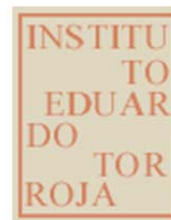
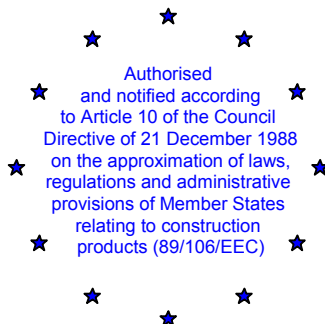


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**MIEMBRO DE EOTA
EOTA MEMBER**

European Technical Approval

ETA-13/0627

English translation prepared by IETcc. Original version in Spanish language

Nombre comercial:

Trade name:

PARKLEX FACADE

Beneficiario del DITE:

Holder of approval:

COMPOSITES GUREA, S.A.
C/ Baldrun, s/n.
Polígono Industrial Alkaiaga.
31780 VERA DE BIDASOA
(Navarra) España

**Área genérica y uso del
producto de construcción:**

Generic type and use of
construction product:

**Kit para el revestimiento de fachadas ventiladas con tablero
compacto HPL terminado en madera.**

Kits for ventilated external wall claddings with HPL panels wood finished

Validez desde:
hasta :

Validity from / to:

24 / 06 / 2013
24 / 06 / 2018

Planta de fabricación:

Manufacturing plant:

COMPOSITES GUREA, S.A. 01

**Este Documento de Idoneidad
Técnica Europeo contiene:**

This European Technical Approval
contains:

25 páginas, incluidos 3 anejos.

25 pages included 3 annexes.



Organización Europea para la Idoneidad Técnica
European Organisation for Technical Approvals

I. LEGAL BASES AND GENERAL CONDITIONS

1. This European Technical Approval is issued by the **Instituto de Ciencias de la Construcción Eduardo Torroja** in accordance with:
 - Council Directive (89/106/EEC) of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products ⁽¹⁾, modified by Council Directive 93/68/EEC of July 1993 ⁽²⁾ and Regulation (EC) n°1882/2003 of the European Parliament and of the Council ⁽³⁾.
 - *Real Decreto 1630/1992 de 29 de diciembre, por el que se dictan disposiciones para la libre circulación de productos de construcción en aplicación de la Directiva 89/106/CEE* ⁽⁴⁾. *Real Decreto 1328/1995, de 28 de julio, por el que se modifican, en aplicación de la Directiva 93/68/CEE las disposiciones para la libre circulación, aprobadas por el Real Decreto 1630/1992, de 29 de diciembre. (BOE 19.895) y la Orden CTE/2276/2002 de 4 de septiembre.*
 - Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex of Commission Decision 94/23/EC ⁽⁵⁾.
 - Guideline for European Technical Approval of Kits for external wall claddings, ETAG 034, edition April 2012, *Part 1: Ventilated cladding kits comprising cladding components and associated fixings and Part 2: Cladding kits comprising cladding components, associated fixings, subframe and possible insulation layer.*
2. The **Instituto de Ciencias de la Construcción Eduardo Torroja** is authorised to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant(s) (e.g. concerning the fulfilment of assumptions made in this European Technical Approval with regard to manufacturing). Nevertheless, the responsibility for the conformity of the products to the European Technical Approval and for their fitness for intended use remains with the holder of the European Technical Approval.
3. This European Technical Approval is not to be transferred to other manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those laid down in the context of this European Technical Approval.
4. This European Technical Approval may be withdrawn by the **Instituto de Ciencias de la Construcción Eduardo Torroja** in particular pursuant to information by the Commission according to Article 5 (1) of Council Directive 89/106/EEC.
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6. The European Technical Approval is issued by the Approval Body in its official language. This version corresponds to the version circulated within EOTA. Translations into other languages have to be designated as such.

⁽¹⁾ Official Journal of the European Communities n° L 40, 11.2.1989, p.12.

⁽²⁾ Official Journal of the European Communities n° L 220, 30.08.1993, p.1.

⁽³⁾ Official Journal of the European Union n° L 284, 31.10. 2003, p.25.

⁽⁴⁾ Boletín Oficial del Estado n° 34 de 9 de febrero de 1993.

⁽⁵⁾ Official Journal of the European Communities n° L 17, 20.1.1994, p.34.

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1. Definition of products and intended use

The kit "PARKLEX FACADE" consists of an external cladding, mechanically fastened to a framework, which is fixed to the external wall of new or existing buildings (retrofit). An insulation layer is usually fixed on the external wall.

This kit for vertical exterior wall claddings is classified as family A, according to the ETA Guidance n° 034: *Kits for external wall claddings. Part 1: Ventilated cladding kits comprising cladding components and associated fixings and Part 2: Cladding kits comprising cladding components, associated fixings, subframe and possible insulation layer*, edition April 2012 (called ETAG 034, in this ETA) and comprises the components specified in table 1, which are factory produced by the ETA holder or a supplier.

1.1 Definition of the construction products

TABLE 1 – DEFINITION OF THE KIT COMPONENTS				
		Components	Material	Sizes [mm]
Cladding element		HPL compact panels for exterior PARKLEX FACADE F ⁽⁶⁾ produced by COMPOSITES GUREA, S.A. EDF ⁽⁷⁾ quality and CE marking ⁽⁸⁾ according to Annex ZA of the EN 438-7:2005 ⁽⁹⁾	High-density, no porous and homogeneous stratified timber panels for external use. This quality of panel is reached by the simultaneous application of high temperature and pressure. Layers of the panel (figure 1): a. PVDF Antigraffiti overlay b. Everlook c. Natural timber veneer d. HPL core : Kraft paper impregnated with phenol/formaldehyde resins e. Natural timber veneer f. Balancing film	6 8 2440 x 1220 x 10 12 14
Ventilated air space		A layer of air between the substrate and cladding elements in which is placed the insulation layer		
Subframe ⁽¹⁰⁾	Brackets	Metalic elements ⁽¹¹⁾ used as load trasmission between the subframe and the substrate wall.	Extruded aluminium ⁽¹²⁾	40x80x40-160 40x150x40-160
	Vertical profiles	Vertical elements ⁽¹³⁾ used to fix the panels by means of visible fixings	Aluminium	60 x 40-80
			Wood ⁽¹⁴⁾	40 x 40-80
Cladding fixings		Elements used to secure the cladding panels to the subframe ⁽¹⁵⁾	To aluminium subframe	Stainless steel screw Ø 5,5 L=28-38
				Aluminum rivet Ø 5 L=e _{pan} +e _{perf} +Ø _{cuerpo}
			To timber subframe	Stainless steel screw Ø 4,8 L=38
Ancillary material		Self-drilling screws between brackets and vertical elements ⁽¹⁶⁾	Stainless steel screw	Ø 5,5 L=25
		Tape used to form the joints in the timber subframe	Ethylene propylene diene monomer (EPDM)	W=60-100
Auxiliary components		Anchorage to substrate ⁽¹⁷⁾	-	-

⁽⁶⁾ Dimensional features, physical – mechanical and weather resistance properties in Annex 1

⁽⁷⁾ Panels for exterior use, severe conditions, fire-retardant

⁽⁸⁾ Certificate of conformity 1239-CDP-0801001

⁽⁹⁾ EN 438-7:2005 "High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (Usually called Laminates) - Part 7: Compact laminate and HPL composite panels for internal and external wall and ceiling finishes"

⁽¹⁰⁾ Not manufactured by COMPOSITES GUREA, S.A.

⁽¹¹⁾ Geometric and mechanical features in Annex 2 and figure 4

⁽¹²⁾ Physical and mechanical properties in Annex 2

⁽¹³⁾ Geometric and mechanical features in Annex 2 and figure 5

⁽¹⁴⁾ Technical specifications in Annex 2

⁽¹⁵⁾ See Annex 2

⁽¹⁶⁾ Geometric and mechanical features in Annex 2

⁽¹⁷⁾ See Annex 3

1.2 Intended use

This kit for ventilated external wall claddings is intended to be used as much in new or existing buildings.

The kit for ventilated external wall claddings is non-load-bearing construction system. It does not contribute to the stability of the wall on which is installed, neither to ensure the air tightness of the building structure but it can contribute to durability of the works by providing enhanced protection from the effect of weathering.

Some use categories have been adopted to correspond to the degree of exposure to impact use (see section 2.4.4).

The provisions made in this European Technical Approval are based on an assumed working life of 25 years as minimum, provided that the conditions lay down in sections 4.2, 5.1. and 5.2. for the installation, packaging, transport and storage as well as appropriate use, maintenance and repair are met.

The indications given on the working life can not be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

2. Characteristics of products and methods of verification

The identification tests and the assessment for the intended use of this kit for ventilated external wall claddings according to the Essential Requirements were carried out in compliance with the ETAG 034. The characteristics of the components shall correspond to the respective values laid down in the technical documentation of this ETA, checked by *Instituto de Ciencias de la Construcción Eduardo Torroja*, (from now on IETcc).

2.1 Mechanical resistance and stability (ER1)

Requirements with respect to the mechanical resistance and stability of non-load bearing parts of the works are not included in this Essential Requirement but are treated under the Essential Requirement Safety in use (See section 2.4)

2.2 Safety in case of fire (ER2)

2.2.1 Reaction to fire

Euro class B-s2, d0 according to standard EN 13501-1: 2007 + A1:2010⁽¹⁸⁾.

This classification is valid for the commercial reference "PARKLEX FACADE F" of high-pressure compact laminate panels in thicknesses of 6mm or greater in accordance with standard EN 438-7:2005 for high-pressure compact laminate and if the insulation layer placed in the ventilated air space is made of a non-combustible material (mineral wool) or if the layer behind the cladding elements is a mineral substrate like masonry or concrete (A1 or A2-s1,d0).

In other cases the class of reaction to fire is F (No performance determined – NPD)

A European reference fire scenario has not been laid down for facades. In some Member States, the classification of external wall cladding kits according to Standard EN 13501-1 might not be sufficient for the use in facades. An additional assessment of the system according to the national provision (e.g. on the basis of a large scale test) might be

⁽¹⁸⁾ EN 13501-1:2007 + A1:2010 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

necessary to comply with Member State Regulations, until the existing European classification system has been completed.

2.2.2 Fire resistance

The fire resistance requirement is applicable to the wall itself (made of masonry, concrete, timber or metal frame) and not on the cladding kits. The cladding kit alone does not meet any fire resistance requirements.

2.3 Hygiene, health and the environment (ER3)

2.3.1 Watertightness of joints

Joints in "PARKLEX FACADE" kit are open, therefore they are not watertight.

2.3.2 Water permeability and Water vapour permeability

These performances are not relevant for external wall cladding kits with ventilated air space.

2.3.3 Drainability

On the basis of the standard construction details (see figures 8, 9 and 10) and the installation criteria of this kit and the technical knowledge and experience, it may be said the water which penetrates into the air space or the condensation water can be drained out from the cladding without accumulation or moisture damage into the substrate.

2.3.4 Release of dangerous substances

The HPL compact panels for exterior **PARKLEX FACADE F** complies with the Annex ZA of the EN 438-7:2005. A declaration of conformity in this respect was made by the manufacturer.

According to this declaration exterior **PARKLEX FACADE F** panels contain:

- In the flame retardant additive
Chemicals: inorganic salts, which amount are 5-7% of the final product's weight and applied by immersion in a solution of the product and subsequent oven-drying
Polybrominated diphenylether: no used.
- Formaldehyde: class E1 according to EN 438-7:2005.

Also regarding the subframe a declaration of conformity in this respect was made by the manufacturer.

According to this declaration the aluminium alloys used for the subframe contain:

- hexavalent Cr, Hg, Pb which amount is always less than 0.1%;
- Cd which amount is always less than 0.1%.

In addition to the specific clauses relating to dangerous substances contained in this ETA, there may be other requirements applicable to the kits falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the EU Construction Products Directive, these requirements need also to be complied with, when and where apply.

2.4 Safety in use (ER4)

2.4.1 Wind load resistance

Wind load resistance has been determined taking into account the mechanical resistance of components (see section 2.4.2) and the wind suction ⁽¹⁹⁾ test tests according to ETAG 034 part 1, section 5.4.1.1

The weakest design mechanically has been tested.

Minimum thickness of panels 6mm; maximum distance between cladding fixings in horizontal direction H=400mm; maximum distance between cladding fixings in vertical direction V=400mm in panel with 2 vertical fixings and V=600 in panel with 3 vertical fixings.

The test results and calculated values for the tested specimen are indicated in table 2

TABLE 2 – WIND SUCTION TEST RESULT			
TEST SPECIMEN	MAXIMUM LOAD Q (Pa)	TYPE OF FAILURE	DISPLACEMENT UNDER MAXIMUM LOAD (mm)
Wood subframe ⁽²⁰⁾ Brackets distance: 800mm Vertical profile distance 400mm Stainless steel screw One panel: 1640 x 1220 x 6mm – 15 fixings Two panels: 440 x 440 x 6mm – 4 fixings/panel One panel: 774 x 440 x 6mm – 6 fixings Two panels: 197x2385x6mm – 12 fixings/panel Two panels: 1640x350x6mm – 10 fixings/panel	3000 ⁽²¹⁾	-	13,11
Aluminum subframe ⁽²²⁾ Brackets distance: 800mm Vertical profile distance 400mm Aluminum rivet One panel: 1640 x 1220 x 6mm – 15 fixings Two panels: 440 x 440 x 6mm – 4 fixings/panel One panel: 774 x 440 x 6mm – 6 fixings Two panels: 197x2385x6mm – 12 fixings/panel Two panels: 1640x350x6mm – 10 fixings/panel	4000 ⁽²³⁾	-	19,45

2.4.2 Mechanical test

2.4.2.1 Pull-through resistance of cladding element

Pull-through resistance of cladding element has been tested according to ETAG 034 part 1 section 5.4.2.1.1, using rivets as cladding fixings²⁴.

Test results are indicated in table 3.

TABLE 3 - PULL-THROUGH RESISTANCE OF CLADDING ELEMENT					
PANEL THICKNESS (mm)	SUPPORT Ø (mm)	FIXING POSITION (Aluminum rivet)	FAILURE LOAD (N)		FAILURE MODE
			F _m	F _{u,5}	
6	180	Centre	2054	1938	Panel
		Border	1139	951	Rivet
		Corner	666	605	Panel
	270	Centre	1537	1322	Panel
		Border	925	848	Rivet
		Corner	341	263	Panel
	350	Centre	1582	1260	Panel
		Border	767	682	Panel
		Corner	232	201	Panel
12	180	Centre	2548	948	Rivet deformation
		Border	3218	1930	Rivet
		Corner	1242	848	Panel
	270	Centre	3194	1685	Rivet
		Border	3549	2842	Rivet
		Corner	799	501	Panel
	350	Centre	3312	2918	Rivet
		Border	3035	1746	Rivet
		Corner	718	558	Panel

⁽¹⁹⁾ The wind pressure test can be avoided because the kit configuration guaranties a better behaviour in face of wind pressure than in face of windsuction

⁽²⁰⁾ Characteristics of component are indicated in Annex 1 and 2

⁽²¹⁾ The test had to be stopped at 3200Pa because the equipment did not achieve stabilization. No failure occurs.

⁽²²⁾ Characteristics of component are indicated in Annex 1 and 2

⁽²³⁾ Test equipment limit.

⁽²⁴⁾ Taking into account that the tensile strength of the screws are higher than the rivet one for the tests it was considered the weakest design.

2.4.2.2 Pull-through resistance under shear load

Pull-through resistance under shear load has been tested according to ETAG 034 part 1 section 5.4.2.1.2.

Tests results are indicated in table 4.

TABLE 4 - PULL-THROUGH RESISTANCE UNDER SHEAR LOAD			
PANEL THICKNESS (mm)	FAILURE LOAD (N)		FAILURE MODE
	F _m	F _{u,5}	
6 Wood subframe	3950.20	3815.83	Screw deformation
6 Aluminium subframe	3415.76	3220.90	Rivet

2.4.2.3 Load bearing capacity of the brackets

The resistance of the brackets and their fixings under tension and shear loads was determined by calculation using the specifications defined in the annex E of ETAG 034 part 2.

The calculation results are indicated in table 5 and 6.

TABLE 5: RESISTANCE TO VERTICAL LOAD OF BRACKETS – CALCULATION RESULT				
BRACKETS DIMENSIONS	F _t (daN) ΔL=0.2% de L	F _{1d} (daN) ΔL=1mm	F _{3d} (daN) ΔL=3mm	F _s (daN) failure
(60+40) x 80 x 3	120	178	202	Purposeless
(100+40) x 80 x 3	101	152	183	Purposeless

TABLE 6: RESISTANCE TO HORIZONTAL LOAD OF BRACKETS – CALCULATION RESULT		
BRACKETS DIMENSIONS	F _c (daN) ΔL=1mm	F _s (daN) failure
(60+40) x 80 x 3	376	Purposeless
(100+40) x 80 x 3	405	Purposeless

2.4.3 Resistance to horizontal point loads

This performance has not been determined (NPD).

2.4.4 Impact resistance

Impact resistance has been tested and classified according to the method indicated in section 5.4.4 of ETAG 034 part 1.

According with the test results the use category of this kit for vertical exterior wall claddings is the Category I, that means this kit can be used in zones readily accessible at ground level to the public and vulnerable to hard body impacts but not subjected to abnormally rough use (e.g. public locations, such as squares, schoolyards, parks or commercial areas with usual movement of goods).

2.4.5 Resistance to seismic actions

This performance has not been determined (NPD).

2.4.6 Hygrothermal behaviour

The hygrothermal behaviour test has been carried out according to the method indicated in section 5.4.6 of ETAG 034 part 1 and during the test cycles, none of the following defects occurs during testing:

- deterioration such as cracking or delamination of the cladding element that allows water penetration to the insulation
- detachment of the cladding element
- Irreversible deformation

This system is therefore assessed as resistant to hygrothermal cycles.

The joint in "PARKLEX FACADE" kit are not watertight so the insulation layer shall be made of EPS to EN 13163, XPS to EN 13164, PUR to EN 13165, phenolic foam to EN 13166 or mineral wool to EN 13162 (WS or WL(P), depending on the national regulations).

2.5 Protection against noise (ER5)

This requirement is not relevant for cladding kits designed with ventilated air space.

2.6 Energy economy and heat retention (ER6)

This requirement is not relevant for cladding kits designed with ventilated air space.

2.7 Aspects of durability and serviceability

2.7.1 Pulsating load

This performance has not been determined (NPD).

2.7.2 Dimensional stability

The dimensional stability at elevated temperature of the panel has been determined according to EN 438-2: 2005⁽²⁵⁾ (section 17).

The test results are indicated in table 5.

TABLE 5 – ACCUMULATED DIMENSIONAL VARIATION		
PANEL THICKNESS (mm)	DIRECTION	ACCUMULATED DIMENSIONAL VARIATION (%)
6	Longitudinal	0,136
	Transverse	0,218
12	Longitudinal	0.033
	Transverse	0,043
14	Longitudinal	0,043
	Transverse	0,088

⁽²⁵⁾ EN 438-2:2005 "High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called Laminates) - Part 2: Determination of properties"

2.7.3 Immersion in water

After immersion in water, flexural strength and pull-through of the panel have been tested according to EN ISO 178⁽²⁶⁾ and ETAG 034 part 1 section 5.4.2.1.1.

Tests results are indicated in table 6 y 7.

TABLE 6 – FLEXURAL STRENGTH AFTER IMMERSION IN WATER		
PANEL THICKNESS (mm)	DIRECTION	TENSIL STRENGTH (MPa)
6	Centre - Transverse	112,00
12	Centre - Transverse	140,82
14	Centre - Transverse	137,35

TABLE 7 - PULL-THROUGH RESISTANCE OF CLADDING ELEMENT AFTER IMMERSION IN WATER					
PANEL THICKNESS (mm)	SUPPORT Ø (mm)	FIXING POSITION (Aluminum rivet)	FAILURE LOAD (N)		FAILURE MODE
			F _m	F _{u,5}	
6	180	Border	1144	918,30	Panel
		Corner	628,75	472,50	
	270	Border	833	706,45	
		Corner	323,75	260,70	
	350	Border	644,50	567,75	
		Corner	254,06	206,45	
12	180	Border	3534	2941	Rivet
		Corner	1495	707,40	
	270	Border	2903,45	2477,61	
		Corner	872,4	473,30	
	350	Border	2966,85	2762,20	
		Corner	671,3	580,55	

2.7.4 Freeze / thaw behaviour

After freeze-thaw cycles (50 cycles), flexural strength and pull-through of the panel have been tested according to EN ISO 178 and ETAG 034 part 1 section 5.4.2.1.1.

Tests results are indicated in table 8 y 9.

TABLE 8 – FLEXURAL STRENGTH AFTER FREEZE-THAW CYCLES		
PANEL THICKNESS (mm)	DIRECTION	TENSIL STRENGTH
6	Centre - Transverse	105,07
12	Centre - Transverse	132,85
14	Centre - Transverse	141,01

TABLE 9 - PULL-THROUGH RESISTANCE OF CLADDING ELEMENT AFTER FREEZE-THAW CYCLES					
PANEL THICKNESS (mm)	SUPPORT Ø (mm)	FIXING POSITION (Aluminum rivet)	FAILURE LOAD (N)		FAILURE MODE
			F _m	F _{u,5}	
6	180	Border	1139,65	1084,25	Panel
		Corner	612,80	480,15	
	270	Border	754	680,40	
		Corner	331,30	306,82	
	350	Border	637,85	580,20	
		Corner	226,10	190,60	
12	180	Border	3574,65	2963,55	Rivet
		Corner	1088,15	660	Panel
	270	Border	3482,65	2720,55	Panel/Rivet
		Corner	979,65	751	Panel
	350	Border	2986,05	2440,25	Panel/Rivet
		Corner	712,65	445,95	Rivet

⁽²⁶⁾ EN ISO 178:2003 "Plastics - Determination of flexural properties".

2.7.5 Chemical and biological attack

This performance has not been determined (NPD).

2.7.6 Corrosion

The material and corrosion protection of the kit components are defined in the relevant table of Annex 2.

2.7.7 UV radiation

The UV radiation resistance has been tested according to EN 438-2:2005 section 28 on PARKLEX F HPL samples with the following references:

- GOLD
- AMBAR
- RUBI
- ANTRA
- COPPER
- ONIX
- SILVER
- QUARTZ

Based on the test results after accelerating ageing from UV radiation the colour stability is satisfactory for the reference of colour tested.

3 Evaluation and attestation of conformity and CE marking

3.1 System of attestation of conformity

According to the decision 2003/640/EC of the European Commission ⁽²⁷⁾ the system of attestation of conformity applicable to "PARKLEX FACADE" kit for external wall claddings is System 1, considering the Class B-s2, d0 (with testing) for the reaction to fire of the kit.

The system of attestation of conformity referred above is described in Council Directive 89/106/EEC Annex III, and defined as follows:

System 1: For uses subject to regulations on reaction to fire
Certification of conformity of the product by a notified certification body on the basis of:

- a) Tasks for the manufacturer:
 - a.1. Factory production control.
 - a.2. Possible further testing of samples taken at the factory by the manufacturer in accordance with a prescribed test plan
- b) Tasks for the notified body:
 - b.1. Initial type-testing of the product,
 - b.2. Initial inspection of factory and of factory production control.
 - b.3. Continuous surveillance (annual), assessment and approval of factory production control.

⁽²⁷⁾ Official Journal of the European Communities L226/21 of 10.09.2003

3.2 Responsibilities

3.2.1. Tasks of the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall insure that the product is in conformity with this ETA.

The manufacturer shall only use raw materials stated in the technical documentation of this ETA. The incoming raw materials are subjected to verifications by the manufacturer before acceptance. The factory production control shall be in accordance with the control plan⁽²⁸⁾ which is part of the Technical Documentation of this ETA. The control plan has been agreed between the manufacturer and the IETcc and is laid down in the context of the factory production control system operated by the manufacturer and deposited at the IETcc. The results of factory production control shall be recorded and evaluated in accordance with the provisions of the control plan. The records include at least the following information:

- Designation of the product, the basic materials and components.
- Type of control or testing and minimum frequencies of control.
- Date of manufacture of the product and date testing of the product or basic material and components.
- Results of controls and testing and, if appropriate, comparison with requirements.
- Signature of person responsible for factory production control.

The records shall be presented to the notified body involved in the continuous surveillance. On request, they shall be presented to the IETcc.

3.2.1.2 Testing of sample taken at the factory

The testing of sample taken at the factory shall be carried out in accordance with the control plan.

3.2.1.3 Other tasks of the manufacturer

The manufacturer shall, on the basis of a contract, involve a body which is notified for the tasks referred to in section 3.1 in the field of cladding kit in order to undertake the actions laid down in the clause 3.2.2. For this purpose, the control plan referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the notified bodies involved. The manufacturer shall make a declaration of conformity, stating that the cladding kit is in conformity with the provisions of this ETA.

⁽²⁸⁾ The control plan is a confidential part of this European Technical Approval and only handed over to the notified body involved in the procedure of attestation of conformity.

3.2.2 Tasks of notified bodies

The notified body shall perform the activities listed above in section 3.1, in accordance with the provisions laid down in the control plan relating to this ETA.

3.2.2.1 Initial type testing

Approval tests of the cladding kit components, conducted by the approval body or under its responsibility in accordance with chapter 5 of the ETAG 034, shall be used for the purposes of the Initial Type Testing and, for System 1, this work shall be validated by the approval body for Certificate of Conformity purpose.

3.2.2.2 Assessment of the factory production control – initial inspection and continuous surveillance

The notified body shall assess the factory production control system in order to check its conformity with the European Technical Approval and any subsidiary information. The notified body shall ensure the manufacturer has technical equipment and trained staff to produce the cladding panels as described in this ETA.

Continuous surveillance of the factory production control is necessary to ensure continuing conformity with the ETA. It is recommended a surveillance inspection per year.

3.2.2.3 Certification

Once the tasks of notified body have been performed, the notified body shall retain the essential points of its actions and state the results obtained and conclusions drawn in a report.

The notified certification body involved by the manufacturer shall issue an EC Certification of Factory Production Control, stating the conformity of the provisions of this ETA.

In cases where the provisions of the ETA and its control plan are no longer fulfilled the notified certification body shall withdraw the certificate of conformity and inform to IETcc without delay.

3.3 CE Marking

The CE marking shall be affixed either on a label attached to it, or on its packaging, or on the accompanying commercial documents. The symbol « CE » shall be followed by the identification number of the notified certification body involved and shall be accompanied by the following information:

- Name and address or identifying mark of the ETA-holder (legal entity responsible for the manufacture).
- The last two digits of the year in which the CE marking was affixed.
- Number of the EC certificate of Conformity for the Factory Production Control.
- Number of the European Technical Approval.
- Number of the ETAG.
- Cladding kit Trade Name.

3.3.1. Example of CE marking

	
1219	Identification number of notified certification body
COMPOSITES GUREA, S.A. C/ Baldrun, s/n Pol. Ind. AlKaiaga 31780 VERA DE BIDASOA (Navarra) - España	Name and address or identifying mark of the ETA-holder (legal entity responsible for the manufacture)
YY	Last two digits of the year of affixing the CE marking
nnnn-CPD-nnnn	Number of EC certificate for the Factory Production Control
ETA nº XX/XXXX ETA Guide 034 – Part 1 and 2 PARKLEX FACADE	ETA number Number of the ETAG Cladding kit Trade Name

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

The ETA is issued for the “PARKLEX FACADE” kit on the basis of agreed data/information which identifies the product that has been assessed and judged.

Detailed description and conditions of the manufacturing process of the “PARKLEX FACADE” kit, and all the relevant design and installation criteria of this kit are specified in the manufacturer’s technical documentation deposited with the IETcc. The main aspects of this information are specified in the following sections.

4.1 Manufacturing

The manufacturing process used for the cladding kit shall comply with that on which the approval tests were based. The agreed data/information regarding suppliers, purchasing process and supplier or/and ETA holder manufacturing process of the cladding system are deposited with the IETcc.

Any change to the cladding kit components, their production process or properties, which result in the deposited data/information should be notified to the IETcc before the changes are introduced. IETcc will decide whether or not such changes affect the ETA and if so whether further assessment or alterations to the ETA shall be necessary.

4.2 Assembly and installation of the kit in works

The kit for ventilated external wall claddings “PARKLEX FACADE” with high-pressure decorative laminates **PARKLEX FACADE F** is designed and installed in accordance with the ETA-holder design and installation instructions, deposited at the IETcc.

The technical documentation of the ETA holder includes complete measures for the design and for the installation of the kit in works and it is available for the kit user. This information has been checked by IETcc and the main aspects are specified below.

The entire building must comply with the specific building regulations, particularly concerning fires and wind load resistance, of the Member States in which the work has been built.

4.2.1 Design

The design of the external wall cladding system for ventilated facade using the PARKLEX FACADE kit should be based on a technical project which considers:

- The mechanical characteristic values of the kit components (panels, cladding fixings and subframe) in order to resist the actions applying on the specific work. National safety factor must be use.
- The substrate material to define the suitable anchorages.
- The possible movements of the substrate and the position of the building expansion joints.
- The dilation of the kit components and of the panels.
- The category of corrosivity of the atmosphere of the works.
- Because joints are not watertight, the first layer behind ventilated air space must be composed by materials with low water absorption.
- The standards construction details indicated in figure 8, 9 and 10.

4.2.2 Installation

The fitness for use of the kits can be assumed only if the installation is carried out according to the ETA holder's specifications:

- Taking into account the configuration defined in the technical project drawings prepared for that purpose.
- Using the specific kit components, manufactured by the ETA holder or by suppliers recognized by the ETA holder
- The installation companies or staff have to be trained and authorized by the ETA holder

4.3 Manufacturer's responsibilities

It is the manufacturer's responsibility to make sure that all those who use the kit are appropriately informed of specific conditions according to sections 1, 2, 4 and 5 including the annexes of this ETA

5 Recommendations

5.1 Packaging, transport and storage

Each kit component is packed independently of each other taking into account its own packaging specifications.

In particular, cladding panels have to be protected from damp, heat and dirt during transport and storage and stored in a covered and ventilated space in order to avoid panel deformation, deterioration and damage.

In any case for packaging, transport and storage it is convenient take in consideration ETA holder instructions.

5.2 Use, maintenance and repair of the works

Maintenance of the assembled system or kit components includes inspections on site, taking into account the following aspects:

- Regarding the panels: appearance of any damage such as cracking, delamination o detachment due to permanent and irreversible deformation.
- Regarding metallic components: presence of corrosion or water accumulation.

Necessary repairs should be done rapidly, using the same kit components and following the repair instructions r given by ETA holder.

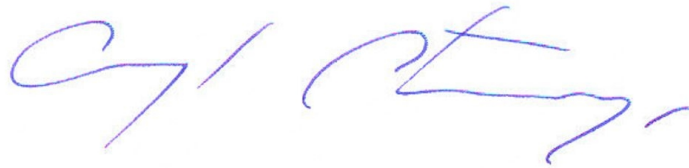


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www.ietcc.csic.es



On behalf of the Instituto de Ciencias de la Construcción Eduardo Torroja

A handwritten signature in blue ink, appearing to read 'Angel Arteaga Iriarte'.

Angel Arteaga Iriarte
Director

FIGURE 3: SYSTEM GENERAL CONFIGURATION AND DETAIL OF JOINT (METALIC SUBFRAME)

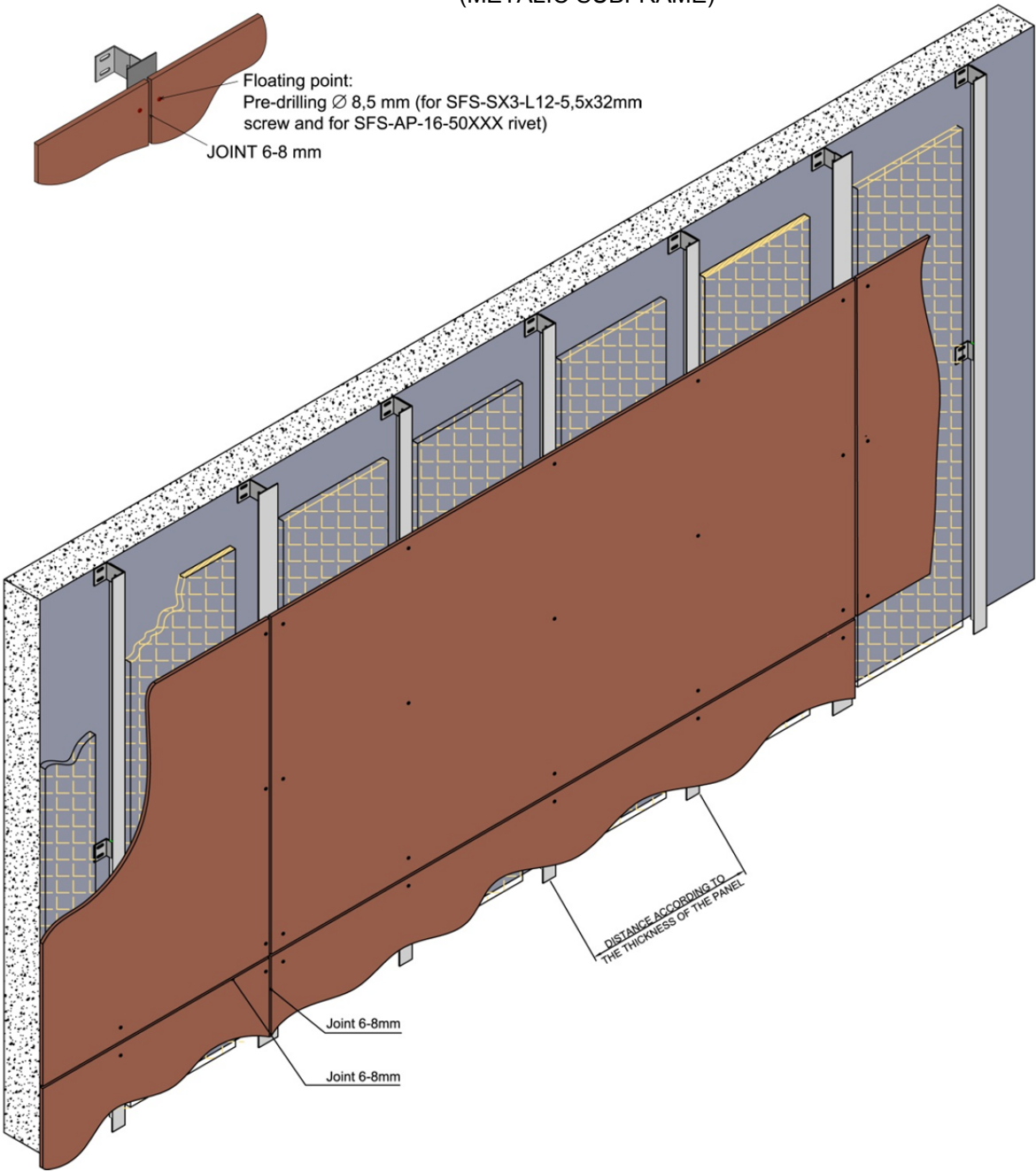


FIGURE 4: ALUMINIUM BRACKETS

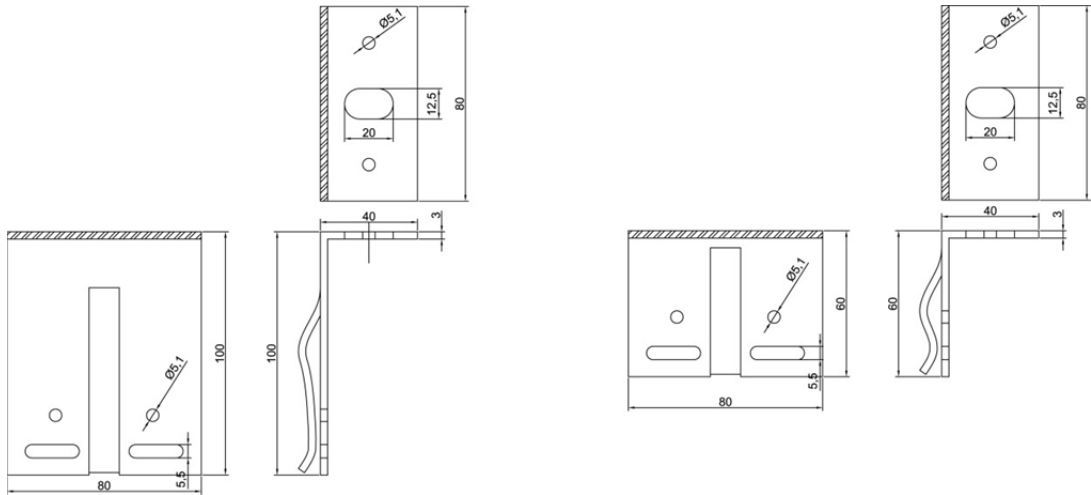


FIGURE 5: ALUMINIUM VERTICAL PROFILES

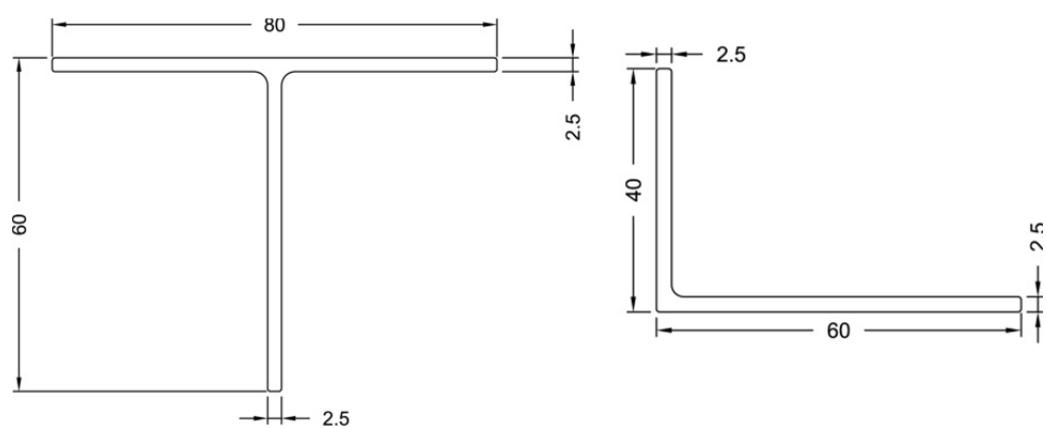
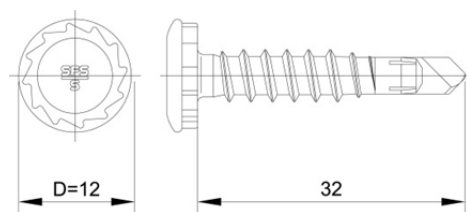


FIGURE 6: CLADDING FIXINGS TO METALIC SUBFRAME

STAINLESS STEEL SCREW

SX3-L12



ALUMINIUM RIVET

AP16

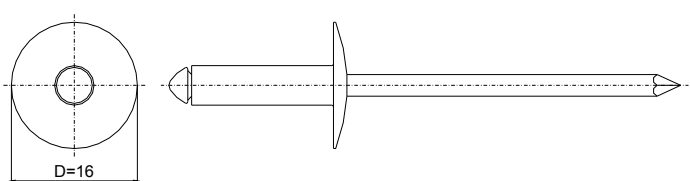


FIGURE 7: CLADDING FIXINGS TO TIMBER SUBFRAME

STAINLESS STEEL SCREW

TWD-S-D12

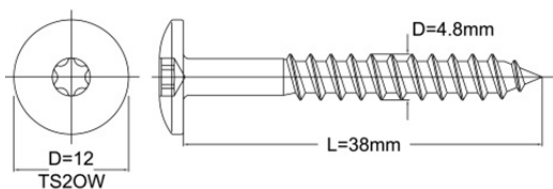


FIGURE 8: DETAIL OF CROWN AND BASE

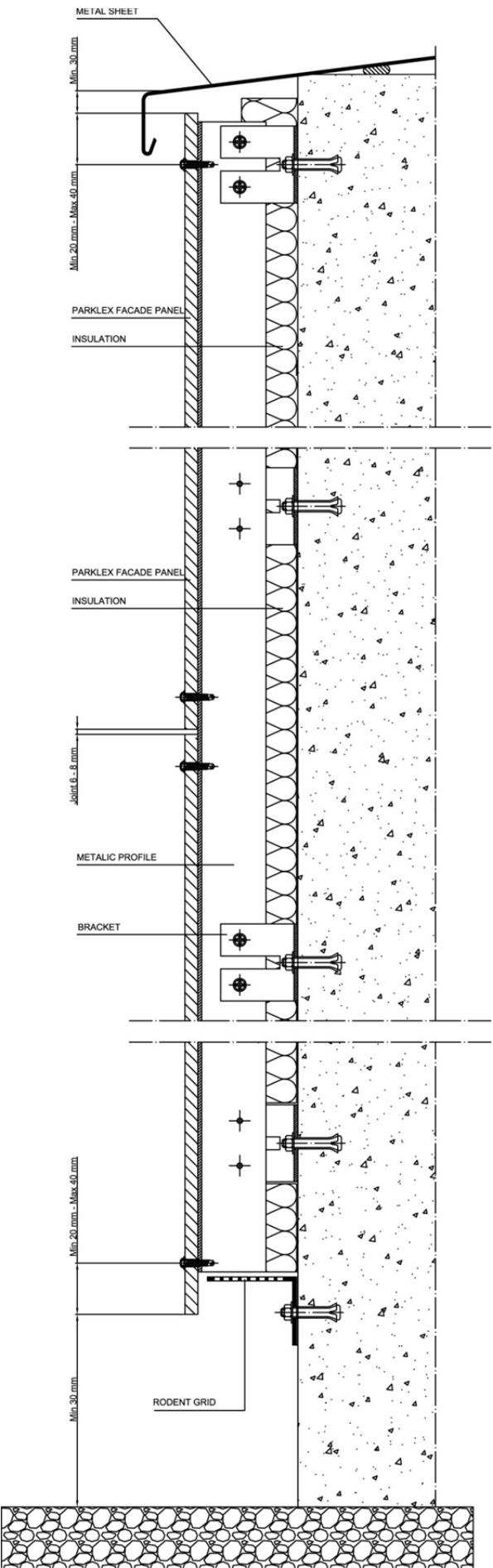


FIGURE 9: DETAIL OF INTERNAL AND EXTERNAL CORNER

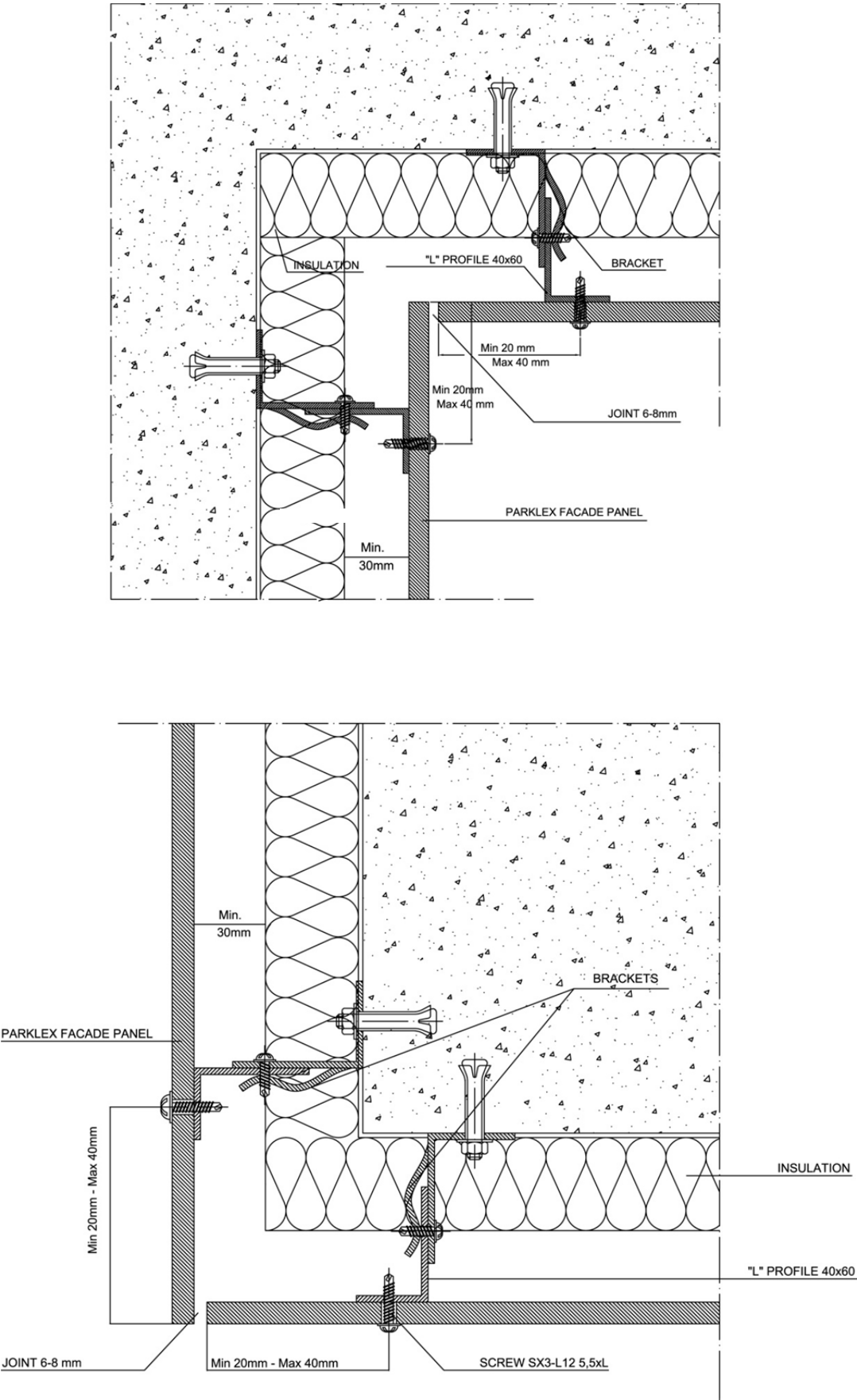
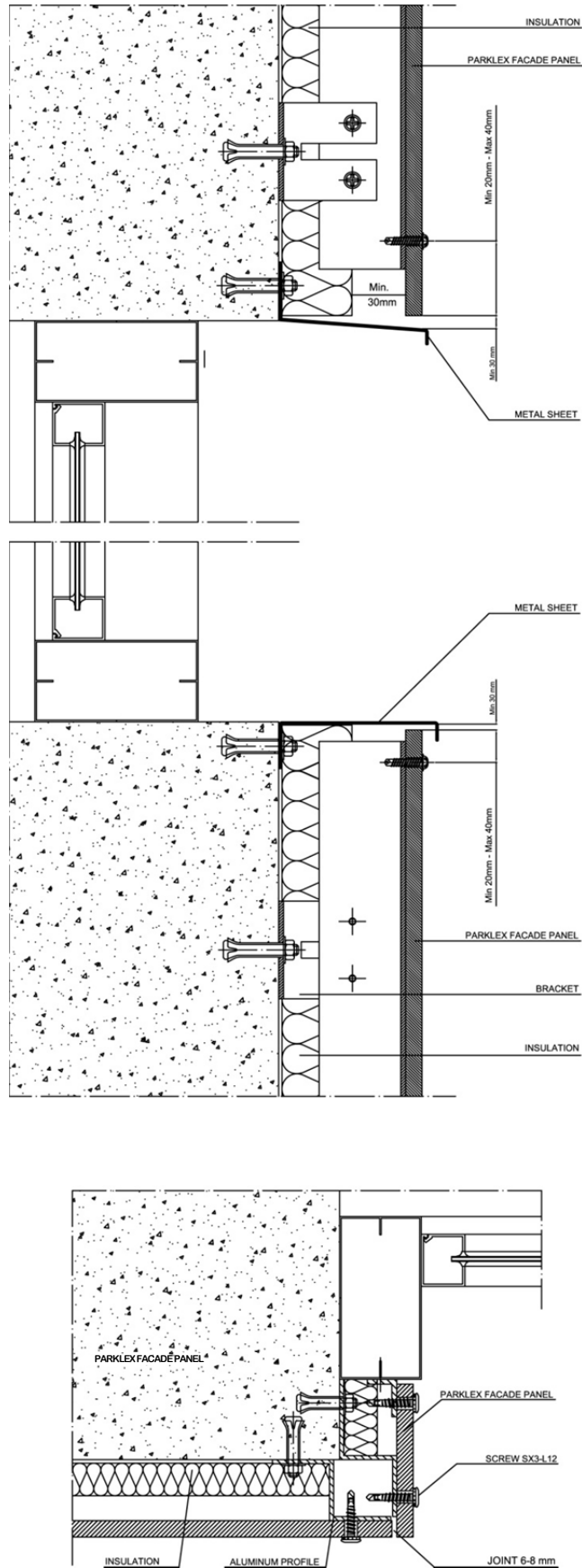


FIGURE 10: WINDOW DETAIL



Note: The details shown in figures above are approximate and must be defined for each project. These details concern the kit for ventilated external wall claddings and may not be used as justification for compliance with the CTE basic requirements.

Annex 1: Cladding element specifications**Dimensional features**

STANDARD DIMENSIONS ⁽²⁹⁾				
Length	Width	Tolerance	Thickness	Tolerance
(mm)	(mm)	(mm)	(mm)	(mm)
2440 x 1220		- 0 + 10	6	± 0,40
			8	± 0,50
			10	
			12	± 0,60
			14	

GEOMETRY ⁽³⁰⁾				
Thickness	Flatness	Straightness	Squareness	Weight
Nominal (mm)	Tolerance (mm/m)	Deviation (mm/m)	Deviation (mm/m)	Nominal (kg/m ²)
6	≤ 5,0 mm/m	≤ 1,5 mm/m	≤ 1,5 mm/m	8,1
8				10,8
10	≤ 3,0 mm/m			13,5
12				16,2
14				18,9

Physical, mechanical and weather resistance properties

PHYSICAL AND MECHANICAL PROPERTIES				
Property	Attribute	Value	Unit	Test
Density	Density	≥ 1,35	g/cm ³	EN ISO 1183-1 ⁽³¹⁾
Elastic modulus	Stress	≥ 9.000	MPa	EN ISO 178 ⁽³²⁾
Flexural strenght	Stress	≥ 80	MPa	EN ISO 178
Tensil strenght	Stress	≥ 60	MPa	EN ISO 527-2 ⁽³³⁾
Resistance to humidity	Mass increase	≤ 8	%	EN 438-2 ⁽³⁴⁾ -15
	Appearance	≥ 4	1 a 5	
Dimensional stability at high temp.	Cumulative dimensional change	L ≤ 0,30 T ≤ 0,60	%	EN 438-2-17
Impact resistance	Mean failure height	≥ 1800	mm e ≥ 6	EN 438-2-21
Resistance to fixings	6 mm	2.000	N	EN 438-7
	8 mm	3.000		
	10 mm	4.000		
	12 mm			
	14 mm			
PCP contents (pentaclorofenol)		Not contain	-	EN 438-7
Formaldehyde emission		E1 Class	-	EN 438-7

WEATHER RESISTANCE PROPERTIES				
Property	Attribute	Value	Unit	Test
Resistance to climatic shock	Appearance	≥ 4	1 a 5	EN 438-2 (19)
	Flexural strength index (Ds)	≥ 0,95		
	Flexural modulus index (Dm)	≥ 0,95		
UV resistance	Contrast	≥ 3	Grey scale	EN 438-2 (28)
	Appearance	≥ 4	1 a 5	
Artificial climate resistance	Contrast	≥ 3	Grey scale	EN 438-2 (28)
	Appearance	≥ 4	1 a 5	
Reaction to fire	-	B-s2, d0	-	EN 13501-1 ⁽³⁵⁾

⁽²⁹⁾ Available smaller dimensions with the same thickness⁽³⁰⁾ Properties according to EN 438-6:2005⁽³¹⁾ EN ISO 1183-1:2004 "Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method".⁽³²⁾ EN ISO 178:2003 "Plastics - Determination of flexural properties".⁽³³⁾ EN ISO 527-2:1997 "Plastics. Determination of tensile properties. Part 2: test conditions for moulding and extrusion plastics".⁽³⁴⁾ EN 438-2:2005 "High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called Laminates) - Part 2: Determination of properties".⁽³⁵⁾ EN 13501-1:2007 "Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests".

Annex 2: Subframe specifications

Wood requirements

Resistance class	$\geq C 18^{(36)}$
Durability	Class 3 ⁽³⁷⁾
Processing	Autoclave level 5
Damp control	$\leq 18\%$

Aluminium Physical and mechanical properties

Symbolic designation	EN AW-Al MgSi	
Numeric designation	AW 6060/ AW 6063 ⁽³⁸⁾	
Treatment	T5	
Corrosion protection	Anodic oxidation	Class 15 or 20 ⁽³⁹⁾
	Lacquered (thickness 0.1 mm and 0.15 mm)	Class SEASIDE ⁽⁴⁰⁾
PHYSICAL PROPERTIES		
Specific weight	2,70 g/cm ³	
Coefficient of linear thermal expansion	23,5·10 ⁻⁶ K ⁻¹ (20/100 °C)	
Elastic modulus	70.000 MPa	
Poisson coefficient	0,33	
MECHANICAL PROPERTIES		
Tensile strength (R _m)	≥ 160/175 N/mm ²	
Elastic limit (R _{p0,2})	≥ 120/130 N/mm ²	
Elongation (A)	≥ 8 %	
Elongation (A _{50mm})	≥ 6 %	
Brinell hardness	60 HB	
According to EN 755-2 ⁽⁴¹⁾ and EN 12020-1 ⁽⁴²⁾		

Brackets Geometrical and mechanical features

BRACKET	Material	Dimensions (mm)	Thickness (mm)	Section (mm ²)	x _c (mm)	I _{xc} (cm ⁴)	y _c (mm)	I _{yc} (cm ⁴)
ISOLALU R80 de ETANCO	Aluminium Al 6060 T5	40 x 80 x 40 - 160	3,0	231	11	3,5	11	3,5
		40 x 150 x 40 - 160		591	5	157,9	65	4,9

Vertical profiles Geometrical and mechanical features

VERTICAL PROFILE		Dimensiones (mm)	Espesor (mm)	Sección (mm ²)	Peso (kg/m)	x _c (mm)	I _{xc} (cm ⁴)	y _c (mm)	I _{yc} (cm ⁴)
Wooden strip two panels fixing		$\geq 80 \times 40$	-	3.000	1,6	40	42,67	20	170,67
Wooden strip One panel fixing		$\geq 40 \times 40$	-	1.600	0,8	20	21,33	20	21,33
Aluminium strip (L) Al 6063 T5		L 40 x 60	2,5	244	0,659	8,91	9,27	41,20	3,40
Aluminium strip (T) Al 6063 T5		T 80 x 60	2,5	345	0,932	40,00	11,58	46,29	10,64

⁽³⁶⁾ EN 338:2011 Structural timber - Strength classes

⁽³⁷⁾ EN 335-2:2007 Durability of wood and wood-based products - Definition of use classes - Part 2: Application to solid Wood

It may use wood battens with treatment for risk category 2, provided that they are protected in the joint between panels with an EPDM elastomeric belt of a thickness exceeding 10/20 mm the width of the strips. In this case, it is necessary verify that the strips are protected from damp in other points as the start of them.

⁽³⁸⁾ Aluminium alloy 6063 T5 is classified as class A (No Known instance of failure in service or in laboratory tests) according to "Aluminium standards and data" (Aluminium association edition)

⁽³⁹⁾ Mean thickness 15μ or 20μ according to the quality mark QUALANOD

⁽⁴⁰⁾ According to the quality mark QUALICOAT

⁽⁴¹⁾ EN 755-2 Aluminium and aluminium alloys. Extruded rod/bar, tube and profiles. Part 2: Mechanical properties.

⁽⁴²⁾ EN 12020-1 Aluminium and aluminium alloys. Extruded precision profiles in alloys en aw-6060 and en aw-6063. Part 1: technical conditions for inspection and delivery.

Cladding fixings specifications

STAINLESS STEEL SCREW TO ALUMINIUM SUBSFRAME	
Designation	SX3-L12Ø5,5xL de SFS intec
Diameter	$\varnothing_{\text{body}} = 5,5 \text{ mm}$
Head screw	$\varnothing_{\text{head}} = 12 \text{ mm}$
Length	L = 28 mm ($e_{\text{panel}} \leq 10 \text{ mm}$) L = 38 mm ($e_{\text{panel}} > 10 \text{ mm}$)
Tensile strength (mean value)	14.000 N
Shear strength (mean value)	9.500 N
Pull- out breaking load (mean value on steel sheet – t=1.5mm)	2.700 N

ALUMINIUM RIVET TO ALUMINIUM SUBSFRAME	
Designation	AP16Ø5,0xL de SFS intec
Diameter	$\varnothing_{\text{body}} = 5 \text{ mm}$
Head screw	$\varnothing_{\text{head}} = 16 \text{ mm}$
Length	$e_{\text{panel}} + e_{\text{profil}} + \varnothing_{\text{body}}$
Tensile strength (mean value)	3.700 N
Shear strength (mean value)	2.400 N
Pull- out breaking load (mean value on steel sheet – t=1.5mm)	2.410 N
Shear breaking load (mean value on aluminium)	2.800 N

STAINLESS STEEL SCREW TO TIMBER SUBSFRAME	
Designation	TW-SØ4,8xL de SFS intec
Diameter	$\varnothing_{\text{body}} = 4,8 \text{ mm}$
Head screw	$\varnothing_{\text{head}} = 12 \text{ mm}$
Length	L = 38 mm
Tensile strength (mean value)	7.100 N
Shear strength (mean value)	5.400 N
Pull- out breaking load (mean value on wood t=26mm)	3.000 N
Shear breaking load (mean value on wood)	1.100 N

Stainless steel screw between vertical elements and brackets

Description	PERCINOX special head self-drilling screw
Diameter	5.5 mm
Length	25 mm
Material	Stainless steel
Standard	EN ISO 3506-1: 2010
Pull-out resistance (mean value on aluminium sheet – t=3mm)	3790 N

Annex 3: Anchorage to substrate

The fixings between the subframe and the substrate are not part of the kit, therefore have not been assessed, even so it is important define type, position and number of the anchorage according to the substrate material and the resistance required due to the envisaged actions and when possible, CE marking according to the ETA via ETAG 001, ETAG 020 or ETAG 029 is recommended.