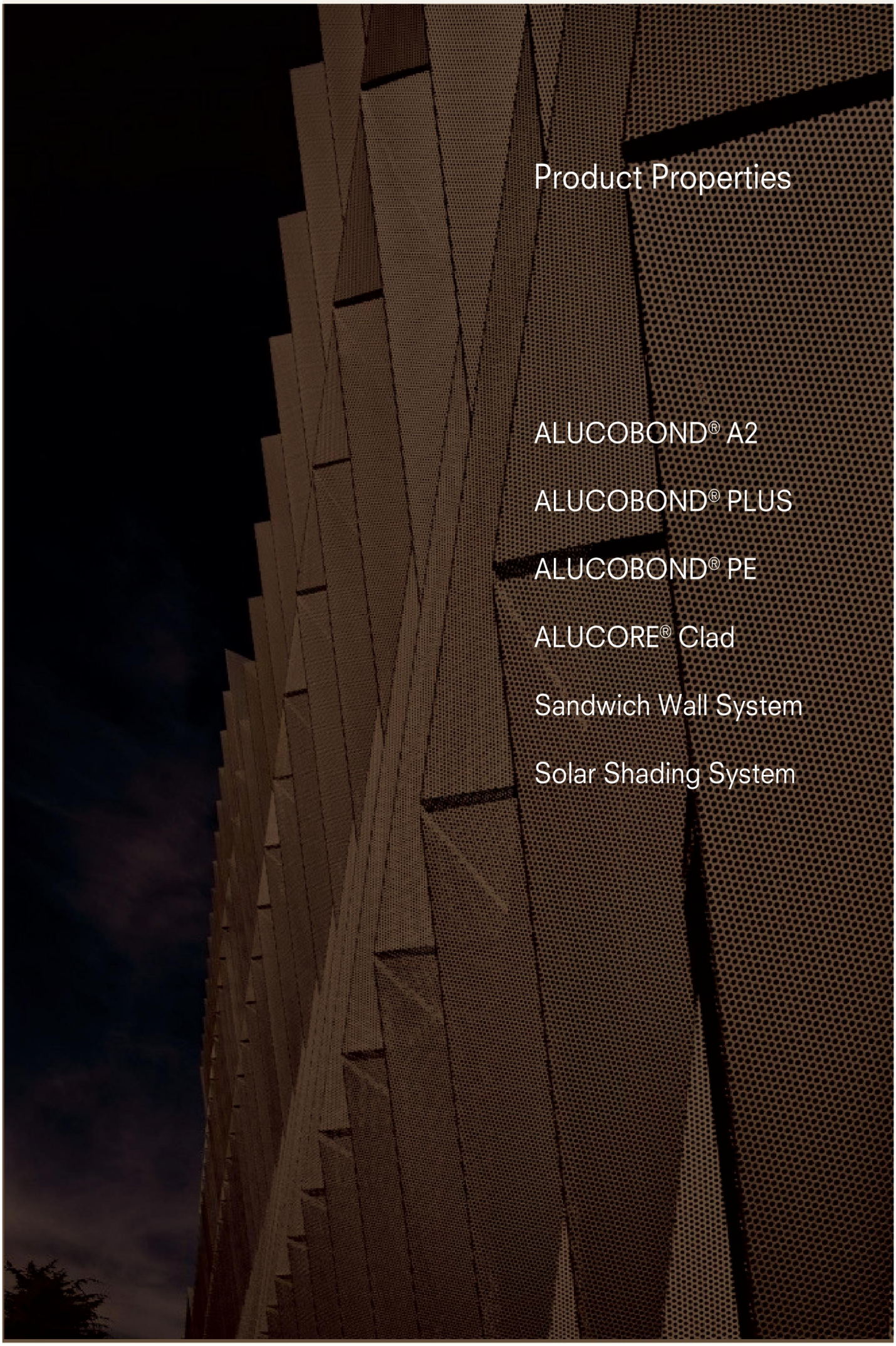
NEXT, ENDLESS AND BEYOND

ALUCOBOND® 阿鲁克邦®

ALUCOBOND®
PRODUCT



Product Properties

ALUCOBOND® A2

ALUCOBOND® PLUS

ALUCOBOND® PE

ALUCORE® Clad

Sandwich Wall System

Solar Shading System

悠久的历史赋予阿鲁克邦⊠优雅、内敛的气质；卓越的性能代表着创造者独具匠心的智慧和永不停息的追求。它专注于细节，尖端技术的支持，是卓越性能的保障；它倡导环保，高质量原材料的应用，是完美品质呈现的基础。几十年的经典传承，阿鲁克邦⊠创造永恒经典，长远价值。它脚踏实地，述说着科技的奥秘，诠释了创新的魅力。

ALUCOBOND® is an evolutionary brand that expresses elegance and profoundness; its unsurpassed performance represents the creator's ingenious mind and relentless pursuit for excellence. Its attention to even the smallest details and never-ending quest for cutting-edge technologies guarantees outstanding properties; its environmentally friendly, carefully selected raw materials ensure perfect quality. A decades-long tradition makes ALUCOBOND® an immortal name, with far-reaching value. It tells the mysteries of technology and charm of originality in a pragmatic way.

阿鲁克邦®亚太生产基地分布
ALUCOBOND® Asia-Pacific production base

1968 世界上第一块铝复合板－阿鲁克邦®，由瑞士铝业公司和德国巴斯夫公司共同研制发明
1969 阿鲁克邦®全球第一家生产工厂在德国辛根工厂正式投产推广
1979 阿鲁克邦®生产工厂在美国肯塔基诞生
1999 阿鲁克邦®生产基地在中国上海落成投产
2007 生产基地落户印度

1968 After a long period of cooperation, Alusuisse and BASF invented the world's first Aluminium Composite Material and named it ALUCOBOND®
1969 ALUCOBOND® production commenced at the Alusuisse facility in Singen, Germany
1979 A second site commenced production of ALUCOBOND® in Benton , Kentucky, USA
1999 A third ALUCOBOND® manufacturing base commenced production in Shanghai, PRC
2007 A fourth ALUCOBOND® manufacturing base commenced production in Mumbai, India

思瑞安复合材料集团是全球复合材料领导厂商，总部位于瑞士，隶属于瑞士Schweiter Technologies集团，在欧美及亚洲拥有4400余名员工。目前，全球拥有20多个复合产品领先品牌,其中应用以建筑业为主的铝复合产品品牌包括：

阿鲁克邦®建筑（幕墙及屋面屋檐、内墙墙面、天花包柱等）幕墙及装饰用板

ALUCORE®屋面及幕墙用蜂窝板

DIBOND®展示广告业用板

As a global leader in composite materials, with its head office in Switzerland, affiliated to Schweiter Technologies Group, 3A Composites employs more than 4400 people in Europe, America and Asia. At present, 3A Composites is a house of 20+ leading brands in their respective material and application categories. Among them, the principle product lines used in architectural applications are:

ALUCOBOND® Aluminium Composite Material (cladding & curtain walls, interior walls, ceilings, column decoration)

ALUCORE® Honeycomb Aluminium Panel (roofing)

DIBOND® Aluminium Composite Material (display and advertising boards)

思瑞安复合材料(中国)有限公司，作为思瑞安复合材料集团在华的独资子公司，成立于1997年，总投资2000万美元，是阿鲁克邦®铝复合板系列产品在亚太地区的生产基地，公司同时拥有遮阳，节能夹芯墙体板系统等系列建筑应用产品。

3A Composites (China) Ltd. was established in 1997 with an investment of USD 20 million and is a wholly owned subsidiary of the 3A Composites Group and is the production base for ALUCOBOND®, ALUCORE® and DIBOND®, sales in the Asia Pacific and Middle East. The company also develops additional architectural solutions, e.g. for solar shading or insulated sandwich wall systems.

阿鲁克邦®作为铝复合板的发明者，自上世纪90年代初进入中国市场以来，已经广泛为建筑市场所接受，成为建筑设计师、终端用户以及建筑施工安装企业等众多客户的主要合作伙伴。

阿鲁克邦®具有极佳的强度/重量比，高品质表面涂层，易加工成型等特点，并拥有先进的开放式幕墙系统。

产品运用遍布许多领域，如建筑外墙及装饰、户外广告、展览展示等。

As the inventor of Aluminium Composite Material, ALUCOBOND® has been widely used in the Chinese construction market by architects, end users and construction companies since its entrance in the early 1990s.

ALUCOBOND® has an impressive strength-to-weight ratio, high quality coil coating, is easy to process and forms the major component of an advanced rear-ventilated cladding system.

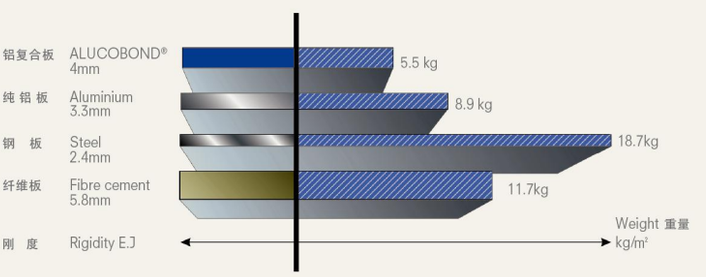
At present, ALUCOBOND® is applied across many architectural applications, both protecting the structures as well as giving them their visual identity.


Etihad Towers, Abu Dhabi

阿鲁克邦®由两层铝板和中间聚乙烯芯材或矿物填充料复合而成。具有极好的强度/重量比。由于阿鲁克邦®的重量轻，故便于加工厂和项目现场的搬运。阿鲁克邦®的高强度和高刚度使之成为最适合建筑物使用的外墙材料。当正确地设计和安装阿鲁克邦®时，即使是在极恶劣的气候条件下，墙面仍然可以保持长期的平整度。

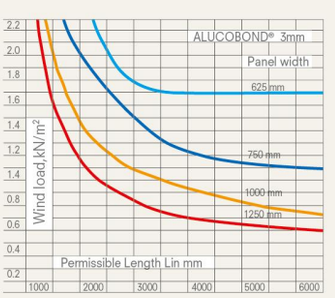
The composite nature of ALUCOBOND®, being made of two aluminium cover sheets, a core of different degrees of minerals and thermoplastic binders, results in an impressive strength-to-weight ratio, especially when comparing large panel sizes.

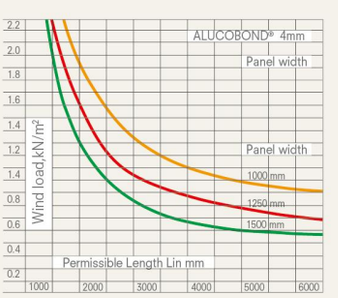
Despite its low weight, which makes ALUCOBOND® easy to transport and handle in the factory and on site, its high rigidity and strength make it the most suitable material for exterior wall cladding. When properly designed and installed, ALUCOBOND® panels will keep their shape and remain flat for life, even when exposed to extreme temperature changes.

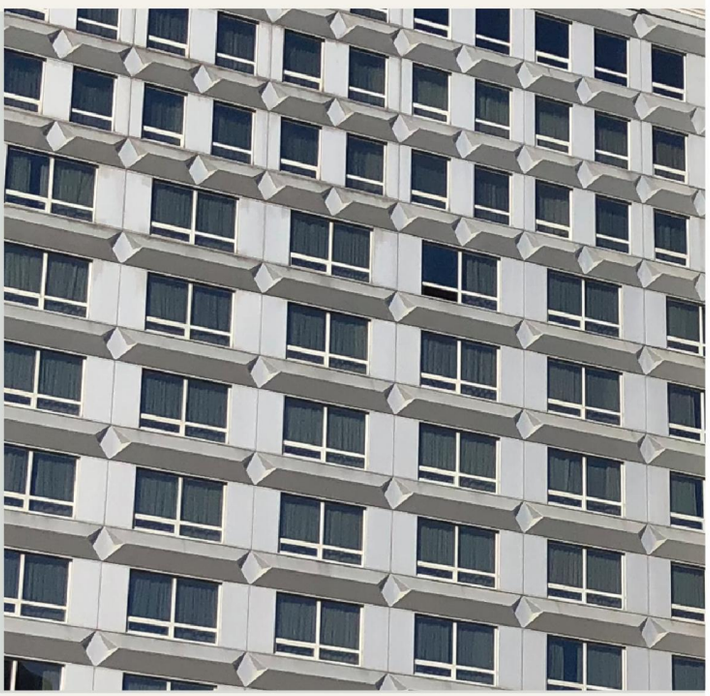


阿鲁克邦®与铝单板比较 / ALUCOBOND® compared with solid aluminium
相同刚度下板的实际重量
Required thickness and actual weights of panels with same rigidity

刚度	阿鲁克邦®/ ALUCOBOND®			铝单板 / Aluminium	
Rigidity E.J	截面模量 Section modulusw	厚度 Thickness	重量 Weight	厚度 Thickness	重量 weight
1250kN cm² /m	1.25 cm³ /m	3 mm	4.5 kg /m²	2.7mm	7.3 kg /m²
2400kN cm² /m	1.75 cm³ /m	4 mm	5.5 kg /m²	3.3mm	8.9 kg /m²







1990年，中国第一个铝复合板项目，北京RADISSON皇家大饭店，使用阿鲁克邦®产品，照片拍摄于2017年12月。
RADISSON SAS Hotel, Beijing, China 1990. The first project of ALUCOBOND® in China. Photo taken in December 2017

The fully automated coil coating process is computer controlled throughout all the stages. Coating quality is tested according to the standards established by the ECCA (European Coil Coating Association) of which 3A Composites GmbH in Germany is a member. The long-term durability of coatings can be compared by measuring:

- Color change
- Gloss retention
- Chalking

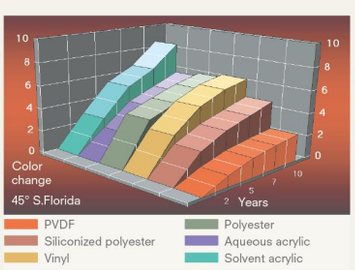
The superiority of Ultra - cote UV resistant lacquer systems (PVDF) is shown in the three graphs. The values indicated are taken from tests conducted by the American Coil Coating Association (NCCA) on lacquered surfaces which were exposed to the extreme climatic conditions of South Florida for several years.

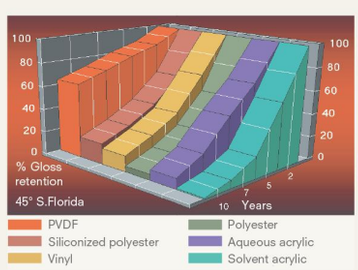
阿鲁克邦®铝复合板表面烤漆自动辊涂生产的整个流程都是由控制中心控制，烤漆质量的检测按照ECCA标准进行，思瑞安德国工厂也是ECCA的会员之一，思瑞安在中国执行同样的烤漆技术及工艺标准。

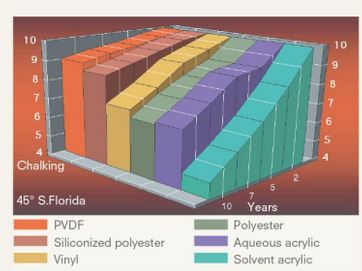
烤漆的耐久性可根据以下参数进行比较：

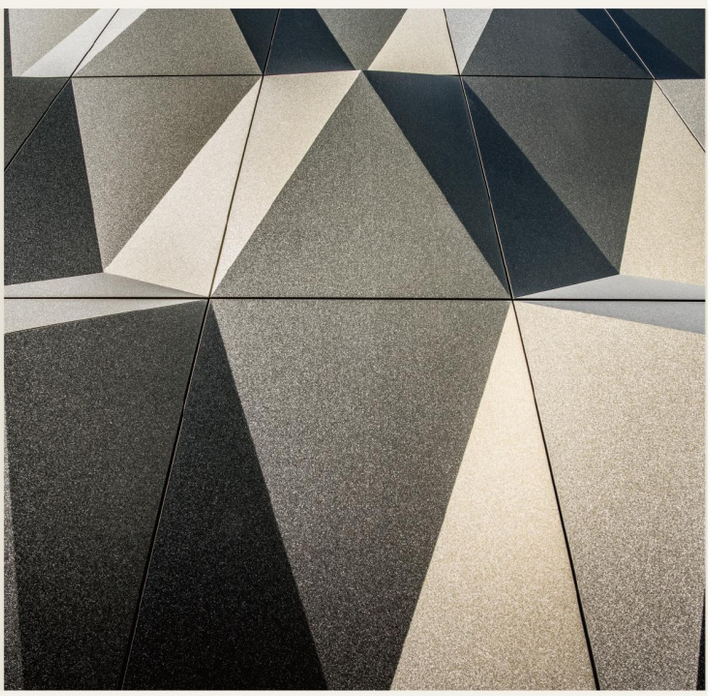
- 颜色变化
- 光泽保持度
- 粉化

以下三张图表中，显示了加御珑® 抗紫外线辊涂系统(PVDF)的卓越性能，表中的数据均来自NCCA通过若干年弗罗里达爆晒测试所提供的结果 (其中红色代表氟碳烤漆的性能) 。









ESEN FU S.R.L.办公楼，意大利。使用产品为阿鲁克邦®大地
ESEN FU S.R.L., Italy. Made of ALUCOBOND® TERRA

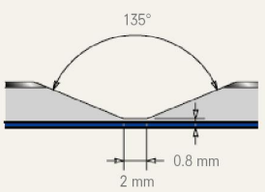
阿鲁克邦®的主要特征是它能用比较简单的技术进行开槽和折边，从而方便加工成型。

铝复合板开槽折边技术的优点有：

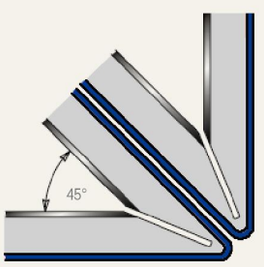
- 加工设备投资低
- 加工技术简单易行
- 可实现不同的设计造型

A major feature of ALUCOBOND® is the possibility to shape panels using a very simple technique called the routing and folding method.

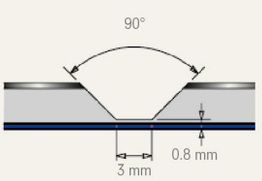
- Low investment cost
- Simple fabrication technique
- Flexibility in creating shapes



135° V形槽，板可弯折至135°
135° V-groove for folds up to 135°

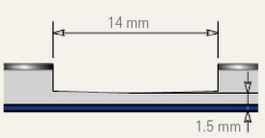


r~2 mm



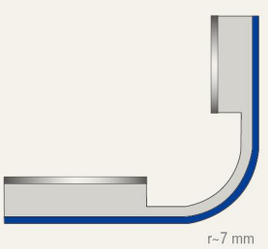
90° V形槽，板可弯折至90°
90° V-groove for folds up to 90°

r~3 mm



方形槽，根据板的厚度不同，
最大可弯折150°

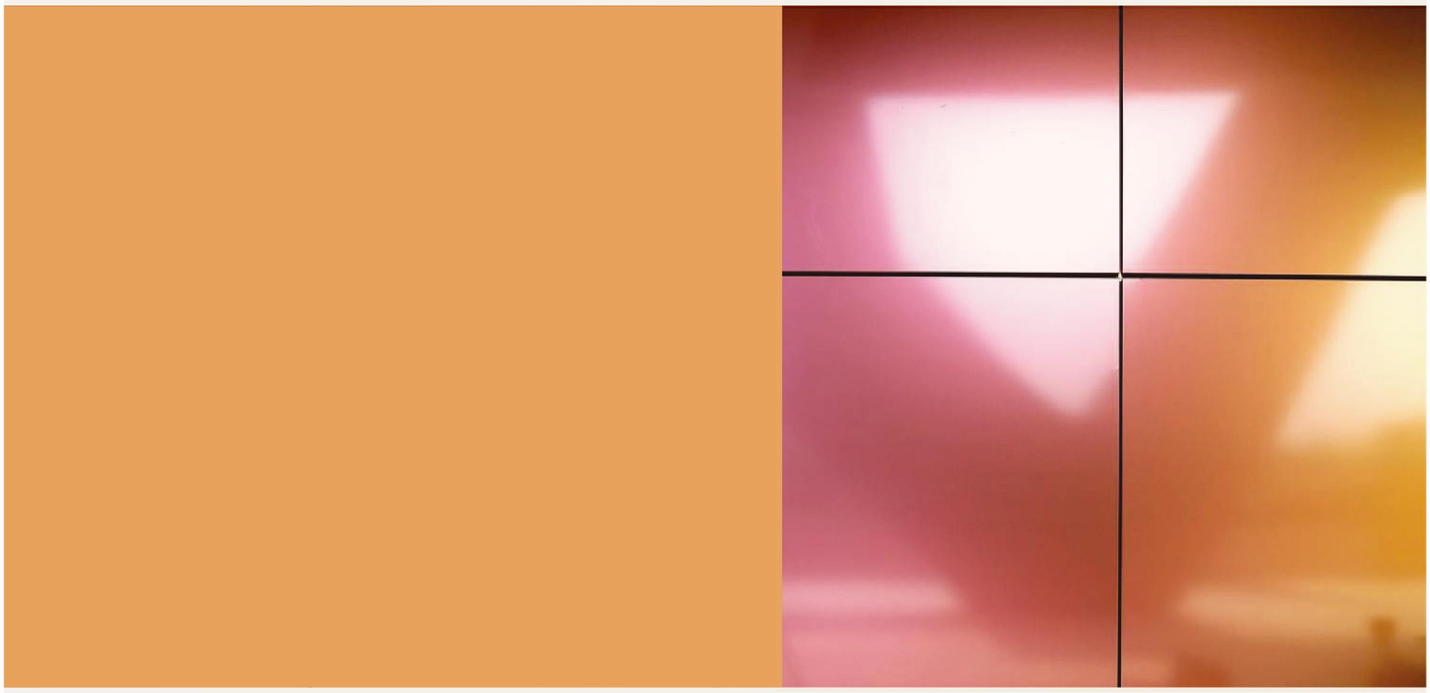
Rectangular (U-) groove for folds up to150°, depending on panel thickness.

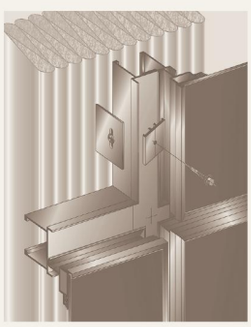


r~7 mm

如需详细信息，
请参照阿鲁克邦®加工技术手册

For futher information please ask for our ALUCOBOND® Processing Brochure





明廊天格® - 平板明框系统
原专利号：ZL 2006 3 0166451.9

适合板块横向或竖向排列的排板方式。
边框铝型材与铝复合板（以下简称“板块”）背面通过结构胶连接、板块通过螺丝将铝合金压块固定至幕墙主框架上，压块将相邻的复合板板块的边框铝型材压住固定。

每块铝复合板外露约5毫米宽的铝合金框边，该框边可根据工程需要表面做彩色喷漆处理，能衬托出明显的分割形状。

3AC Frame 90 System
(Patent NO.: ZL 2006 3 0166451.9)

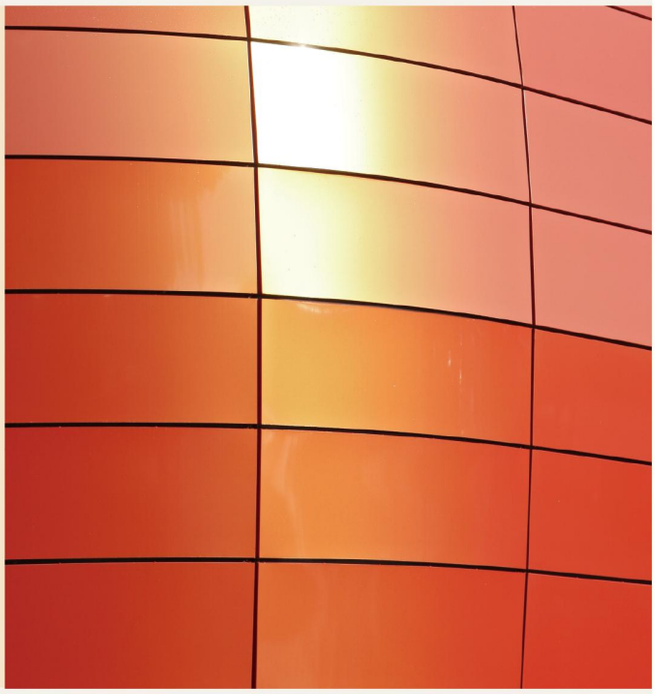
In this system, the ALUCOBOND® sheets are encased in an extruded aluminium fame by means of rear-applied structural sealant. These cassettes are then fixed to main frame in either vertical or horizontal directions by extruded cleats and stainless steel screws. The frame has a 5mm exposed edge around the ALUCOBOND® sheets, and may be coloured to match the ALUCOBOND® finish.

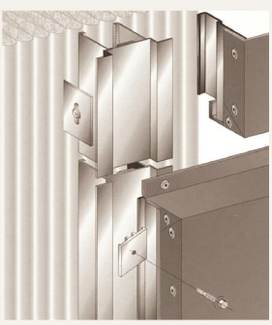
金缕云壁® - 盒型板悬挂系统
原专利号：ZL 2006 3 0166446.8

适合板块竖向排列的排板方式。
在盒形铝板边上冲槽孔后，悬挂于幕墙骨架的销钉上，无横向主龙骨。
拥有板缝宽度小，深度大，板块的固定点隐藏等优点。

3AC Hook-on System
(Patent NO.: ZL 2006 3 0166446.8)

The ALUCOBOND® Hook-on System is an open-joint rear ventilated system with vertical panel layout. Aesthetically pleasing, the system fulfills and satisfies the Architect’s quest for a cladding system with concealed fixing. Unique in its fixings system, which facilitates un-impeded movements of the elements in all aspects, as well as allowing the joint widths between the panels to be as narrow as 6mm





锦添云壁® - 盒形板嵌缝条系统
原专利号：ZL 2006 3 0166448.7

适合横、竖向幕墙排板设计。

横向排板采用螺丝固定上边框龙骨到主框架上，而将下边框龙骨插入下面板块的上边框龙骨；竖向排板采用铝合金压块压住相邻板块竖向边框龙骨的方式。

板缝处理有空缝、橡胶嵌缝条或表面烤漆铝合金龙骨嵌缝条，板缝宽度大于等于15毫米，装饰性嵌条将带来更为美观的外形效果，可根据设计需要选用。

3AC Cover Strip Joint System
(Patent NO.: ZL 2006 3 0166448.7)

This system is one of the most adaptable systems for facade cladding with either vertical or horizontal panel layout. Individual panels are of a tray/cassette type, with four sides folded and framed with extruded aluminium profile sections. Individual elements are fastened to an extruded aluminium sub-structure by means of aluminium profiled cleats, which in turn are anchored to the wall. Typical horizontal and vertical joints between the panels are minimum 15mm wide and all rivets, fastening cleats and screws are concealed within it and kept closed by a profiled strip of matching or contrasting colour.

纬致经格® - 盒型板插接系统
原专利号：ZL 2006 3 0166450.4

适合板块横向排列的排板方式。

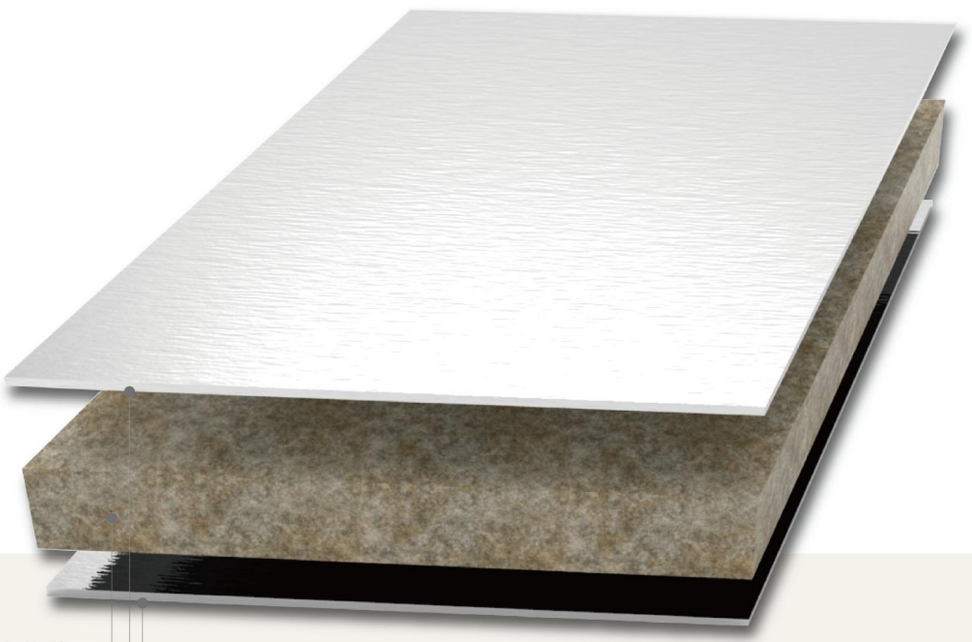
上下板块之间横向龙骨采用上下插接的方式。固定点仅在每一块板上边框横向龙骨上，用螺栓将板块固定至幕墙主龙骨上。

龙骨间安装消除摩擦噪音的特制塑料垫。板缝宽度20毫米，或视板块横向尺寸以及伸缩变形量确定。

3AC SZ-20 System
(Patent No.: ZL 2006 3 0166450.4)

This system of assembly is based on the 'tongue and groove' principle, and particularly suited for facade cladding with horizontal panel layout. Individual panels are folded into a tray, and the top and bottom sides grasped by an extruded aluminium section. The 'Z' and 'S' profiles are riveted to the top and bottom folded edge of the panels respectively, facilitating the 'tongue and groove' assembly. The vertical folded edges are riveted with the 'S' profiles that facilitate fixing with aluminium profiled cleats to the 'Hat' profiled sub-structure. All the rivets, fastening cleats and screws are concealed within the panels.

防火等级：A2
fire-protection rating: A2



不燃型矿物聚合物芯层
Mineral-filled core
with polymer adhesives,
non-combustible

0.5mm 铝板
0.5mm aluminium

阿鲁克邦®A2是全球建筑领域领先的不燃型铝复合板，它采用特种高矿物料填充芯层，从而满足了严格的防火要求，并极大地提高了建筑概念设计的可能性。

阿鲁克邦®A2如同所有的阿鲁克邦®家族产品一样，具有方便加工，耐冲击，防裂及耐腐蚀性能。而最为重要的是它的不燃性。

ALUCOBOND® A2 is the only non-combustible aluminium composite material used in architecture worldwide. Due to its mineral-filled core ALUCOBOND® A2 meets the strictest fire regulations, while fully maintaining all possibilities of freedom of the building's design.

ALUCOBOND® A2, as indeed all the products of the ALUCOBOND® family, allows simple processing, is impact-resistant, breakproof and weatherproof, and above all, non-combustibl

产品尺寸

厚度：4 mm
宽度：1000,1250,1500,1575 mm
长度：2000 mm 最长 6800 mm

Product Range

Thickness: 4 mm
Width: 1000,1250,1500,1575 mm
Length: 2000mm Max: 6800 mm

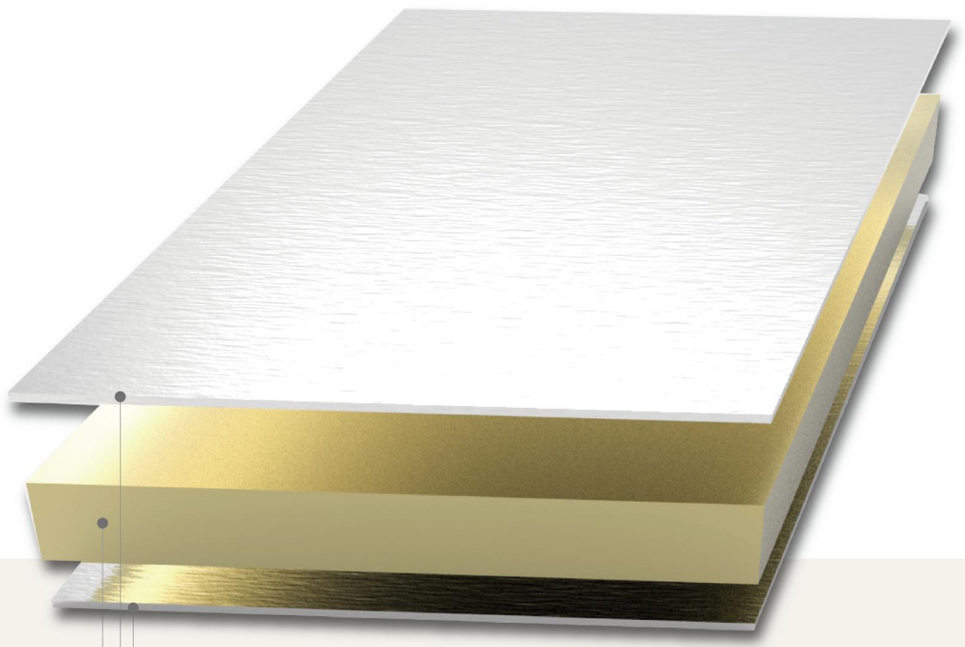
阿鲁克邦®A2 还拥有以下等特点：

不可燃烧性
高强度，重量轻
平整度高
多元化的颜色选择
极佳的耐候性
吸收震动噪声的能力
易于加工安装
预制板块

ALUCOBOND® A2 Characteristic:

Non-combustible
Low weight, high rigidity
Perfect flatness
Large variety of colors
Weatherproof
Vibration-dampening
Can easy be folded and bent
Prefabricated panels

防火等级：B1
fire-protection rating: B1



阻燃型矿物聚合物芯层
Mineral-filled polymer,
fire retardant

0.5mm 铝板
0.5mm aluminium

阿鲁克邦®PLUS是一款专门为有较高防火需求的建筑所研发的材料。

因使用阻燃型矿物聚合物芯层，使得阿鲁克邦®PLUS能满足高级别防火等级的要求。

同时兼具阿鲁克邦®家族产品公认的优良性能，如平整度、可成型性、耐候性和安装简便等。

ALUCOBOND® PLUS has been developed exclusively for the requirements of the fire regulations in architecture.

Due to its mineral-filled core ALUCOBOND® PLUS meets the higher requirements of the fire classifications.

it is hardly inflammable and offers all the proven product properties of the ALUCOBOND® family , such as flatness, formability , resistance to weather and simple processing.

产品尺寸

厚度：4,6 mm
宽度：1000,1250,1500,1575 mm
长度：2000 mm 最长 8000 mm

Product range

Thickness: 4,6 mm
Width: 1000,1250,1500,1575 mm
Length: 2000 mm Max: 8000 mm

阿鲁克邦®PLUS还拥有以下等特点：

高阻燃性
高强度，重量轻
平整度高
多元化的颜色选择
极佳的耐候性
吸收震动噪声的能力
易于加工安装
预制板块

ALUCOBOND® PLUS Characteristic:

Fire retardant
Low weight, high rigidity
Perfect flatness
Large variety of colors
Weatherproof
Vibration-dampening
Can easy be folded and bent
Prefabricated panels

特殊 PE 芯材
Polyethylene, Type LDPE

0.5mm 铝板
0.5mm aluminium

阿鲁克邦®PE是一种轻质铝复合板，它由上下两层铝面板和中间一层特殊芯层经热挤压复合而成。

阿鲁克邦®PE是一种倍受建筑界青睐的高刚度、易成形的建筑装饰材料，它具有出众的耐候性、抗冲击、防裂、减震，且易于加工安装。

所有复合板的烤漆涂层表面都覆有可剥离的保护膜。

ALUCOBOND® PE is a lightweight composites material consisting of two aluminium cover sheets and an internal special core. It has been developed as a rigid and at the same time flexible fascia material for architecture. ALUCOBOND® PE is extremely weatherproof, impact-resistant and break-proof, vibration dampening, and ensures easy and fast installation. All painted panels are supplied with a protective peel-off foil.

The versatile ALUCOBOND® product is a material also preferred in areas other than architecture such as image – building corporate design.

产品尺寸

厚度：3,4,6 mm
宽度：1000,1250,1500,1575 mm
长度：2000 mm 最长 8000 mm

Product Range

Thickness: 3,4,6 mm
Width: 1000,1250,1500,1575 mm
Length: 2000 mm Max 8000 mm

阿鲁克邦®PE 还拥有以下等特点：

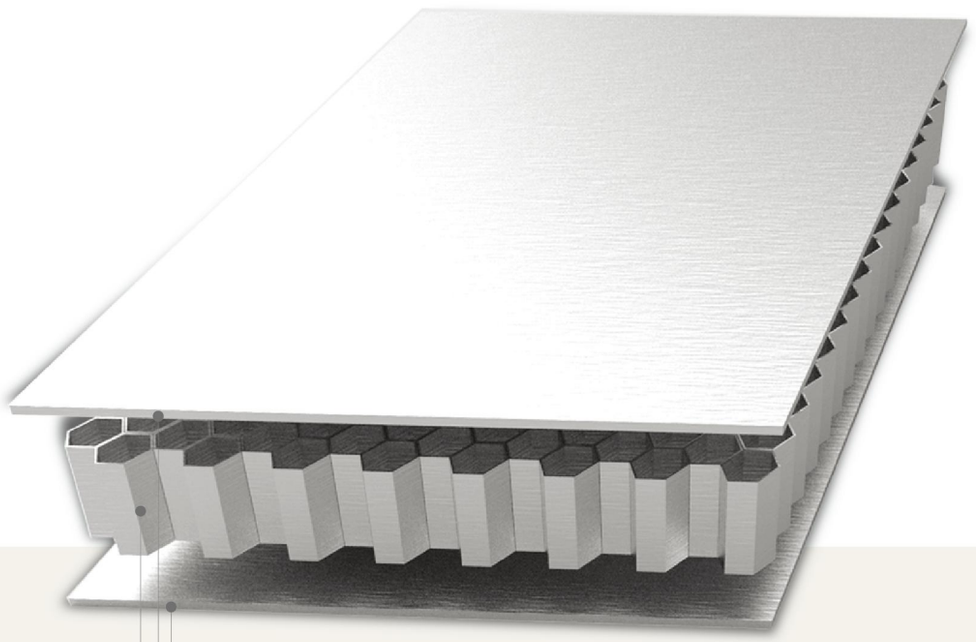
高强度，重量轻
平整度高
多元化的颜色选择
极佳的耐候性
吸收震动噪声的能力
易于加工安装
预制板块

ALUCOBOND® PE Characteristic:

Low weight, high rigidity
Perfect flatness
Large variety of colors
Weatherproof
Vibration-dampening
Can easy be folded and bent
Prefabricated panels

ALUCORE® Clad

阿鲁克®



铝制蜂窝状芯材
Honeycomb core

0.7mm - 1mm 铝板
0.7mm - 1mm aluminium

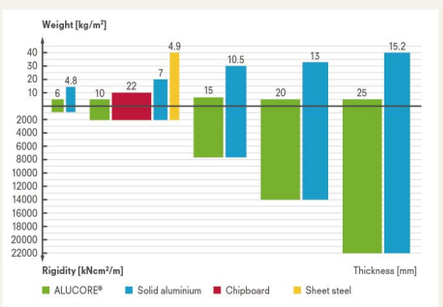
产品尺寸

厚度：6,10,12,15,20,25 mm
宽度：1250,1500 mm
长度：2000 mm 最长 4000 mm

Product Range

Thickness: 6,10,12,15,20,25 mm
Width: 1250 Max 1500 mm
Length: 2000 Max 4000 mm

强度厚度重量比
Rigidity compared with thickness and weight



随着阿鲁克®逐步成为享誉全球的铝复合板品牌，阿鲁克®铝蜂窝板被广泛运用于建筑、交通运输及工业等行业，它是由正背面两块铝板和中间的铝质蜂窝芯材复合而成。

因为铝质蜂窝状芯材赋予复合板材极高的强度和极低的重量，所以对于在外幕墙和屋顶建筑应用等对材料属性有极高要求的工程中具有不可比拟的优势。

ALUCORE® Clad is an aluminium composite material consisting of two cover sheets and an aluminium honeycomb core for a variety of applications in architecture, transport and industry, showing excellent product properties such as extraordinary flatness, large variety of colours and high formability.

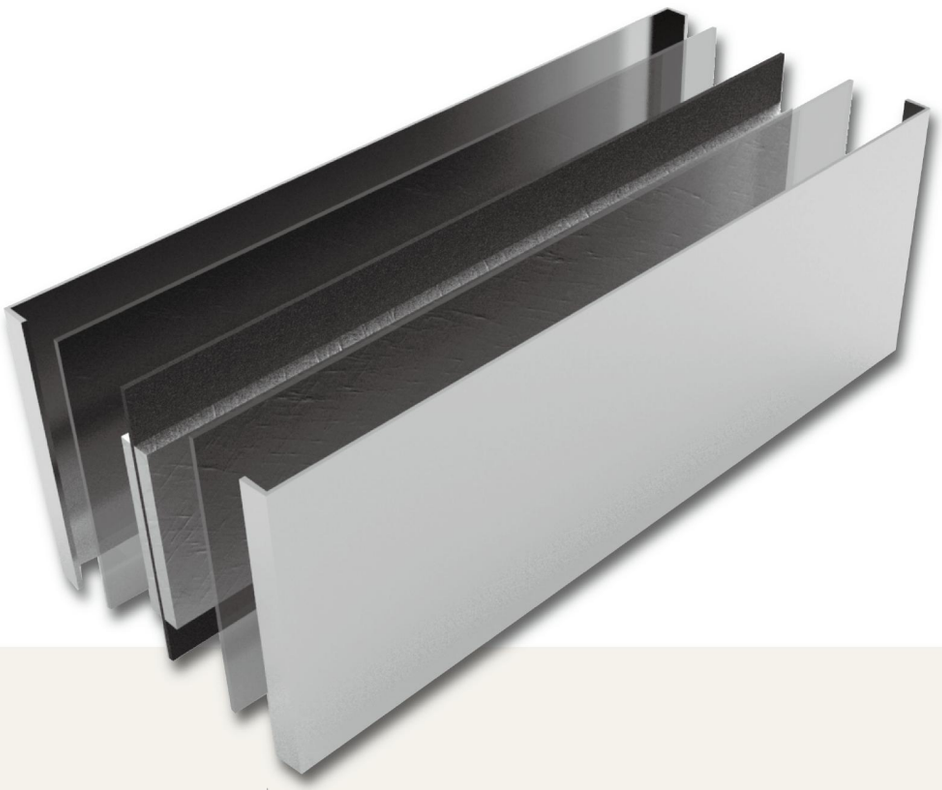
The aluminium honeycomb core gives the composite panel a high rigidity and an extremely low weight. ALUCORE® Clad therefore provides the decisive advantage where very high demands are made on the material for applications such as facade cladding or roofing.

阿鲁克®还拥有以下等特点：

重量轻，极高的强度
较低的热膨胀系数
多种的尺寸、涂层、色彩可供选择
高品质的表面烤漆处理在各种内外装上优异的应用
材料完全可循环，保护环境
极佳的耐久性能
各种安装方式和系统可供选择
各种技术支持

ALUCORE® Clad Characteristic:

Light weight with high degree or rigidity
Very good vibration and sound absorption
Wide range of finishes, colours and panel sizes available
High quality surface finishes with excellent features for interior and exterior applications
Low thermal expansion rate
Fully recyclable and environmental friendly
Excellent long-term behavior
Various fabrication and installation techniques and multiple fixing systems available
Back-up through technical service



保温夹芯墙体板系统基于阿鲁克邦®核心技术理念研发而成。

该系统采用两层合金板及中间高密度防火芯层复合而成，同时配以隐式安装配件，以满足建筑物的荷载，水密性及气密性要求。

它是集装饰、隔热性能于一体的功能性建筑墙体系统，广泛应用于各种大型公共设施，高档工业厂房等建筑。

The Sandwich Wall System is based on the ALUCOBOND® core technology concept.

The system consisting of two cover sheets of aluminium and an intermediate high density fireproof core, together with the integrated installation accessories to meet the load of the building, water tightness and air tightness requirements.

It is a functional building wall that simultaneously satisfies decorative and thermal insulation performance requirements. It has been widely used in a variety of large-scale public facilities, industrial plants and other high-end construction.

产品尺寸

正背面板：0.5,0.7,1.0 mm
铝合金面板
厚度：35,50,60,75,100 mm
尺寸：可达 1500 mm * 4000 mm

建筑用节能保温夹芯墙体板系统有如下特点：

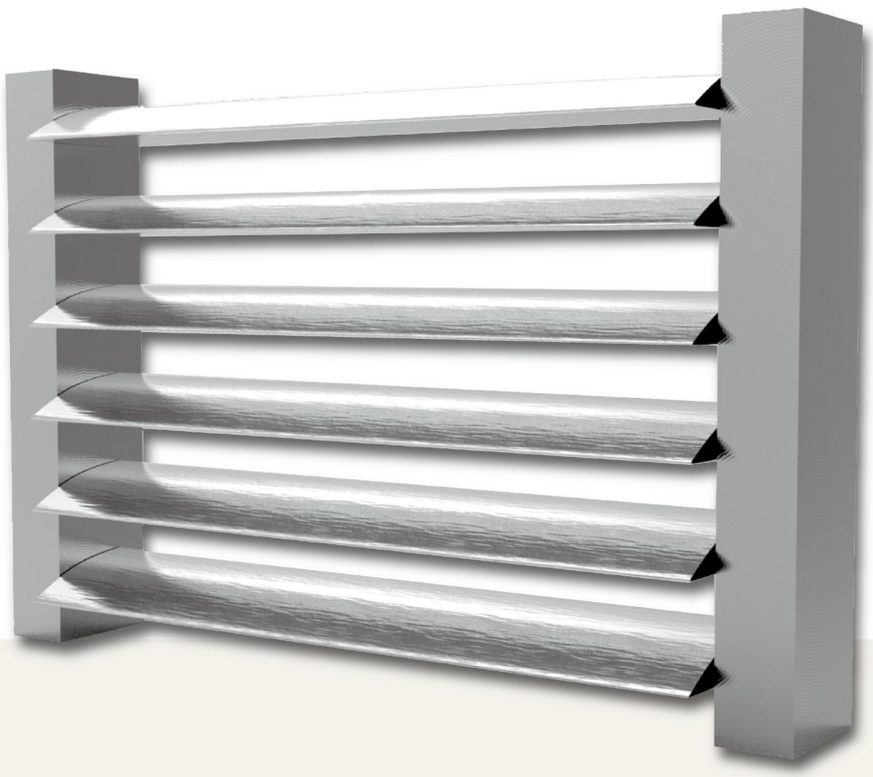
板面尺寸大、平整度佳
保温隔热性能佳
多样化产品系统选择
安装简单灵活
节点设计美观
重量轻、装卸简便

Product range

Sheets: 0.5,0.7,1.0 mm
Thickness: 35，50，60，75，100 mm
Range: 1500*4000 mm

Sandwich Wall System Characteristic:

Large panel sizes, Perfect flatness
Great thermal insulation performance
Various fabrication and installation systems available
Low weight, flexible installation and disassembly



建筑遮阳系统是由高级防锈铝合金铝卷或铝合金型材作为叶片基材，经过特殊预辊涂或氟碳喷涂工艺表面处理，配合特殊设计的安装和控制系统结合而成的遮阳系统产品。

通过控制阳光光线来改善室内温度环境，减少空调及照明用电，从而达到节能环保要求。同时，富有设计感的产品本身及灵活的安装方式有效地满足了建筑外立面造型的美观设计需求。

The Solar shading system is made of advanced corrosion-resisting aluminium coils or aluminium profiles, using special coil coating or fluorocarbon spraying surface treatment process and combined with uniquely designed installation and control systems.

Improve indoor temperatures by controlling the light of the sun to reduce the electricity consumption of air conditioning and illumination, so as to achieve energy conservation and environmental protection requirements. At the same time, rich design sense of the product itself and flexible installation methods to effectively meet the needs of the aesthetic design of the building facades.

产品种类
Range of products

机翼型 Alufoil
翼帘型 Aluscreen
翼型 Alubrise

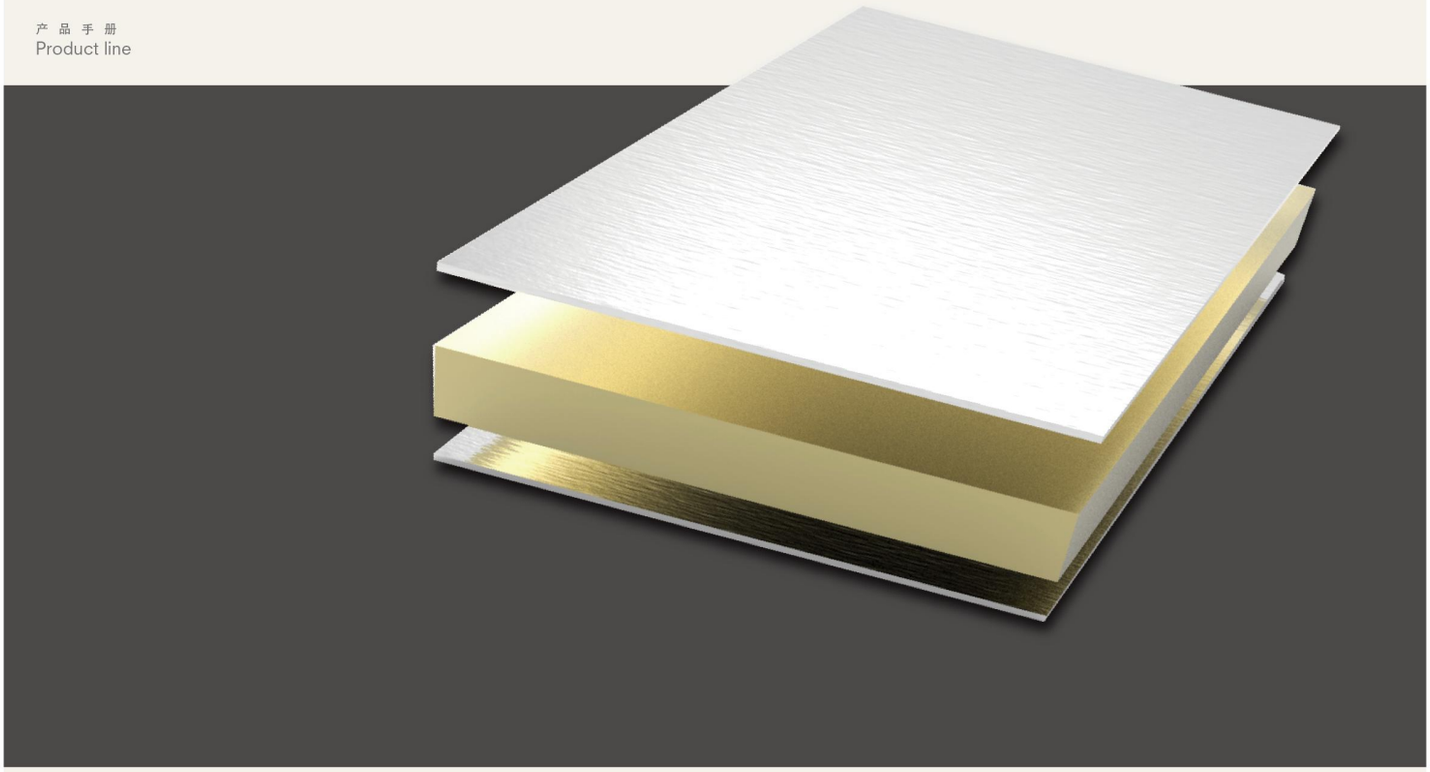
建筑遮阳系统还有以下特点：

节约能源
经久耐用
重量轻
生态环保
回收利用
安装快速
尺寸精确

Solar Shading System Characteristic:

Energy conservation
Long term durability
Low weight
Environmental protection
Fully recyclable
Fast installation
Accurate in size

产 品 手 册
Product line



Product Information	ALUCOBOND® PE	ALUCOBOND® PLUS	ALUCOBOND® A2
厚度 / Thickness (mm)	4 (3, 6)	4, 6	4
宽度 / Width (mm)	1000, 1250, 1500, 1575	1000, 1250, 1500, 1575	1000, 1250, 1500, 1575
长度 / Length (mm)	Range 2000-8000	Range 2000-8000	Range 2000-8000
颜色与表面涂层 / Surfaces	拥有单色、金属色、幻彩色、仿铝本色、仿木纹色等多种表面效果系列 / Provide wide range colours and finished		

*请询厂家：特殊宽度/厚度/长度
*upon Requset: Special Width/Thickness/Lengths

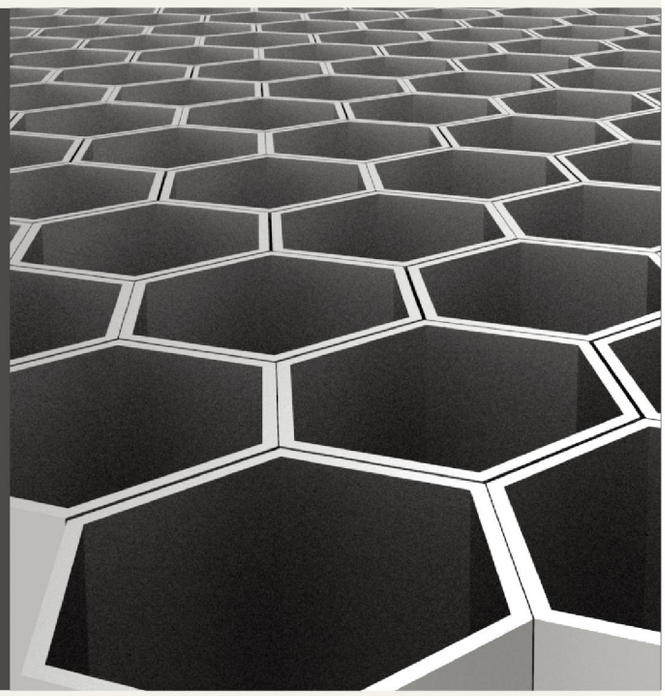
性能指标 / Technical data	ALUCOBOND® PE	ALUCOBOND® PLUS	ALUCOBOND® A2
厚度 / Thickness (mm)	3, 4, 6	4, 6	4
正、北面铝 / Cover sheet, thickness(mm)	0.5	0.5	0.5
重量/Weight (kg / m^2)	4.5 5.5 7.3	7.6 10.8	8.0

复合板及面板的力学性能 Technological data：

截面模量 / Section modulus W(cm^3 / m)	1.25 1.75 2.75	1.75	1.75
复合板刚度 / Rigidity E.J(kN(cm^2 / m)	1250 2400 5900	2400 / 5900	2400
合金 / Alloy	EN-AW-5000 系列或以上高级防锈铝 High quality corrosion resistance alloy by 5000 series of above		
铝面板机械性能 / Mechanical prosperities of the cover sheets	H24/44 according to EN 573-3		
弹性模量 / Modulus of elasticity (N/mm^2)	28,000		
面板抗拉强度 / Tensile strength of cover sheets (N/mm^2)	R_m >= 130		
0.2%屈服应力 /Proof stress (0.2%) (N/mm^2)	$R_{P0.2}$ >= 90		
延伸率 / Elongation	A_{50} >= 4%		
线性热膨胀 / Linear Thermal expansion	线性膨胀为2.4mm/m 100温差时 2.4mm/m at 100°C temperature difference		
耐温性 / Temperature resistance	从-50°C到 +80°C From -50°C to +80°C		从-40°C到 +80°C From -40°C to +80°C

声学性能 / Acoustical properties	ALUCOBOND® PE	ALUCOBOND® PLUS	ALUCOBOND® A2
厚度 / Thickness (mm)	3, 4, 6	4	4
吸声指数 / Sound absorption factor α	0.05	0.05	0.05
隔声指数 / Sound insulation Rw(dB)	25 26 27	(accord.to EN 20354,ISO 354) STC=30,OITC 24	
衰减系数 / Loss factor d(mm)	(ISO/DIS 717-1, EN ISO 140-3) 0.0072 0.0087 0.0138	(accord.to ASTM 90)	
	根据EN ISO 6721频率 100-3200HZ	(accord.to EN ISO 6721, frequency range 100-3200HZ)	

热性质/Thermal properties	ALUCOBOND®	ALUCOBOND®PLUS	ALUCOBOND®A2
厚度/Thickness (mm)	3, 4, 6	3, 4	3, 4
热阻/Thermal resistance (m^2K/W) (accord. to DIN 62612)	0.0072 0.0087 0.0138	0.007 0.009	0.002 0.002
导热率/Thermal conductivity (W/mK) accord. to DIN 4108)	0.43 0.39 0.35	0.49 0.44	1.99 1.77
传热系数/Heat transition coefficient(W/mK) (accord. to DIN 4108)	5.65 5.54 5.34	5.68 5.58	5.83 5.80



ALUCORE® Clad

技术参数 Technical data	标准 Standard	单位 Unit	标准产品厚度12mm Standard product thickness 12mm	标准产品厚度25mm Standard product thickness 25mm
表面材料 / Plane material				
正面铝板** Cover sheet		mm	0.7-1.0	0.7-1.0
重量 Weight		kg/m^2	5.5	6
面板合金 Aluminium alloy	EN 573-3		AA5005A（ALMg1),H42 AA3003,H44	AA5005A（ALMg1),H42 AA3003,H44
烤漆系统 Coating system	辊涂 Coil Coating		PVDF \ HDP \ POLY	PVDF \ HDP \ POLY
光泽度（初始值） Gloss （Original value）	ECCA T2	%	30-45	30-45
铅笔硬度 Pencil hardness	ECCA T4		HB-F	HB-F
芯材/ Core material				
蜂窝芯尺寸 Honeycomb size		mm	6.3-19	6.3-19
铝箔厚度 Aluminium foil thickness		mm	0.076	0.076
平压指数 Flat crush resistance		MPa	>= 0.8	>= 0.8
力学性能 / Mechanical properties				
弹性模量 Modulus of elasticity	EN 1999 1-1	N/mm^2	70,000	70,000
面板抗拉强度 Tensile strength of cover sheets	EN 485 -2	N/mm^2	R_m>= 125	R_m>= 125
0.2%屈服压力 Proof stress(0.2%)	EN 485 -2	N/mm^2	$R_{P0.2}$>= 80	$R_{P0.2}$>= 80
延伸率 Elongation		%	A_{50} >= 3	A_{50} >= 3
线性热膨胀 Linear thermal expansion	EN 1999 1-1		2.4mm/m（100℃温差时）	2.4mm/m（100℃温差时）
声学性能 / Acoustical properties				
吸声指数 α Sound absorption factor α	ISO 345		0.05	0.05
隔声指数 Rw （dB） Sound insulation Rw （dB）	ISO 717-1 EN ISO 6721	dB	15	25
热工性能 / Thermal properties				
热传导系数 λ Thermal conductivity λ	DIN 52612	W/mK	1.35	2.7
热阻系数 R Thermal resistivity R	DIN 52612	m^{2}K/ W	0.0047	0.0093
传热系数 U Heat transfer coefficient U	DIN 4108	W/m^{2}K	5.65	5.58
火焰在铝板表面的扩散性 / Diffusivity of flame on the surface of aluminium sheet			BS476,Part7	1级
表面防火性能 / Surface fireproof performance			BS1991ADB	0级

阿鲁克邦®在各个国家通过的防火测试

Fire behaviour of ALUCOBOND® Aluminium Composite Material

	ALUCOBOND® PE		**ALUCOBOND® PLUS**		**ALUCOBOND® A2**	
国家 **Country**	测试标准 **Test accord. to ...**	级别 **Classification**	测试标准 **Test accord. to ...**	级别 **Classification**	测试标准 **Test accord.to ...**	级别 **Classification**
欧洲 EU	EN 13501-1	Class D	EN 13501-1	Class B, s1, d0	EN 13501-1	Class A2, s1, d0
德国 Germany	DIN 4102-1 DIN 4102-7	Class B2 passed	EN 1187 (method 1) / DIN 4102-7	passed	EN 1187 (method 1) / DIN 4102-7	
法国 France	NF P 92-501 NF F 16-101	Class M1 Class F0	NF P 92-501	Class M1	NF P 92-501	Class M0, non combustible
意大利 Italy	UNI 9177	Class 1				
英国/英格兰/ 威尔士/苏格兰 Great Britain England / Wales / Scotland	 BS 476-6/7 BS 476-6/7	 Class 0 Class 0	 BS 476-6/7 BS 476-6/7	 Class 0 Class 0	BS 476 - Part 6 BS 476 - Part 7 BS 6853 BS EN 13501-1	Index 0 Class0 Class 1 Building Regulations Meets the requirements of the London Underground Ltd. Code of Practice for Fire Safety Limited combustible Non-combustible (Scotland)
斯堪的纳维亚 Scandinavia					DS 1085-1	Class A
瑞士 Switzerland	VKF	Class 4.2	VKF	Class 5.3	VKF	Class 6q.3
俄罗斯 Russia	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89	G4 (combustibility) W1 (flammability) D2 (smoke emission) T2 (smoke flammability)	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89	G1 (combustibility) W1 (flammability) D2 (smoke emission) T1 (smoke flammability)	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89 GOST 31251-03	G1 (combustibility) W1 (flammability) D1 (smoke emission) T1 (smoke flammability) k0
澳州 Australia	AS ISO 9705 AS 1530.3 Indices EN 13501.1	Group 3 material SMOGRA 3.194 m2 / s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0–1 (smoke developed) D	AS ISO 9705 AS 1530-3 Indices EN 13501-1	Group 1 material SMOGRA 1.385 m2 / s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0–1 (smoke developed) B, s1, d0	AS ISO 9705 AS 1530-3 Indices EN 13501-1	Group 1 material SMOGRA 0.630 m2 / s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0–1 (smoke developed) A2, s1, d0
美国 USA	ASTM-E 84	meets requirements	ASTM-E 84 NFPA 285	meets requirements passed		

Alucobond Asia Pacific Management (Shanghai) Ltd.
阿鲁克邦亚太管理 (上海) 有限公司

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