



 Arc™e

Architectural Cladding System
Screen™



altPlus® Architectural Cladding System

- Arc e™ Screen LVB
- Arc e™ Screen PSB
- Arc e™ Screen Installation
- altPlus Solutions

Certifications / Testing





≡ Description

Arc e™ Screen is a patent protected, solid, exterior grade, engineered bamboo cladding system, developed for the highest performing exterior cladding applications. With superior strength, durability and dimensional stability, the Screen™ system is the sustainable performance solution for exterior applications in soffit and cladding applications. Standardized components and fastening systems allow for compatible installation and façade design.

Arc e™ Screen **is the natural, performance, turn-key solution, for exterior cladding.**

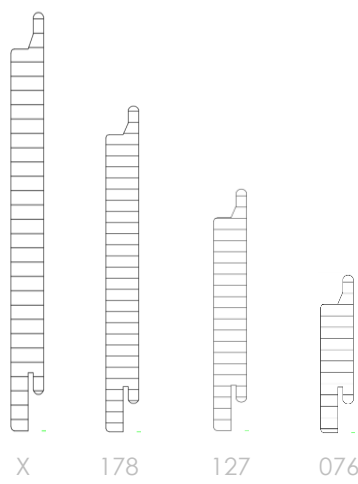


Arc™ e LVB Screen

PERFORMANCE

Use Class	Exterior Use class 3 (BS EN 335) fully exposed above ground
Fire Rating	Achievable Per Performance Requirement: Class B1, Class B (GB 8624-2012) Class B (EN 13501-1) Class B, Class A (ASTM E84)
Certification	FSC certification available Qualifies for LEED® & BREEAM credits
Service Life	25 years (See design, installation & maintenance requirements)

Standard Profiles



STANDARD PRODUCT DETAILS					
PRODUCT	THICKNESS	WIDTH	KG /M ²	COLOR	FINISH
Arc e LVB 076	19mm	76 mm	13.3	See LVB colour table	E1, E5
Arc e LVB 127		127 mm			
Arc e LVB 178		178 mm			
Arc e LVB-X		220+ mm			

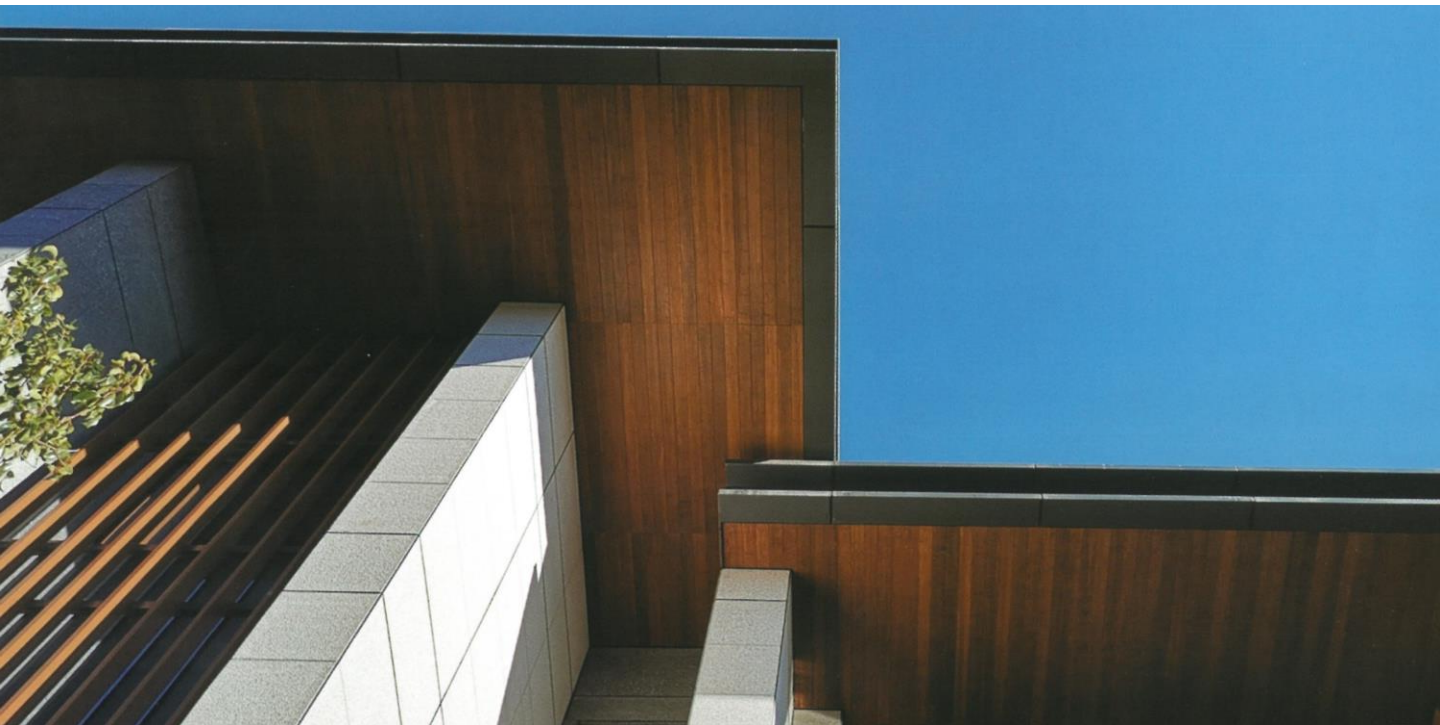
¹ Standard length of plank are 1220, 2440, and 4880 (mm). Custom size are available, please inquire.
² Corner profiles include, miter joint, vertical corner profile, various capping profiles
³ Weight per meter square is not including altPlus Fin T-Clip
⁴ Screen systems are available in panel sizing. Please see altPlus® Screen-X

Designer Note

Finely planed bamboo strips aligned in uniform direction, creating a linear pattern with a traditional bamboo texture reference (node and colour). After thermal treatment each bamboo strip maintains its own range of natural colour tone creating subtle changes across the continuous, seamless, laminated pattern. Laminated strips are similar to engineered wood patterns, but with narrow lamination of 5~8 mm width, creating a tighter pattern. Unlike engineered wood, there are no knots or visible joinery.



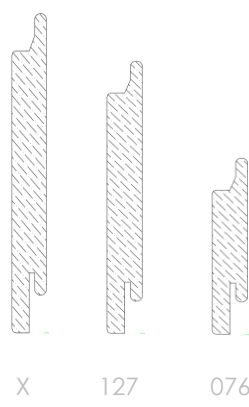




PERFORMANCE

Use Class	Exterior Use class 3 (BS EN 335) fully exposed above ground
Fire Rating	Achievable Per Performance Requirement: Class B1, (GB 8624-2012) Class B (EN 13501-1) Class A (ASTM E84)
Certification	FSC certification available Qualifies for LEED® & BREEAM credits
Service Life	25 years (See design, installation & maintenance requirements)

Standard Profiles



STANDARD PRODUCT DETAILS					
PRODUCT	THICKNESS	WIDTH	KG /M²	COLOR	FINISH
Arc e PSB 076	12,14,18mm	76 mm	15, 17.5, 22.5	Tan, Champagne, Espresso See PSB color table.	E1, E5*
Arc e PSB 127		127 mm			
Arc e PSB 178		178 mm			
Arc e PSB-X		220+ mm			

¹ Standard length of plank are 1860 (mm). Custom size are available, please inquire.
² Corner profiles include, miter joint, vertical corner profile, various capping profiles.
³ Weight per meter square not including altPlus Fin T-Clip.
⁴ Arc e PSB Screen systems are available in panel sizing on custom order.
⁵ E5* is a non-standard system for PSB – with availability per specification.

altPlus PSB Colour Chart

Standards



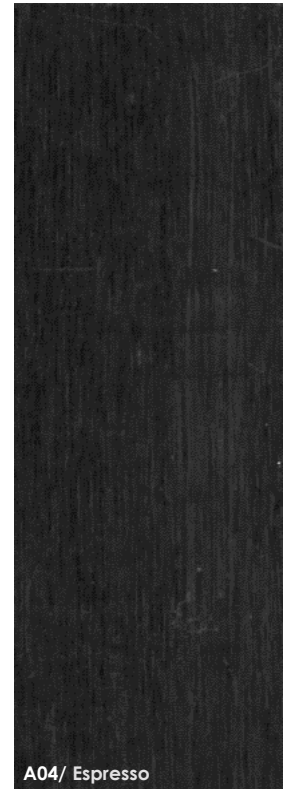
A01 / Champagne



A02/ Tan



A03 / Deep



A04/ Espresso

Designer Note

Individual bamboo strands are compressed together creating a pattern similar to tropical timber appearance. The thermal treatment of the bamboo create a consistent, solid, colour reveal, with three standard selections. PSB is relatable to PSL (parallel strand lumber).

Factory Finish Exterior Oil (e1): Finished with exterior grade wood oil, PSB will turn a grey to a natural patina colour. Install colour can be revived with maintenance applications –re-oiling- in specified cycles. If left to age, the materials will continue to age similar to wood species. In cladding, materials will not delaminate within the design life, but surface checks and fibrous changes should be expected.

PSB coating bond performance is appropriate for e1 finishes by standard and E5 by specification only.



View more projects online at altplus.xyz/arc-e

Service Life

Design / The designed application of Arc e products is significant to the overall service life. Solar radiation and the potential of deposits of water sitting on the surface of the materials are important factors in defining the most compatible finish system and maintenance program, to ensure the achievement of the desired service life. In full exposure, positioning the materials at an orientation greater than 30° from a vertical plane, will increase system requirements.

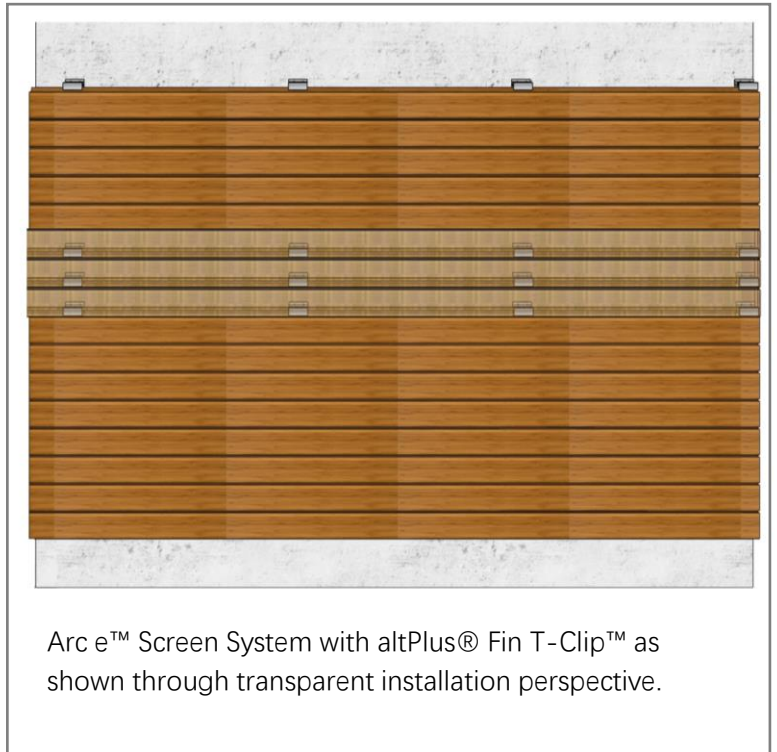
Installation / Arc e Systems need to be installed following the installation guidelines in order to ensure the performance in the desired service life. Refer to the standard installation program for the Arc e Systems and consult with the Arc e Technical team to ensure your drawings are in coordination with the optimum Arc e configuration.

Finish Systems / There are a variety of finish outcomes that are desired and Arc e Systems has the ability to achieve these through the range of altPlus architectural coating systems. There are unique characteristics and benefits to each system that allow for open or closed texture, fire rating in different degrees, sheen levels, and the durability of maintenance cycle. All come with a range of colour tones and features that allow for endless designs in natural and uniform arrangements.

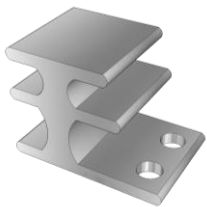
Maintenance / Depending on the design and finish specification, a varying degree of maintenance will be required to achieve a desired service life. Maintenance cycles are available in a range of options from an annual brush on application oil treatment, to a robust 5+ year low-to-no maintenance cycle. The continuous upkeep of a finish coating can result in a service life of up to 60 years. If the desired outcome is a natural weathering of the materials, an Arc e System without treatment can be expected to turn silver-like and weather over the years but remain structurally intact for up to 30 years depending on the design and installation craftsmanship.

Arc e Screen™ Exterior System are typically installed using altPlus® T-Clip™ exclusively provided by altPlus®.

- I. Subframe Assembly:
Concealed fastening, as designed.
- II. Subframe: Fire Treated Wood
Furring Strips: 19 x 89mm
@ 610mm o.c.. Confirm with
Engineering per location.
- III. Fasteners for Screen™
Assembly:
 - I. #12-11 Stainless Steel, 300 Series .(Typical for secondary installation. Screws will be provided for project by manufacturer as specified in shop drawings.)
 - II. altPlus® T-Clip™ will be provided by altPlus® in accordance to engineering and shop drawings for loads required per engineering confirmation.
- IV. Spacers if required: Stainless steel with a diameter and length of 1/2 inch (12.7 mm).



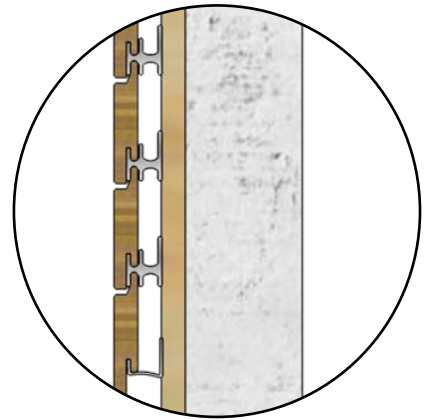
Arc e™ Screen System with altPlus® Fin T-Clip™ as shown through transparent installation perspective.



altPlus® Fin T-Clip™
System

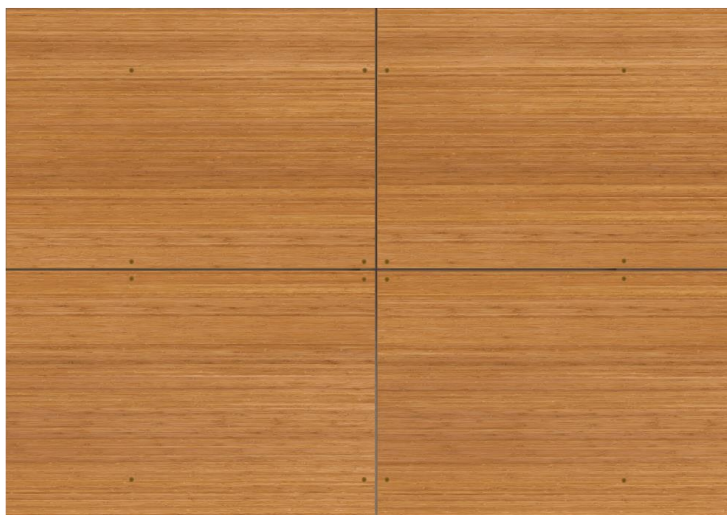


altPlus® Fin T-Clip™
System - Bottom
Channel



Cross-Section of altPlus® FinT-
Cip™ System
Fastening Assembly

Panelized Systems / Revealed or Concealed



Description / Notes

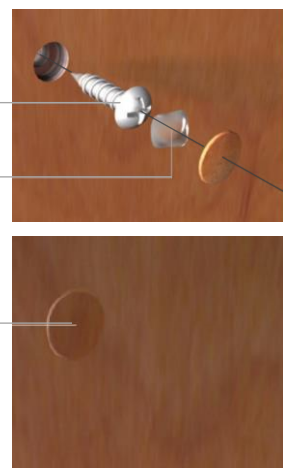
Installing Caps Once the panels have been fastened, caps are inserted to hide the screw heads. To do so, first fill the existing cavity with a flexible silicon, leaving enough space to accommodate the 5~10mm thick cap. To insert the cap and to seal it correctly, it is recommended to tap it with a wooden peg to avoid damage

Note: Flexible silicone is not always a requirement

Panel Fastener

Flexible Silicone

Arc™ Cap





Architectural & Structural Engineered Bamboo Experts

altPlus is focused in the design, development, and manufacturing of the worlds most advanced architectural building materials and systems utilizing engineered bamboo. Leading the world in structural grade performance tested technologies, altPlus Architectural team of engineers, designers, project members and production are the foundation for a successful program integrating engineered bamboo.

altPlus® Solutions

/ Design & Build Services

altPlus provides Design Assist & Contracting services:

Pre-Construction Services

- Feasibility & Budget Design Consultation
- Code Compliance, Environmental Impact Analysisist, and Preliminary Testing Consultation
- Renewable Technologies Integration
- Project Management
- Design Build Solutions - Shop Drawings
- Design Assist - For Architects and Engineers
- Consulting on Sustainable and Net Zero Solutions
- Public/ Private Partnerships for Governments
- SEB (Structural Engineered Bamboo)
- Pre-fab Modular Structures - Fabrication

Construction / Post-Construction

- Materials supply
- Installation construction team
- On-Site Technical support
- As -built Drawings
- Hand Over Documents
- Maintenance services & Training
- Operation troubleshooting

altPlus® Materials

Performance Grade Bamboo
Architectural and Structural Products
Manufacturing
Fabrication & Finishing
Distribution & Logistics





For more information and a list of distribution in your area visit www.altplus.xyz

altPlus Technologies is an engineered bamboo products company delivering service-oriented solutions developed in collaboration with its customers. Its premium solutions are based on ecological, high quality engineered bamboo as a raw material.

Engineered bamboo is the most rapidly renewable, and highest sustainable building material in the world. altPlus Technologies manages and sources bamboo globally and is an approved Chain of Custody supplier.

AEB0120 Jan 06.

The photographs in this brochure are for illustration purposes only.

altPlus Technologies reserves the right to change the range without notice.

Every effort has been made to ensure that colours are accurate within the limitations of natural lighting conditions and the four colour printing process.



altPlus Architectural

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