



TIKAL[®]
MARINE SYSTEMS



TEAK DECK

Application Guide

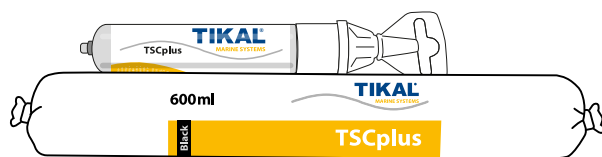
Version 06/2026

Tikalflex TSCplus

TSCplus is one of the highest quality materials available for sealing teak deck joints and has been in production for over 25 years. The 10 year guarantee for black **TSCplus** proves our confidence in the material and sets us far ahead of competition. With excellent flexibility and anti-UV properties, **TSCplus** is the first choice for many mega- and superyachts.

Properties

- Requires no primer
- Remains flexible – will not shrink, crack, crumble or dry out
- Resists staining, mildew, spotting and colour change
- Sandable and without air bubbles or unsightly voids
- Fast curing formula allows the deck to be walked on the next day



Tikalflex TLB Flex

TLB Flex is a one-part, paste like neutral cure MS Hybrid Polymere adhesive, designed to glue Teakwood and Panels to ship decks (CFK, steel, wood, aluminium). It cures when exposed to moisture in the air forming a tough, flexible bubble free seal.

Properties

- Very long open time, up to 45 min.
- Very good adherence to teak
- Very good adherence to CFK, metal and wood
- Requires no primer



Technical data

Chem. Base	Advanced Silanpolymer
Density	1,25 g/ml
Colour	Black, grey, (white)
Skintime	10 min.
Curing speed (25° C / 65 % R.H.)	3 mm in 24 h
Hardness Shore A	39
Elongation at break	670 %
Tensile strength	1,7 N/mm ²
Temperature resistance after cure	- 30° C to 150° C
Application temperature	min. 5° C to max 45° C
Shelflife when stored at 5° C to 25° C	18 months
UV-resistant	Yes
Packing	24 x 100 ml mini foil 12 x 600 ml alu foil

Technical data

Chem. Base	Hybrid MS Polymere
Density	1,7 g/ml
Colour	Black
Skintime	45 min.
Curing speed (25° C / 65 % R.H.)	2 mm in 24 h
Hardness Shore A	55
Elongation at break	150 %
Tensile strength	1,4 N/mm ²
Temperature resistance after cure	- 30° C to + 90° C
Application temperature	min. 5° C to max 35° C
Shelflife when stored at 5° C to 25° C	18 months
UV-resistant	No
Packing	12 x 600 ml alu foil

TBJ 30

Tikalflex Bedding Joint 30

Extremely UV-resistant, steadfast sealant, based on SMP. Suitable for connection joints and expansion joints, beadings between teak, structure or glass.

Properties

- High elasticity, good mechanical strength
- Long open time
- Solvent-, isocyanate- and silicone-free
- Low odor
- Very low emissions
- Extremely UV-resistant
- Very broad adhesion spectrum
- Sandable and paintable



Synteak Activator

Adhesion promotor for synthetic teak deck – alternatives.

Synteak Activator is a one-component, solvent-based adhesion promotor.

Synteak Activator degreases non-porous surfaces and enables excellent chemical bonding of PVC and PUR coverings with Tikalflex TLB Flex, Contact12, TSCplus and many adhesives from other manufacturers.



Technical data

Chem. Base	SMP Hybrid
Density	1.48 ± 0.05 g/cm ³
Colour	Black, white, grey
Skintime	30 min.
Hardness Shore A	32
Application temperature	5 °C to 40 °C
Curing speed (25 °C / 65 % R.H.)	2,5 mm /24h
Tensile strength	1,6 N/mm ²
Temperature resistance after cure	- 40 °C to + 90 °C
Elongation at break	approx. 600 %
Permissible total deformation	20 %
Shelflife when stored at 5 °C to 25 °C	18 months
UV-resistant	Yes
Packing	12 x 600 ml alu foil

Technical data

Chem. Base	Solvent with additives
Consistence	Liquid
Reaction	Physical curing
Colour	Transparent
Reactiontime	5 to 7 min.
Spec. Density	0,78 g/ml
Shelflife when stored at 5 °C to 25 °C	24 months
Application Temperature	5 °C to 30 °C

Dimensions of the joints

If the joints are correctly dimensioned, Tikalflex TSCplus can absorb up to 15 % expansion of the joint. Raw wood swells or shrinks primary through moisture absorption or release. Under regular conditions the moisture changes ca. 5 % to 6 %.

The width of the joint depends on the width of the teak planks, the joint depth, and the heartwood moisture. From these parameters, it is recommended to choose a joint width using the relations as shown in the table.

Planks/Battens

Plank/Batten width	Minimum joint width	Minimum joint depth
30 - 64 mm	4 - 5 mm	6 - 7,5 mm
65 - 85 mm	5 - 6 mm	7,5 - 9 mm
> 86 mm	6 - 7 mm	9 - 11 mm

Seams to margins and structure same dimensions as recommended seam width for battens/planks.

On other woods not of quarter sawn teak, seams should be one step up from above list or more but always with the ratio 1:1,5 or more width to depth.

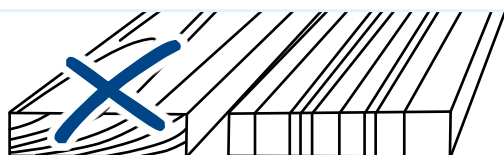
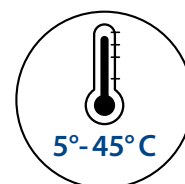
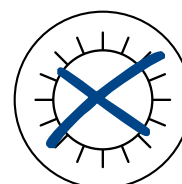
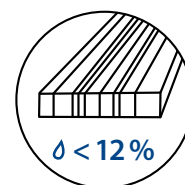
Preconditions

Never caulk wet seams! Never caulk when it rains. Wood moisture must be less than 12 %.

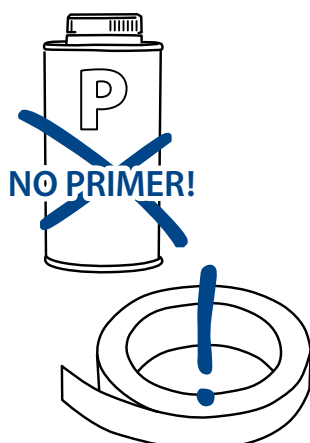
For best results, the temperature while caulking must be between 15° C to 30° C. The colder the temperature the slower the curing.

In tropical heat, avoid direct sun to avoid critically high surface temperatures and always apply caulking under a canopy.

Care for good ventilation of your workplace.



Avoid wood with horizontal/flat grain. Preference quarter sawn wood/vertical grains.



Primer & Bondbreaker

Do not use any primer, as this will diminish the adhesion of the product, void the warranty, and may cause staining within the cured caulking. Only use a bond breaker tape when the joint width is greater than its depth (greater than a ratio > 1,3).

The bondbreaker shall be placed at the bottom of the seam to create a parallel 2-side bond. The Bond breaker must be the same size as the joint itself. A second roll of tape, or preferably the tape core of the taperoll, can be used to guide the tape into the seam. Avoid use of a backer rod, as this will not achieve a good, tight seal at the base of the seam. A proper caulk seam must fill the complete base of the joint.

Gluing down planks and panels

The yacht's/vessel's deck must be clean, free of grease and loose particles. The surface should be dry at all time. Always consider the dew point during application.

Application of adhesive

- Apply TLB Flex evenly (approx. 3-5 mm) using a notched trowel, which shall be held 90° angel to the surface
- Ensure a continuous and even adhesive bed without gaps or interruptions
- Minimum adhesive thickness after pressing, for best adhesion minimum: 1.5 mm for TLB Flex and 0.4 mm for TLB POX
- Work in sections according to the open time of the adhesive

Installation

- Position panels or planks within the open skin formation time (**Note!** for TLB FLEX at higher humidity skin formation will be faster then at low humidity)
- Ensure full wetting of the teak underside
- Perform random checks (lifting elements) to verify proper adhesive transfer
- Avoid air pockets, voids or adhesive bridging
- In case of low humidity less then 55 % always when use TLB Flex wet the teak surface with a squished rag

Pressing/Fixing

- Lay down the panels or individual battens from one end/side to the other, to avoid getting trapped air pockets. Following press down evenly over the entire surface, using weights, vacuum or mechanical fixing systems
- Avoid point loads or uneven pressure as it will create voids which following will lead to trapped dew/water pockets and make the system release/fail
- Keep fixings in place for at least 16-48 hours on 1 comp. TLB Flex and 2 comp. TLB POX 8-16 hours, all depended on level of humidity, temperature, pressure technique and system

Critical areas

- Pay special attention to edges, margins and transitions, use the TBJ 30 for joints/beddings between teak and structure
- Ensure continuous full bonding without gaps/air pockets

General recommendations

- Condition teak, adhesive and substrate to ambient temperature before installation.
- For best adhesion and result use teak containing no more then 12 % humidity
- Adjustments are only possible within the open time of the adhesive
- The same procedure generally applies to cork decks

Synthetic teak

- For PVC or synthetic teak, apply Synteak Activator prior to bonding
- Allow to dry approx. 15 minutes (max. 12 hours before bonding)
- For gluing the system, if low humidity less then 55 % always spay a little water dust over the applied adhesive before laying down the panels
- To avoid bubbles in the SynTeak always avoid direct sun for at least 12 hours.

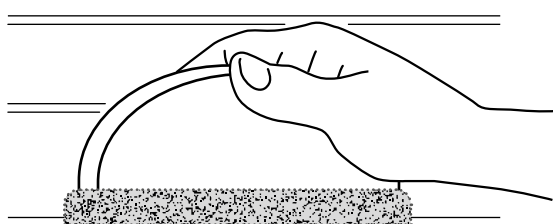
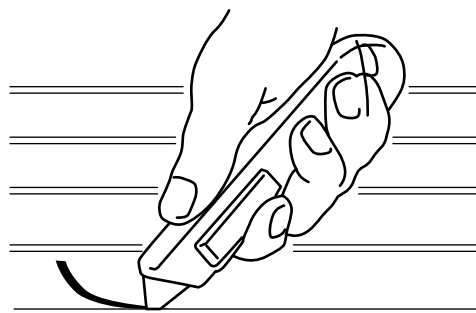


Preperation of old seams

When refitting an old deck, remove old caulking with a very sharp knife and a reefing hook.

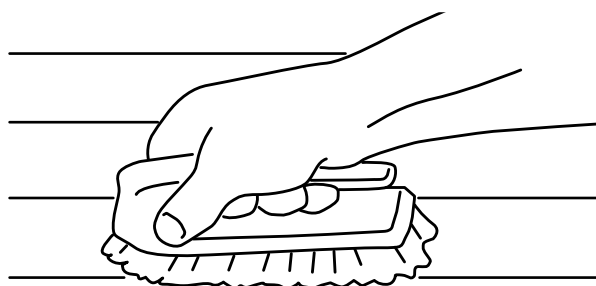
For larger areas, one can use electrical tools like routers and circular saws, carefully avoiding damage to the wood.

Old residue must always be fully removed.

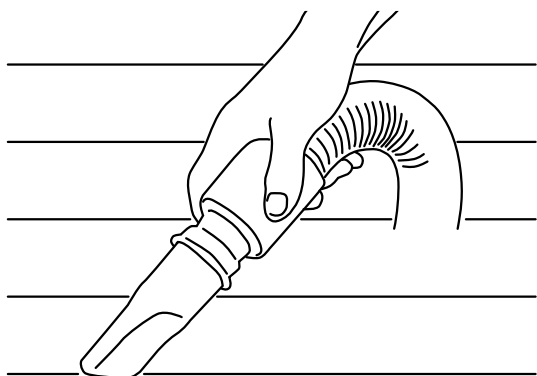


Sanding of the seam walls with 60-80 grit paper on a Seam-Sander or similar tool.

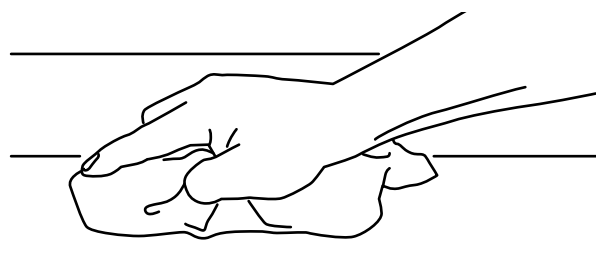
This should fair the seam's surface, rough up remaining mill marks or saw 'polishing' and also remove any wood grain filaments.



Use a brush to loosen debris inside of the old seam.



Thorough cleaning with a vacuum or air blower is a must to remove any sawdust or other contaminants.



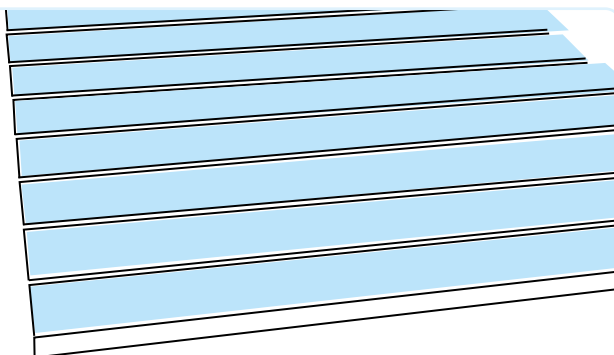
Seams must be carefully cleaned inside with clean cotton rags and oil-free ethanol or acetone.

Never use mineral/white spirits!

Bonding surfaces on both new and remedial joints must be clean, dry and free of dirt, dust and film.

Masking Tape

Avoid using tapestripes on the surface of the teak. If removed too early the jointflanks could be damaged and if removed too late the tape is hard to remove.

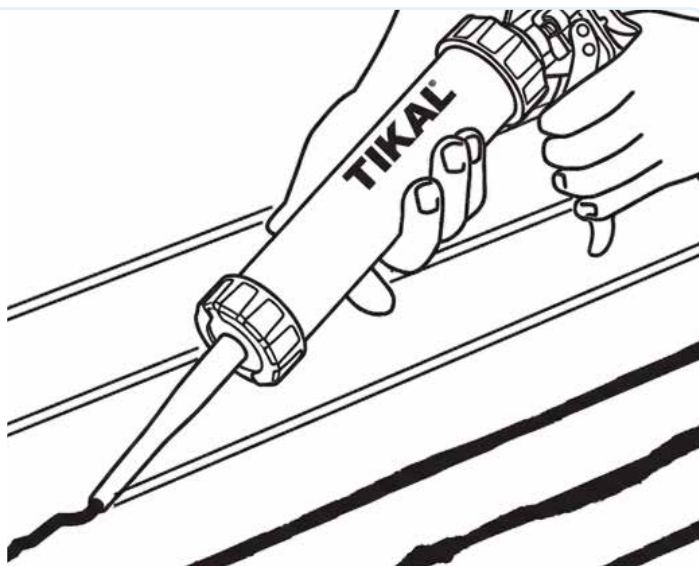


Caulking

Insert 600ml foil into a suitable gun, like the Tikal HQ600 or any other pneumatic or electric type.

For best results, caulk the seams from the bottom to the top of the joint, allowing the caulking to flow upwards until crowning above the top of the seam.

Steadily pull the gun along the seam. Avoid interruptions or changes in direction that may entrap air.

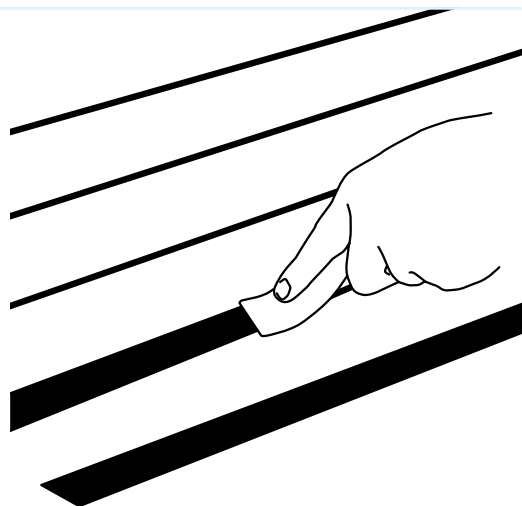


Spooning

Immediately after application, one must Spoon the caulked seams.

Draw a flexible putty knife or a flexible spatula over the seam at a 60° angle to ensure any trapped air bubbles etc. are compressed out. The caulk bead should be proud of the deck to allow approximately 5 % product shrinkage. Work with enough pressure to ensure the caulking completely fills the full joint, but leaves the caulk proud to allow for slight settling.

Once complete, do not disturb the curing process!



Curing and Sanding

After at least 8-10 days of curing the material can be cut back with a very sharp cutter-carpet knife or an electrical oscillator (Fein Multimaster f.e.). Strictly avoid using a blunt knife or chisel. Cut back proud caulking after min. 8 days on black and min. 10 days on grey and white caulking.

Recommended sanding:

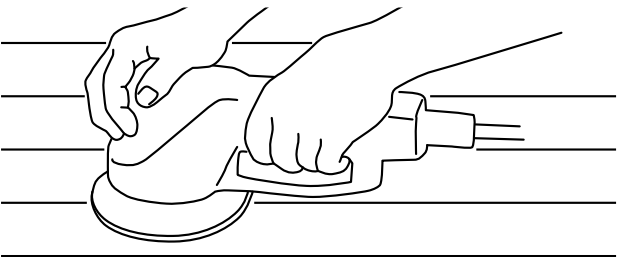
- Black: minimum 8 + 2 days = 10 days
- White/Grey: minimum 10 days + 2 days = 12 days

For a good result leave the caulking to cure as long as possible. Best to sand the caulking after installation. High wood moisture content and air humidity, along with low ambient temperatures,

will all add to the time required for a complete cure. We recommend strongly to start the sanding earliest after 10 days for a full warranty and a very long lasting result. Generally, the caulking cures from the top down at a rate of about 2-3 millimetres per day.

Premature sanding of caulking that is not fully cured could lead to shrinkage, deformation, and 'dragging' or wrinkling of the caulk surface. It may also cause premature seam failure. This must be avoided because uncured caulking will absorb the sanding dust as well as other contaminants, causing discolouration and potential compromising of the seam.

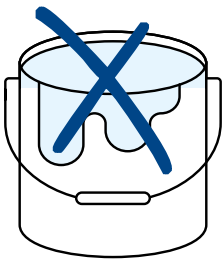
Action	Time	Total
Cut back excess material	8-10 days after caulking	8-10 days
Sanding possible when 20° C / 55 %	2 days + 2 days after caulking	4 days
Recommended start sanding	8 days + 2 days after caulking	10 days
White / Grey	10 days + 2 days after caulking	12 days



Sand the deck by using rotating electric tool such as belt-sander, orbit sanders etc. If using rotating sanders such as orbit sanders and trio etc. on black: start with 40 grit and finish with 80-100 grit, on white/grey: 40-100 grit + final polishing of caulked seams with 120 grit.

Paint & Maintenance

It is not recommended to paint a teakdeck. Most dry paint lacks the flexibility to withstand the typical movements occurring on the wood and joints. This will lead to cracks and an ingress of water beneath the wood. If you choose a flexible paint, ensure it does not contain any acid or solvents. It's not necessary but possible to use a special teakoil. The oil or sealer should not contain kerosene or any kind of petroleum products, as this may cause the caulk to swell and damage the caulking over time.



Teak Cleaner Liquid

Liquid cleaner for teak, cork, and PVC. Well-suited for teak decks with TSCplus and TBJ 30.

- Ready to use
- Tough on dirt – gentle on teak and PVC decks
- Brightens teak and gives it a fresh look
- Environmentally friendly, without harsh chemicals
- MARPOL compliant



Teak Cleaner Powder Scrub

Granular powder cleaner for teak, cork, and PVC. Compatible with TSCplus and TBJ 30, as well as teak.

- Effective abrasive cleaning
- Tough on dirt – gentle on teak and PVC decks
- Mix as needed
- Space-saving powder form
- Brightens teak and gives it a fresh look
- Environmentally friendly, without harsh chemicals
- MARPOL compliant



Technical data

Chem. Base	Citric with surfactants for teak
Density	1.05 g/ml
Application temperature	5 °C to 30 °C
Storage	3 years
Available sizes	1 and 5 liter

Technical data

Chem. Base	Carbonate, soap and surfactants for teak
Application temperature	5 °C to 30 °C
Storage	5 years
Available size	10 kg

Application

Teak Cleaner Liquid

Pre-wet the teak deck thoroughly with fresh water. Apply Teak Cleaner Liquid evenly to the wet surface using a sponge, brush or suitable low-pressure spray equipment.

Allow the product to dwell for approximately 5-10 minutes. Do not allow the surface to dry during application. Agitate the surface using a soft to medium stiffness brush, or a white pad, working strictly across the grain to remove dirt, grease and deposits. Rinse thoroughly with copious amounts of fresh water to remove all residues. Repeat the application if required for heavily contaminated areas.

Teak Cleaner Powder Scrub

Pre-wet the teak deck thoroughly with fresh water. Evenly distribute Teak Cleaner Powder Scrub in its dry, granular form onto the wet surface.

Work the product into the surface using a soft to medium stiffness brush and additional water, always brushing along the grain. The granular composition provides a controlled abrasive effect, making it particularly effective for removing deeply embedded contamination.



Ensure the surface remains wet throughout the application process. The product gradually dissolves and activates during use. After cleaning, rinse thoroughly with copious amounts of fresh water. Repeat the process if necessary.

Restrictions for application

Do not apply in direct sunlight or on very hot surfaces. Elevated temperatures may cause premature drying and reduce cleaning efficiency. Do not allow the product to dry on the surface. Always keep the treated area wet during the entire cleaning process.

Do not use on untreated sensitive materials such as anodized aluminium or other alkali-sensitive surfaces without prior compatibility testing.

Avoid excessive mechanical abrasion (e.g. hard brushes or across the grain), as this may damage the teak surface. Always work along the grain.

Do not use in temperatures below +5 °C or above +30 °C.

Avoid contact with adjacent surfaces (e.g. painted, varnished or metal parts).

Rinse off in case of accidental exposure.

Test the product on a small, inconspicuous area prior to full application to ensure compatibility with the substrate.

Not suitable for use on sealed or coated wood surfaces (e.g. varnished or oiled teak).



Mylin IV - Refit



Luna - Refit



Al Salamah - Refit



Sailing Yacht A - Newbuild



Skat - Refit



Velsheda - Refit



Vantage - Refit



Vava II - Refit



Svea - Refit



Virginia - Refit



Alexander - Refit



Rainbow - Refit

Tikalflex TSCplus* can be found on all vessels referenced above.

TLB Flex was used to adhere the wood "Al Salamah" and to the substrate decks of MY "Alexander".

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