

# HARDWOOD CLIP® SLIM AND ACCOYA®

THE ASSURANCE OF PERFECTLY STABLE AND DURABLE TIMBER DECKING OR CLADDING







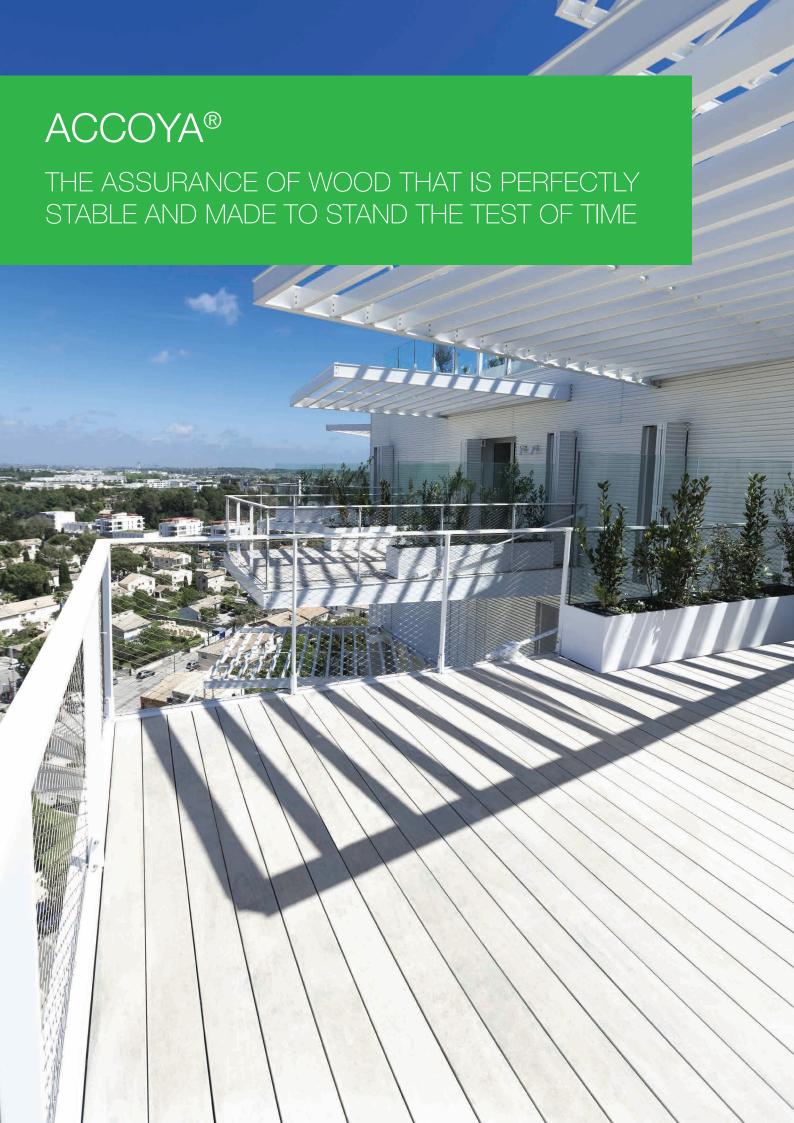






### **CONTENT**

- 03 Accoya® wood
- 04 Characteristics
- 05 Outstanding performance
- 06 Accoya® Color
- 07 Hardwood Clip® SLIM
- 08 Benefits
- 09 Use
- 12 Profiles & Grooving
- 13 Performance that complies with the NF DTU 51.4 standard
- 14 FCBA certification
- 16 Durability, stability and beauty guaranteed
- 17 Hardwood Clip® SLIM and Accoya®: Decking
- 19 Hardwood Clip® SLIM and Accoya®: Cladding
- 21 Hardwood Clip® SLIM range for Accoya® wood
- 23 Növlek® range for Accoya® wood



## **ACCOYA® WOOD**

Accoya® offers a new generation of sustainable decking and cladding in solid wood, a real, environmentally-friendly alternative to tropical wood, treated wood, composites and other non-renewable materials.

Created from a fast-growing certified sustainable timber, it is produced by a unique, patented acetylation process which modifies and improves the original, solid wood properties of the timber from its surface to its core.

Completely non-toxic, Accoya® wood has exceptional performance and can be used to make warp-free long-lasting decking, while preserving the appeal and feel of natural solid wood.







Declare.



## MAIN BENEFITS OF ACCOYA® TIMBER

#### **Performance**



INCOMPARABLE STABILITY



DECKING: 25-YEAR WARRANTY



SUPERIOR DURABILITY



CLADDING: 50-YEAR WARRANTY

#### **Finishes**



BAREFOOT FRIENDLY



SOLID WOOD



EXCELLENT MACHINABILITY



WIDE BOARDS AVAILABLE

### **Sustainability**



LOW CO<sub>2</sub> EMISSIONS



NON-TOXIC



SUSTAINABLE ORIGIN



LOW ENVIRONMENTAL IMPACT



100% RECYCLABLE

## OUTSTANDING PERFORMANCE

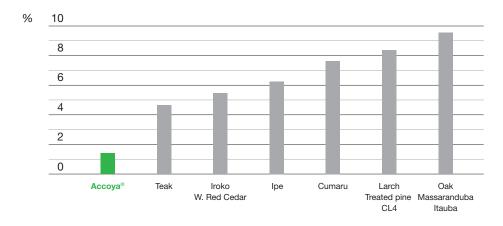
With class 1 (EN350) biological durability, equivalent to that of teak, Accoya® meets the challenges for wood used outdoors. It provides the greatest possible resistance to rot and to insect damage. Designed to last, Accoya® boards are suitable for class 4 use (EN335), with a guaranteed lifespan of at least 25 years in contact with water and soil, and 50 years above the soil.

As well as being **extremely durable**, Accoya® wood guarantees **very stable dimensions**, unmatched on the market. The cladding and decking boards, as well as joists in Accoya® wood remain perfectly straight in all situations. **Free of swelling**, with the **spacing between boards remaining constant** throughout the year, **good shock and abrasion resistance** and **limited rise in temperature in the summer** are some of the exceptional qualities which make it an ideal material for decking and cladding.

#### COMPARISON OF DIMENSIONAL STABILITY

TOTAL TANGENTIAL SHRINKAGE / SWELLING OF STANDARD SPECIES

Source : CIRAD



With a total coefficient of 1.5%, Accoya® solid wood has little sensitivity to distortion or swelling. It is by far the most stable solid wood on the market (e.g. 3 times greater dimensional stability than teak).

For more information: accoya.com



<sup>\*</sup> at least 200 mm above ground, with good ventilation and water drainage.





# GREY DECKING AND CLADDING FOR MINIMAL MAINTENANCE

Accoya® Color Grey offers a natural wood, stained grey throughout.



## HARDWOOD CLIP® SLIM

THE ULTIMATE GENERATION OF INVISIBLE FASTENERS FOR ACCOYA® DECKING AND CLADDING



## **BENEFITS**





SCREWING BOARDS ONTO JOISTS



USE WITH WIDE BOARDS



QUICK AND EASY INSTALLATION 40% TIME SAVINGS



EXTREME STABILITY IN ALL WEATHERS



REGULAR, EVEN SPACING BETWEEN BOARDS ALL YEAR ROUND



ABSORBS SWELLING OF THE BOARDS



EXCEPTIONAL MECHANICAL STRENGTH



EXTREMELY DURABLE



UNCOMPROMISING QUALITY AND PERFORMANCE

### High hardness AISI 304 stainless steel reinforcement

Provides unparalleled rigidity and strength to the fastener, ensuring the board is properly clamped to the joist, and the decking is highly stable, even with the hardest woods.





#### Plastic resin shell

High performance polymer to cope with the mechanical and physical stresses on the fastener.

#### **Gripping ribs**

Hold the fastener in place while it is being screwed in.

#### Integrated spacer

Ensures appropriate, constant and even spacing between boards. It is designed to absorb the swelling of the boards without damaging the wood. 2 thicknesses available: 3 and 5 mm.

\* 5 mm: recommended gap for terraces

### Protective cover for the stainless steel reinforcement

Protects the stainless steel reinforcement, preventing damage to it from the screw head during screwing.

Guarantees durability of the fastener.



#### Black antireflective finish

Ensures full UV protection, as well as complete discretion. Does not reflect the sun's rays or light.

Patented fastener



#### Stainless steel screw A2 AISI 304

Highly resistant to a saline atmosphere. Solid "Antique" colour stainless steel.









#### Small head

Ground serrations, Torx SPAX T-STAR plus.

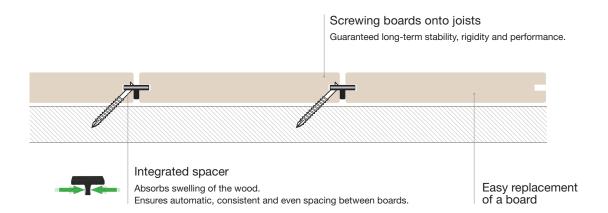
SPAX ground serrations profile

#### **CUT** point

For fast, safe screwing.



**USE** 

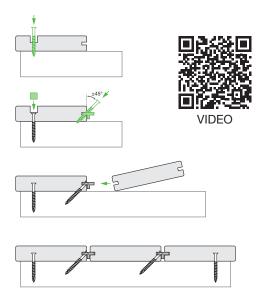


#### **UNBELIEVABLY EASY AND 40% FASTER**

HardWood Clip® SLIM provides **time savings of at least 40% for installing** (apart from the structure) compared to traditional methods, while providing **greater durability and safety**.

Predrilling 1 with the HSS ground drill together with the CUT point and SPAX® screw thread profile guarantee safe, top-quality work, as well as exceptional cutting and penetration speed, with no risk of splitting the wood.

The quality of each of the HardWood Clip® SLIM fastening system components make installing and working unbelievably easy and efficient.





Strictly comply with the requirements of standards and regulations in force (especially NF DTU 51.4 and 41.2), instructions for laying and grooving, manufacturers' instructions, professional standards and best practice.

For more information, contact your dealer or timber merchant or write to us at info@novlek.com.



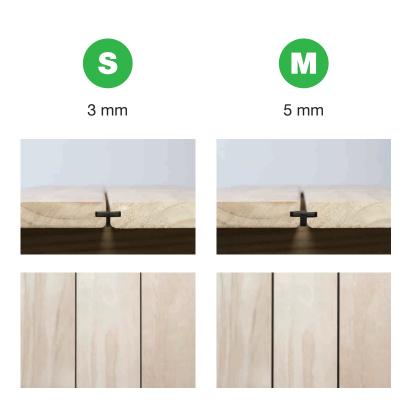
## TWO SIZES FOR SPACING BETWEEN BOARDS FULLY ADAPTED TO EVERY PROJECT WITH ACCOYA®

The spacing shim incorporated into the HardWood Clip® SLIM fastener greatly assists installation, by allowing automatic, even and identical spacing between the boards.

Whether for encouraging proper ventilation beneath the decking, improving rainwater or runoff drainage, to cope with an extra wide board or for aesthetic reasons, HardWood Clip® SLIM offers a choice of two sizes of spacing shims, 3 mm (S) and 5 mm (M) <sup>2</sup>.

With the unparalleled dimensional stability of Accoya®, the use of the model S HardWood Clip® SLIM fastener ensures a narrow spacing of only 3 mm ³ in all weathers, and with no risk.

The choice of spacing allowed by the HardWood Clip® SLIM fastener combined with the choice of board profiles gives a wide range of technical and aesthetic options, as well as applications suitable for every decking or cladding project in Accoya®, whether domestic, commercial or public.



<sup>2)</sup> Accoya® decking: the recommended gap between boards is 5 mm (FCBA Technical specification No. 2023.040.6137 and DT No. 2023.511.9136).

<sup>3)</sup> Only applies to Accoya® cladding. A gap of 3 mm between boards is not recommended for decking unless specifically agreed otherwise.





Models	S	M
Spacing between boards during installation	3 mm	5 mm
Max. allowed swelling	0 mm	4 mm
Materials	Polypropylene and fibreglass Stainless steel AISI 304	Polyethylene Stainless steel AISI 304
Colour	Black, anti-reflection	Black, anti-reflection
UV resistance	Yes	Yes
Resistance to high and low temperatures	Excellent	Excellent





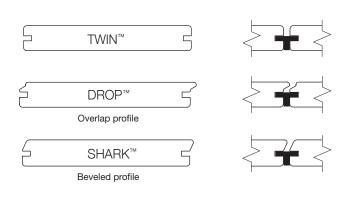
Charred (Japanese Shou-Sugi-Ban technique) and brushed Accoya®

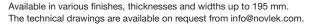
## **PROFILES**

HardWood Clip® SLIM profiles are characterised by **a groove that is only 8 mm deep** and positioned 8 mm from the underside of the board, regardless of its thickness.<sup>4</sup>

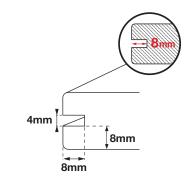
The shallow groove depth improves the resistance to piercing of the upper side of the groove by more than 50% for a 20 mm thick board and achieves a minimum performance of 100 kg for 25 mm thick boards.

4) As resistance to piercing is directly linked to the depth of the groove and the thickness of the board above it, we recommend maximising the latter by positioning the lower surface of the groove 8 mm from the underside of the board, regardless of the board's thickness.





	$TWIN^TM$	DROP™	SHARK™
Decking	•	•	•
Vertical cladding	•	•	•
Horizontal cladding	Sheltered or interior	•	•

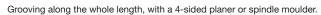




## **GROOVING**











Local grooving, with a Lamello® type biscuit joiner or a router.

## PERFORMANCE WHICH COMPLIES WITH THE DTU 51.4 STANDARD

The HardWood Clip® SLIM has undergone 3 specific technical evaluations, confirming its full compliance with the requirements for decking board fastenings laid down in the NF DTU 51.4 standard: resistance to tearing and shearing, concentrated load (Accoya®) and stability.

The FCBA has carried out rigorous stability and mechanical strength tests on Accoya® boards and joists fastened with the HardWood Clip® SLIM system. This study has demonstrated the compliance of the whole system with the strictest requirements of DTU 51.4 for public, commercial and domestic applications.

No other invisible fastening system has been the subject of so many tests and rigorous assessments, carried out by an approved independent body such as the FCBA.





## **FCBA CERTIFICATION**

Extensive evaluations and tests have been carried out by the FCBA for more than 3 years on the Accoya® decking boards and HardWood Clip® SLIM invisible fastenings.

#### SUMMARY OF TECHNICAL FILE PL/003 - No. 2023.511.9136 (extract)



ACCOYA® Decking & HardWood Clip® SLIM fastenings

#### PRODUCTS EVALUATED

- ACCOYA® decking boards, section between 20.5 x 95 mm and 40 x 195 mm
- ACCOYA® decking joists, minimum section of 45 x 50 mm
- Boards and joists corresponding to grades A2 or A1 depending on the visual classification reference system by the company ACCSYS TECHNOLOGIES
- HardWood Clip® SLIM invisible fastening system



#### **TEST CAMPAIGNS**

Tests	Standard	Description	
Bending	EN 408	19 x 95 mm and 40 x 195 mm boards	
Concentrated load	EN 1533	On models of ACCOYA® boards + ACCOYA® joists (with 50 x 50 mm square standard punch as defined by NF EN 1991-1-1)	
Skid resistance	Measurements as per XP CEN/TS 15676 / SRT pendulum, reinterpreted as per NF EN 16165 dated December 2021	On ACCOYA® boards (smooth and grooved sides), wet and dry states	
Tear-out of the HardWood Clip® SLIM fastening system	NF DTU 51.4	Perpendicular force on the board/joist	
Stability of the HardWood Clip® SLIM fastening/joist/board system	NF DTU 51.4	On ACCOYA® boards + ACCOYA® joists + HardWood Clip® SLIM invisible fastenings (decking subjected to successive cycles of extreme wetting and drying).	
Punch resistance tests in line with HardWood Clip® SLIM lateral grooves	NF EN 12871 (serviceability limit state)	On ACCOYA® 20 mm and 25 mm thick boards (25 mm diameter cylindrical punch as per NF P 06-001)	

#### MAIN CONCLUSIONS

ACCOYA® edged planks enable the creation of decking projects that meet the main expectations and requirements of the current professional standards (NF DTU 51.4).

ACCOYA® timber has the expected durability characteristics for usage-class-4 outdoor decking.

All of the tests performed allow us to certify that ACCOYA® wooden decking can be installed using the **HardWood Clip® SLIM** fastener. <sup>5</sup>

Its behaviour in hygrothermal stability tests make it possible to confirm the good stability of ACCOYA® decking. In combination with the **HardWood Clip® SLIM** fastener, it meets the various criteria and acceptance thresholds defined in NF DTU 51.4 and taken into account for evaluation

For non-residential or non-home decking, the combination with **HardWood Clip® SLIM** fasteners requires ACCOYA® boards with a minimum thickness of 25 mm, finished, shaved and profiled).

 The use of fasteners must comply with the technical recommendations of the manufacturer NÖVLEK®.



#### PARTICULAR CHARACTERISTICS OF ACCOYA® DECKING

Although the use of ACCOYA® joists is recommended, if ACCOYA® boards are fitted onto solid wood joists, use of a protective coating on the upper surface of the joist (bituminous strip, etc.) or separation wedges is recommended in the following two cases:

- joists that have received a durability treatment
- all non-ACCOYA® joists



#### The recommended gaps during installation are:

- at least 2 mm for an end joint between boards
- 5 mm between ACCOYA® boards, gap provided by the wedge integrated in the HardWood Clip®
   SLIM fastener
- 10 mm between ACCOYA® joists or boards and any structure or emerging material (wall, post, rail, glass, breeze block, concrete, etc.)



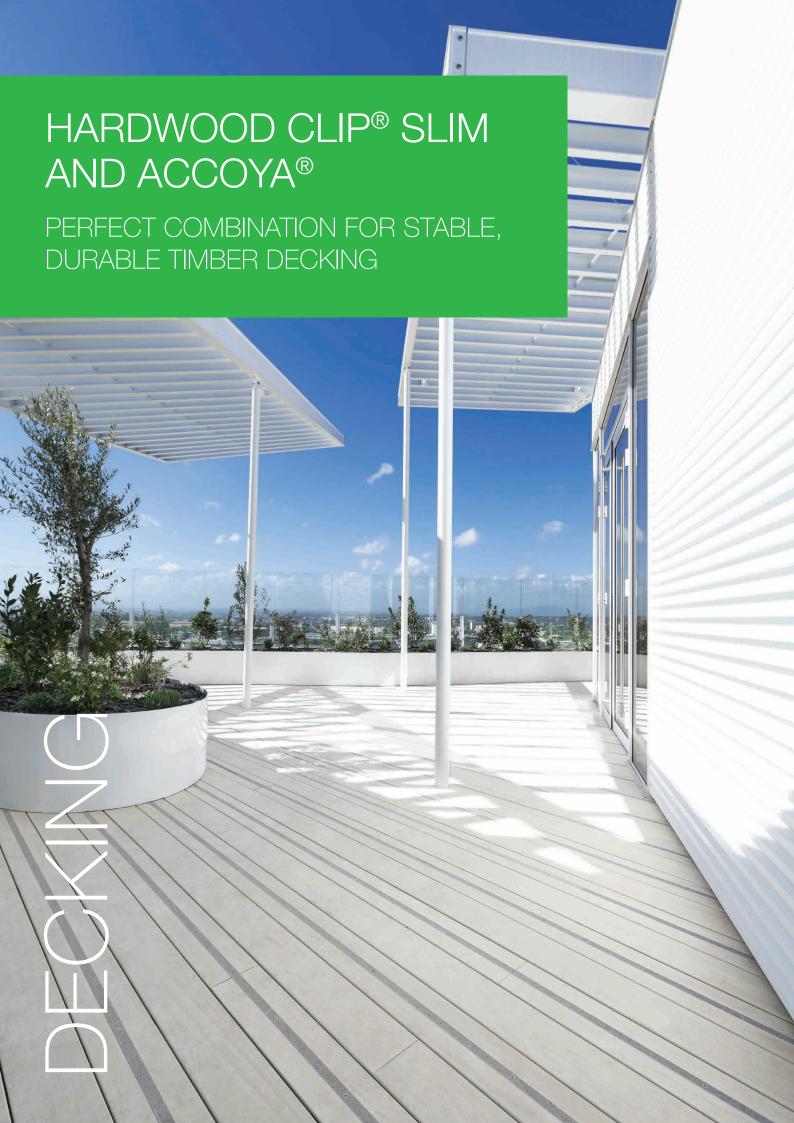
## HARDWOOD CLIP® SLIM DURABILITY, STABILITY AND BEAUTY GUARANTEED

The HardWood Clip® SLIM invisible fastening system is a blend of innovative technical solutions that help to make it the best and most effective fastening system for Accoya® boards.

HardWood Clip® SLIM brings a real revolution to the field of invisible fasteners for timber decking.

The innovation lies in the unique 45° screwing process, the use of two, high-performance and durable materials, and the **exclusive groove profile designed especially for Accoya® boards**.

The exclusive and exceptional technical properties of HardWood Clip® SLIM invisible fastenings ensure complete stability over time, along with superb looks and unparalleled durability for Accoya® timber decking and cladding.



The tests carried out by the FCBA have demonstrated the perfect combination of Accoya® decking boards and HardWood Clip® SLIM invisible fasteners. It fully **satisfies the requirements of the standard NF DTU 51.4.**<sup>6</sup>

The screw and reinforcement of the HardWood Clip® SLIM fastener, made of high-quality, corrosion-resistant A2 stainless steel (AISI 304), comply fully with the requirements needed for Accoya® for outdoor use.

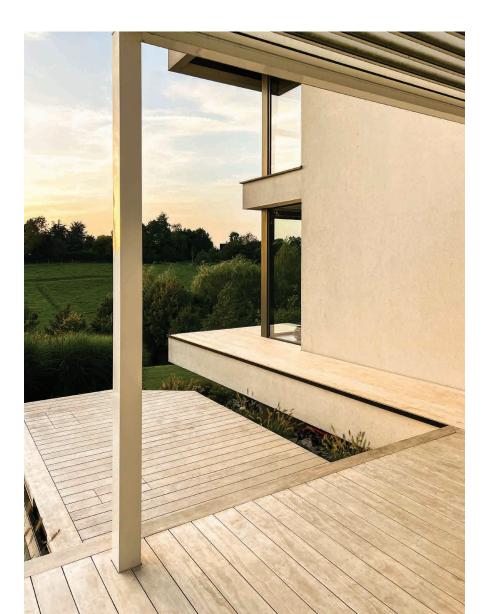
Designed to last as long as the Accoya® wood, the HardWood Clip® SLIM fasteners offer the perfect invisible solution for firm, long-term fastening of decking boards onto their support7, regardless of the climate conditions to which they are exposed.

**Extra-wide, 195 mm boards can be used**, guaranteed **risk-free** because of the unique features and outstanding performance of the HardWood Clip® SLIM fasteners, as well as the exceptional stability of the Accoya® wood.

The combination of HardWood Clip® SLIM and Accoya® guarantees long-term, **top quality appearance**, **impeccable finish** and **unparalleled safety**.

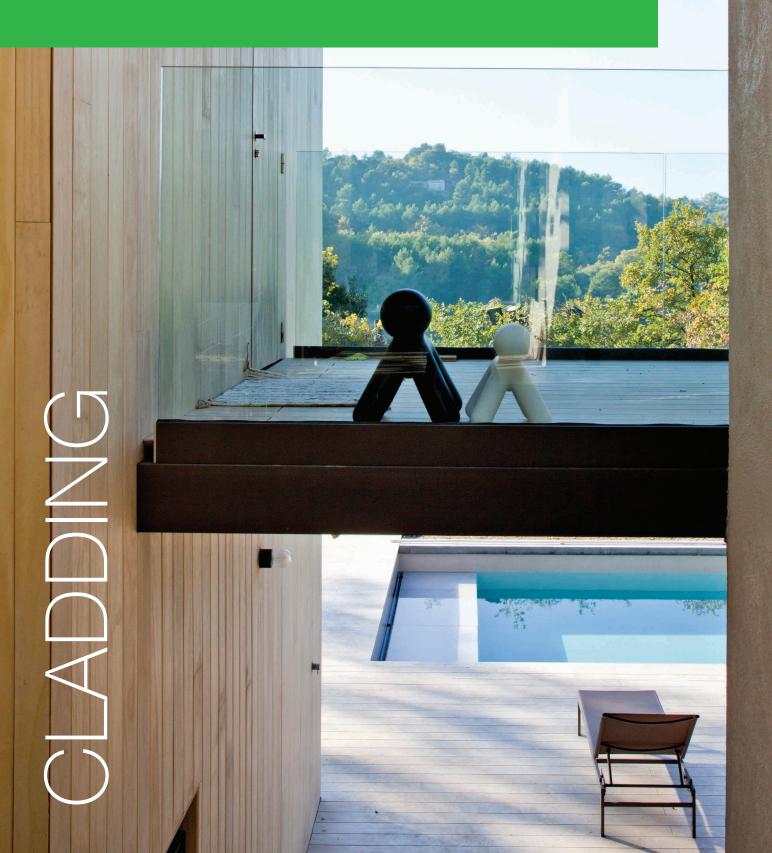
HardWood Clip® SLIM and Accoya® are also good for use outside, on domestic decking, swimming pool surrounds, or commercial or public developments, as well as for interior uses such as floor coverings, with closed or opened joints.

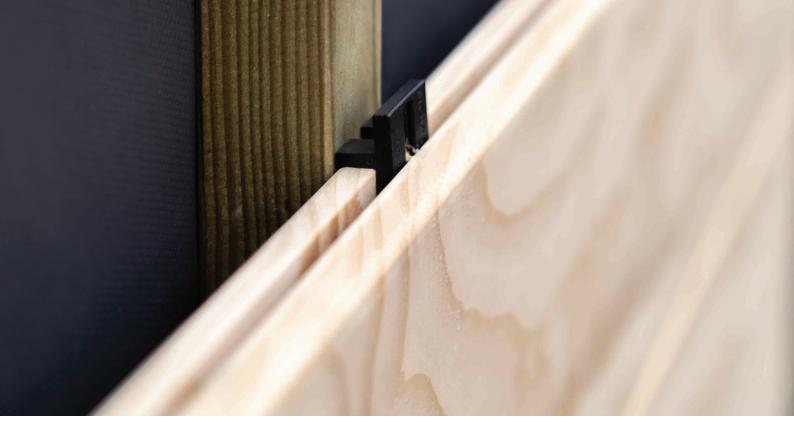
- 6) FCBA Technical specification N° 2023.040.6137 and DT N° 2023.511.9136.
- 7) A centre-to-centre joist spacing of 40 cm is recommended.





IDEAL COMBINATION FOR BEAUTIFUL TIMBER CLADDING THAT IS EASY TO INSTALL





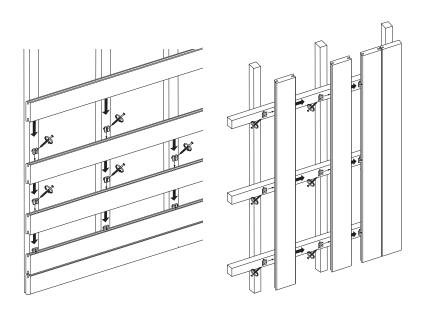
Durable, stable and decorative, Accoya® cladding is perfectly suitable for building facade covering.

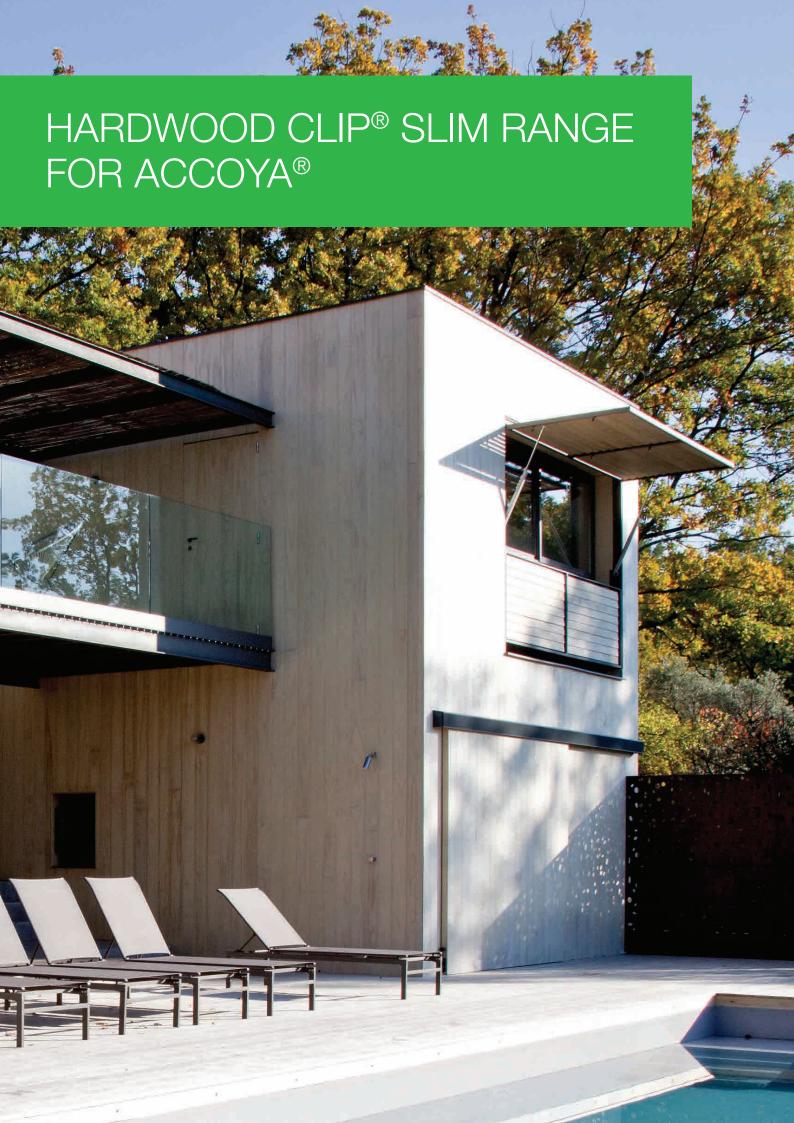
Combined with the HardWood Clip® SLIM fasteners, Accoya® boards are **easy and quick to install** using the integrated spacer, which automatically **ensures they are correctly spaced** and **perfectly parallel to each other**.

Having the boards screwed to their supports with HardWood Clip® SLIM fasteners makes installation much easier, and also guarantees their strength, stability and beauty over the lifetime of the facade covering.

HardWood Clip® SLIM ensures they are firmly fixed, whether laid horizontally or vertically.

The various technical profiles available for HardWood Clip® SLIM provide a solution for every cladding project in Accoya®, whether with closed or opened joints, domestic or public.





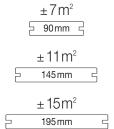
For accoya

# Hardwood Clip® SLIM CLASSIC | ± 11 m<sup>2</sup>

Estimate based on board thickness of 140 mm and joists centre to centre distance of 45 cm  $\,$ 

Model	Article code	EAN code
S - 3 mm	SL-S-185-03	5425 03355 090 5
M - 5 mm	SL-M-185-03	5425 03355 091 2

Also available for Accoya® Color Grey







### Hardwood Clip® SLIM

PRO | ± 27 m<sup>2</sup>

Estimate based on board thickness of 140 mm and joists centre to centre distance of 45 cm  $\,$ 

Model	Article code	EAN code
S - 3 mm	SL-S-450-03	5425 03355 092 9
M - 5 mm	SL-M-450-03	5425 03355 093 6

Also available for Accoya® Color Grey



# Hardwood Clip® SLIM PRO Refill | ± 30 m<sup>2</sup>

Estimate based on board thickness of 140 mm and joists centre to centre distance of 45 cm  $\,$ 

## Refill for the Hardwood Clip® SLIM PRO Accoya® kit

Model	Article code	EAN code
S - 3 mm	SL-S-RF500-03	5425 03355 096 7
M - 5 mm	SL-M-RF500-03	5425 03355 097 4



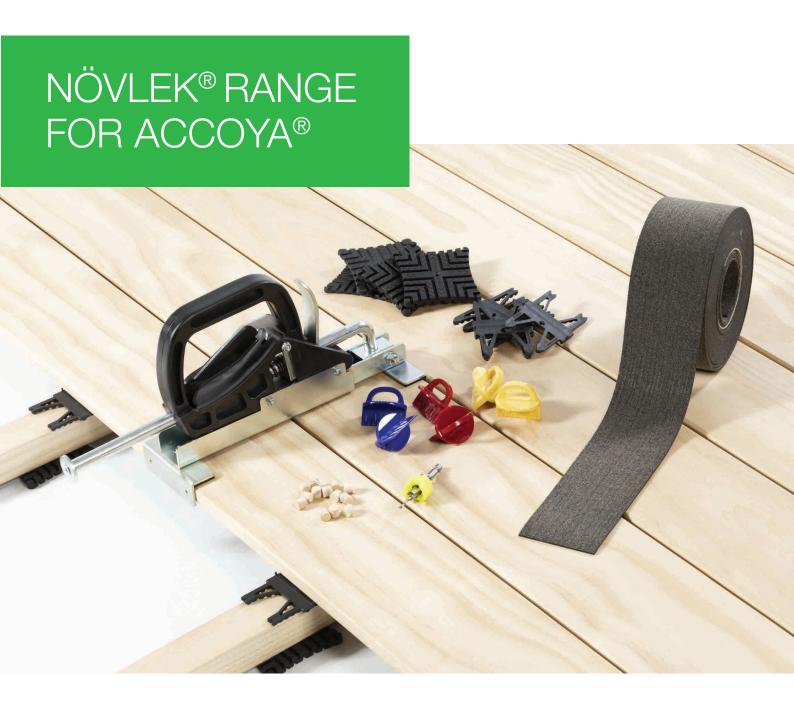
±37 m<sup>2</sup>



195 mm



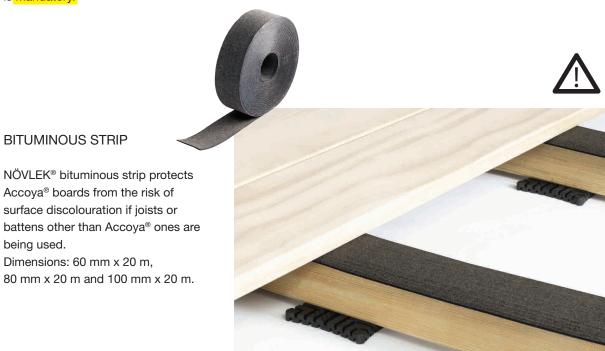




THE ESSENTIALS FOR QUALITY INSTALLATION WHICH RESPECT THE REQUIREMENTS OF ACCOYA® WOOD

## PREVENTS RISK OF DISCOLOURATION

Although the use of Accoya® joists is recommended, if Accoya® boards are fitted onto timber joists that have been treated or are made of any wood other than Accoya®, a protective coating on the upper surface of the joist is mandatory. 8





## PROTECTION AND SHIM SYSTEM



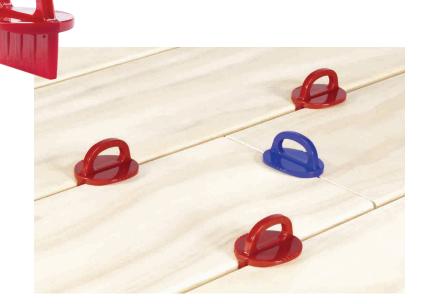


## **TOOLS FOR INSTALLATION**

#### **SPACERS**

The NÖVLEK® spacers are designed to ensure constant, appropriate spacing between the boards. They are easy to install and remove.

3 sizes: 3, 5 and 7 mm.



## DRILL COUNTERSINKS FOR DECKING

The NÖVLEK® drill countersinks for decking is designed to pre-drill the board and joist, and countersink the hole for the screw head, in one operation. Its many settings mean it can fit perfectly with the screw head profile.



## **TOOLS FOR INSTALLATION**



#### STEP DRILL BITS FOR PLUGS

The NÖVLEK® step drill bit is designed to pre-drill the screw hole and mill a flat-bottomed, cylindrical cavity into which the plug will fit. It ensures the plug fits perfectly into its hole with maximum contact for glueing.



#### PLUGS IN ACCOYA®

Plugs in Accoya® have a 10 mm diameter, to make them as discreet as possible. They are made in grain wood and chamfered to make them easy to fit in place.

Also available in Accoya® Color Grey.





## **TOOLS FOR INSTALLATION**



Using NÖVLEK® board clamp when installing decking or cladding boards allows them to be tightened, straightened and held in place quickly and effortlessly.



## SPAX® 4X45 STAINLESS STEEL SCREWS A2

The SPAX® 4x45 screw, in A2 stainless steel, is exclusive to NÖVLEK®. It has been designed specifically for HardWood Clip®. Its properties also make it an excellent, discreet screw for installing timber cladding boards.



	Designation	Model	Format	Article code	EAN code
	SPAX® 4 x 45 STAINLESS STEEL SCREWS A2	Ø 4 mm x 45 mm A2	Box 500 pieces	SPX-0445-TX-03	4003 53024 371 4
STATE OF	SPAX® 4 x 45 STAINLESS STEEL SCREWS A2	Ø 4 mm x 45 mm A2	Box 100 pieces	SPX-0445-TX-01	4003 53018 287 7
Control limit of the control l	BITUMINOUS STRIP 60 mm	60 mm x 20 m	Roll 20 m	BITU-06020-01	5425 03355 204 6
	BITUMINOUS STRIP 80 mm	80 mm x 20 m	Roll 20 m	BITU-08020-01	5425 03355 205 3
To the same of the	BITUMINOUS STRIP 100 mm	100 mm x 20 m	Roll 20 m	BITU-10020-01	5425 03355 206 0
	VENTILATION SHIMS	5 mm x 65 mm	Bucket 325 pieces	INTER-0325-01	5425 03355 523 8
100	VENTILATION SHIMS	5 mm x 65 mm	Box 100 pieces	INTER-0100-01	5425 03355 522 1
000	ISOLATION SHIMS 6 mm	6 mm x 90 mm x 90 mm	Pack 25 pieces	PAD-06-25-01	5425 03355 530 6
0+	ISOLATION SHIMS 10 mm	10 mm x 90 mm x 90 mm	Pack 25 pieces	PAD-10-25-01	5425 03355 531 3
	SPACERS 3 mm	•	Bucket 25 pieces	GAP-3-25-01	5425 03355 300 5
	SPACERS 5 mm	•	Bucket 25 pieces	GAP-5-25-01	5425 03355 301 2
	SPACERS 7 mm	•	Bucket 25 pieces	GAP-7-25-01	5425 03355 302 9
	SPACERS 8 x 3 mm / 8 x 5 mm / 8 x 7 mm	•••	Bucket 24 pieces	GAP-MX-24-02	5425 03355 303 6
	SPACERS 3 mm	•	Bag 12 pièces	GAP-3-12-01	5425 03355 314 2
	SPACERS 5 mm	•	Bag 12 pièces	GAP-5-12-01	5425 03355 315 9
	SPACERS 7 mm	•	Bag 12 pièces	GAP-7-12-01	5425 03355 316 6
	SPACERS 4 x 3 mm / 4 x 5 mm / 4 x 7 mm	•••	Bag 12 pièces	GAP-MX-12-01	5425 03355 317 3
	STEP DRILL BIT FOR PLUGS	Ø 10 mm / Ø 3 mm	Piece	DRL-03010-01	5425 03355 210 7
<del>祖</del> 三 7	STEP DRILL BIT FOR PLUGS	Ø 10 mm / Ø 4 mm	Piece	DRL-04010-01	5425 03355 211 4
	DRILL COUNTERSINK FOR DECKING	90° / Ø 4 mm	Piece	DRL-04010-02	5425 03355 230 5
	DRILL COUNTERSINK FOR DECKING	60° / Ø 4 mm	Piece	DRL-04010-03	5425 03355 232 9
	BOARD CLAMP	For square edge boards	Piece	BJPD-01	5425 03355 400 2
	BOARD CLAMP	For Drop profile boards	Piece	BJPD-04	5425 03355 400 2
	PLUGS IN ACCOYA®	Ø 10 mm	Bucket 1000 pieces	PLG10-1000-03	5425 03355 413 2
	PLUGS IN ACCOYA® COLOR GREY	Ø 10 mm	Bucket 1000 pieces	PLG10-1000-16	5425 03355 447 7
The state of the s	PLUGS IN ACCOYA®	Ø 10 mm	Box 100 pieces	PLG10-100-03	5425 03355 403 3
No. of the last of	PLUGS IN ACCOYA® COLOR GREY	Ø 10 mm	Box 100 pieces	PLG10-100-16	5425 03355 437 8



## DURABLE, STABLE AND ATTRACTIVE

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Archiwood sprl accepts no liability for any defect, damage or loss that may occur where such written instructions and guidelines are not adhered to. @Archiwood srl 2023.

Accoya® timbers must always be installed and used in accordance with the written instructions and guidelines of Accsys Technologies and its agents (available on request). Accsys Technologies shall not be liable for any defect, damage or loss resulting from failure to comply with these instructions and written guidelines.

