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# Decking Cladding Soffit Lumber

**dasso Bamboo**

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Sustainable Innovation. Reliable Performance.  
Greener Future.

**25**  
YEARS  
GUARANTEE



GLOBAL INNOVATOR OF BAMBOO PRODUCTS

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dasso reserves the right to revise product designs and specifications without prior notice. Due to potential color variations caused by the printing process, the actual product may differ slightly from the images shown in this brochure. dasso retains the final right of interpretation for all content herein. For precise information, please refer to the final delivered product.

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# BAMBOO

Bamboo is one of the world's fastest-growing plants, capable of growing more than one meter per day.

A single hectare of bamboo forest can absorb approximately 4.91 to 5.45 tons of carbon dioxide annually—about 33% more than typical tropical forests.

Unlike trees, bamboo regenerates through a rhizome root system, which allows it to be harvested without causing deforestation. In fact, harvesting bamboo encourages new growth, making it a truly renewable resource.

If left unharvested, bamboo naturally dies and decomposes within 10 to 15 years, releasing part of the previously absorbed carbon. By responsibly utilizing this fiber-rich plant, dasso transforms it into high-performance, eco-friendly materials—effectively locking the captured carbon within dasso bamboo products for their entire life cycle.

Made primarily from biomass, dasso bamboo products can be recycled or converted into biogas at the end of their useful life. This ensures the stored carbon remains out of the atmosphere and contributes to a closed-loop, sustainable carbon cycle.

- Our certified Environmental Product Declaration (EPD) discloses comprehensive carbon footprint data as part of our commitment to sustainability and transparency.

- Each dasso bamboo product sequesters carbon throughout its lifespan and is fully recyclable—substantially reducing emissions from both manufacturing and transportation.

- Through advanced processing technologies, dasso bamboo products achieve a net negative carbon footprint.







# dasso

## Company Profile

Established in 1993, the dasso Group is a global leader in the development and production of innovative bamboo products. Headquartered in Hangzhou, China, the company operates 10 manufacturing facilities and over 1,000 employees. Additionally, dasso owns more than 2,700 acres of productive, sustainable FSC certified bamboo forests in China.



Annual manufacturing output

5,700,000 M<sup>2</sup>

### Hangzhou Dasuo Technology Co., Ltd

Multi-purpose production facility produces 500,000 m<sup>2</sup> per year.

### Fujian Dasso Industry Co., Ltd.

Multi-functional factory inaugurated in 2021, with an annual production capacity (dassoCTECH PLUS) of 2 million m<sup>2</sup>, and additional facilities for a second phase.

### Jiangxi Zhushang Bamboo Industrial Co., Ltd

Specialized dassoCTECH factory producing 1 ,000,000 m<sup>2</sup> per year.

### Zhejiang Xinhaiye Bamboo Technology Co., Ltd

Factory specialized in the production of dassoXTR (500,000m<sup>2</sup>/year).

### Hangzhou Zhuangyi Furniture Co., Ltd

The bamboo furniture factory produces 400 full 40-foot containers annually.

### Hangzhou Xinzhu Cultural & Creative Co., Ltd

Integrated design, development, sales and promotion of green bamboo, original design of bamboo crafts.

### Zhejiang Daocheng Bamboo Industry Co., Ltd

A dedicated team of 50 export sales professionals delivers dasso products to markets worldwide.

### Shunchang Zhuji Bamboo Industrial Co., Ltd

Multi-purpose production facility produces 200,000 m<sup>2</sup> per year.



01

Bamboo culms aged 4 to 6 years are sustainably harvested from natural bamboo forests.

02

Bamboo culms are carefully cut, split, and processed into refined strips.

03

The bamboo strips are crushed into fiber strands.

04

Heat treatment technology.

05

The bamboo strands are fused into panels and then cut into various sizes.

06

dasso bamboo products are prepared and packaged.

## The "Fused Bamboo" Treatment Process

### Decking

Reversible face  
Structural T&G end match

### Cladding

Hidden fastener system, Easy to install,  
with end-matching for quick and seamless  
assembly.

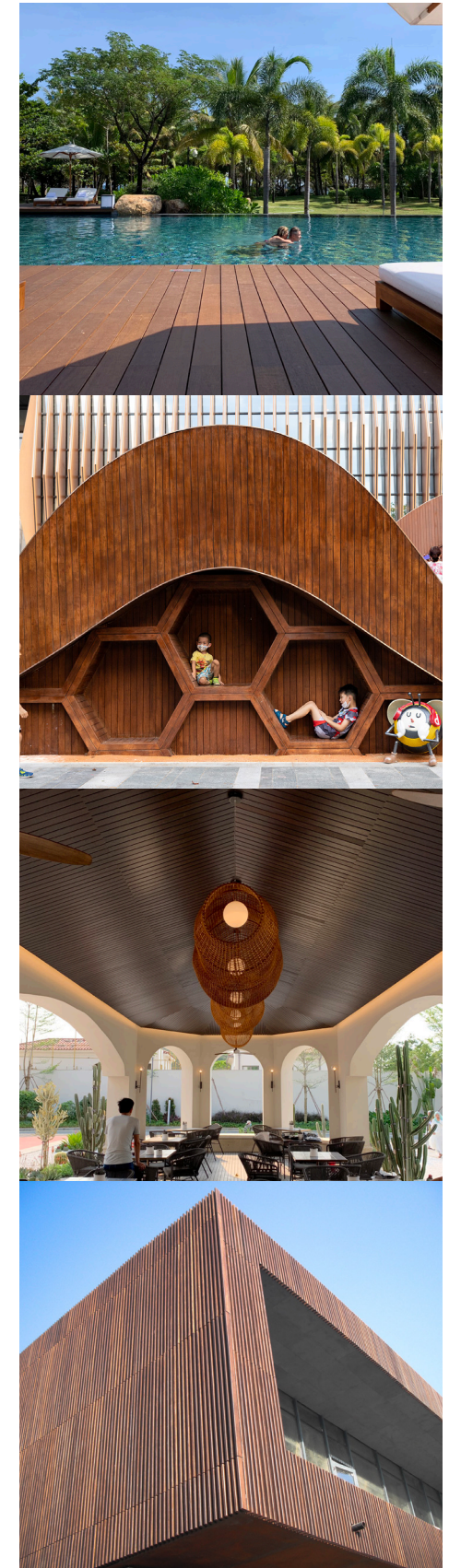
### Soffit

Hidden fastener system, Easy to install,  
with T&G end match

### Lumber & Panel

Versatile applications with flexibility for  
customized production.

9





Technological  
Innovations

dassoXTR

dasoXTR's patented fusion process extracts the sugars and starches from the bamboo fibers and replaces them with phenolic resins. Then, the impregnated fibers are compressed to create a very hard, dense, and durable Fused Bamboo that prevents bacteria, fungus, and other microorganisms from attacking dassoXTR.



dassoCTECH

dassoCTECH is made by crystallizing bamboo fibers with CeramiX particles, impregnating them with phenolic resin (the same durable resin used in bowling balls), and then compressing the material to form Fused Bamboo. The CeramiX particles bond to the fibers, preventing nutrients from attracting bacteria, fungi, mold, or insects. As a result, the bamboo fibers do not rot easily , even when exposed to outdoor environments.



Performance Comparison  
Between dasso Bamboo and Wood

Species	Brinell Hardness (N/mm²)	Density (kg/m³)	Swelling Rate (Width) (%)	Swelling Rate (Length) (%)	Swelling Rate (Thickness) (%)	Durability Class	Usage Class
Oak	34 - 37	680 - 720	9.6	0.1 - 0.3	4.5	2	3
Merbau	46 - 52	830 - 880	4.4	< 0.1	2.7	1	4
Ipe	60 - 70	1000 - 1200	5.1	< 0.1	5.1	1	4
Cumaru	57 - 65	1050 - 1150	7.7	< 0.1	5.5	1	4
dassoCTECH / XTR	80-100	1150- 1200	0.6	< 0.1	4.0 - 5.1	1	4

The Feature of  
Fused Bamboo



Environmentally Friendly

**dassoXTR      dassoCTECH**  
Negative carbon throughout its entire life cycle.  
  
For more information, please refer to our Environmental Product Declarations (EPD).



Termite Resistance

**dassoXTR**  
Termite resistance level:  
Class 8 [AWPA-2012, AWWA E1-09].  
  
**dassoCTECH**  
Reticulitermes santonensis  
DC D(durable)  
[EN 117]



Mould Resistance

**dassoXTR      dassoCTECH**  
Class 0  
[DIN EN ISO 846: 1997-10]  
[DIN EN 152: 2011]



Hard & Durable

**dassoXTR**  
Hardness - Brinell: ± 106.8N/mm² (DIN EN 1534)  
Modulus of Rupture (MOR): 87N/mm²(DIN EN 408)  
Modulus of Elasticity (MOE): 18400N/mm² (DIN EN 408)  
  
**dassoCTECH**  
Hardness - Brinell: ± 79.2/mm² (DIN EN 1534)  
Modulus of Rupture (MOR): 110N/mm² (DIN EN 408)  
Modulus of Elasticity (MOE): 12300N/mm² (DIN EN 408)  
  
**dassoXTR      dassoCTECH**  
Class 1 in durability (EN 350:2016)  
Class 4 in terms of usage (EN 350 - EN 335)



Fire Resistance

**dassoXTR      dassoCTECH**  
Fire standard decking:  
Class B<sub>1</sub>-s1 (EN 13501-1)  
Fire standard cladding:  
Class B-s1,d0 (EN 13501-1)



Guarantee

**dassoXTR      dassoCTECH**  
25-year warranty for residential and commercial use

Patented  
Technology

In 2008, dasso—the global leader in bamboo innovation—revolutionized the market with the launch of dassoXTR. Since then, supported by its dedicated research and development office, dasso has continuously developed pioneering bamboo solutions, including the exclusive dassoCTECH range.

All our products are rigorously tested and certified to meet the most demanding European standards for hardness, fire resistance, durability, and health compliance—ensuring performance, safety, and sustainability.





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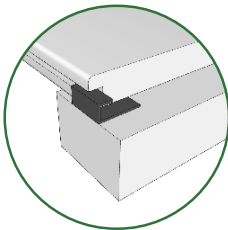
# Decking

## Decking Specification

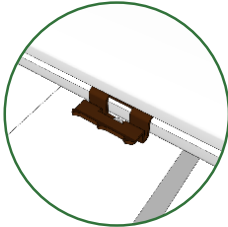
Designation	Product Code	Dimensions (mm)	Profile	End Matched T&G
dassoXTR	XD20-SG2-5TG-PSR/V	20 x 137 x 1850		Yes
	XD20-MG2-5TG-PSR/V	20 x 155 x 1850		
	XD20-WG2-5TG-PSR/V	20 x 178 x 1850		
	XD18-SG2-5TG-PSR/V	18 x 137 x 1850		
dassoCTECH	ED20-SG2-5TG-PSR/V	20 x 137 x 1850		No
	ED20-MG2-5TG-PSR/V	20 x 155 x 1850		
	ED20-WG2-5TG-PSR/V	20 x 178 x 1850		
	ED20-SG2-PSR/V-L3	20 x 137 x 3040		
	ED20-MG2-PSR/V-L3	20 x 155 x 3040		
	ELD20-SG2-PSR/V	20 x 137 x 3050		
	ELD20-MG2-PSR/V	20 x 155 x 3050		

Note: References ending with the letter 'R' have a smooth side and a reeded side, while those ending with 'V' have a smooth side and a V-grooved side. Each product is available with optional single-sided or double-sided (long side) grooving.

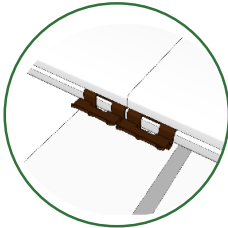
## Decking Installation



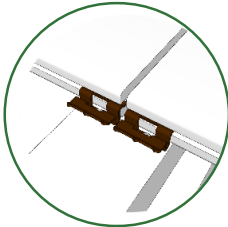
A



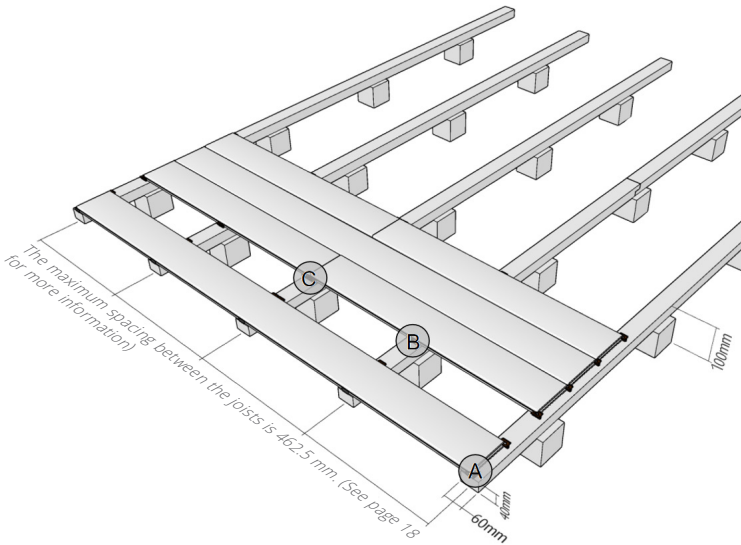
B



C1 With T&G



C1 Without T&G









### Option1: Clip Installation

- Step 1. Determine the surface side of the boards (reeded or smooth surface).
- Step 2. Use fasteners or other suitable fasteners in the following sequence.
- Step 3. Press the fastener in the groove of one decking board.
- Step 4. Tighten the screw in the fastener and the sub beam.
- Step 5. Depending on the type of board, use approx. 20/17/14 fasteners per m<sup>2</sup>, 137/155/178mm wide. When the tongue and groove are connected on the sub-beam, use two fasteners, one for every board.
- Step 6. Only use the included stainless steel decking screws .

### Option 2: Screw down Installation

- Step 1. Determine the surface side of the boards (reeded or Smooth surface). Pre-drill the screw holes 20 mm from the side of the board. Make sure to select an appropriate drill bit for pre-drilling based on the screws being used to prevent the decking from cracking.
- Step 2. Always screw both sides (left and right) of the board.
- Step 3. Use stainless steel decking screws.

## Decking Accessories

Clips Code	Dimensions	Photos	Code	Dimensions	Photos
H-Clips (DC-08A)	27 x 22 x 11mm		DS-01	4.2 x 30mm	
S-Clips (DC-07) (Decking=18mm)	29 x 25 x 10mm		DS-02	4.2 x 25 mm	
S-Clips (DC-06) (Decking=20mm)	29 x 25 x 11mm		DS-03	4 x 41 mm	



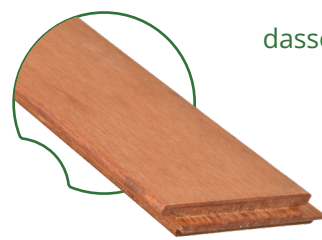


# Cladding

## Cladding Specification



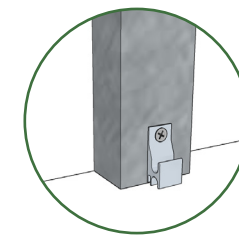
dassoXTR



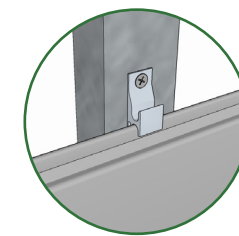
dassoCTECH

Designation	Product Code	Dimensions (mm)	Profile	End Matched T&G
dassoXTR	XS18-SSL-5TG-PSS	18 x 137 x 1850		Yes
	XS18-WSL-5TG-PSS	18 x 178 x 1850		
	XS12-100G2-PSS	12 x 100 x 1860		No
dassoCTECH	ES18-SSL-5TG-PSS	18 x 137 x 1850		Yes
	ES18-WSL-5TG-PSS	18 x 178 x 1850		
	ES12-100G2-PSS	12 x 100 x 1860		No

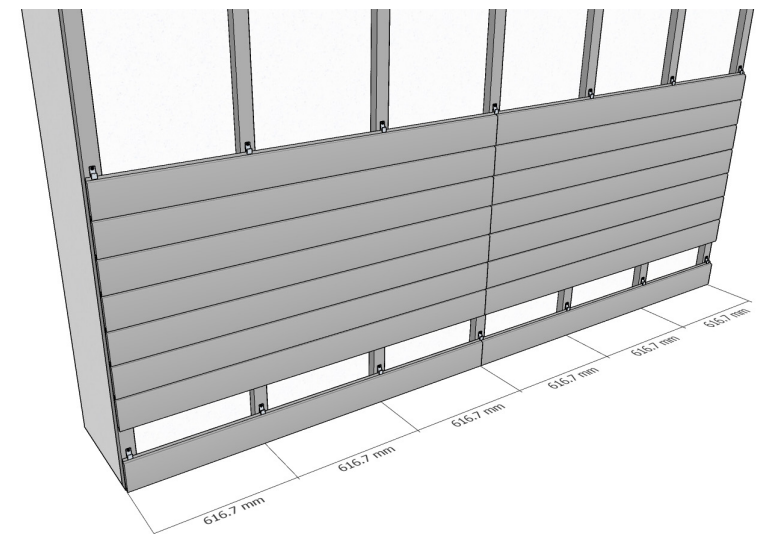
## Cladding Installation



First Row



Second Row



### Step 1. Levelling first row of fasteners.

- Start with the lower row of clips and make sure it is aligned (using a spirit level).

### Step 2: Install the first row of boards.

- Begin by positioning the clips for the next row using the first row of boards as a guide.
- Ensure that the clips are securely engaged in the groove, keeping the boards level. Tap the boards gently into place with a rubber mallet for precise alignment.
- We recommend securing the ends (end joints) of the boards to a batten using two clips for added stability and a seamless finish.

### Step 3: Install the second row of clips.

- Install the second row of clips by pushing them down onto the upper edge of the first row of boards.

### Step 4: Install the second row of boards.

### Step 5: Continue with the rest.

- Continue installing the cladding boards in the same manner to cover the entire surface. Make sure to keep the clips level and maintain a sufficient ventilation gap (5-10 mm) at both the top and bottom of the cladding.

### \*Notifications 1

1.The decking clip is also suitable for the installation of cladding. However, note that the clip specifically designed for cladding has better properties to resist wind forces.



### \*Notifications 2

For the most popular board of 137 mm:

- 1.The actual width, visible from the facade, is 121 mm (137 mm including the overlapping profile).
- 2.You need to plan for 4.35 boards per square meter, taking into account the visible width and the space generated by the clips.

## Cladding Accessories

Clips Code	Dimensions	Photos	Code	Dimensions	Photos
Clip (CC-18)	42 x 19 x 15mm		CS-01	5.5 x 28.5mm	
Clip (CC-12)	40 x 24.5 x 7.5mm		DS-01	4.2 x 30mm	
			DS-02	4.2 x 25mm	
			DS-03	4 x 41mm	





# Soffit

## Soffit Specification

Designation	Product Code	Dimensions (mm)	Profile	End Matched T&G
dassoXTR	XSO12-100-5TG-PSS	12 x 100 x 1850		Yes
dassoCTECH	ESO12-100-5TG-PSS			

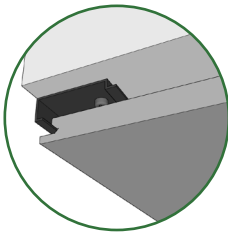


dassoXTR

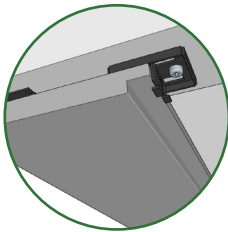


dassoCTECH

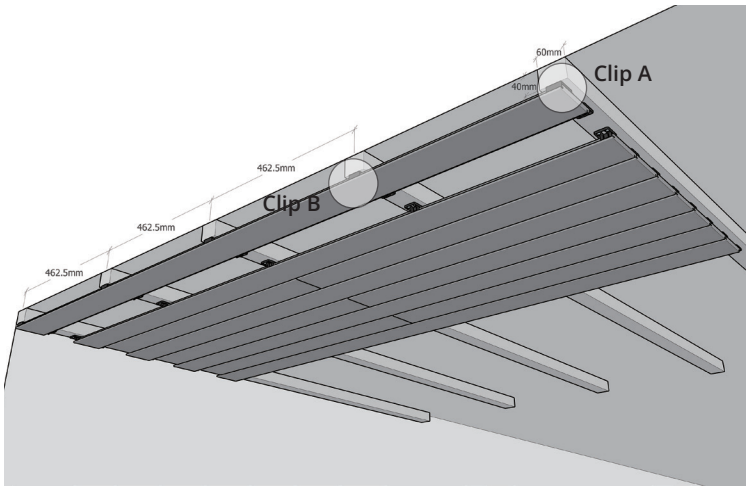
## Soffit Installation



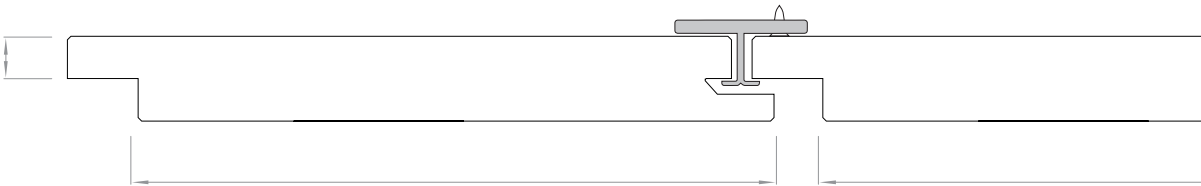
Clip A



Clip B



- Step 1:**  
Make sure the soffit is installed on the correct side. Use the soffit clip.
- Step 2:**  
Use the starter clip A for the first board, using one screw per starter clip.
- Step 3:**  
Use the soffit clip B to install subsequent soffit boards, screw down the nail to contact the joint and clips, use two screws per field clip for the soffit.
- Step 4:**  
Use approx. 27 fasteners per m<sup>2</sup>, each joint should use the clips.



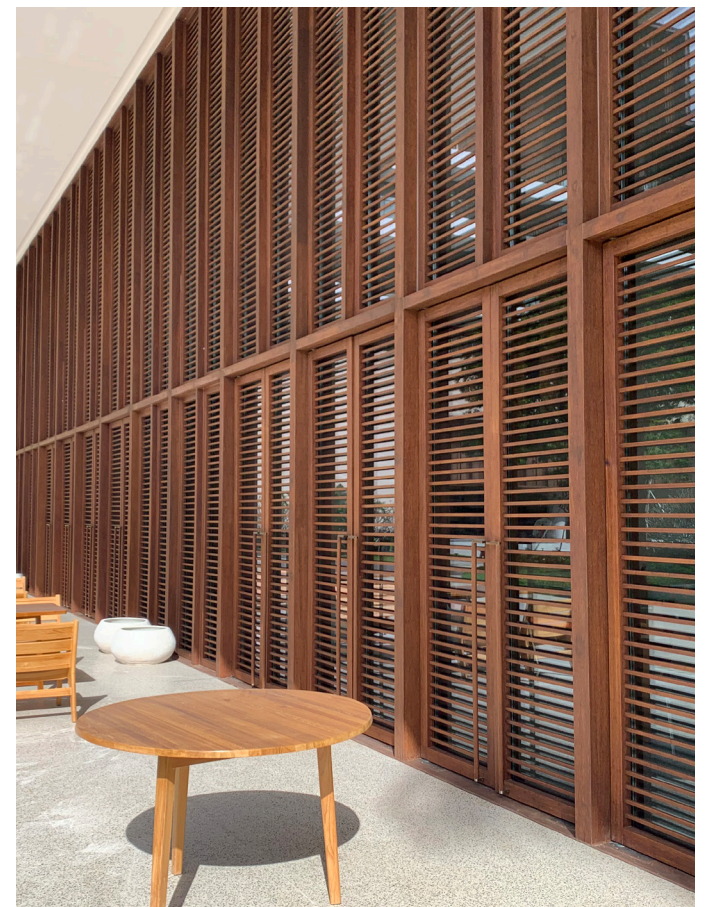
## Soffit Accessories

Code	Dimensions	Photos
Clip SOF-1	32 x 32 x 10.8 mm	
Clip SOF-2	32 x 25 x 11.5 mm	
SS-01	4.2 x 27.5 mm	

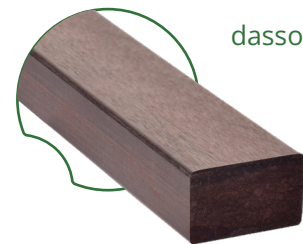




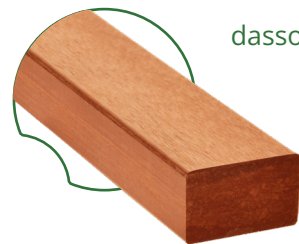
# Lumber & Panel



## Lumer & Panel Specification



dassoXTR



dassoCTECH

Specification	Product Code	Dimensions (mm)	Profile	End Matched T&G
dassoXTR	XL20-205/307-6FT-UAC	20 x 205 / 307 x 1860		No
	XP20-625-6FT-UAC	20 x 625 x 1860		
	XF30-65/100-6FT-PSS	30 x 65 / 100 x 1860		
dassoCTECH	EL20-205/307-6FT-PAC	20 x 205 / 307 x 1860		
	EF30-65/100-6FT-PSS	30 x 65 / 100 x 1860		
	EL40-152/307-6FT-PAC	40 x 152 / 307 x 1860		
	ELF20-65/100/137/155-PSS	20 x 65/100/137/155 x 3050		
	ELF30-65/100/137/155-PSS	30 x 65/100/137/155 x 3050		



# Necessary Accessories

Below are the minimum quantities required for a standard installation without complications.  
Please note that this is an estimate and does not account for site losses.



## Decking

Length (mm)	Width (mm)	Thickness (mm)	Spacing between joists (mm)	Clips per m²	Linear meters of joists per m²
1850	137	20	462.5	20	2.3
1850	155	20	462.5	17	2.3
1850	178	20	462.5	14	2.3
3040	137	20	434.3	20	2
3040	155	20	434.3	17	2
3050	137	20	435.7	20	2
3050	155	20	435.7	17	2

## Cladding

Length (mm)	Width (mm)	Thickness (mm)	Spacing between joists (mm)	Clips per m²	Linear meters of joists per m²
1850	137	18	616.7	16	1.8
1850	178	18	616.7	12	2.3
1850	100	12	462.5	27	2.3

## Soffits

Length (mm)	Width (mm)	Thickness (mm)	Spacing between joists (mm)	Clips per m²	Linear meters of joists per m²
1850	100	12	462.5	27	2.3

# Load Capacity

## Recommended Joist Spacing

Application	Example	Load Distribution (kN/m²)	Concentrated Load (kN)	Recommended Joist Spacing (mm)					
				434.3		462.5		506.7	
Category A	Residential Areas			CTECH	XTR	CTECH	XTR	CTECH	XTR
	Floors	1.5 to 2,0	2.0 to 3.0	√		√		√	
	Stairs	2.0 to 4.0	2.0 to 4.0	√		√		√	
	Balconies	2.5 to 4,0	2.0 to 3.0	√		√		√	
Category B	Office Space	2.0 to 3.0	1.5 to 4.5	√		√		√	
Category C	Areas with Variable, High to Intense Traffic								
C1	Schools, cafes, restaurants, etc.	2.0 to 3.0	3.0 to 4.0	√		√		√	
C2	Churches, theaters, cinemas, conference rooms, etc.	3.0 to 4.0	2.5 to 7.0 (4.0)	√		√		√	
C3	Museums, exhibition rooms, etc.	3.0 to 5.0	4.0 to 7.0	√		√		√	
C4	Dance halls, gymnasiums, stages.	4.5 to 5.0	3.5 to 7.0	For more information and technical support, please contact dasso headquarters or one of its subsidiaries.					
C5	Areas likely to host large crowds, such as concert halls, sports arenas, including stands, etc.	5.0 to 7.5	3.5 to 4.5						
Category D	Commercial Areas								
D1	Commercial spaces	4.0 to 5.0	3.5 to 7.0 (4.0)	For more information and technical support, please contact dasso headquarter- ters or one of its subsidiaries.					
D2	Large shopping centers	4.0 to 5.0	3.5 to 7.0						

\*These data are derived from the load specifications for floors, balconies, and stairs in buildings, as outlined in European standard EN 1991-1-1. The maximum load capacities of our products are based on MOR and MOE laboratory tests conducted in accordance with EN 408. However, please note that we are not a certified calculation body, and these values represent our interpretation of the test results.



# Fading & Maintenance

Fused bamboo (dassoXTR and dassoCTECH) is a natural material, so variations in grain and color may occur. Exposure to UV rays and weather will naturally alter its appearance over time. dassoXTR boards feature a rich chocolate tone, while dassoCTECH presents a warm caramel color at installation. Without regular maintenance, both will gradually develop an elegant silver-gray patina, similar to other hardwoods exposed to sunlight. To preserve their original brown tones, we recommend routine care using an outdoor water-based oil or saturator.

## dassoXTR



## dassoCTECH



# Normal Phenomena



Below are photos of projects completed with dassoXTR and dassoCTECH, taken immediately after installation and several years later, without maintenance.

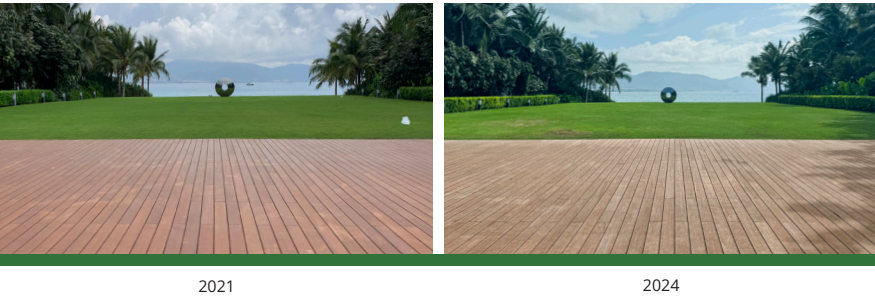
## dassoXTR

Project Reference  
– Zhejiang College of Tourism



## dassoCTECH

Project Reference  
– Park Hyatt Sanya Sun Bay Hotel



# dasso Warranty

dassoXTR and dassoCTECH offer a limited 25-year warranty against manufacturing defects and guarantee that the material will not suffer structural damage due to fungi or termites during this period, provided the material has been installed and maintained according to our guidelines.

## Warranty Details

- Our outdoor bamboo planks are natural products. Like wood, their grain and color evolve over time with exposure to weather conditions. Color variations are a natural characteristic and cannot be considered a basis for claims.
- This warranty does not cover damages caused by misuse, impact, insect infestations, force majeure events, or damage due to other unusual circumstances.
- Purely aesthetic imperfections, such as superficial marks, discoloration from light, microdeformations, or surface wear, are not covered. This warranty does not include damage resulting from improper installation, cleaning, or maintenance. Mechanical or chemical damage is also excluded.
- This warranty statement supersedes all previous statements; the manufacturer's warranty applies only to the current version.
- Minor cracks and splits at the end of the planks, as well as surface deformations, may appear. This phenomenon is normal for bamboo, as it is for most types of wood, and cannot be a basis for claims.
- The surface may become rougher over time due to weather conditions. This is normal for most types of wood and can be resolved with proper cleaning. It is not a basis for claims.
- Minor dimensional or shape changes of the planks may occur after installation. This phenomenon is normal for bamboo, as it is for most types of wood, and cannot be a basis for claims.

## Warranty Conditions

- To be eligible for the warranty, the flooring must be installed according to the installation instructions. Please read our installation instructions carefully before installing the flooring. No claims will be accepted in case of improper installation!
- This warranty is in addition to the buyer's normal legal rights, including the buyer's rights against the seller.
  - If a claim is accepted before the installation of the material, defective planks will be replaced free of charge. No claims will be accepted after installation if the buyer had noticed defects before installation. This warranty does not cover damage caused by third parties (e.g., transport damage).
  - If defects occur after installation, dasso reserves the right either to repair the defect or provide free materials to the buyer. If the defective product is no longer part of the product range, an equivalent from the current range will be provided.
  - A claim does not extend the warranty period.
  - Replacement costs for materials and other expenses are not included in the warranty.

## Warranty Claim Procedure

The claim must be made in writing within 30 days to the dasso dealer/seller, a dasso subsidiary, or directly to dasso's headquarters. dasso reserves the right to verify the claimed damages.





# Bamboo Decking

bamboo decking is a trusted solution for outdoor applications worldwide, delivering reliable performance across diverse environmental conditions. Since 2003, it has been used in projects across Europe and other regions, proving its durability and versatility on a global scale.

- ↑ Espira Kinrara Resort Hotel / Malaysia
- ↪ The Condo Tembusu / Singapore
- Nikki Beach Club, Koh Samui / Thailand





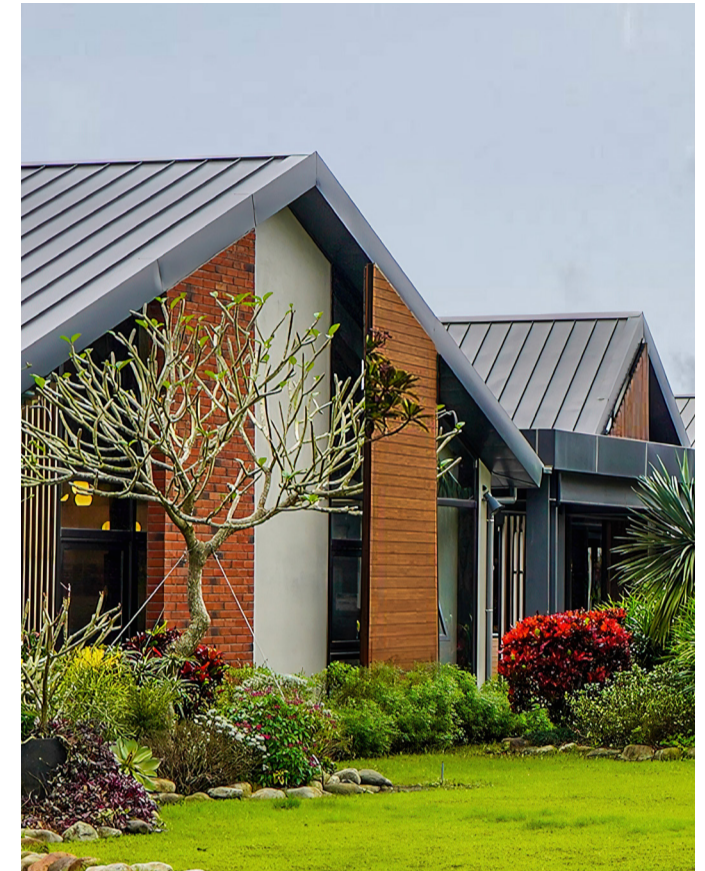


## Bamboo Cladding



dassoXTR and dassoCTECH cladding are an excellent choice for your exterior coverings, combining performance and aesthetics, aging naturally like wood. Our unique FasTrak fastening system is the ideal solution, ensuring a unique aesthetic while reducing waste and speeding up installation by 50% compared to screw-fastened cladding.

- ← Apartment / Italy
- Healtdeva / China
- ↓ World Trade Center Barcelona / Spain







# Bamboo Soffits



Bamboo soffit boards are designed for versatile use, both indoors and outdoors.

They are easy to install, provide great stability, and have a flawless finish. Their elegant design adds a refined aesthetic touch, ensuring a harmonious and sophisticated look for any project.

- ← Surfer's View in Los Angeles / USA
- ↙ NanXun Urban Planning Exhibition Center / China
- Nashville-Davidson County Metropolitan Police Department / USA





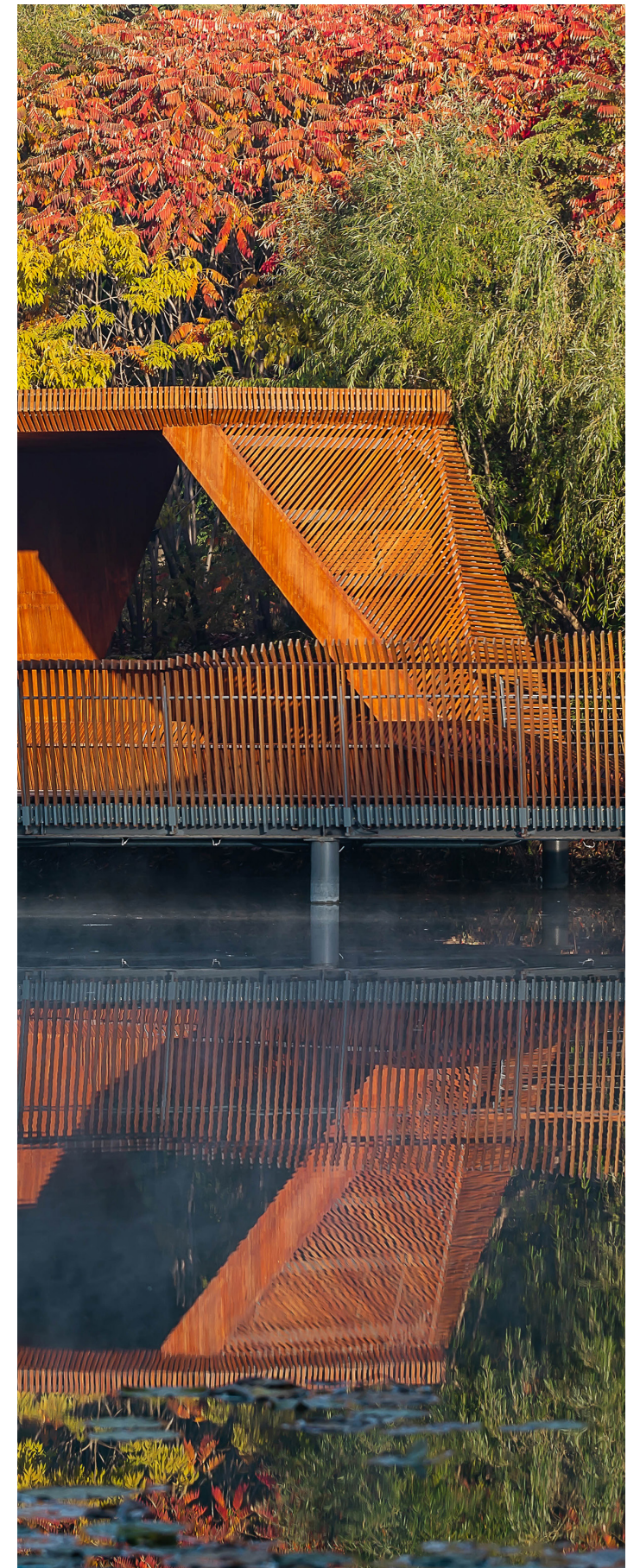


## Bamboo Lumber & Panel

Bamboo lumber & panel are perfect for facade and outdoor furniture projects.

Their hardness, stability, and elegance make them ideal for projects with high-quality requirements and where the risk of vandalism is present, all while maintaining a sleek and refined design.

- ← Private House in Surabaya / Indonesia
- ↻ Private Villa in Karachi / Pakistan
- Changchun Jilin Water Culture Ecological Park / China

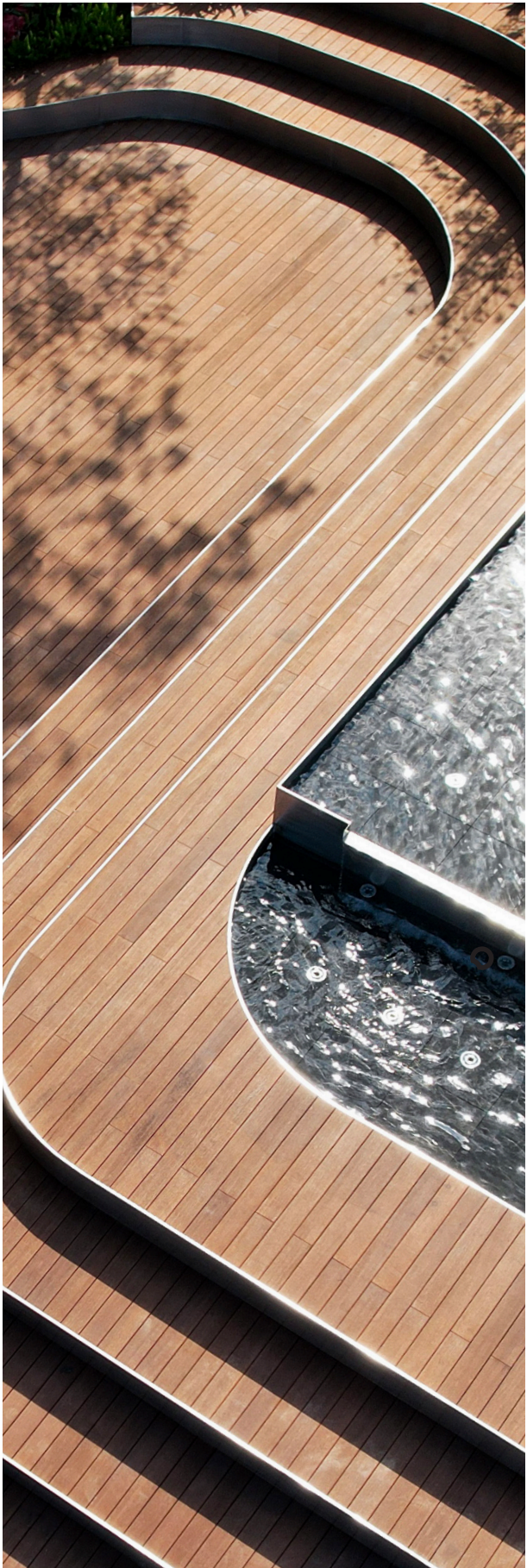




Bamboo  
Scenario

Using various bamboo products helps create functional, durable, and aesthetic living spaces inspired by nature. Our approach, focused on innovation and sustainable development, enables us to design environmentally friendly projects while offering elegant aesthetics and remarkable quality.

- Dongguan Link International Information Park / China
- ↗ Kokako Heights Whare / New Zealand
- Mandarin Oriental, Lake Como / Italy







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FOR MORE INFORMATION,  
FOLLOW OUR OFFICIAL  
ACCOUNTS.

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