

dukto[®] flexible wood

Design Nature Acoustic



dukta® - More flexibility with wood

Visual and technical aspects opening

The dukta® design panel provides 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, 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.



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New Horizons in Design

dukta® JANUS 3-layer panel partition wall

Spatial experience for the highest demands

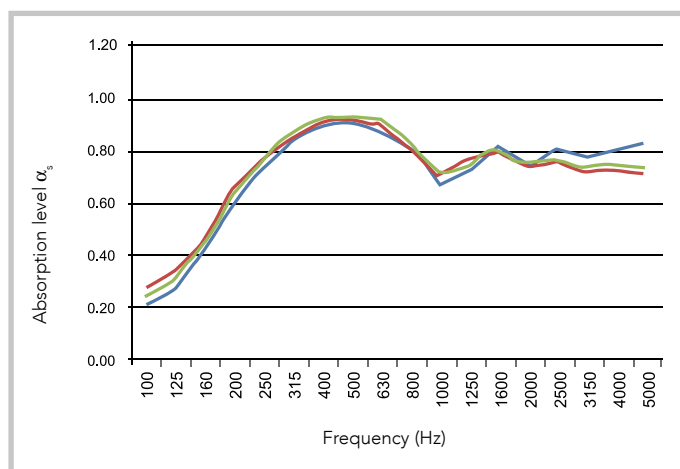
dukta® is suitable for use in acoustically sensitive rooms such as recording studios, cinemas, concert halls, restaurants, foyers, teaching rooms etc.

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.

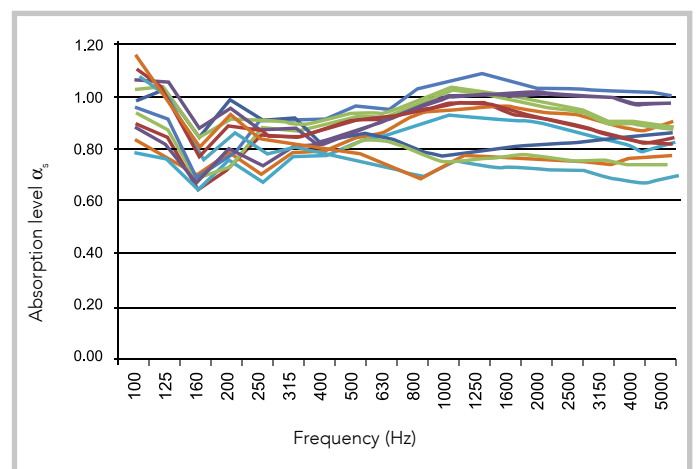
Due to the wave-shaped geometry of the panels, the sound waves come directly from all directions into the openings and are absorbed behind them. The different distances to the wall lead to short and long waves (high and bass sound) being captured in the same way.

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

Flat Mounting

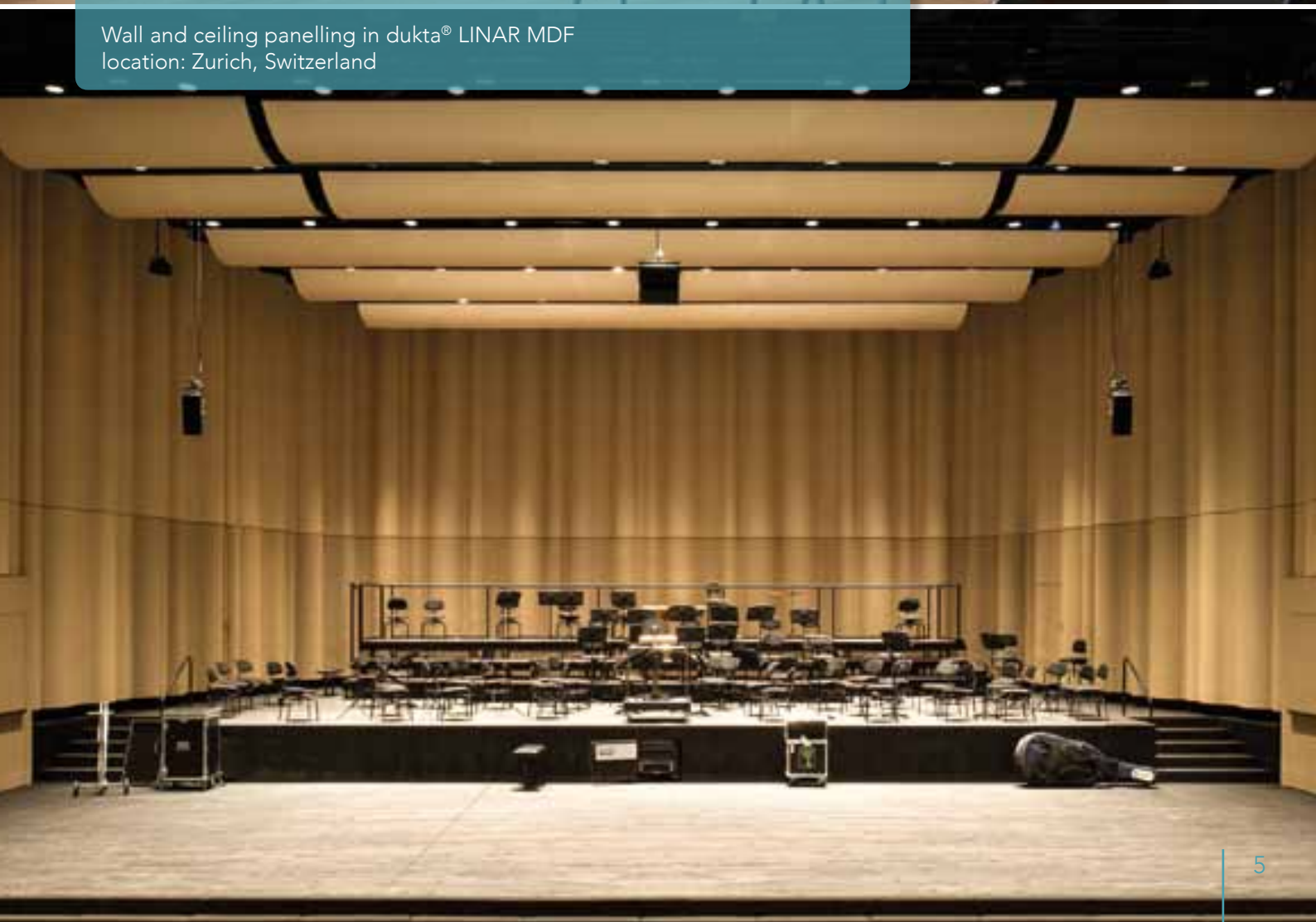


Corrugated Mounting





Wallcovering made of dukta® LINAR in MDF light grey including acoustic fleece
location: Vienna, Austria



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

dukta[®]-Product Information

standard panel dimensions

(tolerance +/- 0.5 cm)	panel size (A x D)	PU (m ²)	usable area in cm (B x C)	usable area in m ² / panel
JANUS (3 layered panel spruce or MDF natural)	250 x 102	2.55	237 x 97	2.29
LINAR (plywood beech or MDF natural)	250 x 125	3.125	235 x 120	2.82
in MDF Color	244 x 125	3.05	228 x 120	2.74
SONAR (MDF natural)	250 x 125	3.125	232 x 120	2.78
in MDF Color	244 x 125	3.05	232 x 120	2.78
FOLI (MDF natural)	250 x 125	3.125	233 x 116	2.70
in MDF Color	244 x 125	3.05	227 x 116	2.65



The **incision** always follows the length and the direction of the wood. For reasons of transport, each panel has a non-incised edge. The outer dimension is charged.

surface: Raw (plywood beech and 3-layered-panel spruce: polished K60)

panel properties

	3-layer panel spruce		MDF natural		MDF Color*		plywood beech		airflow rate
	strength	kg/m ²	strength	kg/m ²	strength	kg/m ²	strength	kg/m ²	
JANUS	27 mm	7	25 mm	10.5					ca. 33%
LINAR			8 mm	4	8 mm	5	8 mm	4	ca. 26%
SONAR			8 mm	4	8 mm	5			ca. 26%
FOLI			8 mm	5	8 mm	6			ca. 13%

* standard colour is black, grey or light grey.

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

As guidance:

LINAR	≥ 120 mm
JANUS	≥ 100 mm
SONAR	≥ 150 mm
FOLI	≥ 230 mm



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 E1 and multilayer panel EN314-2/KL1, sauna panels with no emitting pollutants in gluing according to the test certificate ÖNORM 6219-1

Three 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 raw material wood is subject to natural color variations, which has an effect on both MDF natural as well as MDF Color. Different production batches can therefore show color differences.

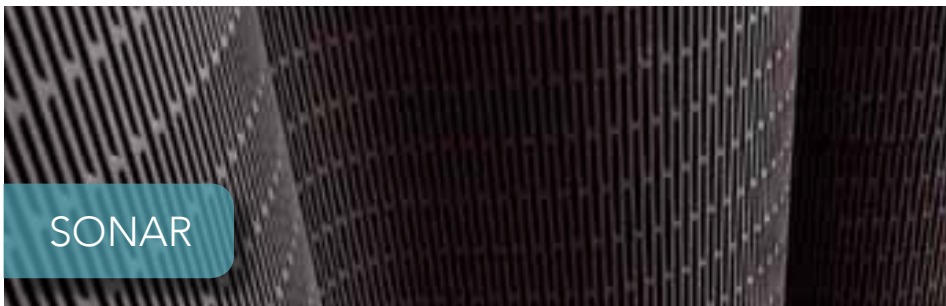
Note: Milling-related minor burns on incised base possible.



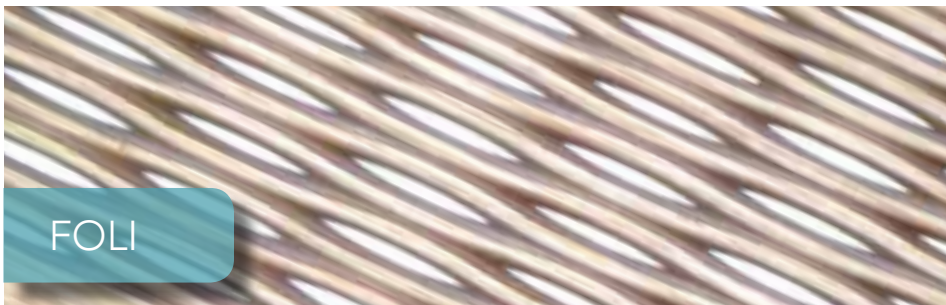
JANUS



LINAR



SONAR



FOLI



CERTIFIED MATERIAL

On request we manufacture your dukta® panels from certified panel material:

JANUS 3-ply spruce (PEFC™) – from 20 pcs, delivery time: 5 weeks

JANUS MDF natural (PEFC™ or FSC™) - from 25 pcs, delivery time on request

LINAR plywood beech (PEFC™) – from 20 pcs., delivery time on request

LINAR/SONAR/FOLI MDF Color (FSC™) – from 30 pcs., delivery time on request

LINAR/SONAR/FOLI MDF natural (FSC™) – from 25 pcs., delivery time on request

LINAR/SONAR/FOLI MDF natural (PEFC™) – from 80 pcs., delivery time on request

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.

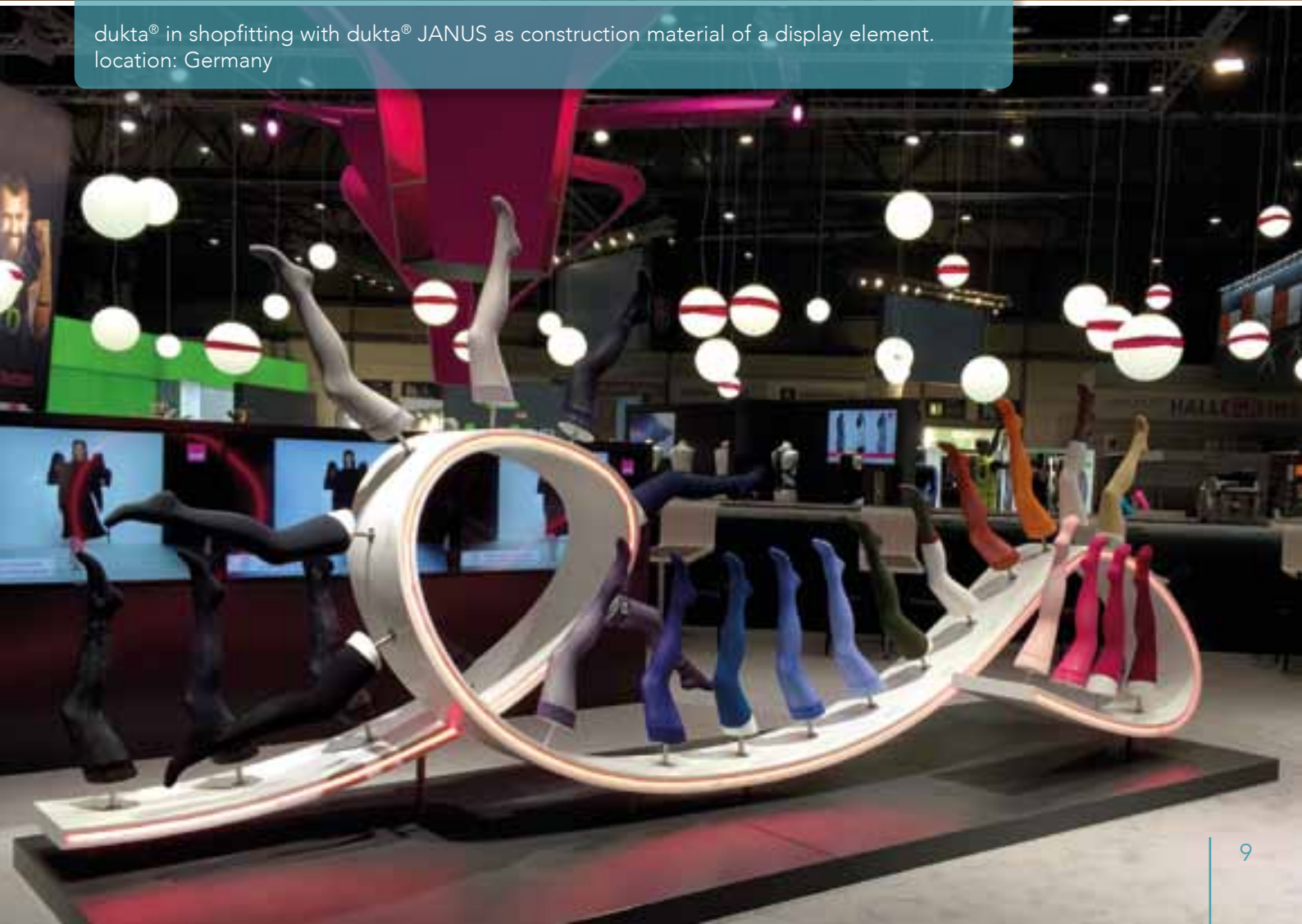
Due to the large proportion of open space (15-40%), the dukta® elements are suitable for the concealed use in room climatic systems and for atmospheric backlighting. Thanks to the greatly enlarged surface area, the incised panels have a regulating effect on the room climate.

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





dukta® LINAR mdf as wall cladding (left in picture), as ceiling lighting and presentation desk.
location: Seregno, Italy



dukta® in shopfitting with dukta® JANUS as construction material of a display element.
location: Germany

Flexible in design: dukta® PRINT

To expand the use and possibilities in interior design and shopfitting, we offer panels with a digitally printed surface: **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



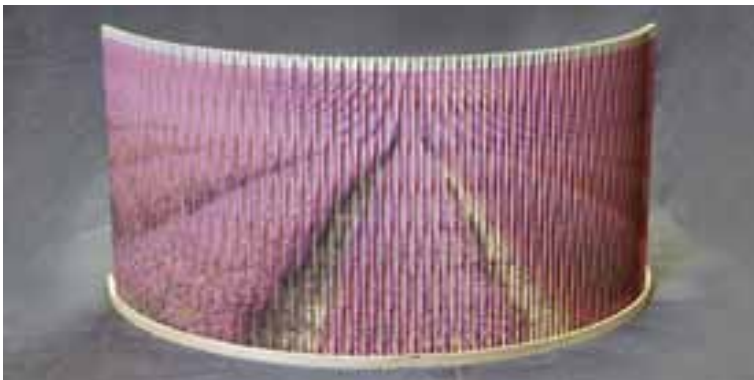
Reclaimed Lumber Grey



Rusty Look



Individual print:



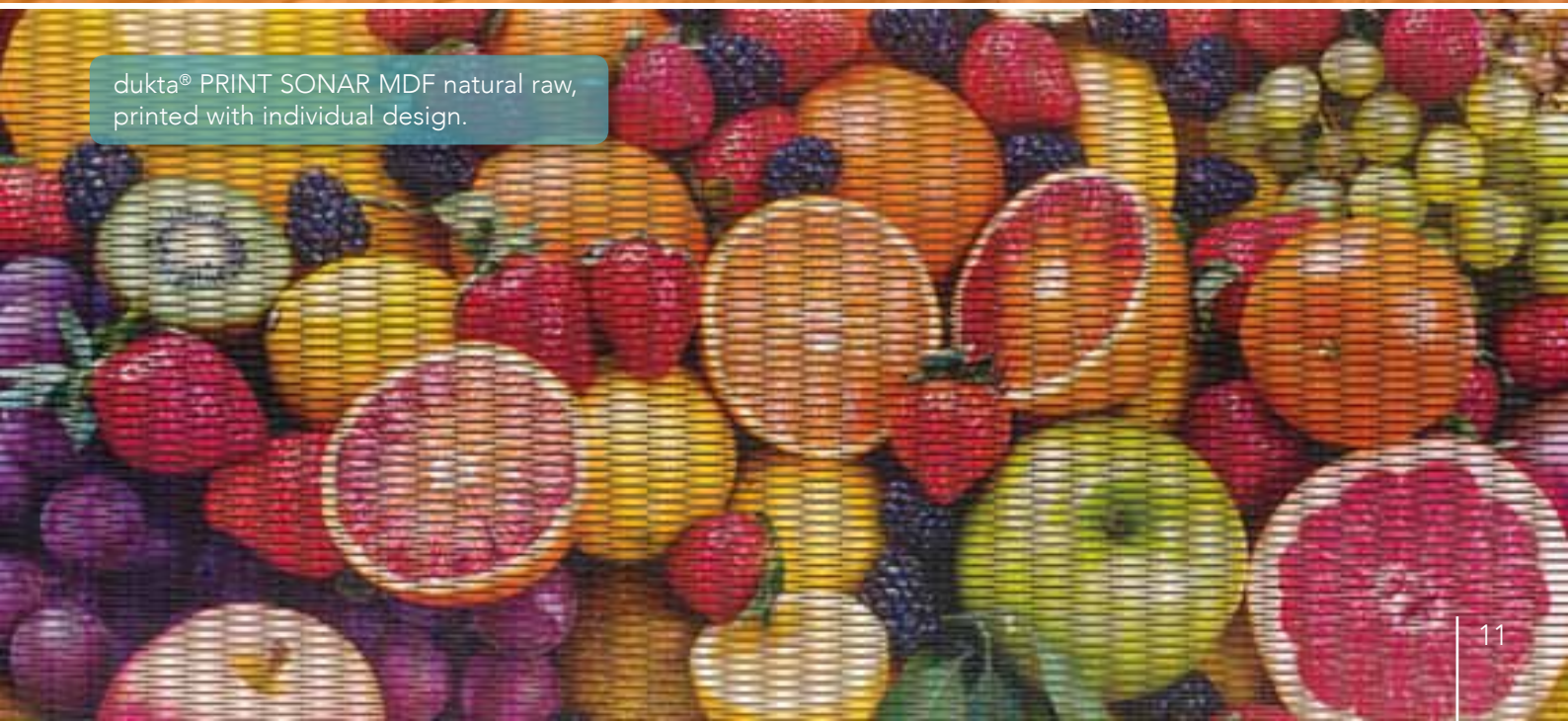
We also manufacture other designs, according to your wishes. Feel free to contact us!

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

For image motifs over several dukta® panels, the usable area per panel is possibly smaller to ensure an ongoing transition.



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



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



dukta[®] sauna panels



100 % glued
formaldehyde-free

Base material is a 16mm plywood panel from european alder with one sided sliced veneer top layer in the choice of oak, hemlock, aspen and american nut.

The front side is milled in the LINAR design and the back is grooved.

Area of application is the high-quality sauna, infrared, hot cabins or wellness (interior construction of the cabins).

The sauna panel is also well suited for use in interiors wherever formaldehyde-free is needed.

Panel format: 250x125cm,
Usable surface: 235x120cm



Saunaboard dukta[®] LINAR with nut veneer (front side)



The back is grooved



© www.deroppitz.at



A sunbed made
of dukta[®] sauna
panel, used wood
type: aspen

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.



MDF Color

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

Panels in 19mm as a one-sided incision LINAR (back is grooved) available 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 lacquered surface. Acoustic fleece available either black or white.



acoustic fleece
backing



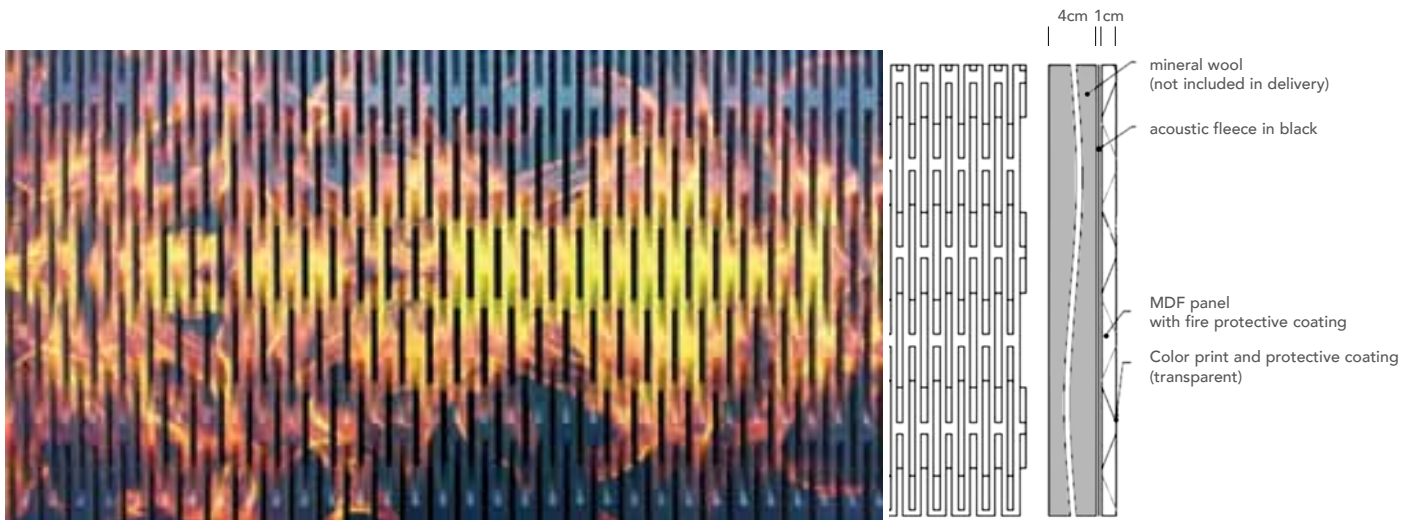
Fire protection with dukta® SONAR PRO

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 incision, fire protective coating, 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 using fire-protection panels ("B1-panel") on request. In addition, fire protective coatings are also possible. Testing the fire protection is the responsibility of the customer.



Special formats / special materials

- Special formats from 30 m². Max. size 1500 x 3000 mm
- 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

Find a short installation
video at www.kolar.at



LINAR/SONAR/FOLI

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.kolar.at.



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 a metal shears.

The solid wooden slats made of raw 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 in combination with DU.AB03.

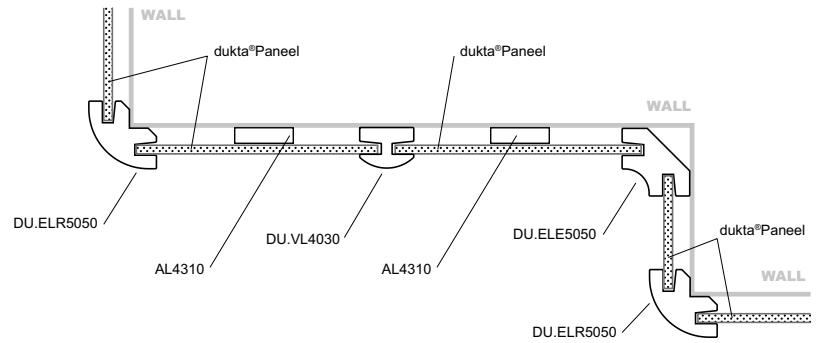
dukta®-Panel strength: 8 mm

	article Number	dimension	moulding type	outside radius
	DU.AL01	21 × 66 mm	cut lengths	–
	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	–
	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)	–
	article Number	dimension	moulding Type	characteristic
	DU.ML40	40 × 0.8 mm	cut lengths 125 cm	flexible bendable

Cut lengths: 250-275 cm (± 2 cm), except DU.ML40: 125 cm

Corner solutions

These mounting mouldings made of solid beech have a 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.



	article Number	dimension	moulding type
	cornice round for outer corner DU.ELR5050	50 × 50 mm	cut lengths
	cornice for inner corner DU.ELE5050	50 × 50 mm	cut lengths
	connector DU.VL4030	40 × 30 mm	cut lengths
	mounting rail AL4310	43 × 10 mm	cut lengths

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.



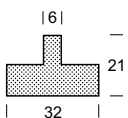

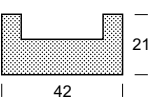

article number	material	dimension	thickness	qty/unit
DU Haken	compact panel	42 × 35 mm	4 mm	1 Set (5 pcs)

JANUS

We offer you the installation of **dukta® JANUS** panels as freestanding elements straight wooden mouldings in beech raw (cut lengths) and also as quarter circles with two different radii. The large circle is designed for 1 dukta® panel width, the smaller circle for ½ panel width.

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

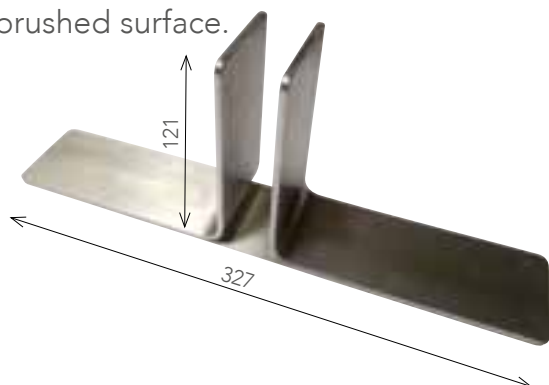


	article number	dimension	moulding type	outside radius
 	DU.AL05	21 × 32 mm	Cut length	–
	DU.AB05-603	21 × 32 mm	Quarter Circle	603 mm
	DU.AB05-303	21 × 32 mm	Quarter Circle	303 mm
 	DU.AL07	21 × 42 mm	Cut length	–
	DU.AB07-610	21 × 42 mm	Quarter Circle	610 mm
	DU.AB07-310	21 × 42 mm	Quarter Circle	310 mm

Cut lengths: 250-275 cm (± 2 cm)

Metal Feet Accessories

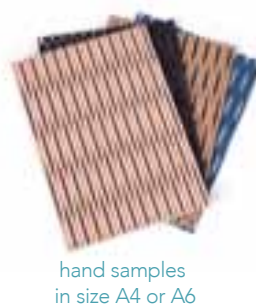
For JANUS as freestanding, two-sided application, we offer metal feet made of stainless steel with a brushed surface.



Perfect for planning and meetings with customers:



Sample boxes



hand samples
in size A4 or A6



presentation
folder

dukta® overview

page	type	material	panel size in cm	usable surface in cm	strength in mm	mini- mum order	delivery time
standard product range							
6/7	JANUS	3 layered panel raw spruce	250 x 102	237 x 97	27	1 pc.	On stock*
6/7		MDF natural	250 x 102	237 x 97	25	1 pc.	On stock*
6/7	LINAR	plywood beech	250 x 125	235 x 120	8	1 pc.	On stock*
6/7		MDF natural	250 x 125	235 x 120	8	5 pcs.	20 wd
6/7		MDF color black	244 x 125	228 x 120	8	1 pc.	On stock*
6/7		MDF color grey, light grey	244 x 125	228 x 120	8	20 pcs.	60 wd
6/7	SONAR	MDF natural	250 x 125	232 x 120	8	1 pc.	On stock*
6/7		MDF color black	244 x 125	232 x 120	8	5 pcs.	20 wd
6/7		MDF color grey, light grey	244 x 125	232 x 120	8	20 pcs.	60 wd
6/7	FOLI	MDF natural	250 x 125	233 x 116	8	1 pc.	On stock*
6/7		MDF color black	244 x 125	227 x 116	8	5 pcs.	20 wd
6/7		MDF color grey, light grey	244 x 125	227 x 116	8	20 pcs.	60 wd
dukta® veneered							
12	JANUS (2 sided)	3 layered panel raw spruce, oak or veneered nut	250 x 102	237 x 97	28	5 pcs.	30 wd
12		MDF natural, oak or veneered nut	250 x 102	237 x 97	26	5 pcs.	30 wd
12	LINAR (1 sided)	MDF natural, oak or veneered nut	250 x 125	235 x 120	8	5 pcs.	30 wd
12		MDF Color black, oak or veneered nut	244 x 125	228 x 120	8	5 pcs.	30 wd
dukta® PRINT							
10/11	standard design: reclaimed lumber grey, reclaimed lumber brown or rusty look	dukta® panels of choice from the standard program	depending on type	depending on type		5 pcs.	30 wd
10/11	individual print	dukta® panels of choice from the standard program	depending on type	depending on type		5 pcs. (per motif)	30 wd**
Special finishes, extra options							
14		Clear matt lacquer				5 pcs.	+ 5 wd
14		RAL lacquer				5 pcs.	+ 5 wd
14		Accoustic Fleece backing				5 pcs.	+ 5 wd
14	LINAR 1 sided, grooved back	MDF Color other colours	244 x 125	228 x 120	19	5 pcs.	20 wd
13	Sauna panels	alder veneered plywood	250 x 125	235 x 120	16	5 pcs.	40 wd
15	SONAR PRO	tested to C-s2, d0	250 x 125	232 x 120	10	20 pcs.	35 wd

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

** 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.





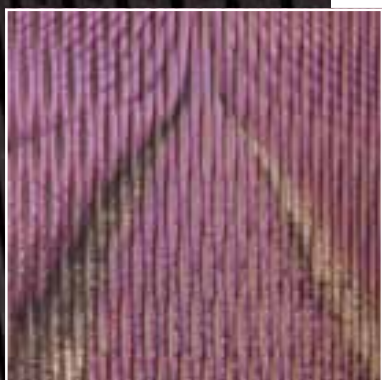
Only wood of best quality
is processed.



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.



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