

Smartfix anodised solid plate alloy

Natural beauty, outstanding durability

The German awarded Smartfix mechanical fix façade system has worked closely with AAF Anodisers Australia, to deliver a facade cladding solution which is abrasive resistant, non combustible and mechanically fixed, suitable for both low and high rise construction.

Specific process parameters of real metal anodising and sustainability of the environment are key underlying strengths of the new Smartfix solid plate alloy façade solution. The AAF Evershield Coastal Anodise finish offers outstanding durability, over a 100 Year Life Cycle, making the Smartfix solid aluminium plate façade solution, both Non Combustible and 100% recyclable.







AAF advanced new Ilustro finishes

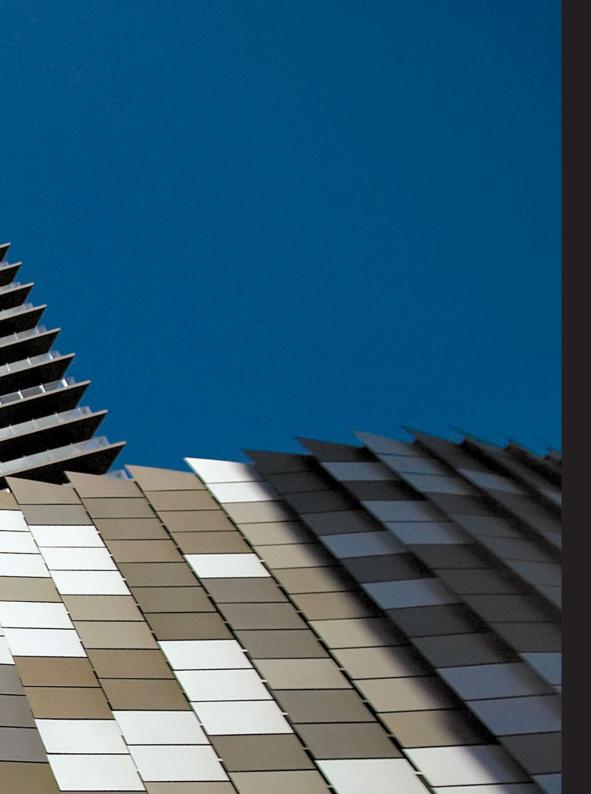
With the Addition of the Illustro series, the Evershield Range has now broadened into 3 lustres.

Matt: The traditional Matt series combining a timeless and natural matt lustre.

Illustro: The exclusive new Evershield Illustro series is cleverly designed to subtly reflect with the changing light conditions throughout the day creating a fusion with natural building elements and rendered finishes.

Bright: The Bright series is just brilliant. A classic polished metal finish that stands the test of time.





Through specific process parameters and controls Evershield® offers outstanding hardness and durability

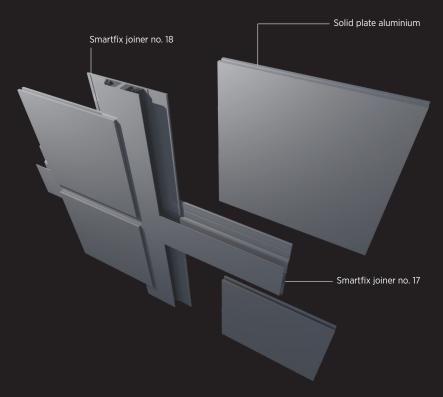
Key Features of AAF Evershield High Grade Anodising finish

- > Uses world Leading technology true Metal Inorganic colouring
- > Is Non Abrasive with outstanding hardness making it ideal for use at high altitude and repels abrasive sands during the most severe windstorms
- Anodising retains its natural beauty as anodizing is a conversion of the real metal itself with incredible hardness and excellent protection of the metal
- > Exceeds AAMA611 and AS1231 Perfomance Standards
- > Exclusive AAF 30 Year Evershield Coastal Marine Warranty
- Anodic treatment may accentuate any lack of homogeneity or differences in metallurgical condition of the aluminium. As a result, some non-uniformity of appearance may be encountered on different areas of a component and/or between different batches of material of the same specification, or where certain welding processes have been used



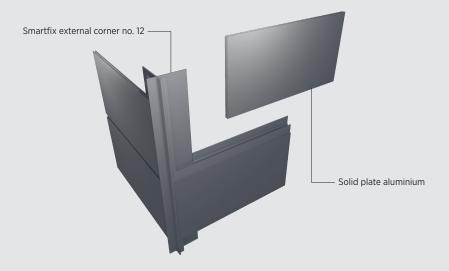
Smartfix system

- > NON COMBUSTIBLE FAÇADE FIXING SOLUTIONS
- NO VISIBLE EXTERNAL JOINT SEALANTS USED
- > WATERPROOF TESTED SYSTEM
- > ABRASIVE RESISTANT
- > CYCLONE RATED
- > ENGINEERED TO LAST



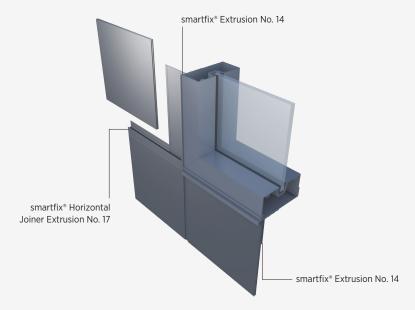
Smartfix vertical and horizontal connection

Please Note: Panel Joint widths can be varied from 5mm to 40mm wide



Smartfix no. 12 external corner

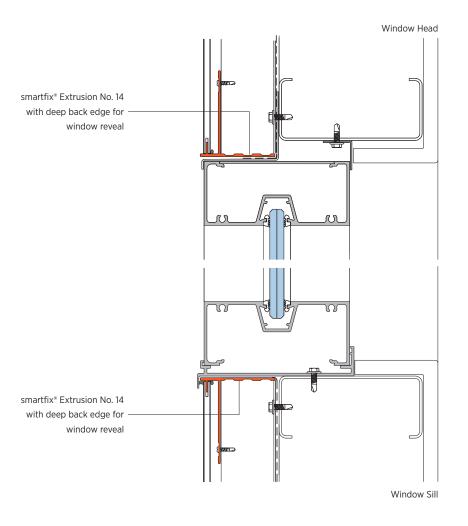
Please Note: Several external corner types are available



Smartfix window joiner details

Window Frame Details

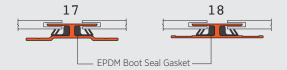
Window head and sill detail using smartfix® Extrusion No.14



smartfix® Aluminium Fixing Profiles

Standard smartfix® Profiles

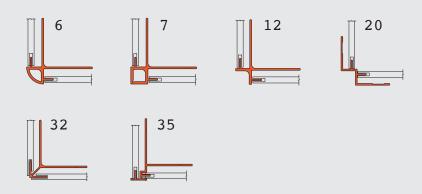
Horizontal and Vertical Joiner Extrusions



Starter, Abutment & Window Extrusions



Corner Extrusions



Colours to Inspire

ILLUSTRO & BRIGHT

ILLOSTINO & DINIOTTI											
PALLADIUM COIN (E87CL)	AZTEC SILVER (E68NL)	MONACO STONE (E65TL)	BOLD AS BRASS (E58TL)	MEDALLION BRONZE (E44TL)	MACCHIATO (E36TL)	BRONZE MONUMENT (E30TL)					
PALEADION COIN (EB/CE)	AZTEC SIEVER (EUGINE)	MONACO STONE (E031E)		MEDALLION BRONZE (L4412)	MACCHIATO (ESUTE)	BRONZE HONOHENT (ESOTE)					
		BRIGHT	BRIGHT	BRIGHT	BRIGHT	BRIGHT					
GUN BARREL (E25TL)	GOLD ODYSSEY (E78GL)			SMOKEY QUARTZ (E60TG)	SMOOTH ONYX (E25TG)	BURNISHED GOLD (E80GG)					



MATT

PLATINUM (E87CM)	STELLA GREY (E78NM)	STAR DUST (E70NM)	APOLLO GREY (E66NM)	SEA BREEZE (E67TM)	PORTLAND STONE (E60TM)	AMBER GOLD (E42TM)
JAMAICAN CHOCOLATE (E35TM)	BURNT SIENNA (E29TM)	EBONY (E26TM)	SUMMER MAIZE (E82GM)	SOVEREIGN GOLD (E78GM)	MAROOCHY SAND (E74GM)	EVERSHIELD° HIGH GRADE ANODISING

Aluminium plastic core Composites Vs. Solid Aluminium plate

Most aluminium composites are predominantly plastic cores, with "aluminium veneer" on top and bottom.

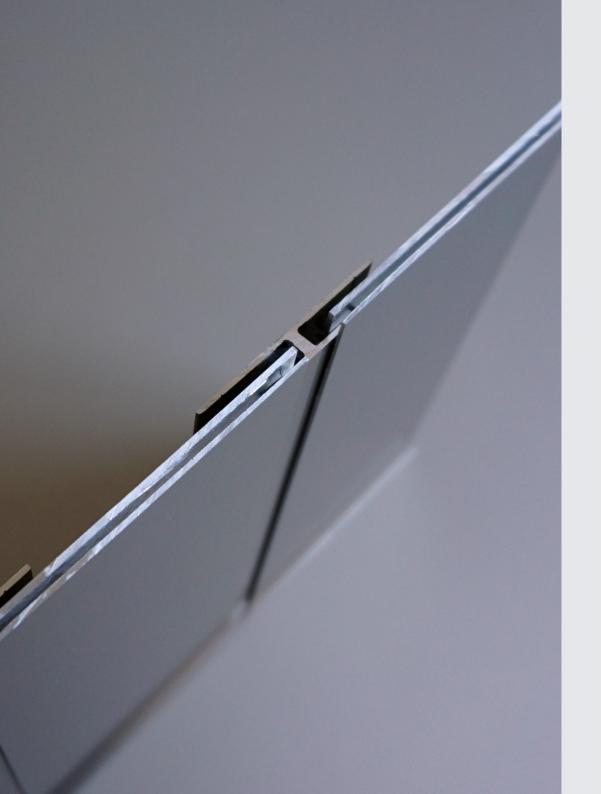
Therefore it is sometimes referred to by some critics as "camouflage product" or "look alike". This plastic core centre is often sandwiched by two pieces of Aluminium skin, sometimes as thin as 0.2mm thick. A growing concern is the high combustibility levels of the plastic core materials. Even FR composite cores are considered combustible under extreme heat.

By engineering standards 0.5mm aluminium to 0.2mm thick Aluminium skin, can be considered to be "wallpaper" in performance. Hinge loads of large panels on these insufficient thicknesses must be supported by costly stiffening substructure.

Solid aluminium sheets do not have this problem. On the contrary: solid sheet alloy can be easily fabricated and retains its strength, and is stable at low and high temperatures. Aesthetically retaining its flatness and will not oil can.

The following advantages immediately draw your attention as to why solid plate aluminium should be your first consideration for Architectural wall cladding.

- **a.** As a head start there is no fire hazard at all. It is a non combustible A1 classified building product according to EN1350.1, which of course also does not develop any toxic gas or smoke under fire
- **b.** It may only ultimately melt with very high temperatures. No flame spread
- **c.** Solid pre-painted aluminium sheet in the proper, optimized alloy and temper may have mechanical properties (permissible load) of approximately 30% stronger than regular composite panels
- **d.** Solid pre-painted sheet can easily be recycled with substantial scrap value. Thus, scrap during fabrication or installation or even life expectation of usually far beyond 30 years (in fact there is no virtual performance limitation) will remain a major asset to the building owner
- **e.** There is no environmental risk at all on the contrary, it is a cradle to cradle material which can easily be recycled at the end of the buildings life span, recycled for soft drink cans or other Aluminium usage



Recycling of fabrication scrap and the material at the end of its life cycle

Critical questions have been raised concerning the recyclability of aluminium composite cladding. As the thin aluminium skins are designed to bond front and back of plastic core panel for the duration of it's life span. There is no practical and economical way to separate the aluminium skin from the plastic core for recycling.

In many developed countries there is a penalty, in disposing these aluminium composite panels (plastic matrix) at the end of the buildings life cycle, as the unwanted plastic core material takes up to 700 years to biodegrade, alternatively the economical cost and embodied energy in recycling is large, all resulting in a largely negative result for the environment. In many countries many architects who specify environmentally unfriendly products are challenged by local government.

Avoiding all these critical issues with a 4mm to 5mm thick Solid aluminium plate with high quality anodise finishes, which encompasses a 30 year warranty with an expected life span of 50 years. This 100% recyclable product, proves a superior architectural choice that can easily be recycled at the end of it's life cycle.

