







People

Enthusiasm



Innovation





Nature



Technology

Quality



A WELL BALANCE OF NATURE TECHNOLOGY INNOVATION



Nature

To support our environment and society to keep growing without destroying our eco-system, we collect wood dust from furniture and wood industries only. They are carefully analyzed and selected. No single tree is cut but still the products remain high percentage of natural ingredient. It is 100% recycled after years of used.

Technology

Adopting the most latest technology and production plant, the material including wood fiber, pigment additives and all components forming a sort of uniform Alloy. This making the product had the natural beauty of wood characteristics while only need very minimal maintenance and last much longer than real wood.

Innovation

To meet the market's demand for new trend and ideas, factory ploughed a lot effort and resources in developing new concepts and products.

For every 1-2 years, new colour range will launch to market to try to fulfilling the designers' imagination.

Ingredients



Innovation Technology

Our knowledge of the raw materials and every single production process make the difference. Our in-house laboratory inspects the raw materials as they arrive, while our plants follow production stage by stage, from product of the compound to extrusion of the profiles.

This guarantees that the wood flour blends perfectly with the thermoplastic material and any additive used.

Coherently following our philosophy, we are carrying on researching new solutions, both for application and product.

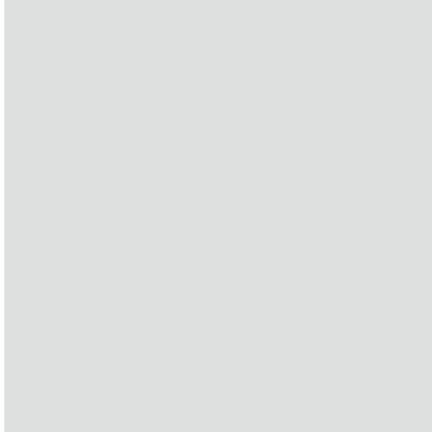
Specific systems studied for our profiles, new natural fibres and colours requested by the market.

A New-Generation Material

Kova Deck WPC is the successful, harmonious combination of the beauty and solidity of wood and the long life of thermoplastic materials. The composition of its 55% wood formulation gives a natural, non-plastic look to our decking profiles. While the correct percentage of thermoplastic matrix is then the main characteristic that makes this composite wood a true hi-tech product.

Right from the start, we have always suggest to use profiles with a solid core rather than hollow profiles. Over time, many markets have proven us right, choosing to use solid profiles due to their workability, stability and long durability.

Kova Deck is the perfect solution for outdoor decking and wall cladding, offering all the warmth and prestige of wood but with lower maintenance costs and optimized coverage.



Strong Points

In addition to its essential characteristics, which make it a perfectly eco-friendly product, Kova Deck composite wood has various other advantages, including :

- Appearance comparable to traditional wood
- Longer durability and greater resistance to the elements and different weather conditions like sun and cold
- Impact and abrasion resistant
- Limited levels of water absorption
- No splinters
- Consequent reduction in maintenance times and costs
- A wide selection of colours thanks to the basic thermoplastic matrix
- Anti-slippery finishes available essential for decking.
- Resistant to swimming pools' chlorine
- Quick and easy installation
- Unaffected by insects and gems



antislip



durability



easy
maintenance



eco-friendly

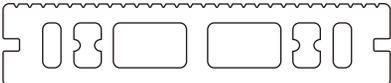


Patina Series



The colours shown are indicative only and we recommend you to make your choice from actual product samples

COLOUR RANGE

Profile	Section	Size
Solid Decking Board		146mm(w) x 23mm(tk)
Hollow Decking Board		145mm(w) x 30mm(tk)

Under-decking fixing structure with anodized aluminum joists, clips and screws.
GREATER DURABILITY AND STABILITY OF THE ENTIRE DECKING SYSTEM

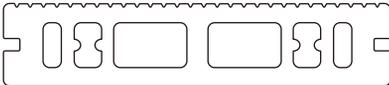


Colour Mix Series



The colours shown are indicative only and we recommend you to make your choice from actual product samples

COLOUR RANGE

Profile	Section	Size
Solid Decking Board		146mm(w) x 23mm(tk)
Hollow Decking Board		145mm(w) x 30mm(tk)

Under-decking fixing structure with anodized aluminum joists, clips and screws.
GREATER DURABILITY AND STABILITY OF THE ENTIRE DECKING SYSTEM



P09 Charcoal





Solid Core - Performance Specification

Physical and mechanical properties	Test Method	Results
Modulus of rupture	ASTM D7031-04 Section 5.5 & ASTM D6109-05 Method A	26.1MPa
Flexural modulus	ASTM D7031-04 Section 5.5 & ASTM D6109-05 Method A	5387MPa
Modulus of rupture after freeze-thaw resistance	ASTM D7031-04 Section 5.20 & ASTM D6109-05 Method A	26.0Mpa
Flexural modulus after freeze-thaw resistance	ASTM D7031-04 Section 5.20 & ASTM D6109-05 Method A	5137Mpa
Impact resistance	ASTM D7031-04 Section 5.12 & ASTM D4495-00(2005)	>123.5J
Specific gravity	ASTM D7031-04 Section 5.14 & ASTM D792-08 Method B	1.318
Water absorption	ASTM D7031-04 Section 5.19 & ASTM D1037-06a Section 23 Method B	0.79%
Moisture content	ASTM D7031-04 Section 5.15 & ASTM D4442-07 Method B	0.47%
Abrasion test	ASTM D7031-04 Section 5.17 & ASTM D4060-10	Wear index : 95.6mg
Static coefficients of friction (Dry condition)	ASTM D2394-05 (2011) Section 33~37	0.48
Static coefficients of friction (Wet condition)	ASTM D2394-05 (2011) Section 33~37	0.55
Sliding coefficients of friction (Dry condition)	ASTM D2394-05 (2011) Section 33~37	0.23
Sliding coefficients of friction (Wet condition)	ASTM D2394-05 (2011) Section 33~37	0.48



Solid Profile

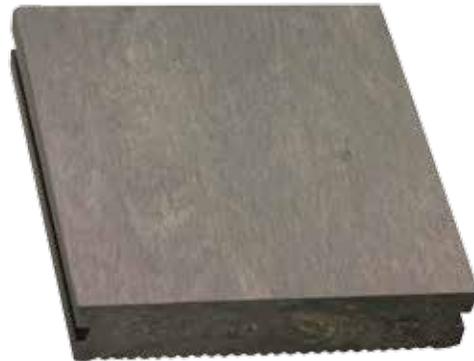
Fineline Surface (FL 01)

Grooved and brushed finish.
It offers an architecturally advance appearance.



Sanded Matt Surface (SM 01)

The sanded surface providing a uniform harmony surface and providing an elegancy appearance.



Natural Wood Surface (NW 01)

Smooth finish brushing.
Conveys a sense of warmth and naturalness.



Natural Wood Surface Deep Brushed (DB 01)

Providing natural and strong wood vein characteristics and anti-slip surfaces.





Hollow Core - Performance Specification

Physical and mechanical properties	Test Method	Results
Flexural Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	24.8MPa
Flexural Modulus	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	4470MPa
Flexural Strength (after freeze-thaw)	ASTM D7031-11 Section 5.20 & ASTM D6109-13 Method A	25.1Mpa
Flexural Modulus (after freeze-thaw)	ASTM D7031-11 Section 5.20 & ASTM D6109-13 Method A	4347Mpa
Impact resistance	ASTM D7031-11 Section 5.12 & ASTM D4495-16	21.6J
Specific gravity	ASTM D7031-11 Section 5.14 & ASTM D792-13 Method B	1.357
Water absorption	ASTM D7031-11 Section 5.19 & ASTM D1037-12 Section 23	0.48%
Moisture content	ASTM D7031-11 Section 5.15 & ASTM D4442-15 Method A	0.28%
Abrasion resistance	ASTM D7031-11 Section 5.17 & ASTM D4060-14	Wear index : 121.4mg
Static coefficients of friction	ASTM D7031-11 Section 5.16 & ASTM D2394-05 (2011) Section 33~37	0.45
Sliding coefficients of friction	ASTM D7031-11 Section 5.16 & ASTM D2394-05 (2011) Section 33~37	0.31



Hollow Profile

Fineline Surface (FL 02)

The groove line will provide anti-slip surface and providing safety and comfort to users.



Sanded Matt Surface (SM 01)

The sanded surface providing a uniform harmony surface and providing an elegancy appearance.



Natural Wood Surface (NW 01)

Smooth finish brushing.
Conveys a sense of warmth and naturalness.

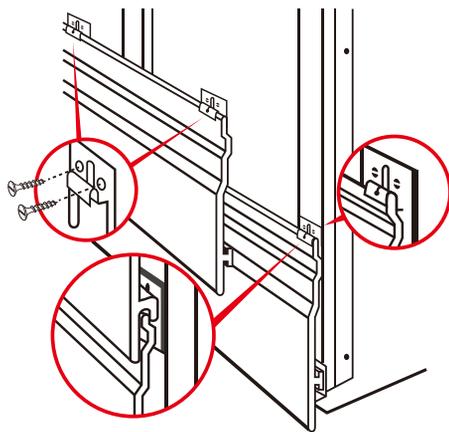






Suitable for aesthetic solutions comparable to traditional wood, with all the advantages of a cutting-edge product. Curtain walls and architectural cladding that guarantee high resistance to the elements, salt corrosion and mould attack, ensuring a considerable reduction in maintenance costs.

A new-gen material with well-known looks that, however, thanks to relentless in-house research and continual dialogue with partners and clients, stands out for its continually evolving technology. Specific “click-clip” fixing system in stainless steel, for simple installation without any visible screws.



Construction

All Kova Deck wall panel products should be fixed using recognized high quality products. The raw material and type of coating used to protect equipment from corrosion is vital. This is why Kova Deck recommend the use of stainless steel fixings.

Accessories include

- Aluminum gap sealer – Internal & External
- Aluminum corner cover – Internal & External
- Aluminum Starting profile
- Aluminum joist
- Stainless steep clip



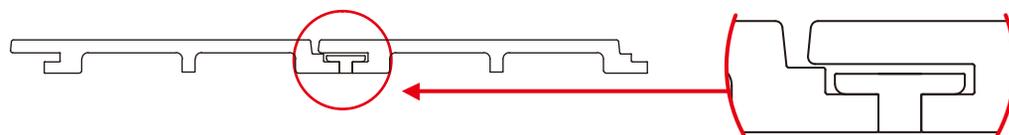
M29 Piallato



P01 Graphite



P05 Champagne





Fencing

- Transparency, design and attractive, combining with transparency colour ;
- Innovative with a universal post that can position the panels from 90° to 180° ;
- Customizable by assembling the panels at heights from 1200mm to 1800mm ;
- Esthetic

Good looking of a visual screen. Both sides of the fence are equally beautiful.



Transparent

Unique concept, privacy or visual fence lead to the attraction of pre-defined patterns or created custom-made.

Manufactured to resist against external climate conditions, Kova Deck fencing offers the mechanical resistance and durability of aluminum with the durability and easy maintenance of Kova Deck. This combination of materials produces fencing that is hard-wearing, easy to maintain and visually appealing.



Natural Appearance

Since the product has high percentage of natural ingredient, it has the same characteristic as natural wood flooring.

The decking planks may have slightly colour different from plank to planks or from batch to batch. The variation should be considered as natural beauty of wood.

Colour Weathering

At the first month or two after fixing, the colour of floor boards will change gradually a bit lighter in colour owing to UV rays exposure. Wood fiber will turn to naturally into grey.

Once the weathering process completed, the colour of decking boards remain the same for the rest of the life.

Patina Series Original



P09 Charcoal



P19 Mocha



P01 Graphite



P04 Bianco



P05 Champagne

Weathered



P09 Charcoal



P19 Mocha



P01 Graphite



P04 Bianco



P05 Champagne

Colour Mix Series Original



M19 Taglio



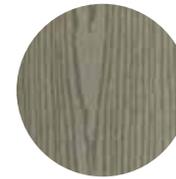
M04 Sabbia



M29 Piallato



M05 Ghibli



M01 Casale

Weathered



M19 Taglio



M04 Sabbia



M29 Piallato



M05 Ghibli



M01 Casale

Thermal Properties

Like other building material, when the product is heated by solar radiation, its surface temperature will raise depending the intensity of sunlight, the duration of exposure and the colour of material as well etc.

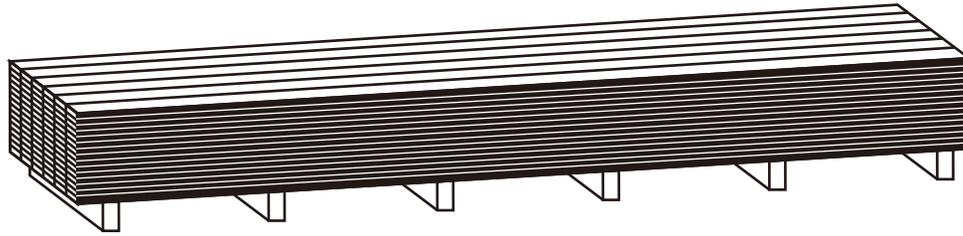
1. Storage

When material delivered to site, the floor boards should put on a flat and level surface. Adjust support blocks accordingly.

When stacking the material, supports should start at each end and be spaced 600mm on centre. Support should line up vertically.

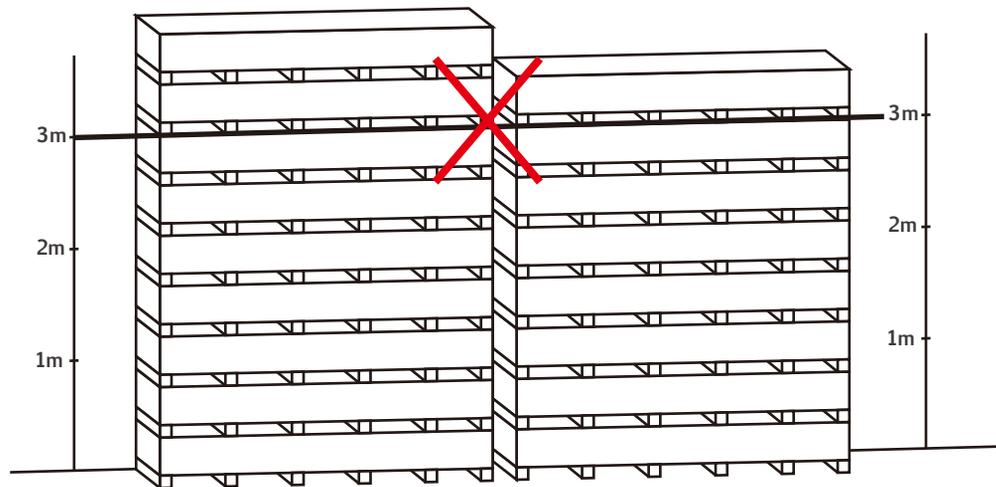
Material should be stacked higher than 3m high.

Material should be covered at site until it is ready to install.



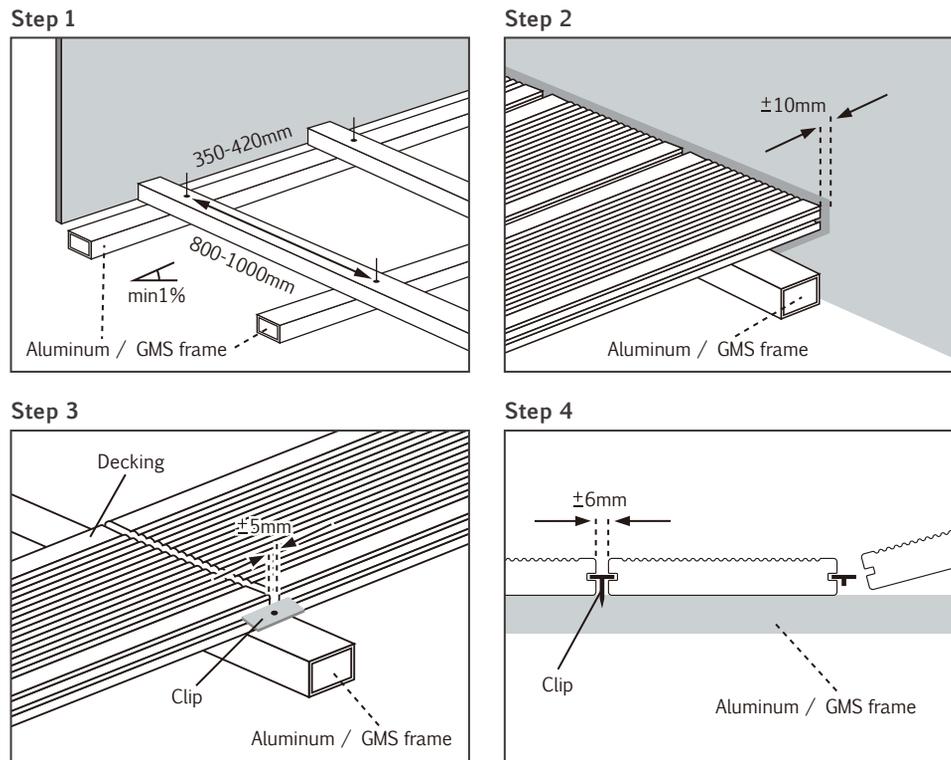
- Material should put at site 48 hours before installation and laying on a flat even platform and protect it from surface sunlight.

- Do not stack Kova Deck higher than 3m high.



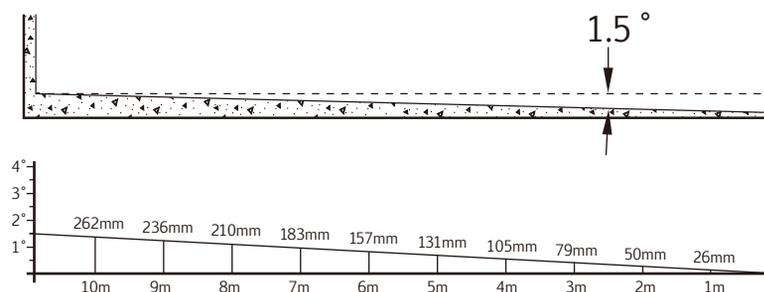
-- Cover material on site until you are ready to install it

2. Installation Steps



3. Important Skill

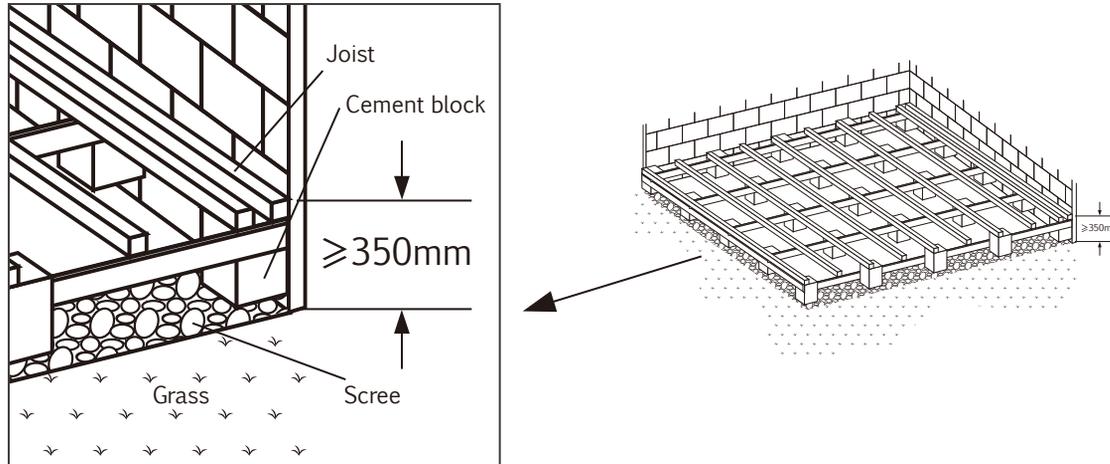
- The beginning board must be fixed with starting clip through the side groove of the boards. The finishing board can be fixed by starting clip or screw.
- We advice to pre-drill in order to avoid splitting the board.
- Using a Aluminum / GMS frame support construction, be aware of material extension and leave always enough space (min. 10mm) around your terrace especially to obstacles.
- To ensure proper drainage the deck should slop min 5mm/m.
- Make sure the installation condition is flat and stable in order to avoid deformation and dents in the surface of the terrace.
- Foundations – concrete / tile surface
The drainage slope must be $>1.5^\circ$



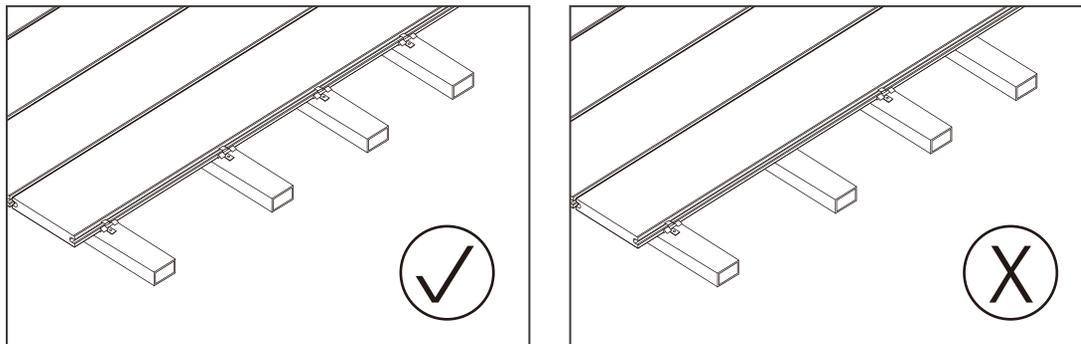
If people can not make the drainage slope, gutter must be fixed on the ground for ventilation.

3. Important Skill

- Foundations – grassland and muddy land
WPC decking requires above the ground $\geq 350\text{mm}$.



- Fixing – substructure
Each substructure must have a clip to fix.



Manufacturer Notes

- This is not a structural product. Sudden heavy blow or impact to the flooring is not allowed and may damage the product.
- Burning or cooking is not allowed on this product as it contains wood and plastic material. If high heated material falling on surface, it should be removed at once.
- Oil, organic matter or stains caused by paint should be removed at once. If not, marks or stained will develop on surface.
- Under very strong sunlight, the product surface temperature will raise. Wearing shoes or socks if needed when walking on it.
- Other defects caused by the following conditions will not be considered such as:
 - * improper handling and storage of product as described.
 - * not following the manufacturer installation specification.
 - * improper use of product
 - * normal wear & tear
 - * act of god

Cleaning Instructions

Although Kova deck need no maintenance, if that should be cleaned periodically installation to keep it looking good.

It is necessary to clean the space between the slats of organic debris to ensure good water drainage and ventilation.

Kova deck requires no special treatment for conservation, but it is possible to paint with some extra coatings against dirt or water.

Kova deck is a product installed in the open, and exposed to stains from diverse backgrounds. The most common, which are described below, are cleaned following these recommendations:

Water Stains

Water stains can be produced by splashing pool water, irrigation, downspout gutters, roofs, etc, or even the same morning dew.

If the installation does not have the correct slope, can produce pools of water that evaporate leaving a visible fence consisting of dissolved substances carries water and even juices that can extract of plant fibers of the stage itself.

These spots are normal for this type of material and not a deficiency Kova deck not affecting the quality of the profile.

Cleaning of such spots is very simple. Dip the stage and move the broom or broom clean so that there are no puddles on the platform itself. Allow to dry. If any stain persists, repeat the operation pouring into a bucket with little water, cleaner soap timber. Dip the brush in it and rub the surface to create foam. Remove standing water using a broom to avoid the puddle.

To limescale that may persist, use a vinegar cleaner, applied directly on the lama previously moistened with water, then rub and rinse with water, as always, preventing puddle forms.

Spots of Soda, Wine, Coffee

Soda stains, wine or coffee are removed with a cleaner soap timber. If any These persists, repeat the operation or cleaning diluted bleach solution. Do not leave the bleach acting in the stage long. Rinse with water.

Grease stains, sun cream, oil, etc

Clean the stain as soon as possible. Remove first with an absorbent paper or cloth, oil, cream or superficial fat. Once you can't withdraw more, apply stain, degreasing cleaner

Kova deck, following instructions:

- Perform cleaning in a sufficiently ventilated place.
- Use latex or vinyl gloves.
- Remove with absorbent paper excess oil, taking care not to spread the stain.
- Dip a cloth or sponge with the cleaner and rub vigorously on the stain on several directions. Repeat 2 times.
- Leave for 1 minute and rinse thoroughly.
- Not to dry, pour into a bucket with little water a dash of dish soap, Fairy type or like. Stir with a clean broom. Soak the brush into the soapy water well bucket and rubbing on the surface treated in various directions until foam.
- Leave for a few minutes and rinse thoroughly. Eliminate possible puddles. Allow to dry.

This type of stains disappears with the passage of time by the effect of sun and weather. It is recommended not to mount the dais barbecue areas.

Difficult, unknown or stains

For stubborn stains of unknown nature, follow different cleaning steps:

- Water
- Cleansing soap
- Diluted bleach (subsequent rinsing with water)
- Bleach concentrated (subsequent rinsing with water)

Burnings or surface damage on stage

For alterations or damage (burns, discoloration by external agents) of the surface of the floors, wipe with a scotch or small grain sandpaper.

On the sanded surface will be a slight change of tone, which can be compared to the rest of the stage with time.

Periodic Cleaning

For any stain act as quickly as possible to prevent surface absorption.

Although installation Kova deck none outstanding stain, and does not need any maintenance, you should carry out general cleaning every 3 to 6 months, depending on use and area installation, for better appearance and beauty of your installation. To do this, perform cleanup following the following steps:

- Use water jet machine pressure (max. 80 bar) with the jet fan or open and run the water within the meaning of grooving of the stage, avoid circular movements and that leave marks on stage. This will help us remove embedded dirt and dust.
- In a bucket with little water, pour a dash of soap and bleach cleaner, and with a broom clean, rub vigorously in different directions, to create foam. Leave for minutes and rinse with plenty of water and avoid puddles. Allow to dry. Depending on the size of the facility, this cleaning should be done at once or in several areas times.

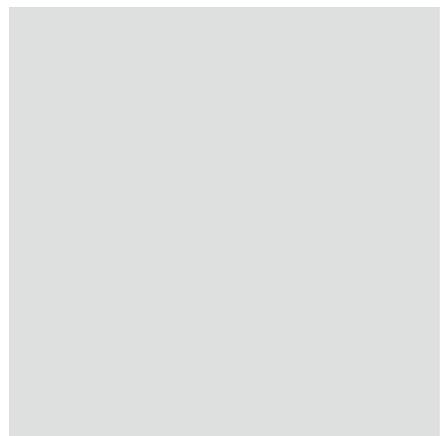
Kova deck surface layer is porous, but the pores are shallow, therefore any stain can remove sanding. If the stain has penetrated the platform, you can sand the surface with fine sandpaper or wire brush, always in the direction of grooving. This process will produce a slight whitening the area that will be planed matching the rest of the flooring over time.

Except for sudsy cleaner, always perform a clean test in an inconspicuous place of the platform, to observe the results. Strictly follow the cleaning instructions. The use of other cleaning or improper use, are the sole responsibility of the customer.











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