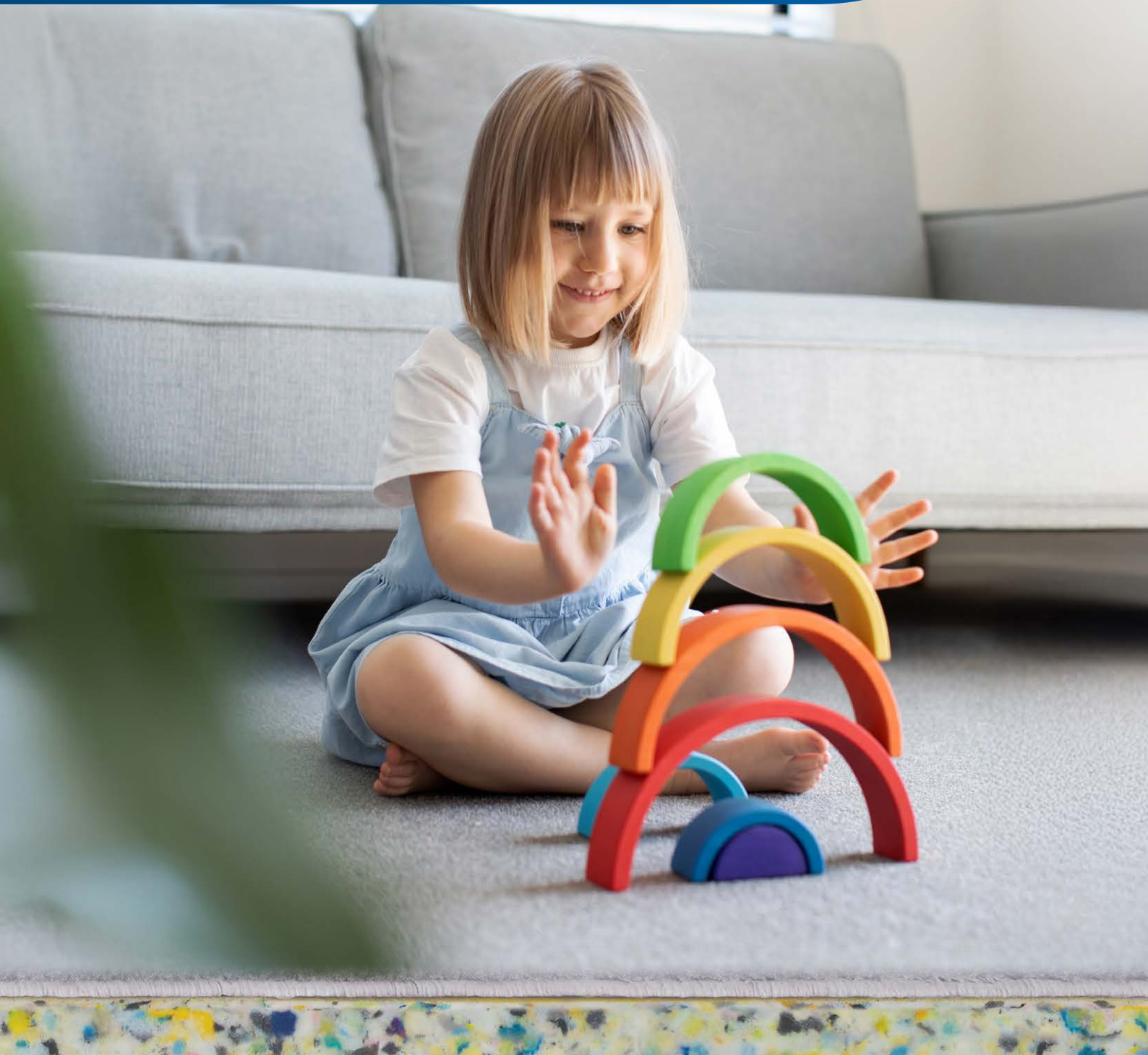




2025 Underlay Catalogue



Content

Dunlop Underlay

- p.08 About Dunlop Underlay
- p.10 Underlay Range
- p.12 Carpet Underlay - Springtred
- p.14 Carpet Underlay - Carpetmate
- P.16 Carpet Underlay - Renu
- p.18 Hard Flooring Underlay
- p.20 Commercial Underlay
- p.22 Dunlop Floorshield

Resources

- p.24 Discovering your Carpet Best Friend
- p.28 Recycle by Dunlop
- p.30 Glossary
- p.32 Carpet Types
- p.34 Impact Acoustic, according to NCC and BCA F5.2
- p.32 Slip Ratings of Flooring, according AS/NZS 4586

Our Partners

CARPET COURT

FLOORING XTRA 

Harvey Norman

 **Choices**
Flooring
The floor you've been searching for



 **CARPET ONE** FLOOR & HOME

 **Andersens**
THE RESPECTED NAME IN FLOOR COVERINGS

 **Solomons**
Flooring

 **Floorworld**
MORE THAN JUST FLOORING

 **AUSTRALIAN**
FloorStyle

 **CARPETWORLD**

 **Bowens**
THE BUILDERS CHOICE



CHOOSE COMFORT

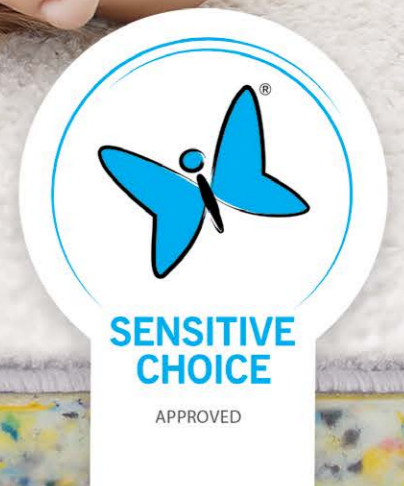
Choose  **DUNLOP**[®]

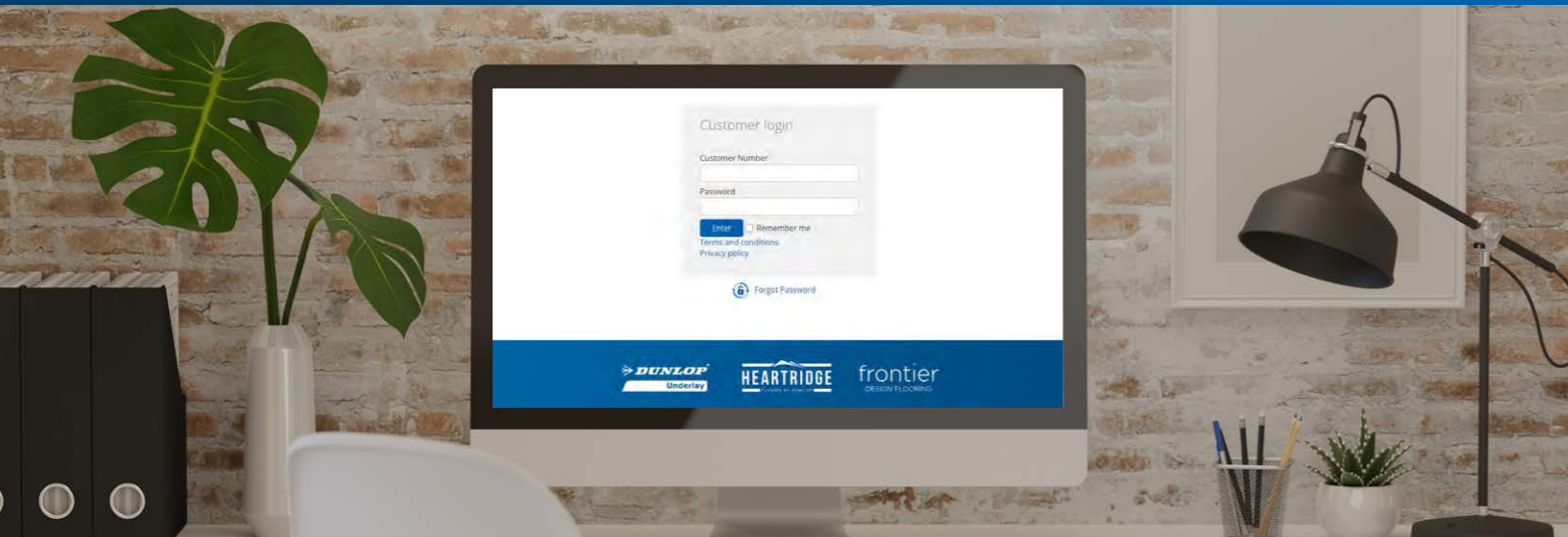
UNDERLAY

Even though you can't see your underlay, it is the single most important factor when it comes to the performance and comfort of your carpet.

 **DUNLOP**[®] UNDERLAY

COME HOME TO COMFORT





















Skip the queue today and order from Dunlop Flooring Online

With Dunlop Flooring Online, it's never been faster or easier to order your underlay or hard flooring products. You can now view your purchase history, invoices, access product images and so much more. For anyone on the go you can now do all this through our Dunlop app!

Make sure to shop with Dunlop Flooring Online and discover the possibilities for you and your business.

- | | |
|--|---|
|  Fire rating & test certificates |  Recycling pick up |
|  View past order history |  Thermal property specifications |
|  Credit claim requests |  Acoustic rating & specifications |
|  Technical product information |  Point of sale requests |
|  Price lists |  Product gallery |
|  Create underlay & hard flooring orders |  Automated Underlay order processing |
|  View Hard Flooring stock availability |  Web-based App Available |
|  Credit card checkout |  View Invoices |

App available to download on Apple Store or Google Play.



Scan to watch DFO video



1969
Humble Beginning
It all starts at our South Melbourne plant with the manufacturing of cotton dressing for the motor and upholstery industry.



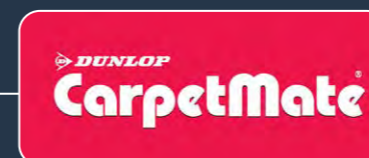
1972
Our First Underlay
Joubert & Joubert invests in the first rebond underlay plant in Australia, and as a result, Dunlop launches the pioneering Omalay range.



1982
A Period of Growth
With business booming, Dunlop packs up and relocates manufacturing operations from South Melbourne to a larger premise in Sunshine.



1990
The Launch of Springtred
We introduce Springtred foam underlay to the Australian market with four premium products in the range, each offering scalable levels of comfort and support.



1993
The Carpetmate Launch
Dunlop Carpetmate launches with an extensive range of foam carpet underlays, featuring eight different combinations of density and thickness.



2019
Big Changes at Dunlop Flooring
We move our head office to a new purpose built location at Truganina in Victoria. Plus, we consolidate manufacturing, making Dunlop's Wetherill Park site the largest rebond foam underlay plant in the Southern Hemisphere.



2017
Dunlop Flooring Re-Brand
To celebrate our 50th year in business, Dunlop Flooring evolves with an exciting new redesign of our branding and digital communications, launching new websites, email marketing, and social channels right across the business.



2014
Launch of the HeartrIDGE Floors Brand
The stylish HeartrIDGE timber flooring range is born using the latest innovative technology to replicate the natural appearance of real timber.



2013
Dunlop Flooring wins Banksia Foundation Award
We are recognised for our commitment to sustainable manufacturing practices and landfill reduction with the Banksia Foundation award for Waste Minimisation.



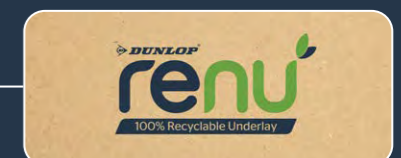
1998
First Dual-Bond Latex Plant
Dunlop Flooring establishes the first dual-bond latex plant in Australia at Dandenong.



2021
The Dunlop EnviroFirst Launch
We continue our mission to drive sustainability through recycling and eco-friendly business practices with the launch of EnviroFirst, our sustainability program.



2022
Recognition for our Sustainable Practices
Dunlop Flooring is selected by the Federal Government's Department of Climate Change, Energy, the Environment and Water to participate in the 'Recycled Content in Use' video series, which showcases Australian manufacturers doing their bit to reduce landfill through innovative recycled products.



2023
Dunlop Underlay Launch Renu
We develop Renu, our first 100% recyclable underlay made from ethically sourced and recycled materials, which becomes the most sustainable bio-based carpet underlay in Australia.



2023
Rebranding of Dunlop Underlay
We launch a refresh of the Dunlop Underlay brand, changing our logo and replacing the tagline 'Comfort for life' with the more customer-focused 'Choose comfort, choose Dunlop.'



Why choose Dunlop?

When it comes to flooring performance, you can rely on Dunlop Flooring. For over 50 years, we've been Australia's largest and most trusted provider of top-quality underlay for domestic and commercial floors. We have the expertise and an extensive range to create the ultimate comfort zone for you and your space.

A Dunlop Underlay will add luxury and longevity to your carpets and timber floors. We use the latest in flooring technology, delivering maximum impact absorption to ensure your floor will maintain its appearance and provide continuous comfort and support underfoot.

Our carpet underlays are engineered with antimicrobial protection that reduces mould, mildew and bacteria to prevent allergies and asthma attacks. Plus, our entire range is 100% recyclable to help reduce landfill, which is better for our environment and your soul.



As Industry Leaders



Australian Made



Lifetime Warranty



Award Winning



Sustainable Product



Health & Safety



Customer Satisfaction

CHOOSE COMFORT

Choose **DUNLOP**



Choose Comfort
Improves softness of the carpet



Choose Peace & Quiet
Reduces noise transfer



Choose Warmth
Retains more heat in the winter



Choose Durability
Improves carpet appearance and retention



Dunlop Envirofirst

Our mission is to drive sustainability through recycling and integrating eco-friendly practices into everything we do as a business. We know that what we do today can help protect our planet for tomorrow, so we will continue to recycle everywhere possible to safeguard our environment for future generations.



Recycle by Dunlop

Participating retailers collect old or discarded foam underlay, together with off-cuts and trims sent back to them, and deliver all of this to Dunlop Flooring. Here it is cleaned, sorted, and ultimately recycled into new, reusable underlay. This brand new recycled Dunlop Underlay is then passed on to the retailer, who in turn provides you the benefit of quality Australian-made underlay for your home.



National Asthma Council

We are proud to be a partner of the National Asthma Council Australia Sensitive Choice program. Our Vinyl, Luxury Vinyl & Hybrid floors are an ideal choice for those who are at risk of allergy and asthma-related health problems.



Watch our video with
Department of Agriculture



Scan to watch
Dunlop remade video



As Australia's largest provider of quality foam underlay, we have over 50 years of experience in improving flooring performance. A Dunlop underlay adds luxury and longevity to carpets and hard flooring.

And because every Dunlop underlay is Australian made, you can be confident you've chosen a quality product. In fact, Dunlop guarantees it for the life of your carpet.



Our Range

Each product has been specifically designed to ensure your floors are durable, comfortable underfoot and retain their appearance for longer.



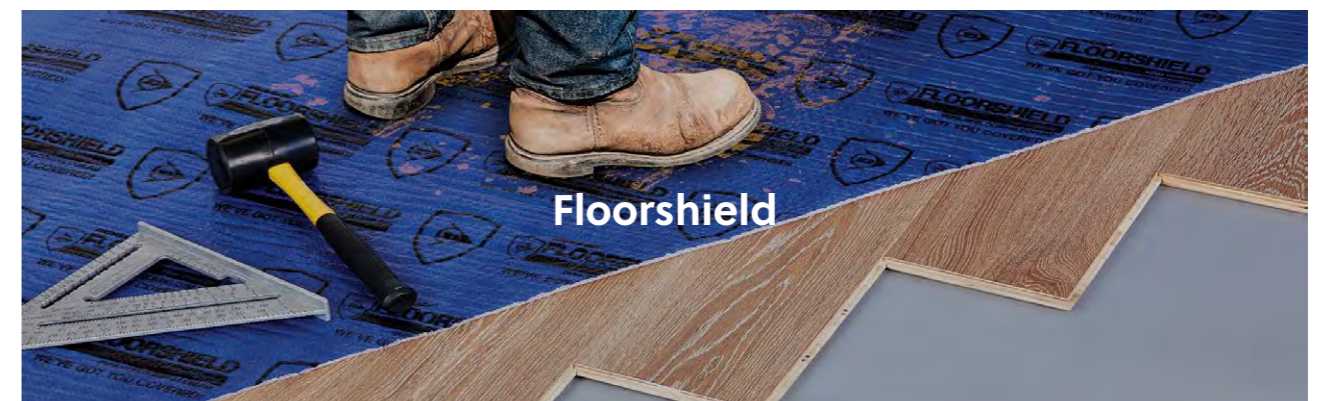
Carpet Underlay



Hard Flooring Underlay



Commercial Underlay



Floorshield

Carpet Underlay

Springtred

DUNLOP UNDERLAY

No matter what level of comfort and performance you need, Dunlop Springtred has it covered. There are 2 premium products available in the range, each offering a different level of comfort and support to suit your budget and your lifestyle. Each product has been specifically designed to make your carpet more comfortable, extra durable, and to help retain its appearance for longer.

For more information on the various tests and standards, visit dunlopunderlay.com.au

Features & Benefits



Your home is a place of comfort. Dunlop Flooring recognises that this comfort also extends to factors that you can't necessarily see, such as the air quality of your home. As such, Springtred carpet underlay is Green Label accredited by the Carpet and Rug Institute in the USA, ensuring that it meets strict criteria on VOC emissions for superior indoor air quality for your entire family. After all, it's what you can't see that makes the difference.



This Carpet Underlay has been treated with Dunlop Fresh-Living which provides proven effective control of bacteria, mould, mildew and fungi whilst also helping to control dust mites which may assist in the prevention of asthma and other allergies. Fresh-Living also provides lasting hygienic freshness, effective odour protection and extends product life by resisting deterioration.



Makes carpet feel richer, thicker and more luxurious



Extends the life of your carpet by absorbing impact



Improves carpet appearance and retention



Acts as a thermal insulator



Improves acoustics by reducing noise transfer



Suitable for all floor types including heated slabs up to 40°C



Environmentally friendly, 100% recyclable



Guaranteed for the life of the flooring



Australian made



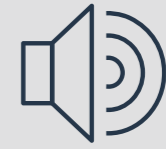
Meets Australian Standards AS 4288-2003 for soft underlays



Improves thermal insulation by up to **290%**



Improves softness by up to **74%**



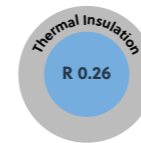
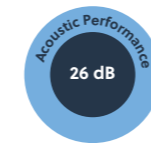
Reduces noise transfer by up to **62%**

Springtred

DUNLOP UNDERLAY

ultimate

Offering even more luxury and support, Springtred Ultimate takes it to another level with its superior balance of thickness and density providing outstanding comfort and performance. Springtred Ultimate is also treated with the proven antimicrobial for added asthma and allergy prevention.



Density meter 120 KG/M³

Thickness: 10mm

Technical Specs

Roll Length 10m

Roll Width 1.8m

Roll Size 18m²

AS 4288 – 2003 Classification: **Luxury**

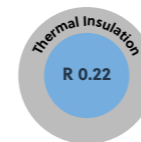
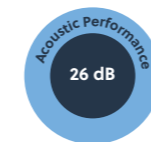


Springtred

DUNLOP UNDERLAY

extra

With its extra density and thickness, Springtred Extra works hard to provide improved underfoot comfort and added performance. Springtred Extra is also treated with the proven antimicrobial for added asthma and allergy prevention.



Density meter 95 KG/M³

Thickness: 9mm

Technical Specs

Roll Length 15m

Roll Width 1.8m

Roll Size 27m²

AS 4288 – 2003 Classification: **Luxury**





Carpet Underlay



Dunlop Carpetmate offers an extensive range of foam carpet underlays to help make your carpet even more comfortable. With six different combinations of density and thickness available, you can choose the right level of comfort and support to suit your requirements.

Features & Benefits



Your home is a place of comfort. Dunlop Flooring recognises that this comfort also extends to factors that you can't necessarily see, such as the air quality of your home. As such, Carpetmate underlay is Green Label accredited by the Carpet and Rug Institute in the USA, ensuring that it meets strict criteria on VOC emissions for superior indoor air quality for your entire family. After all, it's what you can't see that makes the difference.



Makes carpet feel richer, thicker and more luxurious



Extends the life of your carpet by absorbing impact



Improves carpet appearance and retention



Acts as a thermal insulator



Improves acoustics by reducing noise transfer



Suitable for all floor types including heated slabs up to 40°C



Environmentally friendly, 100% recyclable



Guaranteed for the life of the flooring



Australian made



Meets Australian Standards AS 4288-2003 for soft underlays



For truly outstanding performance and comfort, it's hard to go past Carpetmate Premium. Boasting the highest density and thickness in the Carpetmate range, it improves carpet durability for even longer lasting luxury.

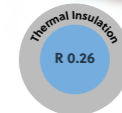
Density meter 100 KG/M³

Thickness: 11mm

Technical Specs

Roll Length 10m
Roll Width 1.8m
Roll Size 18m²

AS 4288 Classification: **Luxury**



Thanks to its extra density, Comfort master delivers additional support and greater performance without compromising on luxurious comfort.

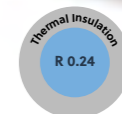
Density meter 100 KG/M³

Thickness: 10mm

Technical Specs

Roll Length 10m
Roll Width 1.8m
Roll Size 18m²

AS 4288 Classification: **Luxury**



The name sums up the feeling you'll get when you first set foot on it. Eureka delivers a perfect balance of softness, resilience, comfort and support.

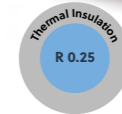
Density meter 80 KG/M³

Thickness: 10mm

Technical Specs

Roll Length 15m
Roll Width 1.8m
Roll Size 27m²

AS 4288 Classification: **Luxury**



Take your comfort level up a notch with Supergreen. Its extra thickness provides additional support and softness underfoot making luxury more affordable.

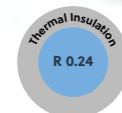
Density meter 69 KG/M³

Thickness: 10mm

Technical Specs

Roll Length 15m
Roll Width 1.8m
Roll Size 27m²

AS 4288 Classification: **General Residential**



With its added thickness, Government Red delivers more quality with extra comfort, exceptional support and added performance.

Density meter 69 KG/M³

Thickness: 8mm

Technical Specs

Roll Length 15m
Roll Width 1.8m
Roll Size 27m²

AS 4288 Classification: **General Residential**



More luxury than you'd expect from an entry-level underlay, Standard is your first step towards a more softer and comfortable carpet.

Density meter 69 KG/M³

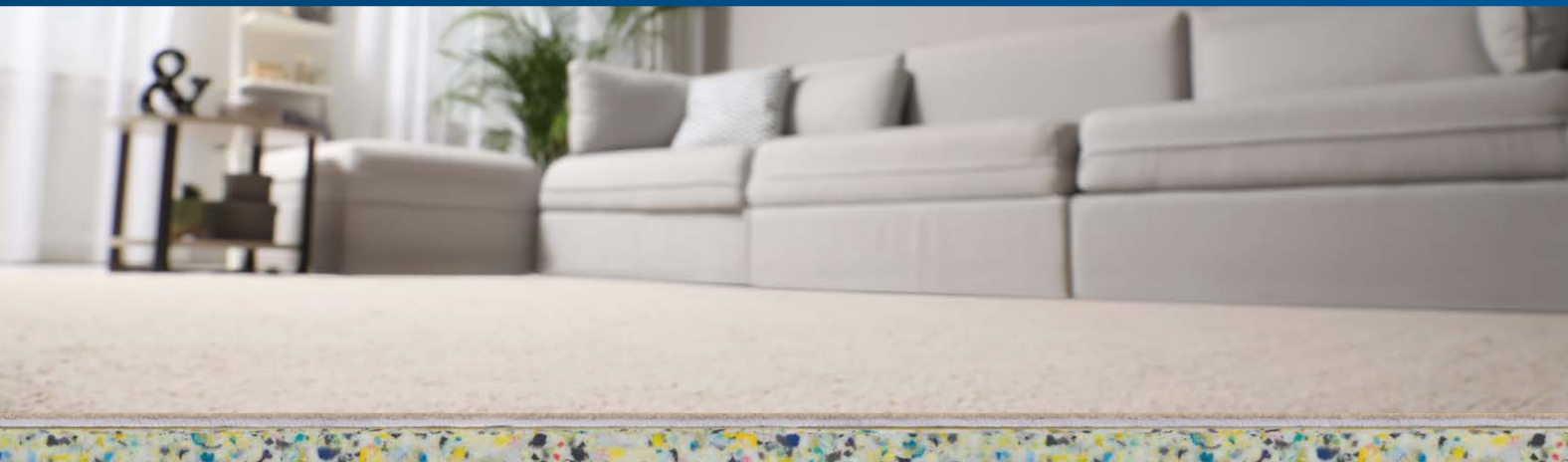
Thickness: 7mm

Technical Specs

Roll Length 15m
Roll Width 1.8m
Roll Size 27m²

AS 4288 Classification: **General Residential**





Carpet Underlay



CHOOSE THE MOST SUSTAINABLE **BIO-BASED** CARPET UNDERLAY

Made from **98%** recycled materials
Whilst also being **100%** recyclable

At the end of its life we will collect your old Renu underlay and recycle it into new underlay again.

On our underlay we use a bio-based film made from responsibly sourced sugar cane. Our packaging is made from the same film or 100% recycled plastic.

By choosing Renu you can help to reduce

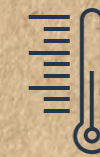
167,000 tonnes!

of waste foam that gets sent to landfill each year!

- ✓ An ethically sourced underlay
- ✓ Thermal insulation reduces emissions
- ✓ Guaranteed for the life of the carpet



COMFORT
Improves softness



WARMTH
Retains heat



PEACE & QUIET
Reduces noise

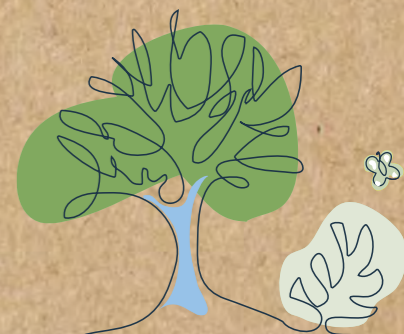


THICKNESS	DENSITY	THERMAL INSULATION
11 mm	140 kg/m ³	R 0.24
LENGTH	WIDTH	ACOUSTIC PERFORMANCE
8 m	1800 mm	25 dB



Say 'No' to waste!

Visit dunlopunderlay.com.au to find out how



Hard Flooring Underlay

Features & Benefits

All Dunlop hard flooring underlays have undergone extensive testing by the CSIRO to determine their impact sound performance and compliance with the impact standard set by the NCC.

The National Construction Code (formerly known as BCA) publishes standards relating to sound insulation for multi-level dwellings to reflect community expectations around noise management.

The NCC standard requires that all flooring assemblies be tested to determine their acoustic performance. These standards reference both impact sound and airborne sound. The standard, as determined by the NCC, for impact sound requirement is $L_{n,w} \leq 62\text{dB}$. The airborne sound requirement is $R_w + C_{tr} \geq 50\text{dB}$.

All Dunlop hard flooring underlays have undergone extensive testing by the CSIRO to determine their impact sound performance and compliance with the impact standard set by the NCC. Dunlop's hard flooring underlays all exceed the standard and the results are listed in the below table.



Acts as a thermal insulator

Manufactured from cross linked polyethylene for exceptional durability

Pre-applied moisture resistant barrier

Improves acoustics by reducing noise transfer

Guaranteed for the life of the flooring

Australian made

	Thermal Insulation	Durability	Moisture Resistance	Acoustic Performance	Warranty	Australian Made
Timbermate			✓	✓	✓	✓
Thermacoustic	✓		✓	✓	✓	✓
Timbercushion		✓	✓	✓	✓	✓
Aquacoustic		✓	✓	✓	✓	✓
Advantage 3				✓	✓	

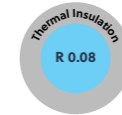
DUNLOP Timbermate

Dunlop Timbermate is a hard flooring underlay specially designed to reduce sound transfer whilst providing added moisture protection. Dunlop Timbermate has been tested by the CSIRO to determine its acoustic performance and compliance with the standard set by the National Construction Code (NCC), which it exceeds.

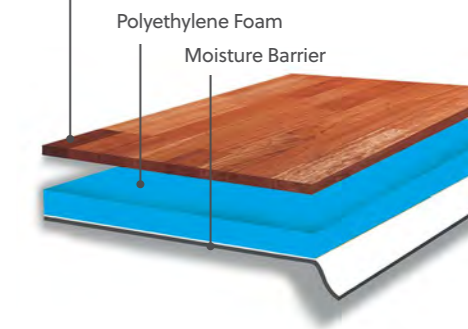
Recommended for use with most common laminate and engineered timber floating floors.

Thickness: 2mm
Technical Specs

Roll Length 50m
Roll Width 1200mm + 100mm overlap
Roll Size 60m²



Floated Timber & Laminate Floor



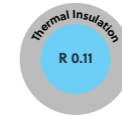
DUNLOP Thermacoustic

Dunlop Thermacoustic is a hard flooring underlay specially designed to offer an increased reduction in sound transfer whilst also providing added moisture and thermal protection. Dunlop Thermacoustic has been tested by the CSIRO to determine its acoustic performance and compliance with the standard set by the National Construction Code (NCC), which it exceeds.

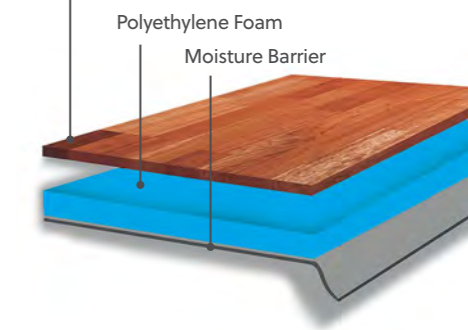
Recommended for use with most common laminate and engineered timber floating floors where superior acoustic, moisture and thermal protection is required.

Thickness: 3mm
Technical Specs

Roll Length 50m
Roll Width 1200mm + 100mm overlap
Roll Size 60m²



Floated Timber & Laminate Floor



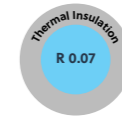
DUNLOP Timbercushion

Dunlop Timbercushion is a specialist hard flooring underlay that provides superior acoustic performance. Incorporating a 200 micron moisture resistant barrier, Timbercushion offers effective moisture and thermal protection. This product includes an incorporated tape seal on the end of the rolls for increased water vapour resistance.

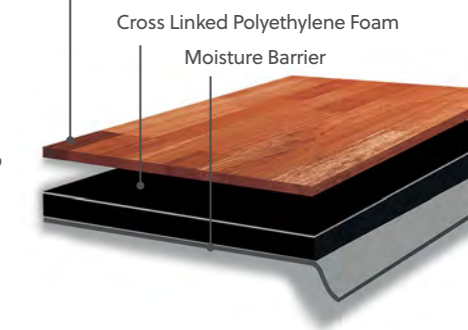
Recommended for use with most common laminate, engineered wood and solid timber floating floors where superior noise reduction, effective moisture protection and resilience is required.

Thickness: 2mm
Technical Specs

Roll Length 20m
Roll Width 1600mm + 200mm overlap
Roll Size 32m²



Floated Timber & Laminate Floor



DUNLOP Aquacoustic

Dunlop Aquacoustic is a specialist hard flooring underlay that provides unsurpassed acoustic performance. Incorporating a 200 micron moisture resistant barrier, Aquacoustic offers superior moisture protection. This product includes an incorporated tape seal on the end of the rolls for increased water vapour resistance.

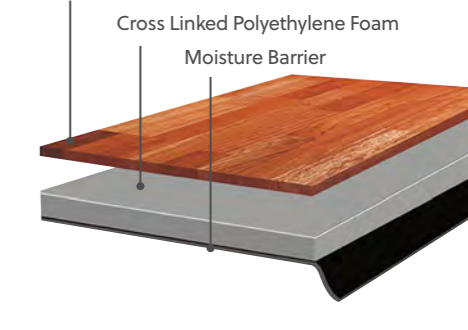
Recommended for use with most common laminate, engineered wood and solid timber floating floors where excellent noise reduction, unbeatable moisture protection and resilience is required.

Thickness: 3mm
Technical Specs

Roll Length 20m
Roll Width 1160mm + 200mm overlap
Roll Size 32m²



Floated Timber & Laminate Floor



DUNLOP Advantage 3

Advantage 3 is a rubber/cork acoustic underlay suitable for timber and laminate, as well as dual bond application of carpet tiles and carpet. Designed to reduce impact sound insulation, Advantage 3 exceeds the National Construction Code's (NCC) minimum requirements for acoustic performance, whilst offering thermal insulation.

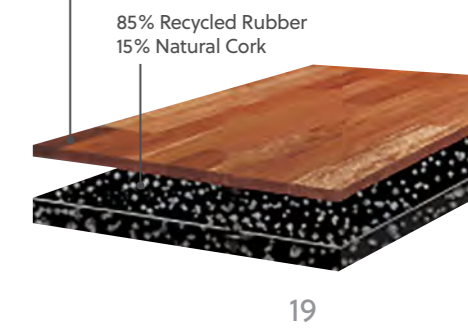
Recommended for use with solid and engineered timber, laminate, luxury vinyl planks, carpet tiles and carpet.

Thickness: 3mm
Technical Specs

Roll Length 10m
Roll Width 1.0m
Roll Size 10m²



Glued or Floated Timber and Laminate



**To achieve the rating of 196Sd, for Dunlop Advantage 3, the product must be installed with a 200 micron plastic sheet.



Marvel Stadium

Situated in the vibrant heart of Melbourne, Marvel Stadium has played host to over 42 million fans since its opening in 2000. In our latest endeavour, we're proud to announce that our Technics 5 commercial underlay will be greeted by thousands of sporting fans and concert goers as they set foot in the glorious stadium. Approximately 3,000m² of Technics 5 has been installed in all function venues of the stadium.

Commercial Underlay

Features & Benefits



Improves acoustics by reducing noise transfer



A quick and easy installation process



Acts as a thermal insulator, reducing energy bills and decreasing your environmental footprint



Provides superior indoor air quality as a result of its low chemical emissions.



Guaranteed for the life of the flooring



Suitable for high foot traffic areas

DUNLOP Advantage 3

Thickness: 3mm
Density meter: 700 KG/M³
Acoustic Performance: 46dB
Water Vapour Resistance: 196Sd

Advantage 3 is a rubber/cork acoustic underlay suitable for: timber and laminate, as well as dual bond application of carpet tiles and carpet. Designed to reduce impact sound insulation, Advantage 3 exceeds the National Construction Code's (NCC) minimum requirements for acoustic performance, whilst offering thermal insulation.

**To achieve the rating of 196Sd, for Dunlop Advantage 3, the product must be installed with a 200 micron plastic sheet.

Glued or Floated Timber and Laminate



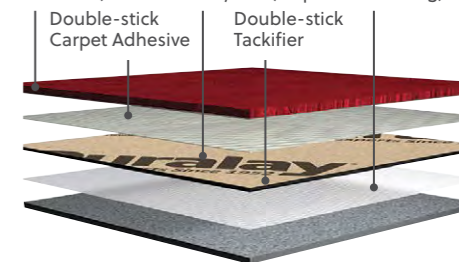
DUNLOP Technics 5

Thickness: 5mm
Density meter: 585 KG/M³
Acoustic Performance: 44dB
Thermal Insulation: R 0.31

Technics 5 is a high specification, twin scrim carpet underlay that provides excellent underfoot comfort, reduces noise, and gives heat insulation. Its unique Textron[®] backing provides exceptional dimensional stability, making it ideal for contract carpet applications and natural floor coverings.

Recommended for Hotels, Retail, Offices, Theatres, Government, Education, Healthcare, Public Spaces, Entertainment, Bars and Lounges, Restaurants and Conference Facilities.

Carpet (Ideal for heavy wear & border work) Technics 5 Underlay Sub-Floor (Prepared for fitting)



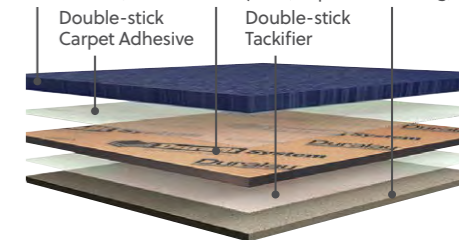
DUNLOP Durafit 7

Thickness: 7mm
Density meter: 400 KG/M³
Acoustic Performance: 44dB
Thermal Insulation: R 0.31

Duralay's Durafit System was the first double-stick system for carpet and underlay when it was launched in the 1980s. It's now the de facto standard for stick-down systems and has been used successfully in thousands of contract installations, large and small, around the world.

Recommended for Hotels, Retail, Offices, Theatres, Government, Education, Healthcare, Public Spaces, Entertainment, Bars and Lounges, Restaurants and Conference Facilities.

Carpet (Ideal for heavy wear & border work) Durafit 7 Underlay Sub-Floor (Prepared for fitting)

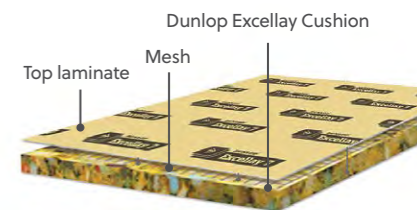


DUNLOP Excellay 7

Thickness: 7mm
Density meter: 120 KG/M³
Acoustic Performance: 29dB
Thermal Insulation: R 0.16

Dunlop Excellay carpet underlay is the best solution for conventional commercial installation environments. It's been specially formulated to provide superior comfort underfoot and outstanding durability in high traffic areas. Made from high density, bonded polyurethane foam, Dunlop Excellay is tough and resilient enough to keep bouncing back under continual traffic loads.

Recommended for Hotels, Conference Facilities, Theatres, Restaurants, Bars and Lounges, Public Spaces, Entertainment and Places of Worship.

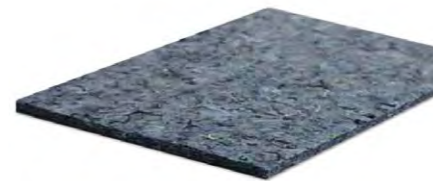


DUNLOP Refibre 9

Thickness: 9mm
Density meter: 95 KG/M³
Acoustic Performance: 39dB
Thermal Insulation: R 0.26

Made from recycled cotton textile, Refibre 9 is recommended for Axminster carpets and high traffic areas such as educational facilities, bars, restaurants, and public spaces.

Recommended for Axminster carpets and high traffic areas such as educational facilities, bars, restaurants, and public spaces.



DUNLOP Performa 5

Thickness: 5mm
Density meter: 160 KG/M³
Acoustic Performance: 23dB
Thermal Insulation: R 0.11

Performa 5 is a high specification, hard-wearing, dual bond carpet underlay that provides excellent underfoot comfort, reduces noise, and gives heat insulation for all commercial applications. Its unique paper top provides exceptional dimensional stability, making it ideal for contract carpet applications and natural floor coverings.

Recommended for Hotels, Retail, Offices, Theatres, Government, Education, Healthcare, Public Spaces, Entertainment, Bars and Lounges, Restaurants and Conference Facilities. Also suitable for conventional application.



DUNLOP Performa 7

Thickness: 7mm
Density meter: 160 KG/M³
Acoustic Performance: 31dB
Thermal Insulation: R 0.15

Performa 7 is a top-tier dual bond carpet underlay engineered for superior durability and plush comfort underfoot. It significantly reduces noise and improves heat insulation, making it an excellent choice for various commercial environments. Featuring a unique paper top, it ensures remarkable dimensional stability, making it well-suited for both contract carpet installations and natural flooring options.

Recommended for Hotels, Retail, Offices, Theatres, Government, Education, Healthcare, Public Spaces, Entertainment, Bars and Lounges, Restaurants and Conference Facilities. Also suitable for conventional application.



*The minimum requirement as set by the NCC is 62 dB. (the lower the dB result for the flooring assembly, the better the acoustic performance). The AAC has given Excellay a 6 star rating; the highest rating achievable. **Thermal resistance is a measure of a material's ability to resist heat transfer. The higher the R-value, the better heat transfer resistance of that material.



PROTECTION FOR EVERY FLOOR

Dunlop Flooring understands the importance of ensuring floors survive the construction phase intact, free from dents and scratches.

Dunlop Floorshield is a reusable floor protection mat that is designed to protect floors and other surfaces during construction.

Technical Specifications

Thickness	4.0mm
Roll Length	50.0m length
Roll Width	1.5m wide
Roll Size	75m ²
Composition	Expanded polyethylene foam, polyethylene based bubble, polyethylene based woven.



Reduces the damaging effects of dropped items.



Protects against dirt, dust, debris and spilled liquids.



Is easy to cut with a knife.



Protects against scratches on soft timbers as a result of its non-abrasive underside.

Best of all, it's lightweight, affordable, and reusable. Due to its versatile nature it can be used on timber, laminate, vinyl, tiles, slate and marble.



Discovering your carpet best friend - A Dunlop Underlay

Dunlop flooring has been Australia's market leader in carpet underlay and timber flooring solutions for over 50 years. As Australia's largest provider of quality foam underlay, and have been committed to offering top-notch flooring performance for all Australians in both residential and commercial settings.

A Dunlop underlay can prolong the life of your carpet, keeping it look newer for longer. A quality underlay can also provide savings on heating bills due to its outstanding thermal insulation properties and it reduces noise transfer and improves acoustics between floors. Selected premium Dunlop underlays are carefully treated with Dunlop Fresh Living which is a proven anti-microbial, which protects against dust mites damaging bacteria mould and mildew significant triggers for asthma hay fever and eczema. It also prevents odours and provides high freshness.

Dunlop carpet underlay is 100% recyclable and manufactured from 90% recycled materials which means choosing Dunlop helps leave a lighter footprint. Dunlop runs its own recycling program, Recycle by Dunlop, encouraging retailers to return their used underlay to help make new underlay. Its products are environmentally friendly, achieving a maximum green star rating for building interiors set by the Green Building Council of Australia, is green tag gold rated for sustainability and indoor quality and Dunlop Carpet Underlay, is accredited by the Carpet and Rugs Institute's Green

Label program, a program that identifies products that are low in VOC's which help promote superior indoor

air quality. Select Dunlop Underlay ranges are even approved by the National Asthma Council of Australia, making it the healthier choice for families.

Dunlop Flooring's carpet underlay is proudly Australian made and has been specifically designed to be better for longer, and meets the A4288 standard for soft underlays. For extra peace of mind, all of Dunlop's products are backed by the Dunlop lifetime guarantee- a promise that a new carpet or timber floor will be supported for its lifetime.

The hidden value of carpet underlay

Carpet is the most popular flooring solution on the market due to its aesthetic, performance properties and environmental benefits. When choosing and installing a carpet what goes underneath is one of the most important decisions. A quality underlay will enhance the advantages provided by installing carpet and ensure the carpet looks new for longer.

Why choose carpet?

Carpet is by far the most versatile and most popular floor covering solution on the market and it offers a wealth of benefits over other floor-covering options. Carpet provides the aesthetics to match or transform any decor and its versatility has led to it being used extensively across offices, hotels, retail and commercial properties apartments and homes.

It is available in an almost infinite combination of colours, patterns, surface textures, and styles, allowing

carpet to fit into or transform an interior space. Carpet brings a warmth and intimacy to a space through its soft and cushioning texture.

The warmth of carpet extends to its thermal properties. Up to 10 to 20% of heat loss from a home can be accounted for by uninsulated floors. Carpet is a great thermal insulator, and its insulation value can be up to 10 times higher than of other floor coverings. It can help significantly reduced energy costs associated with heating or cooling and therefore reduce greenhouse gas emissions.

In addition, due to the low conductivity of carpet, even when at the same temperature as another flooring option, such as marble, the carpet will not feel as cold. Therefore, a carpeted floor will feel warmer, and the room will not require as much heating as one with a smooth surface may.

Carpet can reduce the risk of accidents due to slips and falls and the likelihood of serious injury when falls occur due to its inherent slip resistance. It can also make a positive contribution to human health and wellbeing as a well-maintained carpet helps purify the air by reducing indoor pollutants.

A study conducted by the German asthma and allergy society (DAAB) found that wall-to-wall carpet reduce dust in the air to half the amount that is found above hard flooring surfaces. The researchers concluded a flooring material that binds dust and does not emit into the air is an essential preventative aspect for particularly

sensitive persons already suffering from previous damage to their airways.

The wide range of carpet options and the varying prices means there is a carpet solution to fit any budget. However, the longevity of carpet will be significantly reduced without a high-quality underlay. While the initial cost may seem like an inconvenience, the benefits overtime of installing a quality underlay far outweigh the minor cost difference.

Benefits of high-quality carpet underlay

The role of high-quality carpet underlay will play in the long-term durability and performance cannot be overlooked. It will optimise the benefits provided by installing carpet underlay ensuring the design receives the full advantage of carpet

Choose Warmth

The main factor determining the thermal insulation properties of a carpet is its thickness. The thicker the carpet, the greater the insulation provided, so in a carpet is installed over underlay or carpet cushion, further thermal insulation can be achieved. When there is a temperature difference between the indoor air and that under the floor carpet can help reduce energy costs in heating and cooling. A study conducted by Wools of New Zealand examined the potential electrical power savings which, could be achieved due to carpet installation in a one-room model house. Researchers found the energy needed to heat the room could be



cut by as much as 12.8% and for cooling by 11.7% when a carpet with a 10mm pile height and 11.7mm carpet thickness and a total weight per square metre of 2.3kg was installed. The study also reinforced that the greater the carpet thickness the greater the energy saving.

These benefits are further enhanced by carpet underlay the greatest thermal benefit from a carpet is achieved when as large an area as possible is covered as the reduction in heat loss is proportional to the area carpeted.

For further thermal comfort many quality underlays can be used in conjunction with increasingly popular underfloor heating systems. The energy efficiency advantages, and the benefits of a comfortable and evenly distributed heat source has led to underfloor heating systems being installed in retail and commercial environments and more recently in many new homes to.

When hydronic slab heating is installed with carpet and underlay, the radiant heat will warm the room as it will travel through the underlay in carpet but will not feel warm to touch. Note that most underlays will have a maximum temperature which must not be exceeded by the underfloor heating.

Choose Durability

A high-quality carpet underlay will extend the life of carpet and therefore protect the investment made in laying it. The underlay acts to absorb impact of crushing forces on the pile which reduces the wear on the carpet and improves the carpet appearance and retention, meaning it will be longer before it will need replacing. Carpet underlay can help reduce the visual appearance of minor imperfections of a floor providing a higher quality finish.

Choose Peace and Quiet

Creating a balanced acoustic environment is a major benefit of installing quality carpet and underlay. Installation of carpet and underlay is a leading and popular method used to eliminate excessive noise generated by impact noise such as noise from footfalls, chairs scraped across the floor and objects being dropped.

This is a particular issue for multi residential projects and in homes where children running and jumping can produce heavy floor impacts contributing greatly to ambient noise levels. Carpet paired with a high- quality underlay will help control sound reverberation whereby sounds is bounced off surfaces and continues to live on within a room.

Spaces which are reverberant are noisy and can make it hard to communicate relax or concentrate and can result in increased stress levels and a lower quality of life. The installation of carpet and a quality underlay can help bring long reverberation times down to an acceptable level.

An acoustic or sound rating is used to judge and limit how noise travels within an environment. A Dunlop Underlay can help reduce noise by up to 62%.

Choose Comfort

The extra layer provided by carpet underlay will also improve the comfort underfoot provided by carpet. Put simply, a quality underlay will ensure the new carpet feels as good as it possibly can when walking on it, for as long as possible. The softness and comfort also enhance the safety qualities of carpet as it will give the best possible protection against serious injury, resulting from slips and falls in the home. It will also reduce foot fatigue by cushioning the foot and reducing the impact on joints.

Making the right choice materials of underlay

The main types of underlay are felt, rubber waffle and foam. Similar to carpet all types are available in various grades and qualities and it is vital to examine the extent to which each product may improve the qualities of carpet.

Felt

Felt underlay is made from wool or jute fibres, waste textiles or a combination of these fibres. It was commonly used in the past but has been since surpassed in terms of quality and popularity due to the invention of rubber and foam underlay. Felt is hard wearing but its qualities do not stack up against higher quality options.

Rubber Waffle

Rubber waffle underlay is generally made from strong sponge rubber, providing both support for the

carpet and air circulation. This minimises dampness and condensation under the carpet, reducing the opportunity for growth of mould and other germs. It is also long lasting and durable as it has the capacity to fully recover its shape even after being compressed under a heavy load for a long time.

Foam

Foam underlay is the most popular choice as it offers both a quality foundation and isn't too expensive. It is made from recycled waste products so it's environmentally friendly and is available in a range of densities. It offers great sound and heat insulation properties and feels soft under foot. A quality product will feature millions of tiny air pockets to help it trap and absorb sound, reducing the impact of noise through floors and ceilings. It also recovers quickly from heavy indentations from objects. Regardless of the quality of an underlay it is highly recommended new underlay these installed when carpet is replaced. Underlay wears with the new carpet and a manufacturer may avoid a carpet warranty if laid on old underlay.



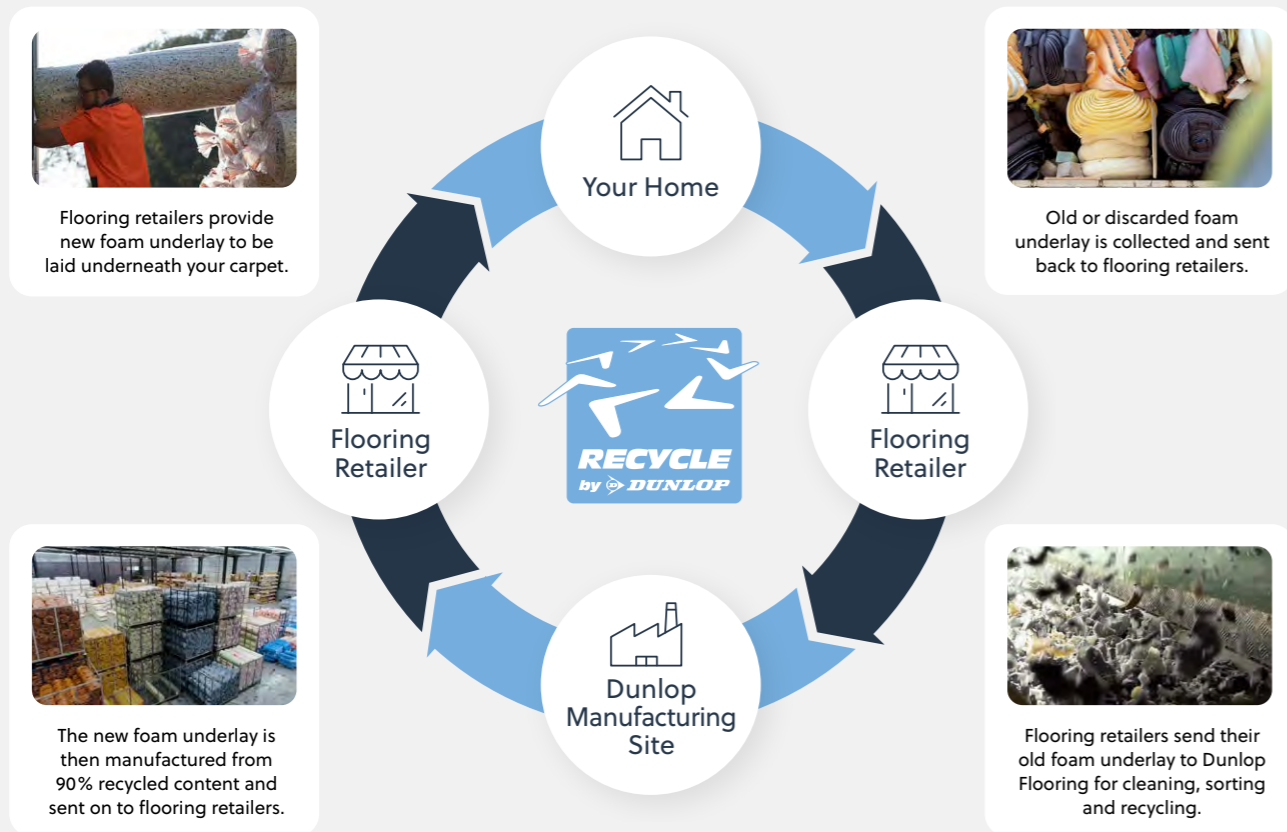
To learn more about the benefits of a Dunlop Underlay product head to www.dunlopunderlay.com.au



Recycle by Dunlop

We manage our own award-winning recycling program, encouraging retailers to return their used underlay to us.

Participating retailers collect old or discarded foam underlay, together with off-cuts and trims sent back to them, and deliver all of this to Dunlop Flooring. Here it is cleaned, sorted, and ultimately recycled into new, reusable underlay. This brand new recycled Dunlop Underlay is then passed on to the retailer, who in turn provides you the benefit of quality Australian-made underlay for your home.



SCAN TO SEE HOW WE RECYCLE CARPET UNDERLAY

Adhesive Type Recommendations

Technics 5, Durafit 7 and Performa 5 Dual Bond Application

Underlay to carpet	Dual Bond Carpet Adhesive
Underlay to floor	Dual Bond Carpet Adhesive or Pressure Sensitive Adhesive

Other Technics 5 Applications

Technics 5 to Carpet Tile	Dual Bond Carpet Adhesive
Technics 5 to the floor when with Carpet tile	Dual Bond Carpet Adhesive or Pressure Sensitive Adhesive
Technics 5 to Timber flooring	PU Timber Flooring Adhesive
Technics 5 to Subfloor when dual bonding timber flooring	Dual Bond Carpet Adhesive or Hard Set Adhesive

Carpet Tile Manufacturers that warrant the use of Technics 5

Shaw, Nolans, VCC, Tarket, Beaulieu, Signature

Advantage 3

Advantage 3 to floor	Hard Set Adhesive, Nexus 870 (if the subfloor is porous) MS Modified Silane if not
Advantage 3 to 2mm & 2.5mm Vinyl Planks Not recommended for 5mm	MS Modified Silane Epoxy Adhesive, Nexus 570
Advantage 3 to Timber Flooring	PU Timber flooring adhesive
Advantage 3 to Carpet Tiles	Not Warranted, Do not use

Vinyl Planks (All Thickness)

Vinyl Planks to Subfloor	True Hardset – not universal adhesives. Nexus 870
Vinyl Planks installed in areas likely to be exposed to water from above	MS Modified Silane Epoxy Adhesive
Vinyl Planks in areas with high temperatures, exposed to the sun and in front of windows.	MS Modified Silane Epoxy Adhesive

Engineered Timber

Engineered Timber Stuck to the subfloor	PU Timber Adhesive
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For manufacture adhesive names/ numbers, please ask the customer to ask their relevant adhesive rep. Please refer to the adhesive manufacturer instructions for Spread Rates of Adhesive and Trowel Sizes.

Glossary / Quick Facts



Why is density important?

The density represents how much foam is packed into each cubic metre of underlay. A high-value density will indicate a better quality underlay (more foam, less air!). As a rule, the higher these numbers, the more luxurious and supportive the carpet underlay will feel. The higher the density, the longer the life of the carpet.



Does underlay help with noise transfer?

An acoustic or sound rating is used to judge and limit how noise travels within an environment. A Dunlop Underlay can help reduce noise by up to 62%.

Your Dunlop underlay is graded by the AAAC (Association of Australasian Acoustical Consultants) star ratings:

- ★★ = less than 65dB
- ★★★ = less than 55dB
- ★★★★ = less than 50dB
- ★★★★★ = less than 45dB
- ★★★★★★ = less than 40dB



What is an underlay thermal rating?

Thermal insulation is measured by an 'R-value' which stands for resistance. Resistance is measured by the amount of heat that passes through a product at a particular time and thickness. The higher the R-value, the greater the insulating power. A Dunlop Underlay can act as a barrier between the subfloor and your hard flooring or carpet. A good thermal-resistant underlay will help keep your energy bills down!

Carpet Installation Types

Direct glue-down carpet installation:

The carpet is glued directly to the floor. The floor needs to be very smooth. Any imperfections in the floor will telegraph through the carpet and be visible. Imperfections in the floor may also cause wear spots.

The **advantages** of glued-down carpets are:

- The carpet is solidly supported and has minimal movement. It provides a good solid base which is better for rolling traffic, including wheelchairs.
- Suitable for ramps.
- Low profile. Stores transitioning from carpet to linoleum will find this to be the lowest profile, safest transition.
- Minimize buckling in buildings with climate control turned off for an extreme amount of time.
- Seams do not peak and are more durable due to lack of flexing.

The **disadvantages** of glued-down carpets are:

- Lack of underlay is less comfortable.
- Lack of underlay means less insulation.
- The carpet is less durable without underlay. Underlay acts like a shock absorber and can significantly increase the life of a carpet.
- When replacement is necessary, removal is more difficult than conventional installations. • We don't sell them underlay for this installation

Conventional Lay Installation:

Conventional Lay carpet installation is homes' most popular installation method. In this installation, strips of wood (called smooth edge) are nailed (or sometimes glued) to the floor around the edges of the room. These strips have hundreds of nails that are angled in towards the wall. The underlay is secured to the floor in the middle of the room. The carpet is then attached to the pins around the room. The installer then stretches the carpet tight across the room.

Advantages of stretch in carpet installation: • A quick, efficient installation method.

- Underlay is more comfortable.
- The underlay is more insulating.
- The underlay extends the life of the carpet.
- Easier to remove than glued-down carpet.
- The only installation method that allows the installer to effectively work with patterned carpets, especially when the pattern has minor problems such as bow or skew (which they always do).

Disadvantages are:

- Not suitable for very large spaces due to concerns of buckling or rippling of the carpet.
- Not suitable for heavy rolling traffic or extensive light-duty rolling traffic.

Dual Bond Carpet Installation:

Often called double stick installation. This is similar to direct glue-down installation, except that we first glue an underlay to the floor and then glue the carpet to the underlay. The underlay for this type of installation can not be any carpet underlay but a high-density commercial underlay explicitly made for this type of installation. Still must use a smooth edge and heat seaming tape to join the carpet. Used for commercial applications and areas of high traffic. Used in pubs, clubs, hotels and casinos, to name a few.

The **advantages** of Dual Bond installation over direct glue down are:

- More comfortable.
- More insulation.
- The pad will extend the life of the carpet.

Disadvantages are:

- Higher costs. Even more difficult to remove than direct glue down when replacement is necessary.
- Higher costs. Underlay costs more than normal underlay. The heavyweight and density of dual bond underlay cost more than conventional underlay.
- Higher costs. Gluing down the underlay and then gluing down the carpet. It's like doing the installation twice, which the installer is paid for.
- The advantages of Dual Bond installation over conventional lay are:
 - It will not ruck up with traffic and wear, and also will not cause trip hazards with the top of the carpet • Takes heavier loads rolled across the top of the carpet
- Helps with laying and setting out borders on the carpet.

The **disadvantages** are over the conventional lay.

- Same as with the Direct stick, extra cost for uplifting and installing



Carpet Types

Cut Pile

This is the most popular type of carpet and is characterized by its cut fibres that stand upright. It is durable, soft, and comes in different styles such as plush, saxony, textured, and frieze.

Loop Pile

In loop pile carpets, the fibres are looped and uncut, creating a dense and durable surface. This type of carpet is known for its resistance to wear and stains. Berber carpet is a popular variation of loop pile carpet.

Cut and Loop

Cut and loop carpets combine both cut pile and loop pile fibres to create a patterned or textured appearance. This type of carpet offers a unique visual effect and can be used to hide dirt and footprints.

Saxony

Saxony carpets have a luxurious, formal appearance with dense, level, and evenly cut fibres. They provide a smooth and elegant surface but tend to show footprints and vacuum marks easily.

Plush

Plush carpets have a velvety and luxurious feel with a dense, even pile height. They provide a formal and elegant look, but their dense fibres can show footprints and vacuum marks.

Berber

Berber carpets feature looped fibres with a distinctive, flecked appearance. They are durable and excellent at hiding dirt and stains. Berber carpets are often made from wool or synthetic fibres.

Patterned

Patterned carpets have various designs and patterns incorporated into the fibres. They can add visual interest and style to a room, ranging from subtle textures to bold geometric patterns.

Textured

Textured carpets have a casual and relaxed appearance with alternating twists of fibres. They are durable, minimize the appearance of footprints and vacuum marks, and are suitable for high-traffic areas.

Axminster Carpet

Axminster Carpet is a type of woven carpet created using either spool Axminster or gripper Axminster looms. It was first produced in 18th century England. The carpet is named after Axminster, a town in Southwest England that continues to produce carpets today. Axminster carpets are a woven carpet that has not changed, and therefore takes longer to make than the rest of the carpets styles. They are normally made with wool yarn and have a weft of flax or hemp backing. They are normally found in commercial applications due to their wild colours, patterns, and hard-wearing ability.

Fire Rating and Floorings

CRF / CHF Rating according to NCC and BCA C1.10:

How is the CRF test conducted?

The test specimen reproduces the total flooring system, including the flooring product, underlay, glues and substrate as appropriate, laid horizontally.

The sample is heated along its length (~1m) using an inclined radiant panel. The sample receives about 11kW/m² of heat energy from the panel at one end and about 1kW/m² at the other end.

It is ignited at the hot end.

The sample is allowed to burn until the flame goes out (extinction).

The heat energy measured at the point of extinction is the Critical Heat Flux (CHF), also called the Critical Radiant Flux (CRF) in the Building Code of Australia. The Critical Radiant/Heat Flux is basically the lowest energy a fire requires to keep burning; hence the higher the value, the better.

Smoke is measured over the duration of the test. The total amount of light extinction (measured as a percentage) due to the smoke obscuring a light beam in the flue is multiplied by the time of the test to give the result (in percent minutes).

What CRF rating do I need?

This depends on the area the flooring is going into. As a rule, we tend to need a 2.2 and above for our flooring applications. If sprinklers are in a building, this can come down to 1.2 and above. Please refer to the Carpet Institute document on DFO for exact details for different areas.

What is the difference between Critical Heat Flux and Critical Radiant Flux?

In relation to this test method and the Building Code of Australia – nothing. The two terms have the same meaning.

What flooring needs a fire rating, and what does not

All types of flooring that go on the floor need to meet the relevant fire regulations, carpet, all types of tiles, laminate, wood (solid and engineered), vinyl, rubber floors in gyms, etc.

Can I just test just the underlay alone?

No. The standard ASO 9239 requires that all Flooring components need to be assembled and tested. A test on an individual component of the flooring is not relevant.

Where does and does not need a fire rating for flooring?

- **These do not require a fire rating.** Detached and semi-detached houses, Townhouses, and Buildings where no one owns or lives above somebody else.
- **These do require to have fire-rated flooring.** Units, apartments, blocks of flats, age care centers and retirement living hotels, pubs and clubs and any other businesses where the public attend, including churches and sports halls

Does an individual unit owner in a high-rise need to have a fire rating when changing their flooring?

Under the NCC and BCA No, they do not. But local strata laws may be set down by the building Body Corp stating they do.

I have a report from overseas. Is that accepted here?

NO, To be acceptable for compliance with the Deemed-to-Satisfy requirements of the BCA, the test must be measured to Critical Heat Flux to AS ISO 9239-1 (or equivalent, e.g. ISO 9239-1).

Can these certificates be used for boats and shipping?

No, this is only for Australia and on-land applications only. For boats and ships fire ratings for flooring, they need an ISO international test certificate. Please see Flamecheck underlay.

The customer wants to put flooring on a wall. Can I use the CRF certificate?

No, there is different testing for walls, and the CRF testing we do does not cover walls.

Impact Acoustic, according to NCC and BCA F5.2

Background to Impact Acoustics

In 2004, the Building Code of Australia (BCA) amended the minimum sound insulation requirements for multi-level dwellings to reflect community expectations. The BCA introduced a minimum impact sound insulation requirement for all floors. The term to describe the impact sound insulation of the floor is the "weighted normalised impact sound pressure level" ($L_{n,w}$). The lower the $L_{n,w}$ for the flooring assembly, the better the performance of the floor in terms of impact sound insulation.

Building Code of Australia (BCA) – AS ISO 717.2-2004 & BCA 2010 Spec F5.2

The BCA requires that the impact sound insulation of a floor is to be no more than 62 dB for floors separating dwellings or for floors separating dwellings from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification. These BCA/NCC requirements do not apply to Office, Education, Hospitality and other commercial buildings.

Information is needed for these results.

It is very important to establish the below information as every building is different. What will pass on one may not pass on another. The below factors all come into play.

Slab thicknesses / Density

This can differ from 150mm to 250mm and sometimes even thicker. Old builders use thinner slabs vs newer buildings are normally 200mm. Some competitors report test results on thick slabs, while test reports are done on a 150mm slab.

Insulation thickness

(if any) Is there insulation in the floor? What thickness is the ceiling

Plasterboard thickness

—(if any) the modern apartments don't even use it. What thickness is the ceiling plasterboard used?

Ventilation space/ceiling space

This, again, can vary between buildings. What is the space between the ceiling and the concrete slab?

Also, ask what is or if the Body Corporate has an AAAC rating on the building, and what rating does our flooring need to achieve to meet this?

This is an important question to ask, along with the floor makeup. The correct information on the subfloor is the responsibility of the store and the unit owner.

We should always remember that all test results are site-specific and do not reflect an individual component's performance but the flooring system in that given location. A given test certificate will indicate performance, which may or may not be able to be duplicated at the client's location.

Association of Australian Acoustical Consultants (AAAC) Star Rating

The AAAC has introduced a rating system that ranks the acoustic quality within apartment buildings to fulfil a need identified by the community and the housing industry. The scheme uses a star rating system that defines acceptable levels of L_n , w within each rating. Body Corps normally set AAAC ratings in a building and are normally needed in a building already occupied. A new building will most of the time relate to the building code of = to or less than 62 DB

What is the Stars DB amount for the AAAC?

- 2 Star acoustic rating – $L_{n,T,w} < 65$ dB
- 3 Star acoustic rating – $L_{n,T,w} < 55$ dB
- 4 Star acoustic rating – $L_{n,T,w} < 50$ dB
- 5 Star acoustic rating – $L_{n,T,w} < 45$ dB
- 6 Star acoustic rating – $L_{n,T,w} < 40$ dB

Why don't we have a 6-Star flooring product?

To get a 6-star rating or any star rating, we need to know the makeup of the floor, i.e. the thickness of the slab, if it has and what the makeup of is of the plasterboard on the ceiling, the cavity, any fibrous insulation and the mounting system. On a normal unit, a 6-star rating with

hard flooring can be almost impossible on most average units.

How do competitors say they have a 6-star rated flooring?

This is because they have tested it on an unrealistic subfloor. I have seen some products tested on a 350mm slab to get a good rating for marketing purposes.

What are the IIC test results?

Some Body Corps will ask for an IIC test result. The IIC test is a test used in Europe and America. This was the test used in Australia until 2004. With the IIC, the higher the Db rating, the better. We have these test results on our reports but are not recognised by the BCA or NCC

What is $R_w + C_{tr}$, Airbourne sound, and how does it relate to flooring?

Airborne sound insulation measures the airborne sound reduction of flooring to the room below. Examples of airborne noise are sounds generated within a space, such as conversations, televisions and music.

The structural wall and floor construction mostly impacts the outcome of this measurement and, therefore, must be tested on-site, taking into account all building materials. Whilst the floor covering can affect the result, its impact is minimal, so floor products are not typically tested alone. The test method used for measurement is calculated in decibels using ISO 717.1 as $R_w + C_{tr}$. The higher the result, the better the acoustic performance, as it indicates a higher reduction in sound transfer.

How is the testing done?

Samples are installed prior to the test. It is required that samples must be >1m in length and 4 to 5 boards in width.

The first piece of equipment needed is the Tapping Machine – This is calibrated to a required standard of impact force (ISO717) This tapping machine simulates heavy footfall. It has 4 prongs that move simultaneously up and down on the sample, similar to pistons in a car. (earplugs required) @ a rate of 10 taps per second.

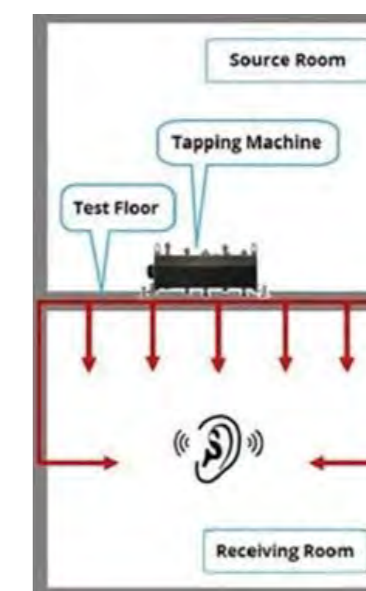
The tapping machine is turned on for 1-minute intervals and kept in the same location on the sample being tested.

After 1 minute, the tapping machine is then turned off. The location of the tapping machine on the sample is moved, and once ready machine is turned back on again. This is done 5 times per sample. This ensures a consistent and even reading across the different locations on the sample.

In the receiving room, the room directly below where the samples are installed. The 2nd acoustic engineer is situated with the sound receiver. This device picks up the noise level in this room in DB (transit noise).

While the tapping machine is on for that 1 minute, the engineer is swooping the below room with the receiver. Again, this ensures they get multiple readings and an average in-room noise result. This is also done across different frequencies.

This meter then calculates the average DB reading and shoots the data back to the Engineers laptop via Bluetooth. They can then do their analysis and provide us with the results



Slip Ratings of Flooring, according AS/NZS 4586

Background to Slip Ratings

The National Construction Code includes safety performance requirements for safe design. Most commercial buildings are required to provide slip-resistant surfaces for safe movement, specifically in areas of emergency access and egress. The slip-resistance requirements of Clauses D2.10, D2.13 and D2.14 of the NCC state that non-slip and non-skid surfaces must be installed on pedestrian ramps, stair treads and landings. Furthermore, other parts of buildings may need to comply with disability access requirements.

What are the ratings?

There are three types of rating. We test all our products in the three types.

P = Wet Pendulum Slip Ratings

R = Oil Wet Inclining Platform

D = Dry Floor Friction

The P and R are used the most, and we aim to have an R10 and P3 on our hard flooring ranges. R was used in the past, and P is more asked for officially these days. But to put it in simple terms, people are used to R10 instead of P3. These are the same way people talk about height in 5.8" instead of 1.76m.

Why do we need slip ratings?

In the flooring industry, it is mainly to protect people walking on a floor from slipping over. The most common cause of this is water or liquids split on the floor's surface.

What is the P test?

Wet Pendulum Slip Ratings AS 4586 Appendix A

The test equipment consists of a swinging pendulum with a spring-loaded rubber foot. As the pendulum passes through the vertical position, the rubber foot makes contact with the wet test surface and slides across

it. The resistance is recorded as a Slip Resistance Value (SRV), then classified by AS 4586. The rubber material used is often referred to as 'Four S', meaning 'simulated standard shoe sole', as this is generally accepted for assessing the slip resistance for people wearing normal and acceptable footwear. There are five classes that the SRV number can fall into. These are designated 'P1', 'P2', 'P3', 'P4' and 'P5'. Class 'P5', the greatest slip resistance and P1, the least resistance

What is the R test?

Oil Wet Inclining Platform / Ramp Slip Ratings AS 4586 Appendix D

The oil-wet ramp slip test is performed in a similar way in which the barefoot ramp slip ratings are obtained, but in this test, oil is used instead of water and a specified safety shoe or boot is used. The most common slip rating that is specified is the R10 slip rating. The test is first conducted by a number of calibration boards walked on to ensure that the person walking on the boards is walking within the normal limits of the test, being a biological control to the slip test. With this test, the results are categorised into five classes from 'R9' to 'R13' where 'R9' represents a shallow angle $\geq 6^\circ$ & $\leq 10^\circ$; 'R10' $\geq 10^\circ$ & $\leq 19^\circ$; 'R11' $\geq 19^\circ$ & $\leq 27^\circ$; 'R12' $\geq 27^\circ$ & $\leq 35^\circ$ and 'R13' the steepest angle $\geq 35^\circ$. Note that some slippery surfaces may not meet any of these classifications.

What is the D test?

The Dry Floor Friction Test (FFT) which provides the slip ratings of surfaces that are intended for mainly internal floors that are away from potential contaminants. This test is unsuitable for assessing frictional characteristics in wet contaminated conditions. The dry test involves a battery-operated machine with a 9mm diameter Four S rubber slider. At a constant speed of 1m per minute, the opposing force on the slider is measured. The machine is sometimes referred to as a 'dry FFT' or the 'Tortus'. The results of two tests are averaged, and the test result is expressed as the D rating.

How do I know which slip rating I need?

90% of the time, you will need a P3 or R10. We aim to have all our hard flooring products come with a P3 or R10 rating. As a rule, we don't get asked for D ratings in flooring as they are not wet floor testing systems. For the full list of areas and the slip rating needed, please see Sharepoint.

What flooring products need a slip rating?

All flooring products on the floor and their finished surface need a slip rating. Yes, as a trade, we get asked for a slip rating on the carpet, and carpet manufacturers can provide it.

Does Underlay need a slip rating?

No, because it is not the finished surface you are walking on.

Where do I find our slip ratings?

All our slip ratings, P, R and D are on the spec sheets of each of our flooring products. The certificates are available on the DFO.

Does stair nosing have to have a slip rating?

Yes, they have to be R10 or P3.

P Testing Method



R Testing Method



D Testing Method



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