



ECHO**JAZZ** AG
RINGSTRASSE 25
6010 KRIENS
SWITZERLAND
[WWW.ECHO**JAZZ**.COM](http://WWW.ECHOJAZZ.COM)
+41 41 340 18 80
[INFO@ECHO**JAZZ**.COM](mailto:INFO@ECHOJAZZ.COM)

ECHOCURTAIN® 12MM DATASHEET

TABLE OF CONTENTS



ECHOCURTAIN® 12MM	1
TENDER TEXT	3
DATASHEET ECHOBOARD® 12MM	4
COLOURS ECHOBOARD® 12MM	5
DIMENSIONS & PARTS	6
ECHOCURTAIN® 12MM PLAIN	6
ECHOCURTAIN® 12MM SPARKLY.....	7
ECHOCURTAIN® 12MM PEN	8
ECHOCURTAIN® 12MM MESH	9
ECHOCURTAIN® 12MM JUNGLE.....	10
ECHOCURTAIN® 12MM BEAM	11
ECHOCURTAIN® 12MM ZEN.....	12
ECHOCURTAIN® 12MM PETALS	13
ECHOCURTAIN® 12MM CITY.....	14
ECHOCURTAIN® 12MM GECKO.....	15
ECHOCURTAIN® 12MM SPIDER	16
ECHOCURTAIN® 12MM BLOCKS	17
ECHOCURTAIN® 12MM BASILIKA.....	18
ECHOCURTAIN® 12MM CELTIC	19
ECHOCURTAIN® 12MM PULL.....	20
ECHOCURTAIN® 12MM ARC.....	21
ECHOCURTAIN® 12MM FLOWERS.....	22
ECHOCURTAIN® 12MM PALM	23
ECHOCURTAIN® 12MM CUBE.....	24
INSTALLATION	25
GRIPPER DIRECT SUSPENSION SYSTEM.....	25
INSTALLATION WITH CURTAIN TRACK	26
CLEANING & CARE	28

PRODUCT NAME

EchoCurtain® 12mm

DESCRIPTION

High-performance acoustic baffle with textile surface made of 100% PET.

EchoCurtain® 12mm is made of robust high-tech felt with homogeneous texture and colour throughout. This sound absorber with a recycled PET content of over 50% is ideal for functional and aesthetic acoustic solutions and a direct answer to questions about ecological and economic sustainability that arise in contemporary interior design, interior decoration and renovation. The high stiffness enables a crossbar made out of the same material. Adjustments can be made very easily by mechanical processing.

PRODUCT PROPERTIES

Thickness: 12mm

Weight: 2400g/m² (± 10%)

Corner radius: 40mm

ACOUSTIC PERFORMANCE

aw: 0.30 - 0.90

NRC: 0.45 - 0.85

INSTALLATION

- Suitable for use in rooms as well as roofed outdoor areas
- Very easy to trim with a knife
- Easily height-adjustable and screwable

MATERIAL PROPERTIES

- Homogeneous edges throughout
- Extremely robust and shockproof
- Very high colour fastness of the all-round homogeneous textile surface available over 10 colours
- Flame retardant. B-s1,d0 certified according to EN 13501
- Extremely low volatile organic compounds below < 0.5mg/m²/h, certified according to ASTM D5116
- Formaldehyde emission below < 0.1mg/m²/h, certified according to ASTM D5116
- Dimensionally stable up to 50°C and 95%rH
- Melting point: 250 °C
- Decomposition Temp: > 250 °C
- Alkalinity: pH: 7.8 (pH 7 is neutral)

CLEANING & CARE

Can be cleaned dry and damp with chlorine or hydrogen peroxide.

ENVIRONMENT

- 100% PET with a content of over 50% from recycled PET bottles
- 100% recyclable
- eco-1 rating within eco-bau & Minergie-Eco requirements
- Cradle to Cradle Bronze certified

DISPOSAL

The product is recyclable as part of ECHOJAZZ's stewardship programme.

DATASHEET ECHOBOARD® 12MM



EchoBoard® 12mm is a high quality sound absorber with an α_w of up to 0.90 and a NRC of up to 0.85, which can be used for acoustic ceilings, walls, office desks or room dividers.

NAME	EchoBoard® 12mm																												
DIMENSIONS	1200mm (± 1mm) x 2800mm (± 1mm)																												
COMPOSITION	100% PET (> 50% recycled PET)																												
PET-BOTTLES* PER PANEL	168 PET-Bottles *The number of PET bottles refers to 500ml PET bottles with a bottle weight of 24g.																												
WEIGHT	2400g/m² (± 10%)																												
MATERIAL THICKNESS	12mm																												
LIGHT FASTNESS ISO 105-B02-1994	> 7																												
FIRE PROTECTION EN 13501	B-s1, d0																												
VOC EMISSIONS ASTM D5116	< 0.5mg/m²/h																												
FORMALDEHYDE EMISSIONS ASTM D5116	< 0.1mg/m²/h																												
ENVIRONMENTAL CERTIFICATES	eco1 Minergie-Eco Cradle to Cradle Certified® Bronze M1 emission-free materials																												
ABSORPTION COEFFICIENT DIN EN ISO 11654 ASTM C423	aw 0.30 (direct mounting) aw 0.60 (50mm wall/ceiling distance) aw 0.90 (200mm wall/ceiling distance) NRC = 0.45 (direct mounting) NRC = 0.70 (50mm wall/ceiling distance) NRC = 0.85 (200mm wall/ceiling distance)																												
COLOURS	> 10																												
ABSORPTION GRAPH	<table><caption>Approximate data points from the Absorption Graph</caption><thead><tr><th>Frequency (Hz)</th><th>Direct Mount (Green)</th><th>50mm Distance (Yellow)</th><th>200mm Distance (Blue)</th></tr></thead><tbody><tr><td>125</td><td>0.02</td><td>0.10</td><td>0.50</td></tr><tr><td>250</td><td>0.05</td><td>0.25</td><td>0.80</td></tr><tr><td>500</td><td>0.20</td><td>0.60</td><td>0.95</td></tr><tr><td>1000</td><td>0.50</td><td>0.95</td><td>0.80</td></tr><tr><td>2000</td><td>0.85</td><td>1.00</td><td>0.95</td></tr><tr><td>4000</td><td>1.00</td><td>0.95</td><td>0.95</td></tr></tbody></table> — Sound absorption coefficient (direct mount) — Sound absorption coefficient (50mm) — Sound absorption coefficient (200mm)	Frequency (Hz)	Direct Mount (Green)	50mm Distance (Yellow)	200mm Distance (Blue)	125	0.02	0.10	0.50	250	0.05	0.25	0.80	500	0.20	0.60	0.95	1000	0.50	0.95	0.80	2000	0.85	1.00	0.95	4000	1.00	0.95	0.95
Frequency (Hz)	Direct Mount (Green)	50mm Distance (Yellow)	200mm Distance (Blue)																										
125	0.02	0.10	0.50																										
250	0.05	0.25	0.80																										
500	0.20	0.60	0.95																										
1000	0.50	0.95	0.80																										
2000	0.85	1.00	0.95																										
4000	1.00	0.95	0.95																										

COLOURS ECHOBOARD® 12MM



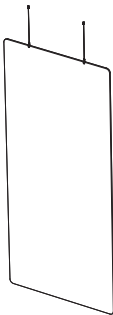
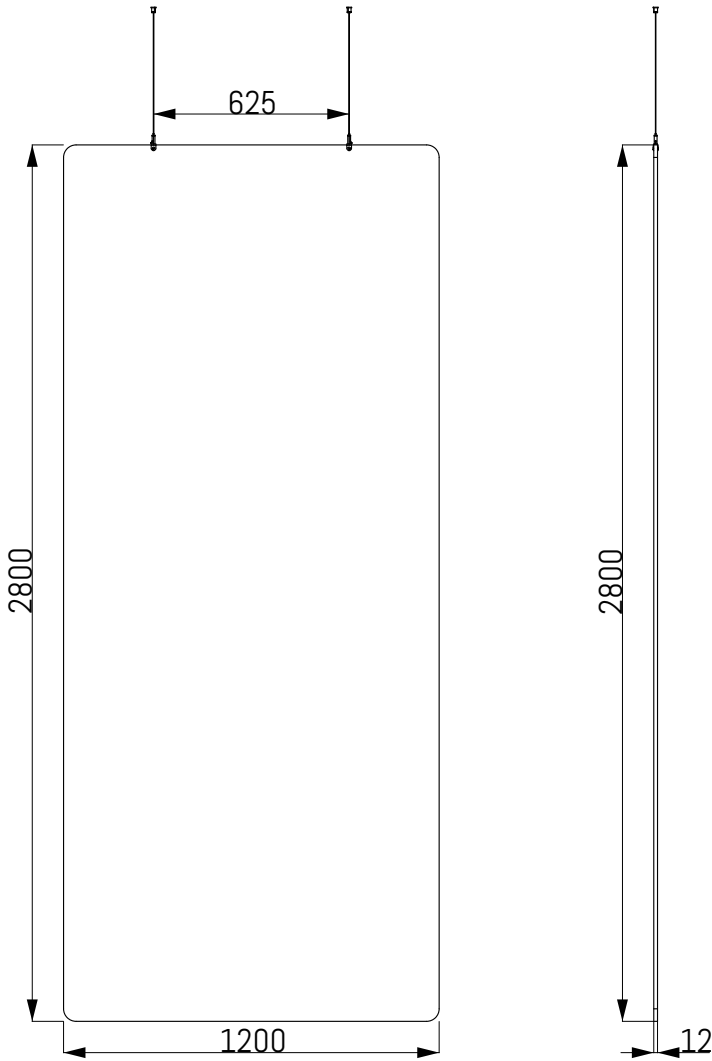
ECHOBOARD® 12MM



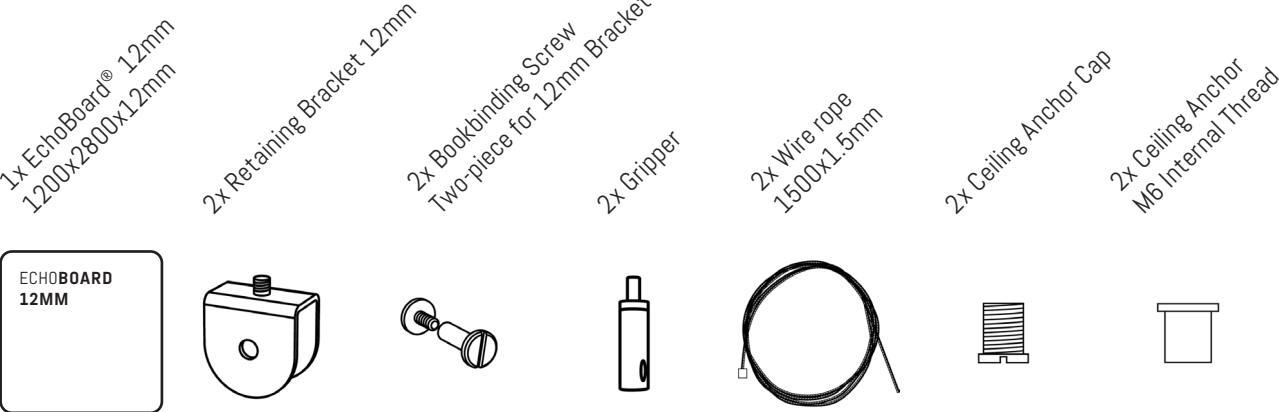
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM PLAIN
1241
1200x2800x12mm



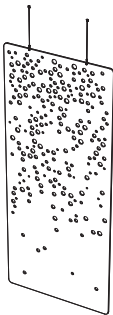
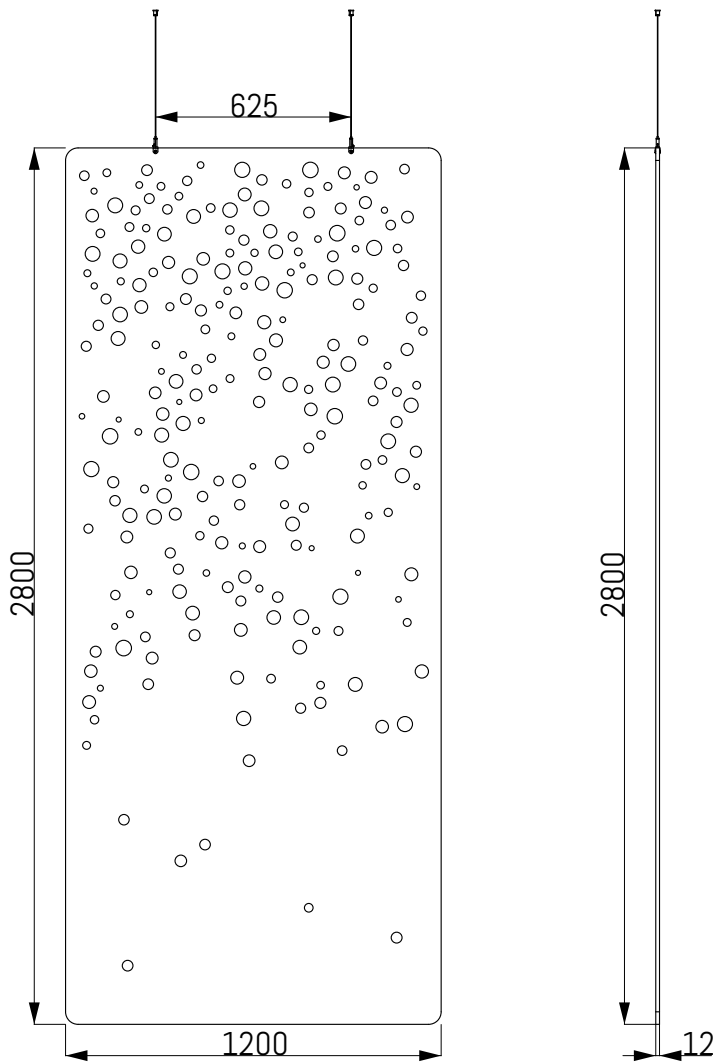
PARTS



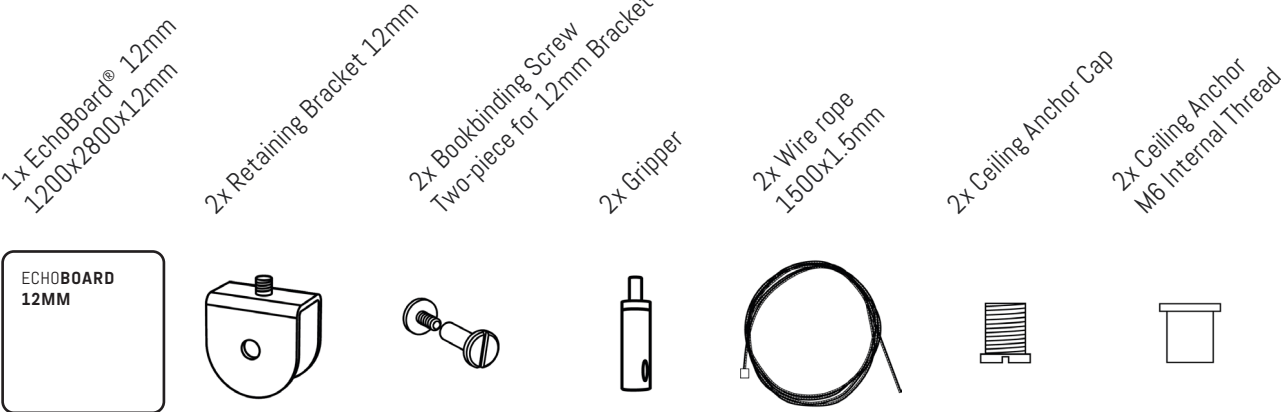
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM SPARKLY
1465
1200x2800x12mm



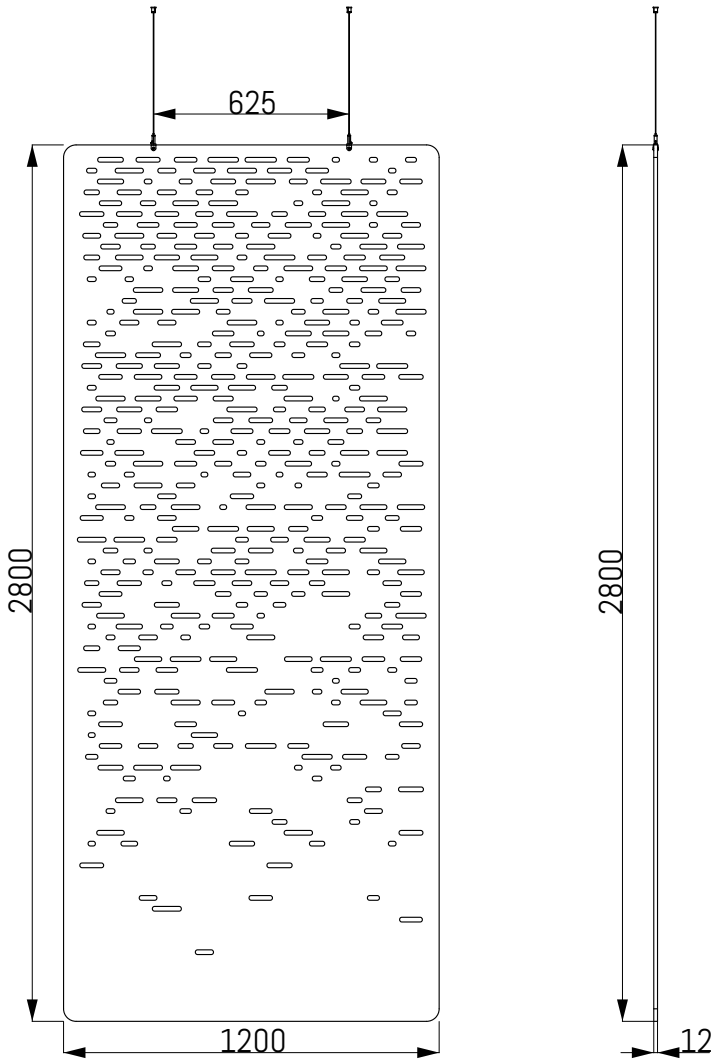
PARTS



DIMENSIONS & PARTS



ECHOCURTAIN® 12MM PEN
1465
1200x2800x12mm



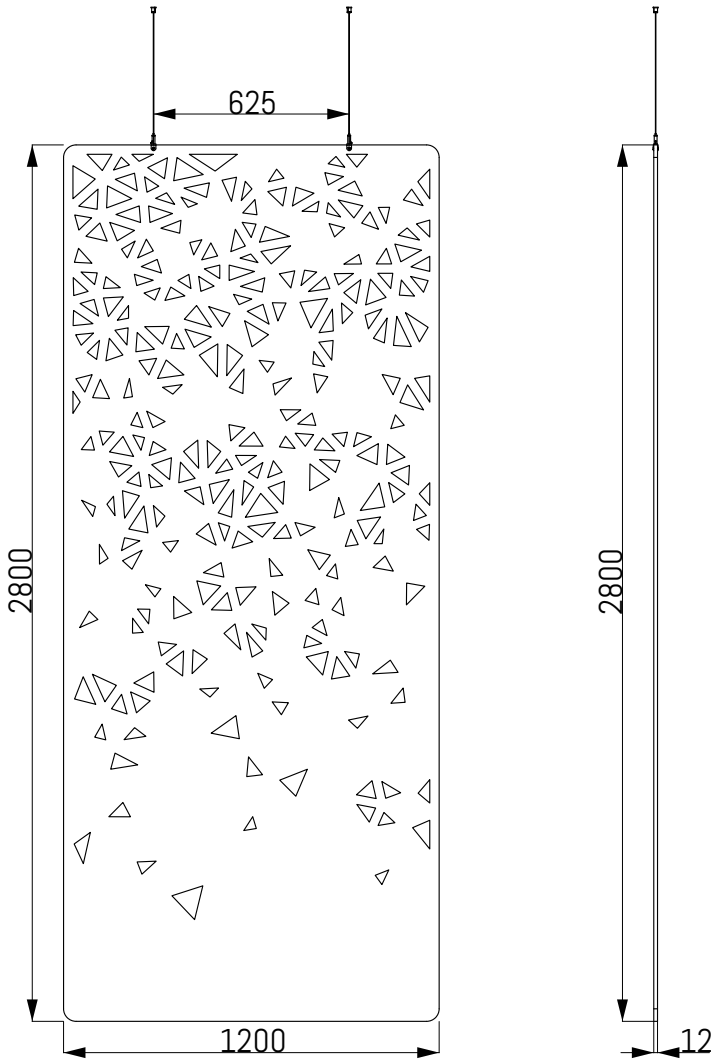
PARTS

1x EchoBoard® 12mm 1200x2800x12mm	2x Retaining Bracket 12mm	2x Bookbinding Screw Two-piece for 12mm Bracket	2x Gripper	2x Wire rope 1500x1.5mm	2x Ceiling Anchor Cap	2x Ceiling Anchor M6 Internal Thread

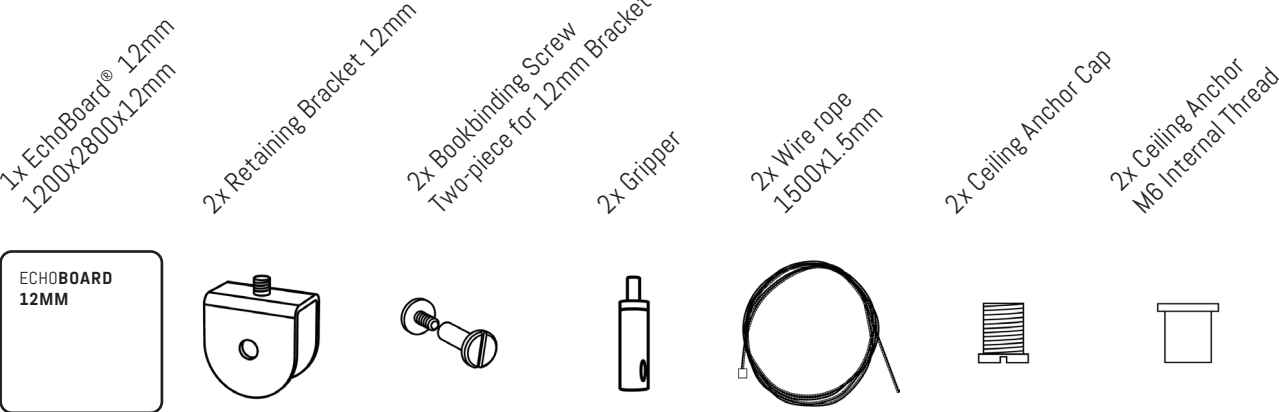
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM MESH
1465
1200x2800x12mm



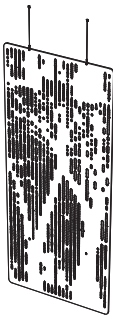
PARTS



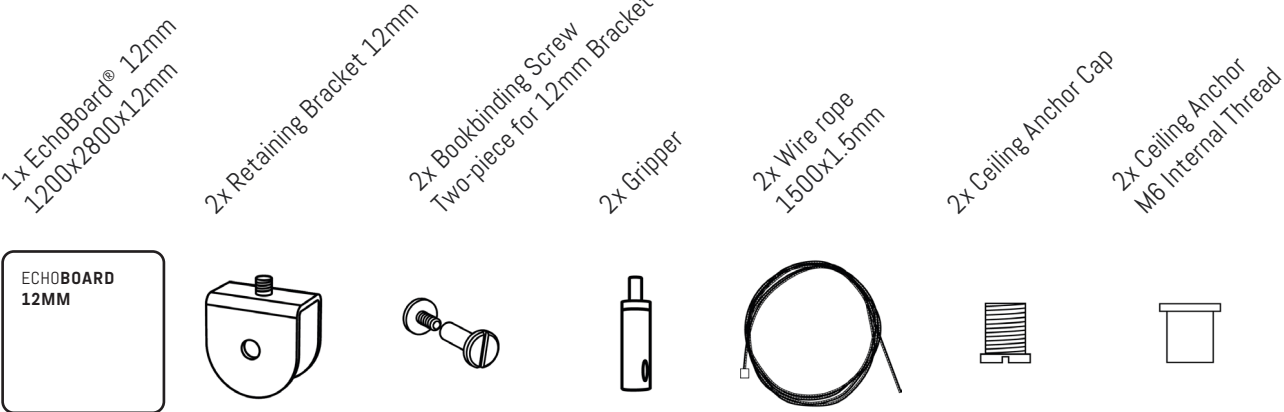
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM JUNGLE
1465
1200x2800x12mm



PARTS



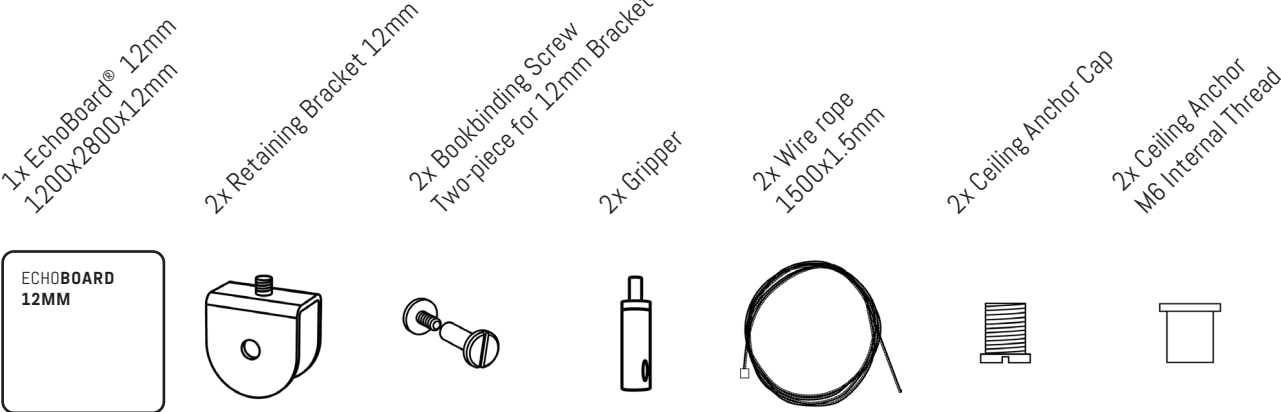
DIMENSIONS & PARTS



ECHO**CURTAIN**® 12MM BEAM
1465
1200x2800x12mm



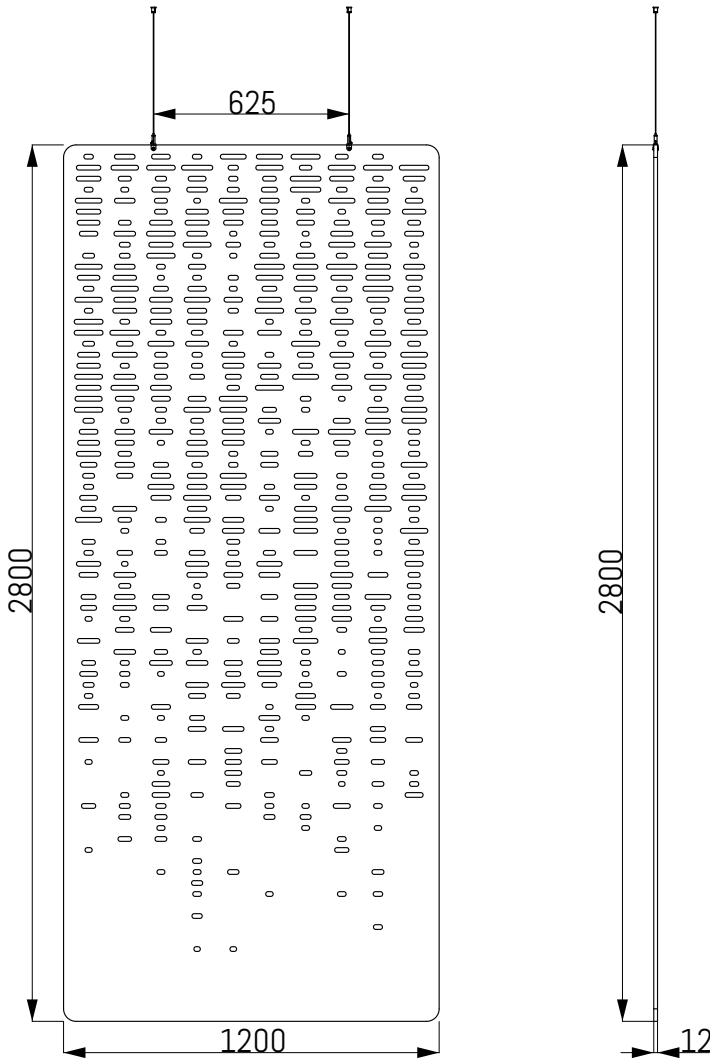
PARTS



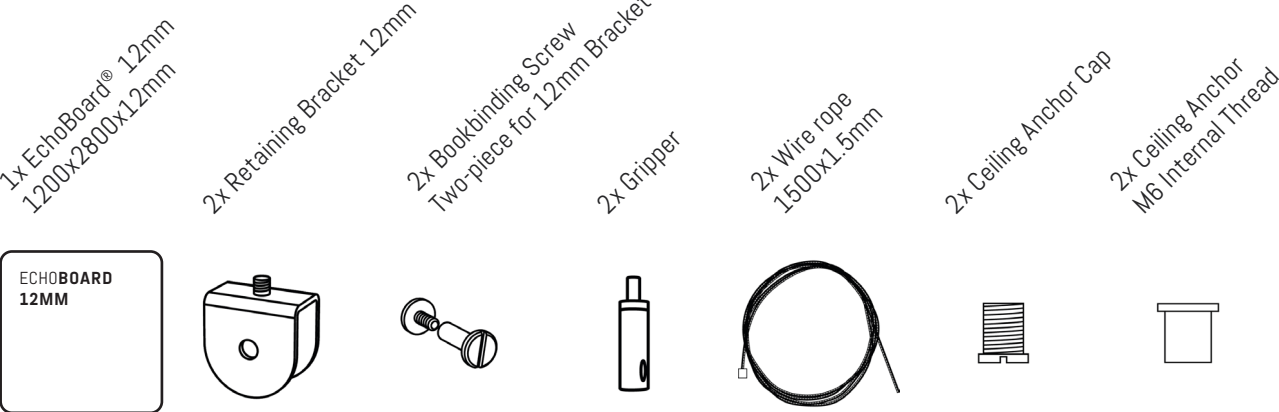
DIMENSIONS & PARTS



ECHO**CURTAIN**® 12MM ZEN
1465
1200x2800x12mm



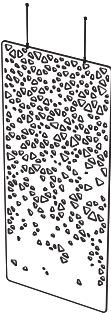
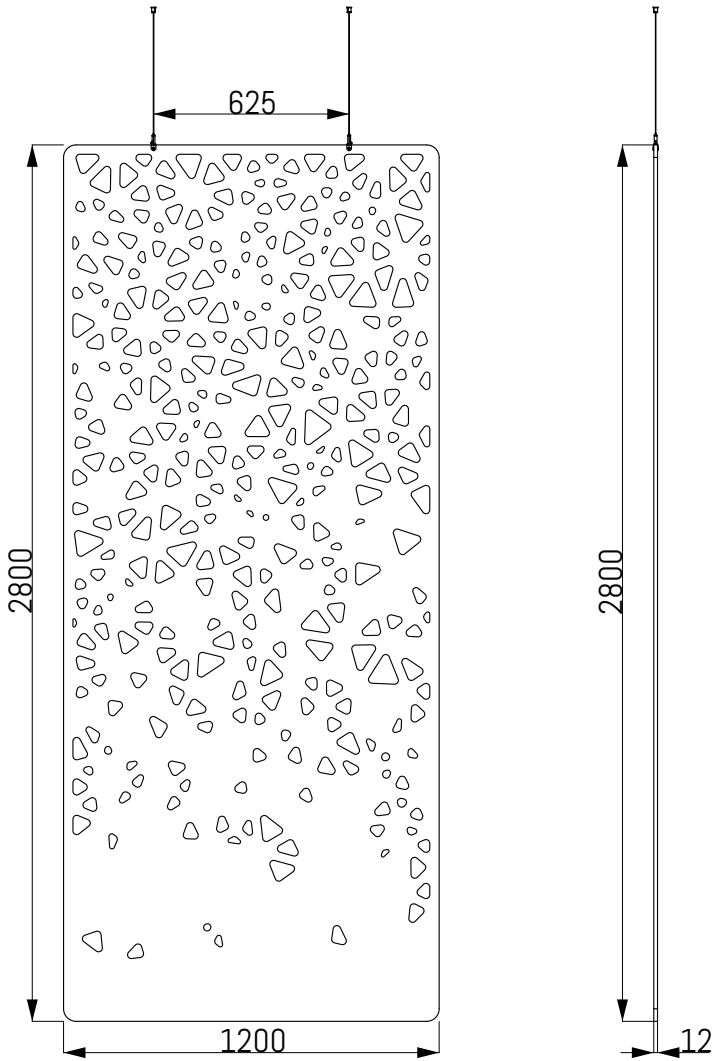
PARTS



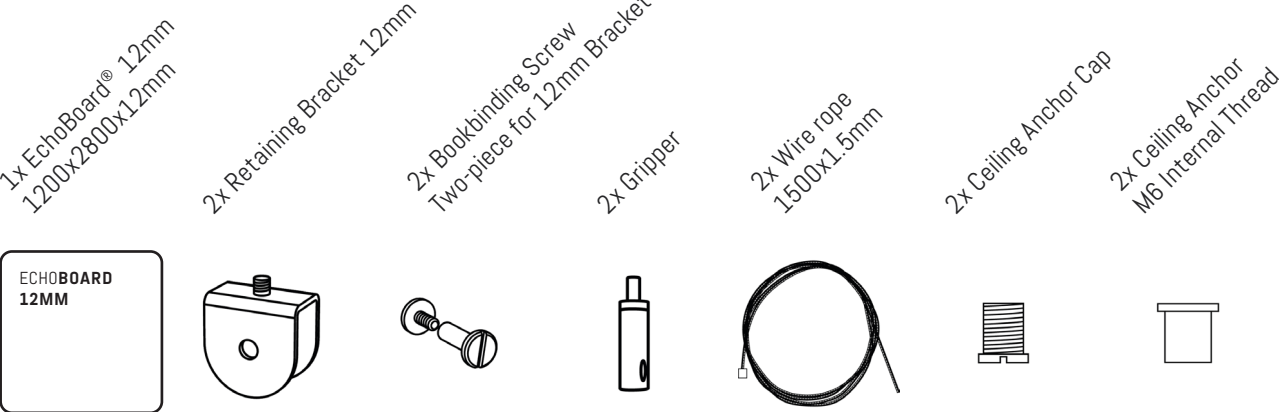
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM PETALS
1465
1200x2800x12mm



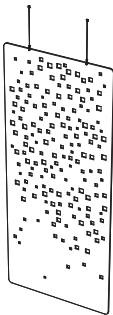
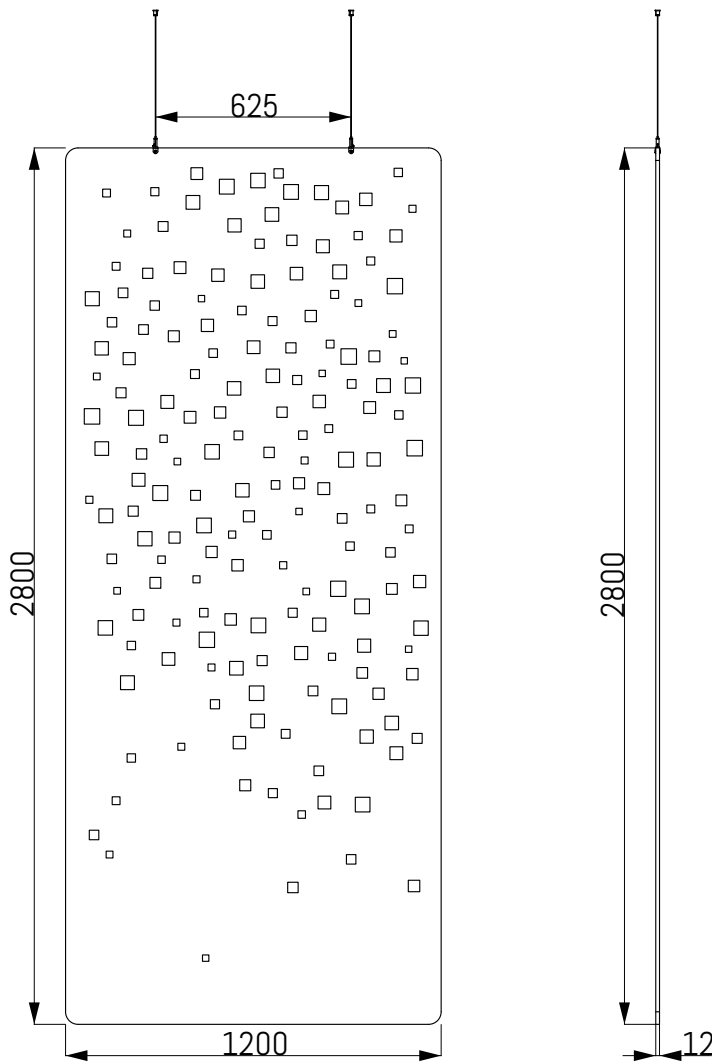
PARTS



DIMENSIONS & PARTS



ECHOCURTAIN® 12MM CITY
1465
1200x2800x12mm



PARTS

1x EchoBoard® 12mm
1200x2800x12mm

2x Retaining Bracket 12mm

2x Bookbinding Screw
Two-piece for 12mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

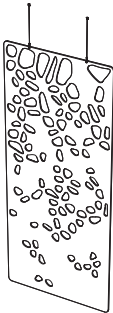
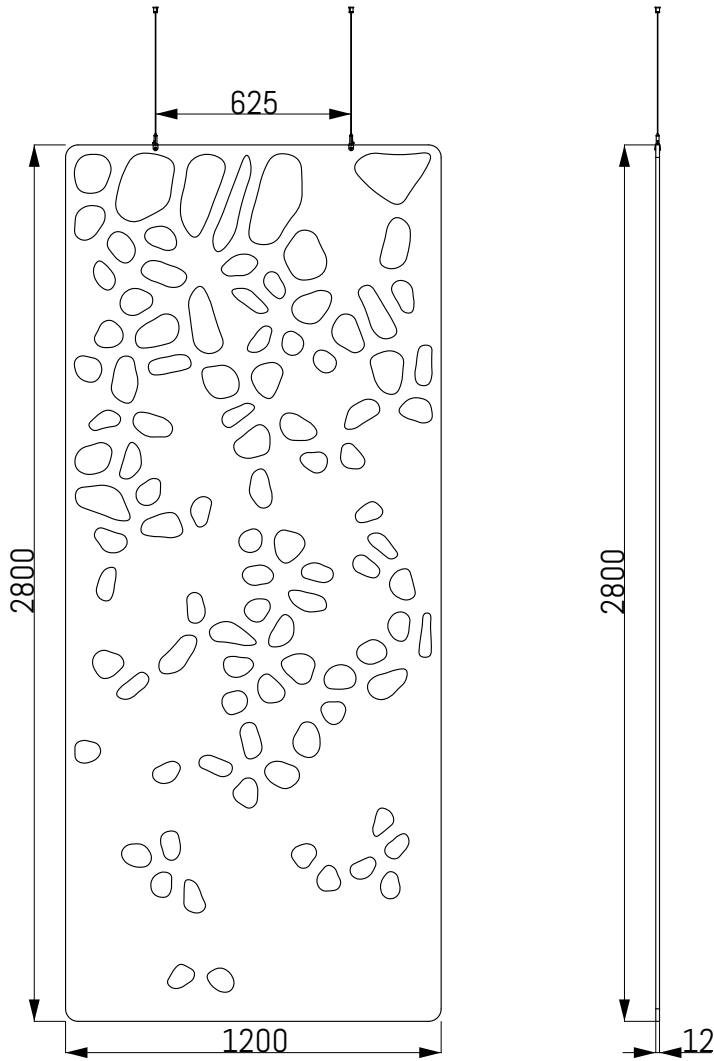
2x Ceiling Anchor Cap

2x Ceiling Anchor
M6 Internal Thread

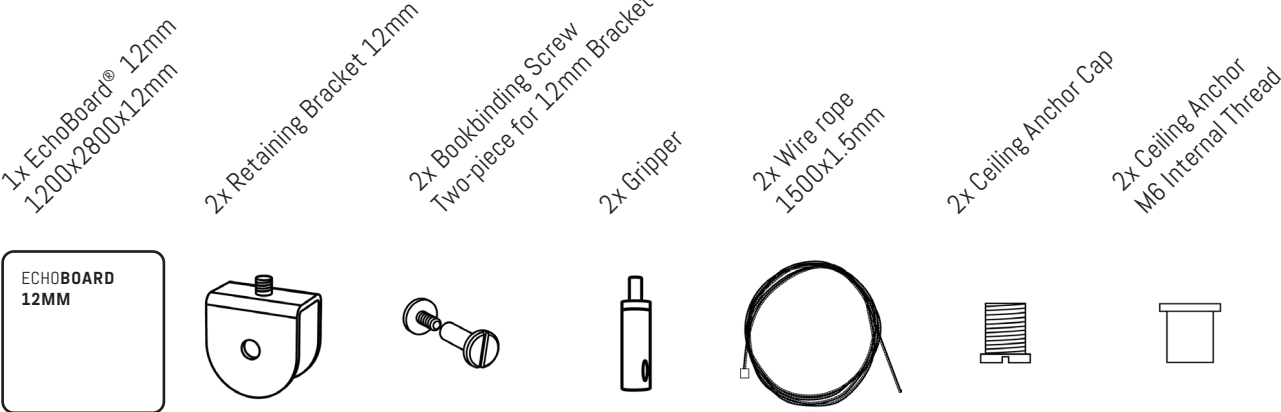
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM GECKO
1465
1200x2800x12mm



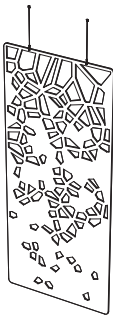
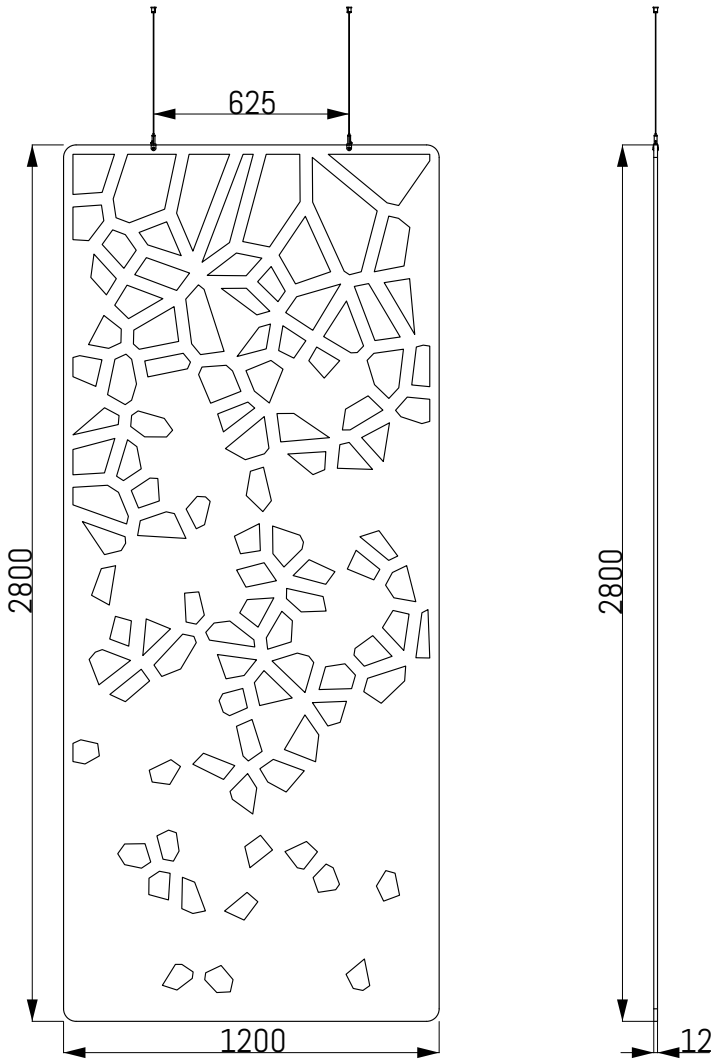
PARTS



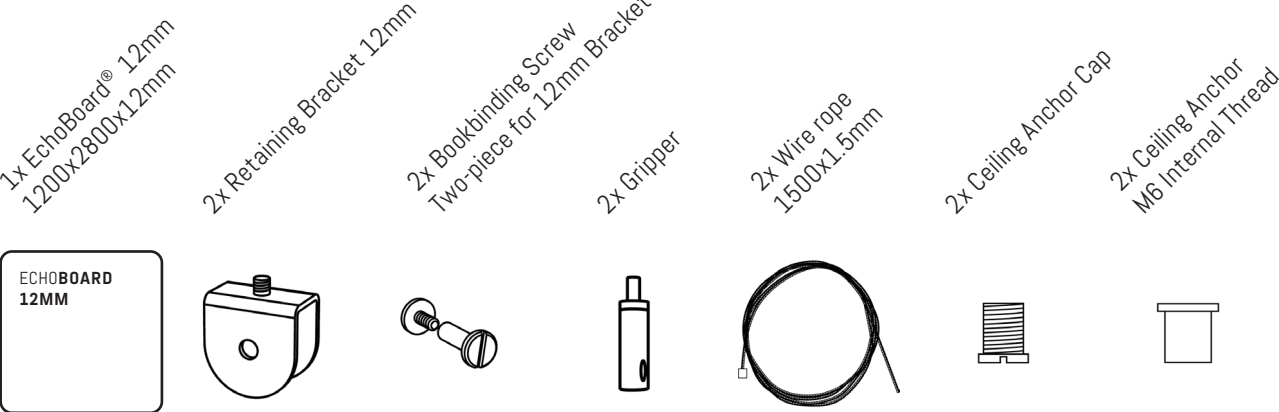
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM SPIDER
1465
1200x2800x12mm



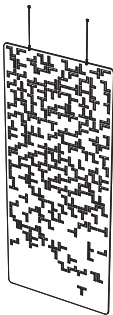
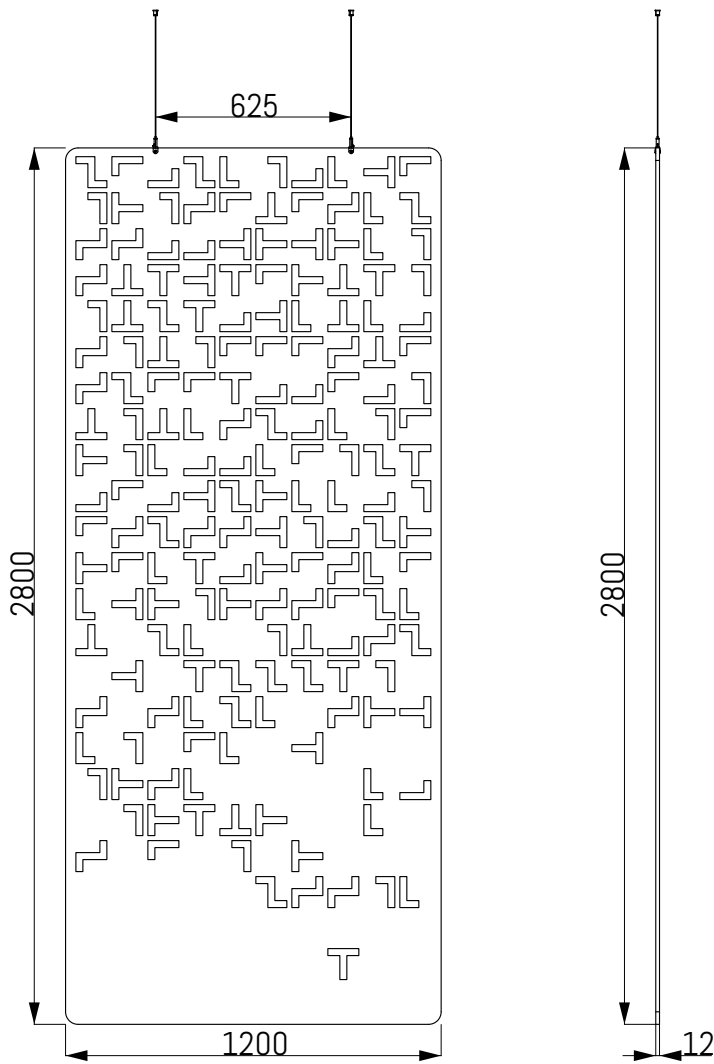
PARTS



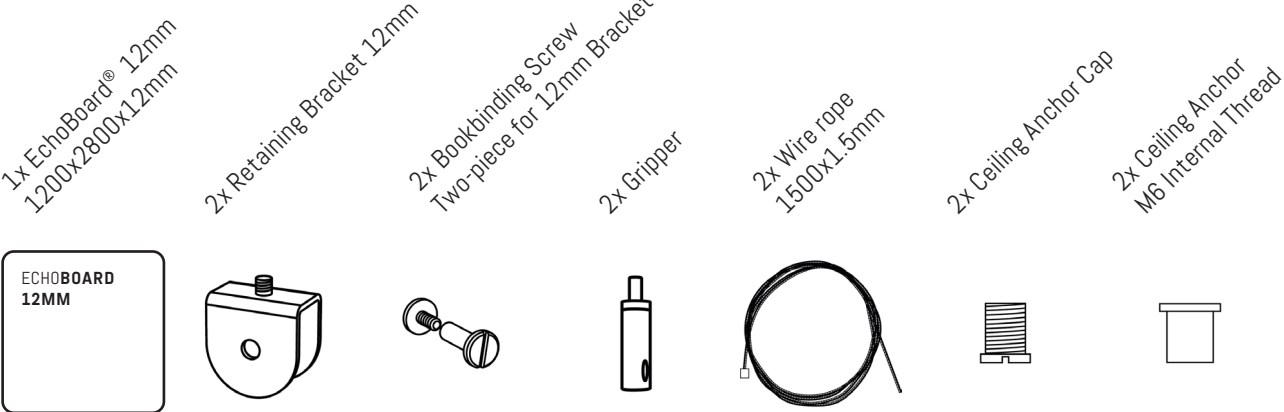
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM BLOCKS
1465
1200x2800x12mm



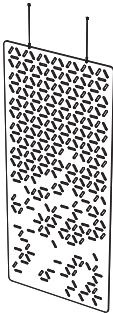
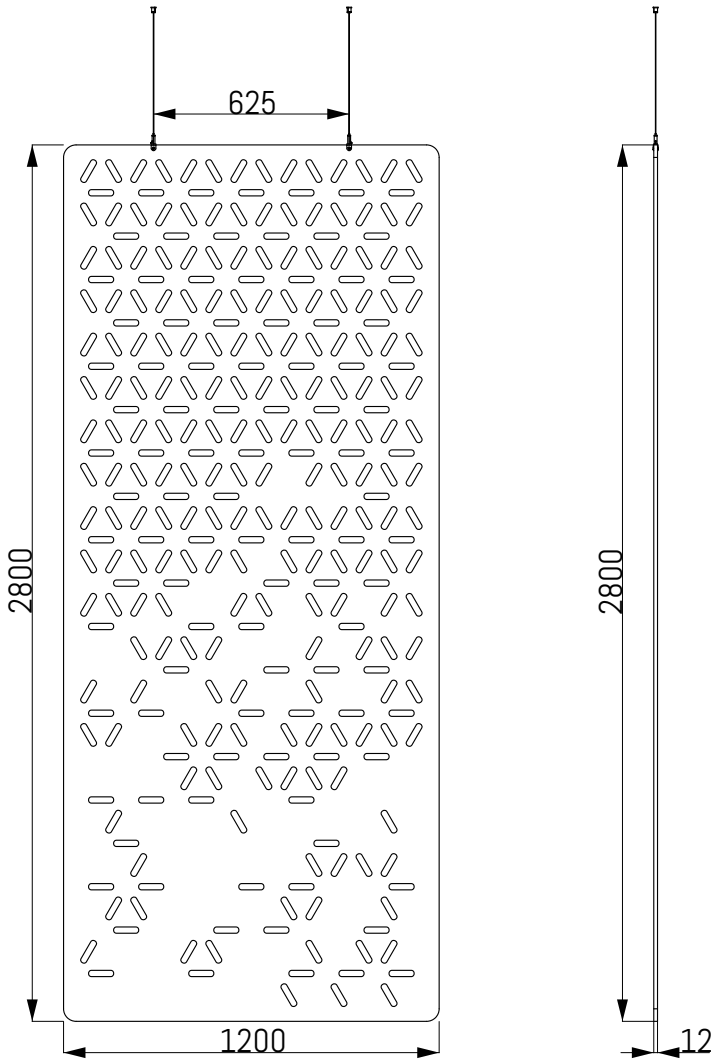
PARTS



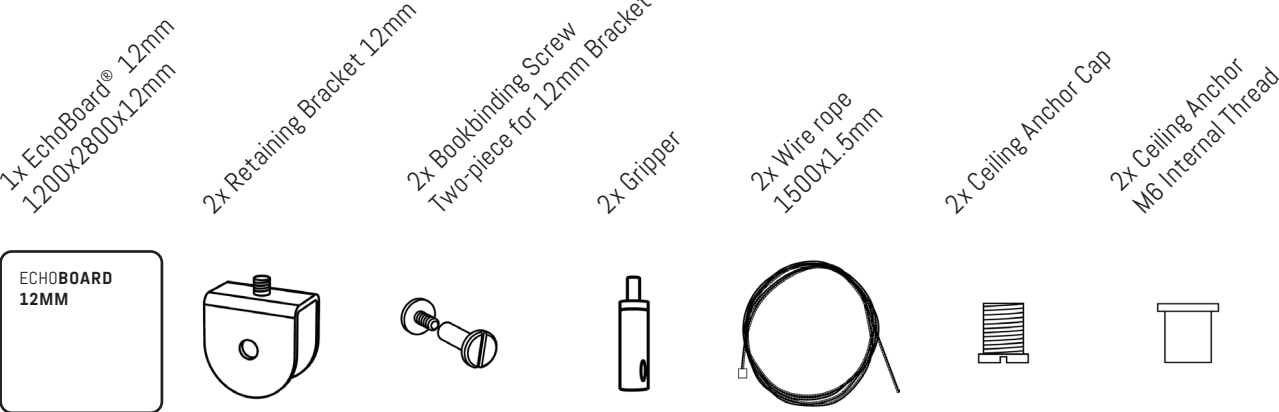
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM BASILIKA
1465
1200x2800x12mm



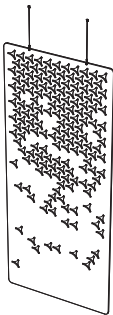
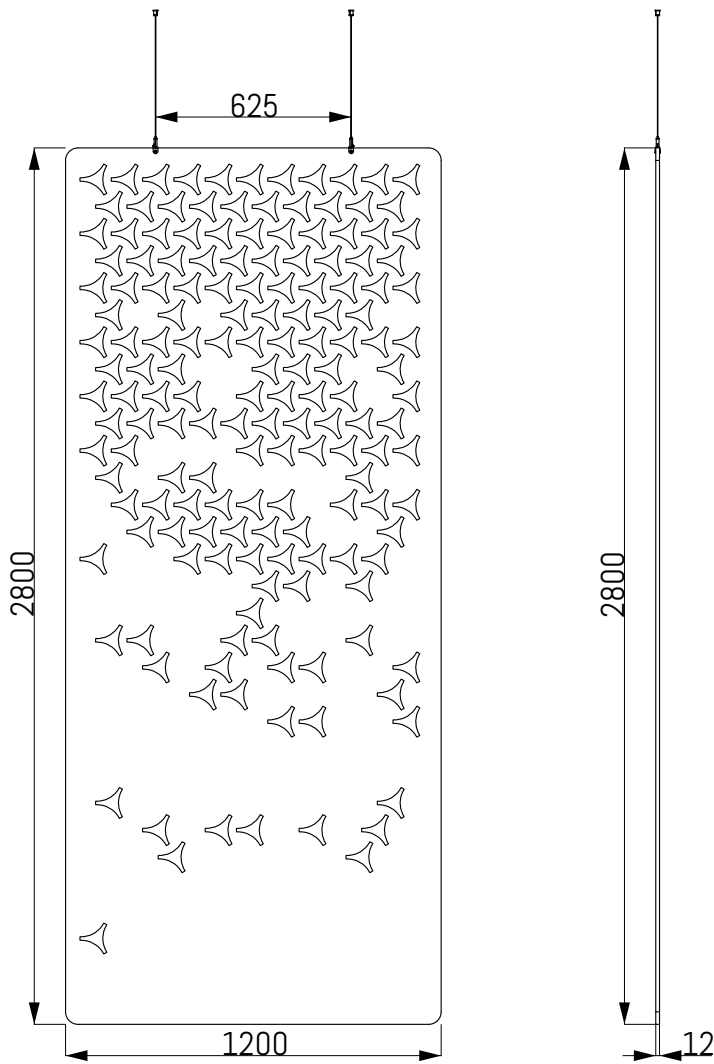
PARTS



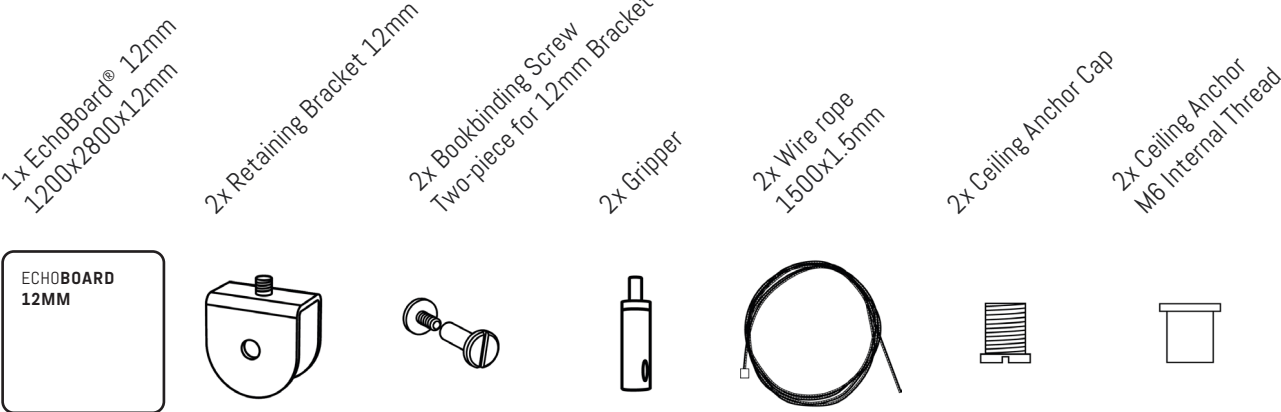
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM CELTIC
1465
1200x2800x12mm



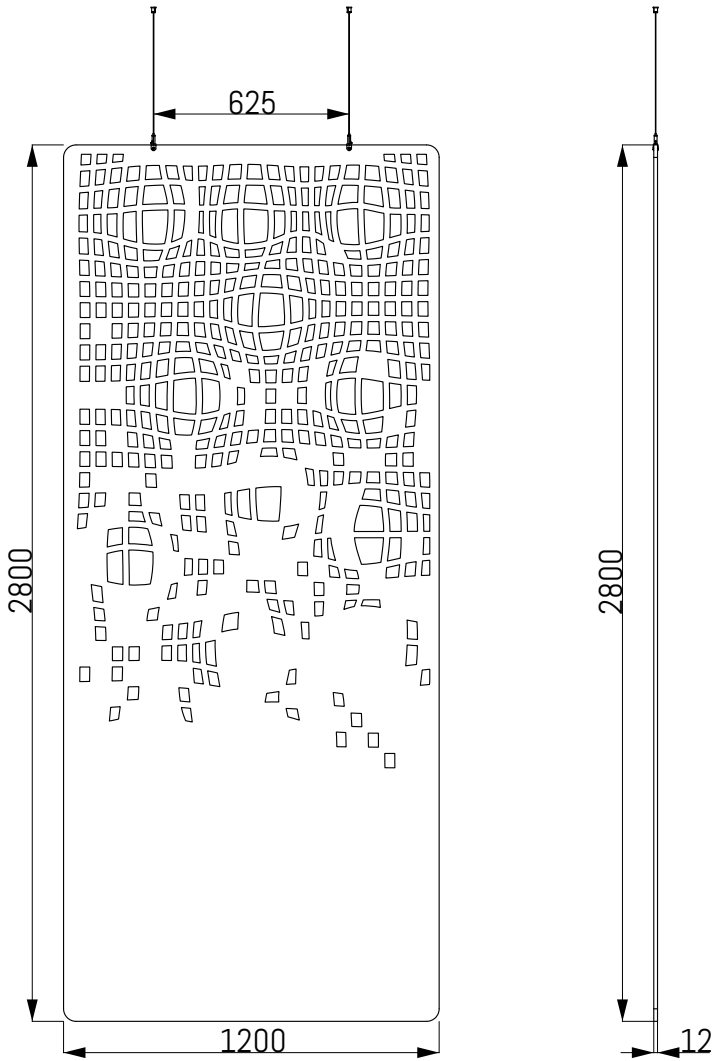
PARTS



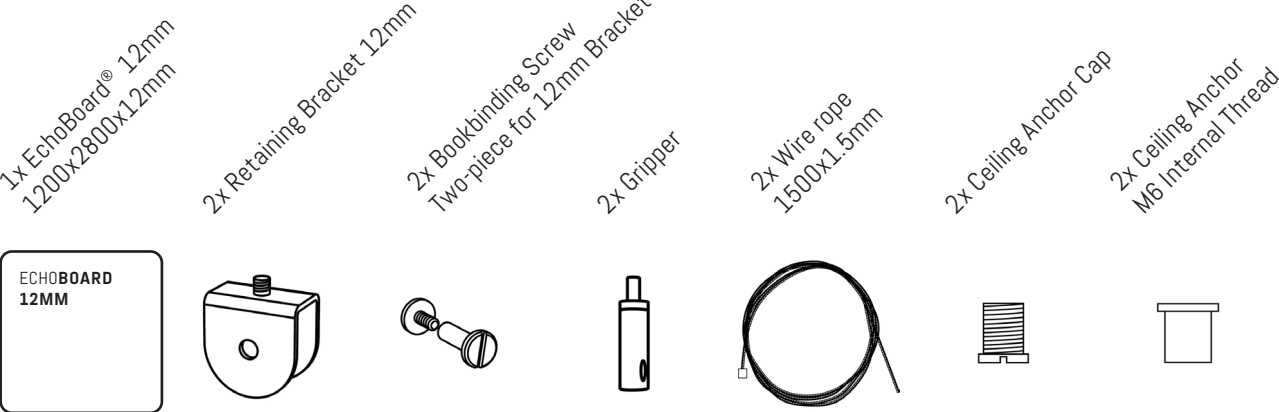
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM PULL
1465
1200x2800x12mm



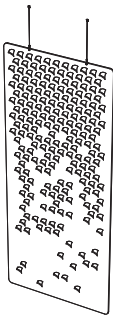
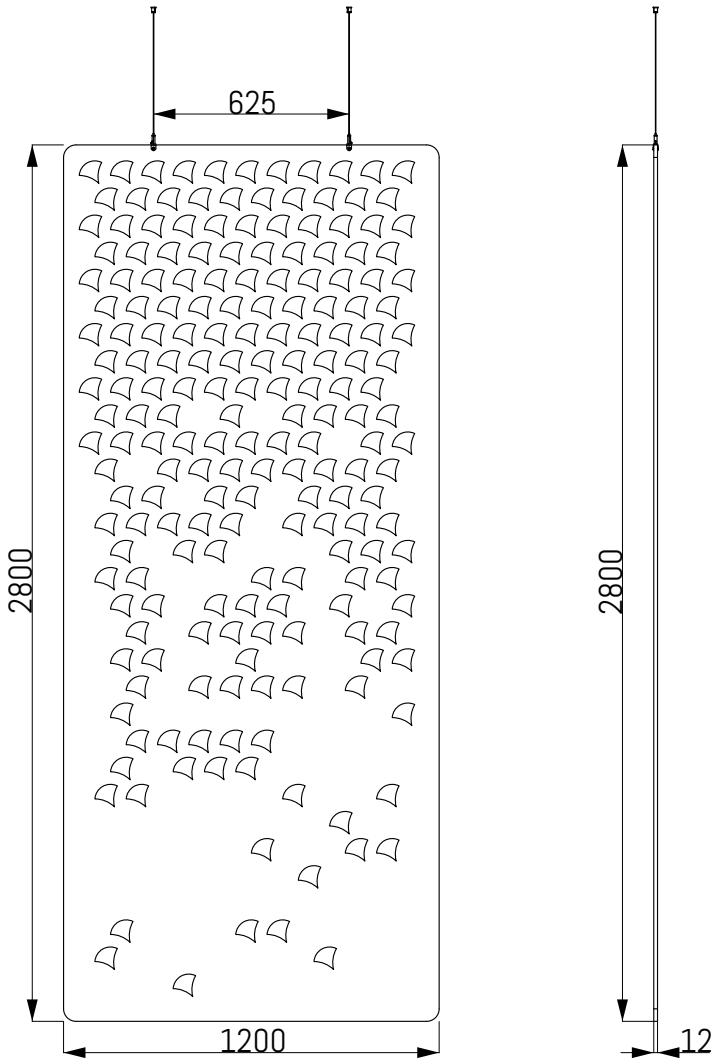
PARTS



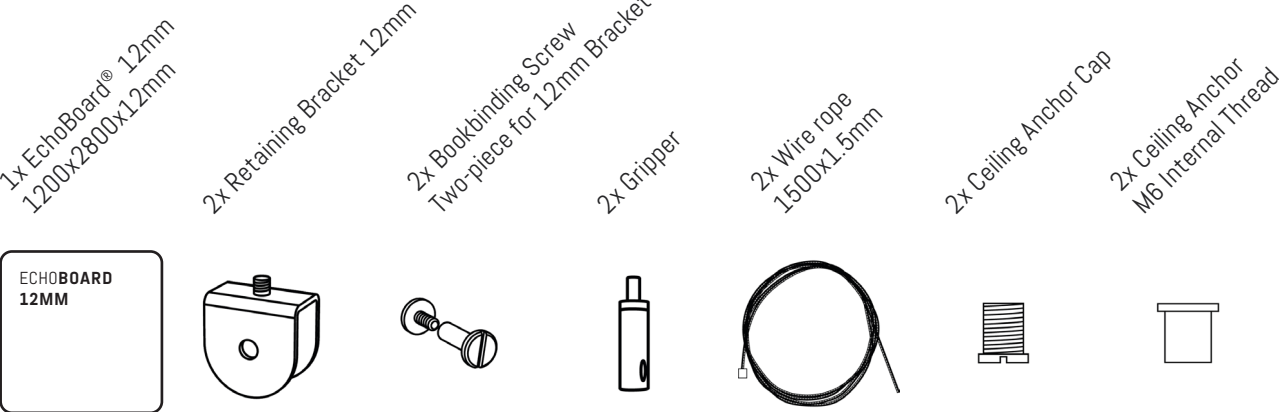
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM ARC
1465
1200x2800x12mm



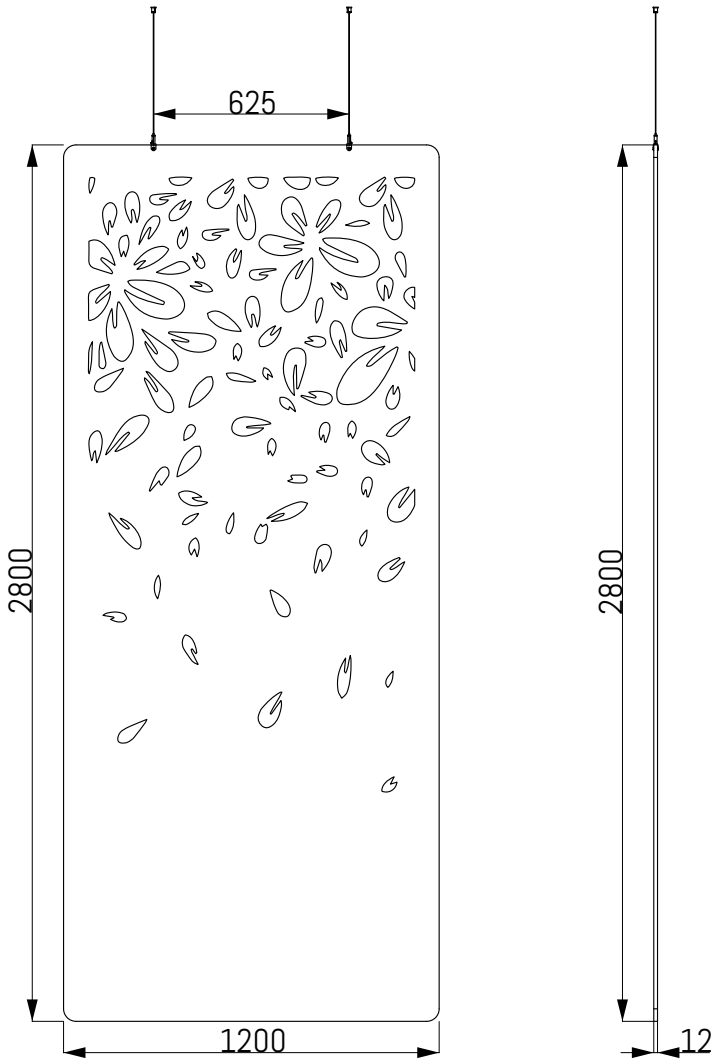
PARTS



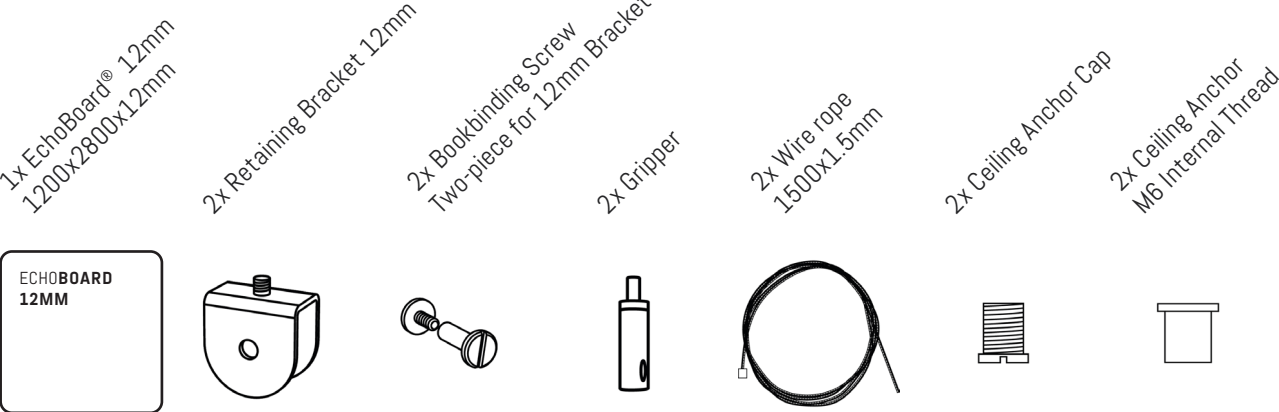
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM FLOWERS
1465
1200x2800x12mm



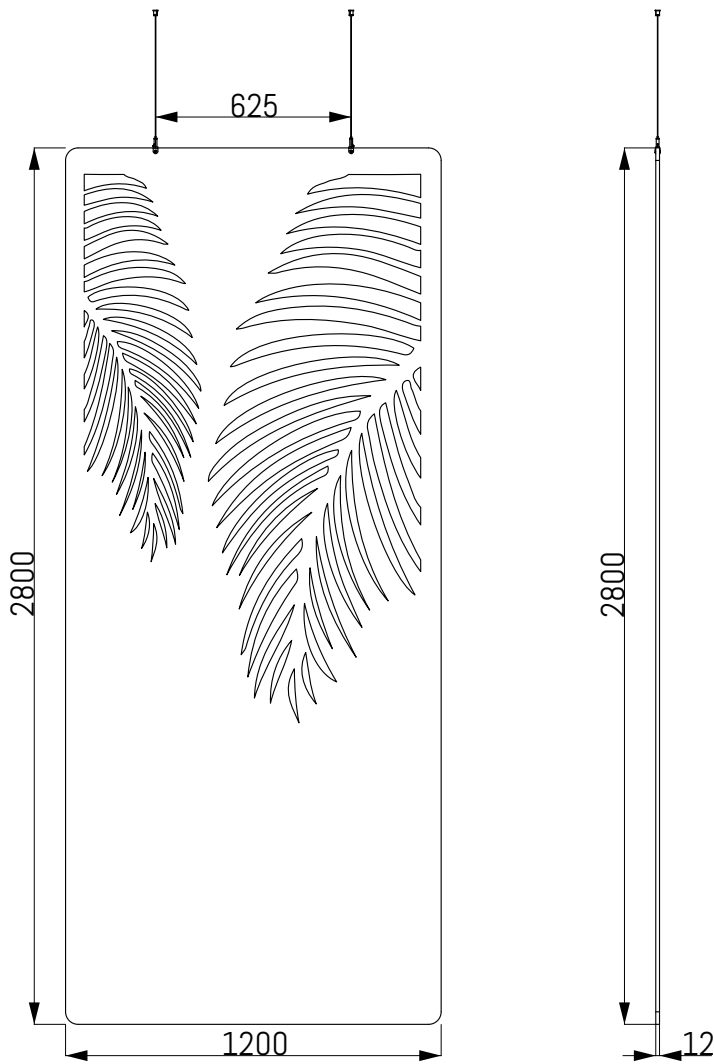
PARTS



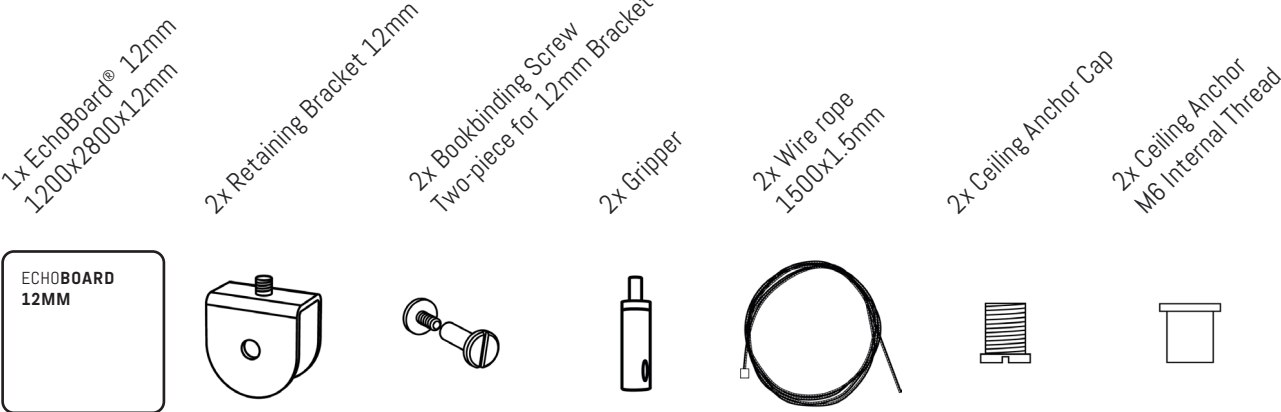
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM PALM
1465
1200x2800x12mm



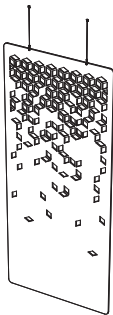
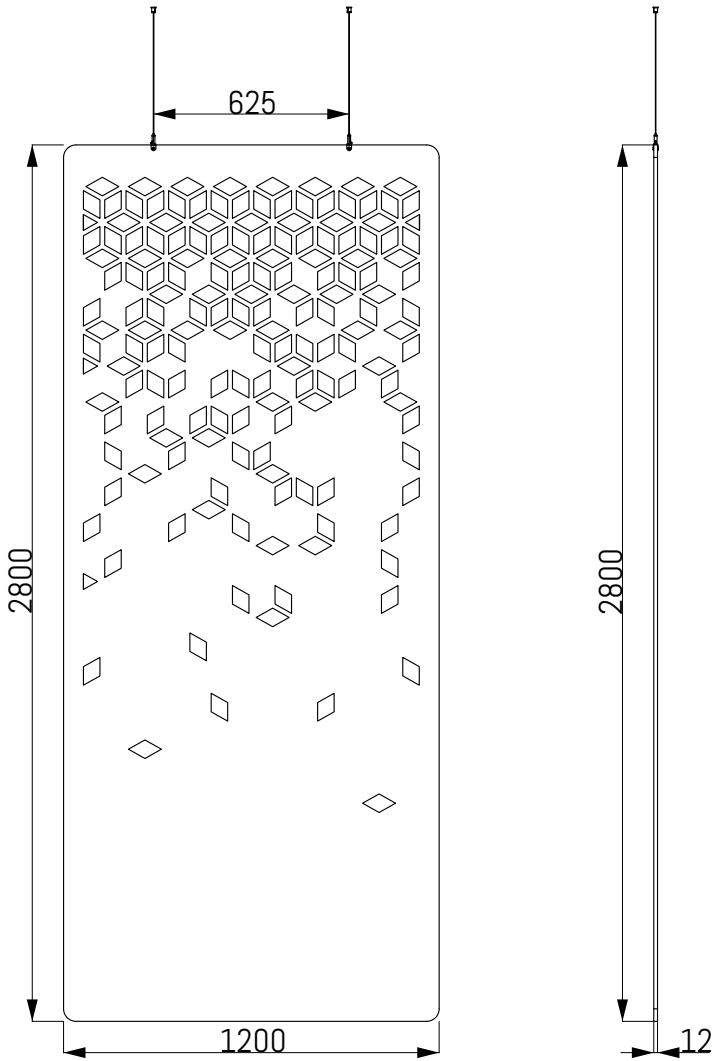
PARTS



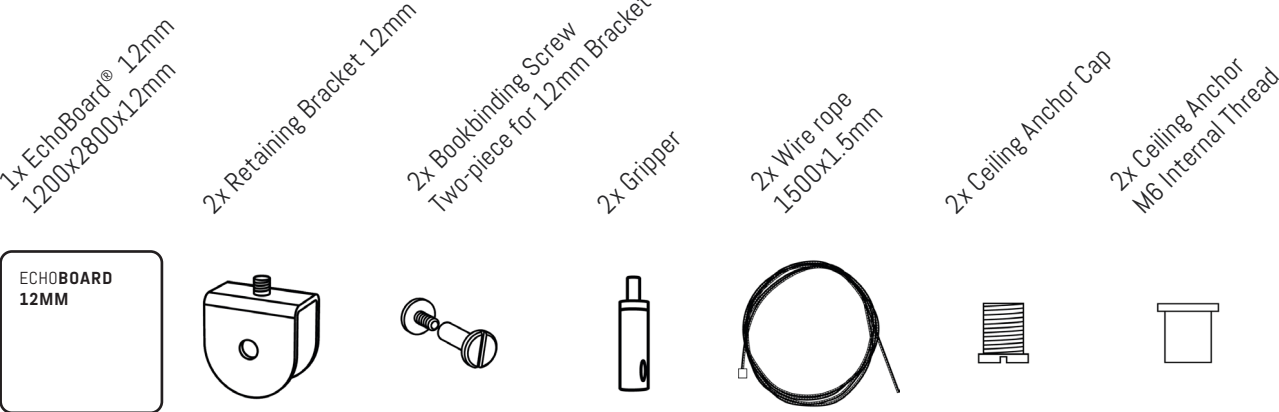
DIMENSIONS & PARTS



ECHOCURTAIN® 12MM CUBE
1465
1200x2800x12mm



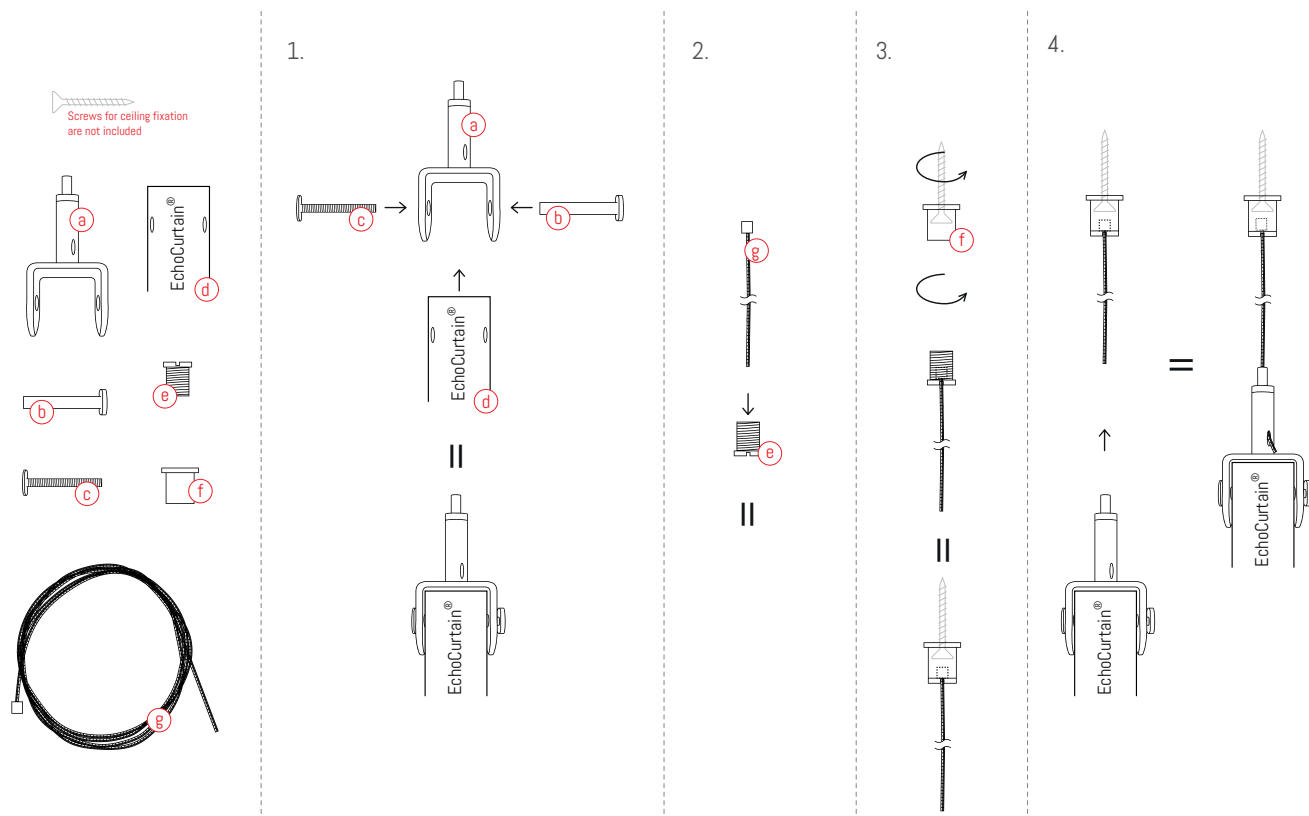
PARTS



INSTALLATION



GRIPPER DIRECT SUSPENSION SYSTEM



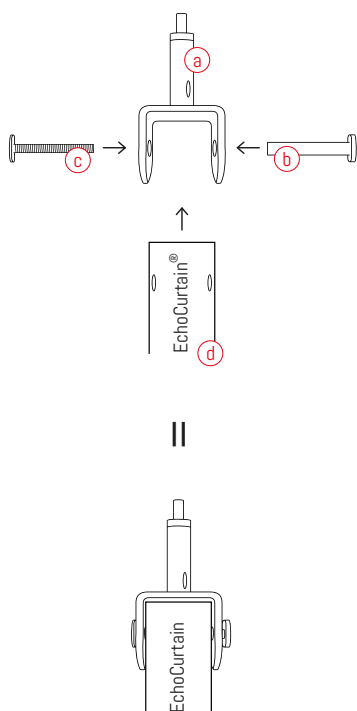
INSTALLATION



INSTALLATION WITH CURTAIN TRACK



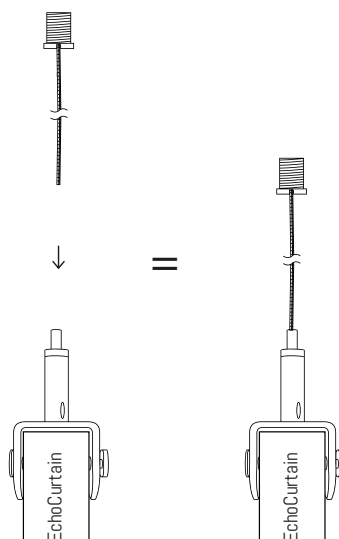
1.



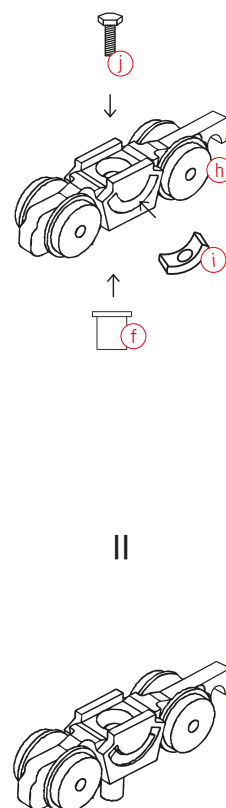
2.



3.



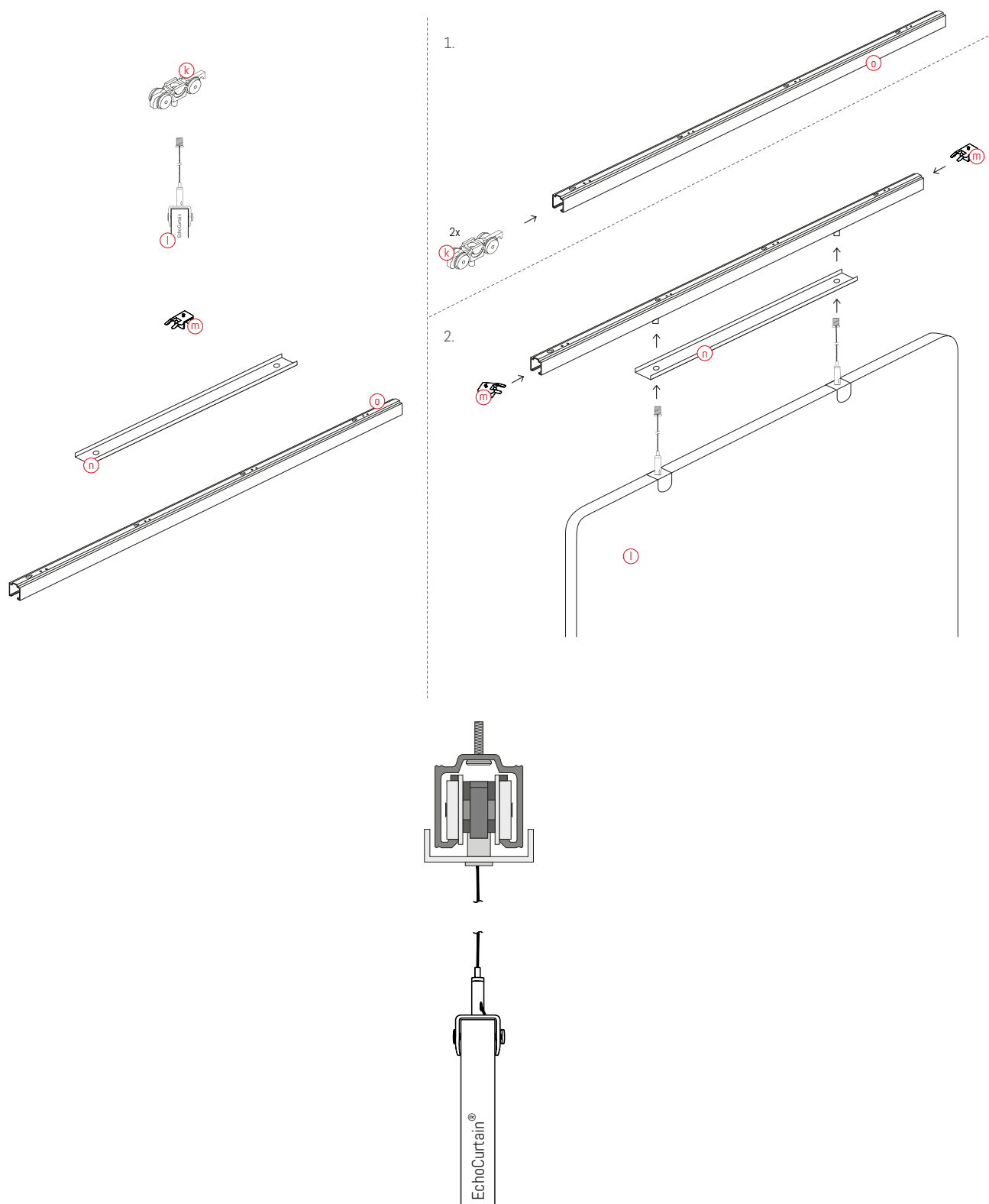
4.



INSTALLATION

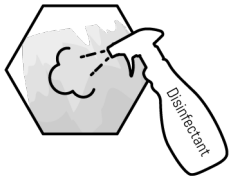


INSTALLATION WITH CURTAIN TRACK



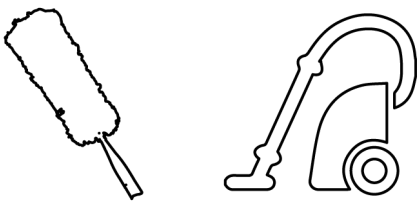
SURFACE DISINFECTION

Spray disinfectants can be used for rapid surface disinfection.



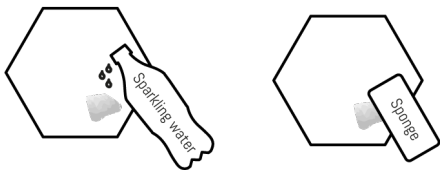
DUSTER/VACUUM CLEANER

For dusting use duster or vacuum cleaner.



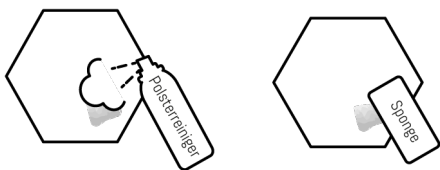
SPARKLING WATER

For slight contamination apply sparkling water to polluted area. Wipe carefully with a sponge.



UPHOLSTERY CLEANER

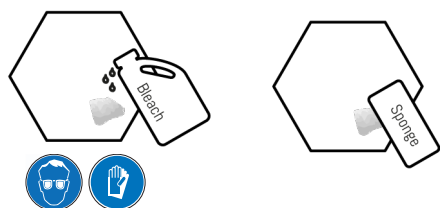
For medium contamination apply upholstery cleaner to polluted area. Wipe carefully with a sponge.



BLEACH

For heavy contamination apply bleach as chlorine or hydrogen peroxide on polluted area. Wipe carefully with a sponge and sparkling water.

Use of protection gloves and glasses is mandatory!



Please make first a cleaning attempt on an inconspicuous spot. Follow the instructions of the cleaning agents.



ECHO**JAZZ** AG
RINGSTRASSE 25
6010 KRIENS
SWITZERLAND
[WWW.ECHO**JAZZ**.COM](http://WWW.ECHOJAZZ.COM)
+41 41 340 18 80
[INFO@ECHO**JAZZ**.COM](mailto:INFO@ECHOJAZZ.COM)

ECHOCURTAIN® 24MM DATASHEET

TABLE OF CONTENTS



ECHOCURTAIN® 24MM	1
TENDER TEXT	3
DATASHEET ECHOBOARD® 24MM	4
COLOURS ECHOBOARD® 24MM	5
DIMENSIONS & PARTS	6
ECHOCURTAIN® 24MM PLAIN	6
ECHOCURTAIN® 24MM SPARKLY	7
ECHOCURTAIN® 24MM PEN.....	8
ECHOCURTAIN® 24MM MESH.....	9
ECHOCURTAIN® 24MM JUNGLE.....	10
ECHOCURTAIN® 24MM BEAM.....	11
ECHOCURTAIN® 24MM ZEN.....	12
ECHOCURTAIN® 24MM PETALS	13
ECHOCURTAIN® 24MM CITY	14
ECHOCURTAIN® 24MM GECKO.....	15
ECHOCURTAIN® 24MM SPIDER.....	16
ECHOCURTAIN® 24MM BLOCKS.....	17
ECHOCURTAIN® 24MM BASILIKA.....	18
ECHOCURTAIN® 24MM CELTIC.....	19
ECHOCURTAIN® 24MM PULL	20
ECHOCURTAIN® 24MM ARC.....	21
ECHOCURTAIN® 24MM FLOWERS.....	22
ECHOCURTAIN® 24MM PALM	23
ECHOCURTAIN® 24MM CUBE	24
INSTALLATION	25
GRIPPER DIRECT SUSPENSION SYSTEM.....	25
INSTALLATION WITH CURTAIN TRACK	26
CLEANING & CARE	28

PRODUCT NAME

EchoCurtain® 24mm

DESCRIPTION

High-performance acoustic baffle with textile surface made of 100% PET.

EchoCurtain® 24mm is made of robust high-tech felt with homogeneous texture and colour throughout. This sound absorber with a recycled PET content of over 50% is ideal for functional and aesthetic acoustic solutions and a direct answer to questions about ecological and economic sustainability that arise in contemporary interior design, interior decoration and renovation. The high stiffness enables a crossbar made out of the same material. Adjustments can be made very easily by mechanical processing.

PRODUCT PROPERTIES

Thickness: 24mm

Weight: 3600g/m² (± 10%)

Corner radius: 40mm

ACOUSTIC PERFORMANCE

aw: 0.50 - 1.00

NRC: 0.70 - 0.95

INSTALLATION

- Suitable for use in rooms as well as roofed outdoor areas
- Very easy to trim with a knife
- Easily height-adjustable

MATERIAL PROPERTIES

- Extremely robust and shockproof
- Very high colour fastness of the all-round homogeneous textile surface available in over 20 colours
- Flame retardant. B-s1,d0 certified according to EN 13501
- Extremely low volatile organic compounds below < 0.5mg/m²/h, certified according to ASTM D5116
- Formaldehyde emission below < 0.1mg/m²/h, certified according to ASTM D5116
- Dimensionally stable up to 50°C and 95%rH
- Melting point: 250 °C
- Decomposition Temp: > 250 °C
- Alkalinity: pH: 7.8 (pH 7 is neutral)

CLEANING & CARE

Can be cleaned dry and damp with chlorine or hydrogen peroxide.

ENVIRONMENT

- 100% PET with a content of over 50% from recycled PET bottles
- 100% recyclable
- eco-1 rating within eco-bau & Minergie-Eco requirements
- Cradle to Cradle Bronze certified

DISPOSAL

The product is recyclable as part of ECHOJAZZ's stewardship programme.

DATASHEET ECHOBOARD® 24MM



EchoBoard® 24mm is a high quality sound absorber with an aw of up to 1.00 and a NRC of up to 0.95, which can be used for acoustic ceilings, walls, office desks or room dividers.

DESCRIPTION	EchoBoard® 24mm																												
DIMENSIONS	1800mm (± 1mm) x 2400mm (± 1mm)																												
COMPOSITION	100% PET (> 50% recycled PET)																												
PET BOTTLES* PER PANEEL	303 PET Bottles *The number of PET bottles refers to 500ml PET bottles with a bottle weight of 24g.																												
WEIGHT	3600g/m² (± 10%)																												
MATERIAL THICKNESS	24mm																												
LIGHTFASTNESS ISO 105-B02-1994	> 7																												
FIRE TEST EN 13501	B-s1, d0																												
VOC EMISSIONS ASTM D5116	< 0.5mg/m²/h																												
FORMALDEHYDE EMISSIONS ASTM D5116	< 0.1mg/m²/h																												
ENVIRONMENTAL CERTIFICATIONS	eco1 Minergie-Eco Cradle to Cradle Certified® Bronze M1 emission-free materials																												
SOUND ABSORPTION DIN EN ISO 11654 ASTM C423	aw 0.50 (direct mount) aw 0.65 (50mm wall/ceiling distance) aw 1.00 (200mm wall/ceiling distance) NRC = 0.70 (direct mount) NRC = 0.80 (50mm wall/ceiling distance) NRC = 0.95 (200mm wall/ceiling distance)																												
COLOURS	> 20																												
SOUND ABSORPTION GRAPH	<table><caption>Approximate data points from the Sound Absorption Graph</caption><thead><tr><th>Frequency (Hz)</th><th>Direct Mount (Green)</th><th>50mm Distance (Yellow)</th><th>200mm Distance (Blue)</th></tr></thead><tbody><tr><td>125</td><td>0.05</td><td>0.15</td><td>0.55</td></tr><tr><td>250</td><td>0.15</td><td>0.35</td><td>0.85</td></tr><tr><td>500</td><td>0.55</td><td>0.85</td><td>1.05</td></tr><tr><td>1000</td><td>0.85</td><td>1.05</td><td>0.85</td></tr><tr><td>2000</td><td>1.00</td><td>1.00</td><td>0.95</td></tr><tr><td>4000</td><td>1.05</td><td>1.00</td><td>1.00</td></tr></tbody></table> Legend: - Sound absorption coefficient (direct mount) - Sound absorption coefficient (50mm) - Sound absorption coefficient (200mm)	Frequency (Hz)	Direct Mount (Green)	50mm Distance (Yellow)	200mm Distance (Blue)	125	0.05	0.15	0.55	250	0.15	0.35	0.85	500	0.55	0.85	1.05	1000	0.85	1.05	0.85	2000	1.00	1.00	0.95	4000	1.05	1.00	1.00
Frequency (Hz)	Direct Mount (Green)	50mm Distance (Yellow)	200mm Distance (Blue)																										
125	0.05	0.15	0.55																										
250	0.15	0.35	0.85																										
500	0.55	0.85	1.05																										
1000	0.85	1.05	0.85																										
2000	1.00	1.00	0.95																										
4000	1.05	1.00	1.00																										

COLOURS ECHOBOARD® 24MM



ECHOBOARD® 24MM



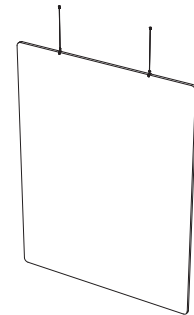
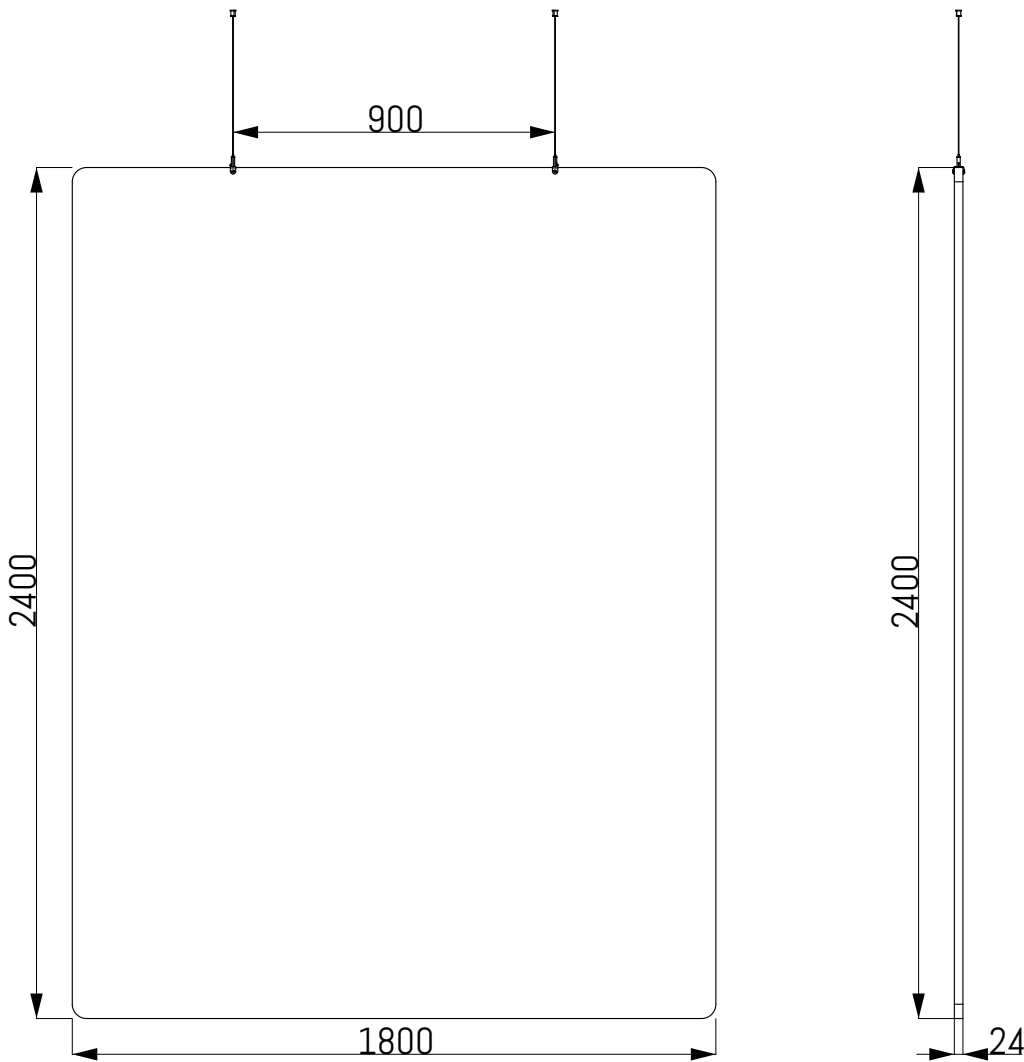
*Discontinued. Colour available from stock while supplies last or on request with a minimum order quantity.



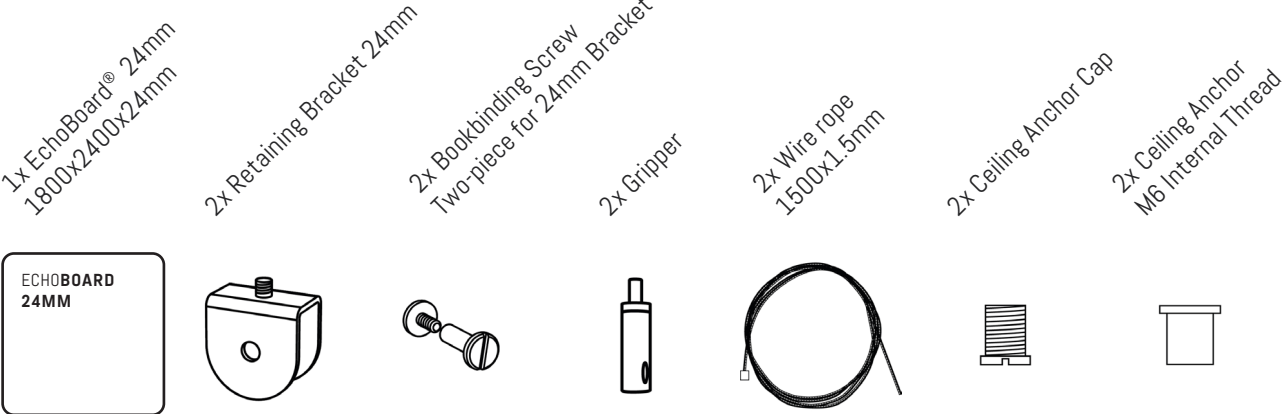
DIMENSIONS & PARTS



ECHO**CURTAIN**® 24MM PLAIN
1242
1800x2400x24mm



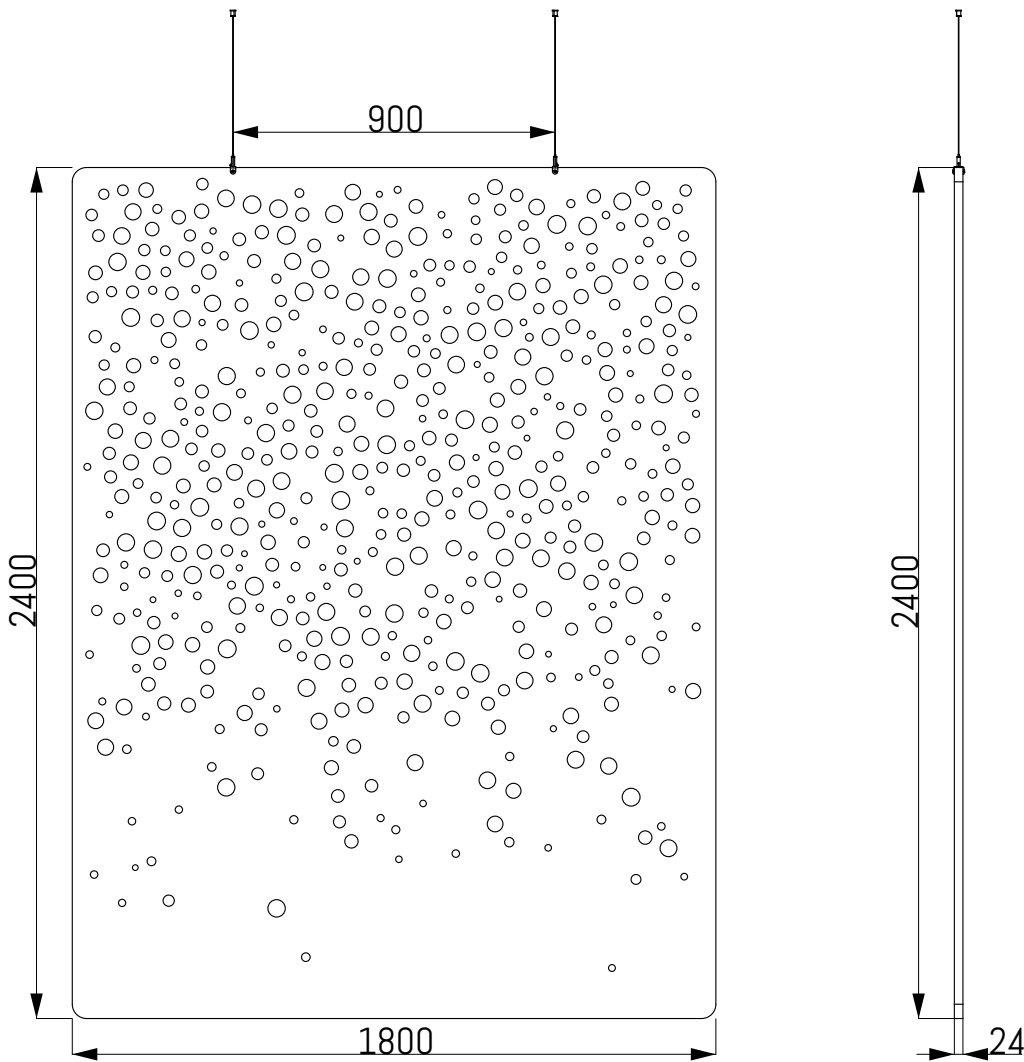
PARTS



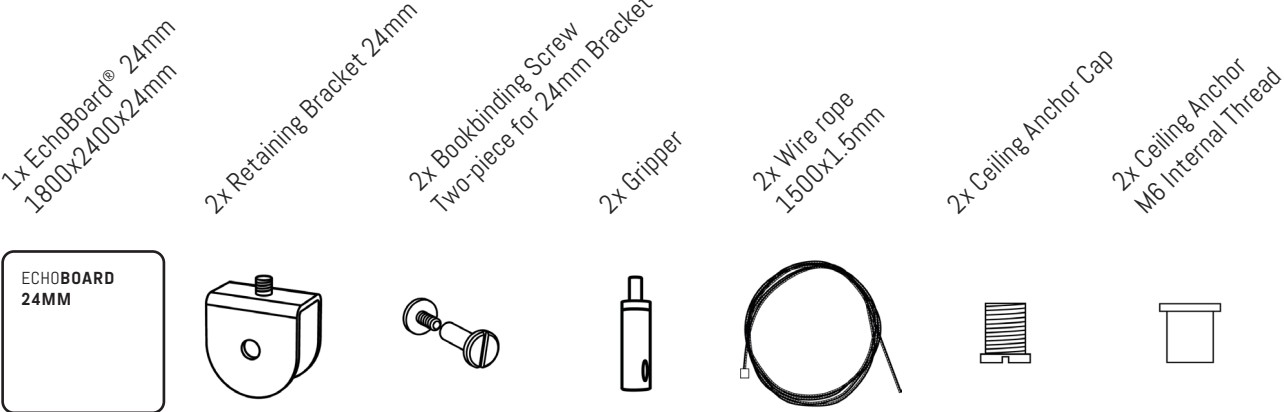
DIMENSIONS & PARTS



ECHO**CURTAIN**® 24MM SPARKLY
1464
1800x2400x24mm



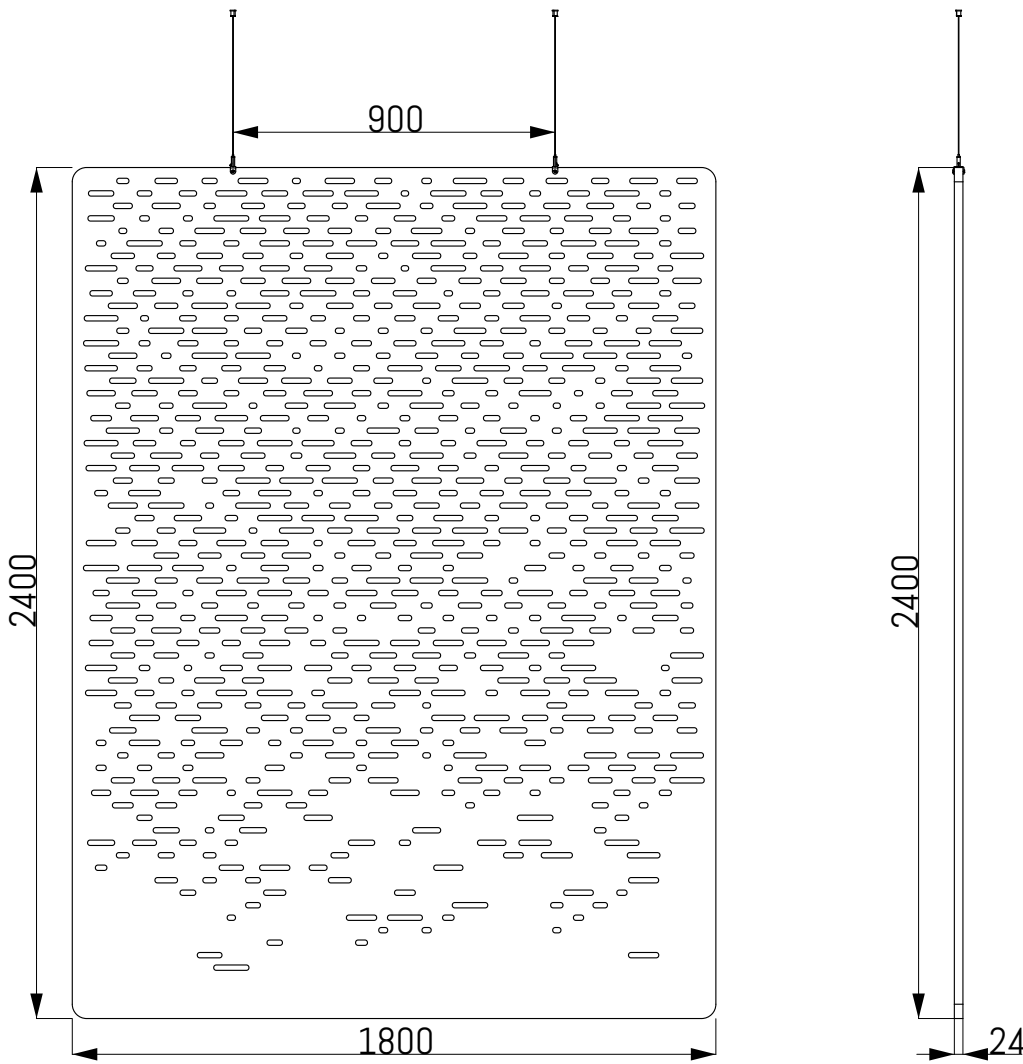
PARTS



DIMENSIONS & PARTS



ECHO**CURTAIN**® 24MM PEN
1464
1800x2400x24mm



PARTS

- 1x EchoBoard® 24mm
1800x2400x24mm
- 2x Retaining Bracket 24mm
- 2x Bookbinding Screw
Two-piece for 24mm Bracket
- 2x Gripper
- 2x Wire rope
1500x1.5mm
- 2x Ceiling Anchor Cap
- 2x Ceiling Anchor
M6 Internal Thread



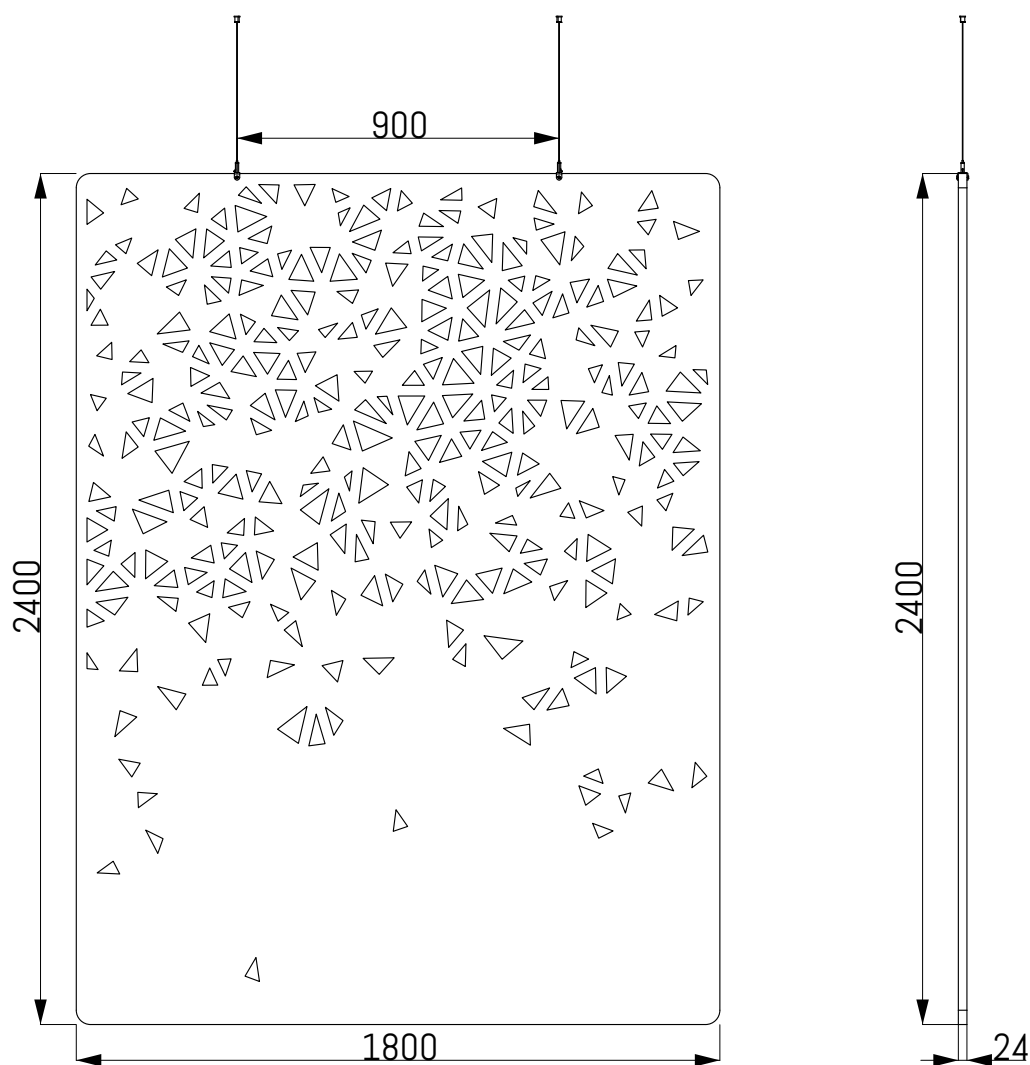
DIMENSIONS & PARTS



ECHOCURTAIN® 24MM MESH

1464

1800x2400x24mm



PARTS

1x EchoBoard® 24mm
1800x2400x24mm

2x Retaining Bracket 24mm

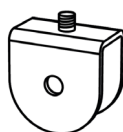
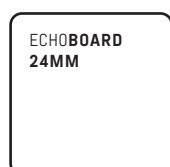
2x Bookbinding Screw
Two-piece for 24mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

2x Ceiling Anchor Cap

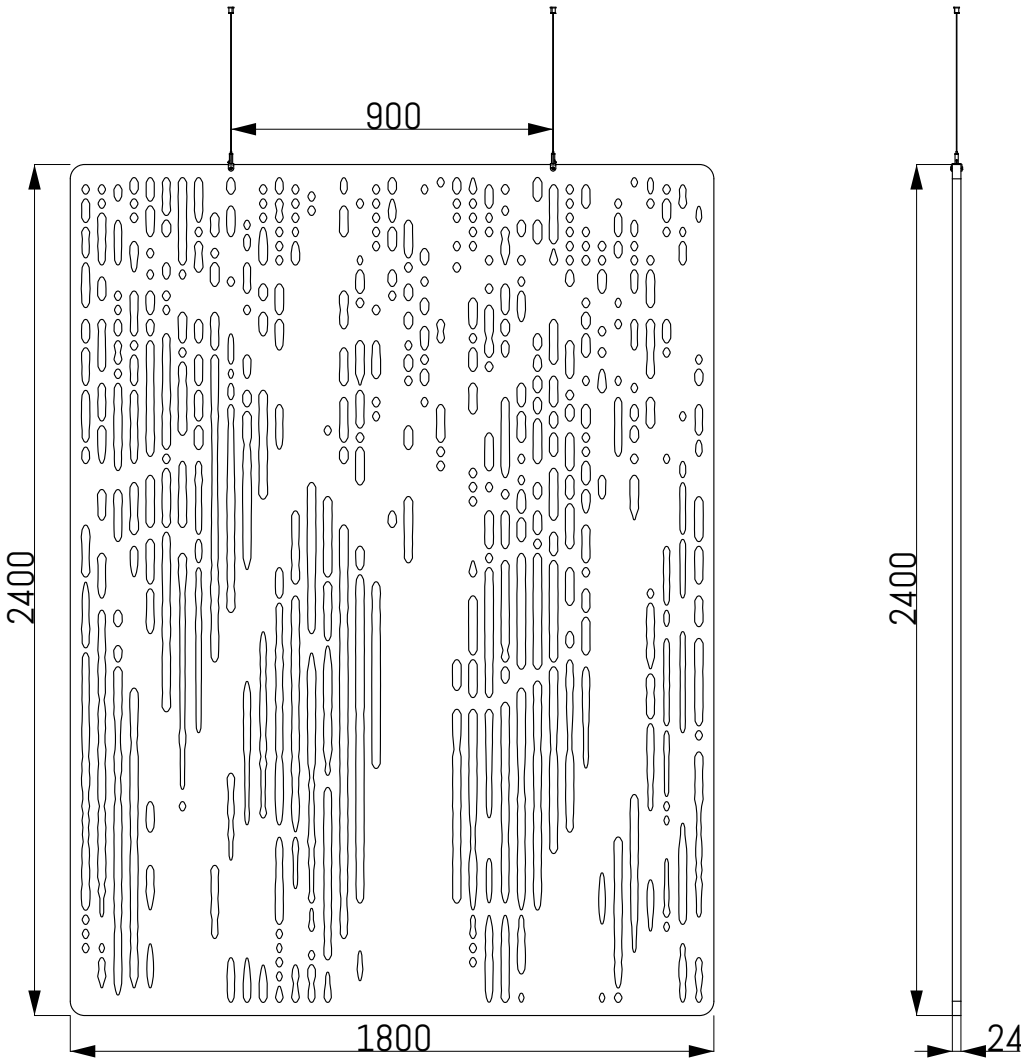
2x Ceiling Anchor
M6 Internal Thread



DIMENSIONS & PARTS



ECHO CURTAIN® 24MM JUNGLE
1464
1800x2400x24mm



PARTS

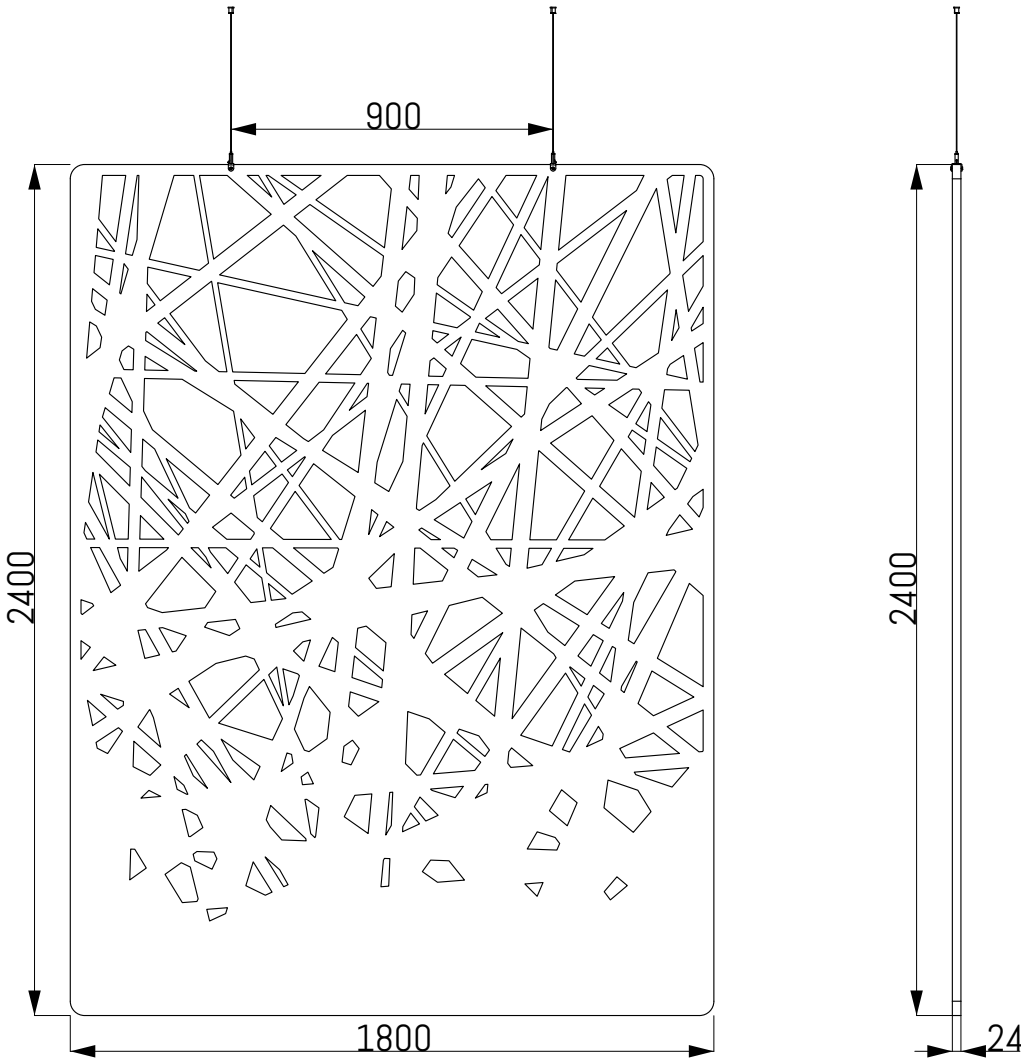
1x EchoBoard® 24mm 1800x2400x24mm	2x Retaining Bracket 24mm	2x Bookbinding Screw Two-piece for 24mm Bracket	2x Gripper	2x Wire rope 1500x1.5mm	2x Ceiling Anchor Cap	2x Ceiling Anchor M6 Internal Thread

DIMENSIONS & PARTS

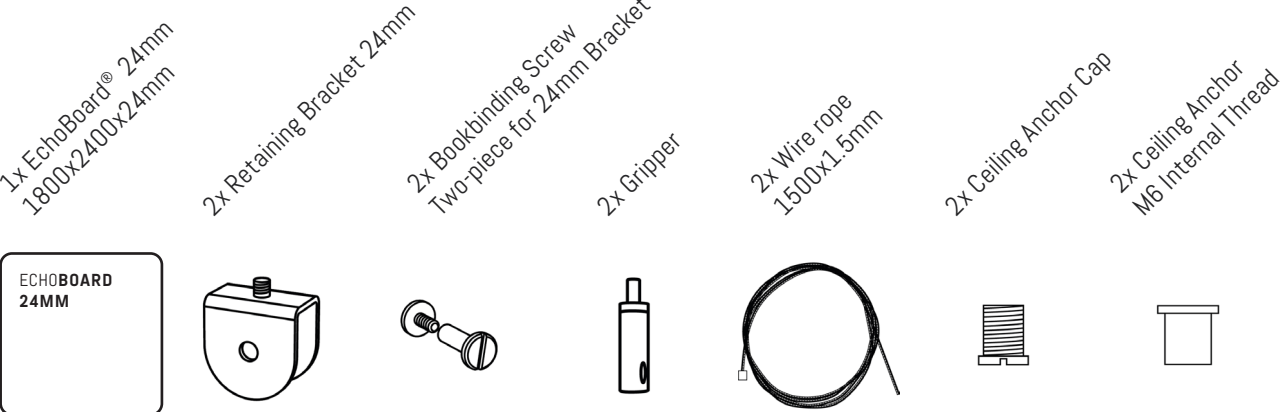
ECHOCURTAIN® 24MM BEAM

1464

1800x2400x24mm



PARTS

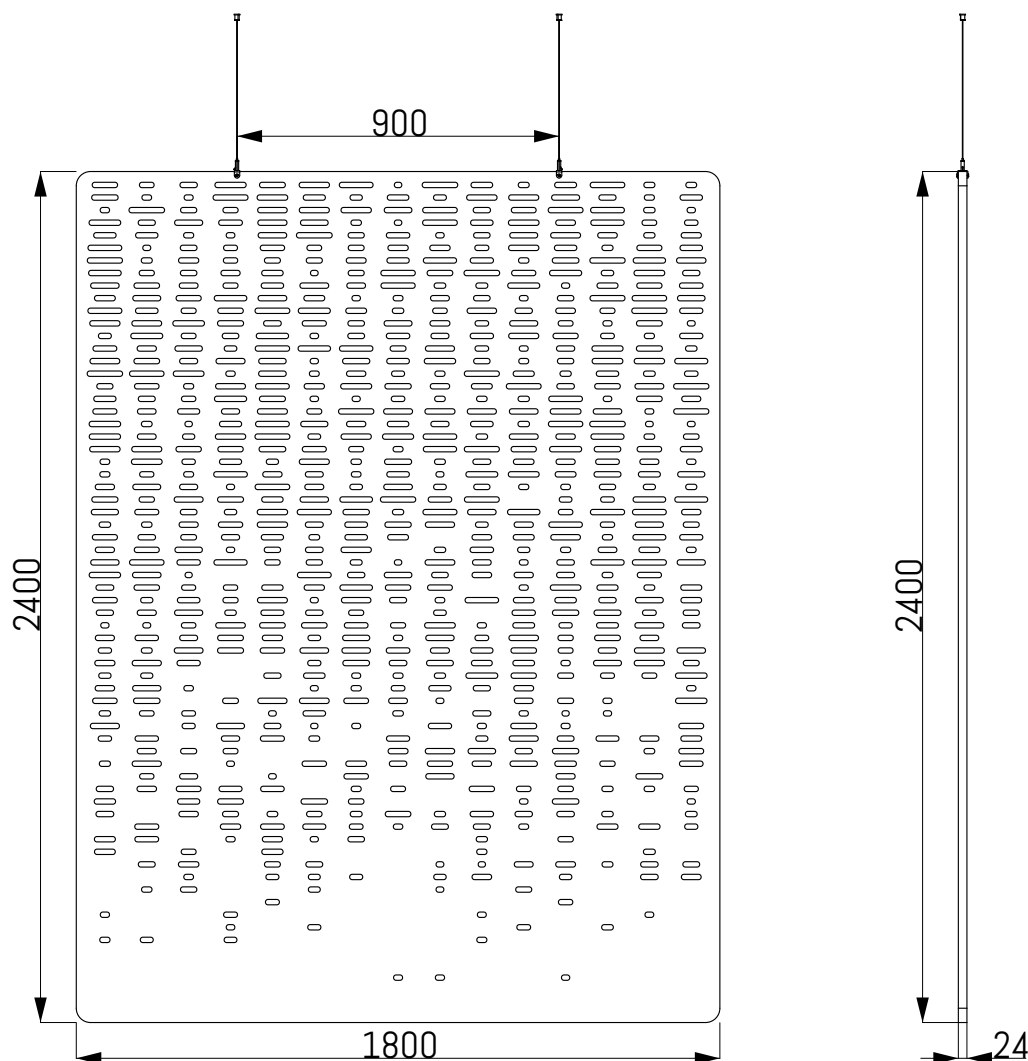
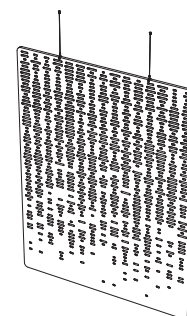


DIMENSIONS & PARTS

ECHOCURTAIN® 24MM ZEN

1464

1800x2400x24mm



PARTS

1x EchoBoard® 24mm
1800x2400x24mm

2x Retaining Bracket 24mm

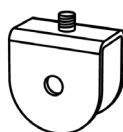
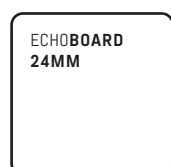
2x Bookbinding Screw
Two-piece for 24mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

2x Ceiling Anchor Cap

2x Ceiling Anchor
M6 Internal Thread



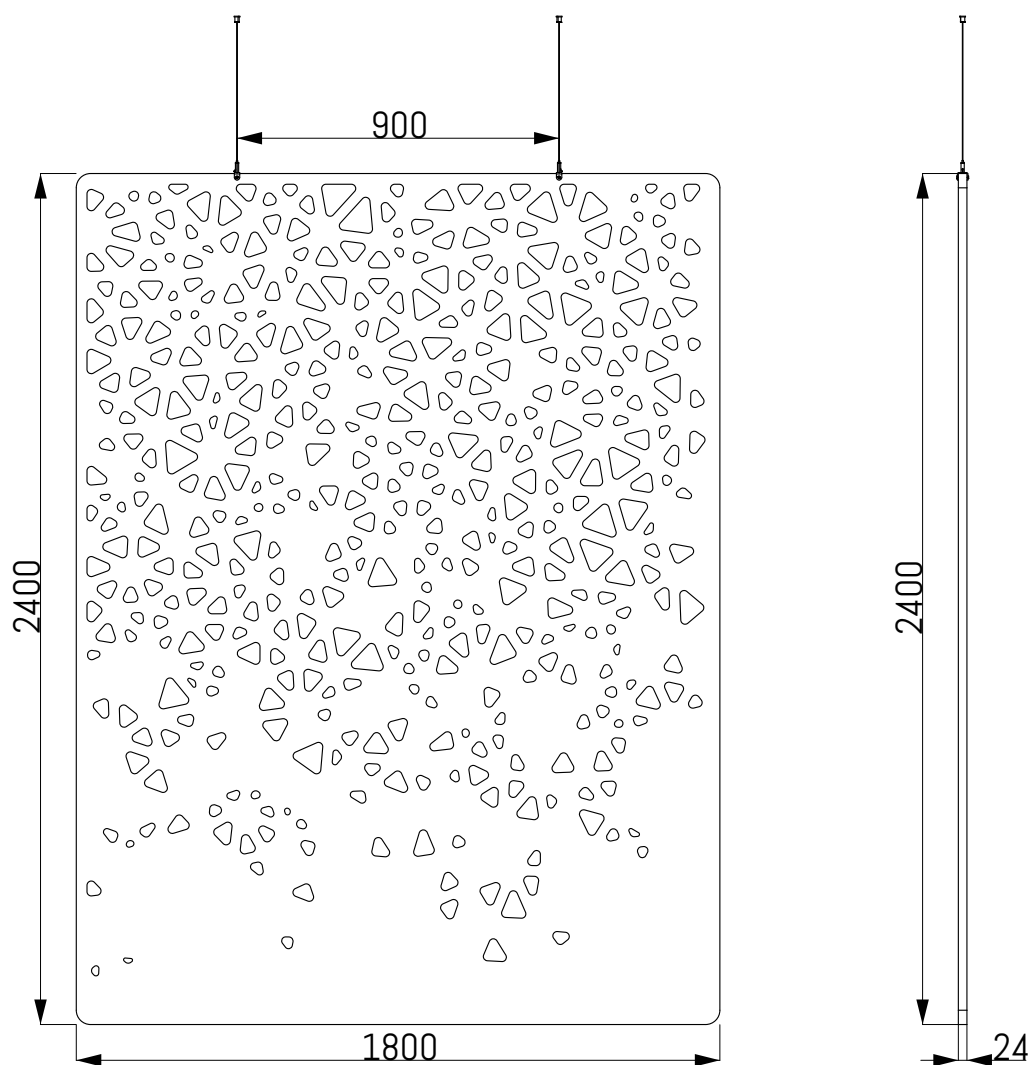
DIMENSIONS & PARTS



ECHOCURTAIN® 24MM PETALS

1464

1800x2400x24mm



PARTS

1x EchoBoard® 24mm
1800x2400x24mm

2x Retaining Bracket 24mm

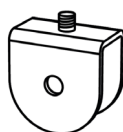
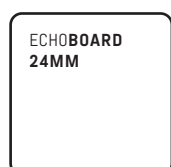
2x Bookbinding Screw
Two-piece for 24mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

2x Ceiling Anchor Cap

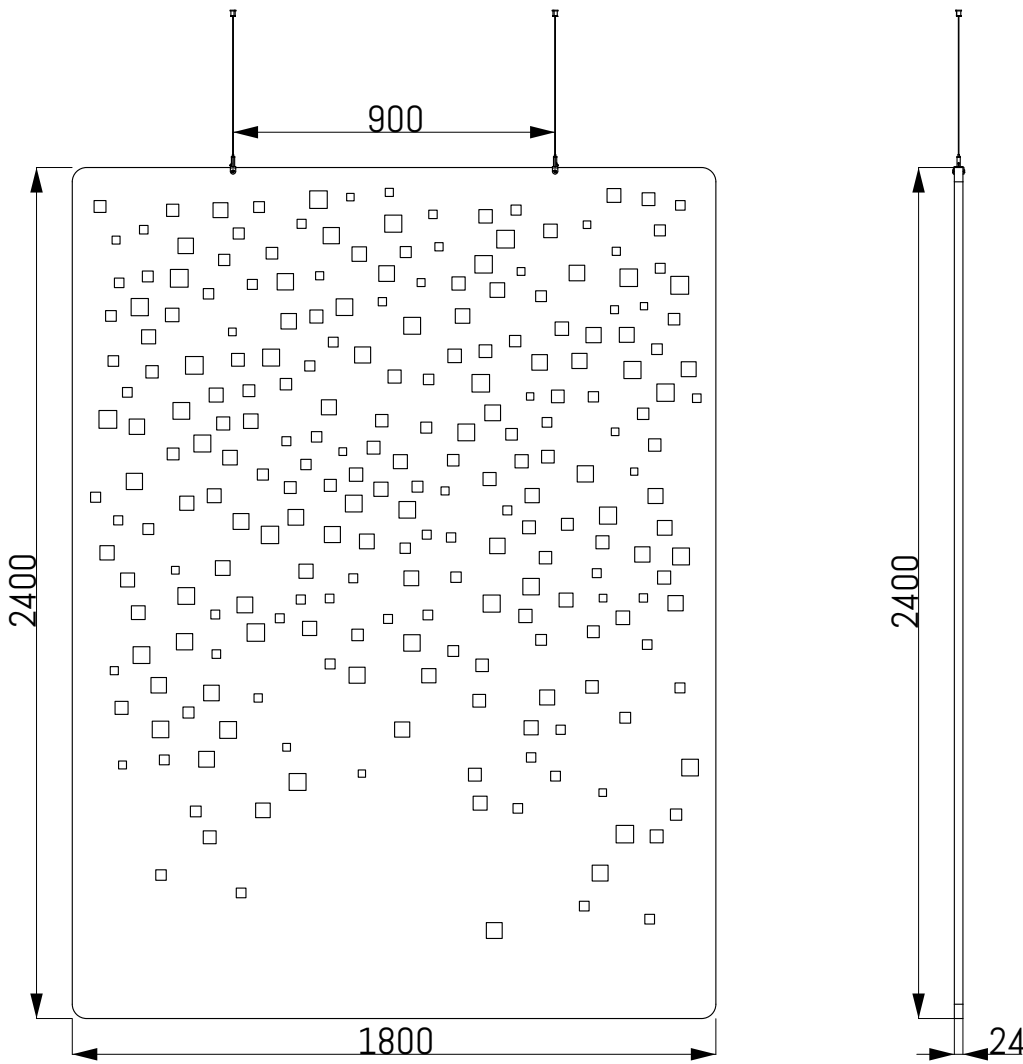
2x Ceiling Anchor
M6 Internal Thread



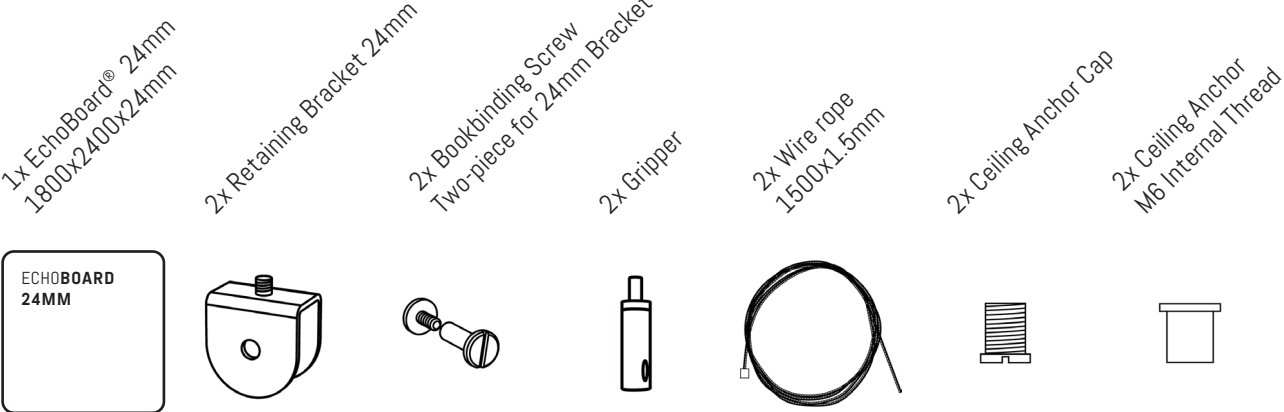
DIMENSIONS & PARTS



ECHO**CURTAIN**® 24MM CITY
1464
1800x2400x24mm



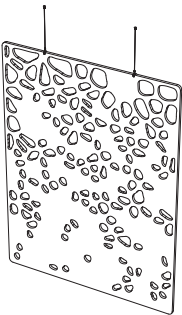
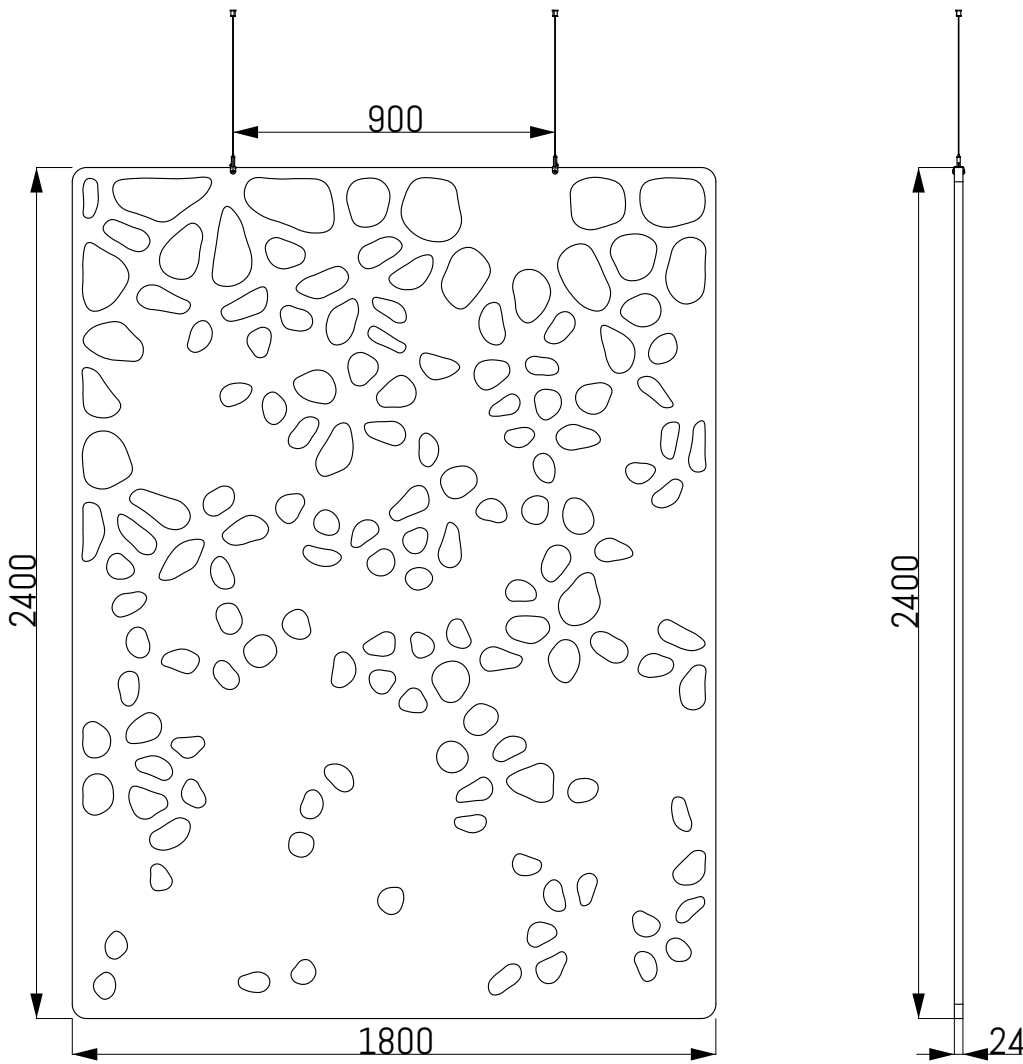
PARTS



DIMENSIONS & PARTS



ECHOCURTAIN® 24MM GECKO
1464
1800x2400x24mm



PARTS

1x EchoBoard® 24mm
1800x2400x24mm

2x Retaining Bracket 24mm

2x Bookbinding Screw
Two-piece for 24mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

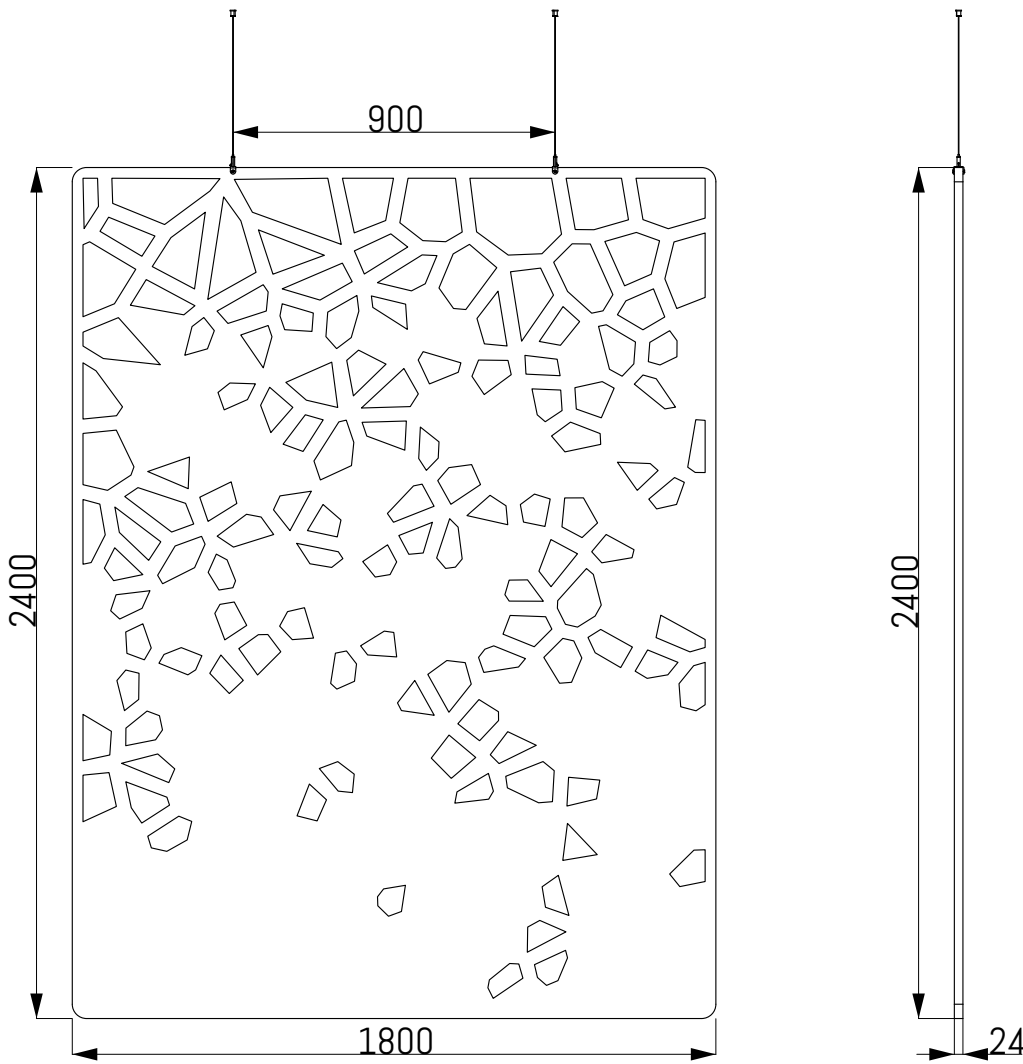
2x Ceiling Anchor Cap

2x Ceiling Anchor
M6 Internal Thread

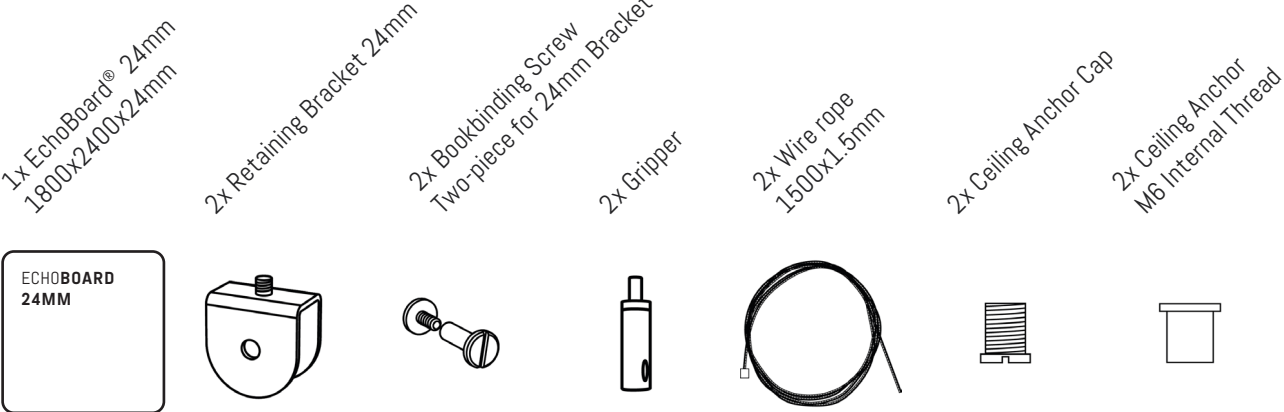
DIMENSIONS & PARTS



ECHOCURTAIN® 24MM SPIDER
1464
1800x2400x24mm



PARTS

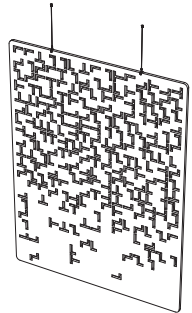
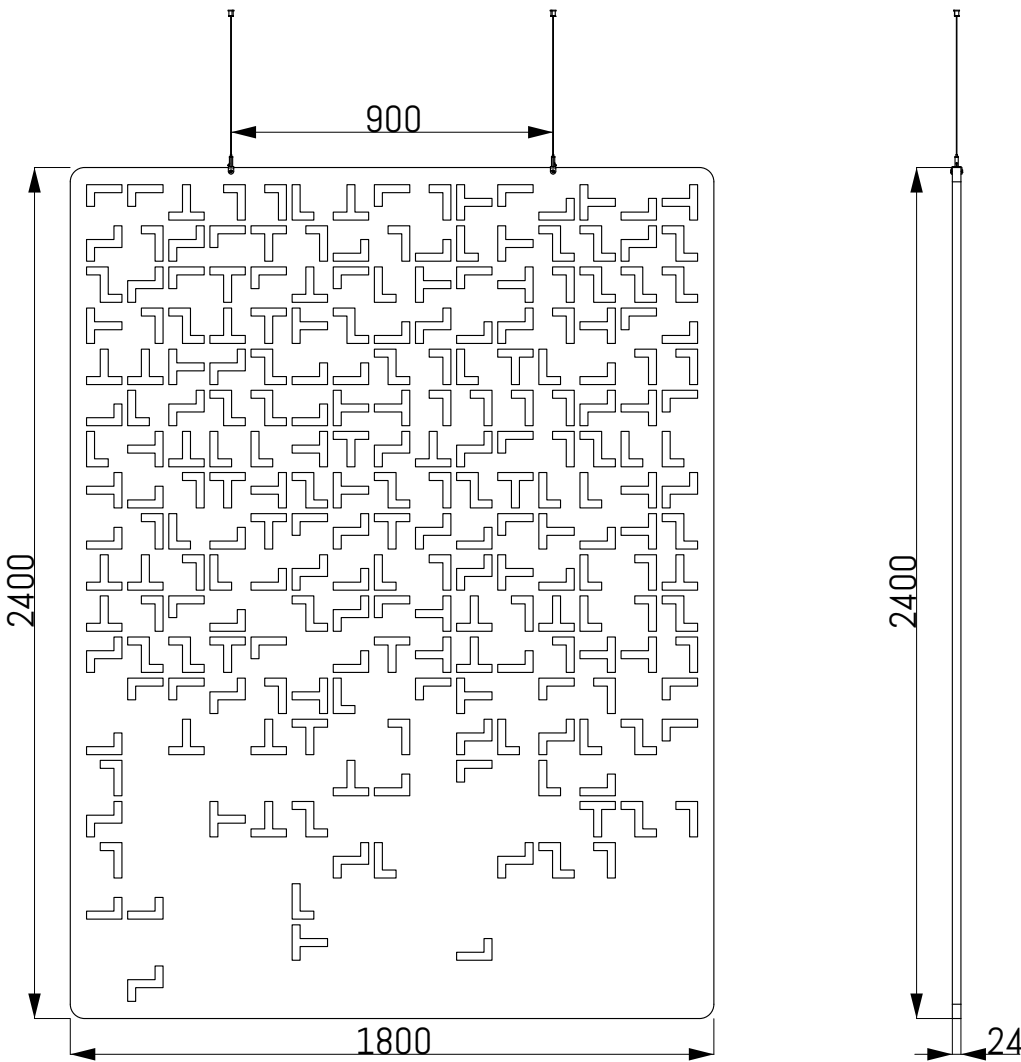


DIMENSIONS & PARTS

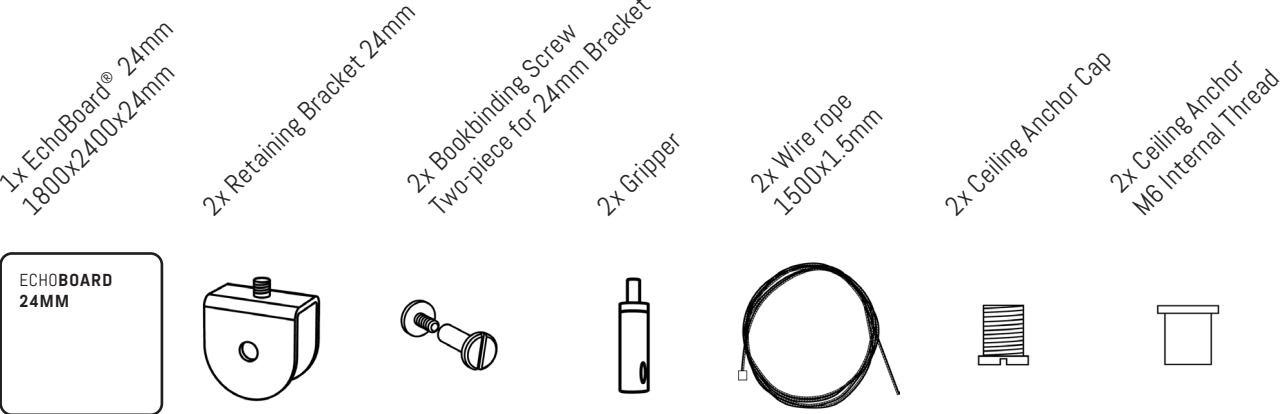
ECHO CURTAIN® 24MM BLOCKS

1464

1800x2400x24mm



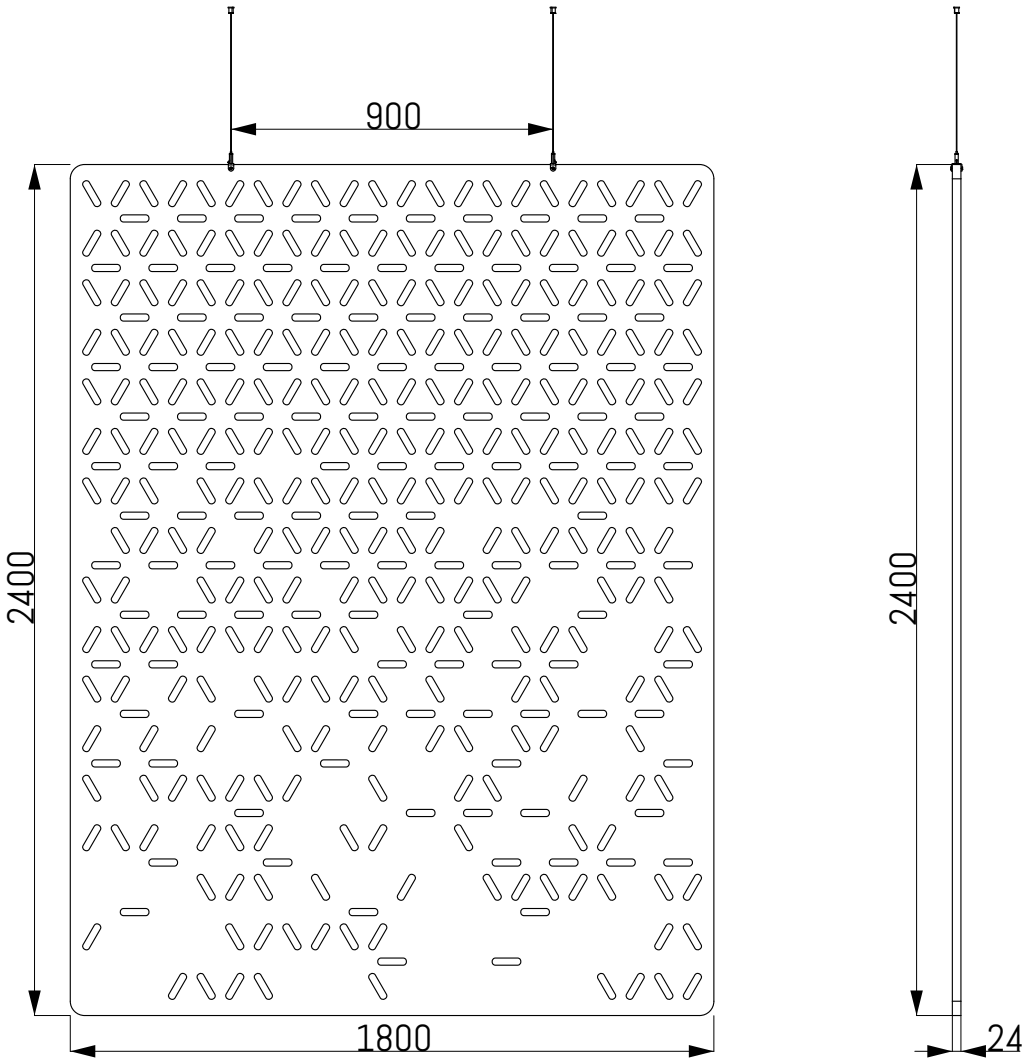
PARTS



DIMENSIONS & PARTS



ECHOCURTAIN® 24MM BASILIKA
 1464
 1800x2400x24mm

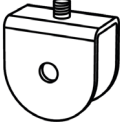


PARTS

1x EchoBoard® 24mm
1800x2400x24mm



2x Retaining Bracket 24mm



2x Bookbinding Screw
Two-piece for 24mm Bracket



2x Gripper



2x Wire rope
1500x1.5mm



2x Ceiling Anchor Cap



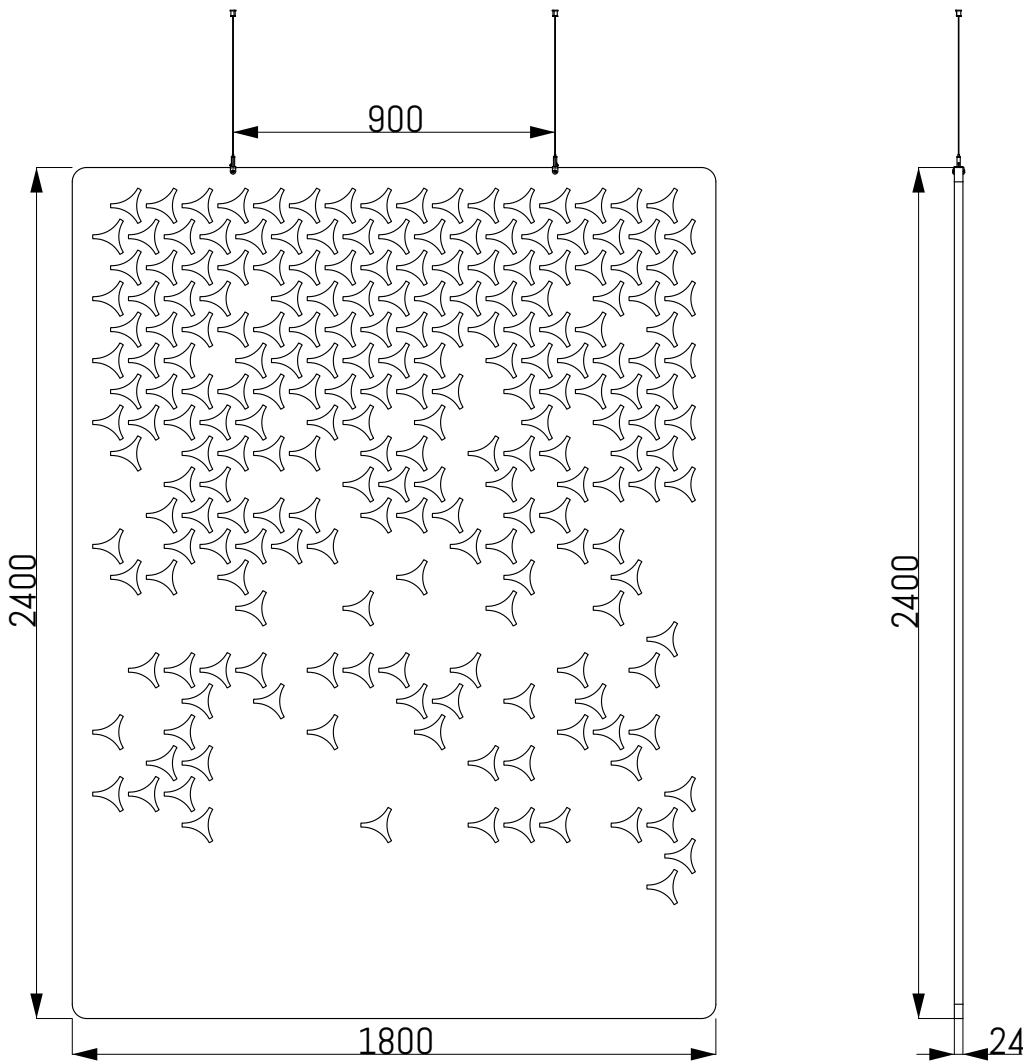
2x Ceiling Anchor
M6 Internal Thread



DIMENSIONS & PARTS



ECHOCURTAIN® 24MM CELTIC
1464
1800x2400x24mm



PARTS

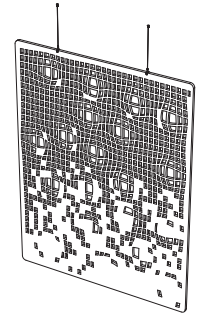
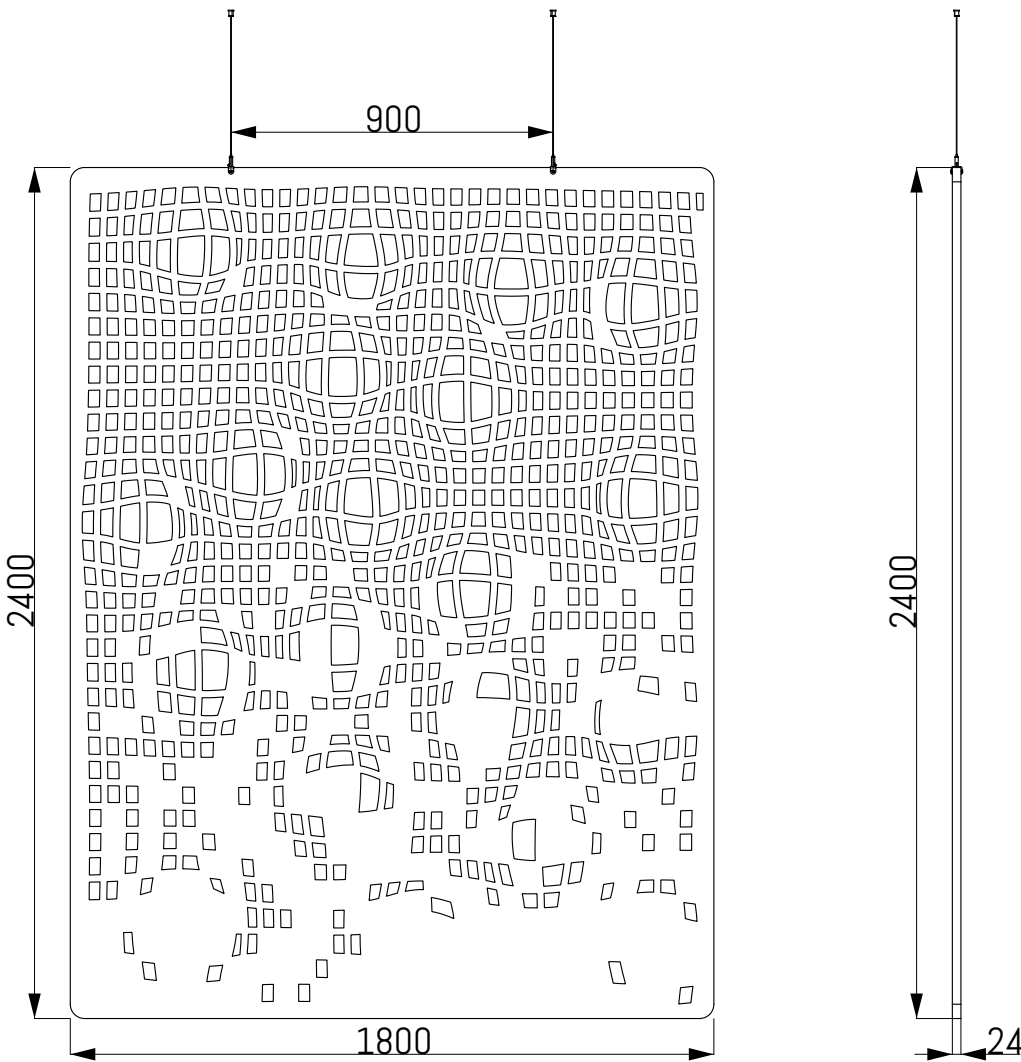
1x EchoBoard® 24mm 1800x2400x24mm	2x Retaining Bracket 24mm	2x Bookbinding Screw Two-piece for 24mm Bracket	2x Gripper	2x Wire rope 1500x1.5mm	2x Ceiling Anchor Cap	2x Ceiling Anchor M6 Internal Thread

DIMENSIONS & PARTS

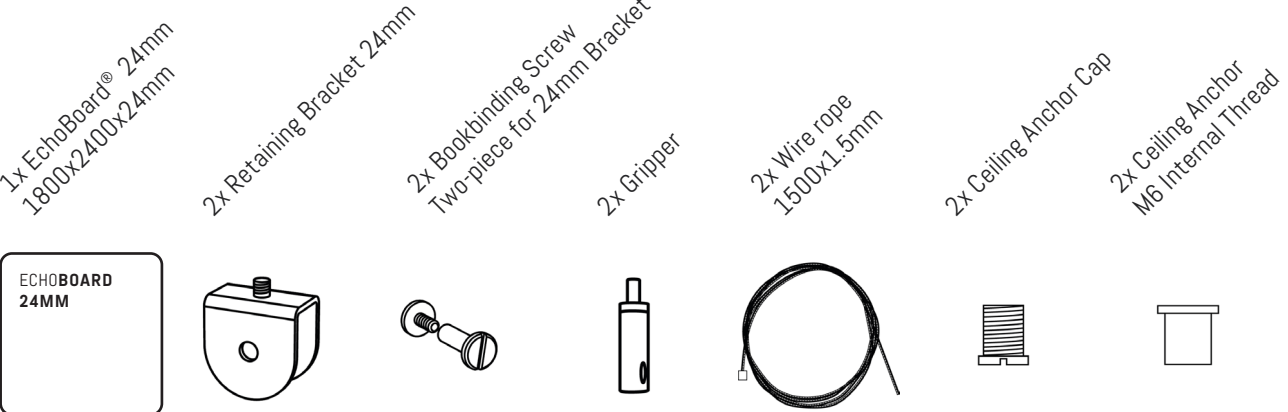
ECHOCURTAIN® 24MM PULL

1464

1800x2400x24mm



PARTS

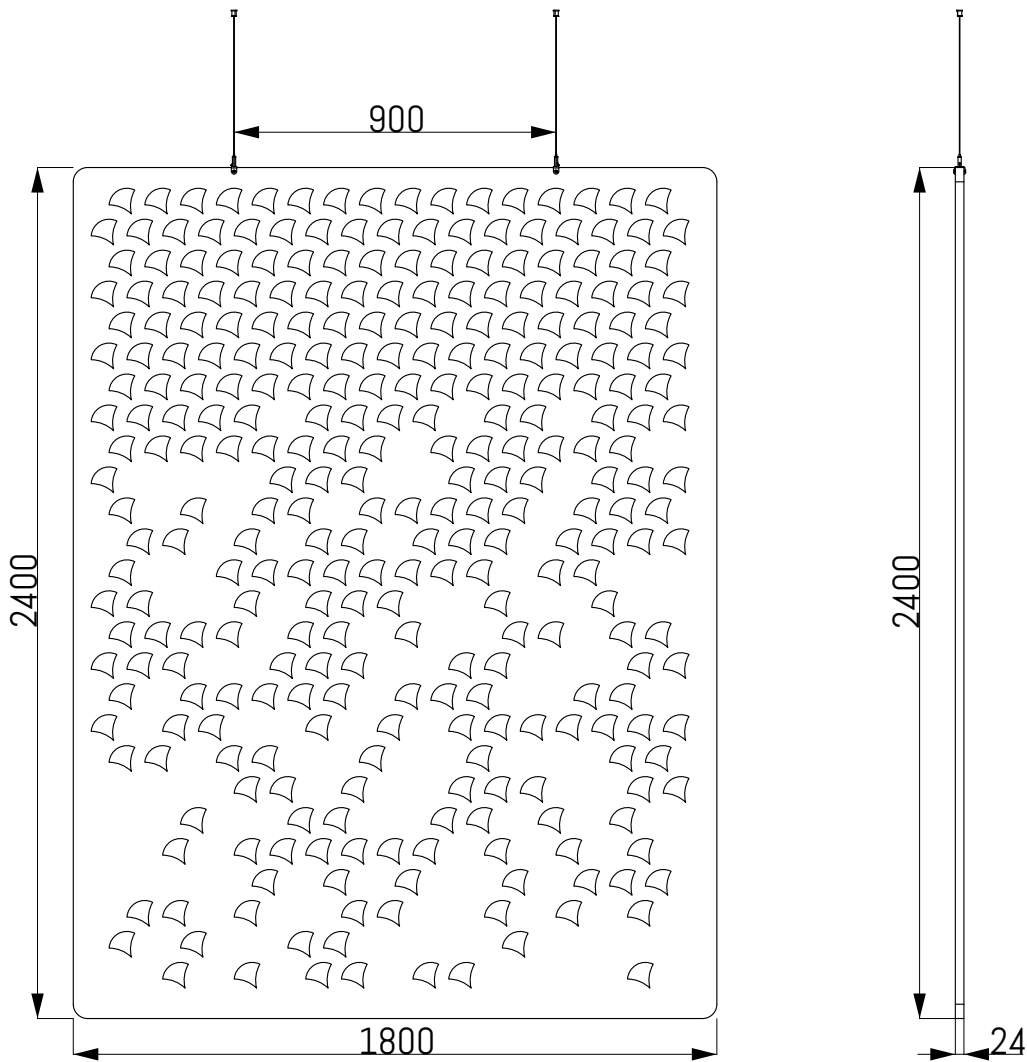


DIMENSIONS & PARTS

ECHO CURTAIN® 24MM ARC

1464

1800x2400x24mm



PARTS

1x EchoBoard® 24mm
1800x2400x24mm

2x Retaining Bracket 24mm

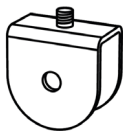
2x Bookbinding Screw
Two-piece for 24mm Bracket

2x Gripper

2x Wire rope
1500x1.5mm

2x Ceiling Anchor Cap

2x Ceiling Anchor
M6 Internal Thread

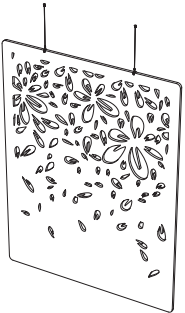
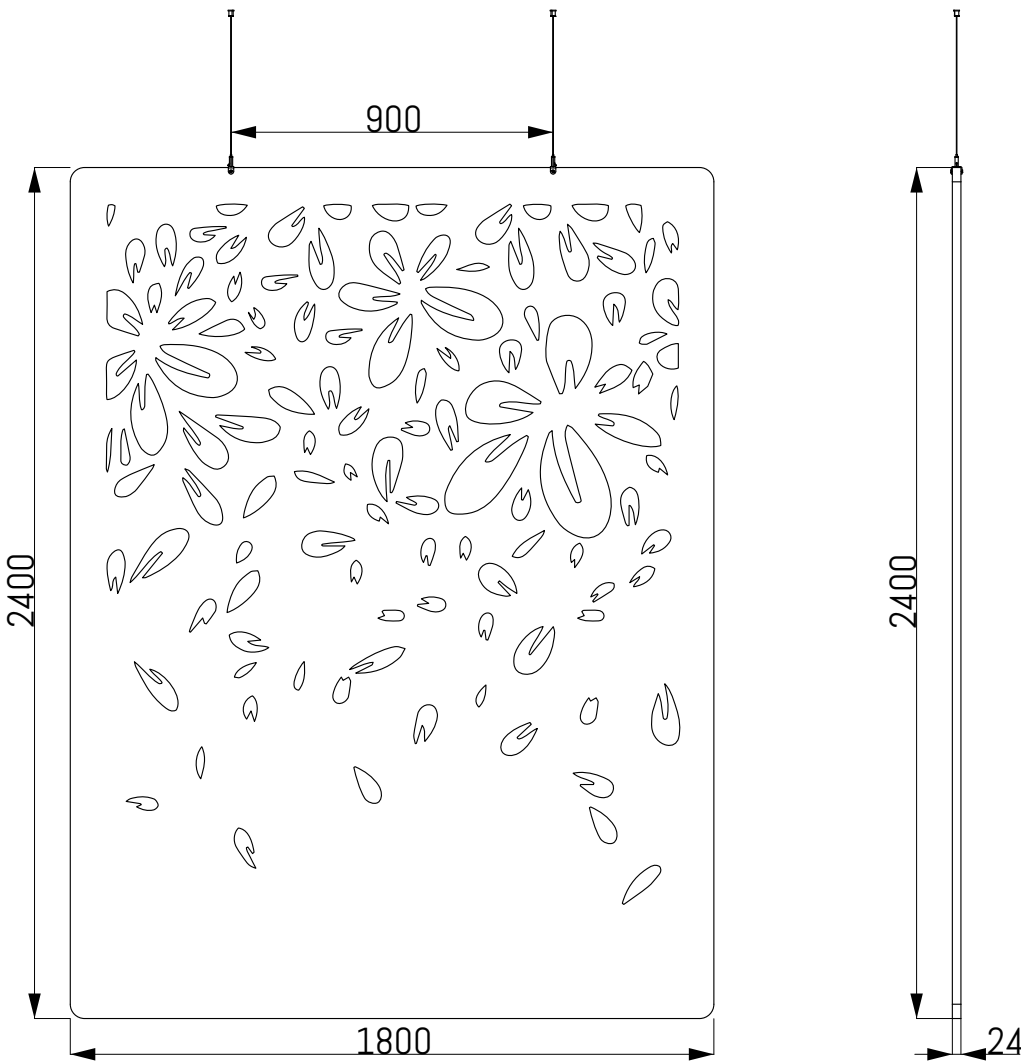


DIMENSIONS & PARTS

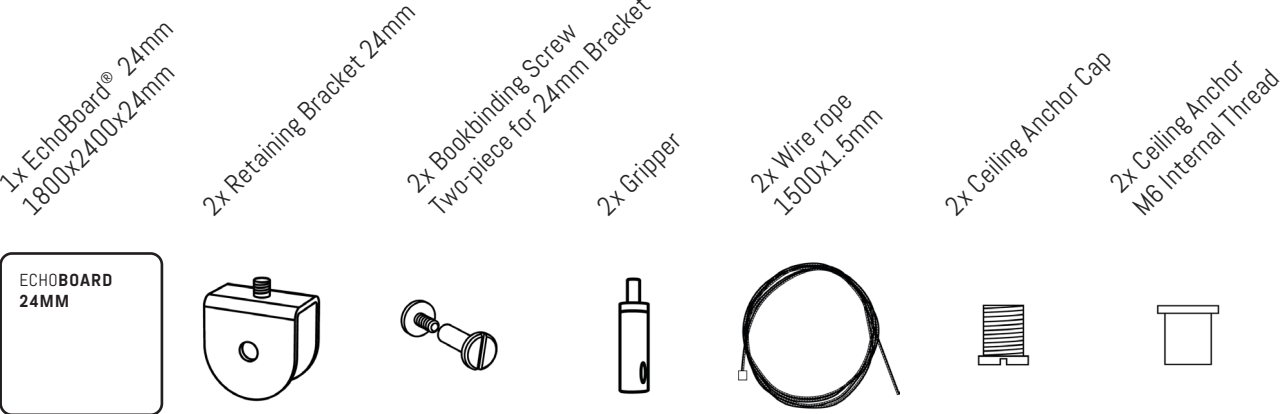
ECHOCURTAIN® 24MM FLOWERS

1464

1800x2400x24mm



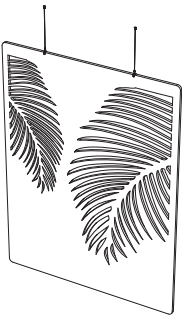
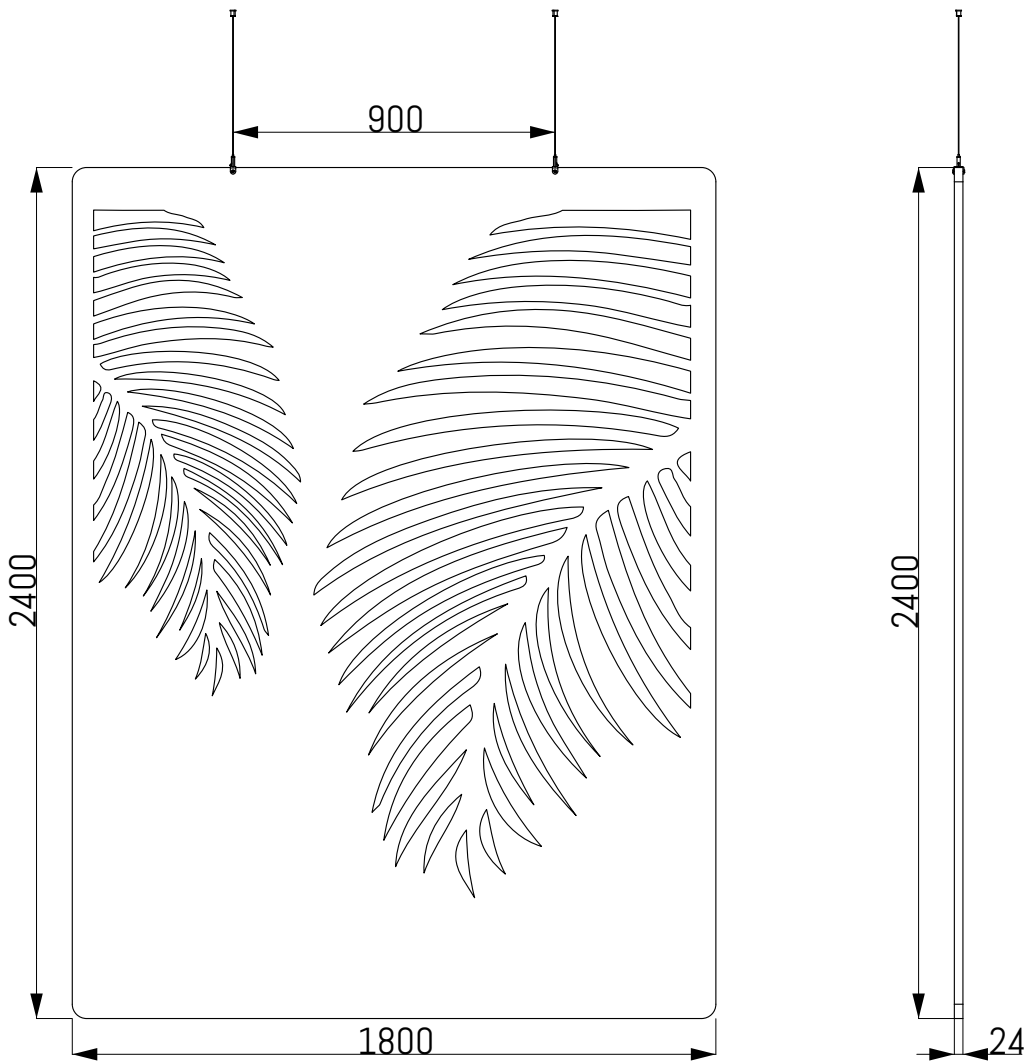
PARTS



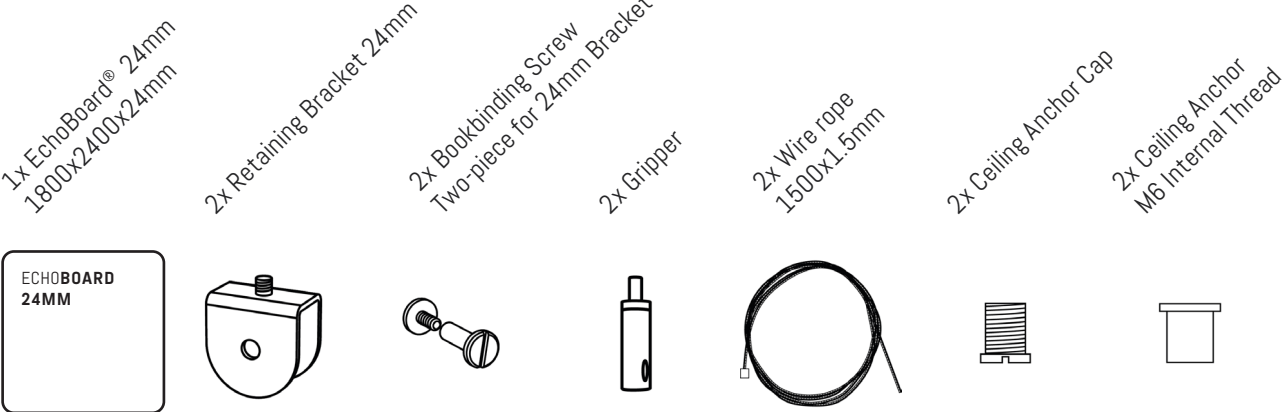
DIMENSIONS & PARTS



ECHOCURTAIN® 24MM PALM
1464
1800x2400x24mm

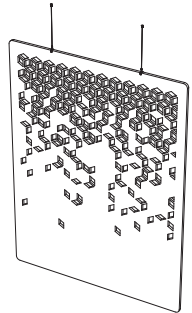
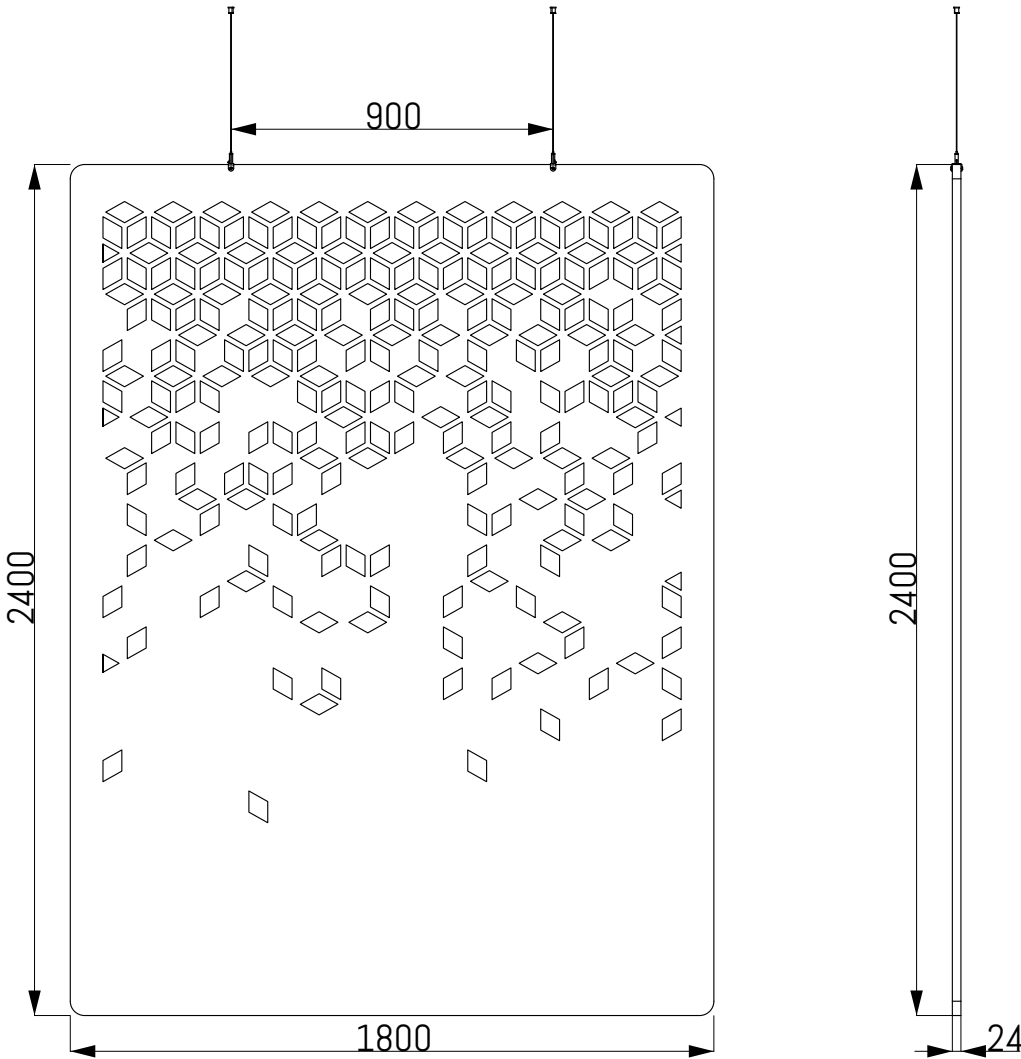


PARTS

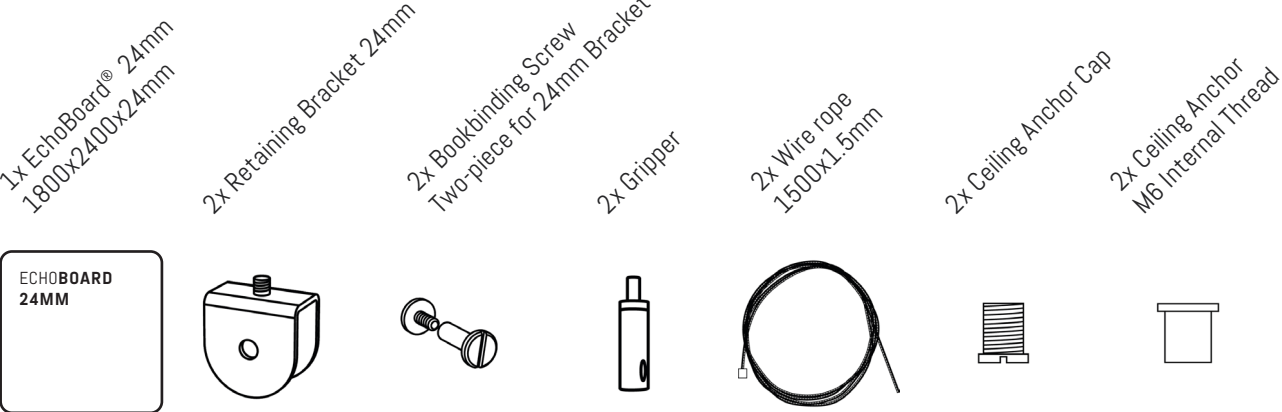


DIMENSIONS & PARTS

ECHO CURTAIN® 24MM CUBE
 1464
 1800x2400x24mm



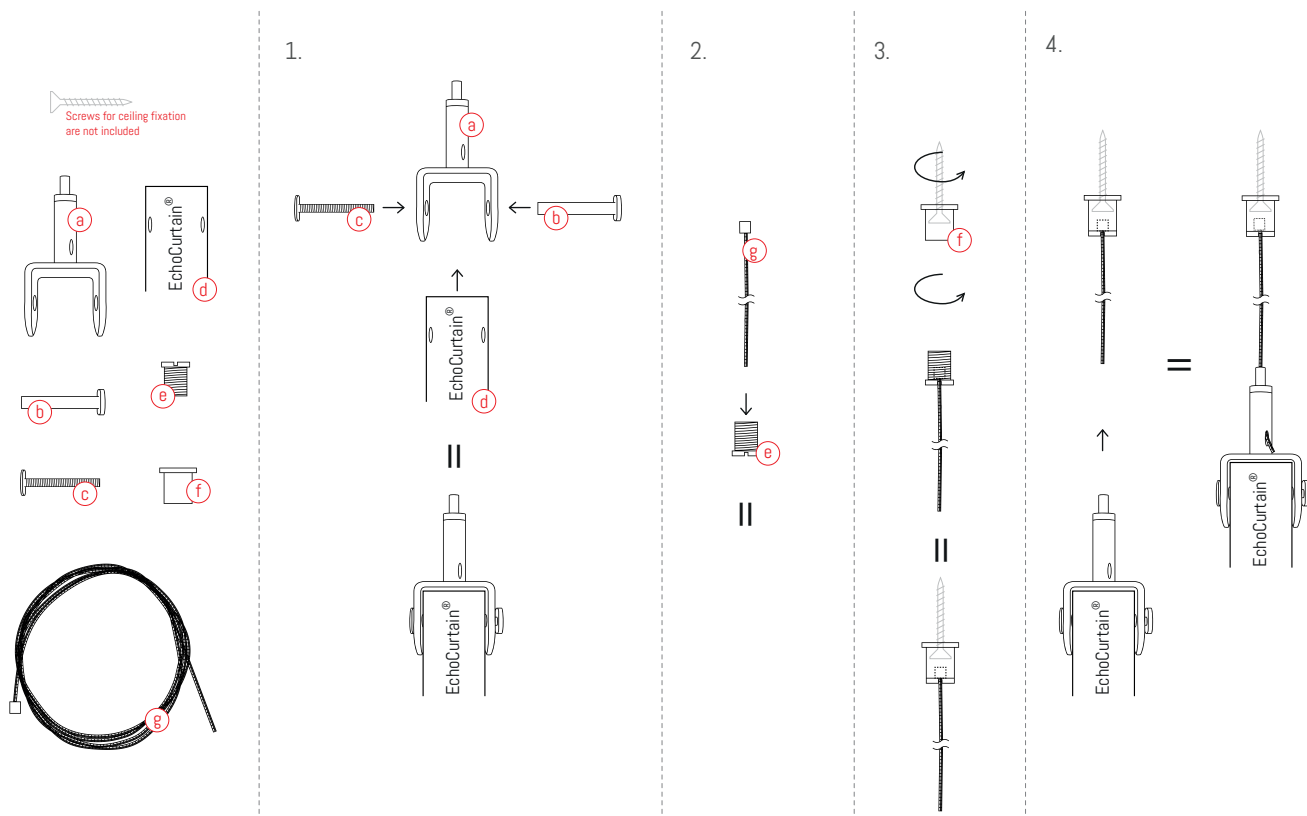
PARTS



INSTALLATION



GRIPPER DIRECT SUSPENSION SYSTEM



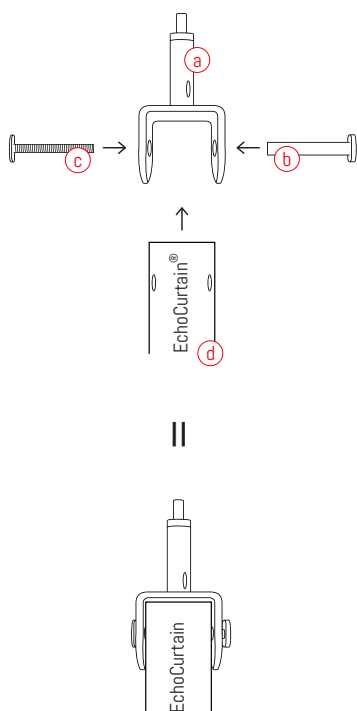
INSTALLATION



INSTALLATION WITH CURTAIN TRACK



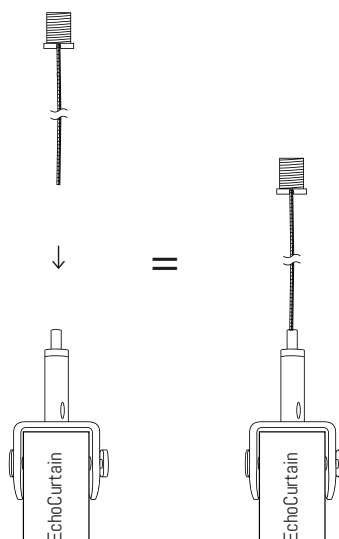
1.



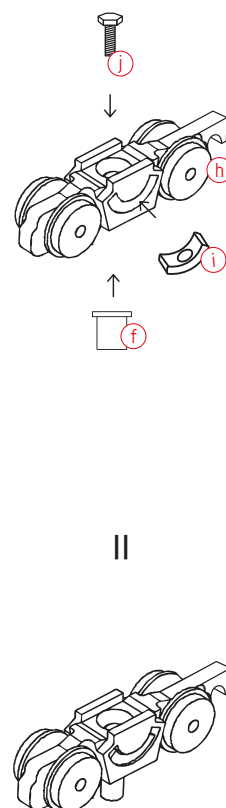
2.



3.



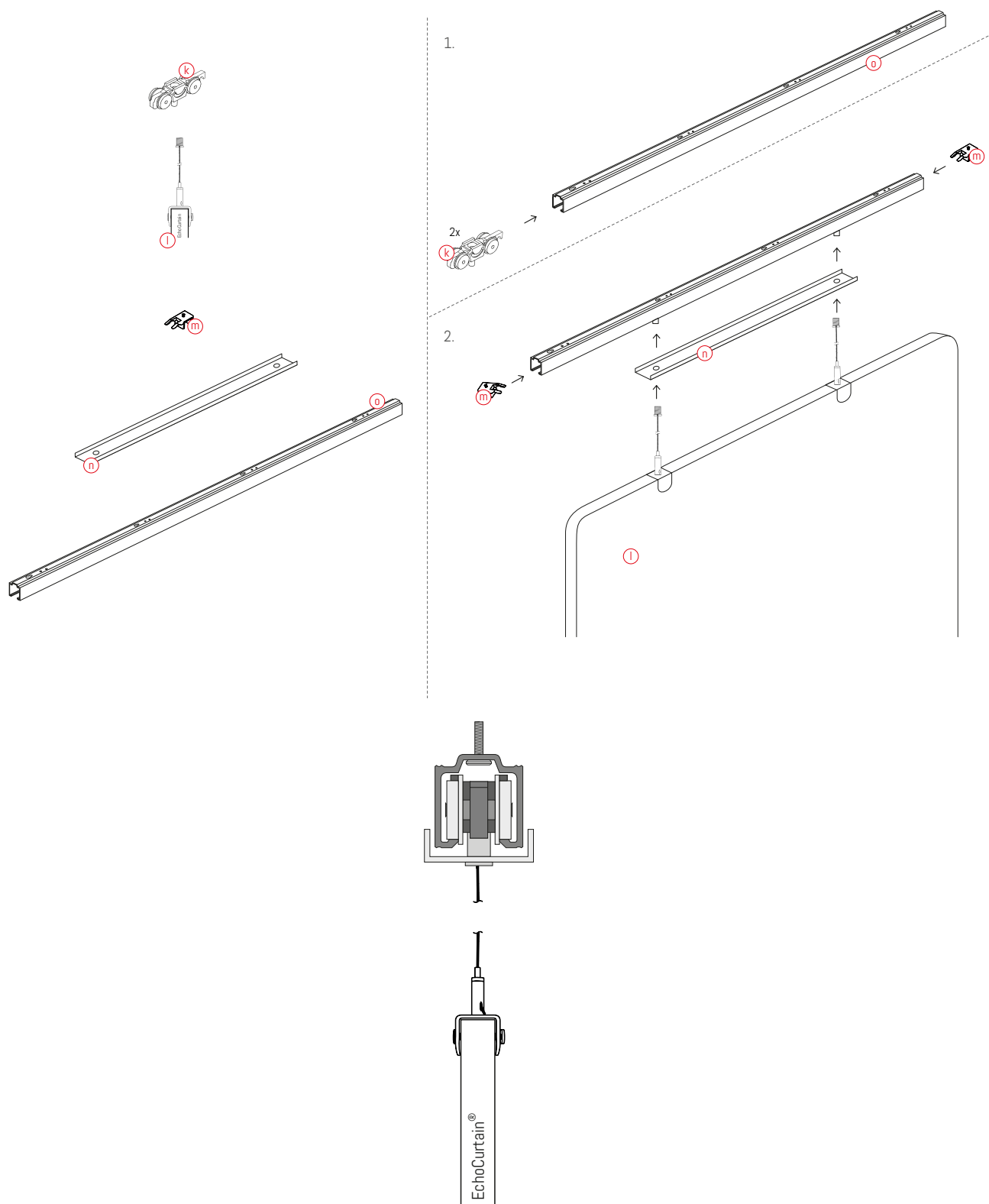
4.



INSTALLATION

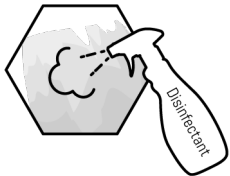


INSTALLATION WITH CURTAIN TRACK



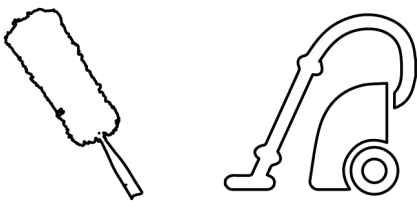
SURFACE DISINFECTION

Spray disinfectants can be used for rapid surface disinfection.



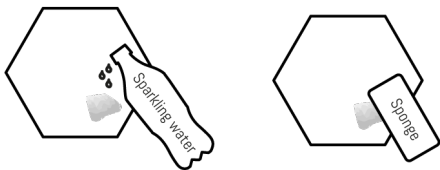
DUSTER/VACUUM CLEANER

For dusting use duster or vacuum cleaner.



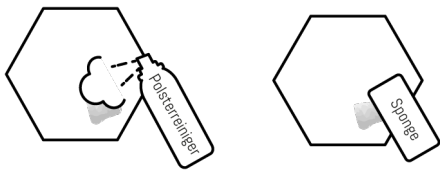
SPARKLING WATER

For slight contamination apply sparkling water to polluted area. Wipe carefully with a sponge.



UPHOLSTERY CLEANER

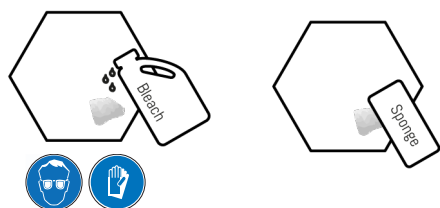
For medium contamination apply upholstery cleaner to polluted area. Wipe carefully with a sponge.



BLEACH

For heavy contamination apply bleach as chlorine or hydrogen peroxide on polluted area. Wipe carefully with a sponge and sparkling water.

Use of protection gloves and glasses is mandatory!



Please make first a cleaning attempt on an inconspicuous spot. Follow the instructions of the cleaning agents.

EnOP GmbH

professionell nachhaltig effizient

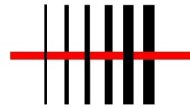
Aawasserstrasse 10

CH-6370 Oberdorf NW

Tel.: +41-41 870 55 16

Fax: +41-41 871 39 87

cf@enpo.ch, www.enpo.ch



EnOp GmbH

professionell - nachhaltig - effizient

Bestimmung des Schallabsorptionsgrads nach Norm EN ISO 354 im Hallraum

Prüf - Gegenstand: Bestimmung des Schallabsorptionsgrads
Echocurtain 239 x 119 cm

Auftraggeber: ECHOJAZZ AG
Ringstrasse 25
CH-6010 Kriens

Inhalt:

1. Gegenstand des Berichts
2. Aufbau der Prüflinge
3. Versuchsdurchführung
4. Messergebnisse

Beilagen: 1

Projekt: P 1656

Verteiler: ECHOJAZZ AG
Herr Sven Erni
Ringstrasse 25
CH-6010 Kriens

Datum: 03. Oktober 2016

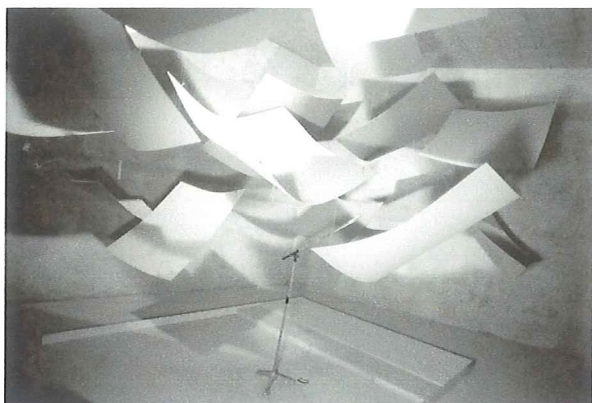
Sachbearbeiter: EnOp GmbH

1. Gegenstand des Berichts

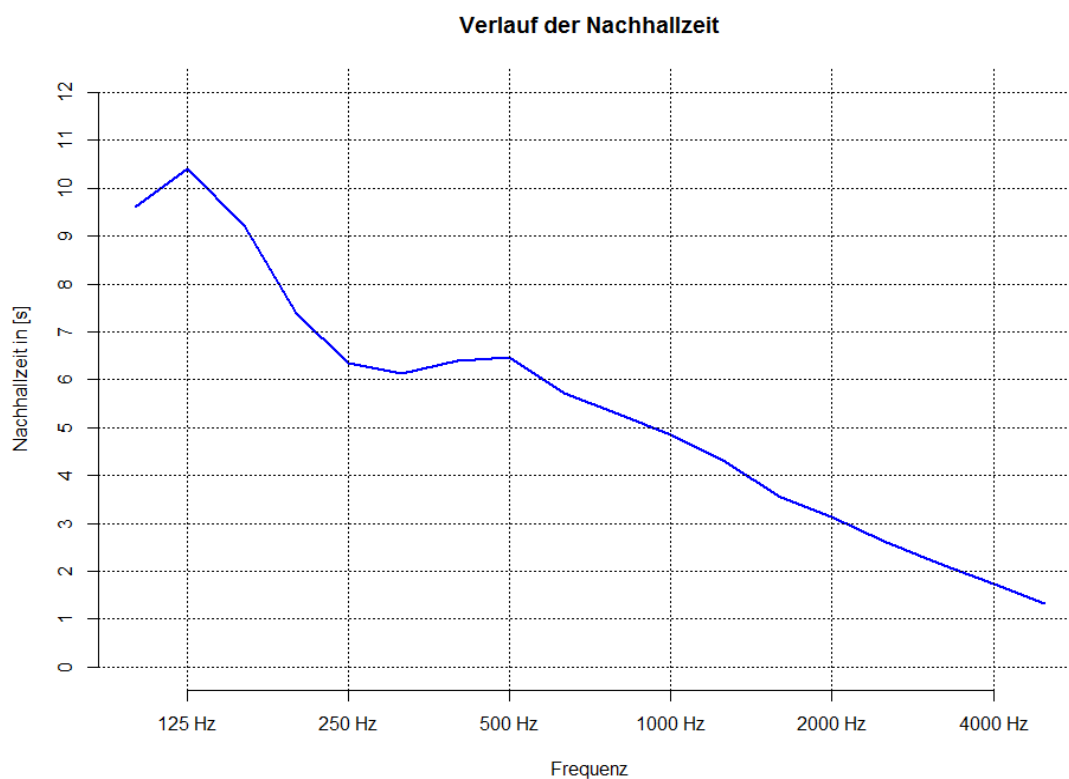
Die Firma ECHOJAZZ AG hat uns den Auftrag erteilt, den Schallabsorptionsgrad verschiedener Decken- und Wandverkleidungen im Hallraum zu bestimmen.

Die messtechnischen Untersuchungen wurden am 29. September 2016 im Hallraum unseres Instituts gemäss den Richtlinien der Norm EN ISO 354, Ausgabe 2003, durchgeführt.

Blick in den Hallraum des Instituts für Lärmschutz mit Prüfanordnung



Verlauf der Nachhallzeit Raum „leer“ während der Untersuchungsphase am 29. Sep. 2016



Relative Luftfeuchte: 72%

Temperatur: 18 °C

Luftdruck: 103.0 kPa

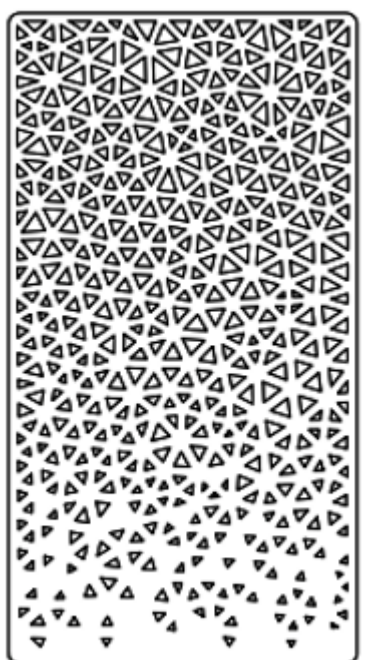
2. Aufbau der Prüfling

Messung EchoCurtain WEB Schallabsorptionsfläche $A_{\text{Obj in}}$ in $[\text{m}^2]$ Modul 239 x 119 cm



Abbildung 1: EchoCurtain im Hallraum

(Zeichnung des Herstellers)



Echocurtain: 239 x 119 cm

Öffnungsanteil in [%] : 19.04

Schnittpfadlänge in [m]: 80.72

Flächen (immer einseitig mit Kanten)

Fläche inkl. Kanten nicht perforiert $[\text{m}^2]$

Fläche inkl. Kanten und perforiert. $[\text{m}^2]$: 3.27

3. Durchführung der messtechnischen Untersuchung

Die Untersuchungen zur Bestimmung des Schallabsorptionsgrads wurden im Hallraum des Instituts gemäss den Richtlinien der Norm EN ISO 354, Ausgabe 2003, vorgenommen.

Als Prüfschall wurde ein über einen Lautsprecher erzeugtes breitbandiges rosa Rauschen verwendet. Die Messung der Nachhallzeit erfolgte mit einem Echtzeitfrequenzanalysator des Typs NTI XL2 mit Bandfilter von der Breite einer Terz. Zur Bestimmung der Nachhallzeit wurde sowohl der Standort des Messmikrofons (NTI M2230 Zertifiziertes Klasse 1 Messmikrofon mit Metallmembran) als auch der Standort der Schallquelle mehrfach verändert.

Die Berechnung des statistischen Schallabsorptionsgrads α_s der untersuchten Anordnungen erfolgte nach der Beziehung:

$$\alpha_s = \frac{0,163 \cdot V \cdot (1/T_2 - 1/T_1)}{S}$$

Hierbei bedeuten: V: Volumen des Hallraums ($V = 212\text{m}^3$)

S: Fläche der untersuchten Anordnungen, je $12,0\text{ m}^2$

T1: Nachhallzeit des leeren Hallraums in s

T2: Nachhallzeit des Hallraums mit Prüfobjekt in s

Zur Verbesserung der Diffusität des Schallfelds waren im Hallraum insgesamt 17 Diffusoren bzw. Reflektoren aus 6 mm dicken Holzfaserhartplatten aufgehängt.

4. Untersuchungsergebnisse

Die Ergebnisse der messtechnischen Untersuchungen sind in den Beilagen 1 dargestellt. Die Prüfanordnung wird grafisch und als Zahlentafel angegeben. Bei der Beilage 1 wurde die Schallabsorptionsfläche A_{Obj} von „EchoCurtain“ WEB Modul (239 x 119 cm) angegeben.

Oberdorf, 03.Okt. 2016

EnOp GmbH Jaime Carvajal Molinet

Schallabsorptionsgrad nach ISO 354:2003

Beilage: 1

der Messung der äquivalenten Schallabsorptionsfläche A_{OBJ}

Auftraggeber: ECHOJAZZ AG

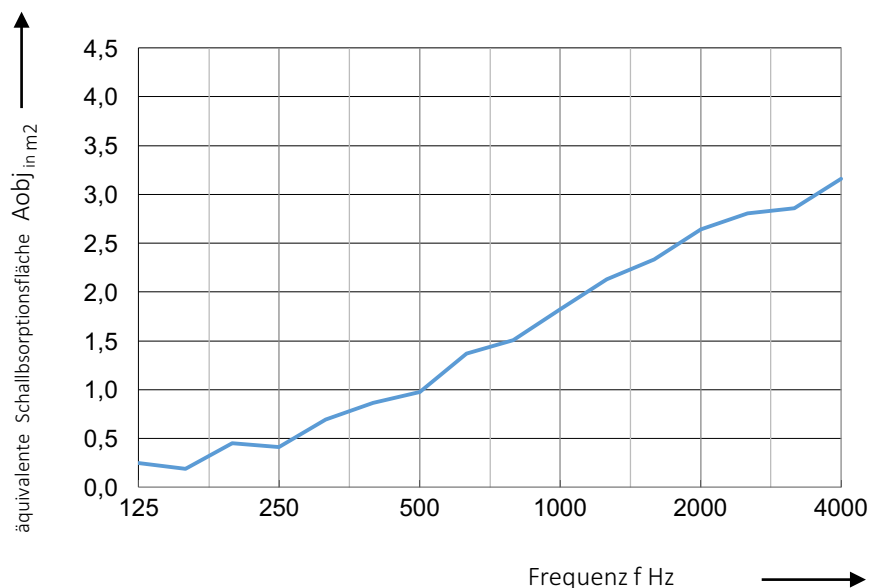
Prüfdatum: 29. Sep. 2016

Aufbau: **EchoCurtain** 239 x 119 cm

EnOp GmbH
professionell - nachhaltig - effizient

	Hallraum leer:	Hallraum mit Prüfobjekt:
Fläche des Prüfmateri als: 16.35 m ²	Relative Luftfeuchtigkeit: 72%	Relative Luftfeuchtigkeit: 72%
Volumen des Hallraums: 212.0 m ³	Temperatur: 18 °C	Temperatur: 18 °C
	Luftdruck: 102.5 kPa	Luftdruck: 102.5 kPa

Frequenz f [Hz]	Aobj in [m ²]
100	0.21
125	0.25
160	0.19
200	0.45
250	0.41
315	0.70
400	0.86
500	0.98
630	1.37
800	1.51
1000	1.82
1250	2.13
1600	2.34
2000	2.64
2500	2.80
3150	2.86
4000	3.16
5000	2.96



\\enop_neu_ab2016\offerte\p_1656_echo_jazz_herr_erni\enop bericht schallabsorptions echo jazz mess-reihe.docx