



#### **WARNING**

Where installation of this product or system has not been undertaken strictly as per these Instructions, the CodeMark certification and claims for compliance under the National Construction Code (NCC) will be deemed null and void. Where this has occurred, alternate building compliance solutions will need to be sought for the specific site.

# Product description - Ecology - Technical data

Euro Selekta Clad (Euro Selekta Clad profiles) are identical in terms of their core material and surface texture. However, they are available with different surface coatings.

The **particle wood core** consists of processed timber. We use exclusively untreated pulpwood in the form of wood shavings, thinning material and round timber from sustainable, domestic forestry. Imported timber is not used - especially from tropical climates.

The **binding agent** used is a thermosetting artificial resin with building authority approval for outdoor use.

As a **wood preservative**, we use an eco-friendly boron-based product with building authority approval that does not contain lindane or PCP.

This **low flammability** version is a mixture of boric acid and borax is used as a fire protection agent. No isocyanates, phosphates or halogens are added.

Several layers of paper are impregnated with artificial resins for use as a coating. The surface and core are fused together without seams in a single process under the application of pressure and heat.

#### Colorpan

Base coating of paper impregnated with melamine resin, followed by coloured Colorpan surface coating using a pure, water-based acrylate. The pigments added are free of toxic heavy metals [no lead, chrome or cadmium].

#### **Dekopan Plus**

Multi-layer coating, printed or dyed; transparent, weatherresistant surface coating of the decor side. Rear side brown, no colour options.

#### **SECTION 1 – CODEMARK COMPLIANCE INFORMATION**

	Volume One	
Performance Requirement(s):	FP1.4	Weatherproofing – Refer Limitation and condition 2
Deemed-to-Satisfy Provision(s):	B1.2 (a)(iii), (b)(iii), (c)(ii) & (c)(iii)	Structural Provisions – Determination of individual actions – Limited to external wall cladding
	C1.10(a)(ii) &(ix)	Fire hazard properties – wall and ceiling Linings
	F5.2(a)	Determination of airborne sound insulation ratings
	F5.5	Sound insulation rating of walls - as applicable - contributes to the acoustic properties of the wall
	G5.2	Construction in Bushfire Prone Areas - External walls - BAL A29
State or territory variation(s):	Part F5 (NT), G5.2	[NSW] [G5.1 Application of part QLD, NSW]

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### SECTION 1 - CODEMARK COMPLIANCE INFORMATION (continued)

	Volume Two	
Performance Requirement(s):	P2.2.2	Weatherproofing – Refer Limitation and condition 2
Deemed-to-Satisfy Provision(s):	3.0.3(a)(iii), (b)(iii) & (c)(iv)	Structural Provisions - Determination of individual actions - Limited to external wall cladding
	3.8.6.2[a][i]	Sound insulation requirements - contributes to the acoustic properties of the wall
	3.8.6.3[a][i]	Determination of airborne sound insulation ratings
	3.10.5.0	Bushfire areas - External walls - BAL A29
State or territory variation(s):	Part 3.8.6 (NT), 3.10	0.5.0 (NSW, QLD)

#### Limitations and conditions:

- 1. In the absence of a site-specific performance solution, this system is not suitable:
  - a. for use in or on Class 2 to 9 buildings where NCC clauses C1.9 and C1.14 requires buildings and/or ancillary elements to be non-combustible; and
  - b. for use in or on Class 2 to 9 buildings where internal walls are required to achieve an FRL regardless of the type of construction.
- 2. Weatherproof testing has not been conducted in accordance with FV1.1 or V2.1.1 and is subject to a site-specific design solution (as illustrated in Section 2).
- 3. Bushfire is limited to the tested specimen as listed in A3.
- 4. This product has fixing requirements analysed, in accordance with the relevant Australian Standards, as suitable for wind classifications N1, N2, N3 & N4 and C1, C2, C3 & C4.
- 5. It is the responsibility of the designer to ensure any timber framing is designed and constructed in accordance with AS 1720.1;2010 and AS 1684;2010.
- 6. Installation requirements are outside the scope of this certificate and subject to project specific engineering advice.
- 7. The Euro Selekta Clad has a maximum fixing spacing of 645mm for general cladding areas and 300mm for areas within 1200mm of corners using 6G-30mm stainless steel screws.
- 8. The Euro Selekta Clad has not been assessed for impact resistance for cyclonic areas in accordance with AS 1170.2:2011.

#### Type and intended use of product

Euro Selekta Clad is permitted to be used on the interior or exterior side of the wall frame or structure, vertically, horizontally on a soffit of a building, awning, architectural feature attached to a wall provided it is used within the condition and limitations detailed in this certificate.

# **Product specification**

The Euro Selekta Clad is 170mm wide with a 155mm cover, 9mm-18mm thick and up to 5400mm in length.

#### Weatherproofing

Euro Selekta Clad testing, conducted in accordance with AS/NZS 4284:2008, passed the water testing portions of the AS/NZS 4284:2008, Clause 8.5 testing, at pressures of 455Pa static and up to 1066 Pa cyclic.

## Fixing requirements

	Maximum Spacing of Fasteners (mm)															
	١	<b>N</b> 1	Ν	12	٨	13	N	4	C	21	С	2	C	:3	С	:4
	General	Corners	General	Corners	General	Corners	General	Corners	General	Corners	General	Corners	General	Corners	General	Corners
JD3	645	300	645	300	645	300	645	300	645	300	645	300	645	300	645	300
JD4	645	300	645	300	645	300	645	300	645	300	645	300	645	300	645	300
JD5	645	300	645	300	645	300	645	300	645	300	645	300	645	300	645	300
J3	645	300	645	300	645	300	645	300	645	300	645	300	645	300	645	300
J4	645	300	645	300	645	300	645	300	645	300	645	300	645	300	569	285

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#### SECTION 1 – CODEMARK COMPLIANCE INFORMATION (continued)

#### Fire

Fire testing has been conducted in accordance with AS/NZS 3837:1998. For details of the tested specimen, contact the Certificate Holder.

Average Specific Extinction Area	2.6m²/kg
Group Number	3

Fire testing has been conducted in accordance with AS 1530.3:1999. For details of the tested specimen, contact the Certificate Holder.

Ignitability Index	13
Spread of Flame Index	0
Heat Evolved Index	4
Smoke Developed Index	3

#### **Bushfire**

Testing has been conducted in accordance with AS 1530.8.1:2007 and achieved a BAL-A29 rating. For details of the tested specimen, contact the Certificate Holder.

#### **Acoustic Properties**

The acoustic testing sample was constructed in accordance with the configuration as follows:

- External Cladding (Source room side) Euro Clad Composite (9mm-18mm thick x 155mm wide) with no sealant.
- 92mm Steel Stud 0.55BMT at 600mm centres, with 100mm thick EarthWool insulation (R2.5).
- 1 x layer 13mm thick Plasterboard (Receiving room side).

#### Results:

R <sub>W</sub> :	47
C:	-3
C <sub>tr</sub> :	-8

#### **Evaluation methods**

Structural Provisions -

A5.2(1)(e). Reports from a professional engineer.

Fire Safety Provisions -

A5.2[1](d). Reports from Accredited Testing Laboratories.

Acoustic Provisions -

A5.2(1)(d). Reports from Accredited Testing Laboratories.

Weatherproofing Provisions -

A5.2(1)(d). Reports from Accredited Testing Laboratories.

#### Reports

AWTA; NATA Accreditation No. 1356; Test Report 7-586357-CQ; Testing in accordance with AS 1530.3:1999; Dated 02/08/2012 (Validated by Ignis Solutions, Report No. IGNS-7210-03 I01R00, Dated 07/05/2019).

Exova Warringtonfire; NATA Accreditation No. 3277; Test Report 326591-00cb.1; Testing in accordance with AS/NZS 3837:1998; Dated 31/08/2015.

ASK Consulting Engineers; Test Report number 6813R02V03\_Euro; Laboratory acoustic testing of an external wall system in accordance with AS/ANZ ISO 717.1:2004; Dated 23/01/2020.

Exova Warringtonfire; NATA Accreditation No. 3277; Test Report 46212000.1; Bushfire resistance test of an external wall system to BAL-A29 in accordance with AS 1530.8.1:2007; Dated 16/2/2017.

Summermore Pty Ltd; Report No. 19-7043; Fixing Requirements Analysis; Wind loadings to AS/NZS 1170.1:2002 & AS/NZS 1170.2:2011; Dated 09/07/2019.

Summermore Pty Ltd; Engineering Report 18-1531; Structural clauses; Seismic Capacity Report to AS/NZS 1170.0:2002 & AS 1170.4:2007; Dated 24/03/2018.

Facadelab; IANZ Accreditation No. 1091 Report no. 17-17; Testing in accordance with AS/NZS 4284:2008, Clause 8.5 only; Dated 13/09/2017.



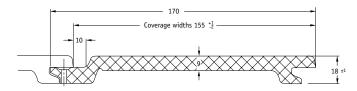


#### **SECTION 2 – INSTALLATION & OTHER SUPPORTIVE DATA**

# General information, Profile dimensions, Calculating the required quantity & Guidelines

#### Scope

The scope of these installation instructions covers all installation variants of façade cladding, vertical, horizontal including soffits.



# Calculating the required quantity (Calculation values exclude cutting waste)

			Required quantity/m <sup>2</sup>	Required quantity/m <sup>2</sup>	
	Coverage width	Standard lengths	Façade profile	Façade screw 3.5 x 50, stainless steel	
Euro Selekta Clad (Colorpan/Dekopan plus) at max. fastening spacing = 645 mm					
(Selekta)	155 mm	5400 mm	6.45 linear m	11 pcs.	

#### Sub-framework for façade cladding

Increased wind suction at the edge areas of the building walls must be considered when planning the sub-framework.

The fastening spacing of the Euro Selekta Clad profiles must be reduced to max. 300 mm in these areas; additional support battens must be provided as necessary.

#### Installation lengths

For installation lengths of more than 5400 mm, the profiles must be cut to a maximum length of 2700 mm in order to minimise the expansion joints. This is dependent on local temperature fluctuations. **Note:** The wood decors are equivalent to natural wood surfaces, meaning that different grain textures are possible within a single shipment (plain and/or mottled). Unfortunately, sorting at the factory is not possible! In order to obtain a uniform overall finish, we recommend considering this fact and, for example, laying out the façade profiles before starting with the installation.

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Building better choice

# **Horizontal installation**

#### A Sub-framework

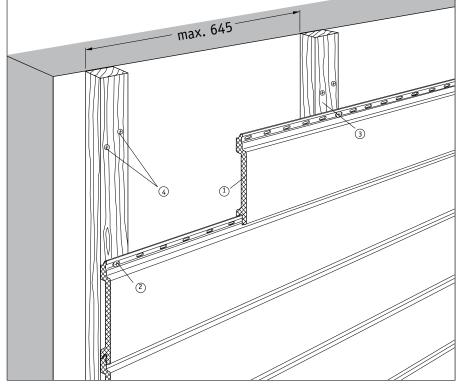
- 1. Euro Selekta Clad profile
- 2. Façade screw 6g x 50 mm, stainless steel
- 3. Support batten 30 x 42 mm, spacing max. 645 mm
- 4. Fastening with 2 screws 6g x 50 mm, stainless steel A2.

#### **B** Starter details

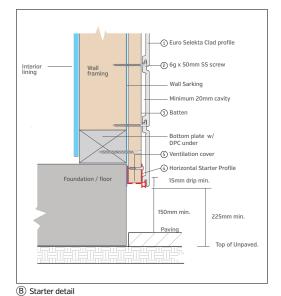
- 1. Euro Clad Selekta profile
- 2. Fastening with 2 screws 6g x 50 mm, stainless steel batten to wall frame or equivalent
- 3. Cavity batten 30 x 42 mm
- 4. Horizontal starter profile.

#### C Window details

- 1. Euro Selekta Clad profile
- 2. Horizontal starter profile
- 3. Window frame flashing
- 4. Window frame
- 5. Z profile.

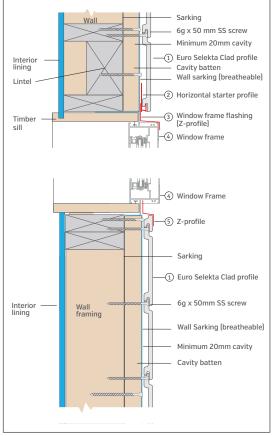


A Typical fixing detail



#### Please note:

- The supporting wall must be watertight and correct flashings used in the event of any water penetration i.e. severe storms
- There must be ventilation/drainage at the base of the wall
- Install breathable sarking over the stud frame keeping all overlaps pointing downwards and tape all joints
- HPL products expand and contract with temperature longitudinally see installation instructions for joint options.



© Window detail





Building better choice

### **Horizontal installation**

### A Fastening spacing

- 1. Euro Selekta Clad profile
- 2. Façade screw 6g x 50, stainless steel A2
- 3. Support connection
- 4. Batten system 30 x 42 mm

X = 3 or more supports, max. 645 mm

X = for only 2 supports, max. 300 mm;

Profile excess length max. 100 mm.



Use only screws 6g x 50, stainless steel A2. Always centre the screws in the punched fastening holes of the façade profile.



e. g. aluminium and wood sub-frameworks

- 1. Building wall
- 2. Support frame / top hat bracket
- 3. Masonry tapper.

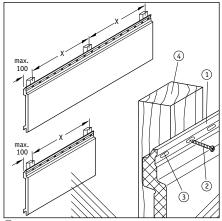
Alternatively, other sub-framework systems can also be used, such as for very thick insulation layers.

#### C Start of installation from below

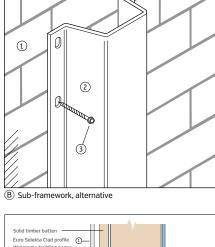
- Euro Selekta Clad profile
- 2. Starting profile T + G, aluminium
- 3. Minimum 20 mm cavity
- 4. Ventilation profile, galvanised
- Wall sarking
- Cavity batten.

# D Internal corner

- Euro Selekta Clad profile
- 2. Aluminium internal corner profile
- 3. 75 x 75 mm flashing
- 4. 6g x 50 mm S/S screws.



(A) Fastening spacing

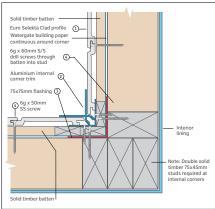


 Euro Selekta Clad profile (5) Wall Sarking - Minimum 20mm cavity Cavity batte , Bottom plate w/DPC under -⑦ 6g x 50mm SS screw (2) Horizontal starter profile Galvanised Wall framing

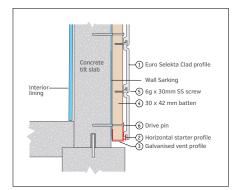
© Start of installation, alternative

#### Please note:

- Baseboard termination At least 100 mm spacing to the floor.
- · Avoid designs that allow moisture build-up.



(D) Internal corner



(E) Fastening to masonry wall

#### E Masonry wall fastening

- Euro Selekta Clad profile
- Horizontal starter profile
- 3. Ventilation profile

- 4. 30 x 42 mm batten
- 5. 6q x 30 mm stainless steel screw
- 6. Drive pin.

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### **Horizontal installation**

#### A External corner

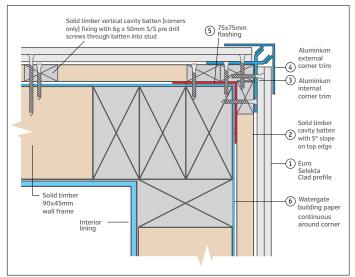
- 1. Euro Selekta Clad profile
- 2. 30 x 42 mm batten
- 3. Aluminium internal corner profile
- 4. Aluminium external corner profile
- 5. 75 x 75 mm flashing.

#### **B** External corner Alternative

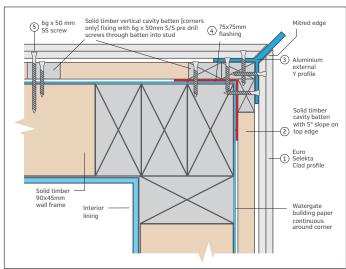
- 1. Euro Selekta Clad profile
- 2. 30 x 42 mm batten
- 3. Aluminium external Y profile
- 4. 75 x 75 mm flashing
- 5. 6g x 50 mm stainless steel screw.

#### C Roof connection

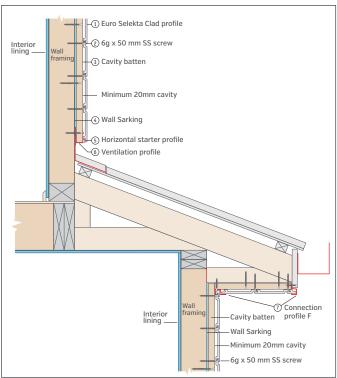
- 1. Euro Selekta Clad profile
- 2. 6q x 50 mm stainless steel screw
- 3. Cavity batten
- 4. wall sarking
- 5. Horizontal starter profile
- 6. Ventilation profile
- 7. Connection profile F.



(A) External Corner



(B) External Corner alternative



C Connection to pitched roof and soffit

#### Please note:

The Aluminium External/Internal corner profile can be used in reverse for Internal corner applications.





# **Horizontal installation**

#### A Window lintel connection

- 1. Euro Selekta Clad profile
- 2 Horizontal starter profile
- 3 Window Z profile
- 4 Window frame flashing
- 5 Ventilation opening (continuous).

#### Window sill connection

- 1. Euro Selekta Clad profile
- 2 2 piece edge cover
- 3 Cavity batten
- 4 Window frame.

#### B Window reveal connect

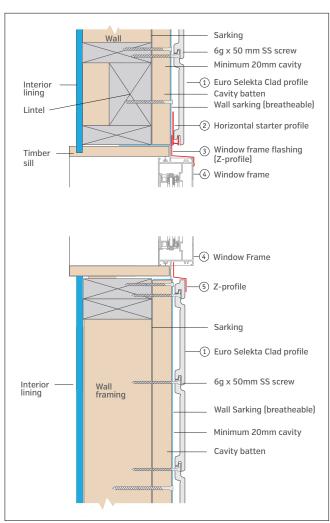
- 1. Euro Selekta Clad profile
- 2. Jamb flashing profile
- 3 Cavity batten
- 4. Aluminium window frame.

#### C Pier floor

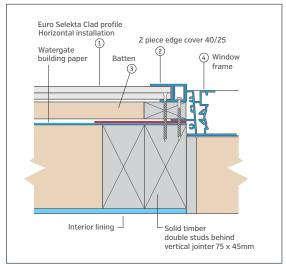
- 1. Euro Selekta Clad profile
- 2. Horizontal starter profile
- 3 Cavity batten
- 4. Ventilation profile (continuous).

#### Please note:

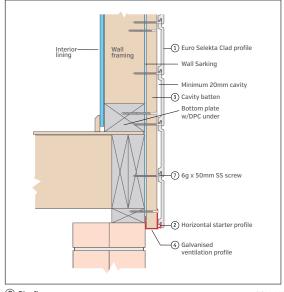
- At the transition between the reveal and the lintel, the connection profiles are given a mitre cut.
- The Z profile covers the vertical left and right hand side flashing profiles.



(A) Window lintel and sill connection



(B) Window horizontal



© Pier floor ESII AUS V4 31.01.20

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### **Horizontal Installation**

#### A Door head detail

- 1. Euro Selekta Clad profile
- 2. Horizontal starter profile
- 3. Ventilation profile
- 4. 6g x 50 mm stainless steel screw
- 5. Z-profile.

## B Parapet detail 1

- 1. Euro Selekta Clad profile
- 2. Edge trim
- 3. Parapet flashing
- 4. 30 x 42 mm batten.

# C Parapet detail 2

- 1. Euro Selekta Clad profile
- 2. Edge trim
- 3. Parapet flashing
- 4. 30 x 42 mm batten.

# D Horizontal to vertical profile

- 1. Euro Selekta Clad profile
- 2. Support batten
- 3. Connection cover profile
- 4. Pan head screw 4 x 40 mm, stainless steel into flashings or profiles.

#### Profile butt joints

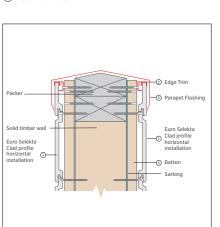
The profiles preferred installation is a continuous vertical joint to 5.4 metres length. Local temperature variations should be considered with the inherent thermal expansion and contraction.

# E Butt joint

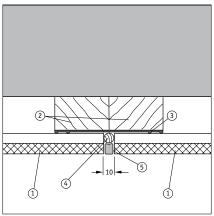
- 1. Euro Selekta Clad profile
- 2. Support batten
- 3. Cover profile, aluminium
- 4. Backing bead
- 5. Clear UV resistant silicon.

Interior Int

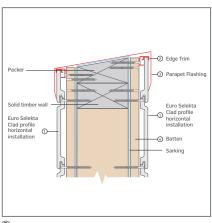
A Door head detail



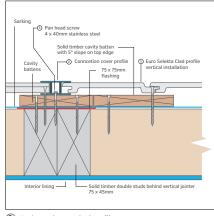
© Parapet detail 2



E Butt joint - end elastometric waterproof joint



B Parapet detail 1



(D) Horizontal to vertical profile

#### Tip:

Peg a 30 mm wide batten to the sub-framework at the joint location. Position the façade profiles flush on both sides. After installation of the façade profiles, remove the batten and fix, then push cam home.

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Building better choice

# **Vertical installation**

#### A Sub-framework

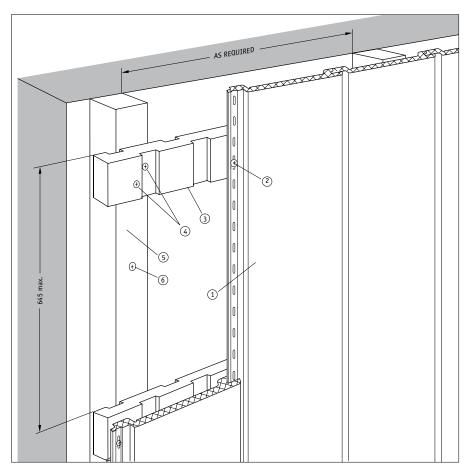
- 1. Euro Selekta profile
- 2. Façade screw 6g x 50 mm, stainless steel
- 3. Timber batten 30 x 42 mm, spacing max. 645 mm
- 4. Fastening with 2 screws 4 x 50 mm, stainless steel
- 5. Timber frame construction at least 45 mm x 75 mm, or at least 20 mm higher than structural wall
- Dowel and screw with building authority approval.

#### **B** - C Sections

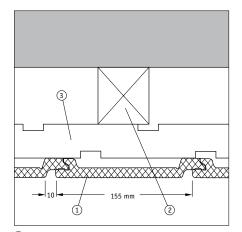
- 1. Euro Selekta profile
- 2. Back ventilation spacing (at least 20 mm\*)
- 3. Timber batten 30 x 42 mm spacing max 645 mm.

#### Note:

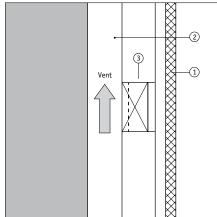
Optional ventilation detail must conform to local sectional penetration table.



(A) Sub-framework







© Vertical section

#### Please note:

- Ventilation penetration holes as per section allowance table.
- · Otherewise a secondary batten is required.

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Building better choice

### **Vertical installation**

#### A Fastening spacing

- 1. Euro Selekta Clad profile
- 2. Façade screw 6g x 50 mm, stainless steel
- 3. Elongated fixing holes
- 4. Timber batten 30 x 42 mm
- X = 3 or more supports, max. 645 mm
- X = For only 2 supports, max. 300 mm; profile excess length max. 100 mm

#### **Fastening materials**

Use only screws  $6g \times 50$  mm, stainless steel. Always centre the screws in the fastening holes of the façade profile.

#### B Sub-frameworks - alternatives

- 1. Building wall
- 2. Support batten ferrule, top hat
- 3. Masonary fixing screw.

Alternatively, other sub-framework systems can also be used.

#### C Start of installation from below

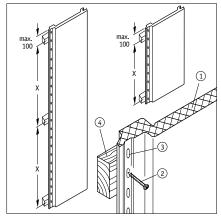
- 1. Euro Selekta Clad profile
- 2. Ventilation profile, galvanised steel
- 3. Ventilation opening, continuous.

# D Alternative detail

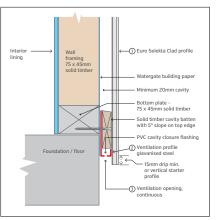
- 1. Euro Selekta Clad profile
- 2. Vertical starter profile.

## E Joiner detail

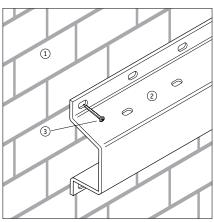
- 1. Euro Selekta Clad profile
- 2. Connection cover profile 2 piece
- 3. Pan head screw 4 x 40 mm stainless steel
- 4. Edge trim profile.



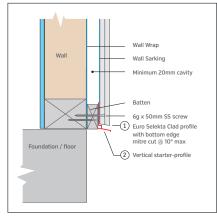
(A) Fastening spacing



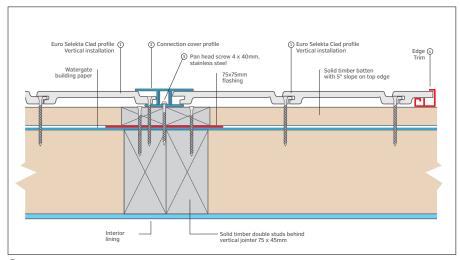
© Starter detail



B Sub-framework, alternative



Alternative detail



E Joiner detail

#### Please note:

- Baseboard termination at least 100 mm spacing to the floor.
- Avoid designs that allow moisture build-up.
- Use local penetration tables.





### **Vertical installation**

#### A External corner

- 1. Euro Selekta Clad profile
- 2. External corner (two-part), aluminium
- 3. Internal corner (two-part), aluminium
- 4.  $75 \times 75$  mm flashing.

#### **B** Internal corner

- 1. Euro Selekta Clad profile
- 2. Internal corner (two-part), aluminium
- 3. 75 x 75 mm flashing
- 4. 6g x 50 mm Stainless steel screw.

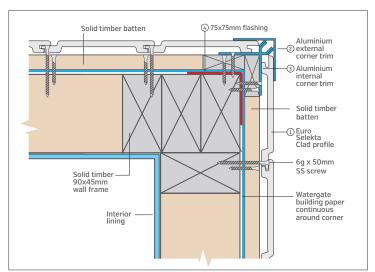
#### C Masonry wall

- 1. Euro Selekta Clad profile
- 2. 30 x 42 mm timber batten
- 3. Drive pin
- 4. 6g x 30 mm Stainless steel screw.

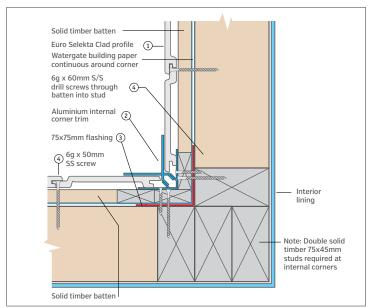
#### Please note:

 The Aluminium External/Internal corner profile can be used in reverse for Internal corner applications.

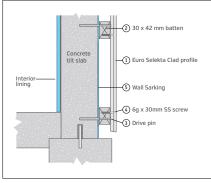
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(A) External corner, alternative



B Internal corner



© Fastening to masonry wall





### **Vertical installation**

#### A Window lintel connection

- 1. Euro Selekta Clad profile
- 2. Vertical starter profile
- 3. Z profile, aluminium.

#### Please note:

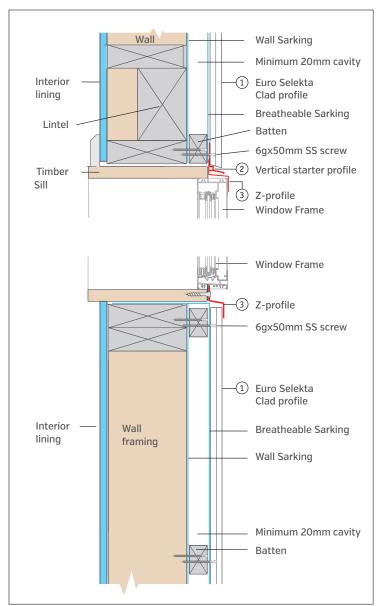
- At the transition between the reveal and the lintel, the connection profiles are given a mitre cut.
- Ensure ventilation profile is underneath Z profile

#### B Door head connection

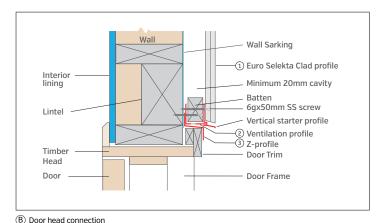
- 1. Euro Selekta Clad profile
- 2. Ventilation profile, continuous
- 3. Z profile, aluminium.

#### C Window reveal connection

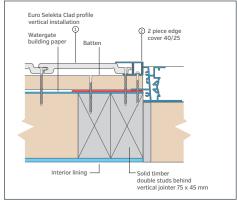
- 1. Euro Selekta Clad profile
- 2. 2 piece edge cover 40/25
- 3. External corner profile, aluminium.



Window reveal connection



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© Window reveal connection





Building better choice

Solid timber double studs behind vertical joiner 75 x 45 mm

# **Butt joints and diagonal** installation

## A & B Vertical installation. continuous

- Euro Selekta Clad profile
- 2. Install 2 support battens 30 x 42 mm in each joint area
- 3. 10 mm\* expansion gap.
- Expansion amount is based on 120 Celsius variation in temperature over 5.4m plank lengths

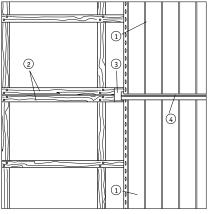
# C & D Vertical / horizontal installation, continuous horizontal butt joint

The sub-framework must be modified at the butt joint according to the installation direction.

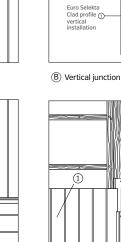
- Euro Selekta Clad profile
- Support battens 30 x 42 mm
- 3. Z profile, maintain 10 mm gap at top
- 4. Back ventilation spacing at least 20 mm
- Connection cover profile.

# E Vertical / horizontal installation, continuous vertical butt joint

- Euro Selekta Clad profile
- Connection cover profile
- 3. Pan head screw 4 x 40 mm, stainless steel.



(A) Vertical installation

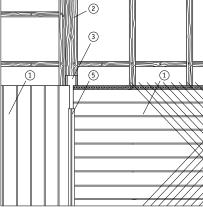


Timber cavity batten with 5° slope on top edge

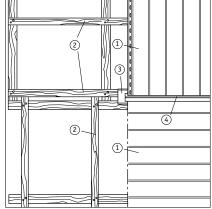
DynaFlash

batten

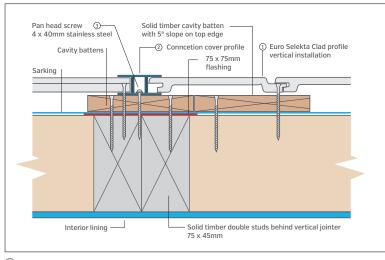
30 x 42 mm



D Vertical/horizontal installation



© Vertical/horizontal installation



(E) Joiner detail horizontal

Tip: Peg a 30 mm wide batten to the sub-framework at the joint location. Position the façade profiles flush on both sides. After installation of the facade profiles, remove the batten and screw on the cover profile T + G in its place.

Note: Position the vertical support battens at the transition point at least 30 mm above the horizontal counter batten to ensure back ventilation.

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Building better choice

## A Parapet detail

- Euro Selekta Clad profile
- Edge trim
- Parapet flashing
- 4. Cavity batten.

## B Roof and soffit detail vertical

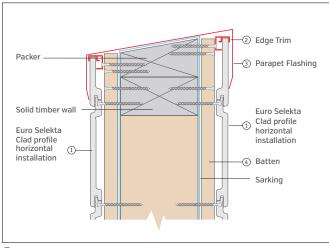
- Euro Selekta Clad profile
- Horizontal starter profile
- Ventilation profile
- 4. Connection profile F.

## C Horizontal pipe detail

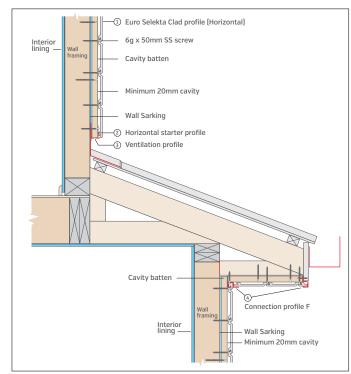
- Euro Selekta Clad profile
- 30 x 42 mm batten
- Pipe flashing (min 100 mm outside pipe)
- 4. Flashing tape
- Sealant over backing rod
- Protective pipe flange.

## D Vertical pipe detail

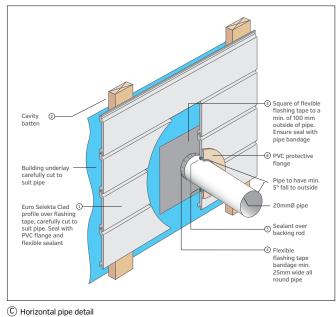
- Euro Selekta Clad profile
- 30 x 42 mm batten
- 3. Pipe flashing (min 100 mm outside pipe)
- 4. Flashing tape
- Sealant over backing rod
- 6. Protective pipe flange.



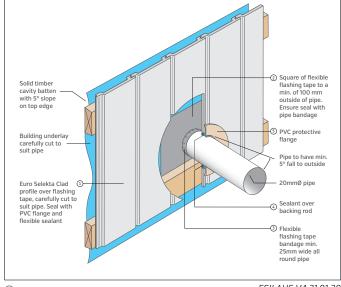
A Parapet detail



(B) Roof and soffit detail - vertical



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ESII AUS V4 31.01.20 (D) Vertical pipe detail





# **General guidelines**

# Arguments for a back-ventilated curtain cladding of the exterior wall

- Energy savings
- · Weather protection
- Attractive design
- · Increased building value

#### Handling

The Euro Selekta Clad profiles must be stored in their packaging, lying flat and dry until use.

#### Sawing with power tools

Hard metal saw blade, high number of teeth, (tooth pitch approx. 10 – 15 mm), saw blade with alternate top bevel or hollow-tooth flat-top teeth.

#### Sawing with hand saws

A well-sharpened and dressed saw with small teeth is sufficient.

#### Fastening the façade profiles

Only with façade screws  $6g \times 50$  mm, stainless steel A2. Centre the fastening screws through the existing punched holes. The screws may only be screwed in until the screw head rests against the surface.

#### Fastening of all connection profiles

Only with façade screws 6g x 50 mm, stainless steel A2.

**Please note:** Heavy structures, such as an awning, climbing trellis, etc., may not be fastened directly to the cladding or its sub-framework. Provide separate sub-frameworks.

### Expansion

The length change of the façade profiles is approx.

1 – 3 mm/linear m, depending on moisture and temperature. Expansion joints of 10 mm\* must be maintained at profile butt joints and profile connections.

#### Sealing cut edges

Cut edges must be sealed free of pores with Werzalit edge sealant. Exception: Sufficiently covered cut edges under the roof overhang.

#### Cleaning

Clean only with water and a liquid detergent. Never use an abrasive cleaner.

\* Expansion amount is based on 120 Celsius variation in temperature over 5.4 m plank lengths

#### Sub-framework

Façade profiles are typically fastened to a wood sub-framework. In principle, the following guidelines should be followed for wood sub-frameworks:

- a) The sub-framework must be fastened using dowels and screws with building authority approval and in accordance with the instructions of the manufacturer.
- b) The support battens must be fastened to the counter battens with at least 2 wood screws, stainless steel A2, per intersection, in a diagonal arrangement.
- c) The sub-framework must be level and plumb.
- d) All Structural framework must be in accordance to Australian Building Standards & Local Building Codes.

#### Thermal insulation

The thermal insulation material must be fastened with appropriate hardware, such as insulation pins, in accordance with the instructions of the manufacturer. The installation must be made windproof to prevent cold air from flowing behind it. We therefore recommend installing in two layers with overlapping joints. The insulation must be flush against the wall.

#### **Back ventilation**

The back ventilation spacing must be at least 20 mm.

The back ventilation cross-section may not be regularly diminished by battens or other objects. The ventilation inlets and outlets must have consistent widths of at least 20 mm.

#### Profile surface finishes

Colorpan: Single-colour coating based on an acrylic paint system.

**Dekopan Plus:** Wood decor with transparent acrylic coating. When stored in damp conditions (e.g. kept outdoors, wrapped in film packaging), the paint layer might undergo partial changes, givin it a milky appearance. These disappear completely once the profiles have dried. The resistance of the paint system is not affected. The environmentally-friendly acrylic coating is finally cured by the effects of weathering.

#### Connections

Clearance at least 10 mm.

#### Butt joints and expansion joints

When profiles have been joined (when fixed) horizontally over lengths exceeding 5.4 metres, individual profiles should not exceed 2.7 metres in lenth so as to keep expansion joints as narrow as possible. With profiles 2.7 metres long, a 10 mm wide expansion joint is needed.

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Technical data		Values	Unit	Test specification
Sustainability		PEFC certified	N/A	PEFC
Density		800 - 950	kg/m³	EN 323
Flexural strength		40 - 45	N/mm²	EN 310
Elasticity modulus		4000 - 6000	N/mm²	EN 310
Tensile strength vertical to the surface		2.0 - 3.0	N/mm²	EN 319
Screw withdrawal strength [1]		800 - 1300	N	WERZALIT TEST STANDARD
Swelling after storage	after 2 hrs	0.3 - 0.6	%	EN 317
in water at 20 °C	after 24 hrs	3.0 - 5.0	%	EN 317
Moisture content		5 – 10	%	EN 322
Temperature resistance	under permanent load under temporary load	-50 to +70 +120	°C	WERZALIT TEST STANDARD
Length change due to moisture/heat exposure [3]		1 - 3	mm/m	WERZALIT TEST STANDARD
Thermal conductivity \( \lambda \) 10		0.20	W/m·K	DIN 52 612
Water vapour permeability diffusion-equiva	alent air layer thickness	5 – 15	m	DIN 52 615
Cross-cut test (4)		GT 0A – GT 1A	N/A	EN ISO 2409
Scratch resistance		0.5 - 1.5	N	EN 438
Light fastness		Level 8	N/A	DIN 54 004
Chemical resistance		limited resistance	N/A	EN 438
Cigarette burn resistance		not resistant to burns	N/A	as for EN 438
Colour deviation <sup>(5)</sup>	ΔE<1	N/A	DIN 5033	
Impact load	impact resistant	N/A	WERZALIT TEST STANDARD	

<sup>4</sup> mm particle board screw, using a hole of 3 mm diameter, 10 mm deep. Not available for all products, please ask for specific information.

# Wind loadings

This is a simplified form or general rule of thumb for wind loadings.

Wind Loading	Speed	Equivalent from test data
Low	<32m/s	N1, N2
Medium	37m/s	C1, N3
High	44m/s	C2, N4
Very High	50m/s	C2, N4
Extra High	55m/s	C2, N4
Specific Design	>55m/s	Engineered design

# Important Building Design Notes:

- The supporting wall must be watertight and correct flashings used in the event of any water penetration i.e. severe storms
- There must be ventilation/drainage at the base of the wall
- Install breathable sarking over the stud frame keeping all overlaps pointing downwards and tape all joints
- HPL (High Pressure Laminate) products expand and contract with temperature longitudinally – see installation instructions for joint options.

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Maximum expected length change under extreme climate fluctuations. Gt 0A is the best, Gt 4A is the worst value.

With measurement geometry 0°/45°, standard illuminant "C".