

SOLEO 4TH GENERATION

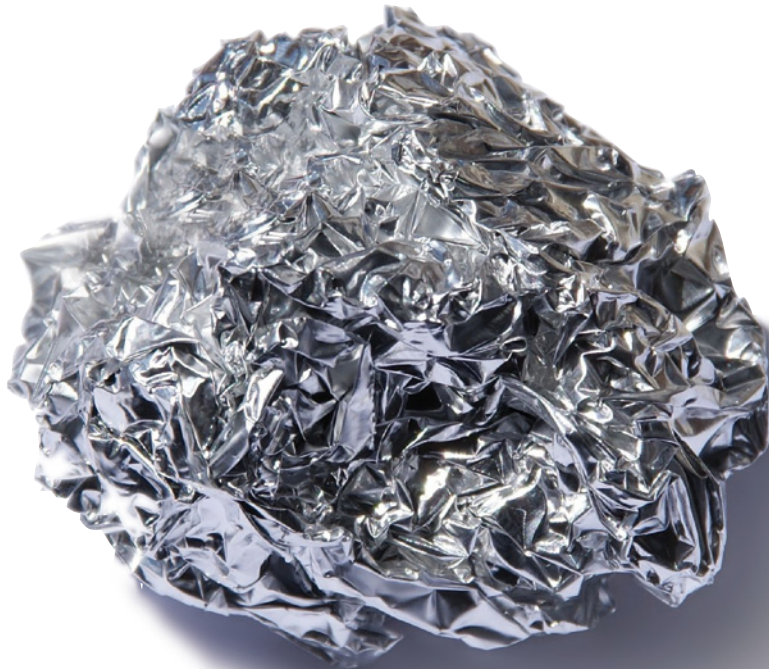
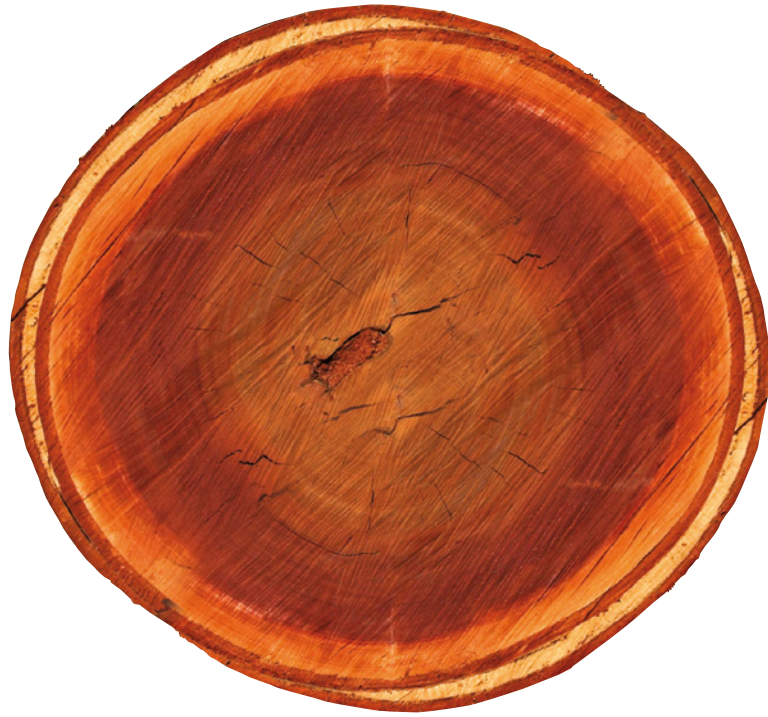
Facade cladding

Sun shaders

Screens

Balustrades

Geolam[®]



Leading edge technologies

An alliance of two outstanding materials

Soleo 4G is the fruit of innovative technologies and a remarkable alliance of two special materials: aluminium and wood composite. Soleo is designed to unlock the full potential of composite wood in new and creative design of facades and wall cladding. Six to eight times lighter than 2nd generation boards, Soleo 4G is also simpler and faster to install. The boards feature an impressive dimensional stability, expanding by only one third the usual rate. They are also highly resistant to fire. Selecting Soleo 4G opens the door to a stunning array of original, aesthetic, hardwearing, and economical solutions for facade trim, sunshades, screens, view breakers, balustrades... The range of applications is vast, and installing is simplicity itself. Soleo 4G is also ideal for designing claustras and decorating interiors to professional standard and a finish that is as soft to the touch as it is elegant to view.

Aluminium and composite wood

Geolam's new line in cladding is the outcome of research in Japan by developers of high performance composite wood. Soleo 4G boards owe their ultra-resistant qualities to an exclusive process of co-extrusion developed in the Japanese construction industry, whereby an aluminium core section is fabricated with an outer covering, or skin, of composite wood. The highly resilient and corrosion-resistant aluminium is therefore covered with a waterproof layer of composite wood. The result: Soleo comes with a 20-year guarantee, and its lifespan for external construction is 50 years minimum.





Guaranteed levels of performance

Boards are six to eight times lighter

The exclusive manufacturing process for Soleo 4G boards relies on hot co-extrusion of aluminium and composite wood. This process produces sections with only one third as much wood composite content as standard boards, and one third the weight of the equivalent composite core volume (in the form of the metallic core). The resulting lightness makes Soleo 4G the ideal choice for building facades. Boards exhibit the same rigid characteristics as the equivalent standard rigid composite boards.

Simple and rapid installation

The design of Soleo 4G shortens the laying phase for facade cladding. Whole modules can be simply designed in factory or workshop and then installed on pre-sealed fixing battens, or on any other suitable pre-prepared structure. Significant savings in time and labour costs can be made. Cutting and fitting the boards requires only a light metal saw. Standard fixing as for simple aluminium structures is all that is required. Finally, Soleo 4G is not just lightweight, but also very rigid, and this means supports can be spaced up to 1,8 m apart.

Extreme dimensional stability

Soleo 4G boards expand at the same rate as aluminium, i.e. less than 1mm/m for a temperature variation of 50°. They therefore expand at a third the rate quoted for standard rigid composite wood boards, and this simplifies installation. Customers place a high value on Soleo 4G's exceptional structural rigidity, assured thanks to the co-extrusion process used in its manufacture.

Exceptional fire resistance

Soleo 4G's aluminium core affords above-average fire protection, an eminently attractive quality when it comes to selecting facade cladding or covering. CRIITT Bois report n° 2011-453 dated 29 June 2011 cites the following ratio: $M_{cm} = M_c = 2,5 \text{ MJ/ml}$, where M_{cm} is the mobilisable combustible mass, and M_c is the combustible mass.

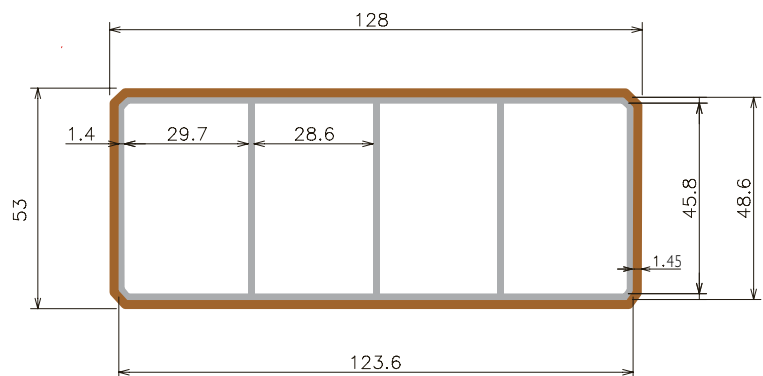




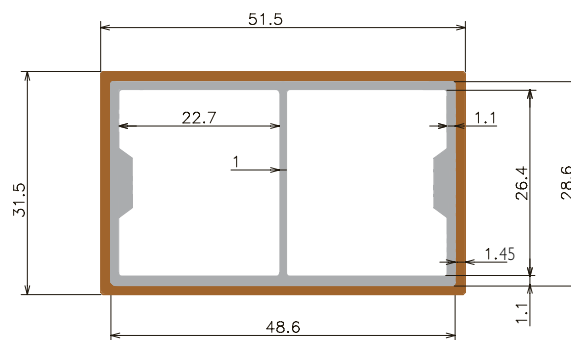


Trim

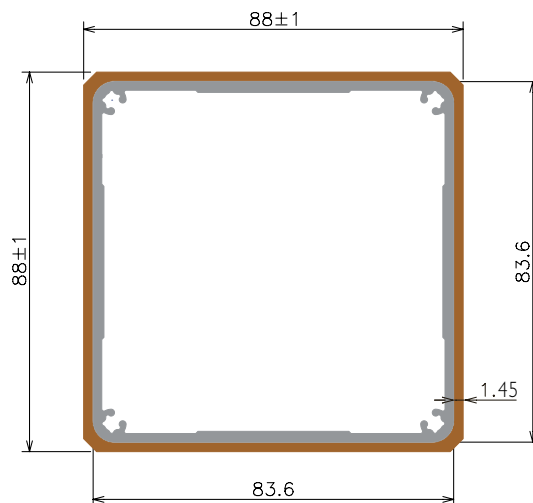
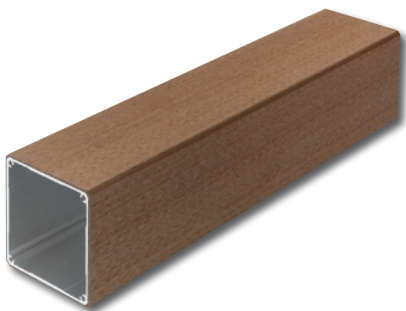
Soleo 10:



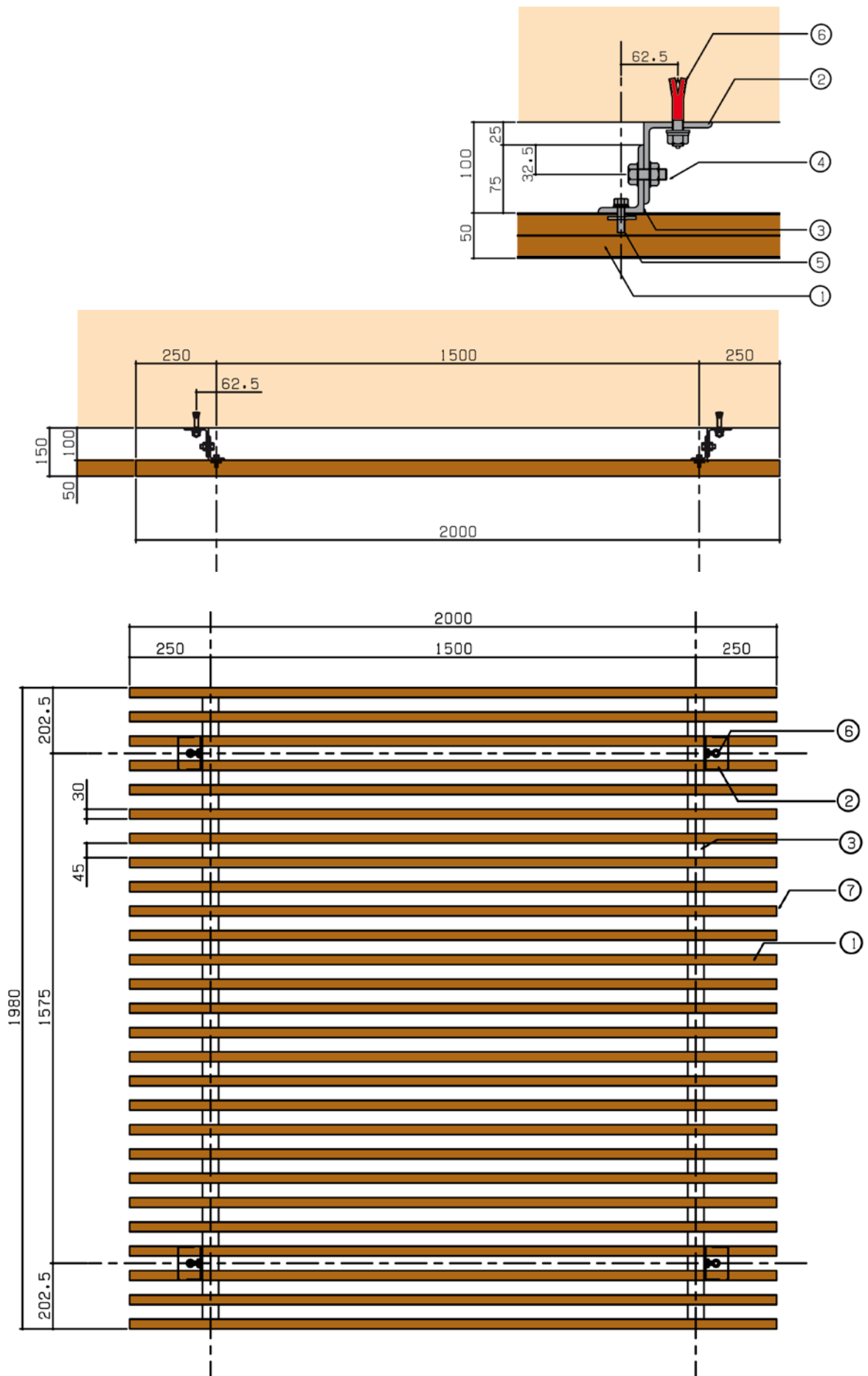
Soleo 11:



Careo 10:

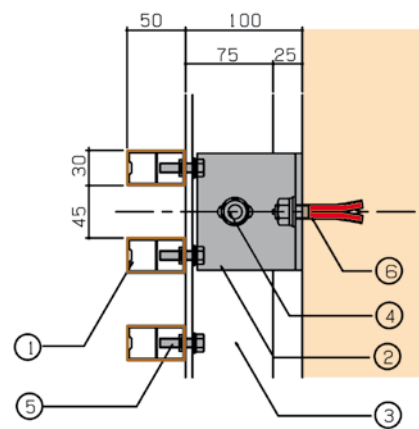
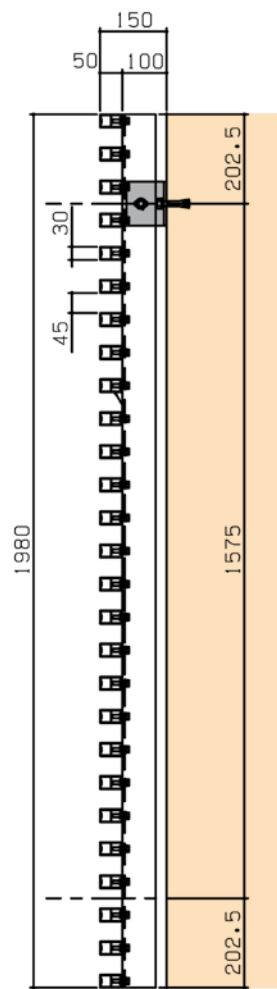


	Soleo 10	Soleo 11	Careo 10
Weight	2,33 kg	0,73 kg	2,63 kg
Maximum cantilever	250 mm	250 mm	250 mm
Rosewood	yes	yes	yes
Teak	yes	yes	yes
Moleskin	3000 m and longer	3000 m and longer	3000 m and longer
Ebony	3000 m and longer	3000 m and longer	3000 m and longer
Cross section 1	53 mm: 15 cm ³	31 mm: 2,77 cm ²	88 mm: 19,54 cm ³
Cross section 2	128 mm: 9,83 cm ³	51 mm: 1,7 cm ²	88 mm: 19,54 cm ³
Second moment 1	53 mm: 98,7 cm ⁴	31 mm: 6,72 cm ⁴	88 mm: 81,66 cm ⁴
Second moment 2	53 mm: 23,9 cm ⁴	51 mm: 2,41 cm ⁴	88 mm: 81,66 cm ⁴
Hollow rate (%)	89,7	87,6	91,0



Laying technique

	Description	Dimensions
1	Board	See illustrations
2	Pre-galvanised L-shaped angle blade	75 × 90 × 6
3	Pre-galvanised L-shaped angle blade	50 × 75 × 6
4	Stainless steel nut	M 12
5	Stainless steel blind nut or clinch nut	M 8
6	Stainless steel hollow wall anchor	M 12
7	Finishing plug	





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