)

Product Code: 100.50.75.01

WaterMark
AS 4032.4 Lic. WMKA21989
SAI Global

Galvin Clear LEAD SAFE

GalvinCare® CP-BS Lead Safe™ Mental Health Anti-Ligature Paddle Handle WTA 1/4 Turn C/D Hot or Cold

Product Code: 120.71.16.01 / 120.71.16.02

WaterMark
AS/NZS 3718 Lic. WMKA0034
SAI Global

AUSTRALIAN MADE AND OWNED

Galvin Clear LEAD SAFE

Toilet Pans

Our range of Wallgate® WC pans are made of vandal-resistant, high-grade, solid-surface material. We offer a wide selection of flush options for use in conjunction with our range of WC pans and urinals. These include mechanical, electronic and pneumatic activation.
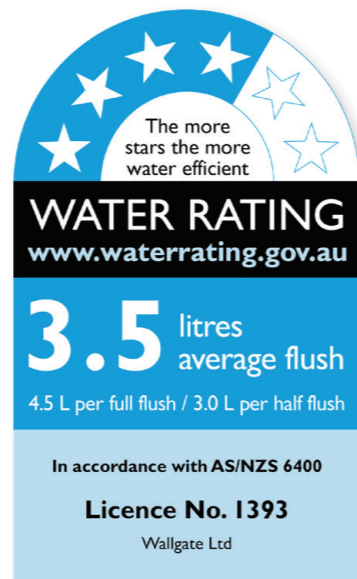
Wallgate

Anti-Ligature, Anti-Vandal Solid Surface
Back To Wall Pan S&P with Grey
Integrated Seat 446x702 - White

Product Code: CWC-155W-AST-AUS

- Anti-ligature design to reduce the potential for self-harm.
- Highly robust which prevents breakages.
- Shrouded waste (S and P trap compatible).
- Concealed through-wall services and fixings.
- WC pan made as one piece without joins.
- Highly polished finish for ease of cleaning.
- Easily renewable surface without a gel coat layer.
- Domestic appearance normalising the environment.
- Range of activation and control options available.

WATER RATING
www.waterrating.gov.au

The more stars the more water efficient

3.5 litres average flush

4.5 L per full flush / 3.0 L per half flush

In accordance with AS/NZS 6400

Licence No. 1393

Wallgate Ltd

Wallgate Anti-Ligature, Anti-Vandal Solid Surface BTW Pan P Trap with Integrated Grey Seat 445x523 - White

Product Code: CWC-150W-AST-AUS

Wallgate Anti-Ligature, Anti-Vandal Disabled Solid Surface BTW Pan S&P with Integrated Grey Seat 460x810 - White

Product Code: CWC-155W-AST-BCA

Wallgate Anti-Ligature, Anti-Vandal Solid Surface Ambulant Pan with Integrated Grey Seat 476x652 - White

Product Code: CWC-156W-AST-AMB

WaterMark
AS/NZS 3718 Lic. 023196
Pro-Switch Pty Ltd

Wallgate
ROBUST. INNOVATIVE. WASHROOMS

Products: CWC-155W-AST-AUS, 50162C, 50169C, ALM-06

Wallgate

Anti-Ligature, Anti-Vandal Solid Surface Front Fixed Basin W/ LH Shelf Integral Outlet 0TH

Product Code: WHBV-101W-LH-NB

- Anti-ligature design assists in the prevention of self-harm.
- Electronic or pneumatic activation.
- Highly robust.
- Made as one piece without joins.
- Highly polished finish for ease of cleaning.
- Easily renewable surface without a gel coat layer.
- Normalises the environment.
- Range of control options available.
- Concealed through-wall services and fixings.

Basins

Our basins are made from highly robust solid-surface material, which provide a normal appearance however offer anti-ligature and anti-vandal properties. There are recessed, wall-mounted, corner-top and vanity-top options available. All can be coupled with basin-activation options combined with our outlets and powerful water management systems.

Wallgate Anti-Ligature, Anti-Vandal Solid Surface Basin with Dual Out & Piezo Activation - White

Product Code: WHB-200W-AUS

WaterMark
AS/NZS 3718 Lic. 023196
Pro-Switch Pty Ltd

Wallgate
ROBUST. INNOVATIVE. WASHROOMS

Wallgate Anti-Ligature, Anti-Vandal Solid Surface Basin with Single Out No Tap Holes - White

Product Code: WHB-201W-NB-AUS

WaterMark
AS/NZS 3718 Lic. 023196
Pro-Switch Pty Ltd

Wallgate
ROBUST. INNOVATIVE. WASHROOMS

Wallgate Anti-Vandal Solid Surface Wash Basin, Back to Wall Waste - Concealed Serv - White

Product Code: WHB-100W

Wallgate
ROBUST. INNOVATIVE. WASHROOMS

Products: 123.20.13.90, 123.23.23.90

Wallgate®

NX Electronic Water Controller
1 Room / 4 Outlets Programmable

Product Code: 123.20.13.90

- Individual outlet or global setting capability.
- Provides evidence of all manual activation and automatic purge activity.
- Highly energy and water efficient.
- Prevents flooding and other abuse.
- Enables combination of activation sensors to be used.
- Outlets automatically close if power fails to prevent flooding.
- Easy navigation with the 3 inch LCD display.
- Scheduled purging and adjustable timings.
- Bluetooth® app for real-time controller access to remotely manage cycle periods, hygiene purging and room lockouts.

Intelligent Water Controls

We provide a comprehensive range of electronic water management controls specifically developed for the secure healthcare environment. The range has been designed to assist with the management of the patient and the prevention of waterborne infection.

GalvinCare® CP-BS Mental Health Anti-Ligature Shower Mixer Paddle Handle Less Button

Product Code: 50197

Flowmatic® Safe-Cell® Prison Concealed Face Plate for Dual Temp Basin

Product Code: 52448

Flowmatic® Prison Ducted Face Plate for Dual Flush Pan 24V AC

Product Code: 52483

The range of polished stainless-steel Safe-Cell® floor drains have been designed to minimise the risk of suicide and prevent the concealment of contraband.

Safe-Cell®

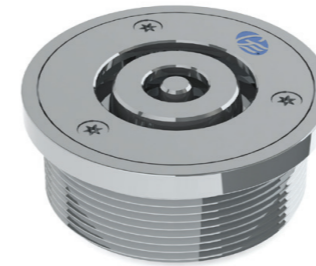## Polished SS316 (CRR) Prison Floor Drain Vinyl 100x80 BSP

Product Code: 303077X

- Specially designed to minimise self harm using a technique called the Crocodile Roll.
- Polished stainless-steel drains in a unique circular style with anti-ligature slot grate.
- Unique inbuilt design features to reduce the hiding of contraband in the drain.
- Maximum flow capabilities.
- All gullies supplied with security screwdriver bit to release the anti-ligature grating for cleaning.
- Suitable options available to be used with standard vinyl, epoxy, tile or concrete flooring.

WaterMark
WMTS 040 Lic. WMK02448
SAI Global

Safe-Cell® Polished SS316 (CRR) Prison Floor Drain Round 100x80 BSP

Product Code: 303070X

WaterMark
WMTS 040 Lic. WMK02448
SAI Global

Slip-Safe® SS Vinyl Bolted Cleanout 150x100 PVC/HDPE/CU Slip-In

Product Code: 69468X

WaterMark
WMTS 040 Lic. WMK02448
SAI Global

Safe-Cell® SS Linear Drain 600mm with Flashing Flange and 50mm Centre Outlet

Product Code: 303090X

WaterMark
AS/NZS 3718 Lic. WMKA0034
SAI Global

Products: WHB-100W, 100.81.10.20, THK-02

Our solid-form accessories have been developed
to complement our sanitaryware products. The anti-ligature accessories range includes: mirrors, shelves, toilet-roll holders, grab rails and other washroom products.
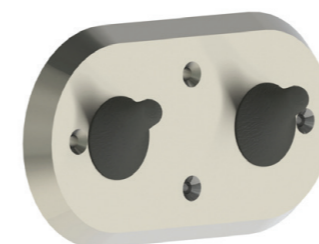
CliniMix®

Lead Safe™ CMV2 Wall Mtd Handsfree POU, Wave On/Off, Mains, Chrome Face Plate with Anti-Ligature Outlet

Product Code: 100.81.10.20

- Front access for commissioning, servicing and disinfection.
- Easy front of wall thermal disinfection.
- Multiple time cycle options are adjustable on-site allowing full flexibility to suit user requirements.
- AS/NZS 4032.4 and NCC 2022 Vol 3, Clause A5G4(2) 'lead free requirements' compliant.
- Smooth anti-ligature outlet.
- Consists of inwall box and front of wall finishing kit.
- Enables water to be mixed closer to the point of discharge, reducing risk of Legionella.
- Provides stable mixed temperature and rapid shut down in the event of cold/hot water supply failure keeping patients safe.
- Bluetooth connectivity available.

GalvinCare® Lead Safe™ Mental Health Detachable Hand Shower for Safe-Connect Shower Head

Product Code: 121.92.16.34

GalvinCare® Mental Health Anti-Ligature 30 deg Grab Rail 700x900mm Powder Coated - LH (Vert or Horiz)

Product Code: 42284

GalvinCare® Anti-Ligature Double Robe / Towel Hook

Product Code: THK-02

Accessories & Combination Sets

Our solid-form accessories have been developed
to complement our sanitaryware products. The anti-ligature accessories range includes: mirrors,
shelves, toilet-roll holders, grab rails and other washroom products.

Wallgate Anti-Ligature, Anti-Vandal
Recessed Shower Shelf Solid Surface -
White

Product Code: ALF-04

Wallgate

Wallgate Anti-Ligature, Anti-Vandal Polycarb
Mirror with Solid Surface Surround 500x650 -
White

Product Code: ALM-03W

Wallgate

Combination 1

GalvinCare® CP-BS Mental Health Anti-Ligature
Wall Extended Outlet 110mm Long 15 FI
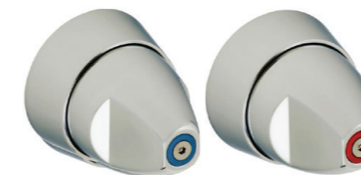
Product Code: 40687

GalvinCare® CP-BS Mental Health Anti-Ligature
Wall Outlet 15 FI

Product Code: 40684

Combination 2

Flowmatic® Automatic Concealed Sensor
Assembly 24v AC for Basin/Sink with SS Face

Product Code: TZ-FLOWTAPC24

Safe-Cell® CP-BS Lead Safe™ Prison Ezy-Grip
Wall Top Assembly Complete C/D Hot or Cold

Product Code: 121.01.03.01 / 121.01.03.02

galvinspecialised
commercial taps + fixtures

GalvinEngineering
the mark of reliability

90th ANNIVERSARY

We design, manufacture
and supply safe,
green and smart water
solutions for high
risk and high care
environments.

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sales@galvinengineering.com.au

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- Australia
- New Zealand
- UK
- USA

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Quality
ISO 9001
SAI GLOBAL

Environment
ISO 14001
SAI GLOBAL

A family
owned
Australian
business

Whilst all reasonable care has been taken in compiling the information in this document, the designs, dimensions and products shown are indicative only and should not be relied upon without prior approval. Due to our policy of continuous development, we reserve the right to alter any details of specifications or products without notice. All information, drawings, technical specifications and product designs remains the property of Galvin Engineering Pty Ltd.

In the absence of a legal or industry definition of anti-ligature or ligature resistant products, when we use these terms, we are referring to products that are designed and manufactured with the intention of reducing the risk of ligature attachment to the product(s).

Galvin Engineering Pty Ltd will always endeavour to design and test our anti-ligature product(s) to reduce the risk of product ligature attachment that may result in serious injury or death. Whilst all reasonable measures are taken at the time of design, the anti-ligature design of the products are not intended to and will not: a. Replace protective measures that need to be taken in the specific circumstances of usage; b. Substitute the need for supervision of those who may be at risk; c. Protect and or prevent those at risk against any self-harm instances that may occur when installed; and d. Protect and or prevent injury when the risks where unknown to us at the time of the design of the product(s).

Galvin Engineering Pty Ltd does not offer and does not represent or warrant that any product(s) for sale are ligature-free. Therefore, Galvin Engineering will not be liable for any claims, loss, or damages arising from ligature attachment on our products. It is the purchaser's responsibility to ensure that products purchased and installed are suitable for the environments in which they are installed, and suitable supervision and protective measures are in place to protect those at risk.

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