

Dibond, Debond or ACP Bond?

A Comparison of Aluminum Composite Panels

Are you looking for an aluminum composite panel for a billboard, signage, facade, or exhibition booth, and have you come across the terms Dibond, Debond, ACP Bond, or the abbreviation ACP? In this comparison, we'll explain what each term means, how the materials differ, and how to choose the right panel for your project.

The short answer: in most cases, they refer to the same type of material - an aluminum composite panel (ACP). The main differences lie in the brand and manufacturer.

What Is Dibond and Who Owns the Brand?

Dibond is a registered trademark of the Swiss company 3A Composites. It refers to an aluminum composite panel consisting of two thin aluminum sheets and a lightweight polyethylene core. The result is a lightweight, rigid, and dimensionally stable panel that is easy to print on, cut, mill, and install.

Because **Dibond** was one of the first products of its kind on the market and became widely used, its name has, in practice, become synonymous with the entire category - much like how people say "Xerox" instead of "copier." However, Dibond is a protected trademark of a specific manufacturer; we mention it here only for comparison and to facilitate understanding.

Debond and ACP Bond – a private label of DENCOP LIGHTING

Debond and ACP Bond are the names under which DENCOP LIGHTING offers aluminum composite panels as its private label. Structurally, it is the same type of material as Dibond: two aluminum sheets and a lightweight core. The word "bond" refers to the manufacturing process - bonding the layers together. ACP is an abbreviation for "Aluminum Composite Panel."

So if you enter "Debond panel," "Debond price," or "Debond 3 mm" into a search engine, you're looking for exactly the type of material we offer under the Debond / ACP Bond brand.

Comparison: Dibond vs. Debond vs. ACP Bond

Name	What it is	Manufacturer / Brand
Dibond	Original aluminum composite panel (ACP)	Registered trademark of 3A Composites (competitor)
Debond	Same type of material – aluminum composite panel	DENCOP LIGHTING private label
ACP Bond	Same type of material – aluminum composite panel	DENCOP LIGHTING private label
ACP	General abbreviation for the entire category	Aluminum Composite Panel – product designation

How aluminum composite panels differ

Not every ACP panel is the same. The main differences that will influence your choice:

- **Panel thickness** – typically 2, 3, and 4 mm; the most common choice is 3 mm.
- **Thickness of the aluminum layers** – typically 0.3–0.5 mm on each side. Thicker aluminum means a stiffer and more durable panel.
- **Core type** – standard PE core vs. FR (fire-retardant) mineral core for fire-resistant applications.
- **Surface finish and color** – painted surface in various colors (e.g., Debond white), brushed or mirror-finish aluminum.

What to Look for When Choosing

For advertising applications (signs, decals, display stands), a standard 3 mm panel with a PE core is usually sufficient. Stricter fire safety requirements apply to facades and cladding on high-rise buildings - a panel with an FR core and the appropriate certifications is required. If you plan to mill or bend the panel (cutting Debond, making box letters, bending edges), take into account both the core thickness and the type of aluminum.

Where to Buy Debond / ACP Bond

DENCOP LIGHTING offers Debond / ACP Bond aluminum composite panels in stock in standard thicknesses and colors - a fully-fledged alternative to Dibond. If you're unsure which thickness, core, and surface are suitable for your project, please contact us. We'll advise you and prepare a no-obligation quote.

Frequently Asked Questions

Is Debond the same as Dibond?

- Structurally, they are the same type of material—an aluminum composite panel consisting of two aluminum sheets and a lightweight core. Dibond is a registered trademark of 3A Composites, while Debond is a private label brand of DENCOP LIGHTING. Their properties and applications are comparable.

How much does a Debond panel cost?

- The price depends on the thickness, core type, color, and size. You can find current prices for Debond panels directly in our e-shop or request a non-binding quote.

What thickness of Debond should I choose?

- 3 mm is most commonly used for advertising and decals. For larger formats and higher mechanical loads, opt for 4 mm; for light applications, 2 mm is sufficient.

Can Dibond be cut and bent?

- Yes. The panel can be cut, milled, and, after a groove is milled, bent to form an edge - this is how box letters and 3D advertising elements are commonly manufactured.

What does the abbreviation ACP stand for?

- ACP stands for Aluminum Composite Panel. It is a generic term for an entire category that includes both Dibond and Debond.