

INNOVATIVE PLASTICS



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MEMBER OF CONSTANTIA INDUSTRIES



OVERVIEW



We are a European company with more than 40 years of experience in the field of technical plastics.

We are a subsidiary of ISOSPORT GmbH, from Eisenstadt, Austria

and a MEMBER OF *Constantia* INDUSTRIES

Our headquarters are located in Slovenske Konjice, Slovenia.

Innovative plastics

Great flexibility in meeting customers' demands, **product performance and quality** are the most important elements of our competitive advantage.

We offer innovative solutions, we produce and supply engineered polymeric materials, represented under the brands KOTERM, ISOFORM, FUNICE, ISOTRACK and KOPLAST, for all fields of industry.

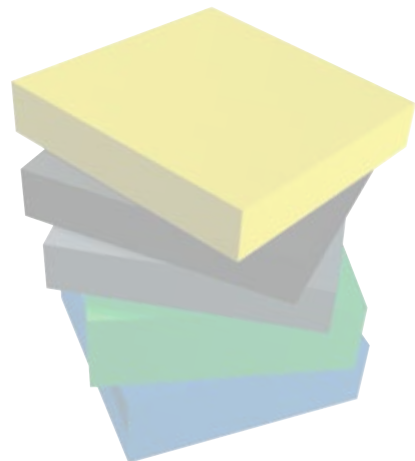
With an extensive range of semi-finished products, we are able to offer you the best solutions tailored to your applications.

The materials offered within this area include everything from PE and PP.

Isokon maintains a permanent development, flexible production and builds a strong partnership with its customers.

With a quick information response and operating with the global network of our distribution partners, we are renowned for providing a fast, flexible and reliable service.

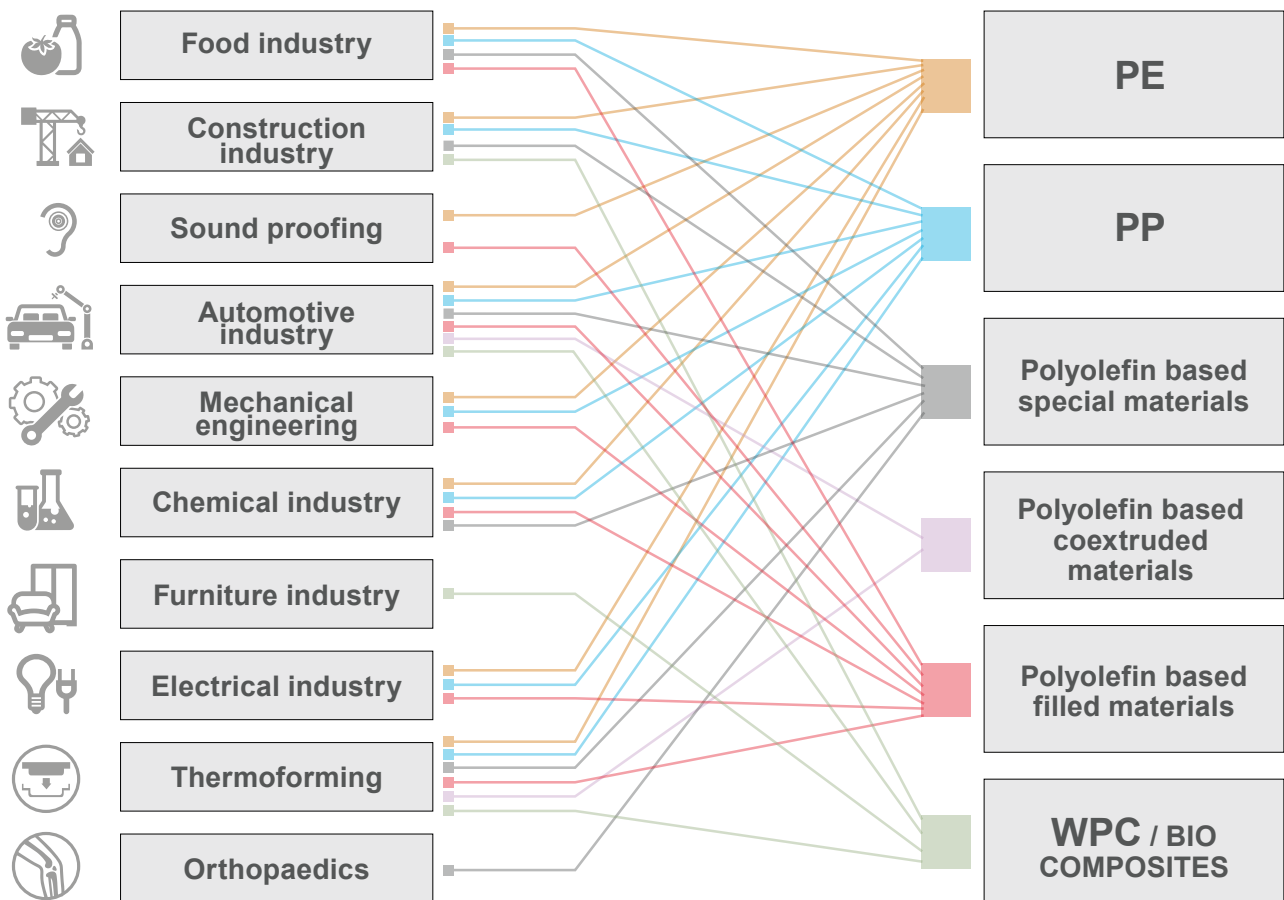
Certified
ISO 9001-2015
ISO 14001 and 45001



RELIABLE SOLUTIONS FOR ALL FIELDS OF INDUSTRY

Specialist in customised products. We offer innovative solutions in the field of thermoplastic production and processing. We help you to solve complicated production or construction problems based on our extensive experience and exceptional know-how.

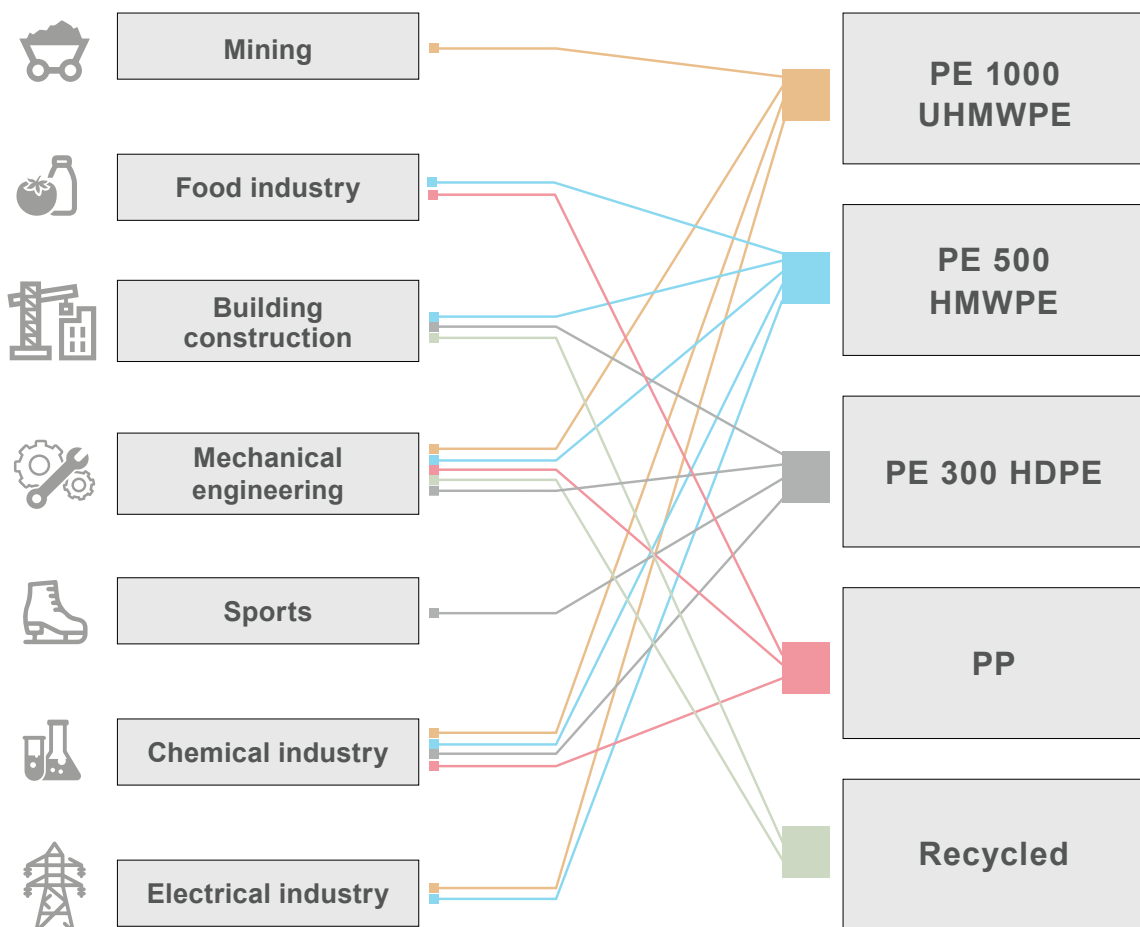
ISOFORM EXTRUDED



Wide range of possibilities

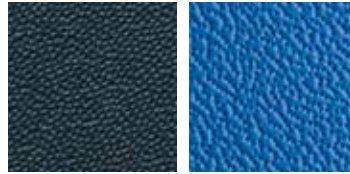
- extruded, co-extruded and filled materials
- pressed sheet and PRESS MOULDED DESIGNED sheet
- production of machine components

KOTERM PRESSED



A WIDE RANGE OF POSSIBILITIES IN SEMI-FINISHED PRODUCTS

ISOFORM EXTRUDED



Lamination on extruded sheets with:

- Fleece
- Textile or fabric
- Foam
- Stripe(s)
- Decorative foil
- Logo-printed foil
- Removable protective foil

EXTRUDED SHEET

- Tailor-made materials for thermoforming
- Composite material – reinforcement with different fillers
- Wood-plastic/BIO composites PE & PP filled with nano-cellulose fibres
- Designed products fabric backed, metal-detectable, anti-slip, electroconductive grades, heavy filled and others
- Embossed surfaces: N1, N2, N3, ALU or on request
- Co-extrusion



Technologies:

- Extrusion of sheets (thickness 0.5–25mm, max. width 1,700mm)
- Co-extrusion (AB, ABA) of sheets (thickness from 1.2mm, max. width 1,500mm)
- Extrusion of sheets with direct compounding (thickness 1–10mm max. width 1,600mm)

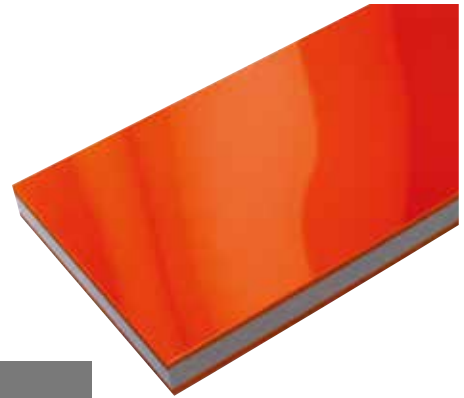
Surface finishing:

- Glossy
- Matt
- Different textured structures with embossed rolls

Others:

- Surface activation with flame treatment
- “Cut to size” parts from extruded sheets

ISOFORM EXTRUDED



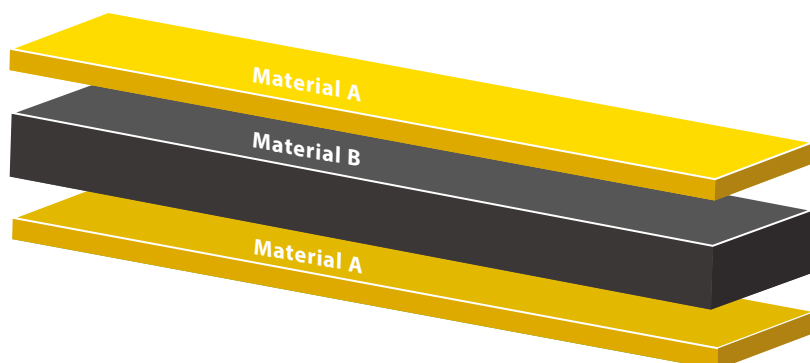
**Maximum width:
1500 mm**
Thickness: 1–8 mm
**Colours: each layer
different RAL**
**Rolls are available
upon agreement.**

CO-EXTRUDED SHEET

Extruding two or more materials through a single die so that materials merge or weld together into a single structure before cooling allows the combination of different compatible materials and colours in a single sheet.

The advantage of co-extrusion is that each layer imparts a desired property, such as stiffness, soft touch, environmental resistance, visual effect.

Applications: automotive industry, food industry, luggage, ... or similar.



FILLED MATERIALS

Fillers and additives are used to change and improve the physical and mechanical properties of plastics. In general, reinforcing fibres increase the mechanical properties of polymer composites while particular fillers of various types enhance a particular property.

Some of the main reasons to using fillers are:

- Improved mechanical properties
 - Density control
- Thermal conductivity
 - Optical effects
 - Flame retardant
 - Cost reduction
- Electrical properties; antistatic

FILLERS AND ADDITIVES

Modification of basic polymeric materials with fillers

- Talcum
- Wollastonite
- Calcium carbonate
- Short/long glass fibres
- Barium sulphate
- Wood flour
- Carbon black

Key Benefits

- Visual appearance (special effects, colour matching)
- Dimensional stability
- Shrinkage
- Stiffness
- Abrasion surface
- Weather influence resistance (UV resistance,...)
- Controlled flammability
- Antistatic characteristics and electrical conductivity
- Controlled impact strength at lower temperature



STANDARD TYPES

	Characteristics	Areas of use	Thickness, width/mm
HDPE (IF 300)	Tough at lower temperatures, Weldable, Moisture and chemical resistant	Construction industry, Chemical industry, Food industry, Automotive industry, Electrical industry, Thermoforming, Mechanical engineering	0.5–25/1550
HDPE (IF 360)	Tough at lower temperatures, Weldable and thermoformable, Moisture and chemical resistant	Construction industry, Chemical industry, Food industry, Automotive industry, Electrical industry, Thermoforming, Mechanical engineering	0.5–25/1550
LDPE (IF 50)	Flexible and soft, Thermoformable, Moisture and chemical resistant	Food industry, Thermoforming, Mechanical engineering, Electrical industry	0.6–5/1500
HDPE-R (IF 200)	Tough at lower temperatures, Weldable and thermoformable, Moisture and chemical resistant	Processing equipment, Chemical engineering	1.5–15/1550

Characteristics		Areas of use	Thickness, width/mm	Colour
EVA	High elasticity, Flexibility, Good forming properties	Sound proofing and anti-vibration, Railways	0.8–5/1500	
IF PE80	Tough at lower temperatures, Weldable and Thermoformable, Moisture and chemical resistant, meets MRS P80 (pipe industry)	Construction industry, Chemical industry	2.0–15/1500	black
IF PE100	Tough at lower temperatures, Weldable and thermoformable, Moisture and chemical resistant, meets MRS P100 (pipe industry)	Construction industry, Chemical industry	2.0–15/1500	black
Polyethylene based special material				
IF 360 K20	Excellent thermoforming properties	Automotive industry, Car boot liner applications	2.0–5/1600	
Orthopaedics				
IF ISORTHO 10	High density polyethylene (HDPE), Excellent thermoforming, Moisture and chemical resistant	Orthopaedics	2.0–8/1500	all skin colours
IF ISORTHO 20	High density polyethylene (HDPE), Excellent thermoforming, Moisture and chemical resistant	Orthopaedics	2.0–8/1500	all skin colours
IF ISORTHO 30	Low density polyethylene (LDPE), Excellent thermoforming, Moisture and chemical resistant	Orthopaedics	2.0–8/1500	all skin colours
IF ISORTHO 60	Low density polyethylene (LDPE), Excellent thermoforming, Moisture and chemical resistant	Orthopaedics	2.0–8/1500	all skin colours
Electro conductive				
PE EL	Electroconductive properties, Surface resistivity < 106Ω	Thermoforming, Bumper protection, Automotive industry	2.0–8/1500	
Polyethylene-based co-extruded material				
Soft anti-slip surface				
IF 50 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.2–3/1500	
IF 51 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.2–3/1500	
IF 52 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.2–3/1500	
IF 50K20 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.2–3/1500	
IF 360 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.5–5/1500	
IF 450 coex TPE	Co-extruded with an anti-slip TPE layer, Thermoformable, Embossed surface, Anti-skid surface	Automotive industry, Thermoforming	1.5–5/1500	
IF S009	Co-extruded with an anti-slip TPE layer, Thermoformable, Meets VDA 4503 requirements,	Automotive industry, Thermoforming	2.0–5/1500	
IFS010	Co-extruded with an anti-slip TPE layer, Thermoformable, Chemical and Corrosion resistant, Anti-skid surface	Automotive industry, Thermoforming	2.0–5/1500	
PPEL coex TPEEL	Co-extruded with an anti-slip TPE layer, Thermoformable, Electroinductive properties	Thermoforming	2.0–4/1500	
Polyethylene-based filled materials				
IF 50 K20	Flexible and soft, Thermoformable, Embossed surface	Car boot liners	1.0–6/1500	
Laminated with foam				
IF 340 KS200	Laminated with a soft durable foam, Thermoformable, Tough	Thermoforming, Automotive industry	1.5–4/1500	

PP

PRODUCTION TYPES

STANDARD TYPES

Characteristics		Areas of use	Thickness, width/mm
PPH (IF 400)	Rigid and high strength, Thermoformable and weldable, Chemical and corrosion resistant, Greater stiffness	Construction industry, Automotive industry, Thermoforming, Mechanical engineering	1.0-20/1500
PPC (IF 450)	Rigid and high strength, Thermoformable and Weldable, Chemical and corrosion resistant, use at lower temperatures	Construction industry, Chemical industry, Food industry, Automotive industry, Thermoforming, Mechanical engineering, Electrical industry	1.0-20/1500

SPECIAL TYPES

Characteristics		Areas of use	Thickness, width/mm
Polyolefin based special materials			
IF 456	Excellent thermoformability, Tough, Chemical and corrosion resistant	Thermoforming, Food industry	0.8–10/1600
FABAC	Laminated with polyester fabric, Weldable, Chemical and corrosion resistant	Chemical industry	2.0–8/1500
PP FOAM (IF 450 PPC FOAM)	Light weight polypropylene foam, Closed cell	Construction industry	2.0–4/1500
Elastomer modified			
IF 410_10	Elastomer modified, Excellent thermoformability, Good low temperature impact strength	Thermoforming, Bumper protection, Automotive industry	2.0–8/1500
IF 410_25	Elastomer modified, Excellent thermoformability, Good low temperature impact strength	Thermoforming, Bumper protection, Automotive industry	2.0–8/1500
IF 410_40	Elastomer modified, Excellent thermoformability, Good low temperature impact strength	Thermoforming, Bumper protection, Automotive industry	2.0–8/1500
IF PPEPM20	Elastomer modified, Excellent thermoformability, Good low temperature impact strength	Thermoforming, Bumper protection, Automotive industry	2.0–8/1500





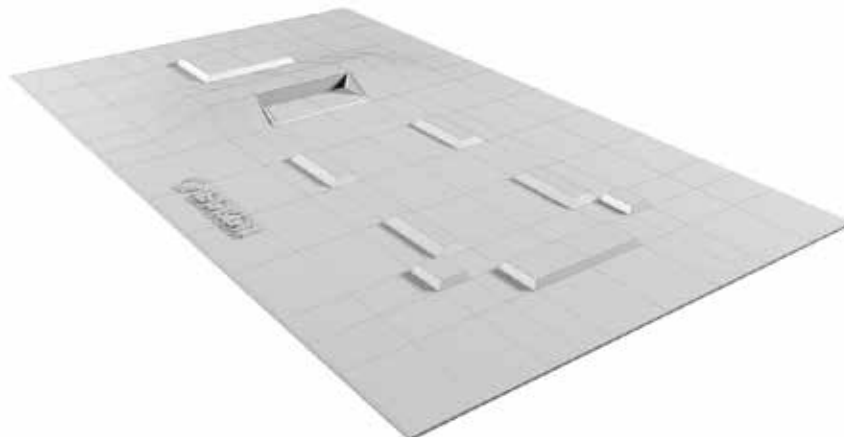
Characteristics		Areas of use	Thickness, width/mm
Electroconductive			
PP EL	Electroconductive properties, Surface sensitivity < 106Ω	Thermoforming, Bumper protection, Automotive industry	2.0–5/1500
Laminated with foam			
IF 456 PPC KS200	Laminated with a soft durable foam, Thermoformable, Tough	Thermoforming, Automotive industry	1.5–4/1500
IF 456 PPEL KS200	Laminated with a soft durable foam, Electroconductive, Thermoformable	Automotive industry, Thermoforming	1.5–4/1500
Orthopaedics			
IF ISORTHO 40	Polypropylene polymer PPC, Excellent thermoforming, Chemical and corrosion resistant	Orthopaedics	2,0-8/1500
IF ISORTHO 50	Polypropylene homopolymer PPH, Excellent thermoforming, Chemical and corrosion resistant	Orthopaedics	2.0–8/1500
Polypropylene-based co-extruded materials			
Soft anti-slip surface			
IF 456MD30	Metal detectable properties, Thermoformable	Food industry	1.0–6/1500
Polypropylene based filled materials			
Talc filled			
IF PPT10	Good thermoformability, Rigid and tough, Talc filled	Automotive industry	1.0–6/1500
IF PPT20	Rigid and high strength, Thermoformable, High temperature resistance	Thermoforming, Food industry	1.0–8/1500
IF PPT30	Increased rigidity, higher Heat Distortion Temperature (HDT)	Electrical industry, Sterilization industry, Chemical industry, Automotive industry	1.0–8/1500
IF PPT-30FR R7035	Tested with a glow wire at 750°C, Higher stiffness than normal PP, Light grey colour	Electrical industry	1.0–4/1600
IF PPT40	Rigid and high strength, High temperature resistance	Chemical industry	1.0–6/1600
IF 456T05	Excellent thermoformability, Tough, Chemical and corrosion resistant	Thermoforming	1.0–8/1500
IF 456T20	Excellent thermoformability, Tough, Chemical and corrosion resistant	Food industry, Automotive industry, Construction industry, Thermoforming	1.0–10/1500
Glass fibre filled			
IF 456T10G10	Filled material, Excellent thermoforming properties, Increased rigidity and stiffness	Automotive industry, Thermoforming	2.0–6/1500
IF 456GF30	Glass fibre filled, Excellent thermoforming properties, Increased rigidity and stiffness	Automotive industry, Thermoforming	2.0–6/1500
Heavy filled			
ISOPHON 60	Flexible and high mass, Easily cut into different shapes, Sheet and roll form up to 5mm thick	Sound proofing	1.5–4/1600
ISOPHON 80	Flexible and high mass, Easily cut into different shapes, Sheet and roll form up to 5mm thick	Sound proofing	1.5–4/1600
HEAVY LAYER	Flexible and high mass, easily cut into different shapes, both sides textile coated for easy gluing	Sound proofing	1.5–4/1600
WPC			
IF LIP	Wood plastic composite, 100% Recyclable, One side coated with special fleece	Construction industry, Furniture industry	1.4–3/1,620
IF LIP RF	Wood plastic composite, 100% Recyclable, Both sides with flame treated surfaces	Furniture industry	1.9–3/1550
IF HMPP	Wood plastic composite, 100% Recyclable, One side coated with special fleece	Construction industry, Automotive industry	1.8–4/1550

RANGE OF SEMI-FINISHED PRODUCTS

ISOFORM dimensions and colour		thickness mm		standard colours	
		PE	PP	PE	PP
1000×2000		2 to 25	2 to 20	natural, black	natural, grey
1500×3000		2 to 25	2 to 20	natural, black	natural, grey
	Rolls on request	Other sizes, thicknesses and colours on request.			
		Thickness tolerance in accordance with EN ISO 14632 (PE), EN ISO 15013 (PP).			

*STANDARD TYPES ON REQUEST

			Thickness, width/mm	Standard colours	Other colours
PE standard semi-finished products					
LDPE (IF 50)	Flexible and softer material compared to HDPE		0.6–5/1500		
HDPE (IF 300, IF 340, IF 360)	General performance	Use at lower temperatures	0.5–20/1550	natural, black	White RAL 9003, Green RAL 6024, Yellow RAL 1018, Red RAL 3020, Orange RAL 2004, Grey RAL 7046, Blue RAL 5015
PP standard semi-finished products					
PPH (IF 400)	General performance	Higher stiffness	1.0–15/1500	natural, grey	
PPC (IF 450)	General performance	Use at lower temperatures	1.0–15/1500	natural, grey	



APPLICATION EXAMPLES **ISOFORM** EXTRUDED SHEET



The summarised data should only be used as a guide. The information data are summarised to the best of our knowledge but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained from them, and it is the end user's responsibility to make their own determination of the product's suitability for the intended applications.

	Density (ISO 1183) g/cm ³	Tensile modulus (ISO 527) MPa	Tensile strength (ISO 527) MPa	Flammability rating (UL94)	Temperature range °C	Food contact
LDPE (IF 50)	0.93	200w	20	HB	-40-70	Yes
HDPE (IF 300)	0.96	1350	27	HB	-40-80	Yes
HDPE (IF 340)	0.96	1020	24	HB	-40-80	Yes
HDPE (IF 360)	0.95	1000	24	HB	-40-80	Yes
IF EVA	0.94	60	6	/	-50-60	No
IF PE80	0.96	1050	>20	HB	-40-80	No
IF PE100	0.96	1100	25	HB	-40-80	No
PPH (IF 400)	0.91	1060	36	HB	0-100	Yes
PPC (IF 450)	0.91	1100	24	HB	-20-100	Yes
IF 456	0.92	1,00	24	HB	-40-80	Yes
IF360 K20	1.09	250	10	HB	-20-70	No
FABAC (IF 450) PPC	0.91	1100	24	HB	-20-80	No
PP foam	0.45	300	5	HB	-20-90	No
IF 410_25	0.92	550	13	HB	-40-80	No
IF 410_40	0.92	300	9	HB	-40-80	No
IF PPEPM20	0.9	720	15	HB	-40-80	No
PPEL	1	1150	21	HB	0-90	No
PE EL	1.05	1050	23	HB	-20-80	No
IF340 KS200	0.96	1000	24	HB	-40-80	No
IF 456 PPEL KS200	1	1100	20	HB	-40-80	No





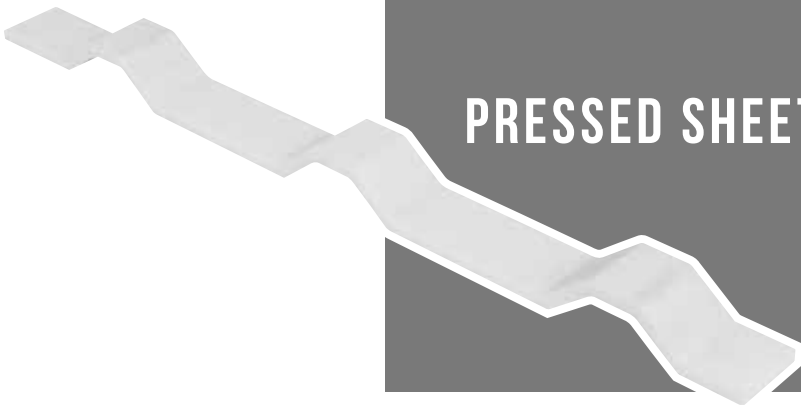
	Density (ISO 1183) g/cm ³	Tensile modulus (ISO 527) MPa	Tensile strength (ISO 527) MPa	Flammability rating (UL94)	Temperature range °C	Food contact
ISORTHO 10	0.95	1000	24	HB	-40–80	Yes
ISORTHO 20	0.95	1000	24	HB	-40–80	Yes
ISORTHO 30	0.93	200	20	HB	-40–70	Yes
ISORTHO 40	0.91	1100	24	HB	-20–100	Yes
ISORTHO 50	0.91	1600	36	HB	0–100	Yes
IF 51 coex TPE	0.93	200	10	/	-25–75	No
IF 52 coex TPE	0.93	150	8	/	-25–75	No
IF S009	0.94	900	>20	/	-25–75	No
IF S010	0.94	900	>18	/	-25–75	No
PPEL coex TPEEL	1	1050	20	/	-20–80	No
IF PPT10	1	1300	29	HB	-40–80	No
IF PPT20	1.06	3200	37	HB	0–100	Yes
IF PPT30	1.2	4200	38	HB	0–100	No
IF PPT30FR R7035	1.2	2500	38	750°C (glow wire test)	0–100	No
IF PPT40	1.23	4100	37	HB	0–100	No
IF 456T05	0.96	1100	25	HB	-40–80	Yes
IF 456T20	1.06	1800	24	HB	-40–80	Yes
IF 456GF30	1.15	2600	28	HB	-20–80	No
ISOPHON 60	1.8	80	8	HB	-40–70	No
ISOPHON 80	2.5	250	5	Class E-d0 (EN13501-1)	-40–70	No
HEAVY LAYER	2	150	5	HB	-40–70	No
IF LIP	1.06	2800	20	/	0–100	No
IF LIP RF	1.06	3700	22	/	0–100	No
IF HMPP	1.06	3200	32	/	0–100	No

KOTERM PRESSES



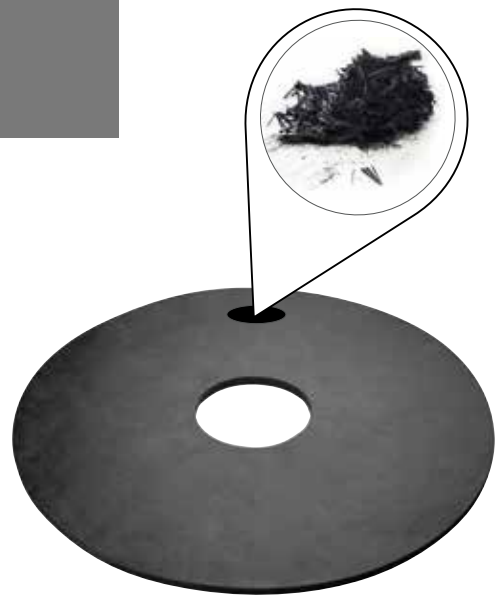
A WIDE RANGE OF POSSIBILITIES IN SEMI- FINISHED PRODUCTS

- Mega press wide product range
- Press moulded designed sheets (pre-formed pressed sheets)
- Prototyping and serial production large machine components (3-5 axis CNC machine up to 8m)
- Material design Fibre filled UHMW PE



PRESSED SHEETS

Mega press wide product range because of investments into technology and development, we are orientated towards the application of modern materials and production technologies.



Standard sheets in dimensions

2,020×1,020mm, 3,030×1,020mm, 6,100×1,020mm
3,030×1,220mm, 2,020×1,220mm, 6,100×1,220mm
Thickness range from 10mm to 130mm

PRODUCTION TYPES

PE

STANDARD TYPES

	Characteristics	Areas of use
PE1000	Low friction, High abrasion and wear resistance, Chemical and corrosion resistance	Mining, Food industry, Mechanical engineering, Chemical industry, Electrical industry
PE500	Balanced mechanical properties, Good chemical resistance, Physiologically safe	Food industry, Mechanical engineering, Construction industry, Chemical industry, Electrical industry
PE300	Tough at lower temperatures, Weldable, Moisture and chemical resistant	Construction industry, Mechanical engineering, Sport-funICE, Chemical industry

SPECIAL TYPES

	Characteristics	Areas of use
PE1000-2	Abrasion and wear resistant, Chemical and Corrosion resistant, No moisture absorption	Mechanical engineering, Chemical industry, Electrical industry
PE9000	Low friction, High abrasion and wear resistance, High impact strength	Mechanical engineering, Chemical industry
UV stabilised		
PE1000UV	UV stabilised, High abrasion and wear resistance, Low coefficient of friction	Mining, Mechanical engineering, Chemical industry, Electrical industry
Anti-static/electroconductive		
PE1000AST	Anti-static, High Abrasion and Wear resistance, Low coefficient of friction	Mining, Mechanical engineering, Electrical industry
PE1000ASTF	Anti-static, High abrasion and wear resistance, Meets food contact regulations	Food industry
PE1000ELC	Electroconductive, High abrasion and wear resistance, Low coefficient of friction	Mining, Mechanical engineering, Electrical industry
Self-extinguishing		
PE1000FR	Self-extinguishing, Meets requirements UL94-V0, High abrasion and wear resistance	Mining, Mechanical engineering, Electrical industry
PE1000FREX	Self-extinguishing with exp. graphite, Meets requirements UL94-V0, Anti-static	Mining, Mechanical engineering, Electrical industry





Characteristics		Areas of use
Wear resistance/sliding properties		
PE1000M	Very low friction, Superior abrasion and wear resistance, Chemical and corrosion resistant	Mining, Mechanical engineering
PE1000S	Very low friction and superior sliding, Superior abrasion and wear resistance, Self-lubricating	Mining, Mechanical engineering
Heat stabilised		
PE1000SH	Heat stabilised, High abrasion and wear resistance, Improved life span at elevated temperatures	Mechanical engineering
Antimicrobial properties		
PE1000ABAC	Antimicrobial effect, High abrasion and wear resistance, Chemical and corrosion resistant	Mining, Mechanical engineering
Metal detectable		
PE1000MD	Contains a Metal detectable additive, High abrasion and wear resistance, High impact strength	Mining, Mechanical engineering
Wear resistance/sliding properties		
PE9000M	Very low coefficient of friction, Superior abrasion and wear resistance, Chemical and corrosion resistant	Mechanical engineering, Chemical industry
PE9000MS	Very low friction and superior sliding, Superior abrasion and wear resistance, Chemical and corrosion resistant	Mechanical engineering, Chemical industry
PE9000NLS	Very low friction and superior sliding, Excellent abrasion and wear resistance, Self-lubricating	Mechanical engineering, Chemical industry
Wear/abrasion resistant		
CER	Excellent abrasion and wear resistance, Low moisture absorption, Chemical and corrosion resistant	Mechanical engineering
CERAMEX	Excellent abrasion and wear resistance, Good sliding properties, Filled with a ceramic filler	Mechanical engineering
X-SLIDE	Very low friction, Superior abrasion and wear resistance, Self-lubricating	Mining
HX-SLIDE	Superior abrasion and wear resistance, Very low friction and superior sliding, Withstands loads as hot as 180°C	Mining
ULA	Excellent abrasion and wear resistance, Low moisture absorption, Chemical and corrosion resistant	Mechanical engineering
UV stabilised		
PE500UV	UV stabilised, Good chemical resistance, Balanced mechanical properties	Mechanical engineering, Sport FunICE, Chemical industry, Furniture industry, Electrical industry
Excellent sliding characteristics		
FunICE	Excellent sliding properties, UV stabilised, Balanced mechanical properties	Sport FunICE
Superior processing properties		
PE300	Tough at lower temperatures, Long-term stress crack resistance, Moisture and chemical resistant	Construction industry, Mechanical engineering, Chemical industry
PE100	Tough at lower temperatures, Long-term stress crack resistance, Completely resistant to corrosion	Construction industry, Chemical industry
PE80	Tough at lower temperatures, Long-term stress crack resistance, Moisture and chemical resistant	Construction industry, Chemical industry
Recycled, cost effective solutions		
PEHDR	Reprocessed material	Construction industry, Mechanical engineering
PEHDR RKB	Reprocessed material	Construction industry, Mechanical engineering
PE1000 R	Reprocessed material, Abrasion and wear resistant, Chemical and corrosion resistant	Construction industry, Mechanical engineering
PE1000 RMB	Reprocessed material, Abrasion and wear resistant, Multicolour visual appearance	Mechanical engineering

PRODUCTION TYPES

PP

STANDARD TYPES

	Characteristics	Areas of use
PPC	Rigid and tough, Chemical and corrosion resistant, Excellent weldability	Mechanical engineering
PPH	Rigid and high strength, Chemical and corrosion resistant, Excellent weldability	Mechanical engineering, Chemical industry
PPH74	Rigid and high strength, Chemical and corrosion resistant, Physiologically safe	Mechanical engineering
PPR	Rigid and high strength, Chemical and corrosion resistant, Excellent weldability	Mechanical engineering, Chemical industry

RANGE OF SEMI-FINISHED PRODUCTS

Standard dimension (mm)	Thickness (mm)	PE 1000 PE UHMW	PE 500 PE HMW	PP	PP(R)
		Natural Green Black	Natural Green Black	Natural	Grey
2020x1020	10	●	●	●	●
3030x1020	12	●	●	●	●
6100x1020	15	●	●	●	●
2020x1220*	20	●	●	●	●
3030x1220	25	●	●	●	●
6100x1220	30	●	●	●	●
	40	●	●	●	●
	50	●	●	●	●
	60	●	●	●*	●*
	70	●	●	●*	●*
	80	●	●	●*	●*
	90	●	●		●*
	100	●	●		●*
	110	●	●		●*
	120	●			●*
	130	●			

Thickness tolerance +0/+0.5

● -standard dimensions and colours





● -minimum quantity 1 press

Press dimensions mm:















2510×6100, 1220×6100, 1020×6100,
2050×4530, 2020×2020,

Maximum planing width mm: 1220

Standard colours:

	PE: natural, black;
	
	PP : natural, grey
	

Colours PE

	White RAL 9016
	Yellow RAL 1018
	Melon RAL 1034
	Red RAL 3020
	Red-brown RAL 3009
	Grey RAL 7037
	Blue RAL 5015
	Pepper-salt M1
	Marble-natural M2
	Marble-black M4
	Water-blue RAL 5021
	Yellow-green RAL 6018
	Violet RAL 4007
	Green RAL 6024

Other colours and special sheet sizes upon request.

BASIC MATERIAL CHARACTERISTICS

KOTERM PRESSED

The summarised data should only be used as a guide. The information data are summarised to the best of our knowledge but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained from them, and it is the end user's responsibility to make their own determination of the product's suitability for the intended applications.

	Density (ISO 1183) g/cm ³	Tensile modulus (ISO 527) MPa	Yield stress (ISO 527) MPa	Flammability rating (UL 94)	Temperature range °C	Food contact
PE1000	0.93	750	>17	HB	-200....86	Yes
PE1000-2	0.95	900	>24	HB	-100....80	No
PE1000UV	0.93	750	>17	HB	-200....80	No
PE1000AST	0.935	750	>17	HB	-200....80	No
PE1000ASTF	0.935	750	>17	HB	-200....80	Yes
PE1000ELC	0.94	750	>17	HB	-200....80	No
PE1000FR	1.01	750	>20	V-0	-200....80	No
PE1000FREX	1	750	>20	V-0	-200....80	No
PE1000M	0.94	750	>17	HB	-200....80	No
PE1000S	0.935	750	>17	HB	-200....80	No
PE1000SH	0.93	750	>17	HB	-200....110	Yes
PE1000 MD	0.93	750	>17	HB	-200....80	Yes
PE9000	0.93	750	>17	HB	-200....80	Yes
PE9000M	0.94	750	>17	HB	-200....80	No
PE9000MS	0.94	750	>17	HB	-200....80	No
PE9000NLS	0.94	750	>17	HB	-200....80	No
CER	0.96	850	>17	HB	-200....80	No
CERAMEX	1.05	950	>17	HB	-200....80	No
X-SLIDE	0.94	750	>17	HB	-200....80	No
HX-SLIDE	0.96	850	>17	HB	-200....80	No
ULA	0.96	850	>17	HB	-200....80	No
PE500	0.96	1200	27	HB	-50....80	Yes
PE500UV	0.96	1200	27	HB	-50....80	No
FunICE	0.96	1200	27	HB	-50....80	No
PEHD nat	0.96	1350	27	HB	-50....80	Yes
PEHD black	0.96	1050	>20	HB	-50....80	Yes
PE100	0.96	1100	25	HB	-50....80	No
PE80	0.96	1050	>20	HB	-50....80	No
PPC	0.92	1300	28	HB	0....100	Yes
PPH	0.91	1350	30	HB	0....100	Yes
PPH74	0.91	1600	36	HB	0....100	Yes
PEHD RKB	>0.96	>900	>23	HB	-40....80	No
PE1000 R	>0.94	900	>17	HB	-50....80	No
PE1000 RMB	>0.94	>750	>17	HB	-50....80	No

APPLICATION EXAMPLES **KOTERM** PRESSED SHEETS



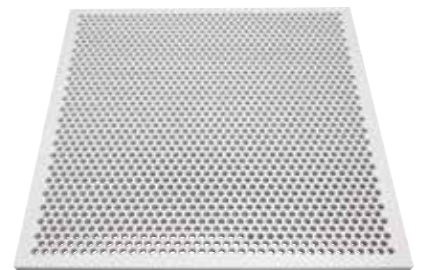
Winter/Summer ski-jumping ramp

Lining of devices and transport means

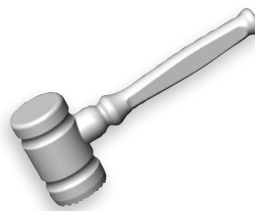
Lining in cooling chambers



Sterilization for autoclaves
in food sterilisation



Cutting boards and
accessories for food
preparation



CUSTOMISED PRODUCT SOLUTIONS-FINISHED PRODUCTS

Bottling industry



Machine components for all industries



Prototyping large machine components

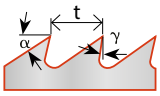
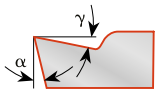
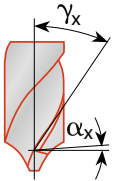
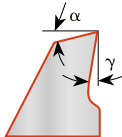
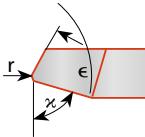
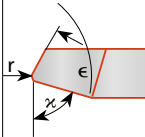


TECHNICAL MANUFACTURING

TIPS OF PROCESSING

The Koterm PE/PP material can be machined with wood as well as metal processing machines.

The sharpness of the tools is essential to prevent splintering. Grinding or polishing is not recommended due to the greasing effect (overheating).

	Sawing	Planing	Drilling	Milling	Turning	Turning
						
Tool	HSS, HM	HSS, HM	Spiral shaped drill	HSS, HM	HSS, HM	Units
Cutting rate	3000-4000*	3000	15-40	1000-2000	100-600	m/min
Feed rate	0.1-0.3	0.1-0.3	0.1-0.3	0.1-0.5	0.1-0.5	mm/tooth mm/rpm
Cutting angle	HSS: 3-6 MH: 5-8	15-20	15-25	5-15	5-15	degrees
Relief angle	HSS: 3-6 MH: 5-8	15-30		5-15	5-15	degrees

Welding

Butt welding procedure: the areas to be welded are heated with the heating mirror at 200 to 220°C using a low pressure level until a layer of approx. 4mm has become plastic. The surfaces are pressed at a pressure level of 10 to 20kp/cm².

*The indicated speed applies to circular saws.

FUNICE SYNTHETIC ICE PANELS

FUNICE are pressed plastic panels fabricated from a special compound and provide gliding properties most similar to natural ice. These panels represent a viable alternative to artificial ice-rinks, making ice-skating possible almost anywhere, at any time.



Our FUNICE panels are fabricated from the base material **KOTERM 500 (HMWPE)** which is compounded with special synthetic additives in order to provide enhanced gliding properties without requiring the additional application of a gliding lubricant, since the panels are self-lubricating.

Technical data		
Material: KOTERM 500 HMWPE		
	Norm	Value
Density		0.95 g /cm ³
Coefficient of linear expansion *	DIN 53752	1.5 ⁻² x 10 ⁻⁴ K ⁻¹
Impact strength (CHARPY)	ISO 179	Does not break

Panel dimensions		
Standard rink dimensions [m]**		
Thickness*** [mm]	Size [mm]	Assembly System
10, 13	1170 x 1170	ePuzzle System
15, 19, 23	1170 x 1170	Puzzle System
18, 20	1200 x 2000 or 1000 x 2000	LW-System, L-System

* Panels can resist more than 50°C

** Different dimensions and special shapes upon request

*** Different thicknesses available upon request

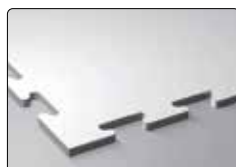


Connecting Systems available

LW-System, L-System

ePuzzle System

Puzzle System



LOGO SKATING PANELS

The logo is printed on a special paper and then heat-pressed to the panels. The colour is absorbed into the material and the panels can be skated on without damaging the logo.

DASHER BOARDS

Can easily be used for recreational and professional skating and indoor applications. It is also highly suitable for mobile rinks, since it can easily be assembled and disassembled.



Frame and supporters:
metal zinc construction with
concrete weights
Wall: PE-HD-sheet
(8-12mm, white)

Dimensions*

- Height: 1070 mm
- Players' gate width: 700 mm
- Top sill 12 mm made of blue PE500
- Kick protection plate 10-15 mm made of yellow PE500

* Upon request,
dimensions can be varied

Standard design of our dasher boards are either rounded corners with a radius of 7.65 m or right-angled corners. On demand we can produce also other designs and shapes.



ISOTRACK

PROTECT – BE SAFE

TEMPORARY ROADWAYS – ACCESS AND GROUND PROTECTION MATS

For safe, heavy duty temporary access across soft ground in extreme wet weather conditions, for difficult conditions in construction, transport or various events.

ISOTRACK X SERIES



ISOTRACK H SERIES



ISOTRACK L SERIES



ISOTRACK tMAT

ISOTRACK X_{SERIES}

Isotrack X series advanced design provides temporary roads, work sites and staging areas where soft or boggy ground prevents safe access. Its cellular core can withstand high compressive loads (>605 psi) and the overlap and connection system creates a safe, continuous and stable work surface.



General information

Overall Dimensions	4000 x 2000 mm
Thickness	Total 102 mm, Core 94 mm
Overlap	200 mm
Useable Surface Area	1,8 x 3,8 m = 6.84 m ²
Weight	360kg
Colour	Sand (standard), other colours subject to minimum order quantity
Transport	Standard high cube 40 feet container 52 mats, Mega Truck standard EU 60 mats
Handling and Installation	Easily handled and installed using different types of equipment
Recycling	100% recyclable

Safety	Surface structure designs provide excellent traction for vehicles
Environmental	No liquid absorption, chemically inert, allows easy decontamination-cleaning
Compressive load capacity:	Can withstand 415 t/m ² (605 psi) without deformation or breakage
Load bearing capacity	In excess of 200t*
Operating Temperature Range	- 40°C to + 80°C
Fire Rating	UL 94HB
AST additive	Tested according to DIN standard IEC EN 62631-3-2:2016
RFID or GPS Tags	Option to install your tag of choice within weather proof pocket.

* Load bearing capacity is dependent on ground conditions.

ISOTRACK H SERIES

Isotrack H series is the leading heavy duty, solid composite mat for temporary access and ground protection. It can be easily installed to provide roadways, work sites and staging areas and does not require any ground preparation. It incorporates the market leading Isotraction™ surface for safe vehicle operation as well as a surface designed for steel tracked equipment operation.



General information

Overall Dimensions	3000 x 2500 mm	Handling and Installation	Mat incorporates lifting points. Can use lifting hooks, slings, eye bolts, forklifts or vacuum lifting equipment
Thickness	Total 46 mm, Core 38 mm	Connection	Using standard M16 bolts with steel or flexible straps. Steel reinforced connection points.
Useable Surface Area	7,5 m ²	Recycling	100% recyclable
Weight	295 kg	Safety	Surface structure designs provide excellent traction for vehicles
Material	Recycled HDPE	Environmental	No liquid absorption and chemically inert. Easy to clean/decontaminate
Colour	Black (standard), other colours optional subject to minimum order quantity	Load bearing capacity	Ideal for supporting vehicles and equipment up to more than 100 tonnes*
Transport	Open top standard high cube 40' container 66 mats, Mega Truck standard EU 75 mats	Fire Rating	UL 94HB

* Load capacity is dependent on ground conditions.

* Load bearing capacity is dependent on ground conditions.

* Load bearing capacity is dependent on ground conditions.

ISOTRACK tMAT

Isotrack tMat is the leading heavy duty, solid composite mat for temporary access and ground protection, smaller dimension with difference in traction surface. It can be easily installed to provide roadways, work sites and staging areas and does not require any ground preparation. It incorporates the market leading Isotraction™ surface for safe vehicle operation as well as a surface designed for steel tracked equipment operation.



General information

Overall Dimensions	3000 x 2000 mm	Handling and Installation	Can use lifting hooks, slings, eye bolts or forklifts, vacuum lifting equipment.
Thickness	Total 47.5 mm, Core 38 mm	Connection	Using standard M16 bolts with steel or flexible straps. Steel reinforced connection points.
Useable Surface Area	6 m ²	Recycling	100% recyclable
Weight	235 kg	Safety	Surface structure designs provide excellent traction for vehicles
Material	Recycled HDPE	Environmental	No liquid absorption and chemically inert. Easy to clean/decontaminate
Colour	Black (standard), other colours optional subject to minimum order quantity	Load bearing capacity	Ideal for supporting vehicles and equipment up to more than 150 tonnes*
Transport	Standard high cube 40 feet container 80 mats, Truck standard EU 96 mats	Fire Rating	UL 94HB

* Load capacity is dependent on ground conditions.

ISOTRACK L SERIES

Isotrack L series is the premium lightweight man-handable, temporary access and ground protection mat with a wide range of uses including roadways and trackways, smaller construction projects, landscape projects, events and more. It has two surface structures - for vehicle and pedestrian use – as well as elongated connection holes for easier installation.



General information

Overall Dimensions	2410 x1200 mm	Handling and Installation	Handhold cut-outs and hand grips for easy handling – two-person lift. No specialist tools or equipment required.
Thickness	Total 20 mm, Core 12 mm	Recycling	100% recyclable
Useable Surface Area	2,89 m ²	Safety	Surface structure designs provide excellent traction for vehicles
Weight	36 kg	Environmental	No liquid absorption and chemically inert. Easy to clean / decontaminate
Colour	Black (standard) Other colours subject to minimum order quantity	Load bearing capacity	Ideal for supporting lighter vehicles and equipment up to 20 tonnes on softer ground and more than 50 tonnes on firm ground*
Transport	Standard high cube 40' container 560 mats, Truck standard EU 650 mats	Fire Rating	UL 94HB

* Load bearing capacity is dependent on ground conditions.

KOPLAST

EXTRUDED PROFILES FOR VARIOUS INDUSTRIES



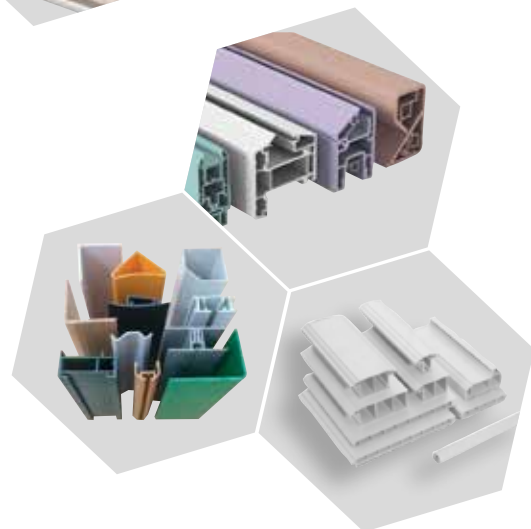
The company is for several years a supplier of PVC profiles for all major manufacturers in the caravaning industry for the markets of Slovenia, Germany, Austria, Italy and France. The ability of our own technological development and the execution of PVC profiles gives us a competitive position in the market.

ROLLING DOORS

The shutter doors manufactured by the company Koplast are intended for use in the caravanning industry. They can be installed as sliding doors for closing drawers and cabinets, as well as bathroom doors.

They are made with special technology, in various colour shades, are silent during the drive and do not cause any noise.

They can be guided with top and bottom guides, or they can be guided through a channel in a thermoplastic shower cubicle.



PROFILES ACCORDING TO MEASURE

With the help of our own development and technology department, we are able to design, construct and develop different profile types according to the requirements of our customers.

PROFILES

On eight extrusion lines, we are able to produce profiles that weigh between 0,1 and 2,0 kg/m and can reach a maximum of 6m in length. The profiles can be produced opened, without chambers, or closed with chambers.

Products could also be co-extruded and made from two or more different materials, for example soft and hard materials.



EXTRUDE

For the extrusion of plastic materials, we have 8 production lines, which means that we can produce 7.2 million meters of profiles annually.

PVC (hard soft), PA, PE, ABS, TPE, SMMA, PVC, ABS, PA, PP, HDPE



LAMINATE

We can coat the profiles of different shapes with films of different quality, which are necessary for both indoor and outdoor use. With the paper, plastic and metal foils as well as micro foils, we achieve an effect of wood, marble, metal design and other designs.



WELD

Would you like us to link your profiles into a framework? We can offer that too. We can weld them together with the help of different connecting elements, screws, ...



BEND

Our equipment allows us to turn different profiles according to your wishes. The minimum radius of the curvature is 30 cm (depending also on the profile shape) and combinations of different curvatures or curvatures and straight parts are also possible.

CNC

With the latest CNC machine, we can also process profiles and adapt them to your requirements, such as openings for the installation of luminaires or the like.



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