

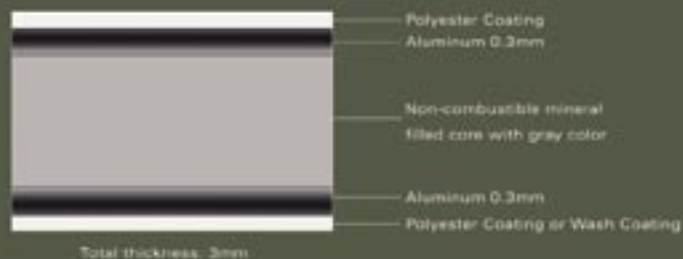
# ALPOLIC®/fr LT

SOARING TO NEW HEIGHTS WITH FIRE SAFE ALUMINUM COMPOSITE MATERIAL



**ALPOLIC®** CONTINUES THE RICH TRADITION OF STUNNING INTERIOR SURFACE CLADDING MATERIALS WITH ALPOLIC®/fr LT. THIS PRODUCT HAS THE SAME GREAT ADVANTAGES FOUND IN STANDARD ALPOLIC®/fr ALUMINUM COMPOSITE MATERIALS PLUS THE ADDED BENEFITS OF A REASONABLE COST THAT LOOKS GREAT ON THE BOTTOM LINE. ALPOLIC®/fr LT SETS A NEW BENCHMARK FOR INTERIOR WALL CLADDING, CEILINGS, AND COLUMN COVERINGS, AND ALSO FOR SUCH LIGHT OUTDOOR APPLICATIONS AS SOFFITS, AWNINGS, PARAPETS AND SIGNAGE.

Composition of ALPOLIC®/fr LT



ALPOLIC®/fr LT has all the features you've come to expect from other ALPOLIC® ACMs, and then some. Fire safety is an imperative issue for interior materials, and ALPOLIC®/fr LT passes the fire tests required for interior materials in the USA and Japan. It's available as a stock item in our full range of solid and metallic colors, as well as in stone and timber-patterned finishes produced with our unique image transfer process. ALPOLIC®/fr LT offers the rigidity of heavy-gauge sheet metal in a light-weight material with superior flatness, vibration dampening, durability, and ease of maintenance. It is amazingly formable, so it can be easily cut, bent, grooved or shaped with ordinary wood-working and metal working tools. The panel's twin sheets of 0.3 mm aluminum deliver the rigidity equivalent to an aluminum sheet of 2.4 mm thickness or a steel sheet of 1.6 mm, and offer a weight reduction to 85% for aluminum and 43% for steel of the same rigidity.







(cover) **Software Park:**

Bangkok, Thailand

Column Cover and Interior Wall

(this page) **Keio Railway Shinjuku Station:**

Tokyo, Japan

Ceiling Panel



STANDARD SAMPLES ARE AVAILABLE IN:

SOLID COLORS  
METALLIC COLORS  
STONE AND TIMBER



\*REFER TO THE COLOR CHART  
FOR MORE INFORMATION

• • •

(1) **Bashamichi Metro Station:** Yokohama, Japan

Interior Wall and Escalator Cover

(2) **Royal Brisbane Hospital:** Brisbane, Australia

Interior Wall

(3) **The Gallery (CRC Tower):** Bangkok, Thailand

Interior Wall and Escalator Cover



(4) **Mainichi Newspaper Building:** Osaka, Japan

Interior Wall and Escalator Cover

(5) **Yume Town Shopping Center:** Takamatsu, Japan

Interior Wall and Escalator Cover

(6) **Office Partition Panel:** Tokyo, Japan

Interior Wall



• • •

\*Not all photos reflect ALPOLIC®/fr LT in 3 mm thickness. Some reflect a 4 mm thickness which is practically replaceable with ALPOLIC®/fr LT.



ALPOLIC®/fr LT



...

(1) **Mitsui Park Tower**, Tokyo, Japan

Ceiling Panel

(2) **Waguri Bldg. Ryukyu Japan Maritime Association**

Chiba, Japan

Ceiling Panel

(3) **Yodobashi Mall Shinjuku**, Tokyo, Japan



Ceiling Panel

(4) **Waguri Bldg. Ryukyu Japan Maritime Association**

Chiba, Japan

Ceiling Panel

(5) **Tokyo Midway Station**, Tokyo, Japan

Ceiling Panel

...







• • •

(1) *Sapporo Dome*: Sapporo, Japan

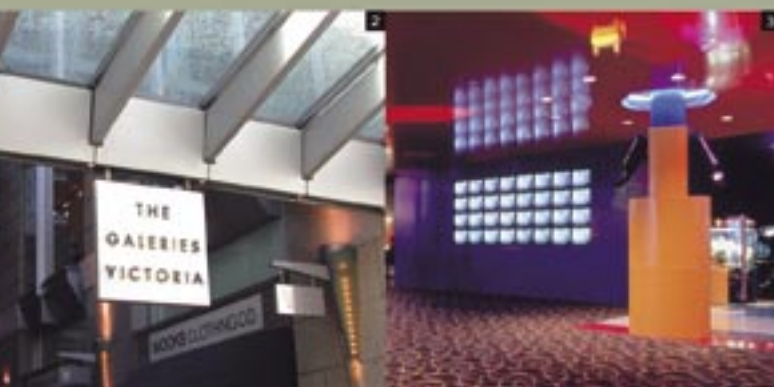
Observation Deck & Escalator Cover

(2) *City Corp 2*: Sydney, Australia

Soffit Panel

(3) *Hollywood Theater*: Tulsa, Oklahoma

Ceiling Panel, Walls & Columns



(4) *Mori Trust Tower*: Tokyo, Japan

Eaves Panel

(5) *Ford Dealership Showroom*: Raleigh, North Carolina

Signage & Displays

(6) *Tysons Corner*: Mclean, Virginia

Fascia & Soffit

(7) *Underpass Lining*: Aomori, Japan

Underpass Lining

(8) *SETP Tunnels Phase 1 & 2*: Brisbane, Australia

Tunnel Lining

• • •







### Suggested Applications

Introducing ALPOLIC®/fr LT, the new lightweight champion of Aluminum Composite Material (ACM). This material is perfect for use on interior walls, columns, ceilings and partitions in shops, offices and factories, and for such light outdoor applications as soffits, awnings, parapets, signs and much more.

### Material Composition

ALPOLIC®/fr LT is composed of a non-combustible mineral core with a small amount of low-density polyethylene sandwiched between two skins of 0.3 mm thick aluminum. The core, indispensable for fire safety of interior applications, is essentially gray in color, with a touch of carbon black for an aesthetically pleasing cut edge. ALPOLIC®/fr LT effective surfaces are finished with polyester coatings and covered with translucent protective films.



### Surface Finishes

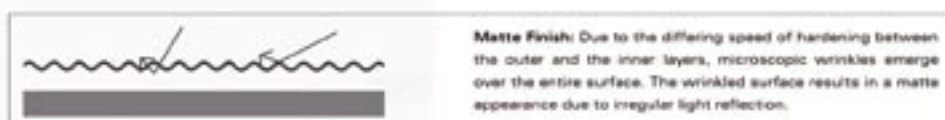
ALPOLIC®/fr LT is available as a stock item in Reversible, Single, Stone and Timber finishes as follows:

**Reversible (N1 to N4):** have effective sides on both front and back.

**Single:** are coated with a matte finish. The back is a wash coating.

**Stone (S1 to S7) and Timber (T1, T2):** are coated with a unique image transfer process. The back is a wash coating.

The surface gloss is between 90% (glossy) and matte depending on the color. **Matte** finish is produced with a new coating technology, as shown below. All finishes are coated with polyester paints in the continuous coil coating line. Refer to the **Color Chart**. In addition to the stock colors, **Custom Colors** are also available, subject to minimum quantities and color match. Please contact distributors or our office for custom color request.



### Paint Performance

The above polyester coatings are resistant to corrosion and moisture in interior applications. Reasonable weatherability can be expected for outdoor applications but, as widely known, polyester coatings have less weatherability than fluorocarbon coatings. With outdoor use, it is possible for polyester coatings to show gradual color fading, a gloss change, and a chalking within several years depending on the intensity of the UV. If such degradation is unacceptable, re-coating may be required. If you require a coating warranty for your project (not available on our polyester-coated products) we recommend the optional fluorocarbon-coated products.

### Optional Coatings

Apart from the above polyester paints, we can supply ALPOLIC®/fr LT in the following distinctive paints as an option: Fluorocarbon coating (Lumiflon®-based): ultra-weatherability suitable for outdoor use.

High cross-link polyester coating: high hardness (4H) and high reflectivity (80%) suitable for lining of tunnels.

Conductive fluorocarbon coating: electric-conductive ( $3 \times 10^{-4}$  ohms) suitable for interior wall and partitions in factories. Refer to Technical Manual for details.

### Dimension

Panel thickness: 3 mm

Panel weight: 5.5 kg/m<sup>2</sup> (1.13 psf)

Panel size in stock:

Width: 1270 mm and 1575 mm (50", 62") (In Matte items, only 1270 mm panels are in stock)

Length: 3099 mm (122")

*Note: Custom width is available between 914 mm and the above width for each finish. A custom length less than 5000 mm can be accepted. Please contact distributors or our sales office for the minimum quantity and the lead-time of custom size.*

### Fire Safety

ALPOLIC®/fr LT is a safe interior material, passing all mandatory requirements for interior materials in the United States and Japan. Though the core material does contain a small amount of combustible polyethylene, the main ingredient of the mineral does not permit the proliferation of flame and restricts the development of smoke detrimental to evacuation activities. Refer to the Technical Manual for details.



### Perforated Panel

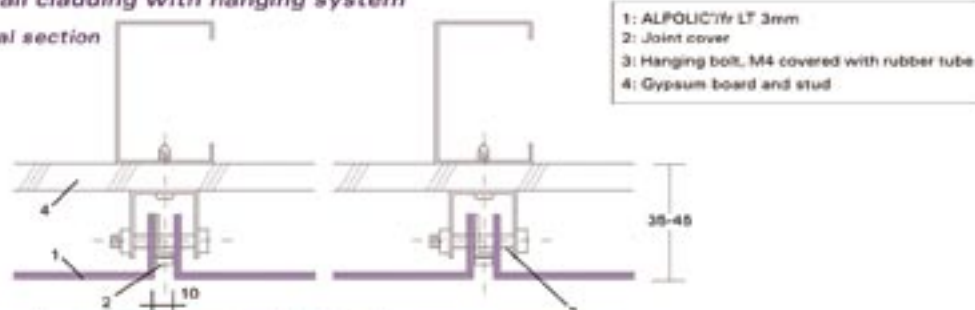
ALPOLIC<sup>®</sup>/fr LT Perforated Panel has a pattern of holes at regular intervals. This provides ventilation and permits vision through the panel, making it suitable for balconies, staircases and partitions. Refer to the Technical Manual.

Refer to ALPOLIC<sup>®</sup>/fr LT Technical Manual for details of the characteristics and the fabrication method.

### Examples of Installation Method

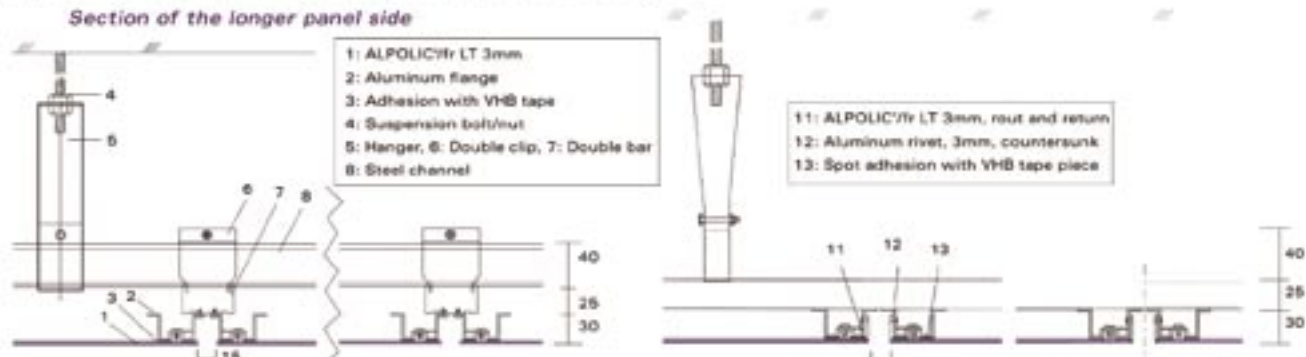
#### (1) Internal wall cladding with hanging system

Horizontal section



#### (2) Ceiling installed on lightweight suspension bar system

Section of the longer panel side



**Recycling**

ALPOLIC®/fr LT is recyclable. Scraps generated from ALPOLIC® plants are collected and brought to the recycling facility located inside the ALPOLIC® plant for recycling.

**ISO 9001:2000 Certified**

ALPOLIC®/fr LT's design, development, manufacturing and sales, are managed with ISO 9001:2000.

**ISO 14000**

ALPOLIC®/fr LT is produced in the plant that has ISO 14000 certificate.



Wall Panel (Color: Maple)



Wall Panel (Color: Walnut)



Ceiling Panel (Color: Gray Metallic Matte)

**Distributed By:**

For additional information, please contact the following:

Mitsubishi Chemical Functional Products, Inc., Composite Materials Division  
Tekko Building, 8-2, Marunouchi 1-chome, Chiyoda-ku Tokyo 100-0005 Japan  
Telephone: 81-3-3287-8124 Facsimile: 81-3-3287-8133  
e-mail: 1605495@cc.m-kagaku.co.jp

Mitsubishi Chemical Singapore Pte Ltd, Composite Materials Department  
79 Anson Road, #12-01 Singapore 079906  
Telephone: 65-6226-1597 Facsimile: 65-6221-3373  
e-mail: SIN0027@cc.m-kagaku.co.jp

Mitsubishi Chemical America, Inc., Composite Materials Division  
401 Volvo Parkway, Chesapeake, VA 23320  
Telephone (USA): 800-422-7270 Telephone (International): 757-382-5750 Facsimile: 757-436-1896  
e-mail: info@alpolic.com

▲ Mitsubishi Chemical Functional Products, Inc.

©2004 Mitsubishi Chemical Functional Products, Inc. All rights reserved.  
ALPOLIC® is a registered trademark of Mitsubishi Chemical Corporation.