SKY RAINBOW INDUSTRY LTD
18 Huanxi road,Huashi,Jiangyin, Jiangsu,China
www.sky-rainbow.com
info@sky-rainbow.com

Technical Data Sheet (TDS)

Product Name: 0.15/3mm Gloss/Matt Digital Printed Aluminum Composite Panel

Product Description: This product is a high-performance aluminum composite panel, featuring high-quality aluminum alloy laminated on both sides of a low-density polyethylene core, with a surface treated by glossy or matte paint. Its lightweight, high strength, and corrosion resistance make it an ideal choice for advertising signage and interior decoration. The aluminum composite panel offers good weather resistance and ease of processing, suitable for a variety of application scenarios..

1. Basic Information

- **Total Thickness**: 3mm
- **Aluminum Thickness**: 0.15mm
- **Core Type**: Low-Density Polyethylene (LDPE)
- **Surface Treatment**: Gloss / Matt (Digital Printing)
- **Applications**: Advertising signage, display panels, architectural exterior cladding, interior decoration

2. Dimensions

- **Total Thickness**: 3mm
- **Aluminum Thickness**: 0.15mm
- **Standard Sizes**: 1220x2440mm, 1500x3050mm

3. Dimensional Tolerances

- **Panel Thickness**: ±0.2mm
- **Aluminum Thickness**: ±0.02mm
- **Width**: ±2mm
- **Length**: ±3mm
- **Diagonal**: ±5mm
- **Warpage**: ≤4mm

4. Surface Properties

- **Coating**: PE (Polyester)
- **Coating Thickness (microns)**: 16±1
- **Pencil Hardness**: ≥2H
- **Toughness of Coating**: ≤3T
- **Impact Strength (kg/m²)**: 50 (No cracking in paint)
- **Adhesion Force**: 100/100 (No peeling)

- **Boiling Water Resistance**: Boiling for 2 hours without change
- **Solvent Resistance**: Cleaned 200 times with Dimethylbenzene without change
- **Acid Resistance**: Immerse surface in 2% HCl for 24 hours without change
- **Alkali Resistance**: Immerse surface in 2% NaOH for 24 hours without change
- **Cleaning Resistance**: >1000 times without change

5. Mechanical Properties

- **Elongation**: ≥1%
- **Peel Strength**: ≥3N/mm

6. Physical Properties

- **Weight**: Approximately 3.3 kg/m²
- **Temperature Range**: -25°C to +80°C
- **Thermal Expansion Coefficient**: 2.4 mm/m @ 100°C temperature difference

7. Weather and Chemical Resistance

- **UV Resistance**: Excellent
- **Corrosion Resistance**: Good resistance to acids, alkalis, and salts
- **Moisture Resistance**: Suitable for high-humidity environments

8. Surface Characteristics

- **Gloss Levels**:

  o Gloss: High Gloss (>80 GU)
  o Matt: Low Gloss (20-40 GU)

- **Color**: Customizable (default is white)
- **Stain Resistance**: Easy to clean, minimal dust adhesion

9. Fire Performance

- **Flame Class**: B2 (Combustible, due to the standard LDPE core)
- **Melting Point**: Approximately 660°C (aluminum)

10. Recommended Usage Conditions

Beautiful panel, colorful world!
ALUMINUM COMPOSITE PANEL

SKY RAINBOW INDUSTRY LTD
18 Huanxi road,Huashi,Jiangyin, Jiangsu,China
www.sky-rainbow.com
info@sky-rainbow.com

- **Application Scenarios**: Suitable for outdoor advertising boards, architectural facades, exhibitions, and displays.
- **Installation Methods**: Frame mounting, panel installation, adhesive fixing, and various other methods.
- **Maintenance**: Regular cleaning of gloss/matt surfaces to maintain appearance.

11. Packaging and Transportation

- **Packaging Method**: Standard wooden crate or pallet packaging
- **Storage Conditions**: Avoid moisture and keep away from corrosive chemicals
- **Transportation Requirements**: Handle with care to prevent impact and scratches

-------end-------

Beautiful panel, colorful world!
ALUMINUM COMPOSITE PANEL