Hako
technical specification

.mdd

.mdd has a leading position among manufacturers of office furniture with many awards that prove quality and continuously increase demand for it`s products.

The realities of today`s market require constant quality improvement at all levels of modern organization. This applies in particular to customer service, marketing, quality of products and also to quality of processes within the company. Partnership relations among employees and with business partners form a base of economic growth and success of the company.

Constant investments in innovative machinery park, optimization of managment systems and an expansion of production halls allow to minimize the lead times for the product of the highest quality.

More than twenty years of experience in office furniture industry come with reference from a long list of companies and institutions to show their appreciation for an efficient and comprehensive service.
.mdd is higly aware of the environment.

Being located in the forest region with lake by it₁s side, .mdd takes the nature seriously and invests constantly in a modern and energy-efficient solutions to preserve the local life. Company puts emphasis on waste segregation and recycling. .mdd has been awarded for the exceptional care and involvement in waste disposal. All materials used are environmentally friendly and enjoy a high 95 % rate of being recycled.

General informations:

Warranty:
.mdd products - **5 years**.
Electrical components and fabric - **2 years**.

Certificate - MFC:

Certificate - fabric:
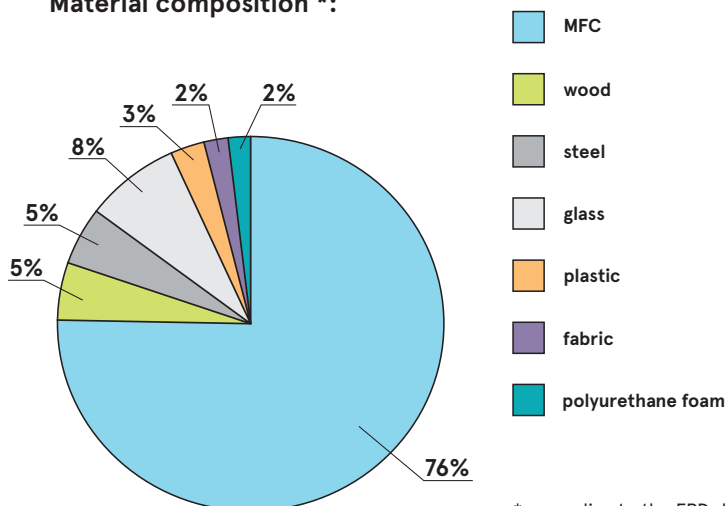

Assembly:
product delivered in separate elements

Packing:
wooden crates; separate elements situated on wooden racks; panels protected by a foil

Boards density:
12 mm - 690 - 750 kg/m3
18 mm - 650 - 690 kg/m3
28 mm - 610 - 630 kg/m3
36 mm - 610 - 630 kg/m3

Material composition *:

- MFC
- wood
- steel
- glass
- plastic
- fabric
- polyurethane foam

76%
5%
5%
8%
3%
2%
2%

* according to the EPD document

Recyclability **
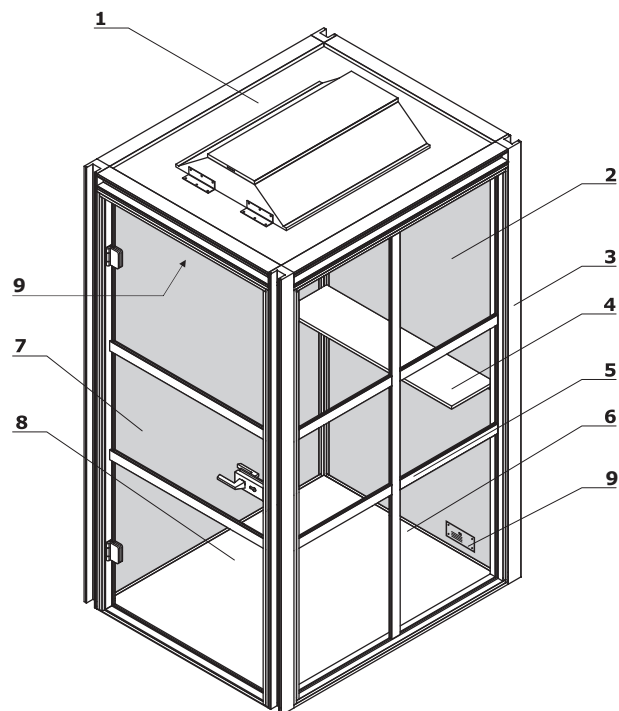Recycling: 12% - Downcycling: 88%

**Recycled content**
9%

Co2 carbon footprint
155,2 kg

** average values for a representative of the group; values may vary for other products

Office booth Hako

1. **Ceiling –** upholstered, equipped with lighting and exhaust fans
2. **Upholstered wall –** full, 75 mm thick, upholstered on both sides; acoustic filling with sound isolation properties
3. **Columns –** 75x75 mm, powder coated
4. **Shelf –** 12 mm MDF, colour: black, can be mounted only to upholstered walls with 1000 mm width
5. **Aluminium strips –** 5 mm thick
6. **Glass wall –** toughened glass, 6 mm thick
7. **Glass door –** toughened glass, 8 mm thick, equipped with hinges, handle with a lock and gaskets system improving the acoustic properties of the booth
8. **Floor –** option with additional fee - melamine plate + acoustic covering (21mm thickness), colour: graphite
9. **Fans:**
   * **in-take** (near the floor) - can be turned on and off, with adjustable fan speed. The exact location can be found on the shop drawings.
   * **exhaust** - integrated with the ceiling lamp

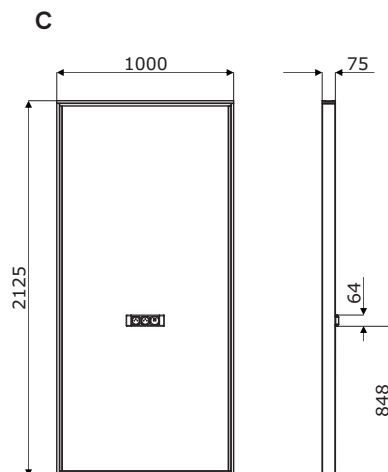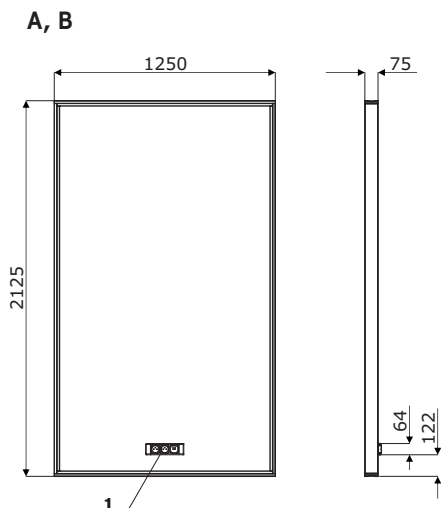**Electric systems available:**

| EU | USA | Schuko | UK | CH |
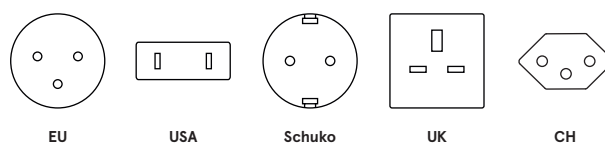
Additional information:

– multi-layer walls structure ensure ideal acoustic isolation; the remarkable acoustic parameters have been confirmed through a research done by an acreddited laboratory in accordance with ISO 23351-1:2020 acquiring a certificate with the D$_{S,A}$ result of 25,7 dB
– air function – fans work for additional 5 minutes after leaving the booth
– maximum air-flow:
   *260 m3/h (for spaces adequate to HK01, HK021)
   *520 m3/h (for spaces adequate to HK03)
– volume 27,5 dB (A)
– LED SLIM panel, 60x60 cm, external power supply; 40W, 3200lm, 4000k, 220-240V AC, 120', RA>80, PF>0.9, white, STANDARD LINE

Attention! In standard the booth has no floor.

Mediabox – dimensions (mm)

1. **Mediabox – 2x230V + 1xUSB + 1xUSB type C**
   A - on the left wall near the floor
   B - on the right wall near the floor
   C - on the shorter wall above 740mm height

A, B

C

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Legend:

 motion sensor (activates the exhaust fans and lighting)

 wireless light switch – which can be situated in any place

 left / right door option

 in-take fans (near the floor) can be turned on and off, with adjustable fan speed - Attention! It is suggested not to block fans to ensure the proper airflow rate

 exhaust fans are integrated with the ceiling lamp

HK01

HK021

HK04

Hako	Date of preparation 31.01.2023	The data contained in this document is valid in the day of its preparation. Change of the product, as long as it does not affect the basic features of it, does not require consistent updates of the document.	page 4/14
			technical specification

Hako

HK08 *
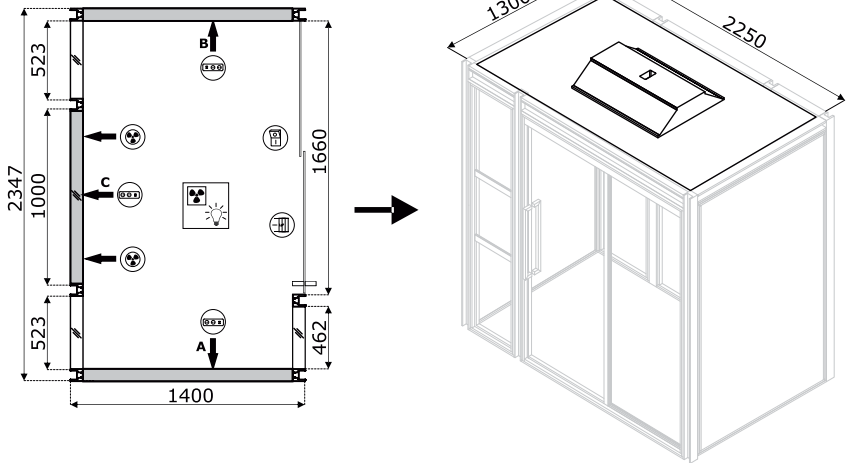
HK03
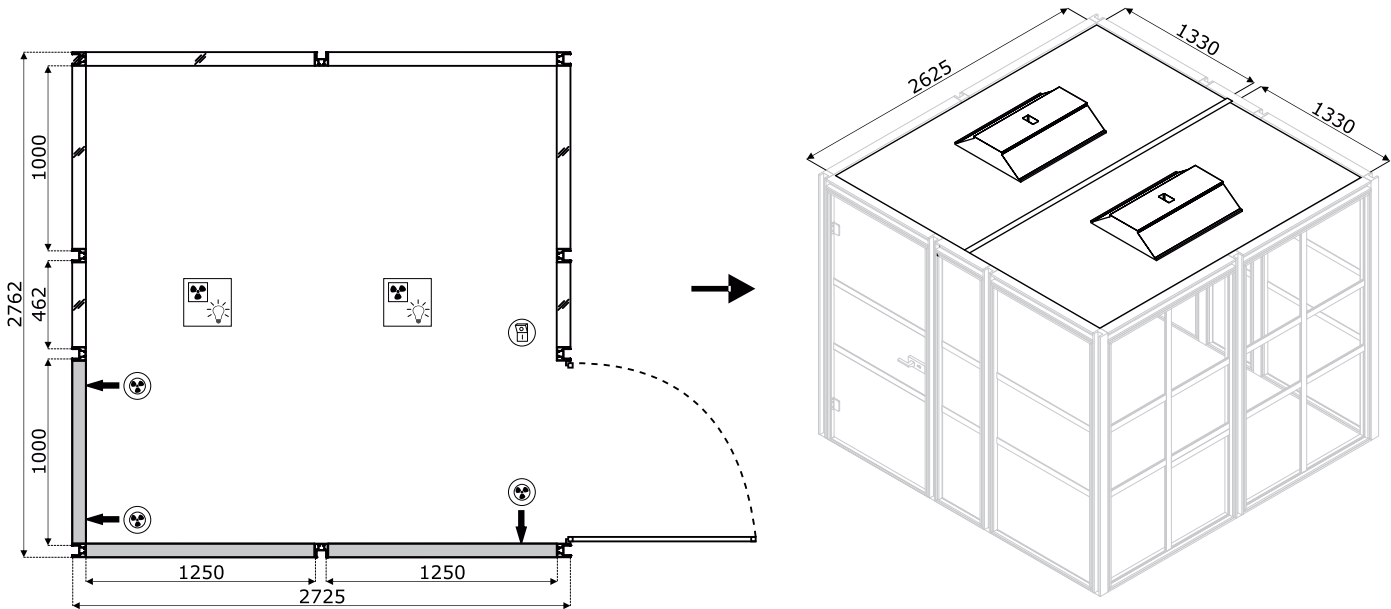
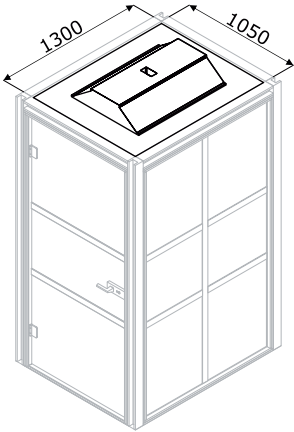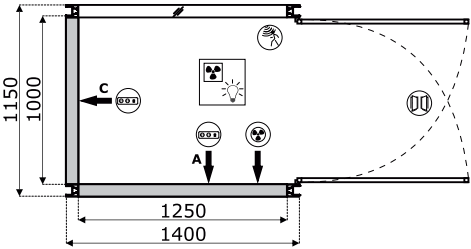* frosted stripes on front walls of sliding door

Hako

Legend:
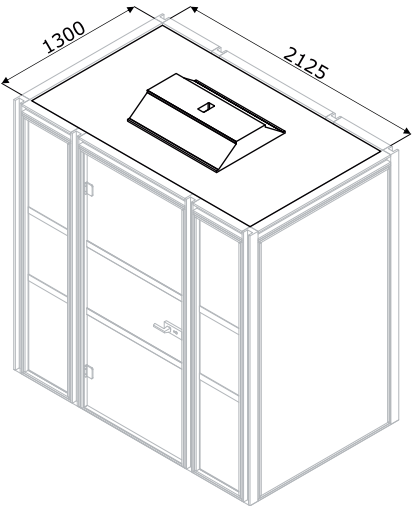
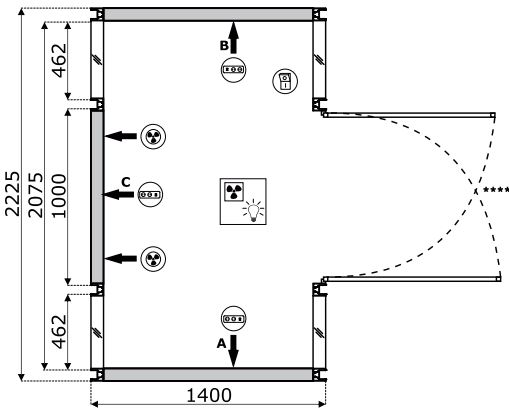⊛ motion sensor (activates the exhaust fans and lighting)

▦ wireless light switch – which can be situated in any place

☢ in-take fans (near the floor) can be turned on and off, with adjustable fan speed - Attention! It is suggested not to block fans to ensure the proper airflow rate

▦ exhaust fans are integrated with the ceiling lamp

HK05
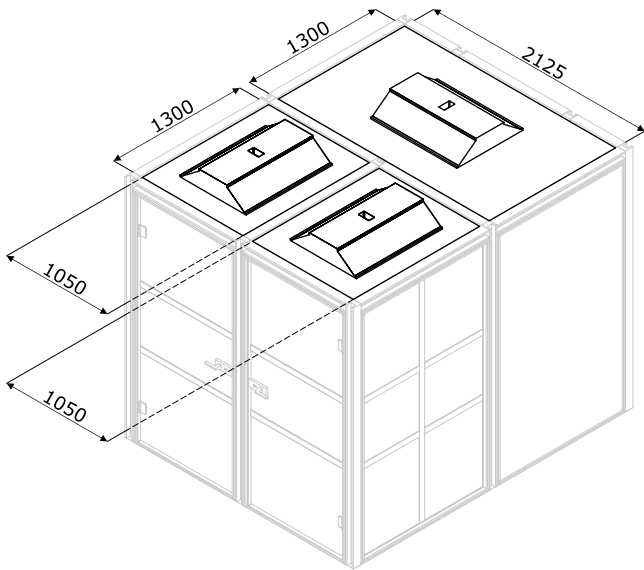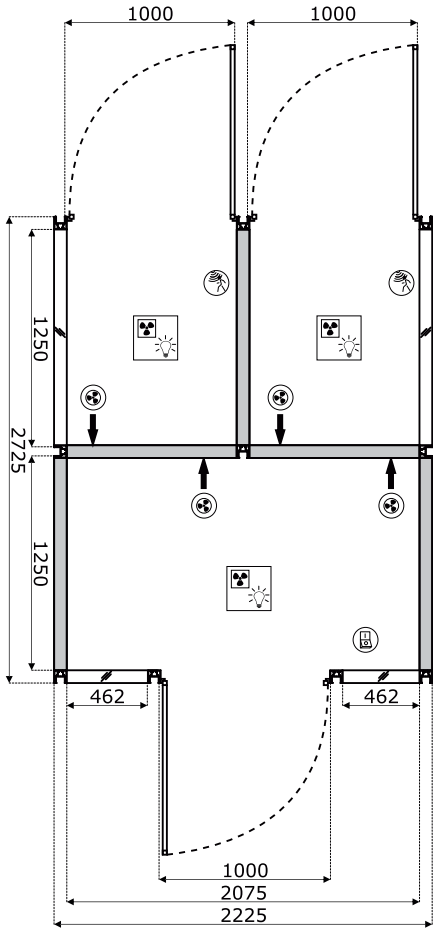
Hako

Legend:

🖐 motion sensor (activates the exhaust fans and lighting)

🔲 wireless light switch – which can be situated in any place

☢ in-take fans (near the floor) can be turned on and off, with adjustable fan speed - Attention! It is suggested not to block fans to ensure the proper airflow rate

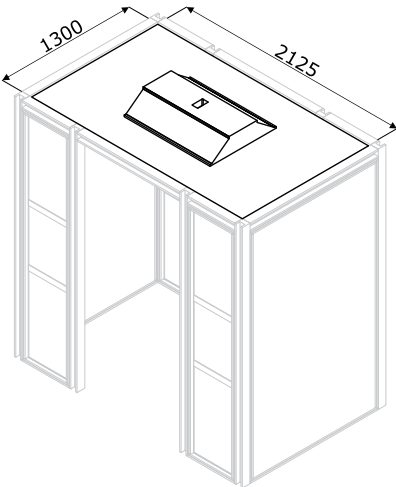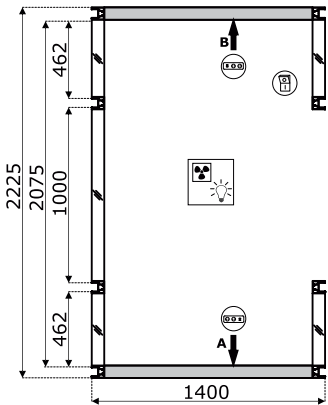🔲 exhaust fans are integrated with the ceiling lamp

HK06
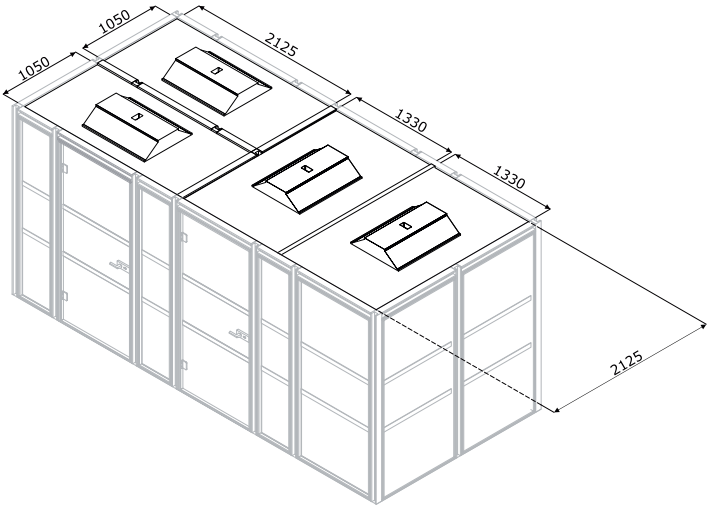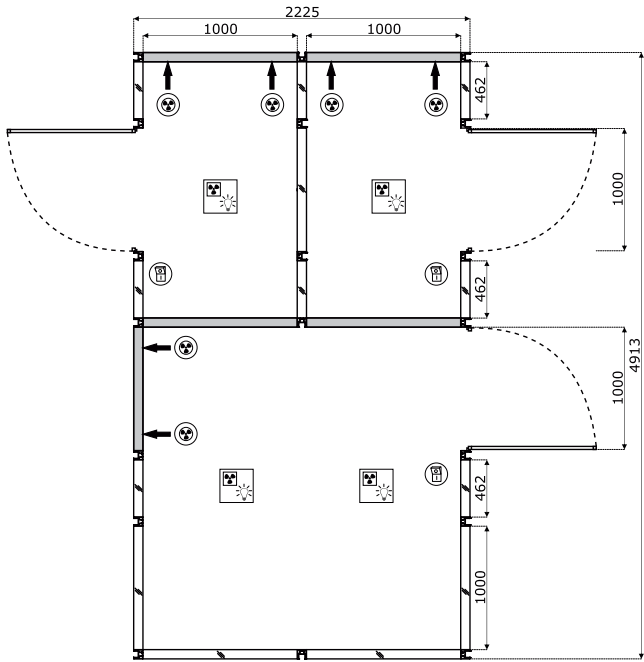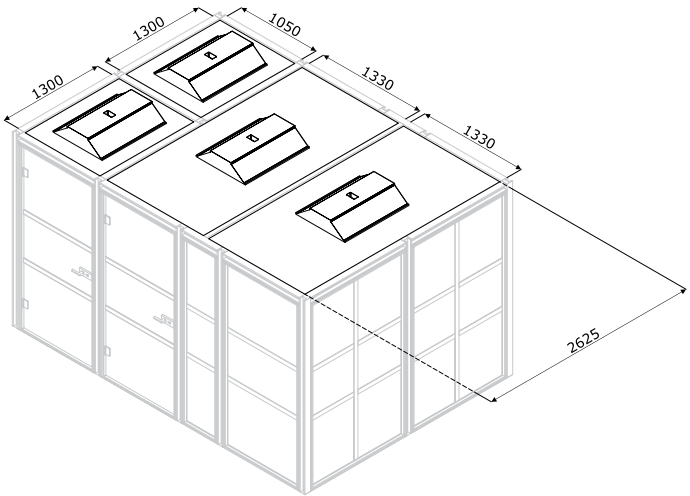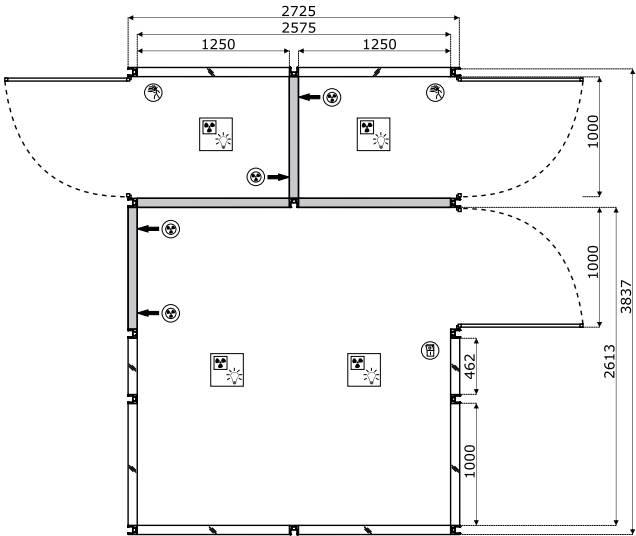
HK07

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Configuration examples

HK01

KAV3

KAV3

HT01

HK021

KAV6P | ST06 | KAV6L

BOD62 | SAVA

HK03

ULTRA | ULTRA

ST10

ULTRA | ULTRA

BPW1

BPW1 | BPN1

BPN1

BPN1

BPN1

BPN1

BPW1

GR03 | GR02S

GR01

GR01

AR05

ES04 | ES02 | ES01

ES01

ES02 | GR02S
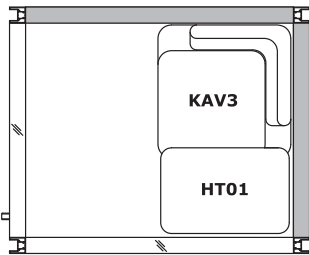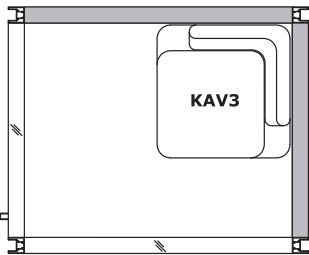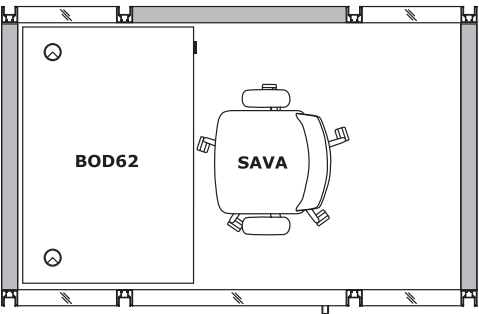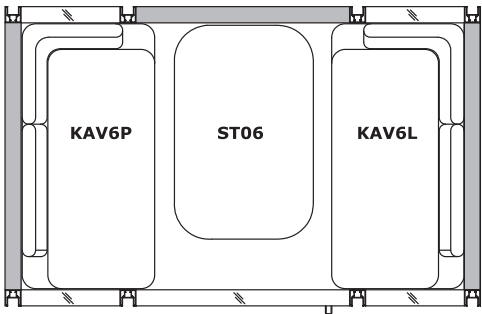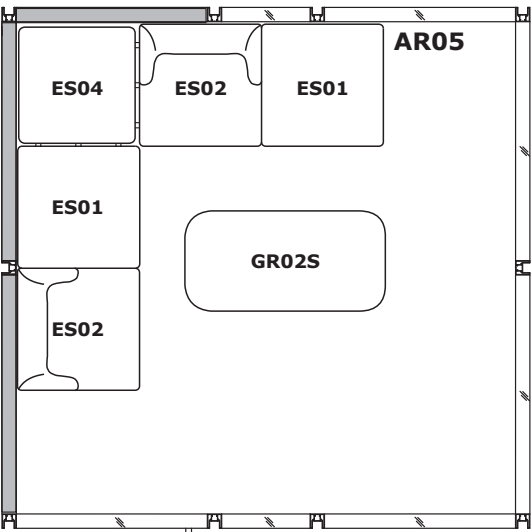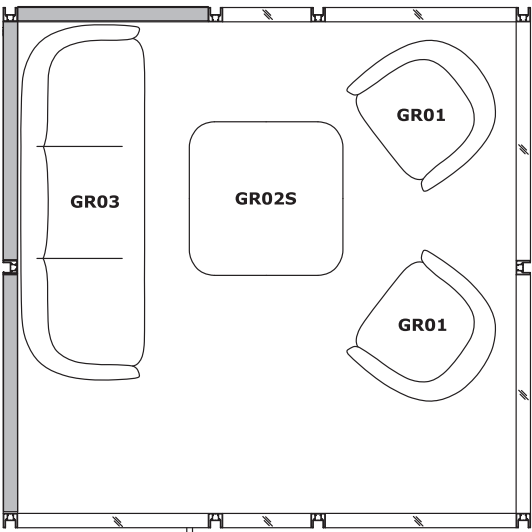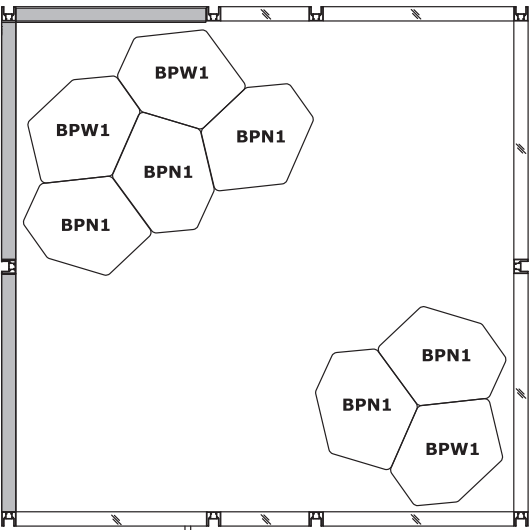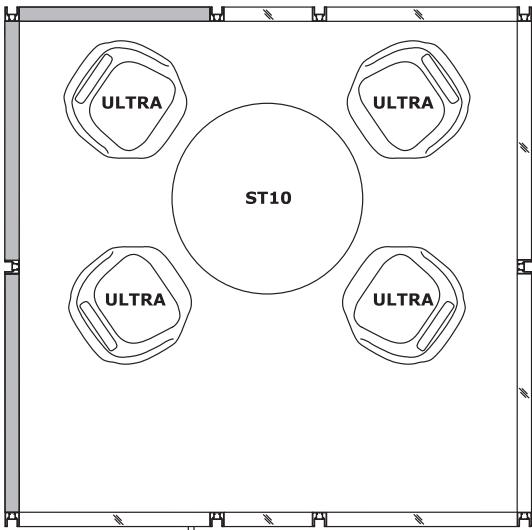
Hako – office booth *
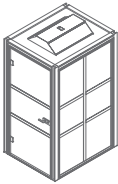
HK01
1150 / 1400 / 2341
399.7 kg
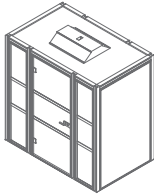
HK021
2225 / 1400 / 2341
534.66 kg
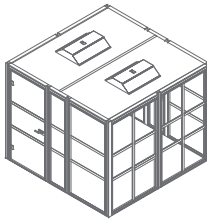
HK03
2762 / 2725 / 2341
942.3 kg
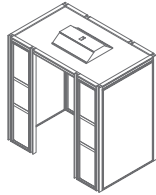
HK04
2225 / 1400 / 2341
442 kg
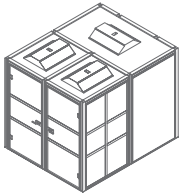
HK05
2225 / 2725 / 2341
995.06 kg
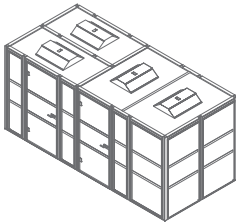
HK06
4913 / 2225 / 2341
1572 kg
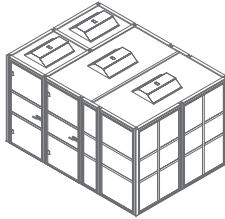
HK07
3838 / 2725 / 2341
1437.4 kg
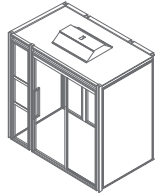
HK08
2347 / 1400 / 2283
533 kg

Shelf *
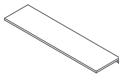
HK1P
980 / 250 / 156
8 kg

* dimensions expressed in millimeters: width x depth x height

Fabric Mica - second price group

MC-2496-64183 Pink	MC-2496-64146 Red	MC-2497-64146 Dark red	MC-2497-66006 Navy blue
MC-2496-66030 Blue	MC-2497-67042 Aquamarine	MC-2497-67017 Bottle green	MC-2497-68146 Green
MC-2497-62048 Olive	MC-2496-62093 Light olive	MC-2496-62095 Mustard	MC-2496-62096 Yellow
MC-2496-61008 Beige	MC-2496-60000 Light grey	MC-2497-60000 Grey	MC-2497-60021 Graphite
MC-2496-66031 Light blue	MC-2496-67015 Mint	MC-2497-64029 Burgundy	

Technical data:

Material	post-consumer recycled polyester 97%, polyester 3%
Fabric weight	305 g/lm
Abrasion resistance rubs	60,000 rubs martindale (EN ISO 12947-2)
Pilling resistance	scale 1-5, max. 5 - EN ISO 12945-2, 4-5
Light fastness	scale 1-8, max. 8 - EN ISO 105-B02, 5-8
Rubbing fastness	dry: 4-5, wet: 4-5, scale 1-5, max. 5 - EN ISO 105x12
Flammability	CA TB 117-2013
	ASTM E 84 Class I
	BS EN 1021-1 Cigarette
	BS EN 1021-2 Match
	BS 476 Part 7 class I

Fabric Medley - second price group

M-68005 Dark olive	M-66008 Grey	M-64019 Red	M-63064 Pink
M-60999 Black	M-61189 Beige	M-60003 Light grey	M-62054 Mustard
M-62002 Yellow	M-66010 Blue	M-65011 Grey-violet	M-63017 Rusty
M-67006 Light blue			

Technical data:

Material	polyester 100%
Fabric weight	510 g/lm (16.45 oz/lin.yd.)
Abrasion resistance rubs	BS EN ISO 12947-2, 75,000 cykli Martindale
Pilling resistance	scale 1-5, max. 5, EN ISO 12945-2 (4)
Colour fastness to light	scale 1-8, max. 8, EN ISO 105-B02 (5-7)
Colour fastness to rubbing	scale 1-5, max. 5, EN ISO 105x12 (wet/dry (4-5/4-5)
Acoustic test sound absorption	ISO 354
Flammability	BS EN 1021-1 (cigarette)
	BS 476 Part 7, Class 2
	Class Uno UNI 9174 - UNI 8457
	CA TB 117-2013
	ASTM E 84 Class I

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Fabric Go Check - second price group

G-66136 Blue	G-66135 Light blue	G-60080 Dark grey	G-66138 Navy blue
G-60084 Dark graphite	G-68149 Dark green	G-68152 Green	G-60079 Grey
G-64183 Marsala	G-63079 Orange	G-64171 Red	G-64172 Burgundy
G-61144 Brown	G-61145 Dark brown		

Technical data:

Material	100% Trevira CS
Fabric weight	435g/lm
Abrasion resistance rubs	80,000 rubs martindale (EN ISO 12947-2)
Pilling resistance	scale 1-5, max. 5 - EN ISO 12945-2, 5
Light fastness	scale 1-8, max. 8 - EN ISO 105-B02, 5-8
Rubbing fastness	dry: 4-5, wet: 4-5, scale 1-5, max. 5 - EN ISO 105x12
Flammability	BS EN 1021 1&2 Cigarette and Match
	BS EN 1021-1 Cigarette
	BS 5852 Crib 5
	BS 7176 Medium hazard
	DIN 4102 - B1
	NFP 92-503/504/505 M1
	ÖNORM A3800-B1-B3825-Q1 UK
	Class Uno UNI 9175 Class 1 I EMME
	FAR/JAR 25.853 (a) (i) (ii)
	CA TB 117-2013
	DIN EN 13501-1 B-s1,d0
	AM 18 - NF D 60-013-(only for fabric)

Fabric Charles - second price group

C-01 Black	C-05 Grey	C-06 Beige	C-14 Brown
C-18 Rusty	C-21 Red	C-30 Pink	C-31 Marsala
C-32 Dark blue	C-35 Blue	C-41 Yellow	C-44 Olive
C-45 Green			

Technical data:

Material	100% polyester
Fabric weight	433g/m2
Abrasion resistance rubs	90,000 Martindale cycles (EN ISO 12947-2)
Pilling resistance	EN ISO 12945-2, 5
Light fastness	EN ISO 105-B02, 5
Rubbing fastness	dry: 4-5, wet: 4-5,EN ISO 105x12
Flammability	EN 1021, 1

* There is a possibility of ordering the product in full colour spectrum of Charles range, as per Dekoma pattern book, within the standard delivery time.

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Fabric Synergy - third price group

LDS08 Grey melange

LDS20 Light grey

LDS27 Black

LDS29 Dark grey

LDS50 Dark green

LDS57 Turquoise

LDS60 Bottle green

LDS61 Plum

LDS69 Navy blue

LDS84 Orange

LDS86 Red

LDS88 Aubergine

LDS19 Beige

LDS79 Brown

LDS44 Yellow

Technical data:

Compositionl	95% Virgin Wool, 5% Polyamide
Fabric weight	400g/m2 (560g/lm)
Abrasion resistance rubs	100.000 Martindale cycles
Colour fastness to light	ISO 105 - B02 5
Colour fastness to rubbing	EN ISO 105x12
	(dry/wet) 4-4
Flammability	EN 1021 - 1&2 (cigarette & match)
	BS 7176 Low Hazard
	NF D 60-013
	ÖNORM B 3825 & A 3800-1 (58 kg/m3 CMHR Foam)
	UNI 9175 Classe 1 IM
	EN 13501-1 Adhered Class D, s1, d0
	IMO FTP Code (Part 8)
	The Furniture and Furnishing (Fire) (Safety) Regulations 1988 (Domestic Cigarette and Match)
	BS 5852 Ignition Source 5 when FR treated
	BS 7176 Medium Hazard when FR treated
	EN 13501-1 Adhered Class B, s1, d0 when FR treated
	EN 13501-1 Un-adhered Class D, s2, d0 when FR treated
	BS 5867-2: Type B Curtains & Drapes when FR treated

Fabric Silvertex - third price group

Technical data:

Material	Topcoat: 100% Vinyl
	Backing: 100% Polyesterr Hi-Loft²ᵀᴹ
Fabric weight	685 gr/m2
Abrasion resistance	>300,000 cycles Martindale
UV-resistance	>= 7 (1000 hours, blue wool scale)
Cold Crack resistance	-23°C
Flame retardancy	NF P 92-503 / M2
	EN 1021, Part 1&2
	DIN 4102 B2
	ÖNORM B 3825, Gruppe I - Schwerbrennbares Verhalten
	ÖNORM A 3800, Teil I, Qualmbildungsklasse QI - schwachqualmend
	IMO Res. MSC.307 (88) (2010 FTP Code) Annex I Part 8
	(MED) Marine Equipment Directive in its current valid version
	UNI 91 75 (1987) / UNI 9175/FAI (1994) Classe I.IM (uno I EMME)
	UNE 23.727-90 IR /M2
	EN 71-2: 2006+AI: 2007 Safety of Toys - Part 2: Flammability
	ECE R I I 8 (replaces Directiveę 95/28/EC)
	FMVSS 302
	FAR 25/853
Antimicrobial	Antifungal Protection, Antibacterial Protection, Antimycotic Protection

There is a possibility of ordering the product in full colour spectrum of Silvertex range, as per Spradling's pattern book, within 15 working days.

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			colours

Fabric Oceanic – third price group

O-16 Pink	O-05 Coral	O-12 Red	O-07 Yellow
O-04 Light green	O-15 Light blue	O-11 Blue	O-13 Light grey
O-08 Dark grey	O-01 Black		

Technical data:

Material	100% post-consumer recycled polyester
Fabric weight	497g/m2
Abrasion resistance rubs	100,000 Martindale cecles (EN ISO 12947-2)
Pilling resistance	EN ISO 12945-2, 5
Light fastness	EN ISO 105-B02, 5
Rubbing fastness	dry: 4, wet: 4, EN ISO 105x12
Flammability	EN 1021, - 1&2 (Cigarette and Match)
	BS 7176 Low Hazard
	BS 5852 Ignition Source
	BS 7176 Medium Hazard

Fabric Quest – third price group

Q-26 Pink	Q-25 Orange	Q-24 Red	Q-21 Pastel yellow
Q-19 Beige	Q-18 Olive	Q-13 Light green	Q-07 Lihgt blue
Q-08 Navy blue	Q-04 Graphite		

Technical data:

Material	100% post-consumer recycled polyester
Fabric weight	330g/m2
Abrasion resistance rubs	100,000 Martindale cecles (EN ISO 12947-2)
Light fastness	EN ISO 105-B02, 4-6
Rubbing fastness	dry: 4, wet: 4, EN ISO 105x12
Flammability	EN 1021, - 1&2 (Cigarette and Match)
	BS 7176 Low Hazard
	UNI 9175 Classe 1 IM
	BS 476 Part 7 Class 1Y (Adhered)
	EN 13501-1 Adhered Class B, s1, d0
	EN 13501-1 Un-adhered Class B, s1, d0
	BS 5852 Ignition Source 5 with EnviroFlam5
	BS 7176 Medium Hazard with EnviroFlam5
	IMO FTP Code (Part 8) with EnviroFlam5

Fabric Grain – third price group

GR-64249 Pink	GR-62122 Yellow	GR-62016 Light orange	GR-63117 Orange
GR-68243 Olive	GR-66236 Sky-blue	GR-66232 Navy blue	GR-60301 Grey
GR-61252 Beige	GR-61250 White		

Technical data:

Material	92% post-consumer recycled polyester 8% polyester
Fabric weight	615g/m2
Abrasion resistance rubs	100,000 Martindale cecles (EN ISO 12947-2)
Pilling resistance	EN ISO 12945-2, 5
Light fastness	EN ISO 105-B02, 5-7
Rubbing fastness	dry: 4-5, wet: 4-5, EN ISO 105x12
Flammability	BS EN 1021 1&2 Cigarette and Match
	BS EN 1021-1 Cigarette
	CA TB 117-2013

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			colours

Fabric Atlas - fourth price group

AS-531 Orange

AS-501 Pink

AS-651 Red

AS-681 Burgundy

AS-391 Brown

AS-781 Navy blue

AS-161 Dark grey

AS-111 Light grey

AS-971 Light green

AS-981 Dark green

Technical data:

Material	90% new wool, 10% nylon
Fabric weight	286g/m2, 400g/lm
Abrasion resistance rubs	100,000 cykli Martindale, EN ISO 12947
Colour fastness to light	ISO 105 B02: 6-7
Colour fastness to rubbing	ISO 105-X12:2001, (wet/dry) 4-5/4-5
Flammability	BS EN 1021-2 Match,BS EN 1021-1 Cigarette, BS 5 5852 Crib 5, BS 5852 ignition source 3, BS 5852 Part 1, NF D 60 013, UNI 9175 1lM, US Cal. Bull. 117-2013

Frame - metal

M010 Light grey semi-matt RAL7044

M014 Red semi-matt RAL3016

M154 Anthracite semi-matt RAL7043

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			colours