

ANSWERING NATURE'S CALL: A SPECIFIER'S GUIDE TO SUSTAINABLE TOILET SEAT SOLUTIONS



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INTRODUCTION

Across all sectors, from commercial to residential settings, bathrooms are an essential component of every building, facility or venue experience. Recent surveys suggest that Australians are acutely aware of the main issues with toilet facilities: lack of hygiene and cleanliness, inaccessibility, poor maintenance and unsatisfactory design.¹ Accordingly, there is a push for designers and specifiers to create accessible bathrooms with design features and fit-outs that minimise health risks while maximising functionality and performance for all users.

This includes the humble toilet seat – a bathroom component typically overlooked by specifiers yet rates as one the most used bathroom features. In the Australian market, most

bathroom products are selected based on price, without proper consideration of design, material content, functionality and durability. As consumers become more concerned with climate change, specifiers should also consider the sustainability values of design solutions during the specification process. It is critical for designers and specifiers to account for all these factors when choosing toilet seats to achieve elevated outcomes with respect to comfort, hygiene and impact on the environment.

In this whitepaper, we examine the impact of poor bathroom specification and explore the key factors relevant to choosing a sustainable toilet seat solution.



THE IMPACT OF POOR BATHROOM SPECIFICATION

Poorly-specified bathrooms, including components that are low quality or not fit-for-purpose, can result in low user satisfaction, poor hygiene and increased operational costs. The most immediate consequences of inadequate toilet components are apparent: broken toilet seats can put a bathroom out of operation during peak business hours and loose hinges on toilet seats can accumulate bacteria and increase the spread of viruses and illness.

However, these types of issues can have a serious impact on businesses. Research in the United Kingdom and the United States indicate that the quality of toilet facilities is an important factor in employee satisfaction.² This is backed up by a study in the *Building and Environment* journal in which 43,021 respondents from 351 office buildings indicated that cleanliness was correlated with worker satisfaction.³ Highlighting the potential customer impact, another American study noted that customers often choose businesses based on bathroom cleanliness.⁴

The health consequences of poor bathroom hygiene extend beyond the spread of illness. According to the United Nations, inadequate toilet facilities can lead to “poor health, absenteeism, attrition, reduced concentration, exhaustion, and decreased productivity”.⁵ Furthermore, unclean bathrooms or toilets that are out of order can make it difficult for people to use these facilities, which has implications for bladder, bowel and kidney health.⁶

Poorly-specified bathroom components will also typically need additional maintenance, repair and cleaning in order to maintain acceptable levels of functionality and cleanliness. This results in increased maintenance, labour and operational costs. Furthermore, toilets that are out of order or require regular cleaning will have a negative impact on the ability of a facility to support heavy traffic flow and may also result in costly business interruptions.

“Some of the best decisions you make in life,
happen when you’re seated.”

TOILET SEATS AND SUSTAINABILITY

In Australia, sustainable building is an economic and environmental necessity and there is growing consumer demand for building practices that reduce waste and emissions. Historically, the construction industry has been one of the largest contributors of waste and emissions in Australia. The Australian Bureau of Statistics reported that during the 2009-2010 period, the Australian construction industry generated 16.5 million tonnes of waste.⁷ The industry is now looking to low carbon, high performance and healthy materials that minimise environmental impact across the supply chain. This trend applies to the production of toilet seats.

Toilet seats are made out of a variety of materials, including:

- plastic;
- wood; and
- polypropylene and acrylic.

Most toilet seats on the Australian market are made from thermoplastic, which is an oil and gas product. The plastics industry makes up approximately 8% of oil production and this figure is predicted to rise to 20% by 2050.⁸

The environmental impact of plastic production is well-established. The manufacture of plastics is fossil fuel intensive and is carbon heavy.⁹ Plastics also release greenhouse gases as they degrade.¹⁰ With consumers becoming more environmentally-conscious, specifiers should seek toilet seats.



KEY CONSIDERATIONS IN TOILET SEAT SPECIFICATION

The issues discussed above highlight the need for a thorough specification process when selecting bathroom components. In relation to toilet seats, the key considerations are discussed as follows.

Ease of clean

Specifiers should consider the cleaning requirements of a toilet seat solution, as it will directly impact hygiene levels and operational costs over time. Toilet seats that are difficult to clean will collect grime and become breeding grounds for germs and bacteria. They will also incur additional energy and labour costs related to cleaning over the product lifecycle.

Some toilet seat materials are more difficult to clean than others. For example, wood is porous, so wooden toilet seats are more likely to retain germs and bacteria. Wood is also prone to splintering and other damage, which allows grime to collect in hard to reach areas.

To make cleaning easier, toilet seat solutions can be made of materials with anti-bacterial properties. Some solutions also include additional features and functionality that assist with efficient cleaning and hygiene, such as:

- 'soft close' seats which reduces hand-to-seat contact;
- hinges with hygienic design profiles; and
- detachable seats which facilitate cleaning around the entire toilet.

Comfort

There are multiple factors to consider when assessing toilet seats for comfort, including the materials used, the hardness of the seat and shape of the seat. Soft toilet seats, which are padded or have a vinyl covering, are typically the most comfortable type of seat available, but they are prone to germ and bacteria growth. Hard toilet seats may be less comfortable, but they offer other benefits like durability and ease of clean.

Specifiers should consider seats with ergonomic features or have an ergonomic profile. A contoured seat surface and ample seating space can contribute to greater comfort. Some solutions include lids that can be used for back support. It is also important to select a seat suited to the characteristics and physical ability of the intended user or group of users.



Durability

Specifiers must consider the application context and ensure the toilet seat is fit-for-purpose, especially if it needs to withstand heavy traffic and usage. Some toilet seat materials offer greater durability than others. Plastic toilet seats may be cheap, but they are prone to failure from heavy usage. Scratches and cracks can appear, which can encourage bacteria growth.

Toilet seats with a high density construction are preferable. Specifiers should check the seat strength and whether or not the solution is resistant to damage such as scratches, cracks and burns.

Accessibility

If a bathroom lacks accessibility features, disabled or elderly users may have difficulty using the bathroom. Specifiers should assess whether the toilet seat meets the functional needs of less-abled users. A client may have a specific need for a raised seat or a lidless design.

Under *AS 1428.1: 2009 Design for access and mobility, Part 1: General requirements for access – New building work*, accessible toilets are required to include a seat that has a minimum colour luminance of 30%. This ensures the seat can be distinguished by users who are vision-impaired. Colour choices of either anthracite grey, blue or black are ideal for meeting this requirement.

Sustainability

As most toilet seats are made from oil-based materials, specifiers should seek alternative solutions that are made out of natural and sustainable raw materials. Seats made out of materials containing toxic or harmful substances should be avoided.

The sustainability credentials of the manufacturer and the product supply chain should also be considered. Companies can establish their reputation for environmentally-friendly management through certification under ISO 14001.

Design options

No two projects or clients are the same, so it is important to identify solutions that have a range of design options. This can include different colours, seat shapes and accessories. Some clients may not require a lid on their seat, so specifiers should identify a design that can be specified without one.





PRESSALIT

100% Danish from its formation back in 1954 to today, Pressalit has been the global market leader in toilet seat supply, working with Caroma, IFO, Villeroy & Boch and many other exclusive sanitary ware brands for decades. Leveraging their Scandinavian focus on design and innovation, this manufacturing company is dedicated to producing high quality and sustainable toilet seats, all backed by a 10-year warranty.

Pressalit has received numerous Red Dot Awards for the design of their bathroom products.

Toilet Seats by Pressalit

Pressalit toilet seats bring Scandinavian luxury into the bathroom, with highly functional, elegantly designed and visually appealing toilet seats ideal for virtually any setting. This includes educational institutions, residential buildings, commercial spaces, age care environments, healthcare facilities and many more.

Made with durable materials and quality stainless steel hinges, Pressalit toilet seats are made to last and designed to be functional and stylish.

Pressalit's ultra-comfortable toilet seats include innovative design features such as:

- a 'soft-close' function that minimises hand contact;
- the ability to quickly release and lift off the seat for efficient cleaning; and
- anti-bacterial technology (Polygiene), which is integrated into the seat to hamper bacteria growth and spread over the entire life of the product.

Available in a variety of shapes, styles and colours, the Pressalit range also includes ergonomic profiles, generous seat space and safety features like stability buffers to increase seat strength and stability. Pressalit toilets are not only highly durable and scratch and burn resistant, they include hygienic profiles and shaped to collect as little dirt as possible.

Pressalit also makes different types of toilet seats that contribute to flexible and disabled-friendly bathroom design for users. Seats are available with or without lids, making toilet access easier for certain users. Toilet seats are also available in raised versions, assisting users who do not have the ability to lower themselves onto a standard seat.

While the vast majority of toilets in Australia are manufactured from non-renewable sources, Pressalit are a brand that is committed to minimising the environmental impact of their toilet seat production. They have created a compound of urea and wood pulp, which has a low oil dependence and contains neither halogens nor organic solvents. During production, the company focuses on waste minimisation and adheres to all emissions standards. Containing no environmentally hazardous substances, Pressalit toilet seats are not only friendly to the environment, they are also 100% safe for human use.

Pressalit has been quality certified in accordance with ISO 9001 and has obtained ISO 14001 certification, an internationally accepted standard for environmental management.

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PRESSALIT®

au.pressalit.com

T : 0415 425 461

E : au@pressalit.com