



Laser and Rotary Materials

www.traffolyte.com

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Laserable Material

Laserable is an UV-resistant acrylic based laminate for both indoor and outdoor applications. Benefiting from a thin top layer, it enables detailed engraving at high production speeds. Its superior composition minimises residue, therefore reducing the need for cleaning whilst maximising your output.

Applications

- Interior Signs
- Exterior Signs
- Badges
- Trophy Plates
- Safety Signs
- Industrial Signage
- Legend Plates



Material Features

Material: Micro-surfaced impact acrylic.
2 ply / 3 ply

Finish: matt, gloss (where indicated)

Thickness: 0.8 mm / 1.6 mm / 3.2 mm

Engraving depth: 0.08 mm

Cutting method: laser, saw, guillotine*

(*not recommended for 3.2 mm)

Sheet size: 1245 x 616 mm



Laser material



Rotary material



Interior use



Exterior use

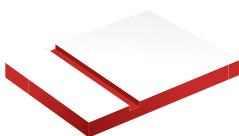
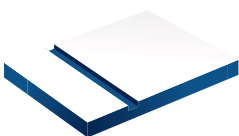
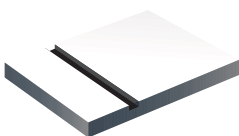
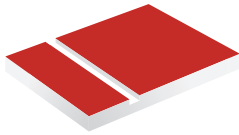
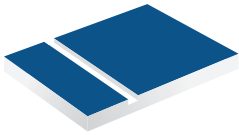
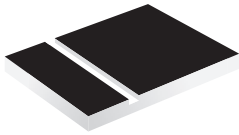
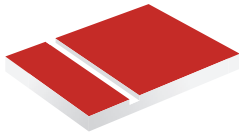
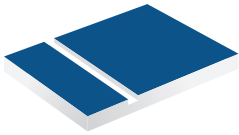
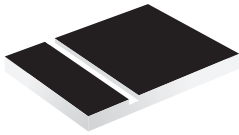
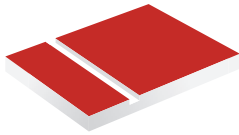
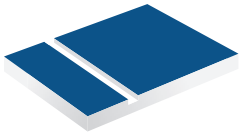
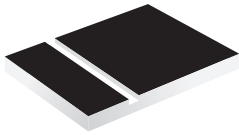


Adhesive available



UV print

Best seller

	White/Red		White/Blue		White/Black
	0.8				
	1.6		Blue/White		Black/White
	3.2 mm				
	0.8		Blue/White		Black/White
	1.6				
	3.2 mm		Blue/White		Black/White
	mm				


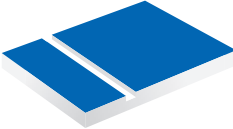
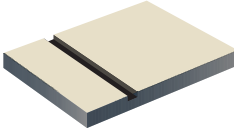

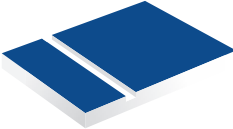
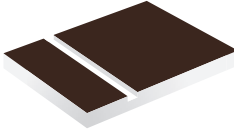
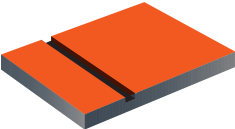
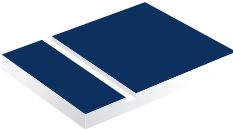
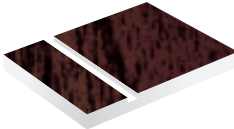
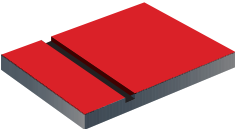
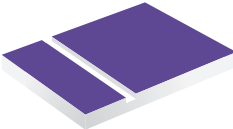
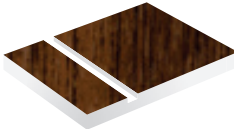
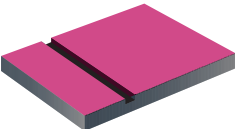
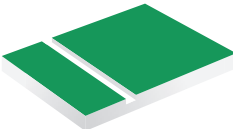
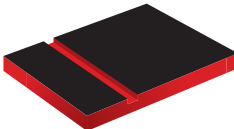

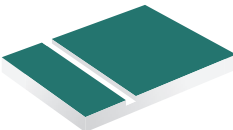
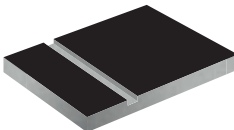
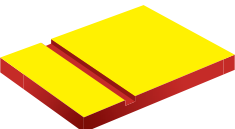
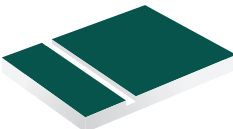
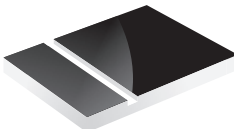
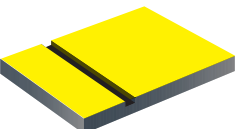
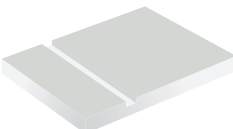
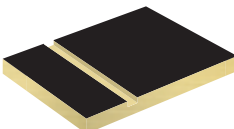
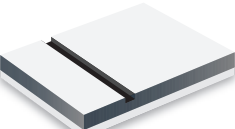
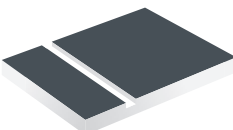
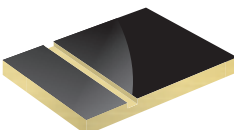

Cut to size service






→ Material cut to YOUR specifications. Hole drilling can be combined with round corners and bevelled edges.

Lasable Material

	Burgundy/White 1.6 mm		Sapphire/White 0.8 mm 1.6 mm		Almond/Black 1.6 mm
	Orange/White 0.8 mm 1.6 mm		NEW! Blueberry/White 1.6 mm		Dark Brown/White 1.6 mm
	Orange/Black 0.8 mm		Navy Blue/White 1.6 mm		Dark Walnut/White 1.6 mm
	Red/Black 1.6 mm		Purple/White 0.8 mm 1.6 mm		English Walnut/White 1.6 mm
	Pink/Black 1.6 mm		Green/White 0.8 mm 1.6 mm 3.2 mm		Black/Red 1.6 mm
	Pink/White 1.6 mm		Celadon Green/White 1.6 mm		Black/Silver 1.6 mm
	Yellow/Red 0.8 mm 1.6 mm		Pine Green/White 0.8 mm 1.6 mm 3.2 mm		Gloss Black/White 1.6 mm
	Yellow/Black 0.8 mm 1.6 mm 3.2 mm		Light Grey/White 1.6 mm		Black/Gold 1.6 mm
	White/Black/White 1.6 mm 3.2 mm		Smoke Grey/White 1.6 mm		Gloss Black/Gold 1.6 mm
			Black/White/Black 1.6 mm 3.2 mm		

Laserable Metallic Plus and Laserable Metallic Material

Laserable Metallic is an acrylic based laminate with an authentic metallic finish. Benefiting from a thin top layer it enables detailed engraving at high production speeds. For external applications and cost effective, time saving alternatives to metal engraving, we recommend TroLase Metallic Plus which is UV-resistant.

Applications

- Interior Signs
- Exterior Signs (Metallic Plus)
- Badges
- Trophy Plates
- Safety Signs
- Funeral Plates



Laserable Metallic Plus

Material: Modified impact acrylic, 2 ply

Finish: brushed metal

Thickness: 0.8 mm / 1.6 mm / 3.2 mm

Engraving depth: 0.08 mm

Cutting method: laser, saw, guillotine*

(*not recommended for 3.2 mm)

Sheet size: 1245 x 616 mm



Laser material



Rotary material



Interior use



Exterior use



Adhesive available



UV print

Laserable Metallic Material

Material: Micro-surfaced impact acrylic, 2 ply

Finish: brushed metal, smooth

Thickness: 0.8 mm / 1.6 mm / 3.2 mm

Engraving depth: 0.08 mm

Cutting method: laser, saw, guillotine*

(*not recommended for 3.2 mm)

Sheet size: 1245 x 616 mm



Laser material



Rotary material



Interior use



Adhesive available



UV print

Cut to size service



Cut to size



Hole drilling



Round corners



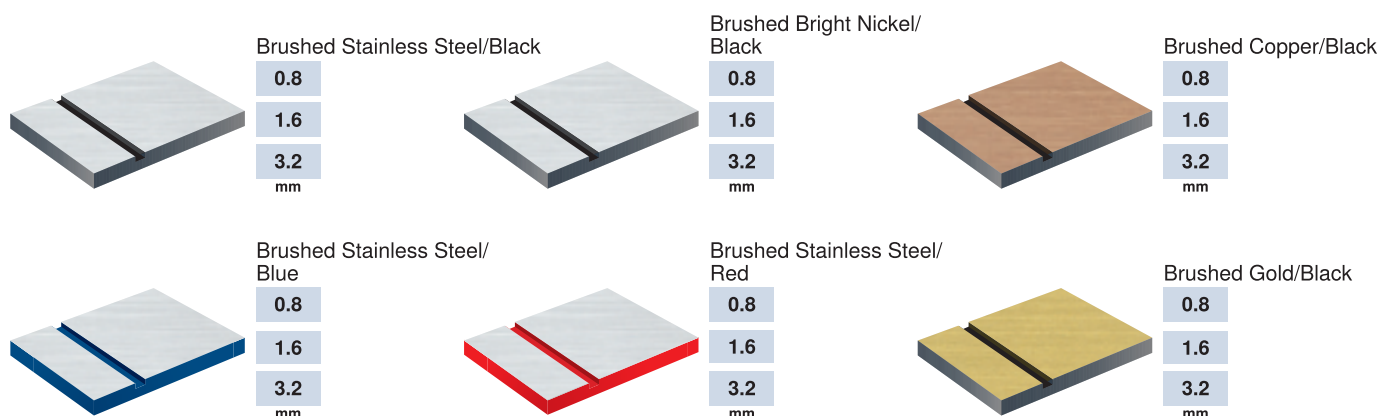
Bevelled edges



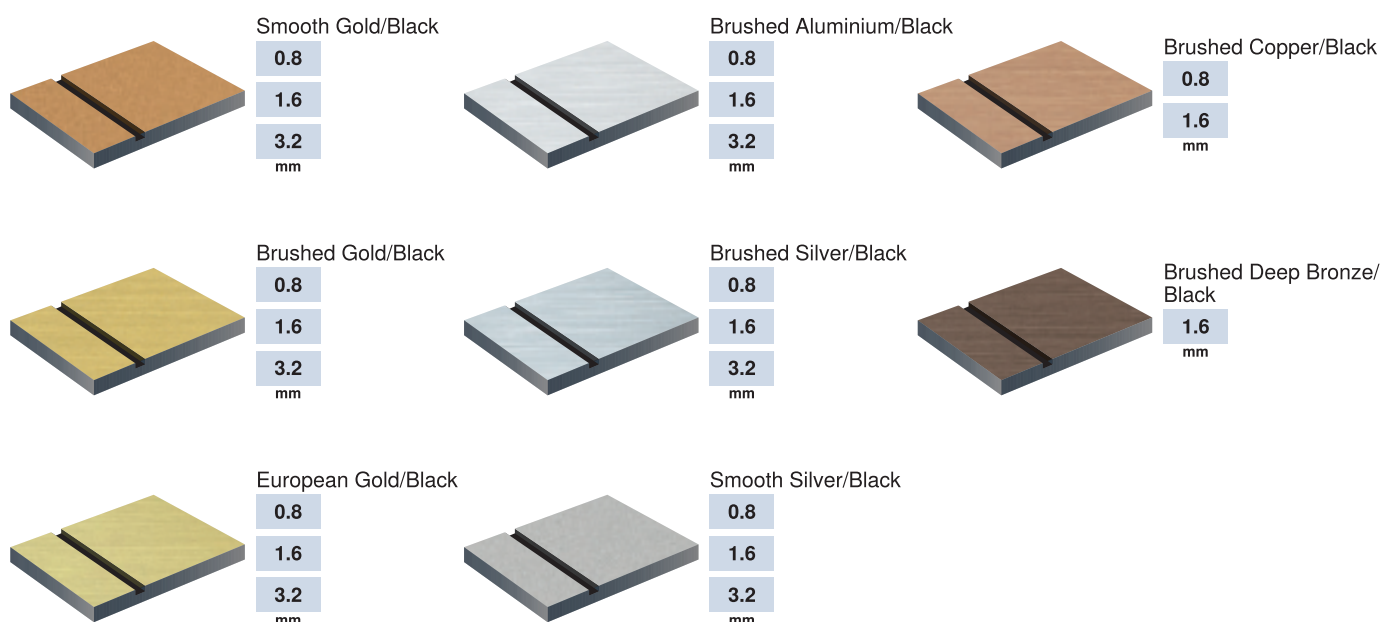
Material cut to YOUR specifications.
Hole drilling can be combined with round corners and bevelled edges.

Laserable Metallic Plus and Laserable Metallic Material

Laserable Metallic Plus



Laserable Metallic Material

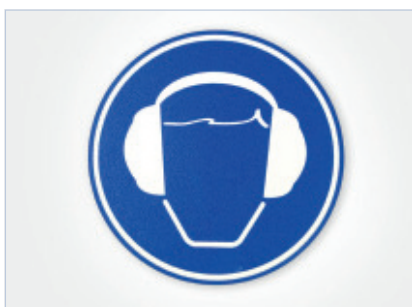


Textures Material

Textures Materials are two-layer acrylic based materials, suitable for applications in demanding environments where extra durability and scratch resistance are required. The textured, matt surface is non-reflective, durable and easy to clean. TroLase Textures are UV- and weather-resistant, suitable for indoor and outdoor use.

Applications

- Exterior & Interior Signs
- Badges
- Safety Signs
- Control Panels
- Industrial Applications



Material Features

Material: Impact acrylic; 1 ply/2 ply

Finish: textured matt

Thickness: 1.6 mm / 3.2 mm

Engraving depth: 0.2 mm

Cutting method: laser, saw, guillotine*

(*not recommended for 3.2 mm)

Sheet size: 1220 x 610 mm



Laser material



Rotary material



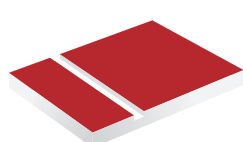
Interior use



Exterior use



Adhesive available

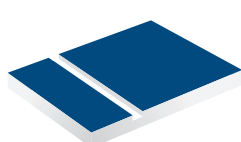


Red/White

1.6

3.2

mm

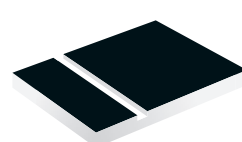


Royal Blue/White

1.6

3.2

mm

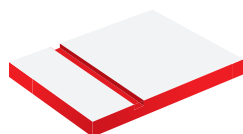


Black/White

1.6

3.2

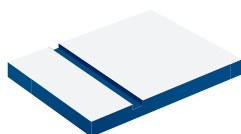
mm



White/Red

1.6

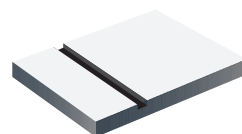
mm



White/Blue

1.6

mm

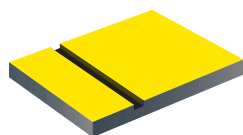


White/Black

1.6

3.2

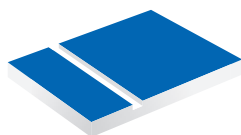
mm



Yellow/Black

1.6

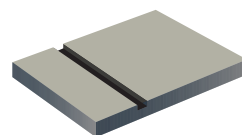
mm



Sapphire/White

1.6

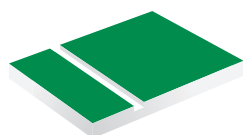
mm



Ash Grey/Black

1.6

mm



Green/White

1.6

mm

Cut to size service



Cut to size



Hole drilling



Bevelled edges



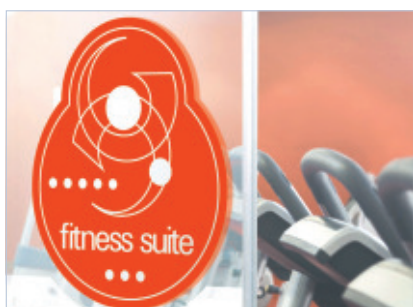
Material cut to YOUR specifications.
Hole drilling can be combined with bevelled edges.

Rotary Material

Rotary Material supplied as standard with a brushed finish. An interior laminate with an extensive colour range, it is ideally suited to internal signage, nameplates, key tags and personal identification. The solid cap offers a highly durable and scratch resistant surface.

Applications

- Interior Signs
- Badges
- Safety Signs
- Information Signs



Material Features

Material: Acrylic cap / ABS core, 2 ply / 3 ply

Finish: brushed

Thickness: 0.8 mm / 1.6 mm / 2.4 mm / 3.2 mm

Engraving depth: 0.30 mm

Cutting method: saw, guillotine* (*not recommended for 3.2 mm)

Sheet size: 1220 x 610 mm



Rotary material



Interior use



Adhesive available

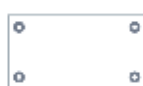


UV print

Cut to size service



Cut to size



Hole drilling



Round corners



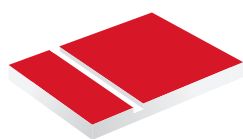
Bevelled edges



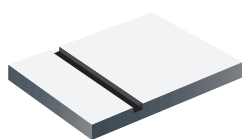
Material cut to YOUR specifications. Hole drilling can be combined with round corners and bevelled edges.

Rotary Material

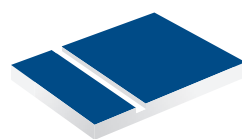
Best seller



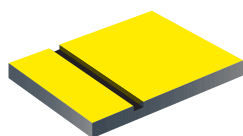
Red/White
1.6 mm



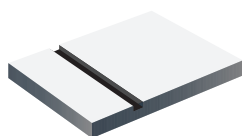
Polar White/Black
1.6 mm
2.4 mm



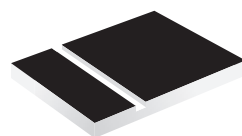
Blue/White
1.6 mm



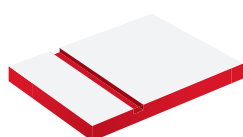
Yellow/Black
1.6 mm



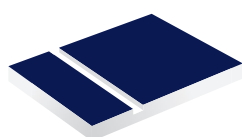
White/Black
0.8 mm
1.6 mm



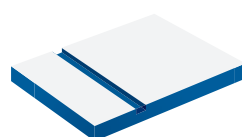
Black/White
1.6 mm



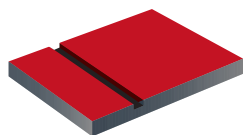
White/Red
1.6 mm



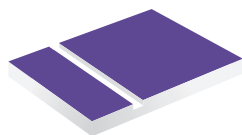
Airforce Blue/White
1.6 mm



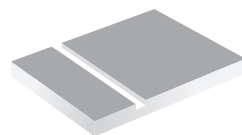
White/Blue
1.6 mm



Red/Black
1.6 mm



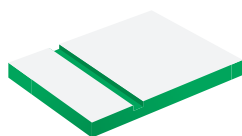
Purple/White
1.6 mm



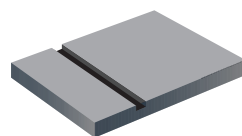
Grey/White
2.4 mm



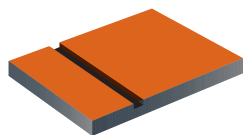
Orange/White
1.6 mm



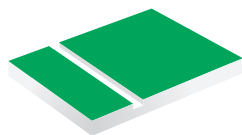
White/Green
1.6 mm



Grey/Black
1.6 mm



Orange/Black
1.6 mm



Green/White
1.6 mm



White/Red/White
3.2 mm



White/Black/White
1.6 mm
3.2 mm



White/Blue/White
3.2 mm



Red/White/Red
3.2 mm



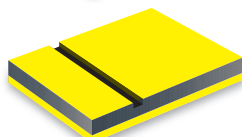
Black/White/Black
3.2 mm



Blue/White/Blue
3.2 mm



Burgundy/White/Burgundy
3.2 mm



Yellow/Black/Yellow
3.2 mm



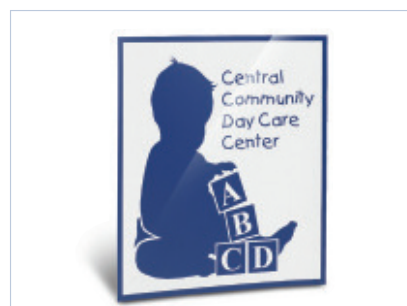
Green/White/Green
3.2 mm

Rotary Gloss Material

Rotary Gloss is highly polished, lustrous in colour and UV stable, suited to both internal and external applications. A thick cap offers resistance to abrasion and whilst suited to mechanical engraving, its modified acrylic composition enables the added advantage of being able to cut intricate shapes using a laser.

Applications

- Exterior & Interior Signs
- Badges
- Safety Signs
- Information Signs
- Industrial Signs
- Plant Labels



Material Features

Material: Laminated impact acrylic, 2 ply / 3 ply*

Finish: gloss

Thickness: 1.6 mm / 3.2 mm

Engraving depth: 0.30 mm

Cutting method: saw

Sheet size: 1220 x 610 mm



Rotary material



Interior use



Exterior use



UV print

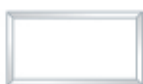
Cut to size service



Cut to size



Hole drilling



Bevelled edges



Material cut YOUR specifications.
Hole drilling can be combined with bevelled edges

Rotary Gloss Material

Best seller



Red/White

1.6

3.2

mm

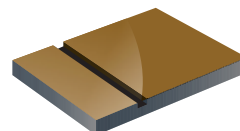


White/Black

1.6

3.2

mm

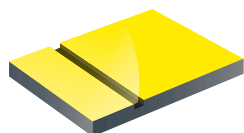


Vintage Gold/Black

1.6

3.2

mm

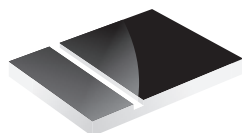


Yellow/Black

1.6

3.2

mm

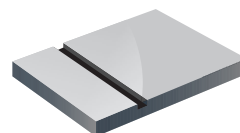


Black/White

1.6

3.2

mm



Vintage Silver/Black

1.6

3.2

mm



Ruby/White

1.6

3.2

mm

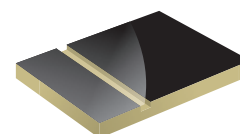


Blue/White

1.6

3.2

mm

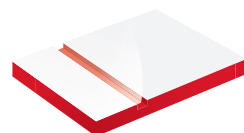


Black/Gold

1.6

3.2

mm



White/Red

1.6

3.2

mm



Sapphire/White

1.6

3.2

mm

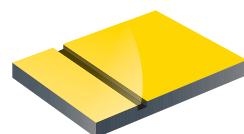


Green/White

1.6

3.2

mm

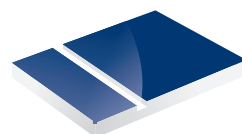


Safety Yellow/Black

1.6

3.2

mm

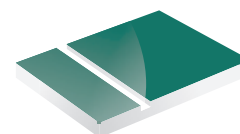


Airforce Blue/White

1.6

3.2

mm



Pine Green/White

1.6

3.2

mm

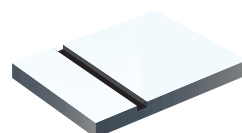


White/Blue

1.6

3.2

mm



Polar White/Black

1.6

3.2

mm



Red/White/Red

1.6

3.2

mm



White/Black/White

1.6

3.2

mm



Blue/White/Blue

1.6

3.2

mm



White/Red/White

3.2

mm



Black/White/Black

3.2

mm



Green/White/Green

1.6

mm



Yellow/Black/Yellow

3.2

mm

Traffolyte Material

Traffolyte is a high pressure laminate suited to internal use. It has a hard durable melamine surface requiring minimal maintenance. Providing a cost effective and practical solution for industrial labels and signage. It is ideally suited to the electrical industry, tallies, ID tags and key fobs. The material is non-flammable up to temperatures of 400°C conforming to the British Adopted European Standard BS EN 438-7:2005.

Applications

- Interior and Safety Signs
- ID Tags
- Control Panels
- Key Fobs
- Food Industry
- Nameplates
- Rating Plates



Material Features

Material: paper and phenolic based thermosetting resin 3-ply

Finish: semi-gloss

Thickness: 1.6 mm / 3.0 mm

Engraving depth: 0.20 mm

Cutting method: saw

Sheet size: 1220 x 1220 mm, 1220 x 610 mm



Rotary material

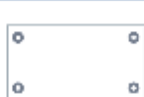


Interior use

Cut to size service



Cut to size



Hole drilling

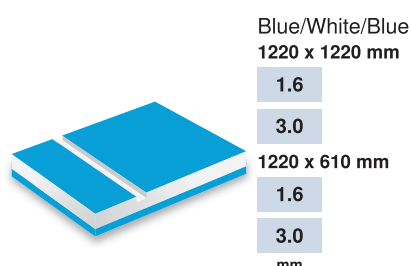
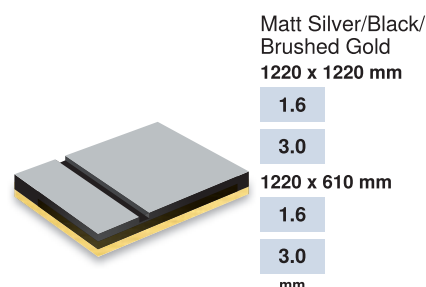
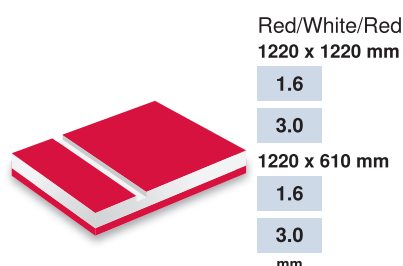
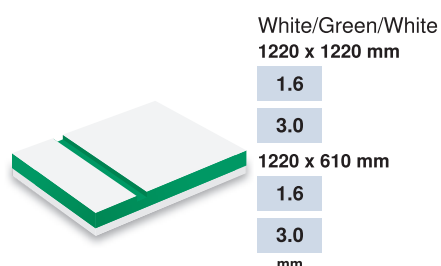
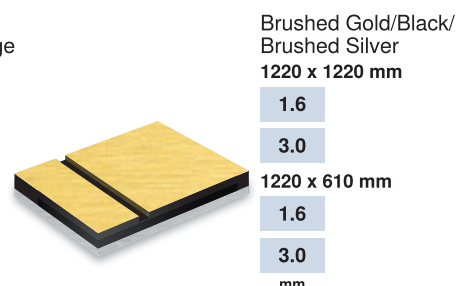
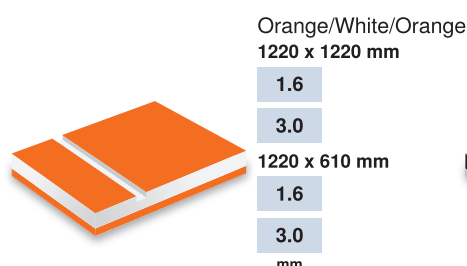
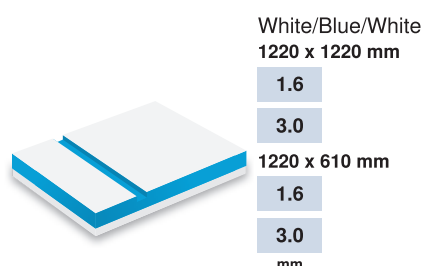
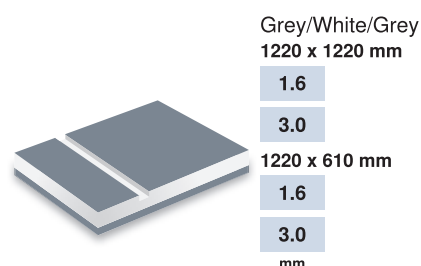
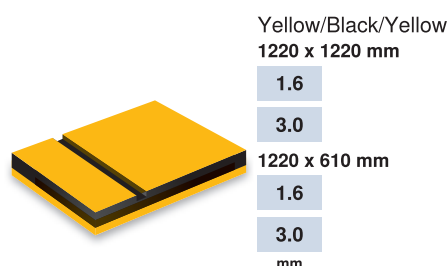
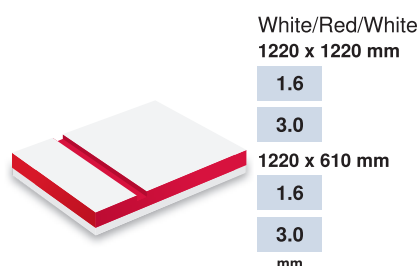
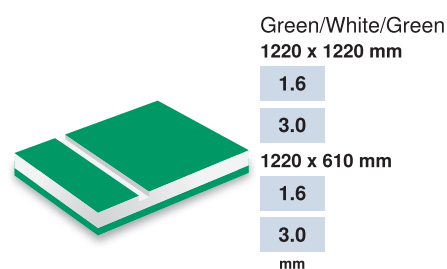
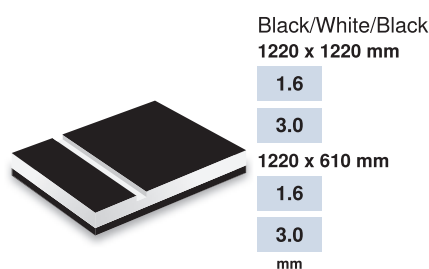
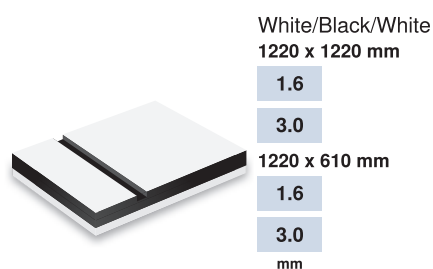


Bevelled edges



Material cut to YOUR specifications. Hole drilling can be combined bevelled edges.

Traffolyte Material



Laserable Material

Physical Properties	Specifications
Substrate	Acrylic
Colors	See catalogue
Thicknesses	0,8 mm / 1,6 mm / 3,2 mm
Sheet Sizes	1245 x 616 mm (+/- 3 mm)
Fabrications Properties	Router, saw, die-cut and laser
Engraving Depth	0,08 mm
Use	Exterior, interior
Processing	Screenprinting: yes Hot stamping: yes UV printing: yes
UV Light Resistance	500 hours QUV or equivalent of 2 years without any color change or fading
Abrasion	Taber testing < 200 cycles CS17 wheel / 500 gram
Cleaning Instructions	N / A
Optical	N / A
Vicat Softening Point	ASTM D-1525 98° C (50° C/hr; 10N) ASTM D-1525 86° C (50° C/hr; 50N)
Specific Gravity	ASTM D-792 1.15 g/cc
Tensile Modulus	ASTM D-638 270,000 psi
Izod Impact	ASTM D-256 @ 23° C 1.1 ft-lbs/in notch
Flexural Modulus	ASTM D-790 270,000 PSI
Thermal Conductivity	ASTM C-117 1.5 BTU/hr*ft ² *F/in
Tensile Strength @ Maximum	ASTM D-638 5,500 psi
Flexural Strength @ Maximum	ASTM D-790 10,300 psi
Heat Deflection Temperature	ASTM D-648 (0.455 MPa; annealed) 89 ° C ASTM D-648 (1.82 MPa; annealed) 80 ° C
Hardness	ASTM D-785 45M Rockwell
Melt Flow Rate	ASTM D-1238 1.0g/10min (230 ° C/ 3.8 kg)

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Laserable Metallic Plus

Physical Properties	Specifications
Substrate	Acrylic
Substrate Colours	Black, White, Transparent, Blue and Red
Substrate Gauges	0.030 to 0.120 mils
Sheet Sizes	24.25" x 49"
Fabrication Properties	Router, saw, die-cut and laser
UV Light Resistance	Q Panel Accelerated Weathering Tester/UVA-340 EL Lamps > 300 hours of continuous UV/moisture exposure
Abrasion	No visible change when tested with 0000 steel wool; Taber testing > 200 cycles with CS 17 wheel/500 grams
Cleaning Instructions	Any cleaning material that dissolves or releases the dirt or stain from the surface can be used to clean AGM or AGG series. Water or mild household detergents should be applied generously using a soft cloth with minimal pressure to avoid micro-scratching the soiled area. Do not use abrasives such as rubbing compounds or cleaners.
Optical	Glossy Finish
Vicat Softening Temperature	ASTM D-1525 208 degrees F (50 degrees C/h; 10 N) ASTM D-1525 187 degrees F (50 degrees C/h; 50 N)
Specific Gravity	ASTM D-792 1.15
Tensile Modulus	ASTM D-638 270,000 p.s.i.
Izod Impact Strength	ASTM D-256 @ 73 F 1.1 ft-lbs/in notch
Flexural Modulus	ASTM D-790 270,000 p.s.i.
Thermal Conductivity	ASTM C177 1.5 BTU/h*ft ² *F/in
Tensile Strength @ Maximum	ASTM D-638 5,500 p.s.i.
Flexural Strength @ Maximum	ASTM D-790 10,300 p.s.i.
Heat Deflection Temperature	ASTM D-648 (0.455 MPa; annealed) 192 degrees F ASTM D-648 (1.82 MPa; annealed) 175 degrees F
Hardness	ASTM D-785 45M Rockwell
Melt Flow Rate	ASTM D-1238 1.0 g/10 min (230 degrees C/3.8 kg)

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Laserable Metallic

Physical Properties	Specifications
Substrate	Acrylic
Colors	See catalogue
Thicknesses	0,8 mm / 1,6 mm / 3,2 mm
Sheet Sizes	1245 x 616 mm (+/- 3 mm)
Fabrications Properties	Router, saw, die-cut and laser
Engraving Depth	0,08 mm
Use	Interior
Processing	Screenprinting: yes Hot stamping: yes UV printing: yes
UV Light Resistance	N / A
Abrasion	Taber testing < 200 cycles CS17 wheel / 500 gram
Cleaning Instructions	N / A
Optical	N / A
Vicat Softening Point	ASTM D-1525 98° C (50° C/hr; 10N) ASTM D-1525 86° C (50° C/hr; 50N)
Specific Gravity	ASTM D-792 1.15 g/cc
Tensile Modulus	ASTM D-638 270,000 psi
Izod Impact	ASTM D-256 @ 23° C 1.1 ft-lbs/in notch
Flexural Modulus	ASTM D-790 270,000 PSI
Thermal Conductivity	ASTM C-177 1.5 BTU/hr*ft ² *F/in
Tensile Strength @ Maximum	ASTM D-638 5,500 psi
Flexural Strength @ Maximum	ASTM D-790 10,300 psi
Heat Deflection Temperature	ASTM D-648 (0.455 MPa; annealed) 89° C ASTM D-648 (1.82 MPa; annealed) 80° C
Hardness	ASTM D-785 45M Rockwell
Melt Flow Rate	ASTM D-1238 1.0g/10min (230° C/ 3.8 kg)

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Textures Material page 1

Technical Properties				
		Standard	Unit	Value
Density		ASTM D782	g/cm³	1.15
Rockwell hardness		ASTM D785	M scale	M42
Tensile strength at break		ISO 527	MPa	38
Nominal strain at break		ISO 527	%	35
Izod impact strength at 20°		ASTM D256	J/m	58.5
Vicat softening point (B/50)		ASTM D1525	°C	88.5
Service temperature		Internal Method	°C	-40 ÷ 80
Scratch resistance		Internal Method	g	300
Flammability		UL94	Class	HB
Lightfastness Q.U.V. Test – ASTM G53				
Metallized surfaces		Wool scale		5
Colored surfaces		Wool scale		4/5
General characteristics				
		Unit	Value	Tolerance
Laminates dimensions	Length	mm	1220	+/- 0.2 %
	Width	mm	610	+/- 0.2 %
Flatness		mm	Deflection max. 5(*)	NA
Top thickness		mm	0.2	+/- 0.03
Thickenss		mm	0.8 ÷ 2.2	+/- 0.1
			2.2 ÷ 3.2	+/- 0.2
Finishing		Texturized		

Textures Material page 2

Color tolerance	n°	ΔE max: 1.0(**)		N/A
Level of contaminants on the surface		1	≤ 1 mm²	N/A
		1	≤ 0.5 mm²	
		3	≤ 0.2 mm²	
Outside use	possible			
Inside use	possible			
Surface aspect	No scratch or dents(***)			
Engraving	Pantograph			
Engraving depth	0.3 mm			
Material description	Impact modified acrylic			

(*) Measured on a base plane

(**) Measured following BS6923 – Color space CIELAB CMC (1:1) using a D65/10° lamp

Approved master as reference

(***) Approved master as reference

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Rotary Material page 1

	DIN	ISO	ASTM	UNIT	VALUE
General characteristics					
Specific density	53479	1183	D792	g/cm ³	1.05
Mechanical properties					
Tensile strength	53455	527	D638	MPa	1900
Elongation at break	53455	527	D638	%	38
Rockwell hardness	/	2039	D785	MPa	M 50
Impact strength (CHARPY un-notched)	53453	179	/	KJ/m ²	does not break
Impact strength (IZOD notched)	53453	180	D256	J/m	36
Thermal properties					
Vicat softening temperature B/50 // A/50	53460	306	D1525	°C	103/94
HDT double thermal treatment (1.82 MPa / 0.45 MPa)	53461	75	D648	°C	96/101
Technical characteristics					
Material	ABS + impact modified acrylic				
Temperature resistance	from -40 °C to +80 °C				
Scratch resistance	internal test with sclerograph (value = 300 g)				
Outdoor use	yes				
Indoor use	yes				
Fire resistance	UL94 method – class HB				
Odour	odourless				
Engraving method	pantograph, laser				
Engraving depth	0.3 mm				

Rotary Material page 2

Aesthetic characteristics	
Surface treatment	brushed
Surface finish	without holes, inclusions, scratches based on the approved sample
Colour tolerance	- max.: 1.5 (DE/DE tolerances) measured on the approved sample
	- Calculation method: CIE LAB CMC (1:1) (according to British Standard 6923)
	- Light source/observer: D65/10°
Impurities	No. 01 ≤ 1 mm ²
	No. 01 ≤ 0.5 mm ²
	No. 03 ≤ 0.2 mm ²
Geometric characteristics	
Board dimensions	1220 x 610 mm (Toleranz +/- 0,2 %) Kanten in rechten Winkeln
Total thickness	0,8 - 1,6 – 2,4 mm (Toleranz +/- 0,1 mm)
Thickness of top side	0,1 - 0,2 mm (Toleranz +/- 0,03 mm)
Evenness	max. 5 mm Wölbung zur Oberfläche

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Rotary Gloss Material page 1

	DIN	ISO	ASTM	UNIT	VALUE
General characteristics					
Specific density	53479	1183	D792	g/cm³	1.15
Water absorption	53492	62	D570	%	0.36
Mechanical properties					
Tensile strength	53455	527	D638	MPa	38
Elongation at break	53455	527	D638	%	35
Rockwell hardness	/	2039	D785	/	M 42
Impact strength (CHARPY un-notched)	53453	179	/	KJ/m²	50
Impact strength (IZOD notched)	53453	180	D256	J/m	58.5
Optical properties					
Refractive index B	53491	489	/	/	1,49
Transparency	5036	/	/	%	90
Thermal properties					
Vicat softening temperature B/50	53460	306	D1525	°C	88,5
HDT under load – 1.82 MPa	53461	75	D648	°C	84,5
Coefficient of thermal expansion	53752	/	/	10-6 K	100
UV colour stability					
The lowest measured value according to the “blue colour scale” is:		4/5 for coloured boards 4 for metal sheets			
The tests were carried out using the QUV method.					

Rotary Gloss Material page 2

Resistance to lacquer and suchlike	
<ul style="list-style-type: none"> + Non-aromatic petrol o Pure oil paints o Inks and lacquer for acrylic glass - Nitrocellulose lacquer - Thinner, general 	
Resistance to chemicals, solvents	
<ul style="list-style-type: none"> + Non-aromatic petrol o Pure oil paints - Thinner, general o Inks and lacquer for acrylic glass - Nitrocellulose lacquer - Ethyl acetate + Sodium acetate, 32% - Acetone + Battery acid o Acetic acid, up to 25% - Acetic acid, concentrated + Arsenic acid o Butyric acid, up to 5% + Citric acid, up to 20% o Hydrochloric acid o Chromic acid o Fluoric acid, up to 20% + Formic acid, up to 20% o Formic acid, up to 40% + Phosphoric acid, up to 10% + Lactic acid, up to 20% + Nitric acid, up to 20% o Nitric acid, from 20 to 70% - Nitric acid, over 70% + Oxalic acid + Sulfuric acid, up to 30% + Sulfurous acid, up to 5% o Concentrated sulfurous acid + Stearic acid + Tartaric acid, up to 50% - Trichloroacetic acid o Cyclohexane o Cyclohexanol + Sodium chlorate - Liquid chlorine - Chloroethyl ether - Chlorophenol + Aluminium chloride + Calcium chloride + Iron(II) chloride + Iron(III) chloride + Magnesium chloride + Potassium chloride + Sodium chloride + Sulfuryl chloride + Tin(II) chloride - Thionyl chloride 	<ul style="list-style-type: none"> + Uric acid, up to 20%, or chlorine water + Oxygen-enriched water, up to 40% o Oxygen-enriched water, over 40% + Soapy water - Diacetone alcohol o Isopropyl alcohol + Alum - Amyl acetate o Ammonia - Liquid sulfur dioxide - Aniline + Arsenic - Benzaldehyde + Pure petrol - Benzene + Potassium dichromate + Sodium bisulfite - Bromine - Ethyl bromide - Ethylene bromide - Butanol - Butyl lactate - Ethyl butyrate + Potassium carbonate + Sodium carbonate + Potassium cyanide + Sodium hypochlorite + Lime water + Mercury o Methanol, up to 30% - Concentrated methanol - Butanone + Monobromo naphthalene + Silver nitrate + Potassium nitrate + Aluminium oxalate + Octane - Perchloroethylene + Potassium permanganate + Hydrogen peroxide, up to 40% o Hydrogen peroxide, over 40% o Oil + Potassium hydroxide solution + Propyl - Pyridine + Sodium bicarbonate + Sodium hydroxide solution

Rotary Gloss Material page 3

<ul style="list-style-type: none"> - Liquid chlorine o Diamyl phthalate - Dibutyl phthalate + Diethylene glycol - Dioctyl phthalate - Dioxane + Heptane + Hexane o Ethanol, up to 30% - Concentrated ethanol - Ether + Petroleum ether - Phenol + Phosphate + Tricresyl phosphate - White phosphorus + Glycerin + Glycol - Chlorinated hydrocarbon - Metallic iodine + Calcium hypochlorite - Phosphorus trichloride + Triethanolamine + Iron vitriol 	<ul style="list-style-type: none"> + Aluminium sulfate + Ammonium sulfate + Magnesium sulfate + Manganese sulfate + Nickel sulfate + Sodium sulfate + Solid zinc sulfate + Aqueous zinc sulfate - Carbon disulfide + Sodium sulfide - Methylated spirit - Carbon tetrachloride - Silicon tetrachloride - Toluene + Turpentine o White spirit + Sulfur - Xylene
THE SYMBOLS STAND FOR:	<ul style="list-style-type: none"> - = not resistant o = relatively resistant + = resistant
Technical characteristics	
Material:	impact modified acrylic
Temperature resistance:	from -40 °C to +80 °C
Scratch resistance:	internal test with sclerograph (value = 300 g)
Outdoor use:	yes
Indoor use:	yes
Fire resistance:	UL94 method – class HB
Odour:	odourless
Engraving method:	pantograph, laser
Engraving depth:	0.3 mm (0.5 mm for metal surfaces)

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Traffolyte Material

Engraving Laminate is a material consisting of layers of kraft paper impregnated with phenolic resins and outer layers on both sides, of decorative paper impregnated with aminoplastic resins; all bonded together by means of high pressure (9MPa) and heat (150°C). By engraving the surface, a colour middle layer is revealed. Suitable for plaques and signs for internal applications.

Property	Test Method (EN 438:2005)	Attribute	Unit	Value
Thickness tolerance	EN438-2.5	Thickness	mm	1.5 ±0.15 3.0 ±0.20
Resistance to surface wear	EN438-2.10	Wear resistance	Revolutions	A≥400
Resistance to immersion in boiling water	EN438-2.12	Mass increase	%	≤5
		Thickness increase	%	≤5
		Appearance	Rating	≥ 4
Stability at elevated temperature	EN438-2.17	Cumulative dimensional change	% Long % Transv.	≤0.30 ≤0.60
Resistance to staining	EN438-2.26	Appearance groups 1-2 Appearance group 3	Rating	5 ≥ 4
Light fastness	EN438-2.27	Contrast	Grey scale rating	≥ 4
Resistance to cigarette burns	EN438-2.30	Appearance	Rating	≥ 3
Resistance to water vapour	EN438-2.14	Appearance	Rating	≥ 4
Tensile strength	EN ISO 527.2	Strength	MPa	L ≥100 T ≥ 70
Flexural strength	EN ISO 178	Strength	MPa	L ≥100 T ≥ 90
Flexural modulus	EN ISO 178	Strength	MPa	L ≥10.000 T ≥ 9.000
Density	ISO 1183	Density	gr/cm ³	≥ 1.35



TCE LTD

Newstead Industrial Estate,
Alderflat Drive,
Stoke-on-Trent
ST4 8HX

Phone: +44 (0)1782 643278
email: sales@tce.uk.com

for more information please visit
www.traffolyte.com