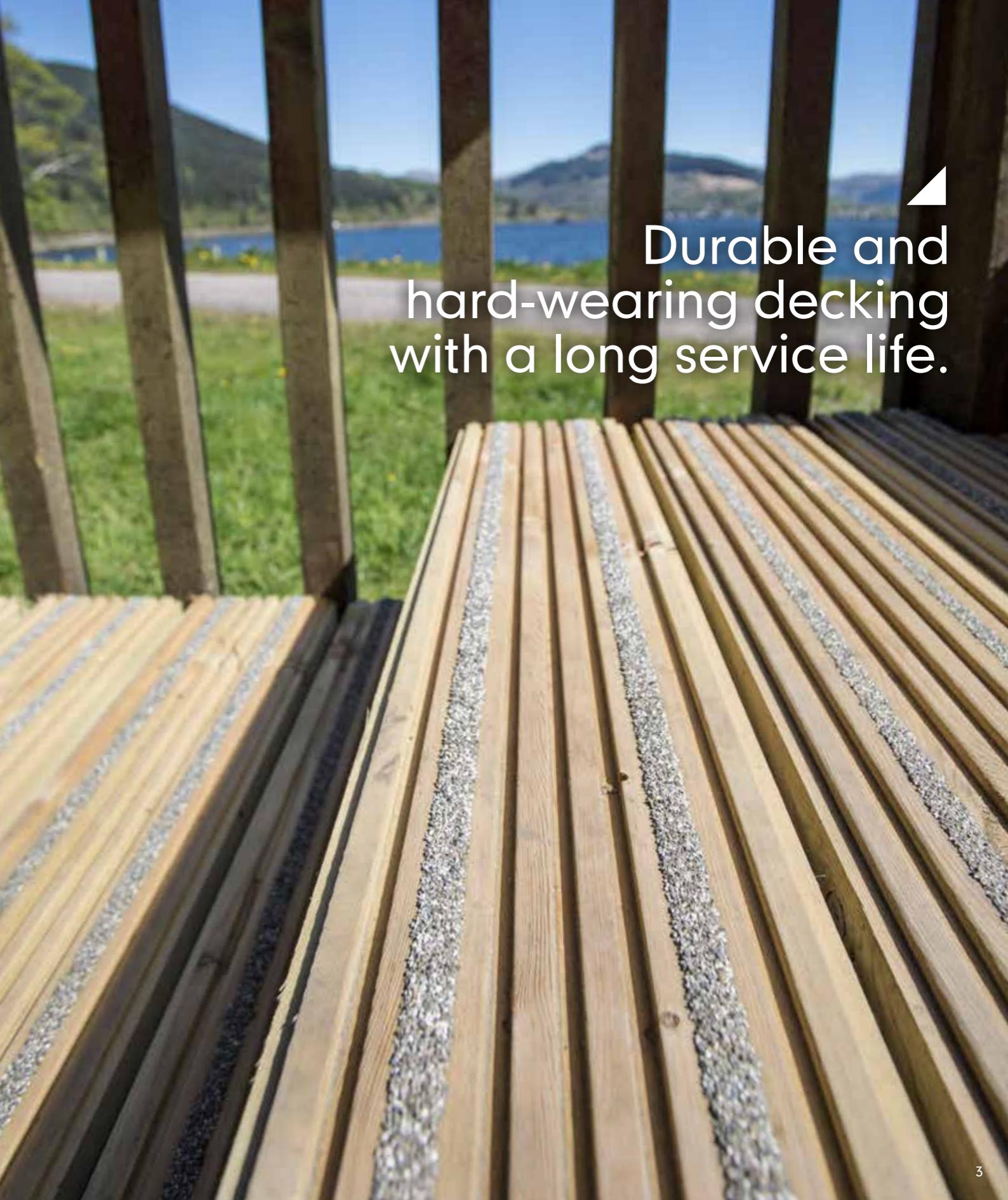




 **TIMBER DECKING**

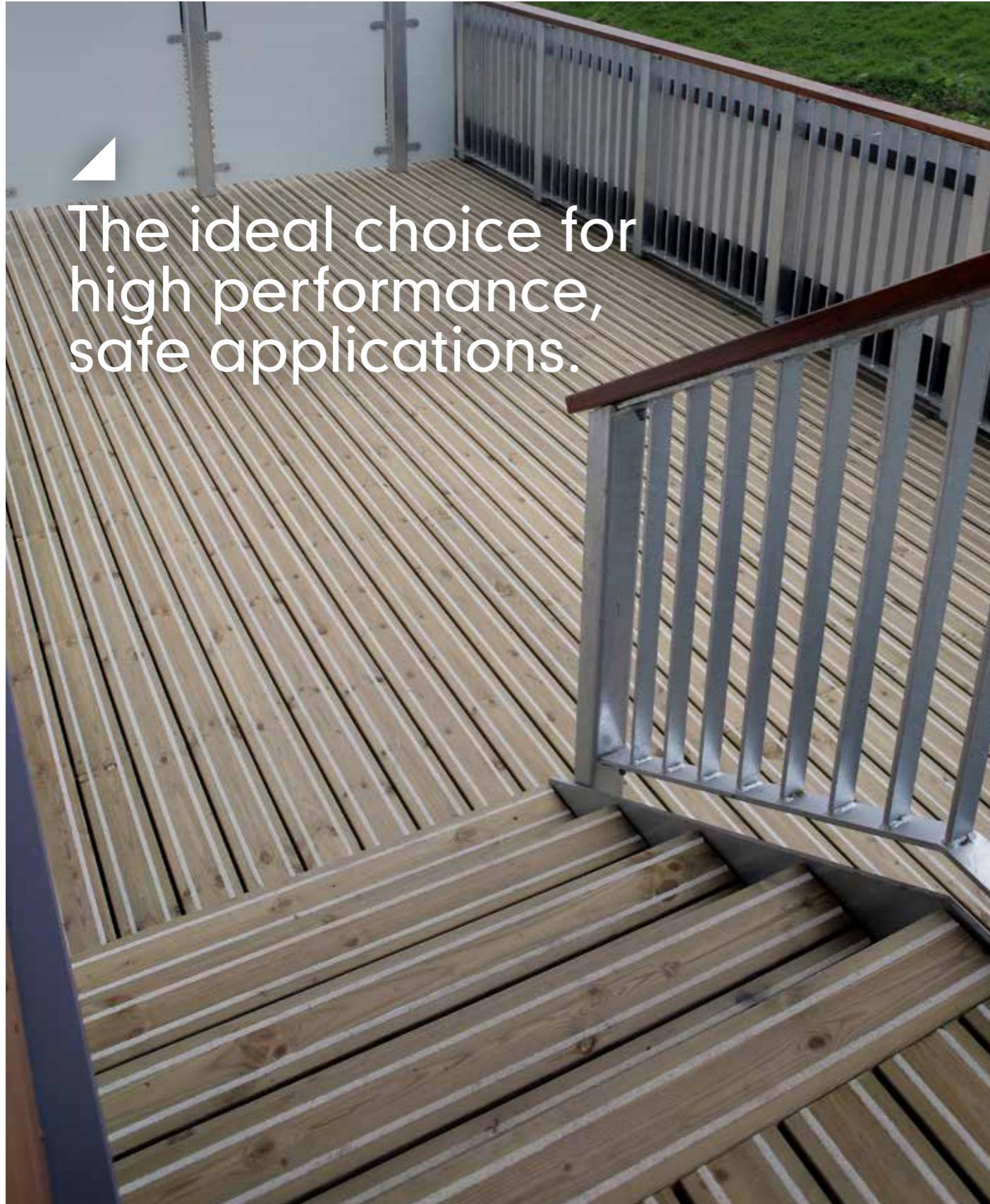
 **Marley**



Durable and
hard-wearing decking
with a long service life.

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The ideal choice for high performance, safe applications.

Timber decks continue to be an increasingly popular choice for many decking applications. However, many conventional decking boards can become slippery in wet conditions and present the danger of slips, falls and personal injury.

We have long recognised the above problem along with the need to provide enhanced grip. The Marley range of structural timber antislip decking products are the ideal choice for safe, high performance commercial applications particularly across education, leisure and lifestyle, health, retail and public sectors.

We use sustainably sourced European Redwood as the optimum timber choice for our decking range due to its strength and stability. With the treatment options we offer and by following our guidance on care and maintenance we provide a strong, durable and hardwearing decking range which offers a long service life.

MARLEY CITIDECK®

Offering all the advantages of timber decking but with a smooth profile and less abrasive inserts, ideal for the urban environment and inclusive areas.

MARLEY ANTSIPLUS®

Developed specifically to provide a slip resistant exterior surface. Recommended for all commercial applications and where there is public access. Both castellated and smooth boards are available.

MARLEY STANDARD

Standard deck boards are available in both castellated and smooth profiles; especially suitable for balcony decks or matching with Antislip Plus® or CitiDeck® in areas that don't require antislip boards.

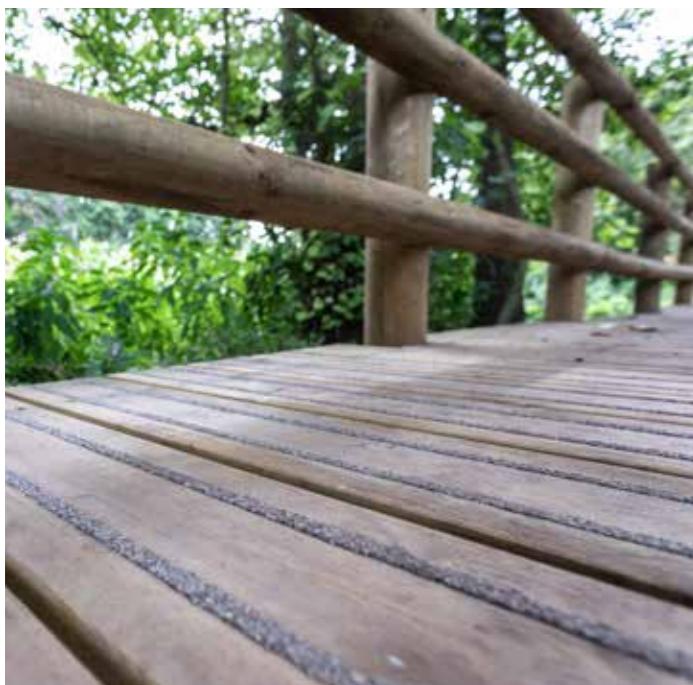
MARLEY CLASSIC

The classic range is a pigmented softwood, which when installed, has the visual appeal and colouring of a luxurious hardwood decking but at an affordable cost.

Why choose antislip decking?

Like many natural products, timber decks without any additional antislip features can quickly become slippery and a hazard.

A product that meets, or even exceeds the Health and Safety Laboratory's antislip testing guidelines should be considered at the design or specification stage.



ANTISLIP

In all public access areas non-slip decking should be used. Both CitiDeck® and Antislip Plus® have been extensively tested* and give low potential for slip.

| Range | Inserts | Average PTV** Wet | Average PTV**Dry |
|----------------|---------|-------------------|------------------|
| CitiDeck® | 2 | 61 | 73 |
| Antislip Plus® | 2 | 63 | 78 |
| Antislip Plus® | 3 | 69 | 81 |

All Marley decking products comfortably exceed the minimum required PTV value of 36.

* This testing was carried out by the Health and Safety Laboratory in Buxton.

** PTV = Pendulum Test Value – To use the description of non-slip decking, the product must achieve a minimum PTV (Pendulum Test Value) of 36.

PROFILES

Historically, castellated boards have been chosen for their traditional appearance. But recent re-examination of the market, shows a smooth profile offers significant benefits and Marley recommends the use of a smooth profile for all applications.

- ▲ Improved water drainage
- ▲ Dirt and debris cannot accumulate in the grooves
- ▲ Smooth deck boards 'wear' less than grooved
- ▲ They are easier to maintain and clean



INCLUSIVITY

Designing and using products that are inclusive is one of the top priorities today, after Health and Safety. Part M of the building regulations covers access and use of buildings and requires that people, regardless of disability, age or gender, are able to gain access to buildings and use their facilities, both as visitors and people who live and work in them. This prevents isolation of people who have a disability.

CitiDeck® was developed for the London Olympics following initial concerns that the castellations in traditional antislip decking made the ride uneven and uncomfortable for wheelchair users and the high level of grip would make change in surface difficult for some pedestrians, in particular the less able.

Following a tough selection process required to become one of the 16 Timber Panel Member companies to supply timber to the Olympic venues, we were delighted to supply over 78,000 linear metres of CitiDeck® as part of the Olympic Park build.

The development of CitiDeck® combines all the benefits of the best selling Antislip Plus® timber decking board, but with a host of other benefits designed to improve the performance of the deck board in urban environments.

The smooth board and less abrasive grit provides a more comfortable surface for urban footwear, wheelchair users and pushchairs, whilst still exceeding the slip resistance requirements of the HSE guidelines.

STRUCTURAL GRADING FOR TIMBER DECKING

All timber decks, whether domestic or commercial, are designed to carry specific loads; these include both uniformly distributed and point loads. Marley offer span tables for both BS 5268 and Eurocode 5 calculations.

C16: Manufactured from selected joinery grade European Redwood and graded to BS 4978 in line with the requirements of BS EN 14081 to achieve Strength Class C16

This structural deck board is suitable for most landscaping and commercial applications.

C24: Manufactured from selected joinery grade European Redwood and graded to BS 4978 in line with the requirements of BS EN 14081 to achieve Strength Class C24

This structural deck board is suitable for applications where there may be higher loads or there is the need for wider joist centres. These may include bridge decks and boardwalks. This premium board is further inspected to ensure that there are no knot holes or excessive dead knots.

CITIDECK® FOR URBAN ENVIRONMENTS



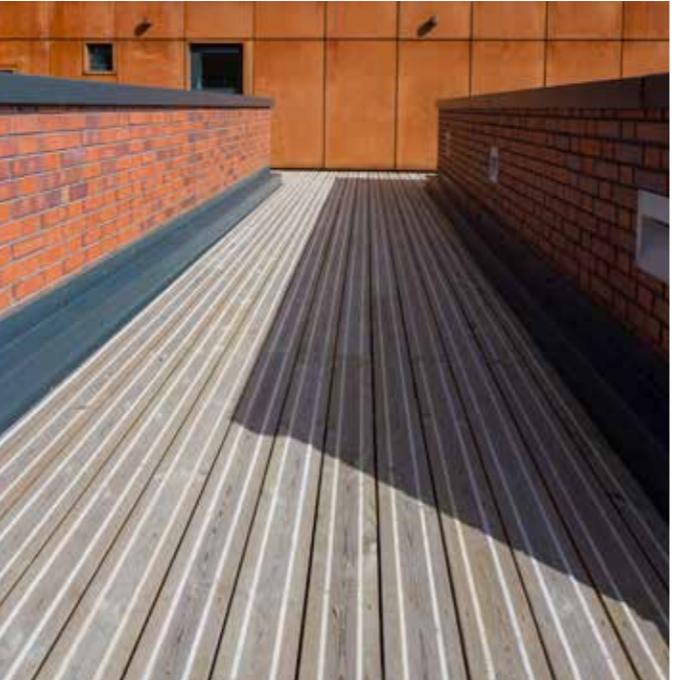
BENEFITS

- CitiDeck® is a sustainable antislip timber decking for inclusive urban environments.
- CitiDeck® offers all the advantages of antislip timber decking but with a smooth profile, ideal for the urban environment and inclusive access.
- CitiDeck® uses a slightly less abrasive grit to provide a more even surface for wheelchairs and the less able, whilst still exceeding the Health and Safety Laboratory's antislip testing guidelines.
- CitiDeck® features two antislip inserts in a white coloured flint. It is increasingly specified for the urban environment, including boardwalks, bridges, hotels, restaurants, pubs, retail outlets and offices.
- The smooth profile is easy to clean and its profile prevents the accumulation of dirt, litter and food waste.
- The most sustainable and one of the most environmentally friendly hard landscaping products.

DIMENSIONS

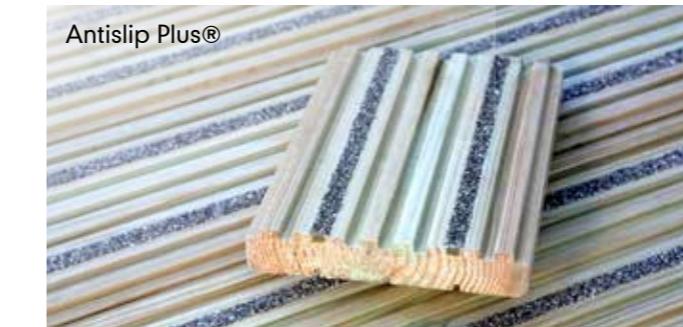
| Finished (mm) | Lengths (m)* |
|---------------|----------------------------------|
| 28 x 145 | 3.6, 4.2, 4.5, 4.8 |
| 34 x 145 | 3.6, 4.2, 4.5, 4.8 |
| 28 x 120 | Available as special order (POA) |
| 34 x 120 | Available as special order (POA) |
| 46 x 145 | Available as special order (POA) |
| 68 x 145 | Available as special order (POA) |

* Precision end trimming to customer specification is available.





ANTISLIP PLUS® TO MINIMISE RISK OF SLIPPING



BENEFITS

- Antislip Plus® is available in either a castellated or smooth profile.
- Antislip Plus® has been specifically designed to provide a durable and effective external antislip surface to minimise any risk of slipping – even in adverse weather.
- Antislip Plus® uses a unique formula of resin based aggregate inserts which are injected into the deck board grooves. If smooth boards are required, grooves are specifically machined into the boards to receive the inserts. Marley recommends the use of Antislip Plus® for all decks where there is public access or where there is an anticipated high level of pedestrian traffic. Antislip Plus® is also recommended for all stairs and ramps.
- Antislip Plus® has been independently tested by the Health and Safety Laboratory.

DIMENSIONS

| Finished (mm) | Lengths (m)* |
|---------------|----------------------------------|
| 28 x 145 | 3.6, 4.2, 4.5, 4.8 |
| 34 x 145 | 3.6, 4.2, 4.5, 4.8 |
| 28 x 120 | Available as special order (POA) |
| 34 x 120 | Available as special order (POA) |
| 46 x 145 | Available as special order (POA) |
| 68 x 145 | Available as special order (POA) |

* Precision end trimming to customer specification is available.

PERFORMANCE

TREATMENT

All Marley timber decking is preservative treated using Celcure to BS 8417:2011 Use Class 3 as standard*.

There are scenarios where decking will need to be treated to UC4 i.e. 'in contact with ground or fresh water, permanently exposed to wetting'. Marley can offer this level of treatment. For further information, please contact the Technical Advisory Service.

Any surface exposed by cutting must be treated with a cut end seal.

* External out of ground contact, exposed to weather.

FIRE TREATMENT

Marley timber decking can be fire treated to reduce the spread of flame, which provides extra time for people to escape a building in the event of a fire. Fire retardant treatment is used to meet building regulations where the deck boards form part of a fire escape. The treatment is applied in a specialist treatment centre under stringently controlled conditions. The treatment during the process becomes fixed and will not leach out.

The treatments have been around for over 40 years and meet European Standard EN 13501-1 under the Construction Products Directive.

MAINTENANCE

Our decking is a low maintenance product.

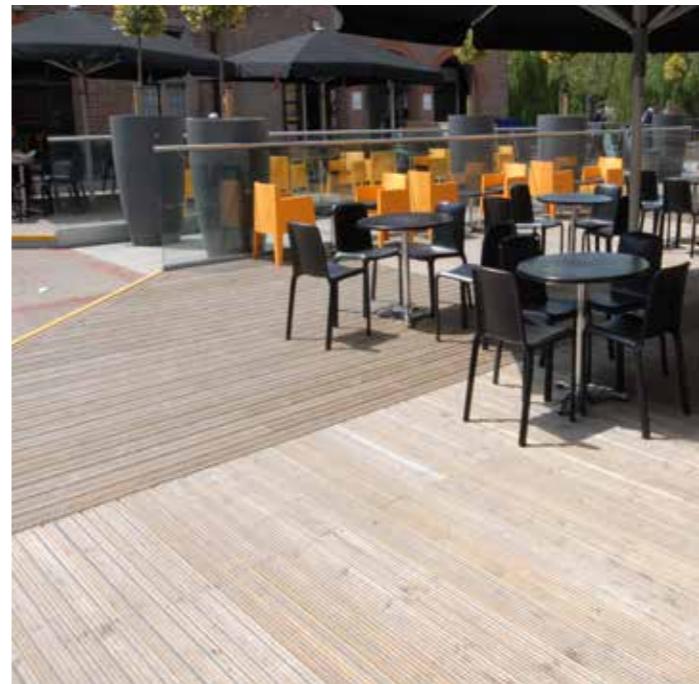
Once treated, the decking does not require any other treatment or stain to be applied during its entire service life.

Once a year we recommend you give your deck a thorough cleaning using a gentle pressure spray or a purpose-made deck cleaning product which is formulated to remove grease and discolouration. This will remove surface algae which may make the deck more slippery.

See our care and maintenance sheet at marleydecking.co.uk

WEATHERING

Timber is a natural product and the colour will eventually fade to an attractive silver-grey. As deck timbers weather, small cracks are likely to appear on the surface of the boards. These are caused by the intermittent wetting and drying of the wood. This is quite normal and does not affect the structural integrity of the deck.



SUSTAINABILITY

Marley is a responsible and ethical manufacturer and only sources fully accredited timber from responsible suppliers. We are certified to both the FSC® and PEFC™ chain of custody schemes. PEFC™: BMT-PEFC-0109, FSC®: TT-COC-001967

Marley is a member of the TTF and subscribes to the responsible Purchasing Scheme. All timber meets both CPET and EUTR directives.

TOLERANCES

Dimensions are accurate at the time of machining, but consideration must be given to the fact that all timbers are prone to slight dimensional movement as they adapt to the ambient atmospheric conditions.

Marley typically supplies timber to a tolerance of +/- 1mm. Please check with our Technical Advisory Service if you require timber to match a previously supplied product.

Lengths are supplied** as the following; 3.6, 4.2, 4.5, 4.8

** Subject to availability

TESTING

Independently tested by the Health and Safety Laboratory using a Stanley Pendulum Test (as described in BS 7976 parts 1-3, 2002) operated to issue 3, 2005 of the United Kingdom Slip Resistance Group (UKSRG) guidelines.

SUITABILITY

Ensure products are suitable for the application by adhering to current Building Regulations - particularly in relation to balconies - and follow the guidance set out in Approved Document B (Fire Safety) and 7 (Materials and Workmanship).

DURABILITY AND PRESERVATION

European Redwood is classified within BS EN 350-1 Class 3-4 Moderately Durable to Slightly Durable.

Any sapwood is classed as not durable. For outside, use European Redwood which must be preservative treated.

SERVICE LIFE

In accordance with BS 8417, Marley treat to a 30 year extended service life.

INSTALLATION

Marley recommends following the Timber Decking and Cladding Association guidelines, 'Timber Decking: the Professionals' Manual. Full details can be obtained from www.tdca.org.uk

FIXINGS

When working with preserved timber, it is important to use the right type of fixings. To ensure optimum performance, Marley offer a range of deck screws

HEALTH AND SAFETY

As with many timbers, fine wood dust created during machining can be an irritant and precautions should be taken to prevent exposure, particularly to the eyes and the respiratory system.

The workplace should be well ventilated with effective dust extraction in place. The use of appropriate dust masks is recommended.

PACKAGING AND STRAPPING

Marley use polyester strapping and reinforced angled edge protectors to ensure that the strapping does not place any stress on the actual timber and therefore the potential for damage is limited.

WASTE DISPOSAL

Marley timber decking should be regarded as treated softwood for on site disposal.

TDCA MEMBERSHIP

Marley are members of the Timber Decking and Cladding Association – a technical and advisory body for the UK timber decking and timber cladding industries. Our timber decking products are accredited with 'Deckmark' and 'Deckmark Plus' through the TDCA.



SPECIFICATION DATA

STRUCTURAL DECK BOARDS AND EUROCODES

Marley has always graded their decking boards to BS 4978 in line with the grading requirements of BS EN 14081. Boards are available graded to European Strength Class C16 or C24.

In 2010, Eurocodes were introduced to provide a harmonised standard across Europe. Later, in October 2013, the Eurocodes were included in the Building Regulations and then confirmed the withdrawal of the British Standards. At the same time, it was recognised that designs to the old British Standard could still be used for some years, but the two standards must not be mixed together.

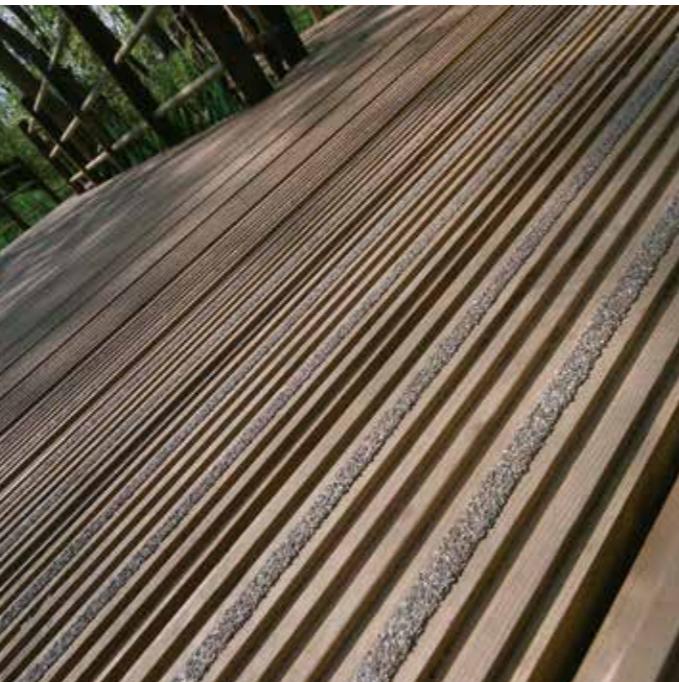
Previously, we have used a set of assumptions based on BS 6399: Part 1 of a point or concentrated load of 1.4kN and a distributed load of 5kN/m² for commercial decks and a maximum deflection of 3mm.

Marley worked closely with TRADA to reconfirm our span tables based on BS 5268 and develop new ones based on Eurocodes. These span tables assume the boards are graded to either C16 or C24 and in accordance with the Construction Products Directive will be CE Marked.

EUROCODES

In all cases, the live load has remained at 5kN/m² (even though Eurocodes allow for less) as it's the point load that is key to the maximum spans. This is increased with different Eurocode assumptions. Please refer to our website for guidance on Eurocode span tables.

| | Live load | Point load | Max. deflection |
|--------------------------|---------------------|------------|-----------------|
| BS 5268 | | | |
| All applications | 5 kN/m ² | 1.4kN | 3mm |
| Eurocodes | | | |
| Restaurants/dining areas | 5 kN/m ² | 3.0kN | 3mm |
| Medium duty walkways | 5 kN/m ² | 3.6kN | 3mm |



CE MARKING

The Eurocode process allows for the CE mark to be used. CE marking is the process by which a product is deemed to be safe and fit for a specific purpose. This can be achieved by compliance with specific European Standards. Marley Timber Decking is the first and only deck board to be CE Marked.

TECHNICAL SPECIFICATION 1 GENERAL USE, BASED ON BS 5268

ASSUMPTIONS

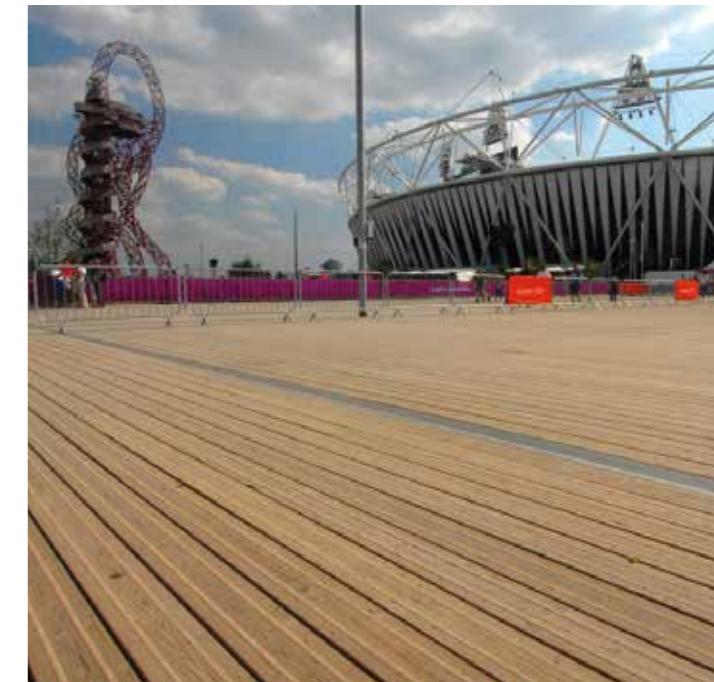
The assumptions used are the original ones that Marley derived from BS 6399: part 1 and are very similar to the assumptions made by the TDCA in their 'Timber decking – the Professionals Manual, edition 2' for commercial decks. These are a 5kN distributed load and a 1.4kN concentrated load with a mid span maximum deflection of 3mm. This deflection is derived from Approved Document M of Building Regulations so that there is a minimal chance of a trip hazard.

It must be noted that, unlike the Eurocode calculations, there is NO allowance for creep within these tables.

Eurocode span tables are available at: marleydecking.co.uk/Resources/Timber-Decking-Span-Tables.aspx

LOADS

- ▲ Assumptions: Marley
- ▲ Live load: 5kN/m²
- ▲ Point load: 1.4kN
- ▲ Max deflection: 3mm



DESIGNED TO BS 5268

| Section: original size | Section: finished size | Profile/finish | C16 Multiple (span mm) | C24 Single (span mm) | C24 Multiple (span mm) |
|------------------------|------------------------|--------------------|------------------------|----------------------|------------------------|
| 32 x 125 | 28 x 120 | Castellated Smooth | 240 300 | 290 350 | 350 430 |
| 32 x 150 | 28 x 145 | Castellated Smooth | 290 370 | 340 440 | 410 530 |
| 38 x 125 | 34 x 120 | Castellated Smooth | 380 450 | 450 530 | 540 640 |
| 38 x 150 | 34 x 145 | Castellated Smooth | 450 550 | 530 640 | 640 750 |
| 50 x 150 | 46 x 145 | Castellated Smooth | 890 950 | 880 920 | 980 1020 |
| 75 x 150 | 68 x 145 | Castellated Smooth | 1320 1410 | 1320 1360 | 1470 1520 |



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Tell me more

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