

# **B:** *hard*

Installation instructions

**STÖCKL**  
**PARKETT**

FIRST STEP FOR LIVING.

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**It's wood. It's hard. It's nature.**

# Installation & maintenance instructions

## B:hard – Multilayer engineered plank

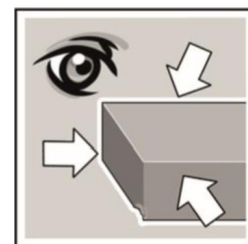
For optimum advice, fulfillment of all inspection obligations and professional installation, please contact an installation specialist. The specifications of the currently valid standards, the general rules of technology and the guidelines on the manufacturer's data sheets and instructions apply to the installation and subsequent use.

**In order to obtain a warranty and the best installation results, the following installation and regulations must be observed without fail.**

⚠ It is extremely important to read and understand this information completely prior to starting!

### Before installation

Stöckl Parkett multi-layer products may only be installed in rooms ready for living. Check the product for transport and material damage before installation. Always check and install in daylight or with sufficiently strong light sources. If defects become apparent during installation, stop further processing immediately so that the goods can be inspected or replaced if necessary. Later complaints will not be accepted.



### Storage and acclimatization

The sealed packages must be stored or acclimatized in a standard room climate of **20° C** room temperature and **approx. 50 % relative humidity**. Give the unopened packages sufficient time to adjust to the climatic conditions in the room (at least 2 days). The original packaging must not be opened until immediately before installation. In case of longer interruption of installation, residual planks must be wrapped in foil again.

⚠ Stöckl GesmbH, as the manufacturer, accepts no responsibility for problems or faults that occur due to improper preparatory work or incorrect installation of the floor. The responsibility for compliance with climatic conditions is not incumbent on the manufacturer.

### Preparation of the subfloor

The subfloor must be sufficiently even, resistant to compression and tension, free of cracks, clean, dust-free and permanently dry. If these guidelines are met, the following subfloors are considered suitable: Screeds (cement, anhydrite), mastic asphalt, wood-based material, or dry screed boards suitable for flooring. The screed **must be sanded over the entire surface** and vacuumed with an industrial Hoover.

Special attention must be paid to the permissible residual moisture of the subfloor as well as compliance with the room climate conditions, as moisture usually leads to irreparable damage. Heated screeds with hot water underfloor heating are suitable up to a maximum surface temperature of 28° C. As a check before installation, the installer must be presented with a completed **"heating protocol"** intended for this purpose!

The subfloor must therefore be checked for residual moisture or readiness for installation in accordance with the applicable normative specifications, the current guidelines (Federal Guild of Floor Layers) and the state of the art. The readiness of the subfloor for laying must be ensured before the parquet is laid.

Maximum permissible residual moisture values according to ÖNORM:

**Cement screed: max. 2.0 % CM with underfloor heating, max. 1.8 % CM.**

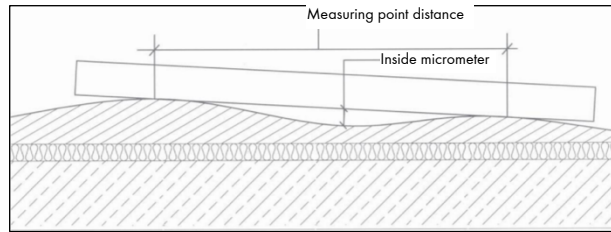
**Anhydrite (flowing) screed or calcium sulphate (flowing) screed with and without underfloor heating max. 0.3 % CM. Maximum CM residual values for accelerated screeds, rapid screeds, cement flow screeds, etc. according to manufacturer's instructions.**

**Wooden subfloors max. 12 % wood compensation moisture, wood-based materials max. 11 % of mass.**



⚠ Before each installation a CM-reading is mandatory!

In addition to the moisture test, also observe the requirements for the flatness of the subfloor. According to ÖNORM DIN 18202 "Tolerances in building construction", these are a maximum deviation of 4 mm at an inside micrometer of 1 m. With a measuring point distance of e.g. 1 m, the subfloor is to be allowed a maximum allowance of 4 mm according to the standard.



**ATTENTION! – 3 mm for increased requirements.** According to ÖNORM B 2218 "Installation of wooden floors" – the flatness tolerances according to ÖNORM DIN 18202 – table 3, line 4 "increased requirements" are specified for parquet elements from 20 cm length.

Depending on the type and condition of the subfloor, primers, fillers, etc. can also be used. In case of application, these materials must be authorized in writing by the respective system manufacturer.

Sufficient drying times (specifications of the respective manufacturer) must be considered. Irregularities in the subfloor can lead to an unsatisfactory appearance and even to the formation of significant gaps.

#### STÖCKL GUIDELINES:

1. INCREASED FLATNESS REQUIREMENTS (3MM) FOR B:HARD MULTILAYER-ENGINEERED-PARQUET
2. On underfloor heating, Stöckl Parkett recommends **full-surface bonding**. A floating installation is only suitable to a limited extent!
3. For heated screed, insist on a complete, signed **heating protocol**, as no warranty is given for damage due to non-compliance with these measures!

#### STÖCKL RECOMMENDATION:

To control the room climate, we recommend an electronic data logger (Fidbox®) for rear installation. The recorded data can be read out conveniently using a smartphone app!

#### **Floor cooling system: (not recommended)**

In the planning phase, but at the latest when the floor layer carries out his inspection duties, approvals from the manufacturer of the floor cooling system must be available and must be complied with.

A disadvantage of these cooling systems is the somewhat lower cooling capacity compared to fan coils or air conditioning units. This is due to the smaller difference between room and water temperature. To prevent damage from condensation, the supply temperature must not be below 18° C – a dew point sensor must be provided in any case. Underfloor heating without humidity management cannot tolerate colder temperatures.

The instruction manual of the floor cooling system must be followed. The user is responsible for the operation. Monitoring devices for temperatures and air humidity, in particular of the subsurface, must be installed (e.g. Fidbox® or equivalent). In any case, a dew point measurement at the supply pipe alone is not sufficient! To achieve **45 – 65 %** humidity of the ambient air, a dehumidification is recommended. The control system must be set in a way that max. 65 % humidity is not exceeded at floor level; the cooling system must be switched off if the relative humidity at floor level exceeds 75 % for several hours. If the room humidity is already **max. 75 %** then the cooling must not be put into operation. For acclimatization and regeneration of the floor structure, interruptions of the cooling phase should be provided at weekly intervals. The user is responsible for the operation and the required climate!

## Wooden substrates

All wood and wood-mix panels without surface treatment are suitable, provided that they are flat and free of structures (plywood or OSB panels, for example).

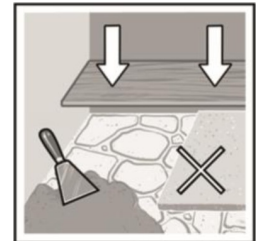
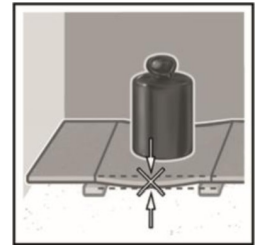
To prevent mold growth or other problems, the wood moisture content of the substructure should not exceed

12 % and cavities under the structure must be adequately ventilated. The installed level must not yield or vibrate under load. Fasten all loose parts permanently. Do not use a vapor barrier on wooden substrates! We recommend our tested and approved Stöckl "Universol Standard 2.0" underlay mat for this purpose.

The direction of laying must run across the old wooden floorboards

## Old flooring

B:hard can be installed on most hard coverings. Level the joints of ceramic tiles with suitable leveling or filling compound according to manufacturer's specifications. Remove all textile and other soft coverings before laying B:hard.

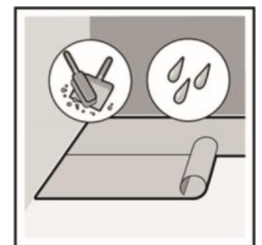


## Floor Installation

### Floating installation

Start installation of the floor only after all craftsmen from other trades have left. Before installation, holes, cracks and other damage should be closed with suitable materials.

It is recommended to open several packages at the same time and mix the planks by color and texture to achieve a uniform overall appearance. Non-compliance may result in undesirable visual impairments.



### ATTENTION!:

For floating installation, the installation area of 25 x 25 m must not be exceeded.

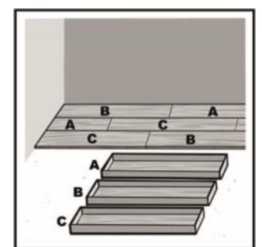
The linear expansion / contraction for large installations is approx. 30 mm per 30 m total length (approx. 15 mm on each side). In width, the expansion is less. With large installations, there is therefore a risk that the interlocking system will break during climatic movements - even if the floor moves in a floating installation, it is heavy and puts a lot of stress on the interlocking system when it moves. Floating floors must not be fixed in place by heavy objects such as kitchen units, ovens, furnishings etc. The floor must be able to expand freely in all directions, otherwise joints may form and the appearance may be unsatisfactory.

Lay a Stöckl Universol Standard Alu 2.0 underlay mat for screed (a fire class Bfl-sl is only achieved with this tested mat!) or Stöckl Universol Standard 2.0 for wooden substructures, at right angles to the subsequent laying direction of the real wood plank B:hard.

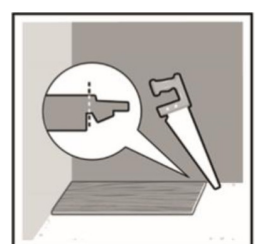
**The temperature of the subfloor during installation must be at least 15° C, max. 28° C, and the relative humidity 45 – 65%.**

### ATTENTION!:

In the event of major deviations from these above-mentioned climatic conditions, during and also after installation, joint and crack formation as well as deformation and/or cover lamella detachment may occur. In the case of heating screed, it is essential to ensure that several heating circuits in one room are controlled at the same temperature. The surface temperature of the installed wooden floor B:hard, **may not exceed 28° C at any point.** The heating capacity of the system must be adjusted accordingly by the heating specialist.

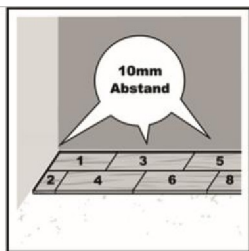


Before starting the installation work, create an installation plan. In doing so, consider expansion and movement joints to be adopted and the room geometry. Adjust the laying direction in the longitudinal direction of the room geometry and/or main light source. Discuss and decide this with your client. If the last row of planks is not at least 5 cm wide according to the measurement, cut the first row of planks so that the first and last row are approximately the same width. Start the installation according to the installation plan in the left corner of the longest room wall.

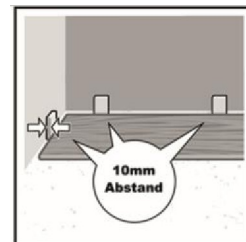


Cut off the click-connection at the front side and the long side to the adjacent wall. This also applies to all subsequent elements that directly adjoin walls. Since wood flooring can swell and shrink due to the natural nature of the wood depending on the humidity, edge distances must be maintained, which are between 10 – 15 mm, depending on the room size.

Calculation: Room width in m x 1.5 = ... mm edge distance, but at least 10 mm.

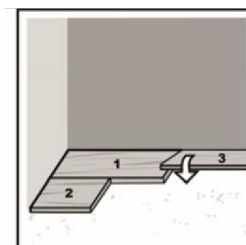
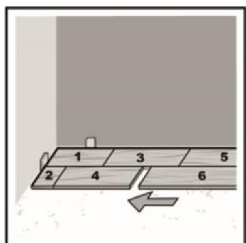


Then properly align the first two, installed rows to the walls, observing the determined wall distance, and place the spacers. Note that a distance of at least 15 mm must be maintained from all rising structural elements (walls, columns, heating pipes, etc.). Failure to do so will result in a clamped condition of the construction, further in bulging of the floor covering and possibly destruction of the floor.



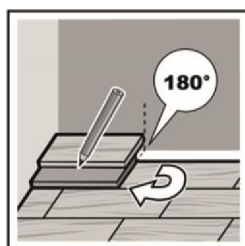
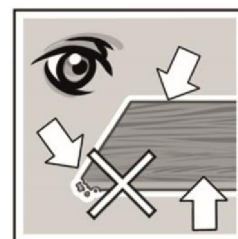
### Install the first two rows according to the illustrated scheme:

1. Place element in a left corner of the room.
2. Shorten the panel and align it straight using a straightedge or angle it in on the long side. To do this, insert the longitudinal tongue diagonally from above into the longitudinal groove of the first element and lower the second element until it lies flat.
3. Press the fourth element into the front of the first element. Now insert the fourth element again lengthwise at an angle from above into the lengthwise groove of the first element. Now push the fourth element in this angled position towards the end face of the second element until the end faces of the two elements fit together exactly. Now lock the connection on the long side by lowering the element and at the same time lock the connection on the short side by pressing it in until you feel it engage.



Then install plank by plank according to the same scheme. The remaining piece of a row can be used as the beginning of the new row if it is at least 40 cm long. The face offset must also always be at least 40 cm.

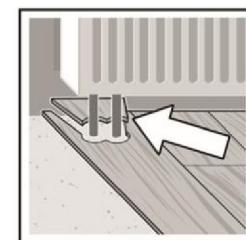
**During the entire installation, the elements must be checked for material defects as well as color and structure deviations. Elements with visible material defects should not be installed. Installed elements with visible material defects are excluded from complaints!**



Cut the elements of the last row to size. Proceed as before when locking the end faces. You can achieve a permanent connection of the possibly narrow end row by using a D3 white adhesive. This must not result in a permanent connection to the subfloor. Also take into account the edge distance to be maintained. Do not apply large amounts of force.

Radiators (or rising elements in the surface): Add approx. 20 mm to the diameter of the rising element and cut the element accordingly. If necessary, glue separated elements together again using D3 white adhesive.

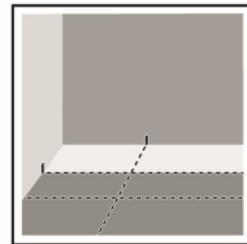
Doors: Mark the cut mark on the door frame using an element section or a turned element. Adjust the door frame accordingly using a suitable tool.



## Full surface bonding

The temperature of the subfloor during installation must be at least **15° C, max. 28° C**, and the relative humidity **45 – 65 %**. For full surface bonding, neither a PE-foil nor an insulating carpet pad is required. Mark the area to be glued on the first three rows using a chalk line to apply the glue after the elements have been reassembled. Proceed only after the initial rows are firmly fixed. Never apply more adhesive than you can process in the time specified by the manufacturer. Therefore, also avoid unnecessarily long interruptions during installation.

All processing guidelines can be found on the adhesive container and must be strictly adhered to. The surface temperature of the installed floor **must not exceed 28° C** at any point later. The heating capacity of the system must be adjusted accordingly by the heating specialist. Otherwise, the elements are laid as described under the point "Floor installation".



### **ATTENTION!:**

In case of major deviations from these above-mentioned climatic conditions, during and also after installation, joint and crack formation as well as deformation and/or cover lamella detachment may occur. In the case of heating screed, it is essential to ensure that several heating circuits in one room are controlled at the same temperature. The surface temperature of the installed wooden floor (B:hard, B:hard modern, Stöckl 2-layer parquet) must then not exceed 28° C at any point. The heating output of the system is to be set accordingly by a heating specialist.

## Cleaning and maintenance

### **Cleaning varnished wooden surfaces**

Remove coarse dirt with a mop, hair broom or vacuum cleaner, fine dust with lukewarm water! For sealed floors (to avoid graying of the surface) please use parquet cleaner. Application instructions are indicated on the product and must be followed. Wring out the cloth firmly and clean your parquet floor with a damp cloth only. Heavy soiling, stains or rubber marks can usually be removed by "erasing". To remove stains, solvents such as turpentine substitute, white gasoline or methylated spirits can also be used with caution.



**ATTENTION!:** Never use sharp or corrosive cleaners or sharp objects for cleaning. Never clean too wet or bring too much water onto the surface, as this could cause the floor to swell in the joint area.

### **Maintenance of varnished wooden surfaces**

To sufficiently protect the surface, the floor should be maintained from time to time with **parquet care** (for varnished surfaces). The parquet care is applied very thinly to the dry, previously carefully cleaned parquet floor with a non-fouling cloth and spread evenly so that no streaks can form. Do not rub in! After approx. 30 minutes, a silk-matt layer is formed which protects the parquet. After drying, additional gloss can be created by polishing.

Once a year, it is advisable to remove the resulting layers with **Parquet Care Remover** and then use the care products to give the floor a new shine. Always observe application instructions!

### **Initial care of oiled wooden surfaces**

Remove coarse dirt with a mop, hair broom or vacuum cleaner, fine dust with lukewarm water. Stöckl Parkett recommends initial oiling with maintenance oil after installation to achieve an even better surface. This reduces the absorption of mop water over the edges of the parquet significantly. Then the entire surface is polished with a single-disc machine by the installer. In that way, the floor is optimally protected right from the start. The frequency of further care depends essentially on the use, the degree of soiling and your personal sense of hygiene.

### Cleaning oiled wooden surfaces

If possible, the floor should be dry cleaned with a powerful vacuum cleaner. If adhering dirt can no longer be removed with dry cleaning, the floor must be damp mopped. To do this, mix lukewarm water with wooden floor soap. For 5 liters of water use about 50 ml of soap. With this lye and a wrung cotton mop, wipe the floor well. For larger areas or very heavy dirt, use a second bucket of clear water to wash out the wipe. Furthermore, you can use intensive cleaner in case of very heavy dirt.

**Do NOT use too much water during cleaning, as this could cause the floor to swell in the joint area! Never use microfiber cloths on oiled surfaces, they will sand the surface.**

### Maintenance of oiled wooden surfaces

Clean the floor as previously described and allow to dry for at least 1 hour with good ventilation. Drip or spray the care oil onto the surface, then spread with a cloth to polish thinly and, if necessary, spread with a white pad to remove streaks. Depending on the size of the surface, the care oil is applied with a polishing cloth, stick and hand pad or single-disc polishing machine. Allow to dry for approx. 6 – 8 hours with good ventilation!

### Repairs

The wooden floor can be easily repaired in case of damage. Damage in the edge area can be repaired by dismantling and inserting a new element. In case of damage in other places, we recommend the following procedure:

Using a plunge saw and a cutting bar, cut out the center of the damaged element. Be careful around the edges of the element so as not to damage neighboring elements. Now remove the remaining parts from the click mechanism. To prepare the replacement element, carefully cut off the tongue on both the front and the long side so that the locking groove remains undamaged.



Now apply the D3 white adhesive to the long and short sides of the prepared element and to the remaining click mechanism of the neighboring elements. Then insert the prepared element from the groove side to the tongue side and weigh it down until the adhesive has set.

### Refinishing recommendation for Stöckl B:hard flooring

#### **PALLMANN CLEAN (water-based cleaning agent)**

- Container must be at the recommended room temperature (20 °C) before use.
- Dilute 1 part PALLMANN CLEAN with 3 parts water.
- Apply evenly to the entire surface with the PALLMANN FLOOR MOP. Allow to act for approx. 2 - 5 minutes and brush off with the PALLMANN TURBO SCRUBBER with GREEN BRUSH ROLLER. Work the edge manually with green pad.
- Take up the loosened dirt with the PALLMANN TURBO SCRUBBER and wipe thoroughly once with clear water and renew the wiping liquor as soon as possible. In the case of particularly stubborn dirt, repeat the process if necessary.

#### **ATTENTION! Not removed cleaner or care product residues have an adhesion-reducing effect!**

- After use, clean the tools with water.
- Once the parquet surface has dried, sand the entire surface with the PALLMANN SPIDER and the ABRASIV PAD. Afterwards, vacuum the surface with the VACUUM CLEANER M 30.
- For the remaining dust binding, wipe the surface with the PALLMANN WIPING MOP and water with a damp cloth.

## PALLMANN PALL-X 350

- Both containers must be at the recommended room temperature (20 °C) and shaken well before use.
- Thoroughly mix component A with component B in a mixing ratio of 3:1. Then allow mixture to stand for 5 minutes.
- Apply PALL-X 350 evenly and under pressure using the APPLICATION ROLLER SOLVENTBASED 4MM/25CM. Consumption: approx. 20 – 35 ml/m<sup>2</sup>. Care must be taken to ensure that the entire substrate is evenly wetted and that no residues remain on the surface.
- Drying time until recoating: approx. 1 hour but within max. 4 hours. The treated surface can then be over-sealed with PALL-X ZERO 2K according to the manufacturer's instructions.
- Dispose of application rollers after use.

## PALLMANN PALL-X ZERO 2K

- Both containers must be at the recommended room temperature (20°C) and shaken well before use.
- Transfer component A into the clean PALLMANN LAQUER BUCKET, then add component B (hardener) and mix thoroughly immediately with a suitable stirrer.
- Apply PALL-X ZERO 2K evenly to the substrate using the APPLICATION ROLLER WATERBASED SPECIAL 8MM/25CM. Starting at the edge in each case, apply alternately first across the grain and then in the direction of the grain. For very heavily used surfaces, 2 coats are recommended.
- Sealing of large surfaces: To avoid striking differences in gloss level, we recommend transferring several containers at once into a large container, stirring carefully by machine and ensuring during application that, if possible, the entire surface is applied in the same layer thickness. In the case of 2-component coating systems, make sure that the mixed quantity - corresponding to the open time - can also be processed.
- Drying time until sandability with 2 coats: approx. 24 hours, depending on climatic conditions up to 36 hours.
- With 2 coats, an intermediate sanding with PALLMANN POWER PAD grain 120 is necessary before the last application.
- Consumption per application layer approx. 80 ml/m<sup>2</sup>.
- Clean tools with water after use.

This information is provided, in accordance with the information received from you, on the basis of our valid terms of delivery and payment. Our written statements are made subject to the examination of any special circumstances on site in individual cases and are to be regarded as an aid to the contractor. They are based on the assumption that all relevant information has been provided to us correctly and in full.

Our written statements are no substitute for a careful examination of the conditions on site. They are made subject to the final assessment by the contractor of the wooden floor surfaces to be surface-treated. We assume knowledge of the relevant DIN/EN standards on which this information is based.

Before starting work, please refer to the latest Pallmann product data sheets and, if applicable, the safety data sheets at [www.pallmann.net](http://www.pallmann.net)

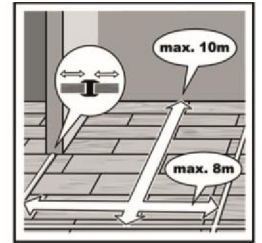
## Room comfort climate

The optimum combination, i.e. the right interplay between relative humidity and temperature is the key to a healthy room comfort climate! Depending on the season, a relative humidity of **45 – 65 %** and a room temperature of **18 – 22° C** are recommended. In addition, the wood floor surface temperature of **max. 28° C** should NOT be exceeded. At these values or conditions, the natural wood properties such as joints, cracks or cupping will occur to a minor extent. Wood is a natural material and changes its shape in case of longer deviation from these given values (especially humidity). This means that deformations (cupping), cracking and even detachment of the wooden floor's surface lamellas may occur. Apart from this, it can also cause health problems for the people living in these rooms



## Important notes

When laying in several rooms, in L-shaped rooms, passage areas and in large areas from 10x8 m, a movement joint profile must be used. Likewise, in the case of contiguous areas, e.g. with several heating circuits, the movement joints provided by the customer must also be incorporated in the surface covering. These can be closed with joint profiles (e.g. multi-part transition profile that does not clamp the floor). Care must be taken to ensure that the movement joints with rising structural elements, e.g. supporting pillars and walls, are functional. We recommend the use of cork edge strips or similar to fill these areas. Fixation of the floating construction by heavy objects, such as kitchen units, stove, aquariums, water beds, etc., must be avoided. If this is unavoidable, the flooring must be allowed to expand freely in all remaining directions from the point of fixation. Failure to do so may result, among other things, in joint openings, but certainly in an unsatisfactory overall impression.



## General Tips

When using a swivel chair, make sure that it is fitted with suitable castors. The same applies to objects that can be moved on castors. Attach high-quality felt glides to all chair legs, tables and movable furniture. This will prevent scratches. Please follow the respective manufacturer's instructions. Dirt-stop mats in the heavily used entrance area prevent dirt and moisture from causing the surface to wear down. This is an important measure, especially for color-treated floors, to prevent tread marks and footprints. The installation of a Fidbox® for data recording is expressly recommended.



Especially during the heating period, we recommend using a humidifier that is adapted to the room! So you will have years of great pleasure with your unique wooden floor from STÖCKL Parkett.

Wood is a natural product and unique in which there may be differences in color, structure and texture due to growth. Exposure to sunlight leads to a natural change in the color of the wood (darkening or lightening). Depending on the structural conditions, the color appearance of the parquet may be different in parts over time in the case of strong incidence of light, such as floor-to-ceiling windows.



woodura®

Patented surface technology

## FOLD DOWN LOCKING SYSTEMS

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