



UCGEN ALUMINYUM

18 YEARS/YIL

BI-FOLDING DOOR SYSTEMS

Seamlessly merge spaces and embrace nature.



17 YEARS



600+ PROJECTS



3,500+ CUSTOMERS



100+ EMPLOYMENT



\$50 MILLION VALUE

Introduction

Where architecture meets innovation.

At Ucgen Aluminum, we are passionate about redefining spaces and transforming the way we interact with our environment. As a leading manufacturing and construction company specialized in architectural metal and glass solutions, we take pride in our commitment to excellence and sustainability.

With our cutting-edge products, we offer a world of possibilities for architects, builders, and designers alike.

Elevate your spaces with bi-folding doors.

Step into a realm of architectural brilliance where seamless transitions between indoor and outdoor living redefine your spaces. At Ucgen Aluminum, our bi-folding door systems combine elegance, functionality, and sustainability to create transformative spaces that captivate and connect.

Explore the possibilities of bi-folding door systems, where innovative design and precision engineering harmoniously coexist. Unleash abundant natural light, optimize space, and embrace the beauty of effortless operation, all while prioritizing energy efficiency and durability.

Discover how our customizable bi-folding door systems can elevate your projects, redefine spaces and unlock boundless architectural potential.



Bi-Folding Door System

Combining minimal aesthetics with design, our insulated bi-folding door system offers smooth performance and long-lasting functionality.



Functional



Aesthetic



Efficient

Introducing our exceptional bi-folding door systems the perfect solution for creating a seamless transition between indoor and outdoor spaces. Crafted with precision and designed to enhance your living or commercial environment, our bi-fold doors offer a stunning combination of **functionality, aesthetics, and efficiency**.

Unleash the beauty of natural light and maximize the feeling of spaciousness with our meticulously engineered bi-fold doors. **The system features a series of lightweight yet robust aluminum frames, ensuring both durability and effortless operation for years to come.** The aluminum frames are not only visually appealing but also resistant to corrosion, making them a low-maintenance choice that withstands the test of time.



Lightweight



Robust



Natural Light

Advantages

1. **Space-saving:** Bi-fold doors fold in on themselves, creating a wide opening without intruding into the indoor or outdoor space. This makes them an excellent choice for areas with limited space.
2. **Seamless Indoor-Outdoor Transition:** Bi-fold doors provide a seamless connection between indoor and outdoor spaces, blurring the boundaries and creating a harmonious flow.
3. **Ventilation and Airflow:** When fully open, bi-fold doors provide excellent ventilation, allowing fresh air to circulate freely throughout the space.
4. **Aesthetics:** Bi-fold doors are aesthetically appealing and can add a modern, stylish touch to any property.

Limitations

1. **Cost:** Bi-fold doors can be more expensive than traditional sliding or hinged doors.
2. **Limited Security:** Bi-fold doors typically have more access points (hinges and locks) compared to single-panel doors, which could potentially be seen as a security risk. However, modern bi-fold doors come with robust locking mechanisms to address this concern.
3. **Size Limitations:** The number of panels in bi-fold doors can be limited by the available space and engineering constraints. For extremely wide openings, other door systems may be more suitable.

Use Cases

Bi-fold doors are versatile and can be used in residential and commercial settings. Their unique design and functionality make them suitable for various applications.



1. Residential Properties

Bi-fold doors are popular choices for residential buildings, especially in homes with outdoor living spaces like patios, terraces, or gardens. They are commonly used as large entrance doors leading to backyard areas or as room dividers between indoor spaces and outdoor entertaining areas.

2. Restaurants and Cafes

Bi-fold doors are frequently utilized in restaurants, cafes, and bars to create a seamless indoor-outdoor dining experience. They enable businesses to open up their interiors to the outdoor seating areas, providing customers with a refreshing atmosphere and an increased sense of space.





3. Offices and Commercial Spaces

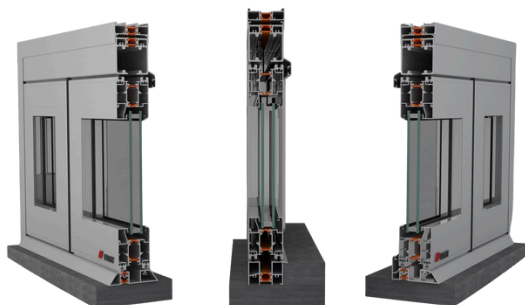
In office buildings and commercial settings, bi-fold doors are employed as flexible partition walls to divide larger spaces into smaller meeting rooms or private offices. They provide versatility in space utilization while maintaining visual connectivity and an open office feel.

4. Showrooms and Exhibition Spaces

Bi-fold doors are utilized in showrooms and exhibition spaces to create striking entrances or display areas. These doors offer a captivating way to showcase products while attracting visitors into the space.

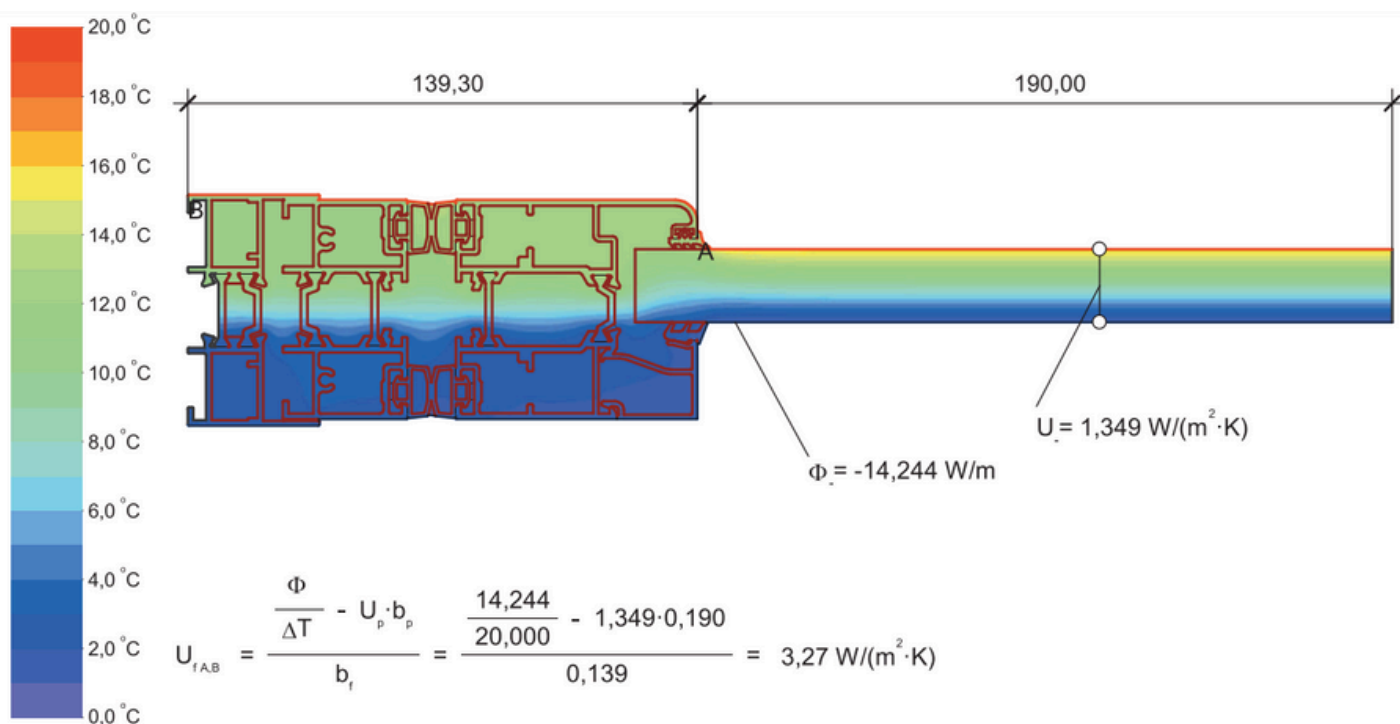


FD-60T Bi-Folding Aluminum Profiles



Frame Width	60 mm
Sash Width	60 mm
Thermal Break	15-20 mm
Min. Glazing Thickness	4 mm
Max. Glazing Thickness	36 mm
Min. Sash Dimensions	600 x 900 mm
Max. Sash Dimensions	900 x 2500 mm
Max. Sash Weight	80 kg
EN 12152 Air Permability	Good
EN 12154 Water Tightness	Good
EN 13830 Wind Resistance	Good
Min. Thermal Insulation	2.35 - 3.27 W / m² x K)

Insulation Details



Material	$\lambda[\text{W/(m} \cdot \text{K)}]$	ε	Boundary Condition	$q[\text{W/m}^2]$	$\theta[^\circ\text{C}]$	$R[(\text{m}^2 \cdot \text{K})/\text{W}]$	ε
Aluminium (Si Alloys)	160,000	0,900	Epsilon 0.9				0,900
EPDM (ethylene propylene diene monomer)	0,250	0,900	Exterior, frame	0,000	0,040		
Panel	0,035	0,900	Interior, normal, horizontal	20,000	0,130		
Polyamid 6.6 with 25% glass fibre	0,300	0,900	Symmetry/Model section	0,000			
Unventilated air cavity	anisotropic						



UCGEN ALUMINYUM

Esiroğlu Mahallesi, Kenan Oltan Caddesi
No: 21 B-7 Blok. Hekimoğlu Sanayi ve
Lojistik Merkezi Maçka / Trabzon



info@ucgenaluminyum.com



www.ucgenaluminyum.com



+90 (462) 325 36 15



+90 (530) 263 07 17



ucgen_aluminyum



ucgen-aluminyum



ucgen.aluminyum