



**NORclad**<sup>®</sup>  
Part of National Timber Group



# TIMBER CLADDING GUIDE



# CONTENTS

---

**01** INTRODUCTION

---

**02** TIMBER SPECIES OVERVIEW

---

**04** 'BRUNNEA' REDWOOD

---

**07** SIBERIAN LARCH

---

**10** UK & CANADIAN WESTERN  
RED CEDAR

---

**13** UK HOMEGROWN LARCH

---

**16** THERMOWOOD

---

**19** PAINTED / COATED

---

**21** ABODO

---

**24** KAYU

---

**27** ACCOYA

---

**30** HARDWOODS

---

**33** ABOUT PRESSURE  
TREATMENT

---

**34** ABOUT FIRE TREATMENT

---

**35** CHAIN OF CUSTODY/  
TIMBER CERTIFICATION

---

**36** HOW TO SPECIFY  
NORCLAD TIMBER  
CLADDING & DETAILING

---

**38** CONTACT US TODAY

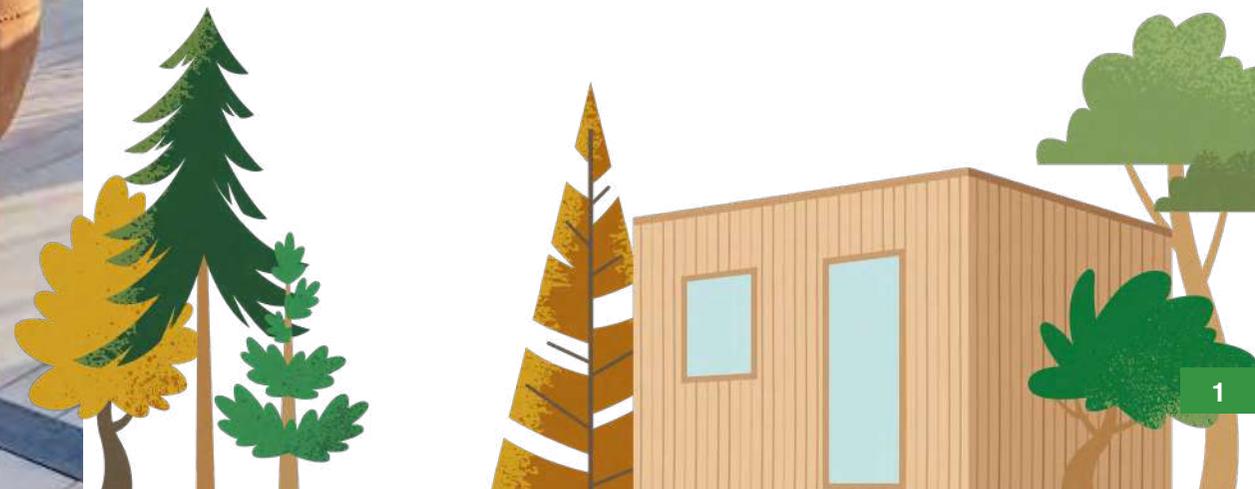


## INTRODUCTION

We are a specialist manufacturing company with over 40 years of experience in the Timber Industry. NORclad supply a range of specially developed timber cladding and associated product solutions, with superb environmental credentials and insulation properties to protect buildings and façades from a whole host of varying climatic conditions.

Working closely with Architects, Contractors, Developers and individual Self Builders nationally, offering professional and technical information, support and a quotation service to cover your needs.

Our raw material is sustainable, responsibly purchased, and FSC® certified or PEFC certified.



# TIMBER SPECIES OVERVIEW

The varied range of species and products offered by NORclad® will ensure our customers are able to specify and order the timber most suited to their project requirements.

All the timber species offered come from renewable sources and offer a low carbon footprint when compared with other construction materials.

By speaking to NORclad® and clearly specifying what you want from your cladding, the team will be able to understand the options available and find the timber cladding solution you require.



## 07 SIBERIAN LARCH

A popular species for Timber Cladding, slow grown with a distinctive straight grain structure and live inter grown knots. Left uncoated this moderately durable and hardwearing timber will weather down to a silver grey appearance over time.



## 10 UK & CANADIAN WESTERN RED CEDAR

Commercially grown in Canada and the Pacific North West of the USA. A very slow grown timber creates an extremely stable and durable timber. Visually the timber contains very few knots, along with a close fine straight grain and is predominantly a red/brown colour.



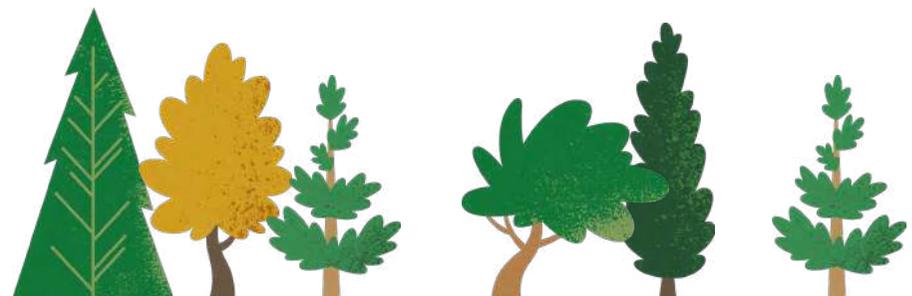
## 13 UK HOMEGROWN LARCH

Homegrown Larch offers different characteristics than imported name sakes, moderately durable and will contain more frequent knots than the imported species – ideal for when the more rustic or traditional timber is required.



## 04 'BRUNNEA' REDWOOD

A Scandinavian, Kiln Dried product with a low moisture content and open cell structure makes Redwood an ideal species to pressure treat. When treated with NORclad Brunnea or NORclad Lite a warranty can be offered on the product.





---

## 16 THERMOWOOD

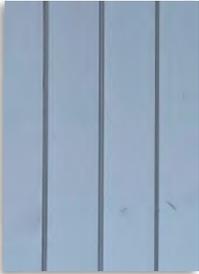
Produced by heat treating Scandinavian pine & spruce to temperatures in excess of 200°C. During this heat treatment, both chemical and structural changes occur within the timber which alter and improve some of its basic characteristics, resulting in a more durable and stable timber.



---

## 24 KAYU

A hardwood timber (Meranti) that has undergone modification to create a product more suited to the external application of Timber Cladding. Undergoing thermal modification changes the cell structure of the timber, and drastically reduces the moisture content, creating a Class 2 Durability timber.



---

## 19 PAINTED / COATED

Working with some of the leading paint manufacturers in the field, NORclad offer factory-painted timbers, including Siberian Larch, Thermowood, and Red Grandis. In a quality controlled environment which is quick and efficient, ensuring consistent quality throughout the order, offering significant saving in time, labour, and money VS on site application.



---

## 27 ACCOYA

Manufactured using a non-toxic treatment and timber sourced from sustainable forests, Accoya® wood has properties that match those of the best tropical hardwoods. A Class 1 Durable Timber, predominately offered pre-coated with a range of film building options.



---

## 21 ABODO

A renewable alternative to some of the more traditionally used softwood timbers. FSC certified plantation timber, engineered to create stable and durable cladding products. The vertical grain construction and Thermal modification process permanently changing the chemical and physical properties of the timber. Also, offered pre-finished with Abodo Protector Oil's in a range of colours.



---

## 30 HARDWOODS

British Sweet Chestnut, and European Oak are both popular options, often finger-jointed to cut out defects and offer a more usable length, less common than softwood species for cladding, but for the right project, a Hardwood cladding can be just what is required.

# 'BRUNNEA' REDWOOD



European Redwood is a very popular specie for timber cladding, this specie is also known as Scots Pine. European Redwood is a well known specie which is imported from Scandinavia.



Private Project

## NORCLAD 'BRUNNEA' REDWOOD A+

1. PEFC/FSC Certified, sustainably sourced Timber
2. Imported from Scandinavia
3. Selected boards for a very low number of knots
4. All timber is sourced and machined to CE Quality Grading Requirements
5. Available lengths from 2.1 – 4.8m+ (common lengths 3.9, 4.2, 4.8m)
6. Max live knot diameter on face: 18mm. 1 knot per metre on average over a 4.5m length

## NORCLAD 'BRUNNEA' REDWOOD A

1. PEFC/FSC Certified, sustainably sourced Timber
2. Imported from Scandinavia
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Available lengths from 2.1 – 4.8m+ (common lengths 3.9, 4.2, 4.8m)
5. Max live knot diameter: 40mm. along the length of timber

## NORCLAD 'BRUNNEA' REDWOOD B

1. PEFC/FSC Certified, sustainably sourced Timber
2. Imported from Scandinavia
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Available lengths from 2.1 – 4.8m+ (common lengths 3.9, 4.2, 4.8m)
5. Max live knot diameter: 60mm along the length of timber

# DETAILED INFORMATION

## 'BRUNNEA' REDWOOD



### Wood Type

Softwood.



### Origin

Europe.



### Durability

Moderately durable.



### Typical Lengths

2.4m – 5.1m.



### Density

510 kg/m<sup>3</sup> at 16-18% moisture content.



### Dimensional stability

Moderate.



### Typical section sizes

Ex 25, 32, 50, 75, 100mm x 25, 50, 75, 100, 125, 150, 175, 200mm.



### Typical End Uses

Widely used in both Cladding and Decking scenarios.



### Fixings

Stainless steel fixings are always recommended.



### Strength & working properties

For its weight, the timber is strong and moderately hard, Redwood machines well, allowing a nice smooth finish.



### Quality

NORclad typically offer European Redwood in A, or A+ Grade, a B Grade product is available for lower specification projects.



### Sustainability

From responsible sources – FSC® and/or PEFC® certified timber.



### Colour

The sapwood is creamy-white to yellow in colour, the heartwood is pale yellow-brown to red-brown, resinous, and usually distinct from the sapwood.

# 'BRUNNEA' REDWOOD

## TREATMENTS

Treatments can be applied to various cladding species to enhance or alter their colour or give them long term protection against the elements.

### **NORCLAD BRUNNEA**

NORclad Brunea provides a 30 year warranty against rot & fungal decay. The treatment process enables the timber to hold colour longer, requiring little or no maintenance.

### **NORCLAD LITE**

NORclad Lite offers a 30 year warranty against rot and fungal decay. This treatment does not contain a pigment and therefore upon exposure to UV light the colour will enrich before beginning to naturally weather to a silver/ grey over time. With little or no maintenance required long term the NORclad Lite treatment is a great peace of mind option over having untreated softwood timber cladding.

## PROFILES



NWC1



NWC2



NWC3



NWC4



NWC5



PSE



NWCC1



NWFE2



NWS1

# SIBERIAN LARCH



Siberian Larch timber cladding is a moderately durable timber. It is a slow grown high density, softwood with a colour that ranges from a light straw yellow to a gold/brown. Siberian larch is a popular, cost effective species of coniferous softwood from Russia.



*Bristol Bears*

## SIBERIAN LARCH A

1. FSC Certified, sustainably sourced Timber
2. Imported from Russia
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Kiln Dried to 14-20% Moisture content
5. Typical lengths 3.0m - 5.7m
6. Average knot diameter: 40mm. Commonly referred to as Unsorted (Grade I-III)

## SIBERIAN LARCH B

1. FSC Certified, sustainably sourced Timber
2. Imported from Russia
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Kiln Dried to 14-20% Moisture content
5. Typically 3.0m - 5.7m lengths
6. Average knot diameter: 60mm. Commonly referred to as Sawfalling (Grade I-IV)

# DETAILED INFORMATION

## SIBERIAN LARCH



### Wood Type

Softwood.



### Origin

Russia.



### Durability

Moderately durable.



### Typical Lengths

2.4m – 4.0m.



### Density

590-650 kg per m<sup>3</sup> at 14% moisture content.



### Typical section sizes

Ex 25, 32, 50, 75mm x 25, 50, 75, 100, 125, 150, 175mm.



### Colour

Varies from pale yellow to orange to golden brown.



### Typical End Uses

Widely used in both Cladding and Decking scenarios.



### Fixings

Stainless steel fixings are always recommended.



### Quality

NORclad typically offer Siberian Larch in A, or B Grade.



### Strength

It is one of the hardest and strongest commercial softwoods available.



### Sustainability

Sourced from well managed forests – FSC® certified.



### Dimensional stability

It has a tendency to distort when wet or not dried, but once dry, is generally stable.

# SIBERIAN LARCH

## TREATMENTS

Treatments can be applied to various cladding species to enhance or alter their colour or give them long term protection against the elements.

### **NORCLAD BRUNEA**

NORclad Brunea provides a 30 year warranty against rot & fungal decay. The treatment process enables the timber to hold colour longer, requiring little or no maintenance.

### **NORCLAD LITE**

NORclad Lite offers a 30 year warranty against rot and fungal decay. This treatment does not contain a pigment and therefore upon exposure to UV light the colour will enrich before beginning to naturally weather to a silver/ grey over time. With little or no maintenance required long term the NORclad Lite treatment is a great peace of mind option over having untreated softwood timber cladding.

## PROFILES



NWC1



NWC2



NWC3



NWC4



NWC5



PSE



NWCC1



NWFE2



NWS1

# UK & CANADIAN WESTERN RED CEDAR



Canadian Western Red Cedar is a durable softwood, slow grown, naturally durable, stable, light weight and has a natural beauty and warmth complemented by a uniform fine grain. UK Grown Cedar will contain more frequent, and larger knots than its Canadian namesake.



Churchwood

## CANADIAN WRC CLEAR & BETTER

1. PEFC Certified, sustainably sourced Timber
2. Imported from Canada
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Max live knot diameter on face: 19mm. Limited along the length of timber
5. Many boards supplied are clear boards

## CANADIAN WRC CLEAR & BETTER 15% 4 CLEAR

1. PEFC Certified, sustainably sourced Timber
2. Imported from Canada
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Max live knot diameter on face: 38mm. Limited along the length of timber
5. Many boards supplied are clear boards
6. Including a percentage of boards graded to No. 4 Clear, the majority meeting No. 2 Clear

## UK - CLADDING GRADE

1. Can be offered PEFC/ FSC certified
2. Grown around the United Kingdom
3. All timber is sourced and machined to CE quality Grading Requirements.
4. Frequent knots and visible grain

# DETAILED INFORMATION

## UK & CANADIAN WESTERN RED CEDAR



### Wood Type

Softwood.



### Typical Lengths

1.828m (6ft) – 4.88m (16ft).



### Typical section sizes

Ex 22, 32, 50, 75mm x 22, 50, 75, 100, 125, 150, 175mm.



### Strength & working properties

As it is a soft timber it can be more prone to physical damage in terms of splitting and indentation/bruising, care should be taken.



### Chemical Properties

This species has natural preservatives which can have a corrosive effect on some unprotected metals, causing a black stain on the wood.



### Origin

Canadian – North America and Western Canada.

UK - Commercially grown around the UK.



### Density

390 kg per m<sup>3</sup> at 16% Moisture Content.



### Typical End Uses

Cladding, Brise Soleil systems, Shingles & Decking.



### Quality

Canadian – Imported as No.2 Clear and Better and No 4 Clear and Better.

UK - Cladding Grade - frequent and large knots throughout the grade.



### Colour

Salmon pink sapwood to dark brown Heartwood – If left unprotected, it will turn to a silver/grey colour.



### Durability

Canadian – durable, high resistance to decay.

UK - Moderately durable timber, recommended to treat with NORclad Lite, or Brunnea preservative.



### Sustainability

Sourced from well managed forests – FSC® and/or PEFC® certified timber.



### Fixings

Stainless steel fixings are always recommended.



### Dimensional stability

Canadian – It has a very low shrinkage factor and is superior to all other coniferous woods in its resistance to warping, twisting and checking.

UK - Medium moisture movement, potential for splitting due to higher knot content

# UK & CANADIAN WESTERN RED CEDAR

## TREATMENTS

Treatments can be applied to various cladding species to enhance or alter their colour or give them long term protection against the elements.

### **NORCLAD BRUNEA**

NORclad Brunea provides a 30 year warranty against rot & fungal decay. The treatment process enables the timber to hold colour longer, requiring little or no maintenance.

### **NORCLAD LITE**

NORclad Lite offers a 30 year warranty against rot and fungal decay. This treatment does not contain a pigment and therefore upon exposure to UV light the colour will enrich before beginning to naturally weather to a silver/ grey over time. With little or no maintenance required long term the NORclad Lite treatment is a great peace of mind option over having untreated softwood timber cladding.

## PROFILES



NWC1



NWC2



NWC3



NWC4



NWC5



PSE



NWCC1



NWSN1 (Canadian only)



NWSN2 (Canadian only)

# UK LARCH



British Larch is an indigenous species which grow in various parts of Britain giving an improved carbon footprint to local projects and developments.

## NORCLAD SUPPLY HOMEGROWN LARCH CLADDING

1. FSC Certified, sustainably sourced Timber
2. Grown within the United Kingdom
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Faster grown than imported species, large and frequent knots along the length



*Weathered*

# DETAILED INFORMATION

## UK GROWN LARCH



### Wood Type

Softwood.



### Origin

UK.



### Durability

Moderately durable.



### Typical Lengths

2.4m – 4.8m.



### Quality

Joinery and Structural.



### Colour

A pale red/brown.



### Typical section sizes

Ex 25, 32, 50, 75mm x 25, 50, 75, 100, 125, 150, 175mm.



### Typical End Uses

Widely used in both Cladding and Decking scenarios.



### Fixings

Stainless steel fixings are always recommended.



### Density

550 kg per m<sup>3</sup> at 18% moisture content.



### Sustainability

Sourced from well managed forests – FSC certified available on request.



### Dimensional stability

It has a tendency to distort when wet or not dried, but once dry, is generally stable.



### Strength & working properties

Moderately durable locally grown timbers, significantly higher knot content than their imported counterparts due to growth rates in our warmer climate, with a lower carbon footprint.

# UK LARCH

## TREATMENTS

Treatments can be applied to various cladding species to enhance or alter their colour or give them long term protection against the elements.

### **NORCLAD BRUNEA**

NORclad Brunea provides a 30 year warranty against rot & fungal decay. The treatment process enables the timber to hold colour longer, requiring little or no maintenance.

### **NORCLAD LITE**

NORclad Lite offers a 30 year warranty against rot and fungal decay. This treatment does not contain a pigment and therefore upon exposure to UV light the colour will enrich before beginning to naturally weather to a silver/grey over time. With little or no maintenance required long term the NORclad Lite treatment is a great peace of mind option over having untreated softwood timber cladding.

## PROFILES



NWC1



NWC2



NWC3



NWC4



NWC5



PSE



NWCC1



NWFE2



NWS1

# THERMOWOOD



ThermoWood is produced by heat treating Finnish grown European Redwood/Whitewood (Scandinavian Pine/Spruce) to temperatures in excess of 200 degrees Centigrade. During heat treatment, chemical and structural changes occur within the timber which alter and improve some of its basic characteristics.

As a result of the treatment, the resulting environmentally-friendly ThermoWood is created. Its colour darkens, it is more stable than normal wood in conditions of changing humidity and its thermal insulation properties are improved, ideal for use in exposed areas such as External Timber Cladding. The heat treatment process enables the use of Scandinavian Redwood in areas requiring a service life of up to 30 years without the need for any further preservative or coating to be applied. The process removes resin from timber. As a result there is no resin leakage or “bleed” through the surface coatings. The combined effect of this together with the improved stability can lead to a lower maintenance requirement.

## NORCLAD SUPPLY THERMOWOOD D

All grading information is given as general guidance, to meet the criteria set through CE marking, quality and grading requirements.

1. PEFC Certified, sustainably sourced Timber
2. Imported from Scandinavia
3. All timber is sourced and machined to CE Quality Grading Requirements
4. Thermally Modified to 6% Moisture content
5. Typically 2.4m+ lengths
6. Frequent knots, creating character and variation from one board to the next



# DETAILED INFORMATION

## THERMOWOOD



### Wood Type

Softwood.



### Origin

Finland.



### Durability

Durable.



### Typical Lengths

2.4m +



### Quality

NORclad typically offer Thermowood D.



### Colour

Medium/dark brown.



### Typical section sizes

Ex 25, 32mm x 50, 75, 100, 125, 150mm.



### Typical End Uses

External Cladding.



### Fixings

Stainless steel fixings are always recommended.



### Dimensional stability

Thermal modification increases stability.



### Density

350 - 480kg/m<sup>3</sup> when moisture content is 6%.



### Sustainability

Sourced from well managed forests – PEFC® certified.



### Strength & working properties

Thermal modification gives increased durability and stability - ideal for external cladding both coated, and uncoated.

# THERMOWOOD

## TREATMENTS & COATINGS

Treatments can be applied to various cladding species to enhance or alter their colour or give them long term protection against the elements.

### **NORCLAD BRUNEA**

NORclad Brunea provides a 30 year warranty against rot & fungal decay. The treatment process enables the timber to hold colour longer, requiring little or no maintenance.

### **NORCLAD LITE**

NORclad Lite offers a 30 year warranty against rot and fungal decay. This treatment does not contain a pigment and therefore upon exposure to UV light the colour will enrich before beginning to naturally weather to a silver/ grey over time. With little or no maintenance required long term the NORclad Lite treatment is a great peace of mind option over having untreated softwood timber cladding.

## PROFILES



NWC1



NWC2



NWC3



NWC4



NWC5



PSE



NWCC1

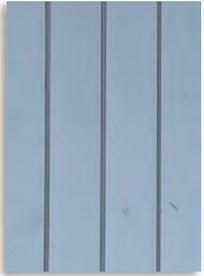


NWSN1



NWSN2

## PAINTED / COATED



Stained and Painted Timber Cladding continues to be a popular choice among NORclad clients. NORclad can offer a number of factory painted timber cladding solutions, both through in house coating lines in the UK.

## PAINTED / COATED

1. FSC and PEFC Certified
2. Working with a number of species
3. Offer factory-painted Siberian Larch, ThermoWood, and Red Grandis
4. High-end painted Timber Cladding



# DETAILED INFORMATION

## PAINTED / COATED

### PAINTED / COATED

NORclad offer factory finished coated options, manufactured and coated in The UK.

Working with a number of different timber species, all either FSC® and/or PEFC® certified. NORclad offer factory-painted Siberian Larch, ThermoWood, and Red Grandis.

Working with some of the leading paint manufactures in the field including Sansin, NORclad are able to offer the natural appearance of timber with a full range of colours or stains to fit your project, such as Sansin and Remmers.

A quality controlled environment which is quick and efficient, ensuring consistent quality throughout the order, offering significant saving in time, labour, and money VS on site application.

- 01.** High-end painted Timber Cladding.
- 02.** A quality controlled environment which is quick and efficient, ensuring consistent quality throughout the order from the first board, to the last.
- 03.** Significant saving in time, labour, and money.
- 04.** Quick and efficient production and delivery process.

# PROFILES



NWPC1



NWPC2



NWPC3

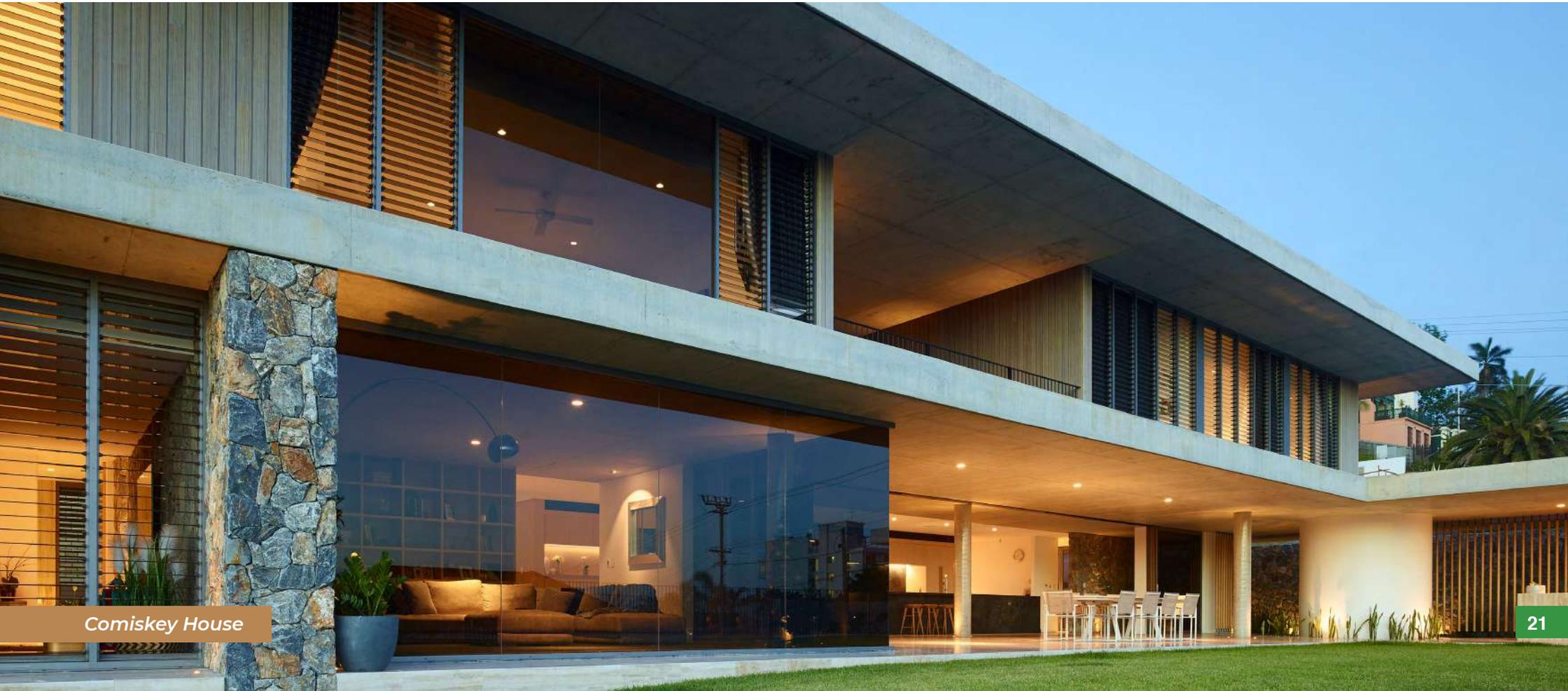


Private House

# ABODO



Abodo produce a range of FSC certified sustainable timber products; super stable thermally modified plantation timber with Vulcan Cladding, in both Flat Sawn and Laminated options.



*Comiskey House*

# DETAILED INFORMATION

## ABODO

The Vulcan Cladding range offers a renewable alternative to some of the more traditional Larch or Cedar cladding that the construction market are used to. FSC certified plantation timber is selected before being engineered to create a stable and durable wood cladding product, a key feature of the product is the patented vertical grain construction. This combined with the Thermal modification process permanently changes both the chemical, and physical properties of the timber.

The increased stability offered from the vertical grain construction allows the use of much wider boards than a standard non-engineered product. This allows the option to secret-fix Vulcan cladding, reducing the risk of moisture penetrating the boards and allowing the possibility of failures.

Vulcan is supplied pre-finished with Abodo Protector Oil, offered in a range of colours this a plant based exterior oil penetrates into the timber.



Comiskey House

# ABODO

## COLOURS



Vulcan  
Ebony



Vulcan  
Walnut



Vulcan  
Graphite



Vulcan  
Manuka



Vulcan  
Teak



Vulcan  
Patina



Vulcan  
Straw

## PROFILES



Hector WB10 (145x20)



Hector WB10 (180x20)



Zara WB12 (180x20)



Zara WB12F (180x20)



Zara WB12 (138x20)



Zara WB12 (90x60)



Zara WB12 (90x40)

# KAYU



A hardwood timber (Meranti) that has undergone modification to create a product more suited to the external application of Timber Cladding. Undergoing thermal modification changes the cell structure of the timber, and drastically reduces the moisture content.

## KAYU A+

1. FSC Certified, sustainably sourced Timber
2. Imported from Malaysia
3. Boards almost entirely free of knots
4. All timber is sourced and machined to CE Quality Grading Requirements.
5. Available lengths 2.1m+



# DETAILED INFORMATION

## KAYU



### Wood Type

Hardwood.



### Origin

Malaysia.



### Typical Lengths

Up to 5m lengths often available.



### Durability

Class 2, Durable. High resistance to decay.



### Typical section sizes

Ex 22, 32 x 75, 100 150mm.



### Density

420 kg per m<sup>3</sup> at 4-6% Moisture Content



### Typical End Uses

Cladding, Brise Soleil systems & Decking.



### Fixings

Pre-Drill Timber, then always use stainless steel fixing.



### Sustainability

Sourced from well managed forests – FSC® and/ or PEFC® certified timber.



### Strength & working properties

As it is a soft timber it can be more prone to physical damage in terms of splitting and indentation/bruising, care should be taken.



### Colour

Dark Brown after thermal modification – If left unprotected, it will turn to a silver grey colour.



### Availability

Sawn and planed products in a wide range of thicknesses, widths and profiled patterns.



### Dimensional stability

After thermal modification the stability is dramatically increased, moisture movement is almost non-existent when used as an external Timber Cladding product.



### Chemical Properties

The thermal modification process relies on heat, and steam (water), the product is chemical/toxin free. There is no further need to apply a preservative to use the timber externally.



### Quality

A small percentage of pin hole may be visible, due to the dark colour of the boards this is difficult to notice, and is classified as a natural characteristic of the specie

## PROFILES



NWC1



NWC2



NWC4



NWC5



NWCC1

### Detailed information

As the thermal modification process only relies on heat, and steam (water), the product is chemical/toxin free. There is no further need to apply a preservative to use the timber externally. All timber comes from sustainable forests and will either be PEFC or FSC certified.

With the final moisture content after thermal modification being 4-6% the stability is dramatically increased, moisture movement is almost non-existent when used as an external Timber Cladding product.



# ACCOYA



Accoya® wood is the result of decades of research and development that has brought together long-established and extensively proven wood modification technique – acetylation – and lead-edge patented technology to create a high performance wood ideal for timber cladding.



*Dartford Rugby Club*

# DETAILED INFORMATION

## ACCOYA

Accoya® high performance wood is suitable for wooden cladding and façades where aesthetics, less frequent maintenance, dimensional stability, durability and insulation value are key factors. Accoya's® versatility makes it ideal for use in residential, commercial and industrial structures.

Manufactured using a non-toxic treatment and timber sourced from sustainable forests, Accoya® wood has properties that match those of the best tropical hardwoods.

Every batch of Accoya® wood is tested after production to ensure that its durability can be guaranteed.

Take a look at just some of the benefits:

- 01.** Accoya® wood is modified all the way through, not just at the surface.
- 02.** Coating maintenance intervals can be expected to be twice as long on Accoya® wood.
- 03.** Thermal conductivity is improved in comparison with softwoods and hardwoods.



### Sustainability

By significantly enhancing the durability and dimensional stability of fast growing, abundantly available certified wood species, Accoya® wood provides compelling environmental advantages over scarce slow growing hardwoods, woods treated with toxic chemicals, and non-renewable carbon-intensive materials such as plastics, steel and concrete. Accoya® has been certified at the C2C Gold level since 2010, as the only structural building material around. A large benefit of C2C certification is that, especially at the higher certification levels (Gold & Platinum) it contributes to several credits in recognised Green Building Schemes such as LEED and BREEAM.

At end-of-use, Accoya® provides no challenges whatsoever. It can be treated similar to untreated wood and thus can be re- or upcycled in various ways.

- Always sustainably sourced from abundantly available, often fast growing wood species
- Use phase advantages: increased life span, less maintenance, superior thermal insulation
- Non toxic and 100% recyclable – a perfect fit with the bio-cycle of the C2C philosophy
- CO2 negative over the full life cycle



### Durability

Accoya® wood's durability (resistance to rot) is Class 1, matching and even exceeding the performance of nature's most durable woods such as Oak, Teak, Iroko and Sapele. Every batch of Accoya® wood is tested after production to ensure that its durability can be guaranteed.

- Class 1 durability – facilitating a longer life span
- Lasting 50 years above ground



### Strength & working properties

Significantly enhancing the dimensional stability of Accoya® wood provides compelling environmental advantages over slow-growing hardwoods (which are often unsustainably sourced) and non-renewable carbon-intensive materials such as plastic, steel and concrete.

Properties of Accoya® wood match, or even exceed those of the best tropical hardwoods, yet is manufactured from sustainably sourced wood.

- Outstanding dimensional stability

# ACCOYA

## PROFILES



NOR 01



NOR 02



NOR02 (95mm)



# HARDWOODS: BRITISH SWEET CHESTNUT & OAK TIMBER CLADDING

Primarily we see Softwoods specified for timber cladding, NORclad are also able to offer selected Hardwoods; British Sweet Chestnut, and Oak; UK, European and American.

## TANNINS

With both Oak and Sweet Chestnut it should be noted that for the first few months after installation the high tannin content of the timbers will begin to exude. This in turn will result in staining where the timber either comes into direct contact, or has poor interface detailing with other materials such as render, masonry, or permeable stone. As with all all of our Softwood claddings, we once again recommend Stainless Steels Fixings are used on Hardwood timbers, the Tannins within Oak and Sweet Chestnut will corrode ferrous metals.

## WEATHERING

Left uncoated, both Sweet Chestnut and Oak will weather down over time – the natural variation in colour of the freshly machined boards will even out to a more uniform silver/grey.



# DETAILED INFORMATION

## HARDWOODS NORCLAD BRITISH SWEET CHESTNUT & OAK TIMBER CLADDING



### Wood Type

**UK Sweet Chestnut** – Hardwood.  
**Oak** – Hardwood.



### Origin

**UK Sweet Chestnut** – Across the UK.  
**Oak** – UK, Europe, America.



### Typical End Uses

**UK Sweet Chestnut** – Cladding.  
**Oak** – Timber Frame, Cladding.



### Typical section sizes

**UK Sweet Chestnut** – Ex 25mm x 75, 100, 125, 150mm.  
**Oak** – Ex 25mm x 75, 100, 125, 150mm.



### Density

**UK Sweet Chestnut** – 550 – 650 kg per m<sup>3</sup> at 16% moisture content.  
**Oak** – 670+ kg/m<sup>3</sup> average.



### Durability

**UK Sweet Chestnut** – Durable (Class 2 EN350-2).  
**Oak** – Durable.



### Strength & working properties

**UK Sweet Chestnut** – Sweet Chestnut resembles Oak, although is easier to work with than Oak. Pre-drilling would be recommended.  
**Oak** – Pre-drilling, and screw fix would be recommended.



### Typical Lengths

**UK Sweet Chestnut** – Jointed at either 4.0m or 6.0m, allowing for a small % of cutbacks.  
**Oak** – Finger jointed lengths open up the availability to match specification.



### Fixings

**UK Sweet Chestnut** – Stainless steel fixings are always recommended.  
**Oak** – Stainless steel fixings are always recommended.



### Sustainability

**UK Sweet Chestnut** – Sourced from well managed forests – FSC certified available on request.  
**Oak** – Sourced from well managed forests – FSC® and/or PEFC® certified available on request dependent on origin selected.



### Availability

**UK Sweet Chestnut** – Sawn and planed products in a wide range of thicknesses, widths and profiled patterns.  
**Oak** – Sawn and planed products in a wide range of thicknesses, widths and profiled patterns.



### Dimensional stability

**UK Sweet Chestnut** – When the product is finger jointed and moisture content is 18%, movement will be small.  
**Oak** – When the product is finger jointed and moisture content is 18%, movement will be small.

# HARDWOODS: BRITISH SWEET CHESTNUT & OAK TIMBER CLADDING

## DETAILED INFORMATION CONTINUED



**UK Sweet Chestnut** – Sweet Chestnut has a high tannin content which can be released when the timber becomes damp or wet. This can lead to staining in contact with metal or ferrous fixings. It is advisable to protect any surfaces that may come into contact with the board prior to fixing. Staining may be removed using an oxalic acid cleaning agent. Once the tannins have exuded, untreated the timber will weather to a silver/grey.

**Oak** – Oak has a high tannin content which can be released when the timber becomes damp or wet. This can lead to staining in contact with metal or ferrous fixings. It is advisable to protect any surfaces that may come into contact with the board prior to fixing. Staining may be removed using an oxalic acid cleaning agent. Once the tannins have exuded, untreated the timber will weather to a silver/grey.



### Colour

**UK Sweet Chestnut** – Light straw like appearance, with colour variation due to finger jointing.

**Oak** – Range of colours, spreading through yellow to brown. Colour variation may be more apparent on finger jointed specification.



## PROFILES



NWC4



NWC5



PSE



NWCCT



## ABOUT PRESSURE TREATMENT

Different species of timber are classified in terms of their natural durability and permeability to preservative treatment. Timber species rated with a high level of natural durability may not require timber treatment however if any sapwood is present or the species does not have a high natural durability rating then preservative treatment is recommended.

When selecting timber for treatment these factors along with the end use of the timber, or Use (British/European Standard BS EN 335-1) determine how much preservative is required to provide long term protection against insect attack and fungal decay. Treatment is then carried out in accordance to BS8417 Preservation of Wood, Code of practice.

To achieve effective and long term preservative treatment four key factors must be followed:

1. Appropriate selection and preparation of wood
2. Use of an effective wood preservative
3. Selection of appropriate treatment process for desire
4. Correct installation of the final treated product

Timber Cladding is growing in popularity as a material within the construction industry. Being a versatile, aesthetically pleasing and cost effective material, there is an ever increasing demand across all sectors of the industry, noticeably in **Residential, Education, Health Care and Retail** projects.

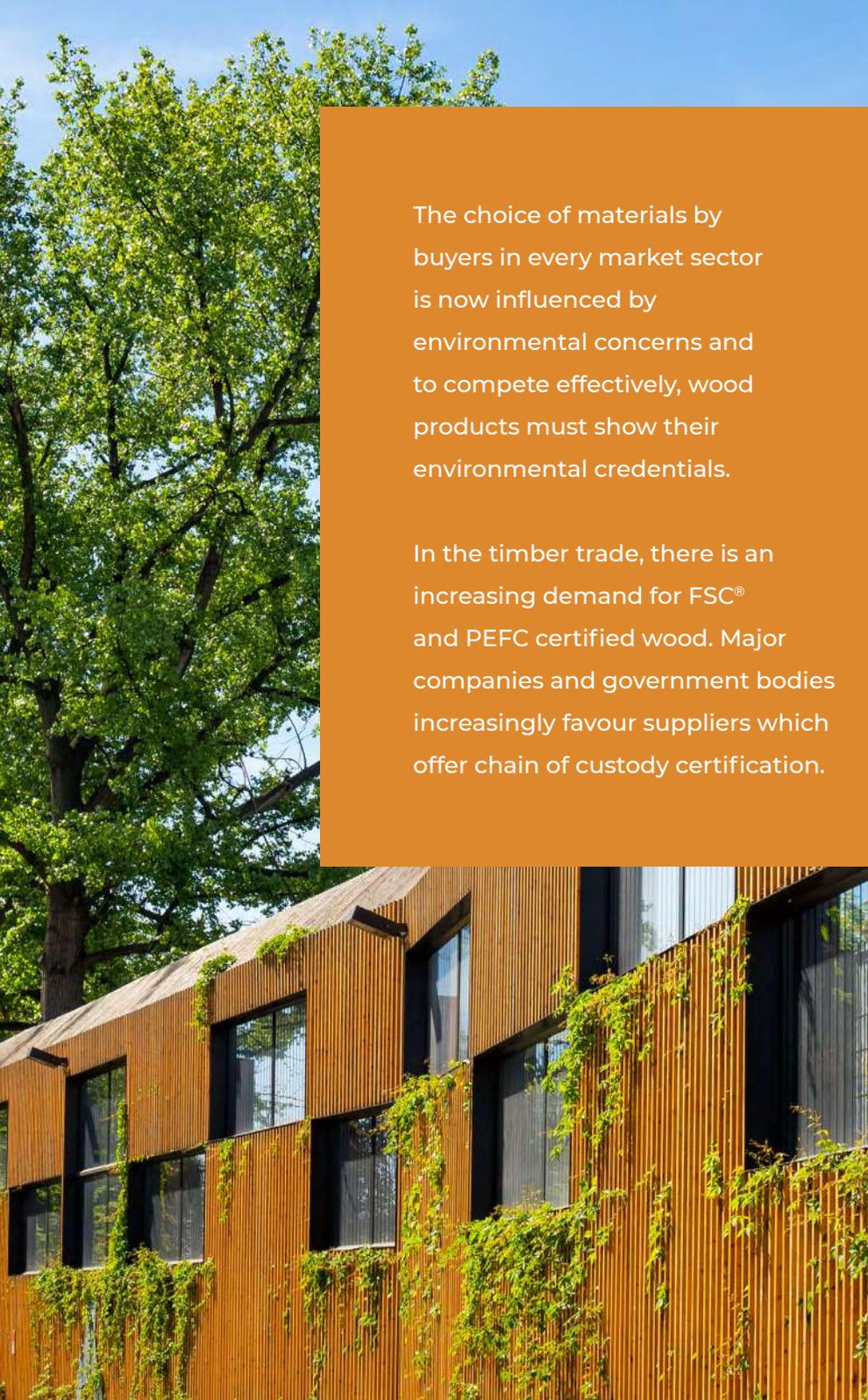
## ABOUT FIRE TREATMENT

A number of projects in these sectors often require the façade to meet Euro Class B/Class “0” (BS 476 Part 6 & 7 ‘Spread of Flame’). This is possible with additional Fire Retardant Treatments, at NORclad we work with 2 processes for applying Fire Treatment;

- 01.** When working with NORclad Lite and NORclad Brunnea Pressure treatments, an additional pressure treatment for EuroClass B would not be achievable. On these materials we offer application through an in house factory controlled system to EuroClass B through an ISO 9001 & 14001 audited Spray & Brush Line.
- 02.** When there is no requirement for a Preservative treatment we are able to offer EuroClass B Fire Treatment via a combination of high pressure impregnation in a treatment cylinder followed by heat curing under controlled conditions, the Sentrin FRX product is our choice for Fire Treating a number of species including Canadian Western Red Cedar and Abodo to EuroClass B.

Both applications are designed to last for the life of the building and no maintenance is required.





The choice of materials by buyers in every market sector is now influenced by environmental concerns and to compete effectively, wood products must show their environmental credentials.

In the timber trade, there is an increasing demand for FSC® and PEFC certified wood. Major companies and government bodies increasingly favour suppliers which offer chain of custody certification.

## CHAIN OF CUSTODY/TIMBER CERTIFICATION

### WHAT IS FSC AND PEFC?

- FSC stands for Forest Stewardship Council®
- PEFC stands for Programme for the Endorsement of Forest Certification

Both of the above organisations are global bodies that are involved in guaranteeing that timber comes from a responsible source.

### WHAT IS CHAIN OF CUSTODY?

Chain of Custody certification, is an assessment from an independent, qualified expert who verifies in writing that the wood flow system applied by a business traces the flow of wood from certified forests through the business and meets the exacting requirements of the certification scheme.

In short Chain of Custody certification monitors the amount of timber a company buys from responsible and well managed sources. It traces and records the movement of all timber through the business and when the timber package is then sold to customers, it confirms all procedures have been followed by stating an FSC or PEFC claim on sales documents.

# HOW TO SPECIFY NORCLAD TIMBER CLADDING & DETAILING



If you have decided that Timber Cladding is going to be one of the materials on your project the next step is to create a specification that will meet the criteria and expectations you, and your client have.

NORclad will be happy to talk through what is available and enable you to select, amongst others:

1. Species
2. Profile
3. Size
4. Treatment
5. Factory applied coatings
6. Requirement for Euro Class B

We offer installation, detailing guidance based on TRADA documentation, with a wealth of knowledge and information on how different timbers will perform over the life span of your project.

Please get in contact if you would like NORclad to create an H21 specification for you.



# CONTACT US TODAY

At NORclad, we pride ourselves on proactive communication with both existing and prospective clients.

If you have a question to ask us or would like to receive a quotation, please feel free to contact us today via email or phone.

## HEAD OFFICE

Arnold Laver and Co Ltd  
Unit A Third Way,  
Avonmouth, Bristol  
BS11 9YH

## PHONE

+44 (0) 1275 794 735

## EMAIL

[sales@norclad.co.uk](mailto:sales@norclad.co.uk)

## WEBSITE

[www.norclad.co.uk](http://www.norclad.co.uk)



**NORclad**<sup>®</sup>  
Part of National Timber Group

