

dukta[®]
flexible wood

2023

WE SUPPLY WOOD PERFECTION IN SERIES.



KOLAR
WOOD ELEMENTS

More flexibility with wood

Visual and technical aspects opening New Horizons in Design

With the dukta® design panel we provide an additional ecological product for indoor use, creating more value for eyes & ears. dukta® panels provide a visual and audible advantage due to their ductility and transparency as in addition to the visually appealing appearance, dukta® panels are characterized by their sound-absorbing effect.

The dukta® panels are wood-based panels incised on one or two sides. The flexibility of the panels is achieved through a patented carving technique. The panels are particularly suitable for wall and ceiling applications, straight and curved surfaces, as well as for freestanding partition elements and furniture.

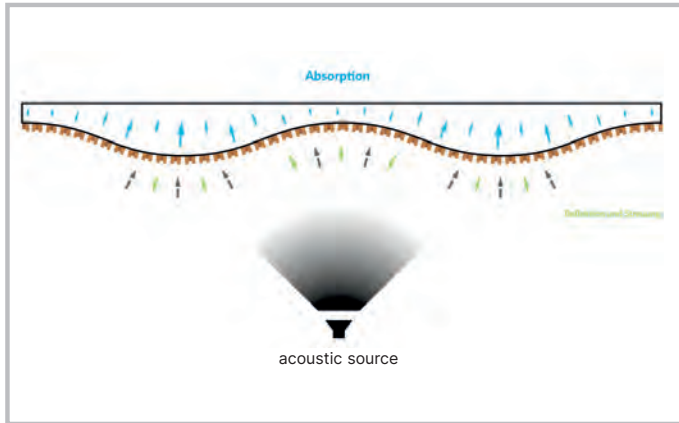




dukta® LINAR in Multiply beech with white fleece backing used to clad the curved wall surfaces in an office building. Project location: Austria

Spatial experience

for the highest demands



dukta® is suitable for use in acoustically sensitive rooms such as recording studios, cinemas, concert halls, restaurants, foyers, teaching rooms etc.

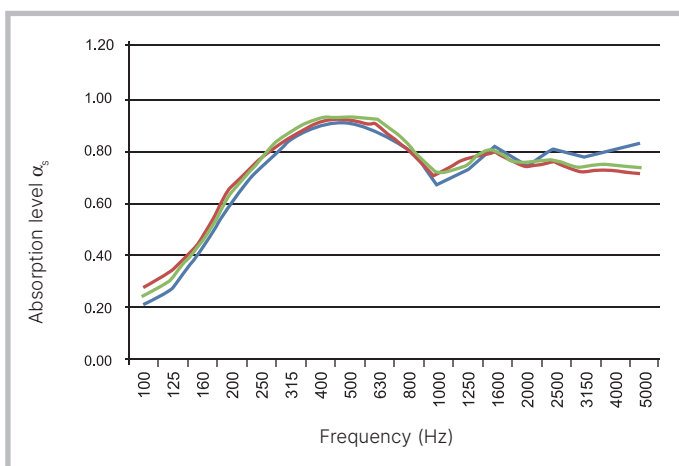
Measurements made by EMPA Schweiz (Swiss Federal Laboratories for Materials Science and Technology) confirm the high absorption properties. In addition, the sound diffusion can be controlled by corrugated mounted panels.

Due to the wave-shaped geometry of the panels, the sound waves come directly from all directions into the openings and are absorbed behind them.

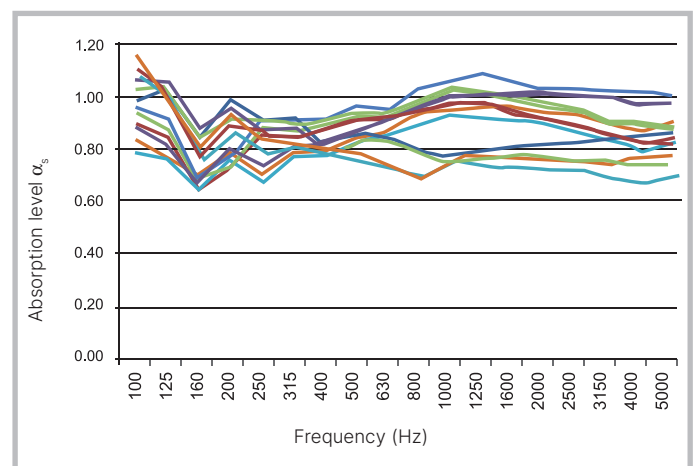
The different distances to the wall lead to short and long waves (high and bass sound) being captured in the same way.

The excellent acoustic properties and fascinating aesthetic enable you to create spatial experiences to the highest standards.

Flat Mounting



Corrugated Mounting

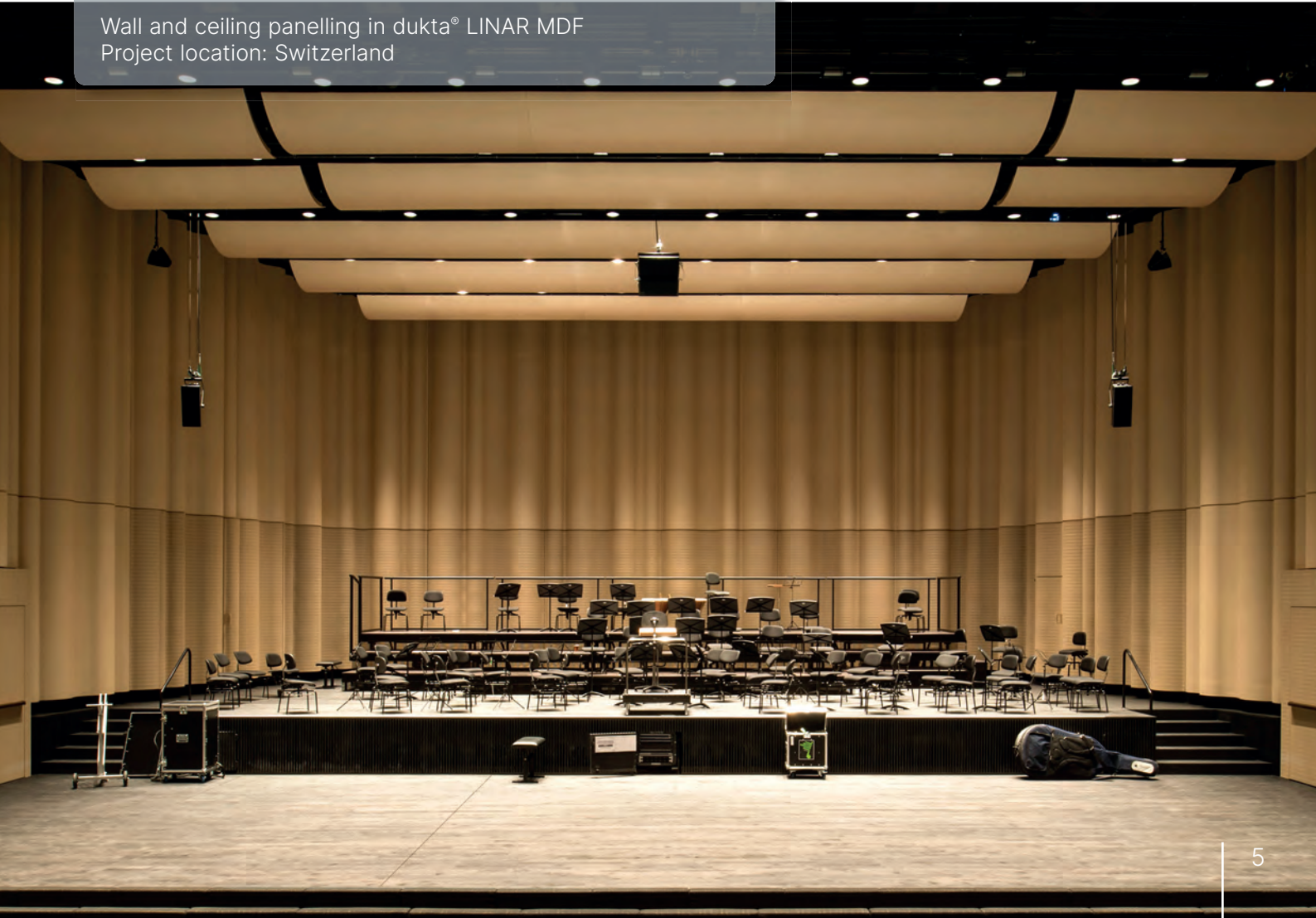


dukta® corrugated acoustic walls and ceilings achieve such high sound absorption values across all frequencies. Other products only do this in specific frequency ranges.



Wall cladding and ceiling panels in dukta® FOLI MDF natural
Project location: Bielsko Biala, Poland

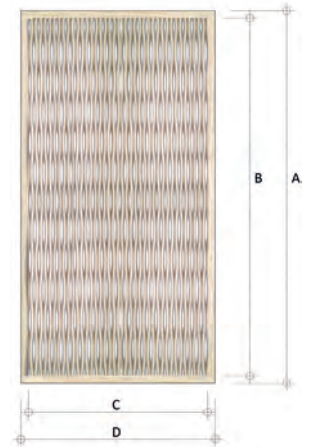
Wall and ceiling panelling in dukta® LINAR MDF
Project location: Switzerland



dukta[®] Product Information

Standard panel dimensions

| (tolerance +/- 0.5 cm) | panel size (AxD) in cm | VPM (m ²) | usable area (BxC) in cm | usable area in m ² / panel |
|---|------------------------|-----------------------|-------------------------|---------------------------------------|
| JANUS (3 layered panel spruce or MDF natural) | 250 × 102 | 2.55 | 237 × 97 | 2.29 |
| LINAR (MDF natural) | 250 × 125 | 3.125 | 235 × 120 | 2.82 |
| in MDF Color | 244 × 125 | 3.05 | 228 × 120 | 2.74 |
| SONAR (MDF natural) | 250 × 125 | 3.125 | 232 × 120 | 2.78 |
| in MDF Color | 244 × 125 | 3.05 | 232 × 120 | 2.78 |
| FOLI (MDF natural) | 250 × 125 | 3.125 | 233 × 116 | 2.70 |
| in MDF Color | 244 × 125 | 3.05 | 227 × 116 | 2.65 |



The **incision** always follows the length and the direction of the wood. Due to transportation, each panel has a non-incised edge.

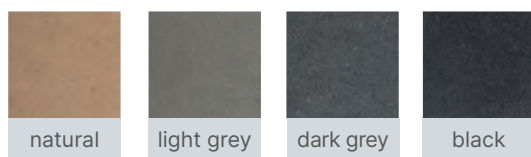
Surface: Raw (Multitplex beech and 3-layered-panel spruce: polished K60)

panel properties

| | 3-layer panel Spruce | | MDF natur | | MDF Color* | | Airflow rate | bending radius |
|-------|----------------------|-------------------|-----------|-------------------|------------|-------------------|--------------|----------------|
| | Strength | kg/m ² | Strength | kg/m ² | Strength | kg/m ² | | |
| JANUS | 27 mm | 7 | 25 mm | 10.5 | | | ca. 33% | ≥ 100 mm |
| LINAR | | | 8 mm | 4 | 8 mm | 5 | ca. 26% | ≥ 120 mm |
| SONAR | | | 8 mm | 4 | 8 mm | 5 | ca. 26% | ≥ 150 mm |
| FOLI | | | 8 mm | 5 | 8 mm | 6 | ca. 13% | ≥ 230 mm |

The **bending radius** depends on the incision type, material and panel thickness.

STANDARD MDF-COLOURS



Material Properties: Temperature resistance and emission values correspond to the standard values of the wood materials used such as solid wood spruce AB/B AW100, MDF-panel.

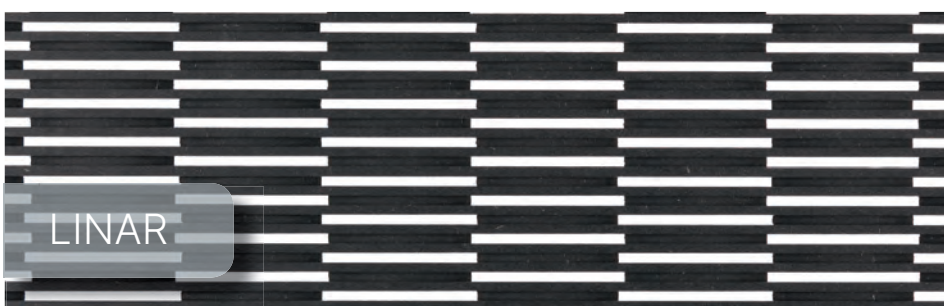
3 layered panel spruce: Homogeneous natural pattern, branches possible, slight pith portions possible, slight color deviations and slight cracks at the edge of the panels. Through milling, stripped or loose branches possible. The wooden panels are glued together and can therefore be integrated in the milling process. Plugged branches are part of the raw material and are permissible.

MDF/MDF Color: The main wood raw material is subject to natural color variations. Different production batches may therefore show slight differences in colour.

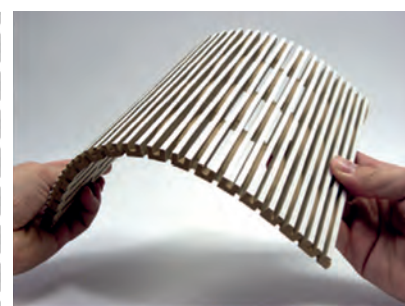
Please note: Conditional minor burns on incised base possible.



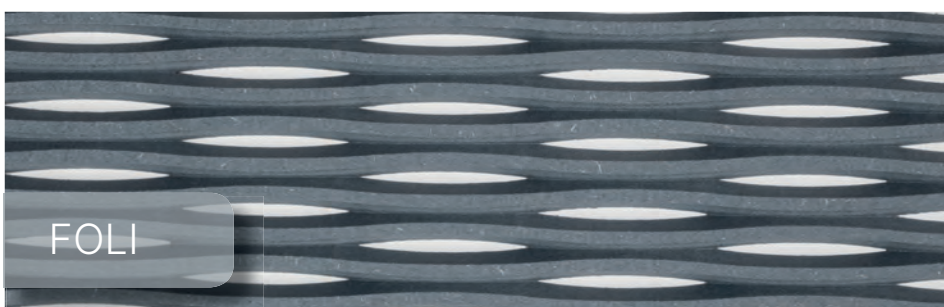
JANUS



LINAR



SONAR



FOLI



CERTIFIED MATERIAL



We can manufacture your dukta® panels from certified panel material on request. Please ask for the current prices.

| available materials | minimum order quantity | usual delivery time |
|---|------------------------|---------------------|
| JANUS 3-layer board spruce (PEFC) | from 20 pieces | 10-12 weeks |
| JANUS MDF natural (PEFC or FSC™) | from 25 pieces | 10-12 weeks |
| LINAR/SONAR/FOLI MDF natural / Color (FSC™) | from 30 pieces | 6-8 weeks |
| LINAR/SONAR/FOLI MDF natural (PEFC) | from 80 pieces | 6-8 weeks |

Flexibility in Use

The wood-based panels incised on one or two sides open up great freedom in design thanks to their accessibility and transparency. They are particularly suitable for sound-absorbing wall and ceiling applications as well as for freestanding partition elements.

Due to the large proportion of open space (up to 33%), the dukta® elements are suitable for concealing room climatic systems and for atmospheric backlighting. Thanks to the greatly enlarged surface area, the incised panels effectively regulate room climates.

dukta® can also be used as a flexible (base) construction material.





dukta® JANUS in MDF lacquered as wall and counter cladding
Project location: Barcelona, Spain

dukta® in shopfitting: dukta® JANUS mdf veneered with oak was used for the design of cash desks in the new Palmers Home stores. Project location: Austria



Impressions

realised projects with dukta®



© MercèGostPhoto



© MercèGostPhoto



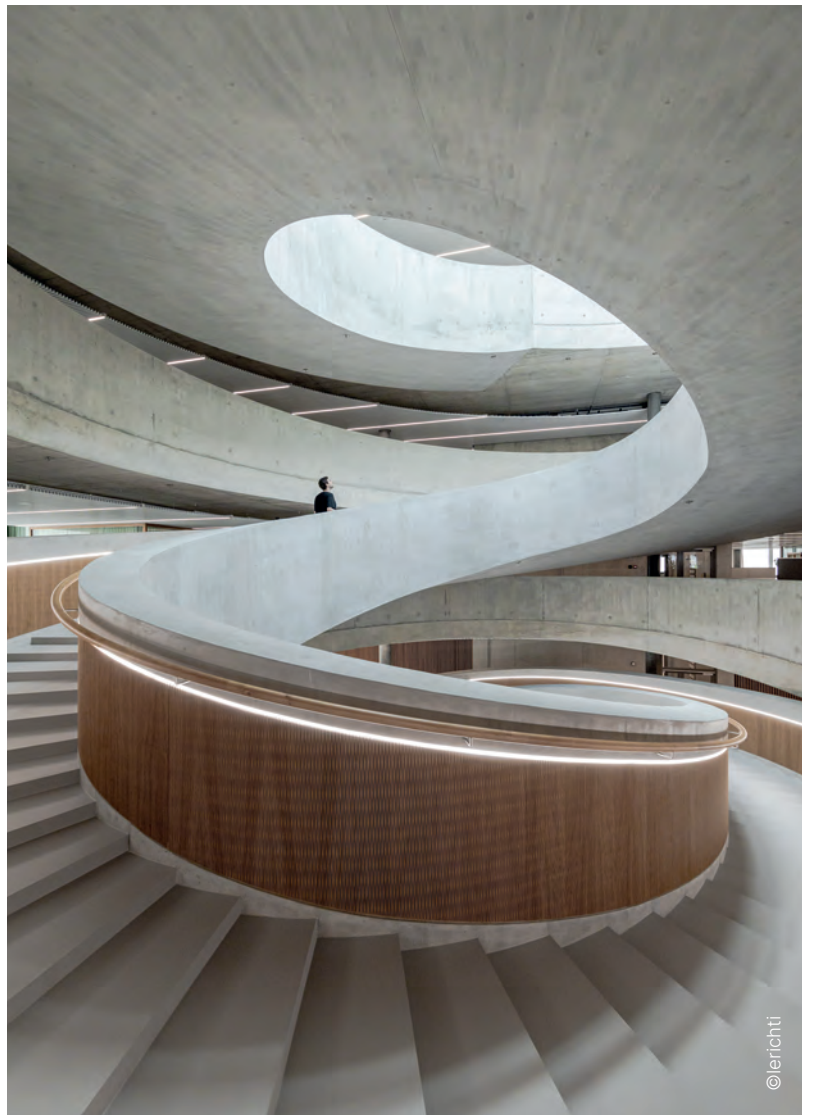




© BLUM



© aitorestevéz



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dukta[®] PRINT

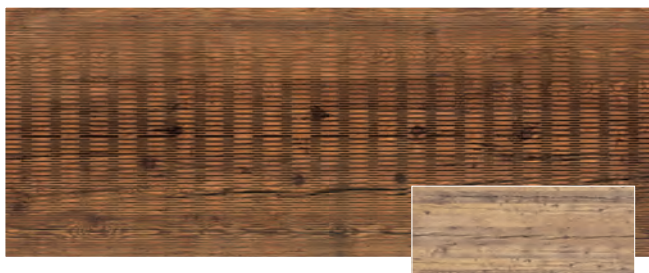
Flexible in design

To expand the use and possibilities in interior design and shopfitting, we have most recently added panels with a digitally printed surface at: dukta[®] PRINT

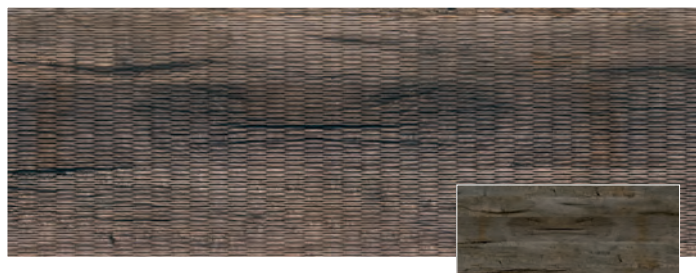
All four dukta[®] types of incision are suitable for printing: Choose from one of our standard designs or send us your idea for an individual print.

Standard-Design:

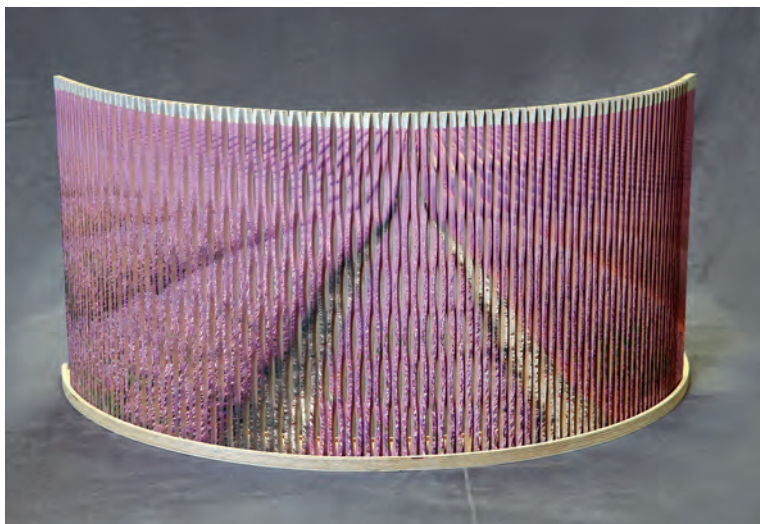
Reclaimed Lumber Brown



Reclaimed Lumber Grey



Individual print:



We also manufacture other designs, according to your wishes. Feel free to contact us!

Minimum order quantity for individual printing is 5 panels per design.

In case of motifs over several dukta[®]-panels, the usable area per panel may be smaller in order to ensure a continuous transition.



dukta® FOLI in MDF Natural and with individual print/design Lavender field.
Use in shopfitting, Energy Club Cheb.



dukta® PRINT SONAR MDF natural raw,
printed with individual design.

dukta[®] veneered



As a high-quality panel for furniture and shopfitting, dukta[®] offers veneered surfaces that offer a decorative composite to interiors.

For the veneered implementation, JANUS with 2 visible sides and LINAR with one visible side are suitable. High quality walnut or veneered oak are to choose from. The dukta[®] panels can be raw or matt lacquered.

Base materials are spruce 3-layered panels or MDF. Especially effective in combination with coloured MDF.



Furniture using dukta[®] LINAR
mdf color black with veneered raw oak



Wooden partition walls and furniture fronts made of dukta® JANUS spruce, walnut veneer.
Project location: Malta



Special finishes

In addition to our standard program, we are continuously developing special solutions for the special requests of our customers.



Lacquered surface

In principle, all dukta® panels can also be ordered with matt lacquered surfaces. Standard colour paints are black (RAL9005) white (RAL9010) and grey (RAL7000) For more colour diversity there is the option of custom-made colored (RAL-) paint.

All coatings are 2-component coatings based on acid-hardening melamine resin and meet the requirements of the standard DIN EN71-Part 3.



MDF Color

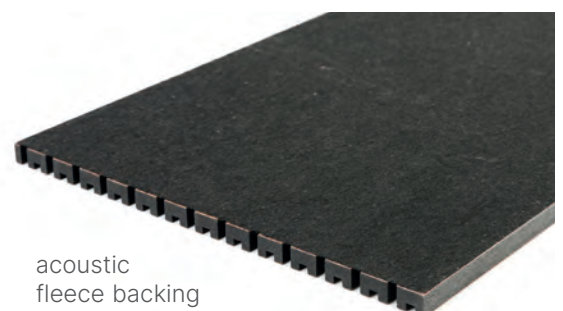
We offer MDF color in black, grey and light grey in our standard program from 5 panels in 8mm (LINAR, FOLI, SONAR) - Delivery time: 4 weeks.

or as a one-sided incision LINAR (back is grooved) in strength 19mm with a minimum order of 5 panels, delivery time: 5 weeks.



Acoustic fleece

Acoustic fleece backing for panels LINAR, SONAR, FOLI is possible in combination with a lacquered surface. Acoustic fleece available in either black or white.



acoustic
fleece backing

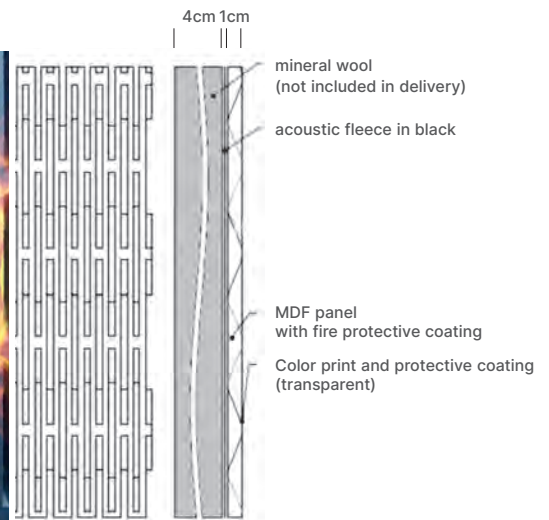
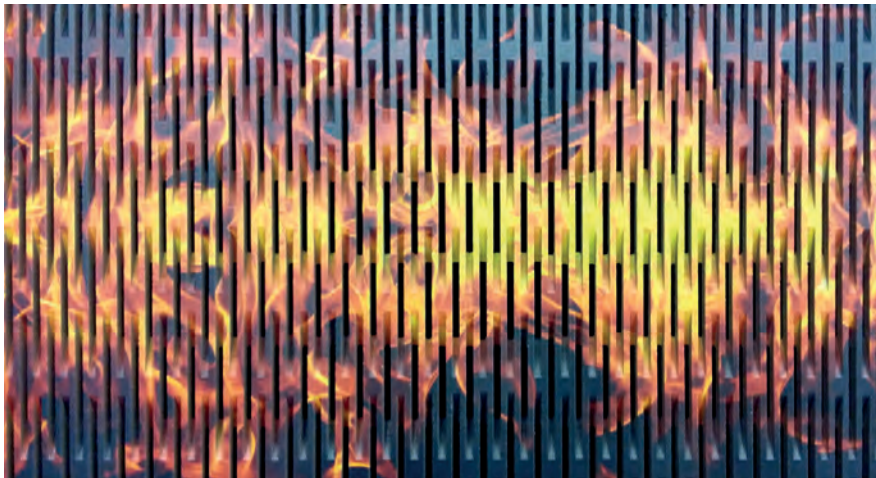


Fire protection with dukta® SONAR PRO

For projects where the use of building materials with classified flammability is necessary, we offer our product "dukta® SONAR PRO". This has been successfully tested for flammability and certified with C-s2-d0 (according to EN standard 13501-1). This classification corresponds to the former DIN B1 standard "flame retardant". The certification of "dukta® SONAR PRO" was carried out in combination with a flame retardant MDF board (B-s2, d0), 10mm thick, with a SONAR milling pattern, which is fire-resistant after milling with a fleece and mineral wool backing *.

* The mineral wool is not included in KOLAR deliveries.

Depending on your requirements, we can also mill other types of dukta® MDF fire-protection panels on request. In addition, fire-protective coatings are also possible. These are neither tested for fire safety nor certified.



Special formats / special materials

- Special formats from 30 m². Max. size 1400×2840 mm, max. usable area 1300×2700 mm (depending on milling pattern and material)
- Special material from 100 m²
- Special milling from 100 m²

All custom-made products are subject to a sample approval. Costs for sample or test milling are offered separately.



e. g. Bamboo
3-layered panel, 7mm

Assembly

LINAR/SONAR/FOLI

Find a short
installation video at
www.fkolar.com



The use of our dukta® panels is possible on walls, in corners and on ceilings. Suitable for straight and curved applications. You can find examples of use on our homepage www.fkolar.com.



Planning



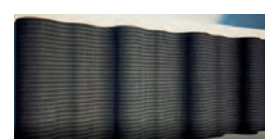
framework



filling (rock wool)



metal moulding ML 40



hang - finished!

For dukta® panels with the milling types **LINAR**, **SONAR** and **FOLI**, we offer the bendable metal moulding (DU.ML40). This is screwed to the wall or a shaped support that dukta® panels are then hung on to. The metal moulding can be easily cut with metal shears.

The solid wooden mounting mouldings from beech are available in a straight version and also as quarter circles with two different radii. The moulding DU.ML07 (spruce raw) can be used both for wall mountings as well as a stationary connecting elements.

dukta®-panel strength: 8 mm

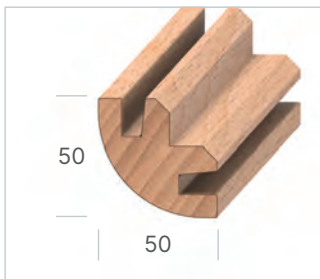
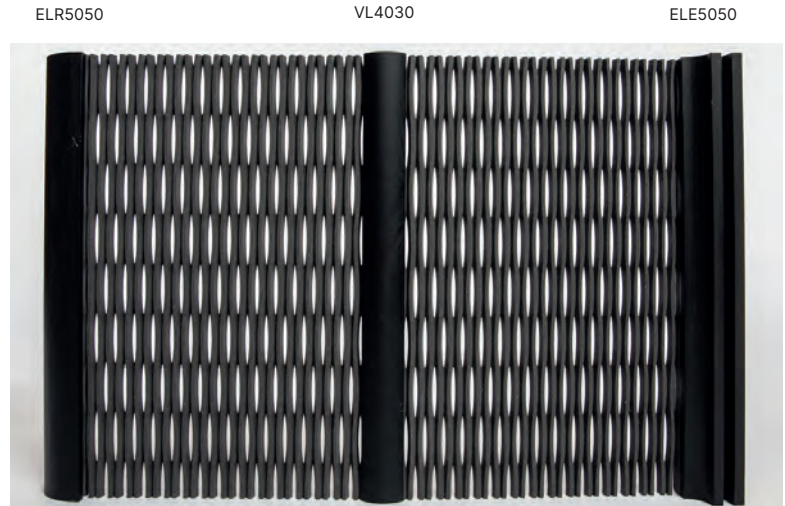
| | Article Number | Dimension | Moulding Type | Radius | Length (± 2 cm) |
|---------------------|----------------|-----------|-----------------------------|----------------------|-----------------|
| | DU.AL01 | 21×66 mm | cut lengths | – | 250-275 cm |
| | DU.AB01-707 | 21×66 mm | quarter circles | 707 mm | |
| | DU.AB01-357 | 21×66 mm | quarter circles | 357 mm | |
| | DU.AL03 | 21×58 mm | cut lengths | – | 250-275 cm |
| | DU.AB03-700 | 21×58 mm | quarter circles | 700 mm | |
| | DU.AB03-350 | 21×58 mm | quarter circles | 350 mm | |
| | DU.ML07 | 40×20 mm | cut lengths (spruce raw) | – | 250-275 cm |
| Metal moulding: | Article Number | Dimension | Moulding Type | Feature | |
| | DU.ML40 | 40×0,8 mm | cut lengths 125 cm | flexible bendable | 125 cm |

Corner solutions

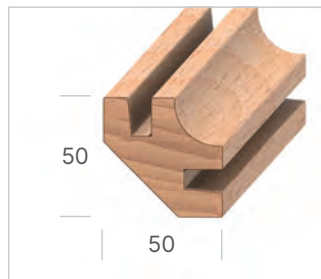
Mounting material for LINAR, SONAR and FOLI

These mounting mouldings are made of solid beech and have matching grooves for LINAR, SONAR or FOLI panels. They are suitable for use as a designer visible element in acoustic wall cladding or for partition walls / room dividers. Other applications include frame construction of acoustic wall elements and acoustic columns.

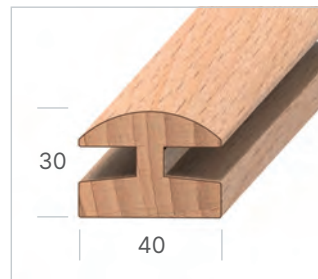
The moulding lengths are 240-250cm.



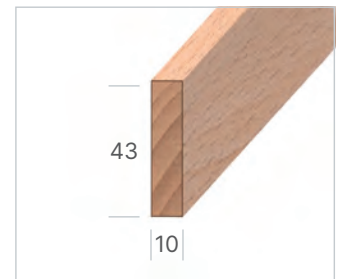
Outside corner
DU.ELR5050



Inside corner
DU.ELE5050



Connecting element
DU.VL4030



Constructing
moulding
AL4310

Accessories dukta® Hook

Hooks for creative use and shopfitting / shop design can be used with a panel thickness of 8mm with milling type LINAR or SONAR.



| Article Number | Material | Dimension | Thickness | qty/unit |
|----------------|---------------|------------|-----------|---------------|
| DU Haken | compact panel | 42 × 35 mm | 4 mm | 1 set (5 pcs) |

Assembly

Mounting material and accessories for JANUS

For the installation of **dukta**® JANUS panels as a free-standing element, we offer you wooden mouldings made of raw beech in a straight design (cut lengths) and also as quarter circles with two different radii. The large arch is designed for around 1 dukta® panel width, the small one for ½ panel width.

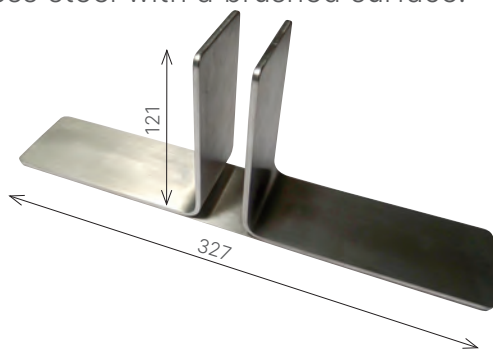
Cut lengths can be used as a bottom moulding, ceiling moulding and side end moulding (miter cutting necessary).



| | Article Number | Dimension | Moulding type | Outside radius | Length (± 2 cm) |
|--|----------------|-----------|----------------|----------------|-----------------|
| | DU.AL05 | 21×32 mm | Cut length | – | 250-275 cm |
| | DU.AB05-603 | 21×32 mm | Quarter Circle | 603 mm | |
| | DU.AB05-303 | 21×32 mm | Quarter Circle | 303 mm | |
| | DU.AL07 | 21×42 mm | Cut length | – | 250-275 cm |
| | DU.AB07-610 | 21×42 mm | Quarter Circle | 610 mm | |
| | DU.AB07-310 | 21×42 mm | Quarter Circle | 310 mm | |

Metal Feet Accessories

For JANUS as freestanding, two-sided application, we offer metal feet made of stainless steel with a brushed surface.



Perfect for planning and meetings with customers:



Sample boxes



hand samples
in size A4 or A6

dukta® overview

| Page | Type | Material | Panel size in cm | Usuable surface in cm | Strength in mm | Minimum order | Delivery time |
|--|--|--|------------------|-----------------------|----------------|-----------------------|---------------|
| standard product range | | | | | | | |
| 6/7 | JANUS | 3 layered panel raw spruce | 250 × 102 | 237 × 97 | 27 | 1 Piece | On stock* |
| 6/7 | | MDF natural | 250 × 102 | 237 × 97 | 25 | 1 Piece | On stock* |
| 6/7 | LINAR | MDF natural | 250 × 125 | 235 × 120 | 8 | 5 Pieces | On stock* |
| 6/7 | | MDF Color black, light gray | 244 × 125 | 228 × 120 | 8 | 1 Piece | On stock* |
| 6/7 | | MDF Color dark grey | 244 × 125 | 228 × 120 | 8 | 5 Pieces | 20 work. d. |
| 6/7 | SONAR | MDF natural | 250 × 125 | 232 × 120 | 8 | 1 Piece | On stock* |
| 6/7 | | MDF Color black | 244 × 125 | 232 × 120 | 8 | 5 Pieces | On stock* |
| 6/7 | | MDF Color light-, dark grey | 244 × 125 | 232 × 120 | 8 | 5 Pieces | 20 work. d. |
| 6/7 | FOLI | MDF natural | 250 × 125 | 233 × 116 | 8 | 1 Piece | On stock* |
| 6/7 | | MDF Color black | 244 × 125 | 227 × 116 | 8 | 1 Piece | On stock* |
| 6/7 | | MDF Color light-, dark grey | 244 × 125 | 227 × 116 | 8 | 5 Pieces | 20 work. d. |
| dukta® veneered | | | | | | | |
| 16 | JANUS (2 sided) | 3-layer panel spruce raw, oak or walnut veneer | 250 × 102 | 237 × 97 | 28 | 5 Pieces | 30 work. d. |
| | | MDF natural, oak or walnut veneer | 250 × 102 | 237 × 97 | 26 | 5 Pieces | 30 work. d. |
| 16 | LINAR (1 sided) | MDF natural, oak veneer | 250 × 125 | 235 × 120 | 8 | 5 Pieces | On stock* |
| | | MDF natural, beech or walnut veneer | 250 × 125 | 235 × 120 | 8 | 5 Pieces | 30 work. d. |
| | | MDF color black, walnut veneer | 244 × 125 | 228 × 120 | 8 | 5 Pieces | On stock* |
| | | MDF color black, oak veneer | 244 × 125 | 228 × 120 | 8 | 5 Pieces | 30 work. d. |
| 16 | FOLI (1 sided) | MDF natural, oak, beech or walnut veneer | 250 × 125 | 235 × 120 | 8 | 5 Pieces | 30 work. d. |
| | | MDF color black, oak, beech or walnut veneer | 244 × 125 | 228 × 120 | 8 | 5 Pieces | 30 work. d. |
| dukta® PRINT | | | | | | | |
| 14 | Standard design: reclaimed lumber grey, reclaimed lumber brown | JANUS MDF / 3 layered panel raw spruce (for measurements see above) LINAR/SONAR/FOLI MDF natural (for measurements see above) | | | | 5 Pieces | 30 work. d. |
| 15 | Individual print | dukta® panels of choice from the standard program | | | | 5 Pieces (per design) | 30 work. d.** |
| Special finishes, extra options | | | | | | | |
| 18 | | Clear matt lacquer | | | | 5 Pieces | + 5 work. d. |
| 18 | | RAL-lacquer standard | | | | 5 Pieces | + 5 work. d. |
| 18 | | RAL-lacquer custom | | | | 20 Pieces | + 10 work. d. |
| 18 | | Accoustic Fleece backing (available for lacquered panels) | | white or black | | 5 Pieces | + 10 work. d. |
| 18 | LINAR 1 sided, grooved back | MDF Color | 244 × 125 | 228 × 120 | 19 | 5 Pieces | 20 work. d. |
| 19 | SONAR PRO | certified C-s2, d0 | 250 × 125 | 232 × 120 | 10 | 20 Pieces | 35 work. d. |

* Small amounts on stock, subject to interim sale. For new production, the delivery time is 20 working days

** From release of a specially produced pattern

Panel Storage: Best stored covered, in a cool and dry place on a flat, smooth and clean surface. Do not expose to direct sunlight!
Handling: dukta® panels can be processed, e.g. cut, milled, drilled and sanded using standard tools for wood. Use new or well-sharpened tools.

Released: April 2023



Only wood of best quality
is processed.



We are certified. Certified
products available on demand
(PEFC oder FSC™)



Ideally suitable for use in
acoustically sensitive rooms such
as recording studios, cinemas,
concert halls or seminar rooms



Diverse interior design possibilities
for planners, interior designers,
carpenters, furniture manufacturers
and many more.



KOLAR
WOOD ELEMENTS

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