

European Technical Assessment

ETA 07/0176

Version 02

Date of issue: 2021-12-03



UBAtc Assessment Operator:
Belgian Construction Certification Association
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Technical Assessment Body issuing the European Technical Assessment: UBAtc.
UBAtc has been designated according to Article 29 of Regulation (EU) No 305/2011
and is member of EOTA (European Organisation for Technical Assessment)

Trade name of the construction product:

SUPALUX®

Product family to which the construction product belongs:

Fire Protective board

Manufacturer:

ETEX BUILDING PERFORMANCE NV

Bormstraat 24

2830 Tiselt (Belgium)

Manufacturing plant(s):

ETEX BUILDING PERFORMANCE production plants 02 and 03

Website:

www.promat-international.com

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

European Assessment Document (EAD):
EAD 350142-00-1106

This version replaces:

ETA 07/0176 issued on 2018/06/25

This European Technical Assessment contains:

42 pages, including 2 annexes, which form an integral part of the document.



European Organisation
for Technical Assessment

Legal bases and general conditions

- 1 This European Technical Assessment is issued by UBAtc (Union belge pour l'Agrément technique de la construction, i.e. Belgian Union for technical Approval in construction), in accordance with:
 - Regulation (EU) No 305/2011¹ of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC
 - Commission Implementing Regulation (EU) No 1062/2013² of 30 October 2013 on the format of the European Technical Assessment for construction products
 - European Assessment Document: EAD 3501-42-00-1106
- 2 Under the provisions of Regulation (EU) No 305/2011, UBAtc is not authorized to check whether the provisions of this European Technical Assessment are met once the ETA has been issued.
- 3 The responsibility for the conformity of the performances of the products with this European Technical Assessment and the suitability of the products for the intended use remains with the holder of the European Technical Assessment.
- 4 Depending on the applicable Assessment and verification of constancy of performance (AVCP) system, (a) notified body(ies) may carry out third-party tasks in the process of assessment and verification of constancy of performance under this Regulation once the European Technical Assessment has been issued.
- 5 This European Technical Assessment allows the manufacturer of the construction product covered by this ETA to draw up a declaration of performance for the construction product.
- 6 CE marking should be affixed to all construction products for which the manufacturer has drawn up a declaration of performance.
- 7 This European Technical Assessment is not to be transferred to other manufacturers, agents of manufacturers, or manufacturing plants other than those indicated on page 1 of this European Technical Assessment.
- 8 The European Technical Assessment holder confirms to guarantee that the product(-s) to which this assessment relates, is/are produced and marketed in accordance with and comply with all applicable legal and regulatory provisions, including, without limitation, national and European legislation on the safety of products and services. The ETA-holder shall notify the UBAtc immediately in writing of any circumstance affecting the aforementioned guarantee. This assessment is issued under the condition that the aforementioned guarantee by the ETA-holder will be continuously observed.
- 9 According to Article 11(6) of Regulation (EU) No 305/2011, when making a construction product available on the market, the manufacturer shall ensure that the product is accompanied by instructions and safety information in a language determined by the Member State concerned which can be easily understood by users. These instructions and safety information should fully correspond with the technical information about the product and its intended use, which the manufacturer has submitted to the responsible Technical Assessment Body for the issuing of the European Technical Assessment.
- 10 Pursuant to Article 11(3) of Regulation (EU) No 305/2011, manufacturers shall adequately take into account changes in the product-type and in the applicable harmonised technical specifications. Therefore, when the contents of the issued European Technical Assessment do not any longer correspond to the product-type, the manufacturer should refrain from using this European Technical Assessment as the basis for their declaration of performance.
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- 13 Subject to the application introduced, this European Technical Assessment is issued in English and may be issued by the UBAtc in its official languages. The translations correspond fully to the English reference version circulated in EOTA.
- 14 A European Technical Assessment was issued by UBAtc on 25 June 2018. Compared to the European Technical Assessment issued on 25 June 2018, the current European Technical Assessment:
 - comprises no technical changes;
 - comprises some editorial changes;
 - includes a new production plant.

(1): OJEU, L 88 of 2011/04/04

(2): OJEU, L 289 of 2013/10/31

Technical Provisions

1 Technical description of the product

1.1 General

SUPALUX® is a fire protective calcium silicate board, composed of a calcium silicate matrix, cement, and mineral fillers. The board is off-white in colour and has a smooth finish on one face and a sanded reverse face.

SUPALUX® is manufactured at ETEX BUILDING PERFORMANCE plants 02 and 03 (known at UBAtc).

1.2 Dimensions and density

Dimensions and density of the boards are given in Table 1.

Table 1 – Dimensions and density SUPALUX®

| Density (dry 105°C): 950 kg/m³± 10% | | |
|---|---|-------------------------------------|
| Density (23°C, 50%RH): 1025 kg/m³ ± 10% | | |
| Thickness (mm) | Length x width (mm) | Tolerances on length and width (mm) |
| 6 ± 0,5 | 2440 x 1220 2500 x 1200 3000 x 1200 | +3/-3 |
| 8 ± 0,5 | 2500 x 1200 | +3/-3 |
| 9 ± 0,5 | 2440 x 1220 2500 x 1200 3000 x 1200 3000 x 1250 3048 x 1220 | +3/-3 |
| 10 ± 0,5 | 2500 x 1200 | +3/-3 |
| 12 ± 1,0 | 2440 x 1220 2500 x 1200 3000 x 1250 | +3/-3 |
| 15 ± 1,0 | 2440 x 1220 2500 x 1200 3000 x 1250 | +3/-3 |

1.3 Ancillary products

Ancillary products referred to in this ETA, as a part of installation provisions or in the framework of determining performances (e.g. fire resistance test), are not covered by this ETA and may not be CE-marked on the basis of it.

2 Specification of the intended use(s) in accordance with the applicable EAD

2.1 Intended uses

This ETA covers fire protective SUPALUX® intended for:

- Internal use (EAD 350142-00-1106, type Z₂);
- internal use high humidity (EAD 350142-00-1106, type Z₁);
- external use semi-exposed (EAD 350142-00-1106, type Y).

SUPALUX® is intended to protect elements or to be used in assemblies as specified in Table 2.

Table 2 – Intended use

| Protection of | EAD 350142-00-1106 reference |
|---|------------------------------|
| Horizontal membrane protection, incl. suspended ceilings acc. to EN 13964 | Type 1 |
| Vertical membrane protection | Type 2 |
| Load-bearing concrete elements | Type 3 |
| Load-bearing steel elements | Type 4 |
| Load-bearing flat concrete profiled sheet composite elements | Type 5 |
| Load-bearing concrete filled hollow steel columns | Type 6 |
| Load-bearing timber elements | Type 7 |
| Fire separating assemblies with no load-bearing requirements | Type 8 |
| Technical services assemblies in buildings | Type 9 |
| Uses not covered by types 1-9 | Type 10 |

Table 2 shows the possible intended uses of the boards. Not all of these have been assessed in the framework of this ETA with regard to fire resistance performance. Annex 2 shows a list of the uses for which fire resistance assessment was carried out. This ETA covers assemblies installed in accordance with the provisions given in Annex 2.

With regard to fire resistance performance, the other intended uses may be supported by other means at national level (as specified in the note in paragraph 3.2.2 of this ETA).

The provisions made in this European Technical Assessment are based on an assumed intended working life of 25 years, provided that the assembled product is subject to appropriate use and maintenance, in accordance with this ETA.

Indications given regarding the working life may not be interpreted as a guarantee given by the producer or the UBAtc, but shall be regarded only as a means for choosing the appropriate product(s) in relation to the expected economically reasonable working life of the construction works.

2.2 Assumptions

2.2.1 Manufacturing directives

This European Technical Assessment is issued for SUPALUX® on the basis of agreed data/information, deposited with the UBAtc, which identifies the product that has been assessed. Changes to the product/production process, which could result in the deposited data/information being incorrect should be notified to the UBAtc before the changes are introduced.

The raw materials are mixed in water and combined in a slurry. The slurry solids are picked up on a rotating drum (Hatschek machine) and carried over a felt to a steel drum until the appropriate thickness is achieved, depending on the desired end-thickness of the board. The material is sliced and laid out flat on a belt, cut and stacked for curing. The boards are autoclaved under saturated steam pressure and dried in an oven. Edges are trimmed and the reverse surface sanded to the specific thickness. Each board is marked in accordance with paragraph 6 of this ETA. SUPALUX® boards are examined for visual defects and non-compliant boards are rejected.

2.2.2 Installation

2.2.2.1 Supporting structure

The distance between supports shall be in accordance with the information provided in the assemblies described in Annex II.

2.2.2.2 Cutting and machining

The fire protective SUPALUX® shall be cut and machined using conventional woodworking equipment. The use of saw blades with hardened teeth or with tungsten carbide tipped blades is recommended. When machining the fire protective board with power tools, dust extraction shall take place and inhalation of dust should be avoided.

A safety data sheet is available from the manufacturer upon request.

2.2.2.3 Joints

The fire protective SUPALUX® boards shall be butt jointed.

The boards can have square or bevelled edges. The type of edge shall be in accordance with the assemblies described in Annex II.

Joints in adjacent boards shall be staggered as specified in Annex II.

The use and type of joint filler shall be in accordance with the assemblies described in Annex II.

2.2.2.4 Mechanical fasteners

Fastening of SUPALUX® boards onto the support structure shall be in accordance with the assembly information provided in Annex II.

2.2.2.5 Surface treatment

The SUPALUX® board surface allows for most types of decoration. When applying a surface treatment, the absorption capacity and alkalinity of the boards have to be taken into account.

Assessment of the influence of surface treatment (such as plastering, paints, tiles, wallpaper), on the performance of the SUPALUX® boards, has not been performed in the framework of this ETA.

2.2.2.6 Assembly

The SUPALUX® boards shall be applied as specified in the assemblies in Annex II.

2.3 Recommendations

2.3.1 Recommendations on packaging, transport and storage

During transport and storage, SUPALUX® boards should be stacked on a flat underground and covered. Storage should take place on pallets, in a sheltered and well-ventilated space.

2.3.2 Recommendations on use, maintenance and repair

Future modifications to the building should not adversely affect the fire protective properties of the system in which SUPALUX® boards are used. Care should be taken to prevent any reduction of fire performance as a result of increased applied load to protected elements of the works (e.g. beams, columns, ceilings, floors, or walls).

The assessment is based on the assumption that damage, for example caused by accidental impact, is repaired. It is further assumed that replacement of components during maintenance/repair will be undertaken using materials specified by the ETA.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR1)

This basic requirement for construction works is not relevant for SUPALUX® boards according to EAD 350142-00-1106.

3.2 Safety in case of Fire (BWR2)

3.2.1 Reaction to fire

SUPALUX® boards have a reaction to fire classification A1 according to EN 13501-1.

3.2.2 Fire resistance

Assemblies incorporating SUPALUX® boards have a resistance to fire classified according to EN 13501-2 as presented in Annex II.

NOTE: This ETA covers a limited number of assemblies subjected to fire resistance assessment. As time progresses, the performance declaration for fire resistance covered by CE-marking should gradually be enlarged by the ETA-holder and incorporated in this ETA by amendment or revision. In the meantime, and taking into account the transitional arrangements for test and classification standards and the corresponding national legislation, the ETA-holder should be permitted to maintain and be able to use - on a national basis - his portfolio of test data for this characteristic, based on relevant national standards, next to the performance declaration covered by the CE-marking based on this ETA.

3.3 Hygiene, Health and the environment (BWR3)

3.3.1 Air and/or water permeability

In accordance with EN 12467, the SUPALUX® boards are impermeable to water.

3.3.2 Release of dangerous substances

No performance assessed.

3.4 Safety in Use (BWR4)

3.4.1 Flexural strength

In accordance with EN 12467, the SUPALUX® boards have a modulus of rupture (MOR) of $\geq 4,50$ MPa (95% confidence level).

The SUPALUX® boards have sufficient strength to support their own mass. The SUPALUX® boards are not intended to support additional loads.

3.4.2 Dimensional stability

The SUPALUX® boards, tested in accordance with EN 318, are dimensionally stable.

3.4.3 Resistance to impact and eccentric load

No performance assessed.

3.5 Energy economy and heat retention (BWR6)

3.5.1 Thermal conductivity

No performance assessed.

3.5.2 Water vapour permeability

No performance assessed.

3.6 Protection against noise (BWR5)

3.6.1 Airborne sound insulation

No performance assessed.

3.6.2 Sound absorption

No performance assessed.

3.6.3 Impact sound insulation

No performance assessed.

3.7 Aspects of durability, serviceability and identification

3.7.1 Durability and serviceability

3.7.1.1 Resistance to deterioration caused by water

In accordance with EAD 350142-00-1106, the SUPALUX® boards are resistant to water deterioration

3.7.1.2 Resistance to soak/dry

In accordance with EAD 350142-00-1106, the SUPALUX® boards are resistant to soak/dry cycles.

3.7.1.3 Resistance to freeze/thaw

In accordance with EAD 350142-00-1106, the SUPALUX® boards are resistant to freeze-thaw cycles.

3.7.1.4 Resistance to heat/rain

This characteristic is not relevant for the intended use Z₂ (internal use), Z₁ (internal use high humidity), Y (external use semi-exposed).

3.7.1.5 Basic durability assessment

Product performances confirm a working life of 25 years for the intended use Z₂ (internal use), Z₁ (internal use high humidity) and Y (external use semi-exposed).

3.7.2 Identification

3.7.2.1 Product properties

See § 1 of this ETA.

3.7.2.2 Compressive strength

The compressive strength of the SUPALUX® boards, based on assessment testing in accordance with EAD 350142-00-1106 and EN 826, is 9,3 MPa. This value is a guidance value, and does not reflect a statistical evaluation, nor a minimum guaranteed value. This value is not intended to be used as a calculation value as basis for structural design.

3.7.2.3 Tensile strength

The perpendicular tensile strength of the SUPALUX® boards, based on assessment testing in accordance with EAD 350142-00-1106 and EN 1607, is 78 kPa.

The parallel tensile strength of the SUPALUX® boards, based on assessment testing in accordance with EAD 350142-00-1106 and EN 1608, is 989 kPa.

These values are guidance values, and do not reflect a statistical evaluation, nor minimum guaranteed values. These values are not intended to be used as calculation values as basis for structural design.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with Regulation (EU) N° 305/2011, Article 65, Directive 89/106/EEC is repealed, but references to the repealed Directive shall be construed as references to the Regulation.

The system of assessment and verification of constancy of performance, specified in the Decision of the Commission 1999/454/EC of 1999/07/14 ⁽³⁾, as amended, is specified in the following Table.

Table 3 – System of assessment and verification of constancy of performance applicable to SUPALUX®

| Product(s) | Intended use(s) | Level(s) or class(es) | Assessment and verification of constancy of performance system(s)* |
|--------------------------|--|-----------------------|--|
| Fire Protective Products | For fire compartmentation and/or fire protection or fire performance | Any | 1 |

* See Annex V to Regulation (EU) N° 305/2011

In addition, according to the decision 1999/454/EC of 1999/07/14 ⁽³⁾ of the European Commission, as amended, the systems of assessment and verification of constancy of performance specified in table 4 apply to fire protective products with regard to reaction to fire.

⁽³⁾: see OJEU L178/52 of 1999/07/14

Table 4 – Systems of assessment and verification of constancy of performance with respect to the reaction to fire

| Product(s) | Intended use(s) | Level(s) or class(es) (reaction to fire) | Assessment and verification of constancy of performance system(s) (a) |
|--|---|--|---|
| Fire Protective Products | For uses subject to regulations on reaction to fire | (A1, A2, B, C)* | 1 |
| | | (A1, A2, B, C)**, D, E, F | 3 |
| | | (A1 to F)***, NPD**** | 4 |
| <p>(a) Systems 1, 3 and 4 : See Regulation (EU) N° 305/2011, Annex V * Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material) ** Products/materials not covered by footnote (*) *** Products/materials that do not require to be tested for reaction to fire (e.g. products/materials of class A1 according to Commission Decision 96/603/EC⁴, as amended) **** 'No Performance Declared' in accordance with Regulation (EU) N° 305/2011, Article 6(f)^a Systems 1 and 2+ :See Regulation (EU) N° 305/2011, Annex V</p> | | | |

5 Technical details necessary for the implementation of the AVCP system, as foreseen in EAD 350142-00-1106

5.1 Tasks for the ETA-holder

5.1.1 Factory production control (FPC)

The ETA-holder shall exercise permanent internal control of the production. All the elements, requirements and provisions adopted by the ETA-holder shall be documented in a systematic manner in the form of written policies and procedures. This factory production control system shall ensure that production is in conformity with this ETA.

The personnel involved in the production process shall be identified, sufficiently qualified and trained to operate and maintain the production equipment. Machinery equipment shall be regularly maintained and this shall be documented. All processes and procedures of production shall be recorded at regular intervals.

The ETA-holder shall maintain a traceable documentation of the production process from purchasing or delivery of raw or basic raw materials up to the storage and delivery of finished products.

The factory production control system for the product includes relevant design specifications, including adequate drawings and written instructions for:

- type and quality of all materials
- overall dimensions
- packaging and transport protection

The production control system shall specify how the control measures are carried out, and at which frequencies.

(4): see OJEU L267 of 1996/10/19

ETA-holders which have an FPC system that complies with EN ISO 9001 and that addresses the requirements of this ETA are recognised as satisfying the FPC requirements.

Products that do not comply with requirements as specified in the ETA shall be separated from the conforming products and marked as such. The ETA-holder shall register non-compliant production and action(-s) taken to prevent further non-conformities. External complaints shall also be documented, as well as actions taken.

When materials/products are delivered for incorporation into the production process, verification of conformity with specifications in the quality manual shall take place and be recorded.

If supplied materials/components are not manufactured and tested by the supplier in accordance with agreed methods, or where the ETA-holder purchases materials/components on the open market, then where appropriate, they shall be subject to suitable documented checks/tests by the ETA-holder before acceptance.

The characteristics of incoming material and components, for which the supplier demonstrates documented compliance with a product specification, for an intended use that is appropriate for its use as a raw material or component of the product, shall be considered satisfactory and need, except in justified doubt, no further checking, unless the control plan specifies differently.

5.1.2 Testing of samples taken at the factory

5.1.2.1 General

At least the following minimum information shall be recorded:

- date and time of manufacture
- type of product produced (boards)
- material specification (dimensions and thickness)
- all results of the verifications performed within the agreed upon control plan

5.1.2.2 Maintenance, checking and calibration of equipment

All testing equipment shall be maintained, calibrated and/or checked against equipment or test specimens traceable to relevant international or nationally recognised reference test specimens (standards). In case no such reference test specimens exist, the basis used for internal checks and calibration shall be documented.

The ETA-holder shall ensure that handling, preservation and storage of test equipment is such that the performances are maintained

When production is intermittent, the ETA-holder shall ensure that any test equipment which may be affected by the interruption is suitably checked and/or calibrated before use. The calibration of all test equipment shall be repeated if any repair or failure occurs which could upset the calibration of the test equipment.

5.1.2.3 Testing as part of Factory Production Control

Table 5 specifies minimum requirements for testing as part of FPC.

If constituent materials or components are supplied by other manufacturers to the ETA-holder, the supplier shall perform FPC on those constituent materials or components. If that is the case, those suppliers should submit the relevant records to the ETA-holder.

Table 5 – FPC test plan for SUPALUX®

| Property | Minimum frequency |
|---|--|
| Determination of organic content (reaction to fire) | 1 per week ⁽⁵⁾ |
| Determination of dimensional stability at high temperatures (fire resistance) | 1 per week |
| Indirect test method (small oven test) ⁽⁶⁾ | 1 per year |
| Water impermeability | 1 per 3 year |
| Dimensional stability | 1 per year |
| Identification | |
| length, width | 1 per day ⁽⁷⁾ , per dimension |
| thickness | 1 per day, per thickness |
| apparent density | 1 sample per n boards |
| Flexural strength | 1 sample per n boards |

5.2 Initial Type Testing

The assessment tests will have been conducted by the UBAtc or under its responsibility (which may include a proportion conducted by an independent laboratory or by the ETA-applicant, witnessed by the UBAtc). The UBAtc will have assessed the results of these tests in accordance with chapter 3 of this ETA, as part of the ETA issuing procedure.

The results of assessment testing shall be used by notified bodies (cf. Regulation (EU) 305/2011, Annex V, clause 1.6).

6 Other marking and/or information

Each board shall at least be marked with product name and a traceability code. Each package is marked with the product name, traceability code, thickness of the boards, and dimensions of the boards.

⁽⁵⁾: A week represents 5 production days.

⁽⁶⁾: Production shall be subjected to a small oven test (test performed on one thickness).

⁽⁷⁾: A day represents a 24h time period in which production is considered to be as usual for the production facility concerned.

UBAtc asbl is a non-profit organization according to Belgian law. It is a Technical Assessment Body notified by the Belgian notifying authority, the Federal Public Services Economy, SMEs, Self-Employed and Energy, on 17 July 2013 in the framework of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC and is member of the European Organisation for Technical Assessment, EOTA (www.eota.eu).

This European Technical Assessment has been issued by UBAtc asbl, in Sint-Stevens-Woluwe, on the basis of the technical work carried out by the Assessment Operator, BCCA.

On behalf of UBAtc asbl,

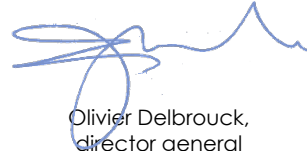
On behalf of the Assessment Operator, BCCA,
responsible for the technical content of the ETA,



Eric Winnepenninckx
secretary general



Benny De Blaere,
director



Olivier Delbrouck,
director general

The most recent version of this European Technical Assessment may be consulted on the UBAtc website (www.butgb-ubatc.be).

Annex I: References

Reference number EAD 350142-00-1106

Document title Fire protective products - Fire protective board, slab and mat products and kits.

Reference number EN 13964:2004

Document title Suspended ceilings - Requirements and test methods.

Reference number EN 13501-1:2002

Document title Fire classification of construction products and building elements - Part 1: Classification using test data from reaction to fire tests

Reference number EN 13501-2:2003

Document title Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance tests, excluding ventilation services

Reference number EN 1364-1:1999

Document title Fire resistance tests for non-loadbearing elements - Part 1: Walls

Reference number EN 12467:2004

Document title Fibre-cement flat sheets - Product specification and test methods

Reference number EN 318:2002

Document title Wood based panels - Determination of dimensional changes associated with changes in relative humidity

Reference number EN 826:1996

Document title Thermal insulating products for building applications - Determination of compression behaviour

Reference number EN 1607:1996

Document title Thermal insulating products for building applications - Determination of tensile strength perpendicular to faces

Reference number EN 1608:1996

Document title Thermal insulating products for building applications - Determination of tensile strength parallel to faces

Reference number EN 14566:2008

Document title Mechanical fasteners for gypsum plasterboard systems – Definitions, requirements and test methods.

Reference number EN 14195:2005

Document title Metal framing components for gypsum plasterboard systems – Definitions, requirements and test methods

Reference number EN 13162:2001

Document title Thermal insulation products for buildings - Factory made mineral wool (MW) products – Specification

NOTE: The editions of reference documents given above are those, which have been adopted by the UBAtc for its specific use when establishing this ETA. When new editions become available, these supersede the editions mentioned only when confirmed by the UBAtc.

Annex II : Fire resistance performances and assembly methods for uses of boards covered by this ETA

A 2.0 Overview of fire resistance performances for SUPALUX® assemblies

The fire protective assemblies in Table A.2.1 have been assessed within the framework of this ETA. Assemblies installed according to the provisions given in this annex are covered by this ETA.

Table A 2.0.1

| Assemblies assessed within the framework of this ETA | Classification according to EN 13501-3 | Test Standard | Intended use category according to EAD 350142-00-1106 | Installation details | Date of addition to this ETA |
|--|--|---------------|---|----------------------|------------------------------|
| Non-loadbearing metal stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 9 mm) | E 60 EI 30 EW 30 | EN 1364-1 | Type 8 | Annex 2.1 | 2007-09-10 |
| Non-loadbearing metal stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 9 mm) | EW60 EI30 | EN 1364-1 | Type 8 | Annex 2.2 | 2013-06-27 |
| Non-loadbearing metal stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 9 mm) | EW120 EI60 | EN 1364-1 | Type 8 | Annex 2.3 | 2013-06-27 |
| Non-loadbearing metal stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 12 mm) | EI120 | EN 1364-1 | Type 8 | Annex 2.4 | 2013-06-27 |
| Non-loadbearing metal stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 2 x 12 mm) | EI240 | EN 1364-1 | Type 8 | Annex 2.5 | 2013-06-27 |
| Non-loadbearing timber stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 6 mm) | EI30 | EN 1364-1 | Type 8 | Annex 2.6 | 2013-06-27 |
| Non-loadbearing timber stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 9 mm) | EW90 EI60 | EN 1364-1 | Type 8 | Annex 2.7 | 2013-06-27 |
| Non-loadbearing timber stud partition, protected on both sides by SUPALUX® fire protective boards (thickness 15 mm) | EI120 | EN 1364-1 | Type 8 | Annex 2.8 | 2013-06-27 |

Annex 2.1 Specification of a non-loadbearing metal stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 9 mm), insulated with a mineral wool layer (thickness ≥ 50 mm, density ≥ 40 kg/m³)

A.2.1.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2007-09-10. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.1.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **E 60, EI 30 and EW 30** in accordance with EN 13501-2.

A.2.1.3 Installation requirements

Installation requirements in paragraph 2.2.2 of this ETA shall be taken into account.

A.2.1.4 Supporting structure

The supporting structure consists of horizontal steel U-sections (see figures section B) with minimum dimensions of (45 x 50 x 45 x 0.6) (mm) on the sole and head of the partition, and vertical steel C-sections (see figures section A) with minimum dimensions (50 x 50 x 50 x 0.6) (mm) at maximum 600 mm centres. The sole U section is fixed to the surrounding construction with screws of minimum Ø 5 x 80 mm, at maximum 500 mm centres. The head U section and the outer vertical studs are fixed to the surrounding construction with anchor bolts of minimum Ø 6 x 70 mm at maximum 500 mm centres.

The tensile stress in the supporting components shall not exceed 6N/mm². The supported structure is not fire protected.

Specifications for the components are given in Table A.2.1.1.

| Table A.2.1.1 | | | |
|---------------|---|-----------------------------|---|
| Element | Identification | Characteristics | Mounting and fixing |
| U-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (45 x 50 x 45 x 0.6) (mm) | Horizontal steel sections, placed on the head and sole of the partition |
| C-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (50 x 50 x 50 x 0.6) (mm) | Vertical steel sections, placed at ≤ 600 mm centres |
| Anchor bolts | Steel anchor | ≥ Ø 6 x 70 mm | Used for fixing of the head U-channels and the outer C-channels to the surrounding construction at ≤ 500 mm centres |
| Screws | Galvanized steel screw according to prEN14566 or equivalent | ≥ Ø 5 x 80 mm | Used for fixing of the sole U-channels to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 68 mm.

A.2.1.5 Insulation

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 40 kg/m³ and a width corresponding with the steel channel dimensions (minimum width 50 mm).

Specifications for the linear joint seal are given in Table A.2.1.2.

| Table A.2.1.2 | | | |
|------------------|------------------------------------|---|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 40 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 50 mm) | Filling of the void in the partition construction. |

A.2.1.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 9 mm) is fixed onto both sides of the steel channel framework to form the partition, as shown in the general view in the figures in paragraph A.2.1.9. The boards are fixed with steel screws with minimum dimensions of Ø 3,5 x 25 mm, at maximum 250 mm centres.

Behind the horizontal board joints (to the inner side of the partition), horizontal SUPALUX® board fillets (minimum thickness 9 mm) with a minimum width of 75 mm are fixed with steel screws with minimum dimensions of Ø 3,5 x 25 mm, at maximum 250 mm centres (see figures detail 5).

Specifications for the components are given in Table A.2.1.2.

| Table A.2.1.2 | | | |
|---------------------|---|--|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Boards | Fire protective board SUPALUX® | Length: 2500 mm Width: 1200 mm Thickness: 45 mm | Installed to form a rectangular duct. Joints in different faces are located in the same cross section |
| Board Strips | Fire protective board SUPALUX® | Width: 150 mm Thickness: 45 mm | Installed along the joints between two duct sections to connect the two duct sections |
| Screws | Galvanized steel screws according to EN 14566 or equivalent | Dimensions: (a) ≥ Ø 4.8 x 100 mm (b) ≥ Ø 4.8 x 80 mm | Fixing at ≤ 150 mm centres (a) of the boards (b) of the board strips |

A.2.1.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

Specifications for the linear joint seal are given in Table A.2.1.4.

| Table A.2.1.4 | | | |
|--------------------------|------------------------------------|--|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.1.8 Details

All installation details shall be executed as presented in the figures A.2.1.9.1 to A.2.1.9.2.

A.2.1.9 Figures

Key

- [1] SUPALUX® board, thickness 9 mm
- [2] SUPALUX® board fillet, thickness 9 mm, width ≥ 75 mm
- [3] C-section (galvanized steel), ≥ (50 x 50 x 50 x 0.6) (mm) at ≤ 600 mm centres
- [4] U-section (galvanized steel), ≥ (45 x 50 x 45 x 0.6) (mm)
- [5] Mineral wool, density ≥ 40 kg/m³, thickness corresponding with steel channel dimensions
- [6] Screws (galvanized steel), ≥ Ø 5 x 80 mm at ≤ 500 mm centres
- [7] Steel anchor bolts (steel), ≥ Ø 6 x 70 mm at ≤ 500 mm centres
- [8] Linear joint seal (mineral wool), density ≥ 32 kg/m³, width corresponding with steel channel dimensions
- [9] Screws (galvanized steel), ≥ Ø 3,5 x 25 mm at ≤ 250 mm centres
- [10] Surrounding construction

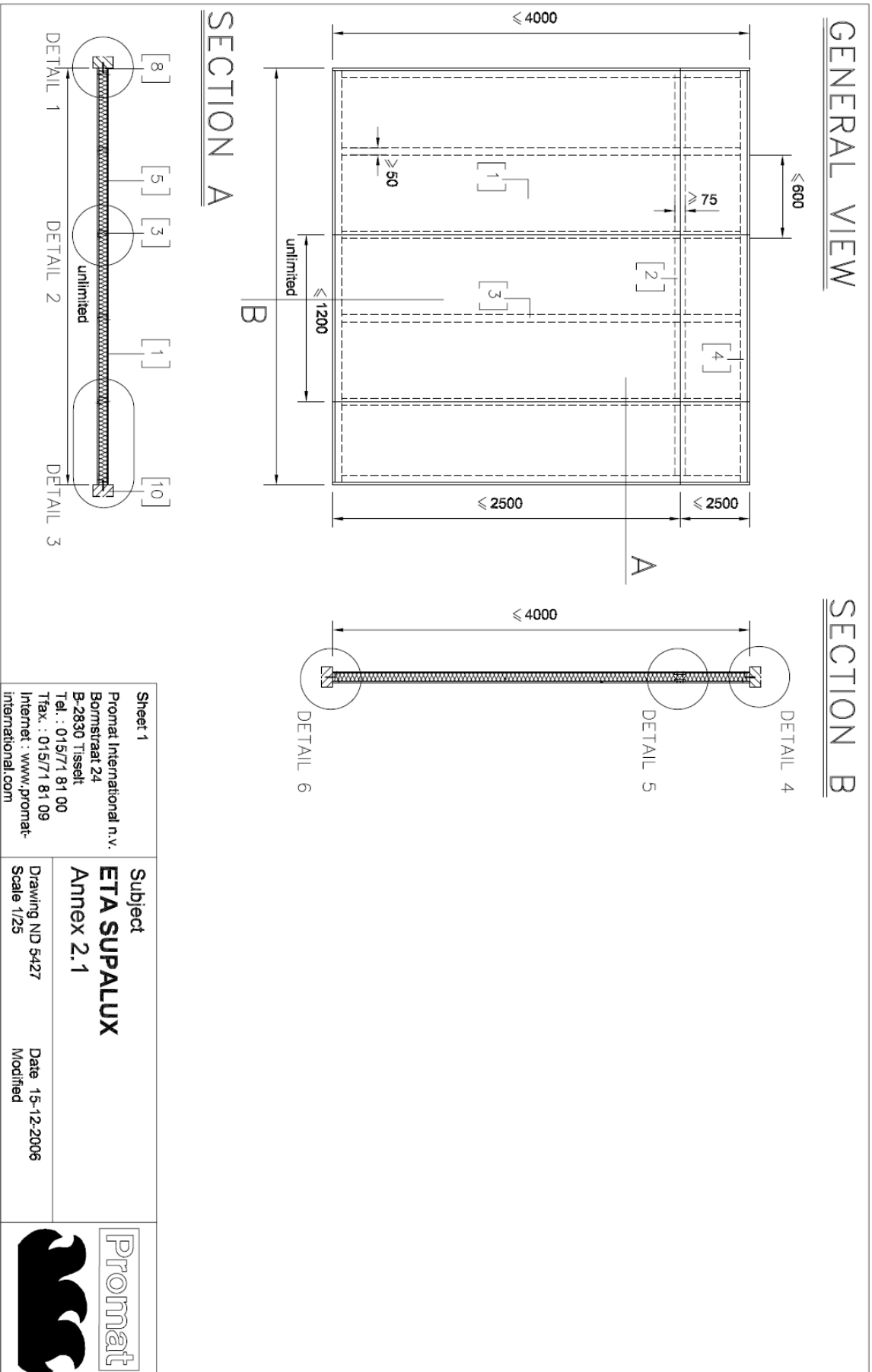
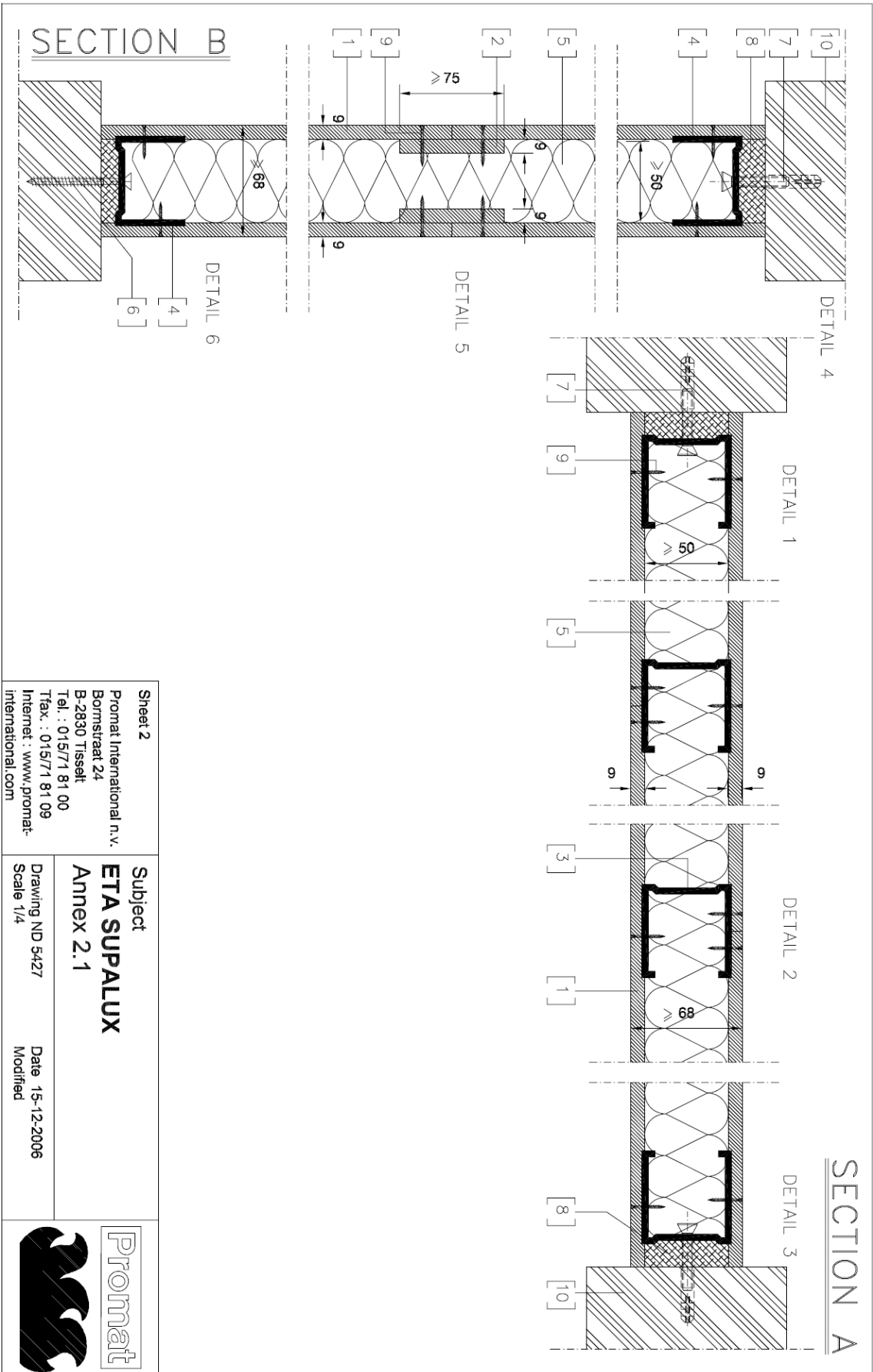


Figure A.2.1.9.1



Sheet 2
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Subject
ETA SUPALUX
Annex 2.1

Drawing ND 5427
 Scale 1/4

Date 15-12-2006
 Modified

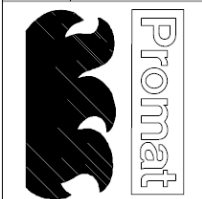


Figure A.2.1.9.2

Annex 2.2: Specification of a non-loadbearing metal stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 9 mm), insulated with a mineral wool layer (thickness ≥ 60 mm, density ≥ 23 kg/m³)

A.2.2.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.2.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EW 60 and EI 30** in accordance with EN 13501-2:2007+A1:2009.

A.2.2.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.2.9.

A.2.2.4 Supporting structure

The supporting structure consists of ceiling and floor channels with minimum dimensions of (50 x 25 x 0.5) (mm) on the sole and head of the partition, and vertical steel C-studs with minimum dimensions (48 x 32/34 x 0.5) (mm) at maximum 610 mm centres. The ceiling and floor channels are fixed to the surrounding construction with M6 steel anchor bolts, at maximum 500 mm centres. The vertical studs are friction fitted to the ceiling and floor channels.

Specifications for the components of the supporting structure are given in Table A.2.2.1.

| Table A.2.2.1 | | | |
|---------------|---|---------------------------|---|
| Element | Identification | Characteristics | Mounting and fixing |
| U-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (50 x 25 x 0.5) (mm) | Horizontal steel sections, placed on the head and sole of the partition |
| C-stud | Galvanized steel channels according to EN 14195 or equivalent | ≥ (48 x 32/34 x 0.6) (mm) | Vertical steel sections, placed at ≤ 610 mm centres |
| Anchors | steel anchor bolts | ≥ M6 x ≥ 40 | Used for fixing of the ceiling and floor channels to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 68 mm.

A.2.2.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 23 kg/m³ and a width corresponding with the steel channel dimensions (minimum width 60 mm).

Specifications for the linear joint seal are given in Table A.2.2.2.

| Table A.2.2.2 | | | |
|------------------|------------------------------------|---|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 23 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 60 mm) | Filling of the void in the partition construction. |

A.2.2.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 9 mm) is fixed onto both sides of the steel channel framework to form the partition, as shown in the general view in the figures in paragraph A.2.2.9. The boards are fixed with galvanized steel screws with minimum dimensions of M4 x 25 mm, at maximum 300 mm centres.

Behind the horizontal board joints (to the inner side of the partition), horizontal SUPALUX® board fillets (minimum thickness 9 mm) with a minimum width of 75 mm are fixed with steel galvanized screws with minimum dimensions of M4 x 16 mm, at maximum 300 mm centres.

Specifications for the components are given in Table A.2.2.3.

| Table A.2.2.3 | | | |
|----------------------|---|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 9 mm | Applied with screws to the steel channel framework |
| Board fillet | SUPALUX® Fire Protective board | Thickness: ≥ 9 mm Width: ≥ 75 mm | Applied with screws (to the inner side of the partition) along each horizontal board joint |
| Screws | Galvanized self-tapping steel screws according prEN14566:2002 or equivalent | M4 x 25 mm | Used to fix the boards at ≤ 300 mm centres |
| Screws | Galvanized self-tapping steel screws according prEN14566:2002 or equivalent | M4 x 16 mm | Used to fix the board fillets at ≤ 300 mm centres |

A.2.2.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

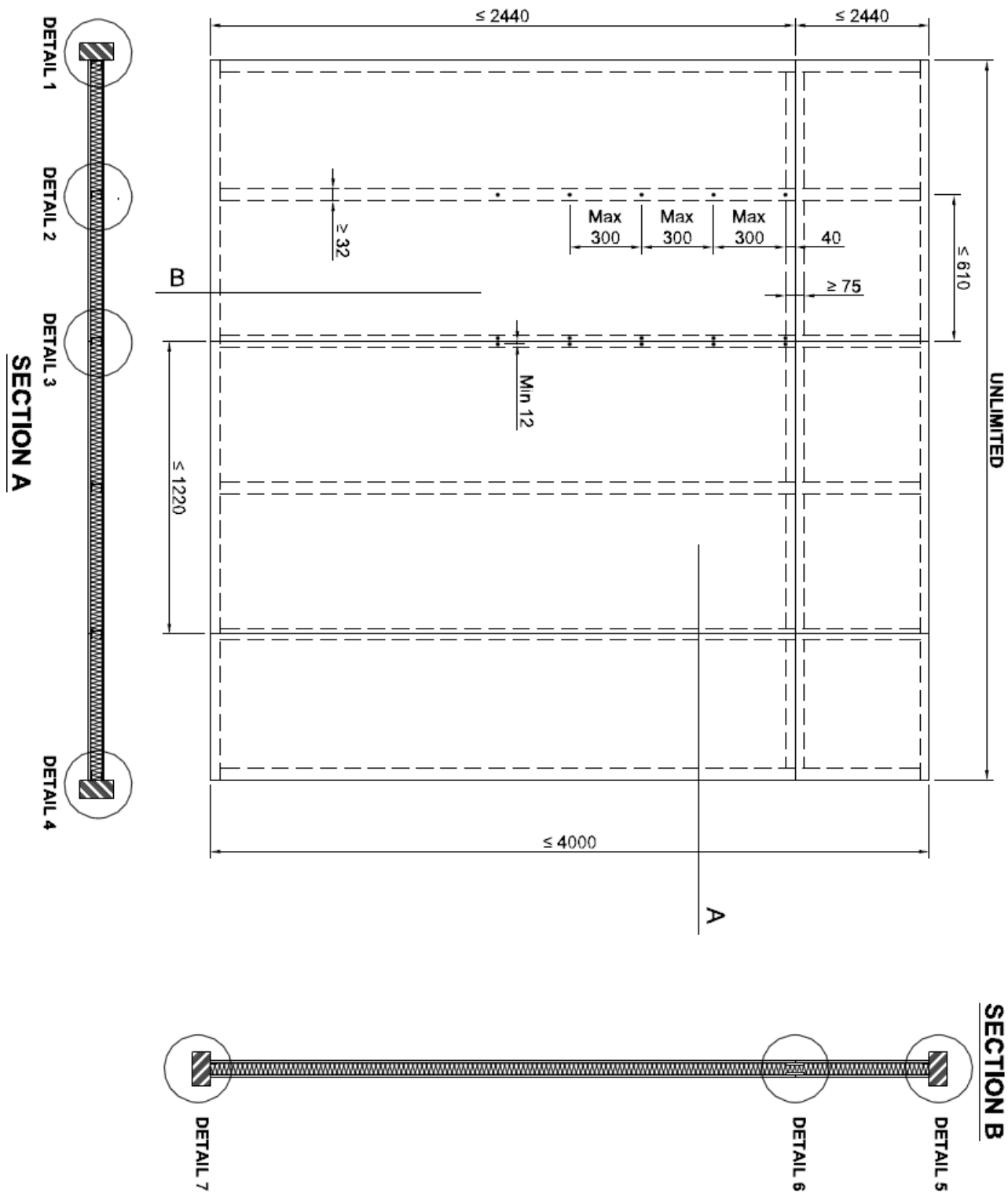
Specifications for the linear joint seal are given in Table A.2.2.4.

| Table A.2.2.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.2.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.2.9.

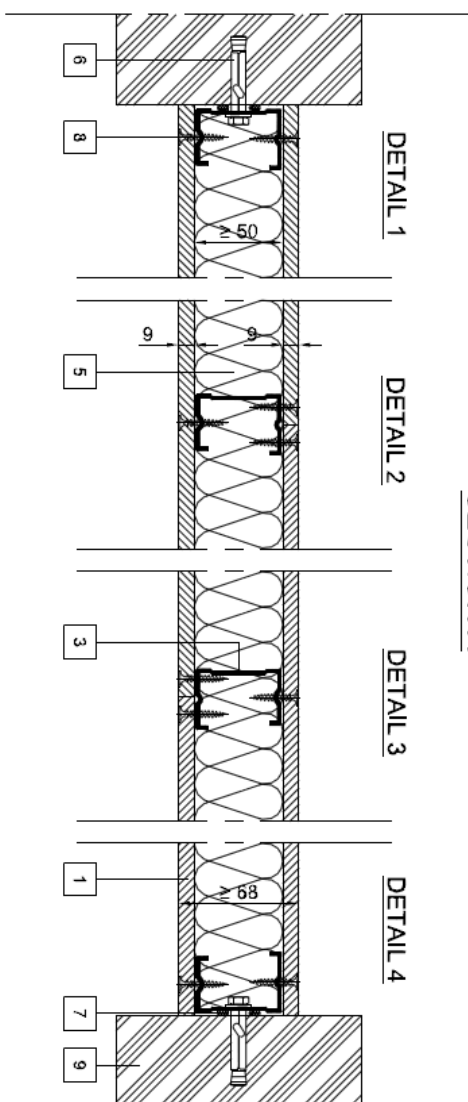
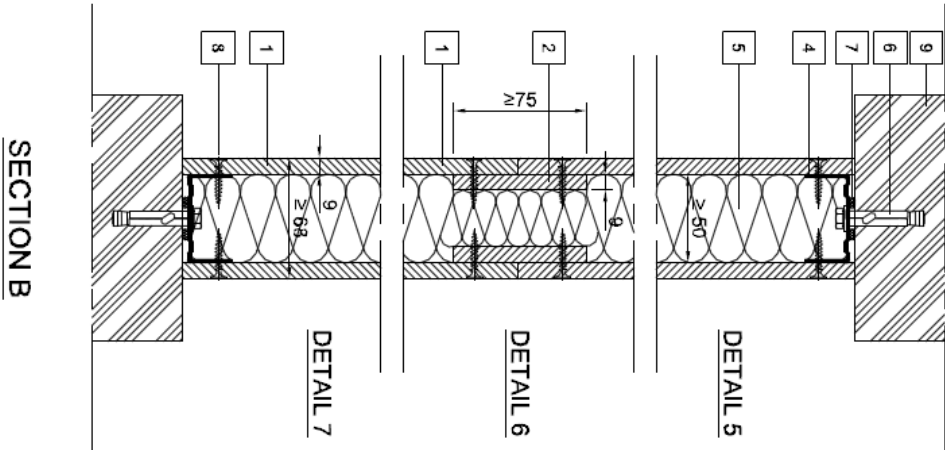
A.2.2.9 Figures



Subject :

SUPALUX®
Annex 2.2

Drawing 2.2.1



- 1 SUPALUX®-S board, thickness 9mm
- 2 SUPALUX® board fillet, thickness 9mm, width ≥ 75 mm
- 3 C-section (galvanized steel), $\geq (48 \times 34/32 \times 0.6 \text{ mm})$, at ≤ 610 mm centers
- 4 U-section (galvanized steel), $\geq (50 \times 25 \times 0.5 \text{ mm})$
- 5 Mineral wool, density $\geq 23\text{kg/m}^3$, thickness 60mm
- 6 Steel anchor bolts, M6 x ≥ 40 mm at ≤ 500 mm centers
- 7 Linear joint seal, mineral wool, density $\geq 23\text{kg/m}^3$, width corresponding with steel channel dimensions or, intumescent sealant, 2 x continuous 6mm \varnothing beads
- 8 Screws (galvanized steel), $\geq \text{M4} \times 25$ mm at ≤ 300 mm centers
- 9 Surrounding construction

Subject :
SUPALUX®
Annex 2.2

Drawing 2.2.1

Annex 2.3: Specification of a non-loadbearing metal stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 9 mm), insulated with a mineral wool layer (thickness ≥ 60 mm, density ≥ 45 kg/m³)

A.2.3.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.3.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EW 120 and EI 60** in accordance with EN 13501-2:2007+A1:2009.

A.2.3.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.3.9.

A.2.3.4 Supporting structure

The supporting structure consists of ceiling and floor channels with minimum dimensions of (50 x 25 x 0.5) (mm) on the sole and head of the partition, and vertical steel C-sections with minimum dimensions (48 x 32/34 x 0.5) (mm) at maximum 610 mm centres. The ceiling and floor channels are fixed to the surrounding construction with steel M6 anchor bolts, at maximum 500 mm centres. The vertical studs are friction fitted to the ceiling and floor channels.

Specifications for the components of the supporting structure are given in Table A.2.3.1.

| Table A.2.3.1 | | | |
|---------------|---|---------------------------|--|
| Element | Identification | Characteristics | Mounting and fixing |
| U-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (50 x 25 x 0.5) (mm) | Horizontal steel sections, placed on the head and sole of the partition |
| C- stud | Galvanized steel channels according to EN 14195 or equivalent | ≥ (48 x 32/34 x 0.5) (mm) | Vertical steel sections, placed at ≤ 610 mm centres |
| Anchors | steel anchors bolts | ≥ M6 x ≥ 40 | Used for fixing ceiling and floor channels to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 86 mm.

A.2.3.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 45 kg/m³ and a width corresponding with the steel channel dimensions (minimum width 60 mm).

Specifications for the linear joint seal are given in Table A.2.3.2.

| Table A.2.3.2 | | | |
|------------------|------------------------------------|---|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 45 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 60 mm) | Filling of the void in the partition construction. |

A.2.3.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 9 mm) is fixed onto both sides of the steel channel framework to form the partition. The boards are fixed with galvanized steel screws with minimum dimensions of M4 x 32 mm, at maximum 300 mm centres.

Behind the horizontal board joints (to the inner side of the partition), horizontal SUPALUX® board fillets (minimum thickness 9 mm) with a minimum width of 75 mm are fixed with galvanized steel screws with minimum dimensions of M4 x 25 mm, at maximum 300 mm centres.

Specifications for the components are given in Table A.2.3.3.

| Table A.2.3.3 | | | |
|----------------------|--|--|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 9 mm | Applied with screws to the board fillets applied to the steel channel framework |
| Board fillet | SUPALUX® Fire Protective board | Thickness: ≥ 9 mm Width: ≥ 75 mm | Applied with screws (to the inner side of the partition) along each horizontal board joint |
| Board fillet | SUPALUX® Fire Protective board | Thickness: ≥ 9 mm Width: ≥ 50 mm | Applied with screws on each side of the vertical C-studs |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 25 mm | Used to fix the boards and horizontal board fillets at ≤ 300 mm centres |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 32 mm | Used to fix the boards and vertical board fillets to the vertical C-studs at ≤ 300 mm centres |

A.2.3.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

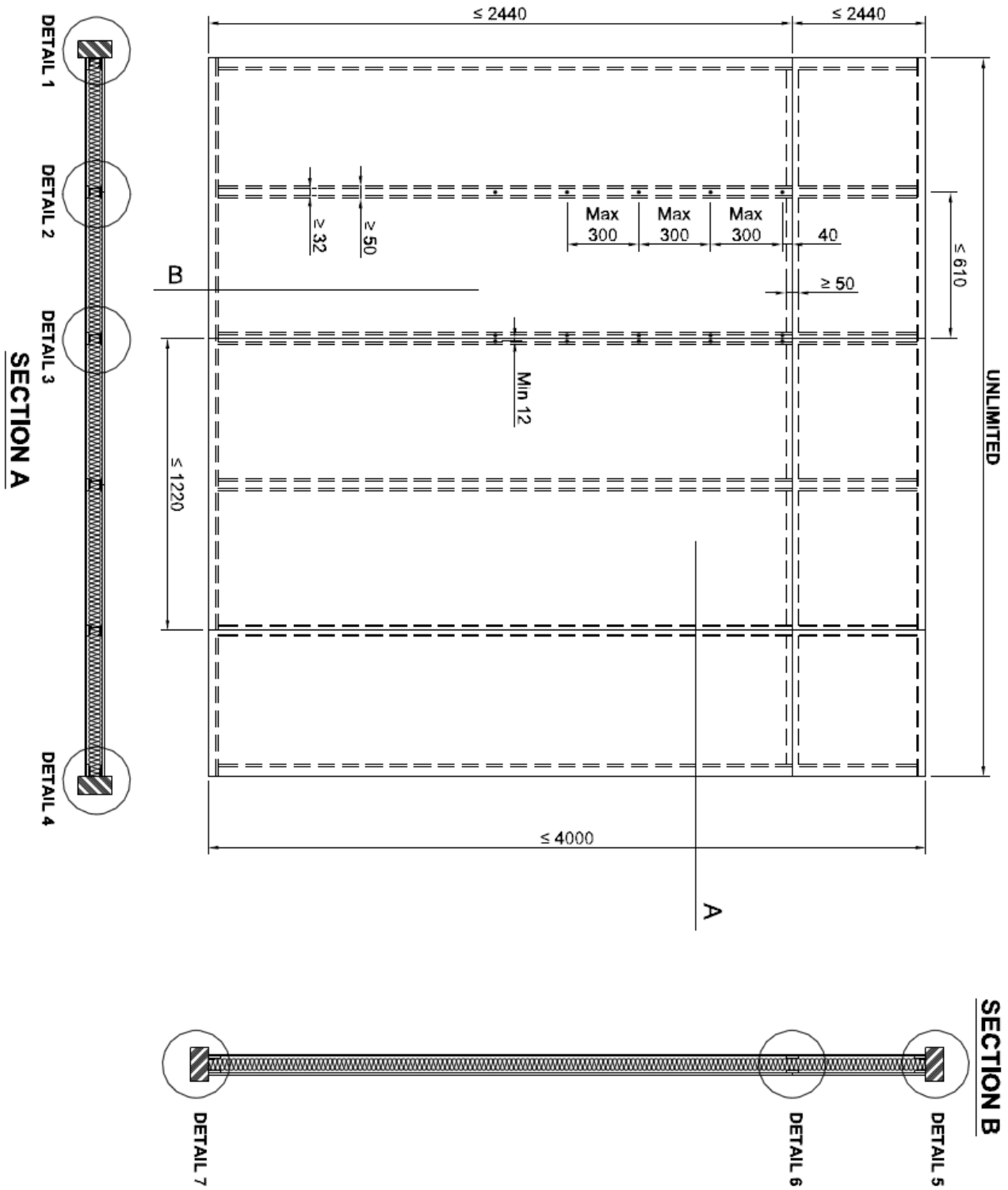
Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

Specifications for the linear joint seal are given in Table A.2.3.4.

| Table A.2.3.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.3.8 Details

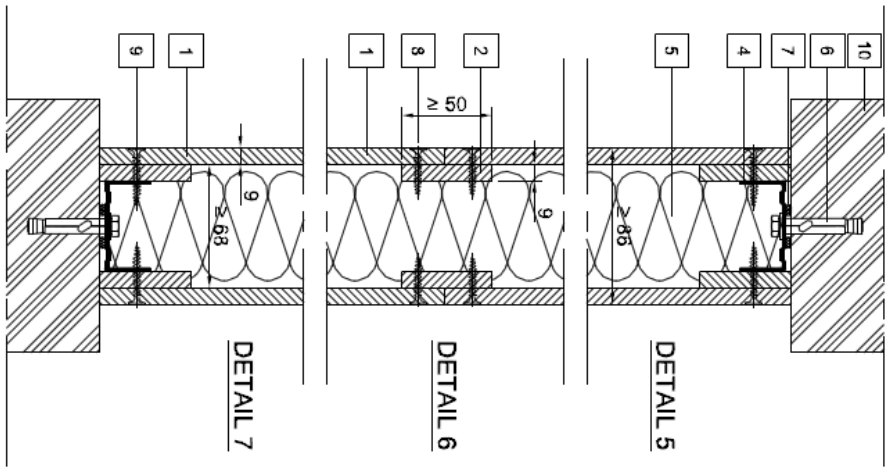
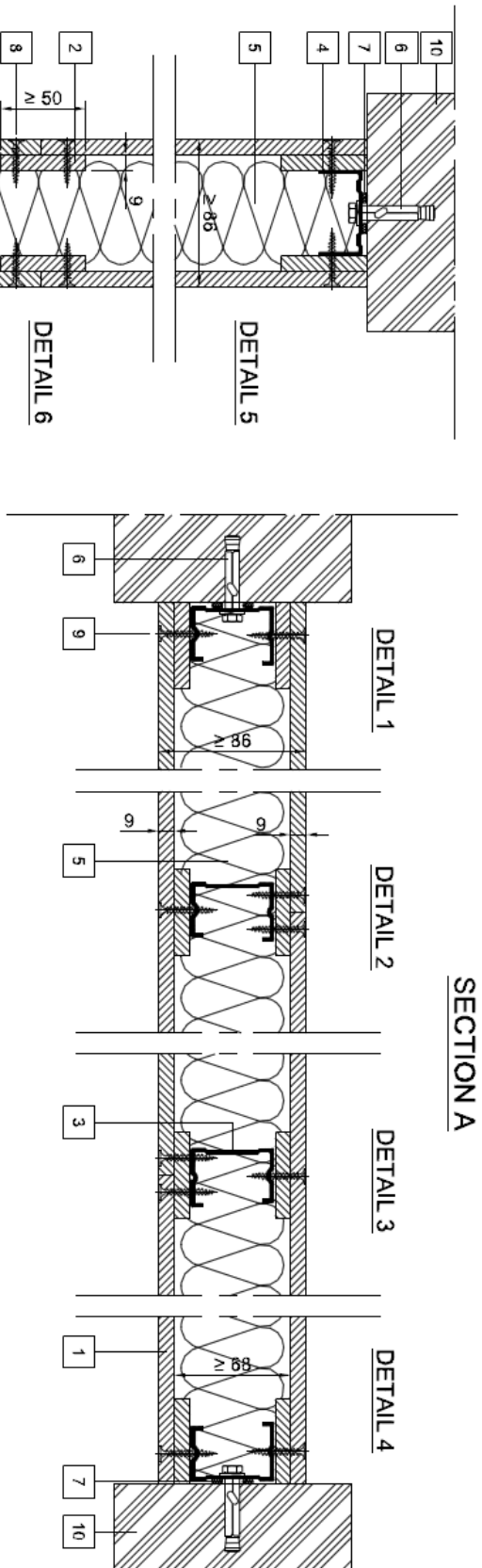
All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.3.9.



Subject :

SUPALUX®
Annex 2.3

Drawing 2.3.1



- 1 SUPALUX® S board, thickness 9mm
- 2 SUPALUX® board fillet, thickness 9mm, width $\geq 75\text{mm}$
- 3 C-section (galvanized steel), $\geq (48 \times 34/32 \times 0.6 \text{ mm})$, at $\leq 610 \text{ mm}$ centers
- 4 U-section (galvanized steel), $\geq (50 \times 25 \times 0.5 \text{ mm})$
- 5 Mineral wool, density $\geq 23\text{kg/m}^3$, thickness 60mm
- 6 Mineral wool, density $\geq 45\text{kg/m}^3$, thickness 60mm
- 7 Linear joint seal, mineral wool density $\geq 23\text{kg/m}^3$, width corresponding with steel channel dimensions or, intumescent sealant, 2 x continuous 6mm \varnothing beads
- 8 Screws (galvanized steel), $\geq M4 \times 25\text{mm}$ at $\leq 300\text{mm}$ centers
- 9 Screws (galvanized steel), $\geq M4 \times 32\text{mm}$ at $\leq 300\text{mm}$ centers
- 10 Surrounding construction

Subject :
SUPALUX®
Annex 2.3

Drawing 2.3.3

Annex 2.4: Specification of a non-loadbearing metal stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 12 mm), insulated with a mineral wool layer (thickness ≥ 2 x 50 mm, density ≥ 100 kg/m³)

A.2.4.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.4.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EI 120** in accordance with EN 13501-2:2007+A1:2009.

A.2.4.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.4.9.

A.2.4.4 Supporting structure

The supporting structure consists of ceiling and floor channels with minimum dimensions of (100 x 40 x 0.6) (mm) on the sole and head of the partition, and vertical steel C-sections with minimum dimensions (98,8 x 40 x 0.6) (mm) at maximum 610 mm centres. The ceiling and floor channels are fixed to the surrounding construction with M6 steel anchor bolts, at maximum 500 mm centres. The vertical studs are friction fitted to the ceiling and floor channels.

Specifications for the components of the supporting structure are given in Table A.2.4.1.

| Table A.2.4.1 | | | |
|---------------|---|--------------------------|--|
| Element | Identification | Characteristics | Mounting and fixing |
| U-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (100 x 40 x 0.6) (mm) | Horizontal steel sections, placed on the head and sole of the partition |
| C- stud | Galvanized steel channels according to EN 14195 or equivalent | ≥ (98,8 x 40 x 0.6) (mm) | Vertical steel sections, placed at ≤ 610 mm centres |
| Anchor bolts | Steel anchor bolts | ≥ M6 x ≥ 40 | Used for fixing ceiling and floor channels to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 148 mm.

A.2.4.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 100 kg/m³ and a width corresponding with the steel channel dimensions (minimum width 2 layers of 50 mm staggered between the layers by minimum 150mm).

Specifications for the linear joint seal are given in Table A.2.4.2.

| Table A.2.4.2 | | | |
|------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 100 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 2 layers of 50 mm) | Filling of the void in the partition construction. staggered between the layers by minimum 150mm |

A.2.4.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 12 mm) is fixed onto both sides of the steel channel framework to form the partition. The boards are fixed with galvanized steel screws with minimum dimensions of M4 x 32 mm, at maximum 250 mm centres.

Behind the horizontal board joints (to the inner side of the partition), horizontal SUPALUX® board fillets (minimum thickness 12 mm) with a minimum width of 75 mm are fixed with galvanized steel screws with minimum dimensions of M4 x 25 mm, at maximum 250mm centres.

Specifications for the components are given in Table A.2.4.3.

| Table A.2.4.3 | | | |
|----------------------|--|---|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 12 mm | Applied with screws to the board fillets applied to the steel channel framework |
| Board fillet | SUPALUX® Fire Protective board | Thickness: ≥ 12 mm Width: ≥ 75 mm | Applied with screws (to the inner side of the partition) along each horizontal board joint |
| Board fillet | SUPALUX® Fire Protective board | Thickness: ≥ 12 mm Width: ≥ 50 mm | Applied with screws on each side of the vertical C-studs |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 25 mm | Used to fix the boards and horizontal board fillets at ≤ 250 mm centres |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 32 mm | Used to fix the boards and vertical board fillets to the vertical C-studs at ≤ 250 mm centres |

A.2.4.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

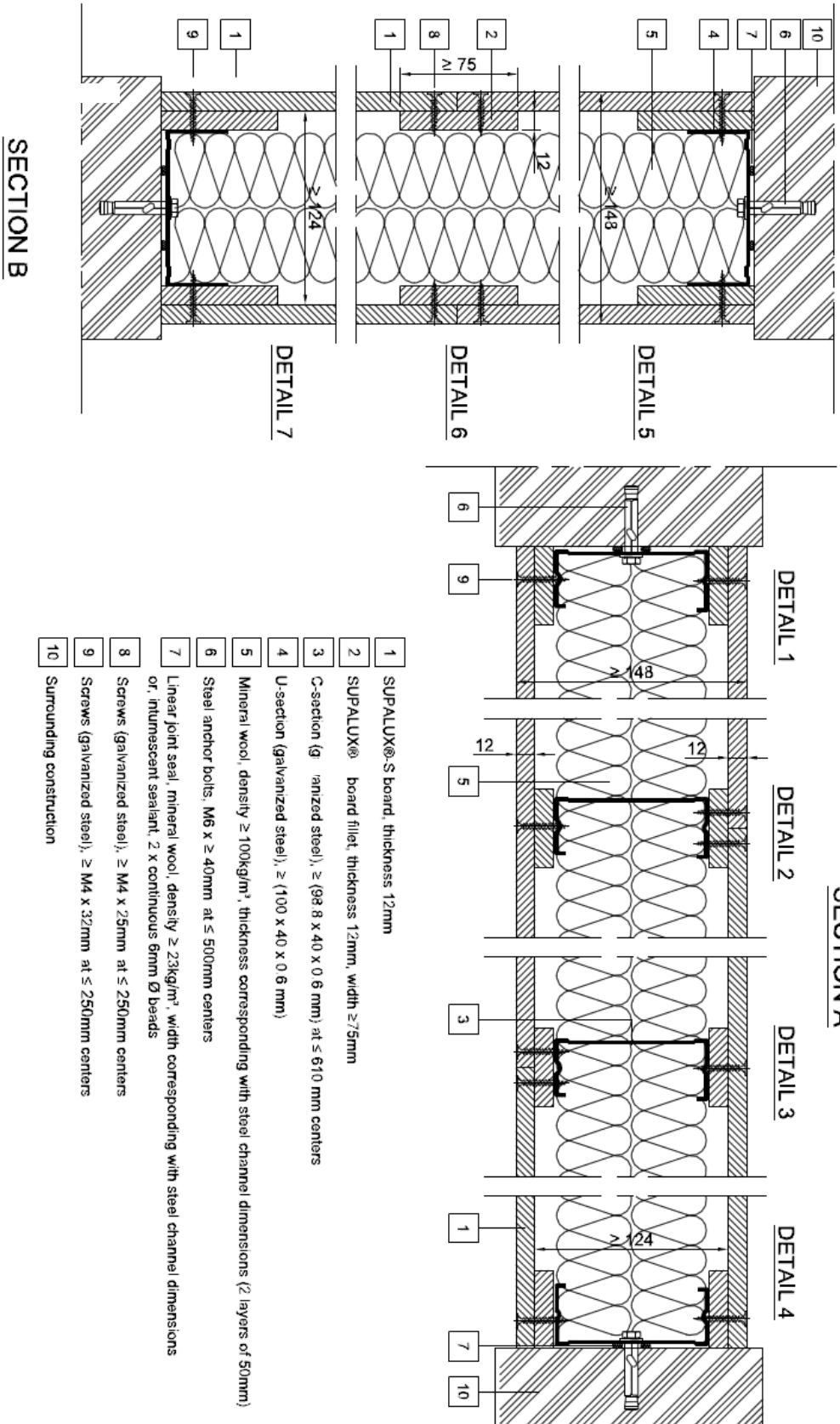
Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

Specifications for the linear joint seal are given in Table A.2.4.4.

| Table A.2.4.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m ³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.4.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.4.9.



Subject :

SUPALUX®
Annex 2.4

Drawing 2.4.2

Annex 2.5: Specification of a non-loadbearing metal stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 2 x 12 mm), insulated with a mineral wool layer (thickness ≥ 3 x 50 mm, density ≥ 100 kg/m³)

A.2.5.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.5.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EI240** in accordance with EN 13501-2:2007+A1:2009.

A.2.5.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.4.9.

A.2.5.4 Supporting structure

The supporting structure consists of ceiling and floor channels with minimum dimensions of (150 x 40 x 0.6 mm) on the sole and head of the partition, and vertical steel C-sections with minimum dimensions (148,8 x 49/47 x 0.6) (mm) at maximum 610 mm centres. The ceiling and floor channels are fixed to the surrounding construction with M6 steel anchor bolts, at maximum 500 mm centres. The vertical studs are friction fitted to the ceiling and floor channels.

Specifications for the components of the supporting structure are given in Table A.2.5.1.

| Table A.2.5.1 | | | |
|----------------------|---|-----------------------------|--|
| Element | Identification | Characteristics | Mounting and fixing |
| U-section | Galvanized steel channels according to EN 14195 or equivalent | ≥ (150 x 40 x 0.6) (mm) | Horizontal steel sections, placed on the head and sole of the partition |
| C-Stud | Galvanized steel channels according to EN 14195 or equivalent | ≥ (148,8 x 47/49 x 0.6)(mm) | Vertical steel sections, placed at ≤ 610 mm centres |
| Anchor bolts | Steel anchor bolts | ≥ M6 x ≥ 40 | Used for fixing ceiling and floor channels to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 198 mm.

A.2.5.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 100 kg/m³ and a width corresponding with the steel channel dimensions (minimum width 3 layers of 50 mm staggered between the layers by minimum 150mm).

Specifications for the linear joint seal are given in Table A.2.5.2.

| Table A.2.5.2 | | | |
|-------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 100 kg/m³ Thickness: corresponding with steel channel dimensions (≥ 3 layers of 50 mm) | Filling of the void in the partition construction. staggered between the layers by minimum 150mm |

A.2.5.6 Fire protective boards

Two layers of fire protective SUPALUX® boards (minimum thickness 12 mm) are fixed onto both sides of the steel channel framework to form the partition, as shown in the general view in the figures in paragraph A.2.5.9. The boards are fixed with galvanized steel screws with minimum dimensions of M4 x 32 mm, at maximum 300 mm centres.

The boards are staggered horizontally by 1 stud (max 610 mm) and vertically by minimum 300 mm. The outer board is fixed to the inner board with steel screws with minimum dimensions of M4 x 25 mm, at maximum 200 mm centres.

Specifications for the components are given in Table A.2.5.3.

| Table A.2.5.3 | | | |
|----------------------|--|---|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 12 mm | Applied in 2 layers with screws to the steel channel framework |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 25 mm | Used to fix the outer boards to the inner board fillets at ≤ 200 mm centres |
| Screws | Galvanized steel screws according prEN14566:2002 or equivalent | M4 x 32 mm | Used to fix the boards to the vertical C-studs at ≤ 300 mm centres |

A.2.5.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

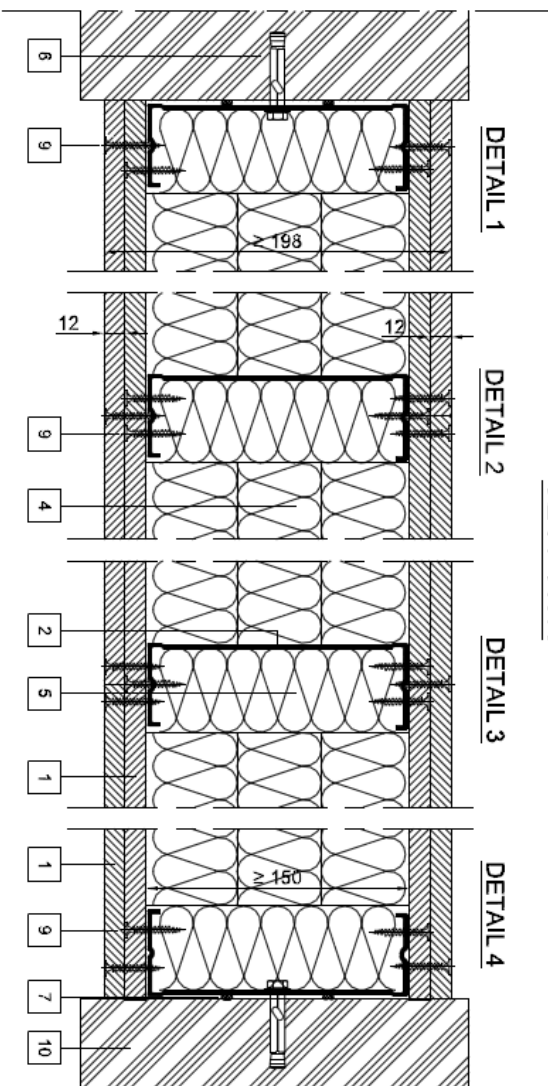
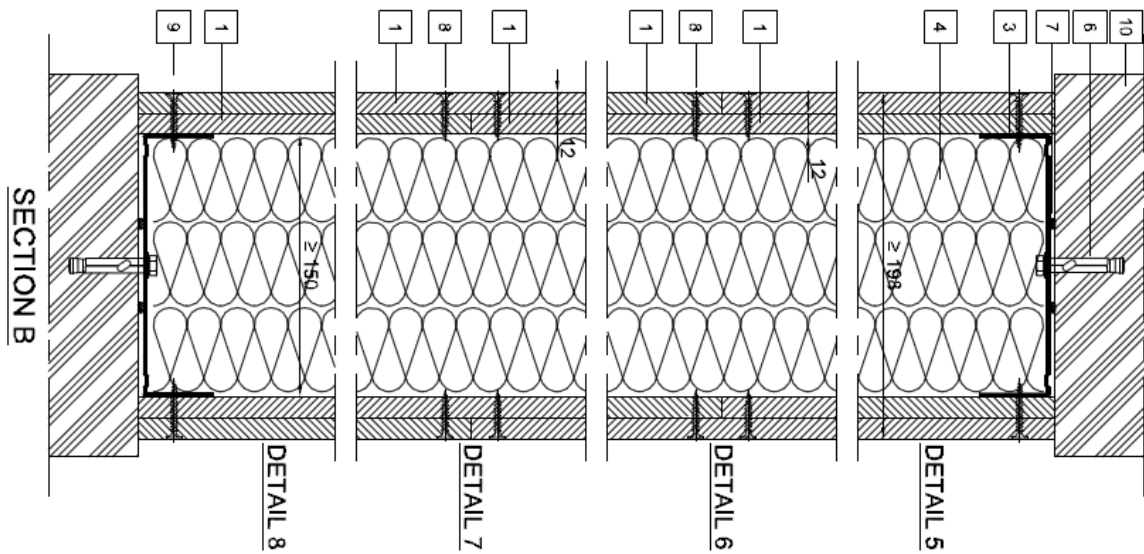
Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

Specifications for the linear joint seal are given in Table A.2.5.4.

| Table A.2.5.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.5.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.5.9.



- 1 SUPALUX®-S board, thickness 12mm
- 2 C-section (galvanized steel), $\geq (148.8 \times 47/49 \times 0.6 \text{ mm})$ at $\leq 610 \text{ mm}$ centers
- 3 U-section (galvanized steel), $\geq (150 \times 40 \times 0.6 \text{ mm})$
- 4 Mineral wool, density $\geq 100 \text{ kg/m}^3$, thickness corresponding with steel channel dimensions (3 layers of 50mm)
- 5 Studs packed tight with mineral wool
- 6 Steel anchor bolts, $M6 \times 40 \text{ mm}$ at $\leq 500 \text{ mm}$ centers
- 7 Linear joint seal, mineral wool, density $\geq 23 \text{ kg/m}^3$, width corresponding with steel channel dimensions or, intumescent sealant, 2 x continuous 6mm \varnothing beads
- 8 Screws (galvanized steel), $\geq M4 \times 25 \text{ mm}$ at $\leq 200 \text{ mm}$ centers
- 9 Screws (galvanized steel), $\geq M4 \times 32 \text{ mm}$ at $\leq 300 \text{ mm}$ centers
- 10 Surrounding construction

Subject :

SUPALUX®
Annex 2.5

Drawing 2.5.2

Annex 2.6: Specification of a non-loadbearing timber stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 6 mm), insulated with a mineral wool layer (thickness ≥ 60 mm, density ≥ 23 kg/m³)

A.2.6.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.6.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EI 30** in accordance with EN 13501-2:2007+A1:2009.

A.2.6.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.6.9.

A.2.6.4 Supporting structure

The supporting structure consists of horizontal and vertical timber studs of 63x50mm. The horizontal studs are placed at the sole and head of the partition and at the joint between adjacent boards. The vertical timber studs are placed at maximum 610mm centres studs. The outer vertical and horizontal studs are fixed to the surrounding construction with steel through anchor bolts M6x85 at 500 mm centres.

Specifications for the components of the supporting structure are given in Table A.2.6.1.

| Table A.2.6.1 | | | |
|---------------|----------------------------|------------------|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Studs | Timber Studs | ≥ (63 x 50) (mm) | Horizontal timber studs, placed on the head and sole of the partition, and at the horizontal joint between boards Vertical timber studs, placed at maximum 610 mm centres. |
| Anchor bolts | steel through anchor bolts | ≥ M6 x ≥ 85 | Used for fixing the head and sole to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 75 mm.

A.2.6.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 23 kg/m³ and a width corresponding with the timber stud dimensions (minimum width 60 mm).

Specifications for the linear joint seal are given in Table A.2.6.2.

| Table A.2.6.2 | | | |
|------------------|------------------------------------|---|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 23 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 60 mm) | Filling of the void in the partition construction. |

A.2.6.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 6 mm) is fixed onto both sides of the timber stud framework to form the partition, as shown in the general view in the figures in paragraph A.2.6.9. The boards are fixed with 2.3 mm x 38 mm round head nails at maximum 300 mm centres. The minimum distance between the nail and the board edge is 12 mm

The horizontal and vertical board joints (to the inner side of the partition), are situated at the centre of the timber studs.

Specifications for the components are given in Table A.2.6.3.

| Table A.2.6.3 | | | |
|----------------------|--------------------------------|--|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 6 mm | Applied with nails to the timber stud framework |
| Nails | Round head nails | 2,3 mm x 38 mm | Used to fix the boards to the timber framework |

A.2.6.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

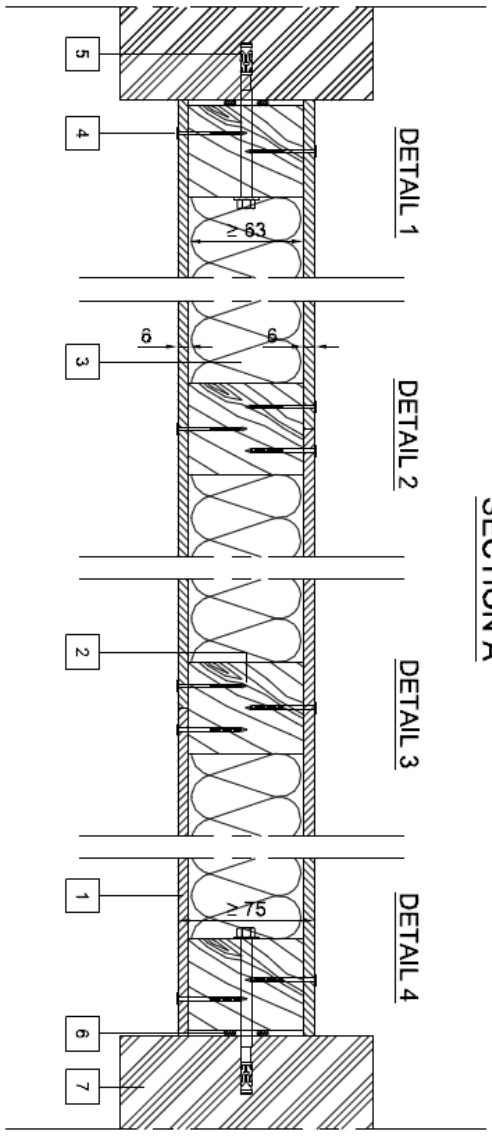
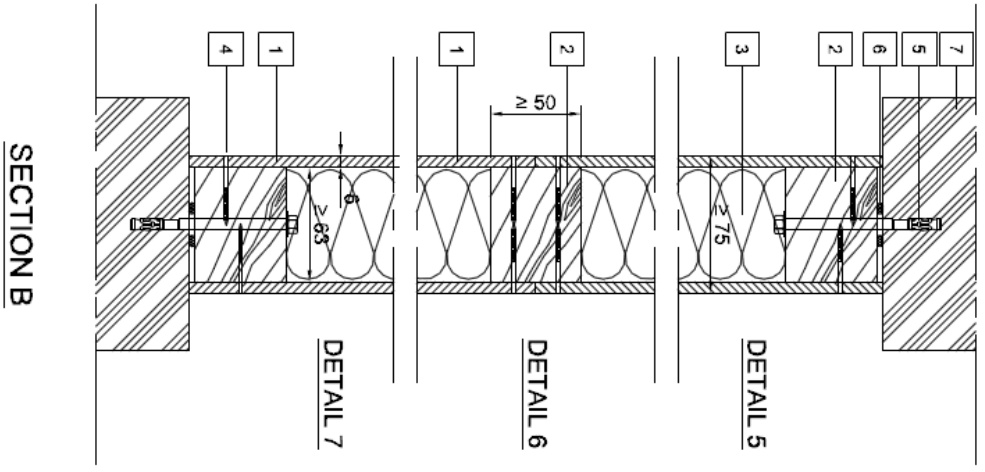
Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

Specifications for the linear joint seal are given in Table A.2.6.4.

| Table A.2.6.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m ³ (before compression) Width: corresponding with steel channel dimensions (≥ 50 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.6.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.6.9.



- 1 SUPALUX® - board, thickness 6mm
- 2 Timber stud 1mm x 50mm
- 3 Mineral wool, density $\geq 23\text{kg/m}^3$, thickness 60mm
- 4 Round head nails, $\geq 2.3\text{mm}\varnothing \times 38\text{mm}$ at $\leq 300\text{mm}$ centers
- 5 Steel through anchor bolts, M6 x $\geq 85\text{mm}$ at $\leq 500\text{mm}$ centers
- 6 Linear joint seal, mineral wool density $\geq 23\text{kg/m}^3$, width corresponding with timber stud dimensions or, intumescent sealant, 2 x continuous 6mm \varnothing beads
- 7 Surrounding construction

Subject :
SUPALUX®
Annex 2.6

Drawing 2.6.2

Annex 2.7: Specification of a non-loadbearing timber stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 9 mm), insulated with a mineral wool layer (thickness ≥ 60 mm, density ≥ 45 kg/m³)

A.2.7.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.7.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EW 90 and EI 60** in accordance with EN 13501-2:2007+A1:2009.

A.2.7.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.7.9.

A.2.7.4 Supporting structure

The supporting structure consists of horizontal and vertical timber studs of 63x50mm. The horizontal studs are placed at the sole and head of the partition and at the joint between adjacent boards. The vertical timber studs are placed at maximum 610mm centres studs. The outer vertical and horizontal studs are fixed to the surrounding construction with M6x85 mm steel through anchor bolts bars at 500 mm centres.

Specifications for the components of the supporting structure are given in Table A.2.7.1.

| Table A.2.7.1 | | | |
|---------------|----------------------------|------------------|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Studs | Timber Studs | ≥ (63 x 50) (mm) | Horizontal timber studs, placed on the head and sole of the partition, and at the horizontal joint between boards Vertical timber studs, placed at maximum 610 mm centres. |
| Anchor bolts | steel through anchor bolts | ≥ M6x85 mm | Used for fixing the head and sole to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 81 mm.

A.2.7.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 45 kg/m³ and a width corresponding with the timber stud dimensions (minimum width 60 mm).

Specifications for the linear joint seal are given in Table A.2.7.2.

| Table A.2.7.2 | | | |
|------------------|------------------------------------|---|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 45 kg/m ³ Thickness: corresponding with steel channel dimensions (≥ 50 mm) | Filling of the void in the partition construction. |

A.2.7.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 9 mm) is fixed onto both sides of the timber stud framework to form the partition. The boards are fixed with 2,3 mm x 50mm round head nails at maximum 300 mm centres. The minimum distance between the nail and the board edge is 12 mm

The horizontal and vertical board joints (to the inner side of the partition), are situated at the centre of the timber studs.

Specifications for the components are given in Table A.2.7.3.

| Table A.2.7.3 | | | |
|----------------------|--------------------------------|--|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 9 mm | Applied with nails to the timber stud framework |
| Nails | Round head nails | ≥2,3 mm x 50mm | Used to fix the boards to the timber framework |

A.2.7.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

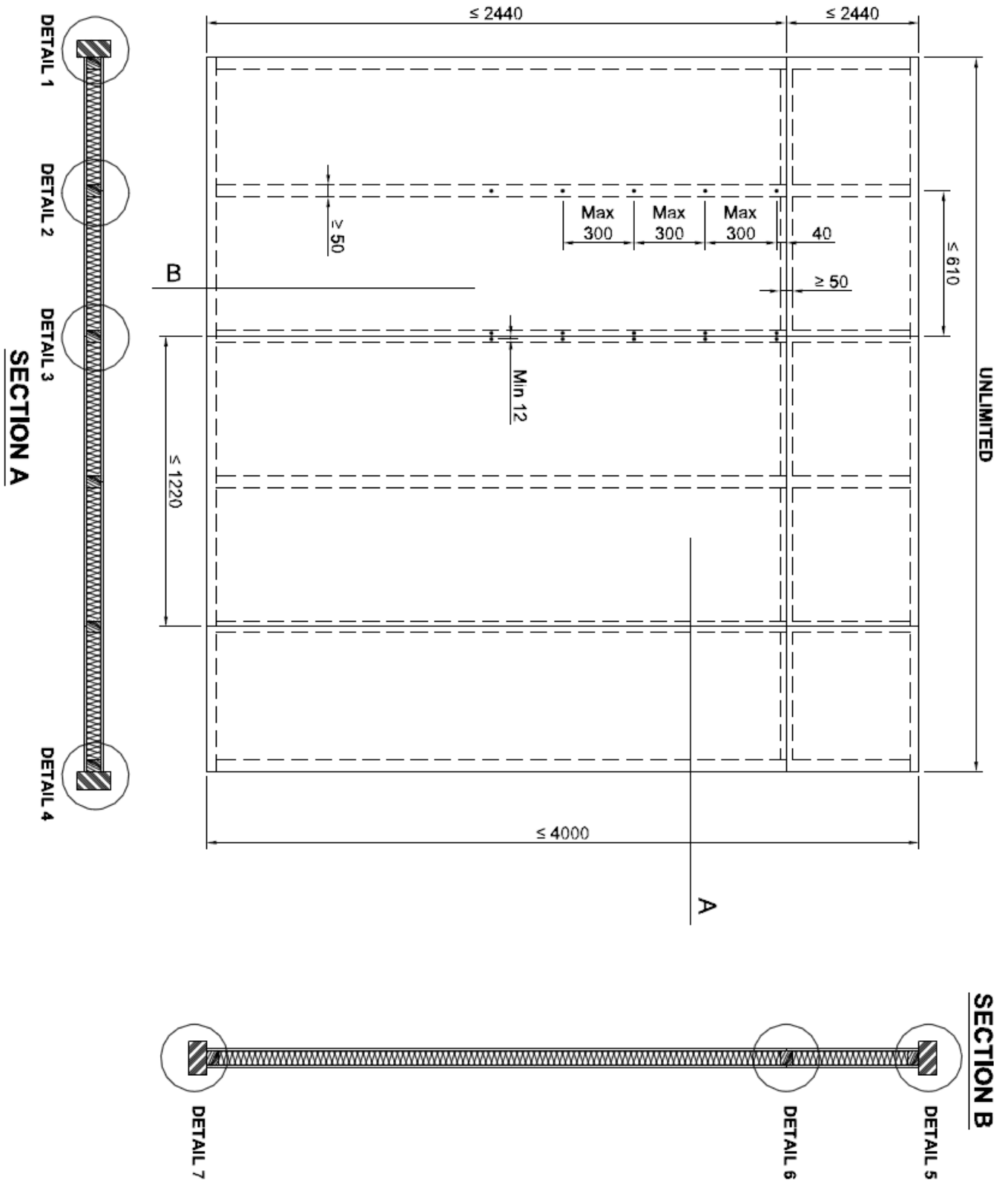
Specifications for the linear joint seal are given in Table A.2.7.4.

| Table A.2.7.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m ³ (before compression) Width: corresponding with timber stud dimensions (≥ 63 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.7.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.7.9.

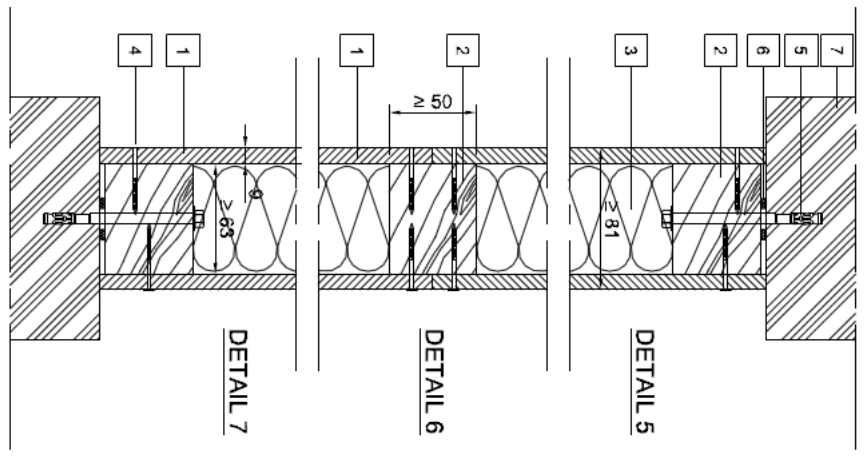
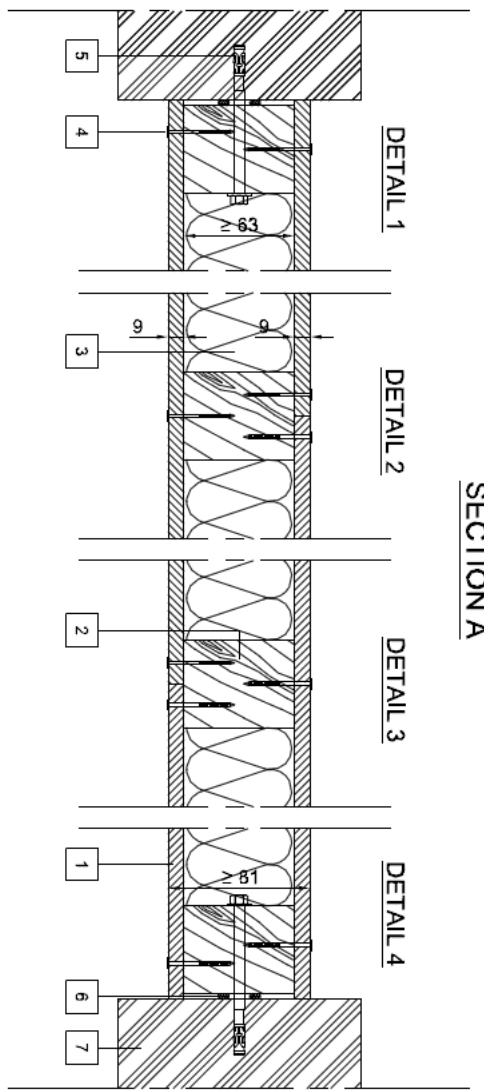
A.2.7.9 Figures



Subject :

SUPALUX®
Annex 2.7

Drawing 2.7.1



- 1 SUPALUX®-S board, thickness 9mm
- 2 Timber stud mm x 50mm
- 3 Mineral wool, density $\geq 45\text{kg/m}^3$, thickness 60mm
- 4 Round head nails, $\geq 2,3\text{mm}\varnothing \times 50\text{mm}$ at $\leq 300\text{mm}$ centers
- 5 Steel through anchor bolts, M6 x $\geq 85\text{mm}$ at $\leq 500\text{mm}$ centers
- 6 Linear joint seal, mineral wool, density $\geq 23\text{kg/m}^3$, width corresponding with timber stud dimensions or, intumescent sealant, 2 x continuous 6mm \varnothing beads
- 7 Surrounding construction

Subject :
SUPALUX®
Annex 2.7

Drawing 2.7.2

Annex 2.8: Specification of a non-loadbearing timber stud partition assembly (intended use type 8), protected on both sides by a single layer of SUPALUX® fire protective boards (thickness ≥ 15 mm), insulated with a mineral wool layer (thickness ≥ 2 x 40 mm, density ≥ 100 kg/m³)

A.2.8.1 Date of addition to this ETA

This annex was added to ETA 07/0176 on 2013-06-27. This assembly was not covered by this ETA prior to the addition of this annex.

A.2.8.2 Classification

The assembly described in this annex has been tested according to EN 1364-1 and classified **EI 120** in accordance with EN 13501-2:2007+A1:2009.

A.2.8.3 Installation requirements

The installation provisions given in paragraph 2.2.2 of this ETA shall be taken into account. Details can be found in the drawings in paragraph A.2.8.9.

A.2.8.4 Supporting structure

The supporting structure consists of horizontal and vertical timber studs of 89x50mm. The horizontal studs are placed at the sole and head of the partition and at the joint between adjacent boards. The vertical timber studs are placed at maximum 610mm centres studs. The outer vertical and horizontal studs are fixed to the surrounding construction with steel through bolts M6 x ≥85 bars at 500 mm centres.

Specifications for the components of the supporting structure are given in Table A.2.8.1.

| Table A.2.8.1 | | | |
|---------------|---------------------|------------------|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Studs | Timber Studs | ≥ (89 x 50) (mm) | Horizontal timber studs, placed on the head and sole of the partition, and at the horizontal joint between boards Vertical timber studs, placed at maximum 610 mm centres. |
| Anchor bolts | steel through bolts | M6 x ≥85 bars | Used for fixing the head and sole to the surrounding construction at ≤ 500 mm centres |

The maximum height of the partition is 4 m. The minimum thickness of the partition is 68 mm.

A.2.8.5 Insulation layer

An insulation layer is applied in the void between the board layers that constitute the partition. The mineral wool insulation layer is in accordance with EN 13162 and has a minimum reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 100 kg/m³ and a width corresponding with the timber stud dimensions (minimum width 2 layers of 40mm, staggered between the layers by minimum 150mm).

Specifications for the linear joint seal are given in Table A.2.8.2.

| Table A.2.8.2 | | | |
|------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Insulation layer | Mineral wool according to EN 13162 | Density: ≥ 100 kg/m³ Thickness: corresponding with steel channel dimensions (≥ 2 layers of 40 mm) | Filling of the void in the partition construction. staggered between the layers by minimum 150mm |

A.2.8.6 Fire protective boards

A layer of fire protective SUPALUX® boards (minimum thickness 15 mm) is fixed onto both sides of the timber stud framework to form the partition. The boards are fixed with 3 mm x 63 mm round head nails at maximum 300 mm centres. The minimum distance between the nail and the board edge is 12 mm.

The horizontal and vertical board joints (to the inner side of the partition), are situated at the centre of the timber studs .

Specifications for the components are given in Table A.2.8.3.

| Table A.2.8.3 | | | |
|----------------------|--------------------------------|---|---|
| Element | Identification | Characteristics | Mounting and fixing |
| Board | SUPALUX® Fire Protective board | Width: ≤ 1220 mm Length: ≤ 2440 mm Thickness: ≥ 15 mm | Applied with nails to the timber stud framework |
| Nails | Round head wire nails | 3 mm x 63 mm | Used to fix the boards to the timber framework |

A.2.8.7 Joints

Board joints and the perimeter gap between the boards and the surrounding construction do not require filling.

A mineral wool linear joint seal is installed between the perimeter steel channels and the surrounding construction. The mineral wool linear joint seal is in accordance with EN 13162 and has a reaction to fire class A1 (in accordance with EN 13501-1), a minimum density of 32 kg/m³ and a width corresponding with the steel dimensions (minimum width 50 mm).

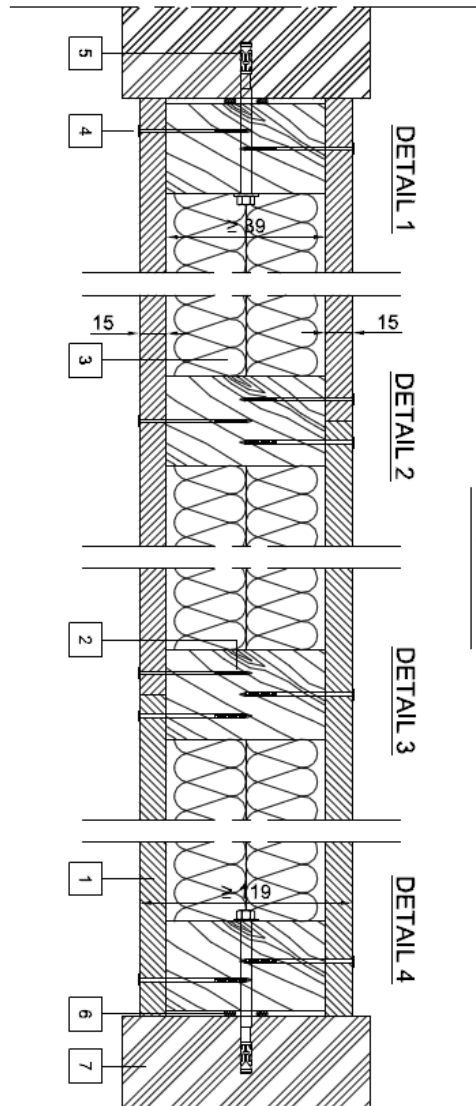
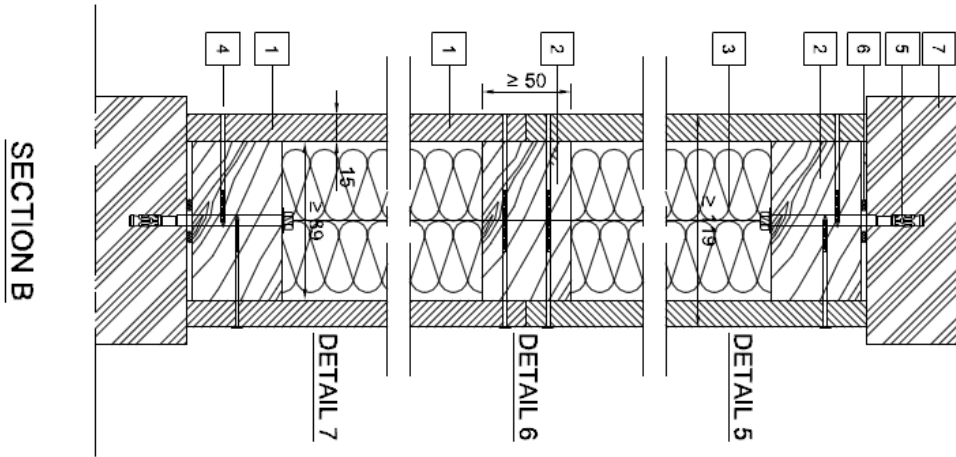
Alternatively Promaseal Intumescent Acrylic Sealant can be used to seal the gap between the perimeter steel channels and the surrounding structure.

Specifications for the linear joint seal are given in Table A.2.8.4.

| Table A.2.8.4 | | | |
|--------------------------|------------------------------------|--|--|
| Element | Identification | Characteristics | Mounting and fixing |
| Linear joint seal | Mineral wool according to EN 13162 | Density: ≥ 32 kg/m³ (before compression) Width: corresponding with timber stud dimensions (≥ 89 mm) | Installed between the surrounding construction and the perimeter steel channels (head/sole U-channels and outer C-channels). Compressed to 15 mm. |

A.2.8.8 Details

All mounting and fixing details shall be executed according to the drawings presented in the figures in paragraph A.2.8.9.



- 1 SUPALUX®-S board, thickness 15mm
- 2 Timber stud 89mm x 50mm
- 3 Mineral wool, density $\geq 100\text{kg/m}^3$, thickness 40mm (2 layers)
- 4 Round head nails, $\geq 3.0\text{mm}\varnothing \times 63\text{mm}$ at $\leq 300\text{mm}$ centers
- 5 Steel through anchor bolts, M6 x $\geq 85\text{mm}$ at $\leq 500\text{mm}$ centers
- 6 Linear joint seal, mineral wool, density $\geq 23\text{kg/m}^3$, width corresponding with timber stud dimensions or, intumescent sealant, 2 x continuous 8mm \varnothing beads
- 7 Surrounding construction

Subject :

SUPALUX®
Annex 2.8

Drawing 2.8.2