

Premium Star



For you to create



Fundermax

[www.fundermax.com](http://www.fundermax.com)

Think in new dimensions





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## **Fundermax**

From furniture and facades to interior design, Fundermax works at the interface of ideas and materials. Today the company – which has a proud history spanning 130 years – stands as a global market leader in compact boards and producer of high quality materials using wood and laminates. Our sustained success has been based on prime quality, imaginative design, diversity and sustainable production. Our products are Made in Austria and exude a love of the natural resources of wood, creativity and inventiveness.

- modern production facilities in Austria and Norway
- approx. 1,400 employees
- annual turnover of €430 million
- part of Constantia Industries AG
- Staatspreis Unternehmensqualität (2018)



**As a forward-thinking company, we are focused on bringing you the very latest trends as they emerge.**

With our newly developed 'Premium Star' product, we are setting new quality standards. Total shine with reflective effects (Supergloss) and a super matt surface with anti-fingerprint-effect (Aptico) makes it possible to think in new dimensions.

Available in 12 exclusive colours.

# 1 Surfaces

**„Interior design needs beauty  
in its purest form.“**

(Philippa I., Interior Designer)







## Experience Aptico

Matt perfection with anti-fingerprint-effect makes it possible to think in new dimensions.

<b>Product:</b>	Premium Star
<b>Surface:</b>	Aptico (AP)
<b>Size:</b>	2,800 mm x 2,070 mm
<b>Thickness:</b>	10.0 – 28.0 mm

### Material description

Decorative, UV lacquered wood-based material.  
Support panel version Homogen P2 SL.

### Application

Decorative wood-based panels for indoor use.



## Aptico Premium Star Surface Properties

Properties	Test method	Value
Surface Coating		UV Lacquer
Colour deviation compared to test sample / reference decor	EN 14323:2017 5.8	Level 4: slight deviation in colour and / or surface
Gloss Level	EN 13722:2004	Measurement angle 85°: < 15 GE (± 3 GE against master/reference)
Surface appearance	EN 438-2 Chap. 4	According to EN 438-3 Chap. 6.2.5.2 Dirt, stains and similar surface defects: max. 1.0 mm <sup>2</sup> /m <sup>2</sup> Fibres, hair and scratches: maximum 10 mm/m <sup>2</sup>

Properties	Test method	Value
<b>Climate conditions</b>		
Humid climate/humidity resistance	AMK-MB-005:07/2007	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material)
Climate change resistance	DIN 68930:2009 3.3.1. 3 cycles	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material)
	AMK-MB-005:07/2007 20 cycles	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material, colour change*)
Temperature resistance	AMK-MB-001:07/2007	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material, colour change*)
Lightfastness	DIN EN 15187	Bluescale 6: Greyscale ≥ 4
Laquer adhesion (Cross-cut test)	ISO 2409:2013	GT ≤ 1

\* Colour measurement after 7 days of light storage of the samples in a room climate.

### Furniture surface behaviour according to DIN 68930:2009 3.2.2. at:

Chemical stress	DIN EN 12720	DIN 68861-1: ≥ 1 C (1 A for selected substances**)
Scratch resistance	DIN EN 15186 Procedure B	DIN 68861-4: 4 C (≥ 2 N) (Assessment with contrast agent according to EN 438-2:2016)
Abrasion resistance	DIN EN 15185	DIN 68861-2: ≥ Klasse 2 E (> 25 revolutions)
Dry heat	DIN EN 12722	DIN 68861-7: 7 C (100 °C, Grad 5)
Wet heat	DIN EN 12721	DIN 68861-8: 8 B (75 °C, Grad 5)

\*\* Test substances: Acetone, ethyl-butyl acetate, disinfectants, cleaning agents, 10% acetic acid, 10% citric acid, 48% ethylalcohol, red wine, cola.

## Aptico Dimensions

Properties	Test method	Tolerance	Value	Unit
Length		± 2,0	2800	mm
Width		± 2,0	2070	mm
Blank cuts		± 2,0		mm
Thickness		± 0,3	10 - 28	mm
Warping	EN 14323	± 2,0		mm/m



## Experience Supergloss

Total shine with reflective effects makes it possible to think in new dimensions.

<b>Product:</b>	Premium Star
<b>Surface:</b>	Supergloss (SG)
<b>Size:</b>	2,800 mm x 2,070 mm
<b>Thickness:</b>	10.0 - 28.0 mm

### Material description

Decorative, UV lacquered wood-based material.  
Support panel MDF SL.

### Application

Decorative wood-based panels for indoor use.





## Supergloss Premium Star Surface Properties

Properties	Test method	Value
Surface Coating		UV Lacquer
Colour deviation compared to test sample / reference decor	EN 14323:2017 5.8	Level 4: slight deviation in colour and / or surface
Gloss Level	EN 13722:2004	Measuring angle 20°: ≥ 83 GE (± 3 GE against master/reference)
Surface appearance	EN 438-2 Chap. 4	According to EN 438-3 Chap. 6.2.5.2 Dirt, stains and similar surface defects: max. 1,0 mm <sup>2</sup> /m <sup>2</sup> Fibres, hair and scratches: maximum 10 mm/m <sup>2</sup>

Properties	Test method	Value
<b>Climate conditions</b>		
Humid climate/humidity resistance	AMK-MB-005:07/2007	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material) DOI as per Elcometer ≥ 60
Climate change resistance	DIN 68930:2009 3.3.1. 3 cycles	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material) DOI as per Elcometer ≥ 99
	AMK-MB-005:07/2007 20 cycles	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material, colour change*) DOI as per Elcometer ≥ 70
Temperature resistance	AMK-MB-001:07/2007	Optical: No visible surface changes (cracks, bubbles, delamination of the coating material, colour change*) DOI as per Elcometer ≥ 85
Lightfastness	DIN EN 15187	Bluescale 6: Greyscale ≥ 4
Laquer adhesion (Cross-cut test)	ISO 2409:2013	GT ≤ 1

\* Colour measurement after 7 days of light storage of the samples in a room climate.

### Furniture surface behaviour according to DIN 68930:2009 3.2.2. at:

Chemical stress	DIN EN 12720	DIN 68861-1: ≥ 1 C (1 A for selected substances**)
Scratch resistance	DIN EN 15186 Procedure B	DIN 68861-4: 4 C (≥ 2,0 N) (Assessment with contrast agent according to EN 438-2:2016)
Abrasion resistance	DIN EN 15185	DIN 68861-2: ≥ Klasse 2 E (> 25 revolutions)
Dry heat	DIN EN 12722	DIN 68861-7: 7 C (100 °C, Grad 5)
Wet heat	DIN EN 12721	DIN 68861-8: 8 B (75 °C, Grad 5)

\*\* Test substances: Acetone, ethyl-butyl acetate, disinfectants, cleaning agents, 10% acetic acid, 10% citric acid, 48% ethylalcohol, red wine, cola.

## Supergloss Dimensions

Properties	Test method	Tolerance	Value	Unit
Length		± 2,0	2800	mm
Width		± 2,0	2070	mm
Blank cuts		± 2,0		mm
Thickness		± 0,3	10 - 28	mm
Warping	EN 14323	± 2,0		mm/m

## 2 Decors

**„I want my work to grab the attention in the truest sense.“**

(Sophie B., design student)



# Aptico Decors





# Supergloss Decors



# 3 Processing Guidelines

Premium Star & Star Favorit

**„Good materials must  
be processed properly“**

(Jonas G., processor)



When processing Premium Star with Aptico and Supergloss surfaces as well as Star Favorit, please ensure to follow the guide lines for the selection of tooth feed ( $f_z$ ) and feed speed ( $v_f$ ) set out in the table. These parameters are related to the tool diameter (D), number of teeth (z), rotational speed (n) and the feed speed ( $v_f$ ) of the processing machine. The correct choice of each ensures a successful result.

The following formulas apply to the calculation of cutting, tooth and feed speeds:

#### $v_c$ – Cutting speed [m/s]

$$v_c = D \cdot \pi \cdot n / 60 \cdot 1000$$

D – Tool diameter [mm]

n – Rotational Speed of Tool [ $\text{min}^{-1}$ ]

#### $f_z$ – Tooth feed [mm]

$$f_z = v_f \cdot 1000 / n \cdot z$$

$v_f$  – Feed speed [m/min]

n – Rotational Speed of Tool [ $\text{min}^{-1}$ ]

z – Number of teeth

#### $v_f$ – Feed speed [m/min]

$$v_f = f_z \cdot n \cdot z / 1000$$

$f_z$  – Tooth feed [mm]

n – Rotational Speed of Tool [ $\text{min}^{-1}$ ]

z – Number of teeth

Machining method	Tooth feed $f_z$ [mm]
Panel saw	0.06 – 0.07
Panel sizing	0.06 – 0.07
Milling on continuous systems	0.50 – 0.70
Milling on stationary machines	0.20 – 0.34

Machining method	Feed speed $v_f$ [mm]
Dowel drilling*	1.5 – 3.0
Through-hole drilling*	1.0 – 2.0
Drilling for fittings*	1.3 – 2.5

\* for MDF reduce values by 25–30%

#### Tool info and cutting material

Tools with new or newly repaired cutting edges are recommended for optimum edge quality. In principle, both tools with hard-cutting (HW) as well as diamond cutting (DP diamond polycrystalline) blades can be used. To ensure the longest possible life time for the tool, we recommend using diamond blades.

When processing Supergloss high gloss surfaces in particular, we recommend using new or newly refurbished cutting tools to achieve optimum edge quality. Ensure the highest possible accuracy when sharpening or eroding the tools.

#### Tool life-span

The life-span of a tool depends on a large number of influencing factors, therefore no statements or rights can be derived within the framework of this processing guideline. All suggestions, machining parameter and references, are simply that – forming guidelines only. Machine or process-related issues can lead to changing circumstances. An optimal setup of machine, tool and materials, as well as a clear understanding of customer-specific requirements can only be achieved with a Leitz or Leuco application engineer on site. The values given are recommendations, depending on the equipment and age of the machinery, changes can be made, in the parameters, to obtain better results.

Due to the superior quality and special surface finish of Fundermax Premium Star with Aptico and Supergloss surfaces, a reduction of tool lifespan is to be expected compared to conventionally coated Fundermax panels (Star Favorit), (particularly with reference to the pre-mentioned influencing factors).



## Cutting

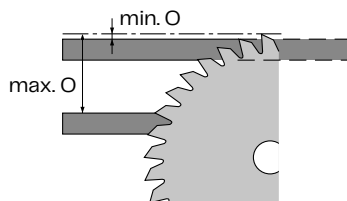
**Please note:**

- Visible side (decorative side with foil) facing up
- Pay attention to the correct saw blade overhang
- Adapt speed and number of teeth to the feed speed
- Use a saw with a scoring unit in order to ensure clean cuts on the underside of the panel

Depending on the overhang of the saw blade, the entrance and exit angles can affect the quality of the cutting edge. If the upper cutting edge becomes untidy, the saw blade must be set higher. If the same occurs on the underside, the saw blade should be lowered. For the best results it should be set to the correct height.

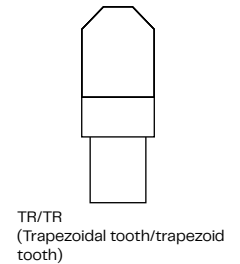
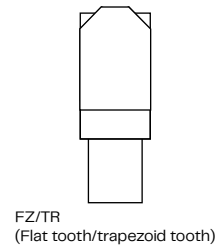
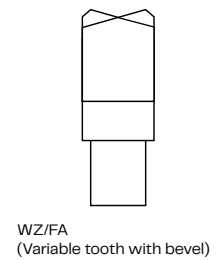
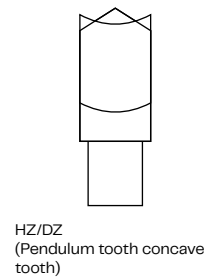
**Sliding table saws require the following saw blade overhangs (O):**

We recommend saw blades with a high number of teeth are generally recommended for good processing quality. For circular saws, the recommended cutting speed is 60 – 90 m/s. The maximum permissible speed of the tools vc has to be taken into account. A feed per tooth (fz) of 0.07–0.11 mm should be selected.

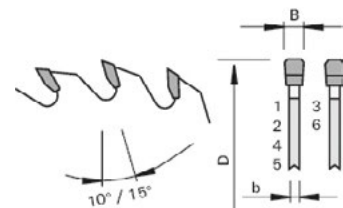


Producer	Tool diameter D [mm]	Overhangs O [mm]
Leitz	300 – 400	ca. 10
Leuco	250	ca. 15 – 20
Leuco	300	ca. 15 – 25
Leuco	400	ca. 25 – 30

**Recommended saw tooth shapes Leitz**



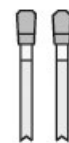
**Recommended saw tooth shapes Leuco**



Q-Cut \*G6\*



Q-Cut \*K\* (TR-F K)



TR-F-FA

### Sliding table saws

Sliding table saws with a hollow/pointed saw tooth shape (HZ/DZ) provide the best cutting results for Leitz products. This tooth shape is also recommended when scoring saw blades are unavailable. When using Leuco products, HW circular saw blades with the saw tooth shape TR-F K are

particularly suitable. Very good cutting results can also be achieved with the HW circular saw blade "solid surface" with a 0° rake angle.

Producer	Dimensions D x SB x Bo [mm]	Tooth shape	Number of teeth z	rotational speed n [min <sup>-1</sup> ]	feed speed v <sub>f</sub> [m/min]	ID-No.
Leitz	303 x 3.2 x 30	HZ/DZ	68	4,000	Manual feed	161003
Leitz	400 x 4.4 x 30	WZ/FA	72	4,500	10	65346
Leuco	350 x 4.0 x 30	TR-F K	72	5,000	Manual feed	192974
Leuco	303 x 3.2 x 30	TR-F-FA	84	5,000	Manual feed	189531

Further dimensions available by request

### Panel dividing saw

Very good cutting results are achieved with the new panel dividing saw blades from the "Q-Cut" program (Q-Cut G6). Good results can also be achieved with the "Q-Cut K" family of panel dividing circular saws. The

recommended pitch (fz) per tooth is in the range of 0.06 – 0.07 mm. Good edges on both sides can only be achieved by using a suitable scorer.

Producer	Dimensions D x SB x Bo [mm]	Tooth shape	Number of teeth z	rotational speed n [min <sup>-1</sup> ]	Overhangs O [mm]	ID-No.
Leuco	450 x 4.0 x 60	TR-F K	72	3,600	approx. 25	192978
Leuco	450 x 4.8 x 60	G6	72	3,600	approx. 25	192883

### Diameter circular saw blade

### Saw blade overhangs

D = 250 mm	approx. 15 – 20 mm
D = 300 mm	approx. 15 – 20 mm
D = 350 mm	approx. 18 – 28 mm
D = 400 mm	approx. 25 – 30 mm
D = 450 mm	approx. 25 – 30 mm

### Joint milling on milling machines/ Continuous Flow Systems

In order to create chip-free and seamless edges on the top layer of the panel, joining tools with a reciprocal axis angle should be used. For industrial production we recommend diamond cutting heads with an axis angle of  $\geq 43^\circ$  and  $\leq 55^\circ$ . The chip removal should be as small as possible and not exceed 2 mm. To achieve good results it's better to use tools with high concentricity and balancing quality. This can be achieved using centering interfaces such as hydraulic clamping systems, HSK mount or shrink fit systems. In order to achieve the highest possible service life of the cutting edges, it is recommended that only one type of material be processed. When working with manual feeds on table milling machines, only tools marked „MAN“ or „BG test“ may be used.

Additionally, please adhere to the speed range indicated on the tool itself and keep within it for safety reasons. The tools for manual feeding must only be used against the rotation of the milling machine.

The tooth feed (fz) of joining cutters should be set between 0.50 and 0.70 mm. For a perfect cutting result we recommend the following tools, for example:

Producer	Dimensions D x SB x Bo [mm]	Number of teeth z	Name	Axis angle	ID-No.
Leuco	125 x 42,8 x 30	3	DIAREX airFACE	48°	186323
Leuco	125 x 63 x 30	3	SmartJoiner	43°	186055
Leitz	125 x 43 x 30	3	Pro Edge Expert	50°	192251
Leitz	125 x 63 x 30	3	Pro Edge Expert	45°	192250

Further dimensions, diameters, directions and cutting widths available



Leuco DIAREX airFACE



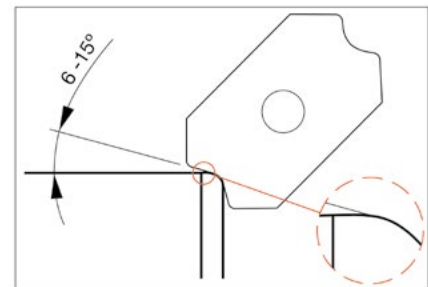
Leuco SmartJoiner



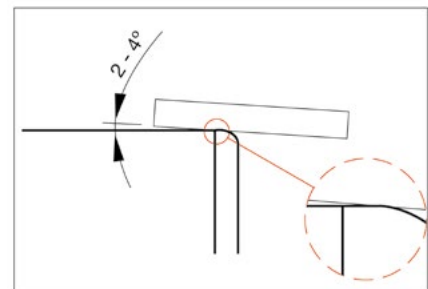
### Edge processing on the edge banding machine

For the processing of edges (which come with a protective film to protect the surface) the use of commercially available separating, cooling and cleaning agents is recommended. The Premium Star and Star Favorit panels can be edged using a laser and polyurethane adhesion – with laser technology delivering the cleanest results. Please consider the pressure of the pressure rollers especially around edges.

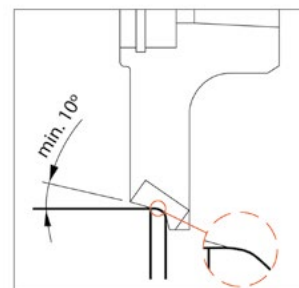
The edges of Premium Star and Star Favorit are best suited to being processed on continuous lines as well as on machining centres. Please note the processing instructions for ABS edges. By using protective films on the upper side of the board (decorative side) as well as the edges, it should also be noted that the profile run-out must be adjusted to the type of scraper blade used, to avoid damaging the protective film.



Profile scraper blades



Flat scraper blades



Radius/Chamfer

### CNC stationary machines

For machining on top, milling machines and machining centres, spiral solid carbide end mills (VHW) or preferably diamond-equipped (DP) top cutters are recommended. For milling work, always use shank cutters with an axis angle between 35° - 48°. It is important to ensure that the cutting edge of the surface is never on a cutting overlap, as this can lead to premature breakouts.

It is important to ensure that the work piece is well tensioned on the machine. If necessary, additional mechanical clamps can be used to support the vacuum pads. We recommend stable and stiff shrink chucks for maximum concentricity, balance and perfect cutting quality. A good processing result can only be achieved with sufficient rigidity of the machine. Stiff gantry machines are ideal.

Leuco p-System groove milling cutters can also be used in particular for very precise grooving and pocket milling. In addition, common HW/VHW and diamond end mills will also work, provided they have corresponding negative axis angles (over 15°). The recommended pitch (fz) per tooth is in the range of 0.20 - 0.34 mm.



Leuco DP Hochleistungsfräser DIAREX



Leuco DP CM Hochleistungsfräser Nesting



Leuco p-System Nut-Schaftfräser CM DP

### Recommended application data

Producer	Number of teeth z	rotational speed n [min <sup>-1</sup> ]	feed speed v <sub>f</sub> [m/min]	Tooth feed f <sub>z</sub>
Leitz	1	20,000 - 24,000	10	-
Leitz	2	20,000 - 24,000	20	-
Leitz	3	20,000 - 24,000	24	-
Leuco	2	18,000 / 24,000	10 / 12	0.20 / 0.20
Leuco	3	18,000 / 24,000	14 / 18	0.27 / 0.27
Leuco	4	18,000	20-22	0.34

### End mills

Producer	Dimensions D x NL x S [mm]	Number of teeth z	Turning direction	Execution	ID-No.
Leitz	20 x 38 x 20	2 + 2	RL	Diamaster Quattro	191241
Leitz	20 x 32 x 20	2 + 2	RL	Diamaster Quattro Edge Expert	191071
Leuco	20 x 28 x 25	2 + 2	RL	DP Hochleistungsfräser DIAREX	186151
Leuco	12 x 22 x 25	3 + 3	RL	DP CM Hochleistungsfräser Nesting	186571
Leuco	10 x 10,4 x 12	1 + 1	RL	p-System Nut-Schaftfräser CM DP	186097

Further dimensions available by request

## Drilling

Carbide-filled or fully carbide (VHW) spiral, dowel and hinge drills are recommended. To ensure higher stability on CNC machining centres it's best to use hinge drills in the main spindle rather than the drilling bar.

When drilling holes for fittings, cylinder-head drills with a cutting pressure-reducing geometry are particularly recommended. On the inlet side, flaring can be reduced or avoided if the drilling parameters are optimised step by step. If possible, select drilling mode S-F-S (slow-fast-slow).

## Hinge Drills

Hinge bores can be drilled with full carbide hinge drills.

The following tools are recommended:

Producer	Execution	Tool diameter D [mm]	Number of teeth z	Rotational speed n [min <sup>-1</sup> ]	Vorschub v <sub>f</sub> [m/min]*	Identnummer
Leitz	HW-massiv-hinge drill Excellent	30	z2/v2	3,000 - 4,500	0.5 - 2.0	37202
Leitz	HW-massiv-hinge drill Excellent	35	z2/v2	3,000 - 4,500	0.5 - 2.0	37214
Leuco	Cylinder Boring Bits HW - „Light“	15	z2	4,500	1.3 - 1.5	184684
Leuco	Cylinder Boring Bits HW - „Light“	35	z2	6,000	1.5 - 2.5	184688

Further dimensions available by request

\* for MDF reduce values by 25-30%



Cylinder Boring Bits HW - „Light“

## Dowel Drill

Producer	Execution	Tool diameter D [mm]	Number of teeth z	Rotational speed n [min <sup>-1</sup> ]	Vorschub v <sub>f</sub> [m/min]*	Identnummer
Leitz	HW-Solid-dowel drill Excellent	5	z2/v2	4,000 - 4.500	0.5 - 1.5	33729
Leitz	HW-Solid-dowel drill Excellent	5	z2/v2	4,000 - 4.500	0.5 - 1.5	33497
Leuco	Dowel Bits HW	5	z2	4,500	1.5 - 2	167194
Leuco	Mosquito Dowel Bits	5	z2	6,000	2.5 - 3	182391

Further dimensions available by request

\* for MDF reduce values by 25-30%



Leuco Mosquito Dowel Bits



Leuco Dowel Bits HW

## Through-hole drill

Producer	Execution	Tool diameter D [mm]	Number of teeth z	Rotational speed n [min <sup>-1</sup> ]	Vorschub v <sub>f</sub> [m/min]*	Identnummer
Leitz	HW-massiv-trough hole drill Excellent	5	z2/v2	4,000 - 4.500	0.5 - 1.0	34019
Leitz	HW-massiv-trough hole drill Excellent	5	z2/v2	4,000 - 4.500	0.5 - 1.0	34101
Leuco	Through-Hole Bits HW	5	z2	4,500	1.0 - 1.5	176254
Leuco	Mosquito Through-Hole Bits	5	z2	6,000	1.5 - 2.0	183152

Further dimensions available by request

\* for MDF reduce values by 25-30%



Leuco Mosquito Through-Hole Bits



Leuco Through-Hole Bits HW



## Furniture fittings

### Handle Mounting

When mounting handles or knobs, please ensure that the pressure of the supporting surfaces are evenly distributed, in order to avoid pressure points on the surface. The screws should always be tightened by hand or with a torque screwdriver. In both cases, we recommend a torque of not more than 1.5 Nm, for small or thin grips reduce torque further. The use of a cordless screwdriver is not recommended for this application – the over tightening of screws can lead to optical imperfections on the surface.

In particular with delicate handle types, care must be taken to ensure that the narrow contact surfaces sit flat on the surface of the panel and are free of sharp edges, burrs or score marks. An exactly vertical through-hole in the panel with smooth edges is mandatory for a perfect end result.

The following tool can be recommended for mounting handles:

### Fittings

When drilling blind holes into the panels, a sufficient residual wall thickness ( $\geq 2$  mm) must be maintained to avoid imperfections and marks on the visible surface. When mounting the fitting, all screws must be tightened uniformly by hand. The use of screwless fitting systems is also very useful.

Producer	Execution	Torque range [Nm]	measurement accuracy [%]	ID-No.
Wera	7440 Torque Screwdriver	0.3 - 3.0	± 6	05074700001



Wera Torque Screwdriver

## Care Instructions

### General instructions for care

To maintain the structure of the surface, always clean with a soft cloth or a non-abrasive sponge. To prevent smears, the area to be cleaned should be wiped dry afterwards using a soft, dry cloth or paper towel.

To avoid spoiling the surface finish, do not use dirt erasers, micro-fibre cloths or similar. In the case of stubborn stains in particular, cleaning agents rather than mechanical means must be used to remove soiling from the deep structure.

Spillages of substances or liquids (tea, coffee, etc.) must be quickly removed as long exposure times can impair the relevant colour and surface structure.

### Slight contamination

A soft, non-abrasive sponge, cloth or chamois leather and warm water are recommended for the removal of light soiling; a little detergent may be added as required.

Examples of light soiling:

Dust, soap residue, coffee, fruit juice, etc.

### Normal contamination/pollutants

Same procedure as for light soiling, except conventional household cleaning agents without abrasive additives are also used. Glass cleaner, soft soap-water solution (1:3) or diluted vinegar are also suitable for removing many stains. Please note that cloths should be changed regularly in order to remove rather than spread dirt.

Examples of normal soiling:

Fat, oil, limescale deposits, pencil marks, adhesive residue, etc.

### Stubborn soiling

The procedure is the same as that for light soiling, although organic solvents such as acetone, nail varnish remover, spirit, etc. can also be used for cleaning (test first on an unobtrusive area). Please be sure to change cloths used to remove dirt regularly, and to perform final cleaning in order to neutralise solvents.

Examples of stubborn soiling:

Silicone, permanent markers, nail varnish, lipstick, etc.

### Final cleaning

Always use water to remove cleaning agents completely, thereby preventing clouding and smears. Then rinse with clean, warm water. Use an absorbent cloth or paper towel (kitchen roll) to wipe the surface dry.

### These methods of cleaning should not be used:

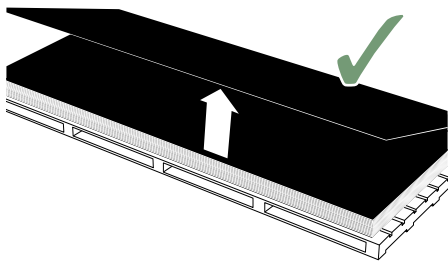
- Detergents with a high acid or salt-content
- Steam cleaners
- Cleaning with: microfibre cloths, steel wool, cleaning sponges with scratchy surfaces, polishing agents, bleaching agents, furniture polishes, abrasive chemicals such as ammonia, chloroform, etc.

## Handling of Premium Star & Star Favorit

### Transport and handling

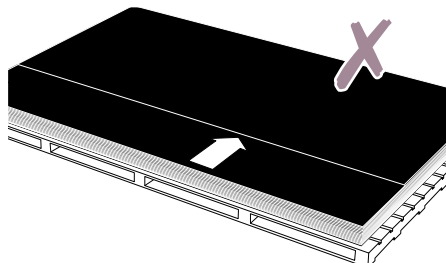
Care must be taken to avoid damaging the high-quality edges and surface of the material. Despite the excellent strength of the surface and the protective transport film, the overall stacking weight of Premium Star and Star Favorit can cause potential damage. It's essential, therefore, to avoid dirt and other contaminants between the panels.

Fundermax Premium Star and Star Favorit panels must be secured during transportation to avoid slippage. When loading and unloading, the panels should always be lifted, if necessary with AIDS such as a suction trolley or other similar devices. Do not pull or push the panels across the edge.



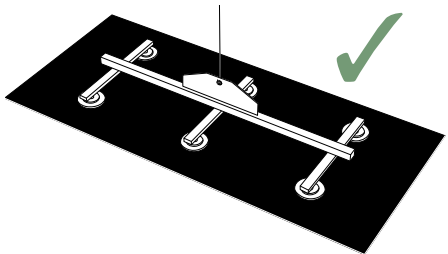
Always lift the panel

Fig. 1



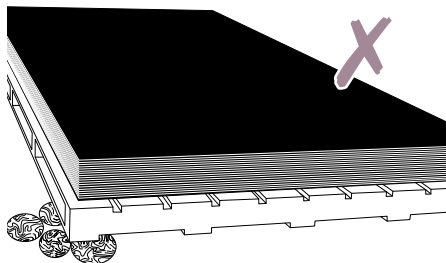
Do not slide the panel from the stack

Fig. 2



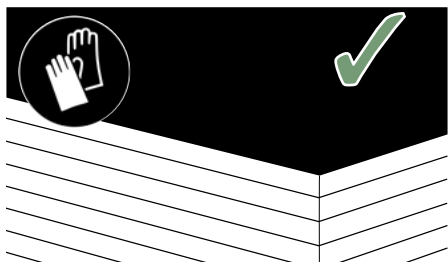
Use lifting system for large-sized panels

Fig. 3



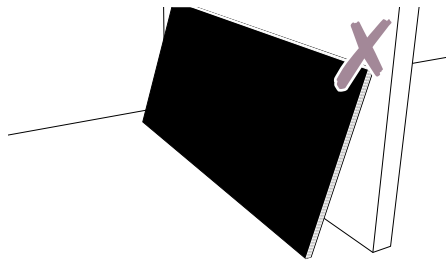
Always place the panels on a flat surface

Fig. 4



Caution: sharp edges!

Fig. 5



Do not lean the panels upright

Fig. 6

**Information on the storage capability of the protective film**

The surface protection film must be removed within 6 months of application (noted by the Fundermax production date.) Products, which are covered in film, must not be stored in direct sunlight. Under certain conditions, increased adhesion may occur during storage. For this reason, it may take a greater amount of force to remove the film. This has no effect on the quality of the product and does not constitute a reason for complaint. If the above instructions are not followed, adhesive residues from the film may remain on the surface of the panel.

**Storage and Air Conditioning**

Fundermax Premium Star and Star Favorit panels are stacked horizontally on tarpaulins, stable bearing and production boards. The goods must be fully supported and it is absolutely imperative that there is no dirt or other contaminants between the panels.

Also pay attention to clean storage and stacking surfaces of the panel parts : during the entire semi-part production and final assembly process. The cover sheets must always remain on top of the stack. The same rules apply to stacks which have been cut to measure. Improper storage may cause permanent deformations or damage to the surface of the panels.

Whole panels should be stacked on pallets. If these are unavailable, the use of at least 4 stacking timbers (80x80mm) is recommended. The timbers are to be spaced evenly under a  $\geq 10$ mm thick storage panel.

Fundermax Premium Star and Star Favorit panels should be stored in closed rooms under normal climatic conditions, at a temperature of around 15 °c – 25 °c and a maximum humidity of 50%–65%. Different climatic conditions on the two panel surfaces must be avoided. Before mounting, the panels must be acclimatised adequately to ambient condition to avoid swelling of the edges.

**Applications**

Premium Star, Star Favorit and MMC (matt micro coated boards) are primarily used for vertical decorative applications in indoor areas. This product is not recommended for horizontal applications with load requirements.

Star Favorit Superfront is also suitable for horizontal applications.



## 4 Delivery program

\* available from 1 pallet

Premium Star: double-sided variant with AP/AP or SG/SG possible on request.

Colour deviations may occur between the different carrier materials!

			Product	Premium Star			
			Size (mm)	2,800 x 2,070			
			Thickness (mm)	19.0	19.3	10.0; 12.0; 16.0; 18.0; 22.0 and 25.0	10.3; 12.3; 16.3; 18.3; 22.3 and 25.3
			Core	AP/FH	SG/SM	AP/FH	SG/SM
Decortype	Decor no.	Nearest NCS Code	Surface				
U	L003 Clara White	S 0502-R50B		●	●	○*	○*
U	L006 Aspen White	S 0300-N		●	●	○*	○*
U	L007 Raven Black	S 9000-N		●	●	○*	○*
U	L009 Cloud Grey	S 7502-R		●	●	○*	○*
U	L011 Amelia Creme	S 0804-Y30R		●	●	○*	○*
U	L013 Nevada Greige	S 4005-Y50R		●	●	○*	○*
U	L022 Darwin Grey	S 1500-N		●	●	○*	○*
U	L023 Dusk White	S 0502-G50Y		●	●	○*	○*
U	L024 Toledo Grey	S 5502 -Y		●	●	○*	○*
U	L030 Linen Beige	S 2005-Y50R		●	●	○*	○*
U	L031 Cosmo Grey	S 8000-N		●	●	○*	○*
U	L032 City Grey	S 5000-N		●	●	○*	○*

- .. available from stock from 1 piece
- .. available with standard delivery time

### Decortype

U = Uni

### ABS edges

ABS edges are offered by our trading partners. For more information, please contact our sales representatives.



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