

UV RESISTANCE & EXTERIOR COLOUR GUIDANCE

Technical Bulletin

UV PERFORMANCE

Durasein® Pure Acrylic Solid Surface has been independently tested by SGS for resistance to accelerated light ageing using Xenon-arc exposure.

Testing was conducted in accordance with **ISO 4892-2:2013/Amd.1:2021 Cycle 1**, with colour change assessed in accordance with **ISO 105-A02:1993/Cor.2:2005**.

Following **200 hours of Xenon-arc exposure**, incorporating cycles of light, heat, humidity and water spray, the Durasein® sample achieved a:

GREY SCALE RATING: 4–5

Under ISO 105-A02, Grey Scale 5 represents the highest resistance to colour change and 1 the lowest.

UNDERSTANDING COLOUR PERFORMANCE

As with other architectural materials, prolonged exposure to UV radiation and exterior environmental conditions can result in gradual changes to colour and surface appearance.

Individual colours may respond differently to prolonged exposure. In general, changes are typically less noticeable in **whites, lighter colours and neutral tones**, while they may be more apparent in **dark, vivid or highly saturated colours**.

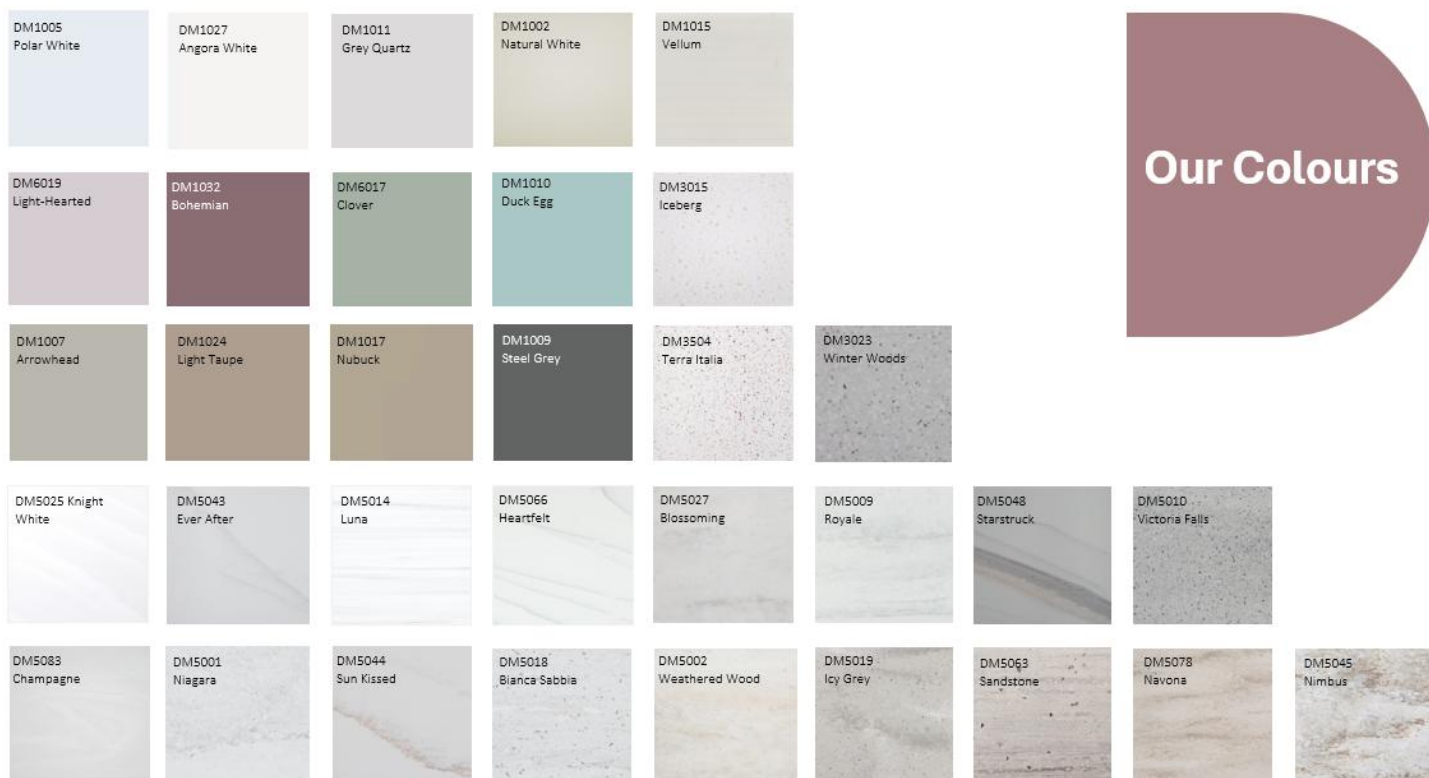
Patterned and multi-coloured designs may also display changes differently due to variations in pigments, particles and decorative elements.

Colour selection should therefore be considered together with the location, orientation, level of UV exposure and expectations for long-term appearance.

EXTERIOR COLOUR SELECTION

The following Durasein® Australian colour range is provided to assist designers and specifiers when considering materials for exterior applications.

Important: Individual Durasein® colours have not all been independently tested for exterior colour performance. The colour guidance shown has been categorised by Durasein colour specialists based on professional visual assessment. The suitability of a colour should be considered in relation to the specific application and expected environmental exposure.



Durasein®

Colour Resistance to UV Exposure

Series	Code	Colour Name	Band	Minimal colour change expected	Some colour change may be visible	Greater colour change may be visible
Price Band A						
Welnest	DM1005	Polar White	A	●		
Welnest	DM1027	Angora White	A	●		
Welnest	DM1002	Natural White	A	●		
Welnest	DM1011	Grey Quartz	A	●		
Welnest	DM1015	Vellum	A	●		
Price Band B						
Welnest	DM1024	Light Taupe	B		●	
Welnest	DM1017	Nubuck	B		●	
Welnest	DM6019	Light Hearted	B	●		
Welnest	DM1032	Bohemian	B			●
Welnest	DM6017	Clover	B		●	
Welnest	DM1010	Duck Egg	B		●	
Welnest	DM1007	Arrowhead	B		●	
Welnest	DM1009	Steel Grey	B			●
Mineral	DM3015	Iceberg	B	●		
Mineral	DM3023	Winter Woods	B		●	
Mineral	DM3504	Terra Italia	B		●	
Price Band C						
Natural	DM5018	Bianca Sabbia	C		●	
Natural	DM5063	Sandstone	C		●	
Natural	DM5001	Niagara	C		●	
Natural	DM5009	Royal	C		●	
Natural	DM5027	Blossoming	C		●	
Natural	DM5014	Luna	C	●		
Natural	DM5010	Victoria Falls	C		●	
Natural	DM5043	Ever After	C		●	
Natural	DM5044	Sun Kissed	C		●	
Natural	DM5066	Heartfelt	C		●	
Natural	DM5025	Knight White	C	●		
Natural	DM5048	Starstruck	C		●	
Natural	DM5019	Icy Grey	C		●	
Natural	DM5002	Weathered Wood	C		●	
Natural	DM5083	Champagne	C	●		
Natural	DM5078	Navona	C		●	
Natural	DM5045	Nimbus	C		●	

A RENEWABLE SURFACE

An important advantage of Durasein® Pure Acrylic Solid Surface is its renewable surface.

Minor scratching, staining and surface weathering can generally be reduced or removed through appropriate cleaning, sanding and refinishing. This ability to renew the surface can help maintain appearance and extend the service life of the material, giving it longevity and reducing environmental impact.

As well as its ability to be repaired and rejuvenated, Durasein® offers exceptional design flexibility. The material can be thermoformed, inconspicuously joined and CNC machined, enabling complex forms and detailing for architectural applications.

Durasein® Pure Acrylic Solid Surface has low moisture absorption and provides good resistance to stains, pollutants, detergents and humidity. Its renewable surface can also assist with the removal of graffiti and other surface contamination through appropriate cleaning, pressure washing or refinishing techniques.

These characteristics make Durasein® a versatile material for appropriately designed exterior applications.

EXTERIOR DESIGN CONSIDERATIONS

Exterior performance depends on more than UV exposure alone. Consideration should be given to **colour selection, orientation, thermal expansion and contraction, panel dimensions, fixing and support systems, ventilation and installation methods**.

All exterior applications should be fabricated and installed in accordance with current Durasein® technical recommendations. Please refer to the Durasein Fabrication & Installation Manual.

https://durasein.com/au/wp-content/uploads/sites/14/2023/04/Durasein_AU_Fab_Manual_090922.pdf

TESTING & PERFORMANCE NOTE

Accelerated laboratory testing provides an indication of potential material performance but cannot reproduce every environmental condition encountered in service.

The independent SGS test applies specifically to the **12 mm Durasein® Pure Acrylic Solid Surface sample submitted for testing**.

Actual exterior performance may vary according to colour, environmental exposure, geographical location, orientation, application and installation.

Please visit our website: www.durasein.com/au for more information