ASAŞ

Signbond
Let's Color Life
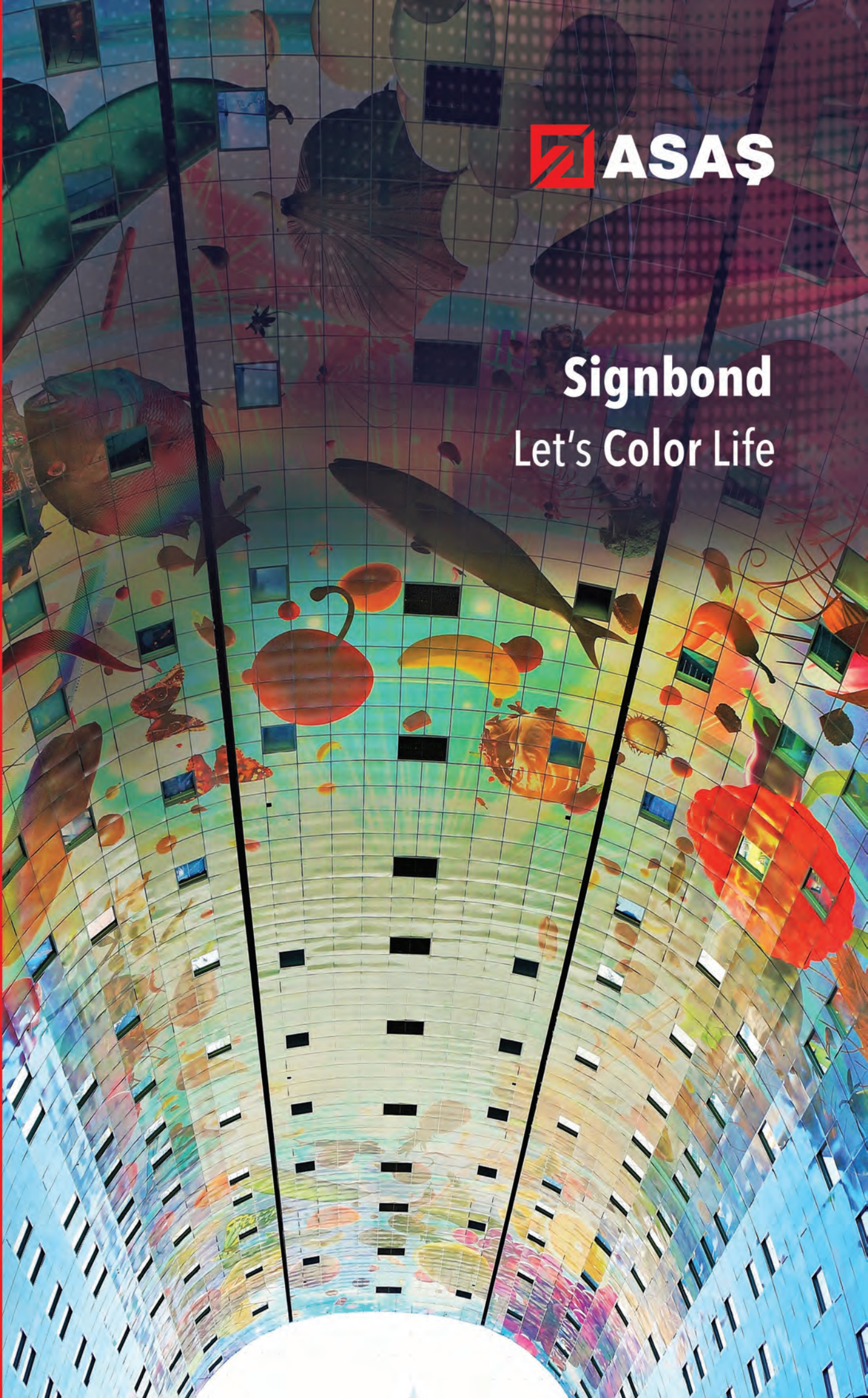
Aluminium Composite Panel

CONTENTS

ALUMINIUM COMPOSITE PANEL

Made in Turkey – Distributed from Germany and Turkey

ASAŞ has been a leading company in the industry since 1990 and also proud to be a pioneer with the first composite panel production facility installation in Turkey in 2006. **ASAŞ** composite panel products offers various design & color options, highest quality standards, durability, easy processability, smooth finishing, lightness. **ASAŞ** composite panel products are amongst the most preferred products in construction, decoration, interior application, furniture, advertisement and signage sectors. The composite panel production facility operates with 4 lines and has the capacity of 7.500.000m² aluminium composite panel production. **ASAŞ** also produces its own aluminium coils and uses them in the production of aluminium composite panels. That provides an advantage to **ASAŞ** for being able to meet custom requests due to client requirements.

Thanks to our high technology facility, both aluminium composite panels with various dimensions and colors which are filled with low dense polyethylene and non-flammable custom composite panels which are filled with aluminium hydroxide can be produced.

All products are tested in the labs with the most modern equipments by quality engineers and served to our customers only after meeting the international quality standards.

CHARACTERISTICS

- Cover sheets in AlMg0.5Mn0.5 alloy
- Lightweight – high rigidity
- Very high resistance to weathering and corrosion UV resistant black and White protective film
- Weather resistant – applicable with temperatures between - 30°C up to + 90°C
- Easy to process – also three-dimensional
- Wide range of colours and formats – up to 1500 mm width
- For interior applications
- The aluminium coil production contains recycled materials

PROCESSING

- Digital printing | Screen printing
- Laminating
- Lacquering
- Contour milling
- Water jet cutting
- Shearing | Sawing | Die cutting Glueing
- Drilling | Riveting | Screwing Welding
- Folding (V-groove) | 3D
- Cold bending | Cold folding
- Engraving (laser / graver)

APPLICATIONS

- Creative work
- Decorative lighting
- Digital printing Displays (POS/POP)
- Exhibition design Furniture
- Exterior/ Interior design
- Lettering Partitions
- Screen printing

- Shop design | shop fitting
- Signage
- Corporate ID
- Commercial projects
- Government&Health care facilities
- Outdoor advertising
- Way finding/Street signage

CERTIFICATES

Our Signbond production site is certified according to DIN EN ISO 14001, which establishes globally recognized requirements for environmental management. Furthermore, a strong linkage of management systems for quality (DIN EN ISO 9001), workplace safety (DIN ISO 45001) and energy management (DIN EN ISO 50001) is a key point in our corporate philosophy.

Signbond has Occupational Health and Safety Management Certification (OHSAS18001) and UL Certification (USR, CNR - Structural Panels, Aluminium Composite Panels Model Signbond with thickness of 3mm, 4mm and 6mm with certification number of 4789279442-E513732)

TECHNICAL DATA SHEET

THICKNESS AND WEIGHT				
Panel Thickness	mm	3	4	6
Thickness of Aluminum Sheet	mm	0.20 - 0.25 - 0.30		
Weight	kg/m²	3.8	4.75	6.6
CORE				
Polyethylene, Type LDPE	g/cm³	0.98		
SURFACE				
Lacquering		Modified-Polyester-Coating		
Gloss (Initial value)	%	25 - 95		
MECHANICAL PROPERTIES				
Section Modulus (W)	cm³/m	0.8	1.1	1.7
Rigidity (E·I)	kNcm²/m	865	1620	3840
Alloy of Aluminium Sheet		EN AW-3105A (Al0.05Mg0.5), H46 according to EN 485-2		
Modulus of Elasticity	N/mm²	70'000		
Tensile Strength of Aluminum	N/mm²	Rp min 150		
Proof Stress	N/mm²	Rp0,2 110 - 175		
Elongation	%	A50 ≥ 3		
Linear Thermal Expansion		2.4 mm/m at 100°C temperature difference		
ACOUSTICAL PROPERTIES				
Sound Absorption Factor (as)		0.05		
Sound Transmission Loss (Rw)	dB	24	25	26
Loss Factor (d)		0.0057	0.0072	0.0102
THERMAL PROPERTIES				
Thermal Resistance (1/λ)	m²K/W	0.0080	0.0113	0.0180
Thermal Transmission Thermal Coefficient (k)	W/m²K	5.61	5.50	5.30
Temperature Resistance	°C	(- 30) … (+ 90)		

SIZE / THICKNESS

Panel Thickness (mm)	3	4	6
Weight (kg/m²)	3,5	4,5	6,3
1000mmx2050mm	√	√	√
1000mmx3050mm	√	√	√
1250mmx2500mm	√	√	√
1250mmx3050mm	√	√	√
1500mmx3050mm	√	√	√
1500mmx4050mm	√	√	√

SURFACE PROPERTIES

|	
Paint Thickness	20+5
Pencil Hardness	HB-4H
Toughness of Coating	3T
Temperature Resistance	(-30 / +90 C)
Impact Strength (joule)	4
Boiling Water Resistance	Boiling for 2hrs without change
Oil Resistance	Surface immersed in 20 engine oil for 24hrs without change
Solvent Resistance	Cleaned 100 times with dimethylbenzene without change
Cleaning Resistance	1000 times without change with pressurized water spray or IPA with a clean cloth can also useable.

DIMENSIONAL TOLERANCES

Panel Thickness (mm)	(+/- 0.2)
Width (mm)	(-0 to +2)
Length (mm)	(-0 to +3)
Diagonal	(-0 to +5)
Thermal Expansion	2.4mm/m at 100°C Temprature Difference
Aluminium Thickness	As specified in EN485-4

Standard Colors

Signbond is specifically developed as composite panel implementations for signage industry.
With individual project creations, Signbond offers endless options through its creative colour schemes.
From traditional to trendy colors, all options are available in different surface combinations.
The aluminium coil production contains recycled materials.
Warranty period is 5 years for exterior usage.

All standard colors are available for matt (30+/-5 gloss) and high gloss 75+/-7 gloss) values. Regarding to your for your
project requirements, please be informed about gloss offerings by your sales person.
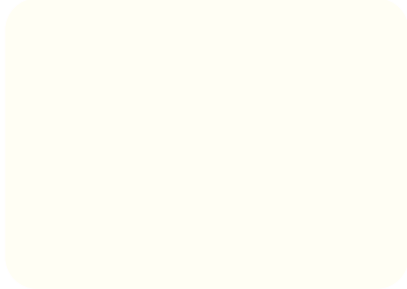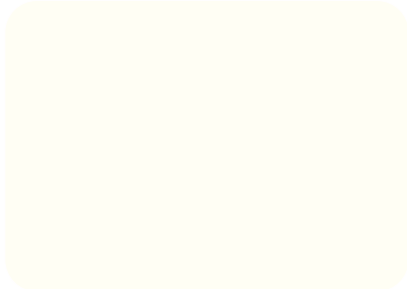
SB 033 / RAL 9003
Pure White (Matt)

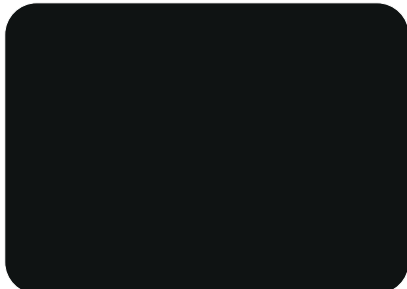**SB 048 / RAL 1023**
Traffic Yellow (Matt)

SB 051 / RAL 6005
Moss Green (Matt)

SB 047 / RAL 9003
Pure White (High Gloss)

SB 038 / RAL 1023
Traffic Yellow (High Gloss)
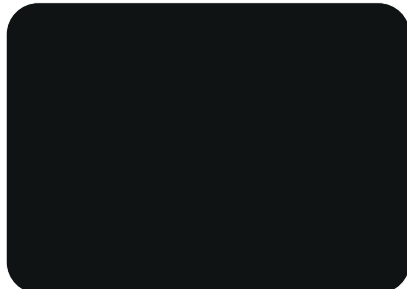
SB 037 / RAL 6005
Moss Green (High Gloss)

SB 034 / RAL 9005
Jet Black (Matt)

SB 049 / RAL 3020
Traffic Red (Matt)

SB 050 / RAL 5002
Ultramarine Blue (Matt)

SB 043 / RAL 9005
Jet Black (High Gloss)

SB 035/ RAL 3020
Traffic Red (High Gloss)

SB 036 / RAL 5002
Ultramarine Blue (High Gloss)

Metalic Colors

SB 032 / RAL 9006
White Aluminium Silver (Matt)

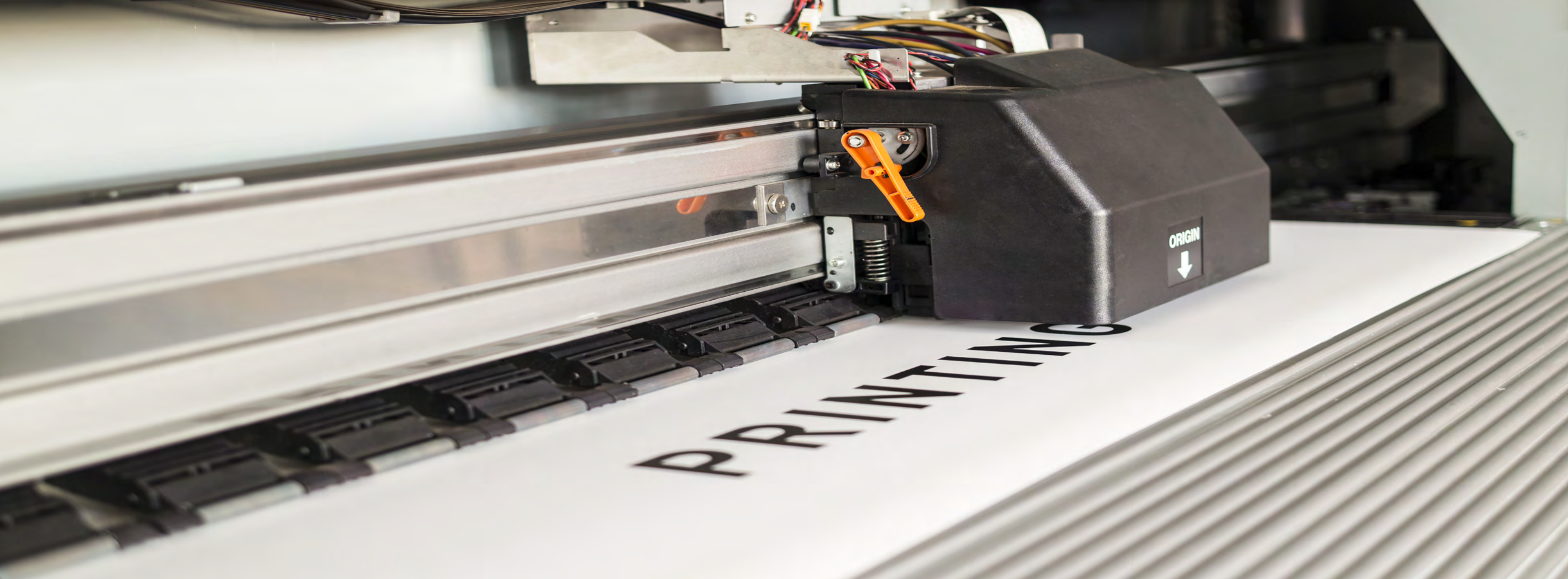**SB 042 / RAL 9006**
White Aluminium Silver (High Gloss)

Speacial Colors

Available in colour options e.g. RAL or PANTONE colour systems or your custom colour, and in a wide range of gloss levels. From low gloss (> 10 GU) to high-gloss (<= 95 GU), everything is possible – please contact to ASAŞ sales team.

| GU = Gloss Unit

Signbond Digital

Signbond Digital is specifically developed for viscom industry.

It is suitable for direct digital printing on flatbed printers.

In cooperation with leading printing manufacturers, the print trials brought out remarkable results.

Signbond Digital is UV-resistant and temperature resistant up to 80°C, meaning the sheet is not only suitable for external applications but it is ideal both in internal and external applications, for shop windows, advertising boards and high-class advertising campaign signage, for exhibitions and event marketing.
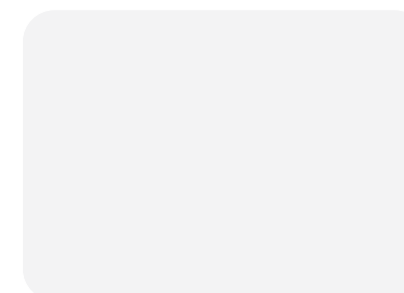
With 0.2mm aluminium sheets, Signbond Digital is ideal for flat applications.

The warranty period is 2 years for exterior usage.

Signbond Digital color is available for matt (25-40 gloss) and high gloss (70-95 gloss) values. Regarding to your for your project requirements, please be informed about gloss offerings by your sales person.
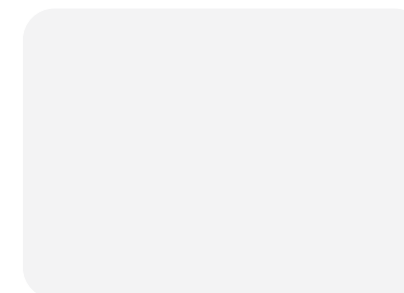
SB 031
Printable White (Matt)

SB 041
Printable White (High Gloss)

Paint Thickness: 20 micron
Pencil Hardness: HB-4H
Toughness of Coating: 3T
Temperature Resistance: -30 / +90 C
Solvent Resistance: MEK > 100
Peel Strength: >4Joule
Gloss: 25-95
**Boiling Water Resistance:** Boiling for 2 hours without damage
Oil Resistance: Surface immersed in 20 engine oil for 24 hours without change
Cleaning Resistance: 1000 times without change with pressurized water spray or IPA with a clean cloth can also useable.
Lacquering Gloss (Initial Value): Modified Polyester Coating %25-95

*Easy peel protective film is used for Signbond Digital.
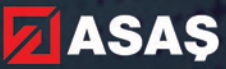
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