

VTT Expert Services Oy
PL 1001
02044 VTT
Puh. +358 20 722 4911
Telekopio +358 20 722 7003



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EOTAN JÄSEN

Eurooppalainen tekninen hyväksyntä ETA-01/0002 European Technical Approval (amendment)

Kaupan nimi:

Trade name

Hyväksynnän haltija:

Holder of approval:

Tuotetyyppi ja sen käyttötarkoitus:

Generic type and use of construction
product:

Voimassaoloaika: Validity from/to

Tämä versio korvaa: This version
replaces:

Valmistuspaikka:

Manufacturing plants:

Eltete väliseinäjärjestelmät

Eltete cubical partition systems for sanitary applications

Eltete Oy/Ab

P.O. Box 94

FI-07901 Loviisa

SANITEETTITILOJEN VÄLISEINÄJÄRJESTELMÄ

PARTITION WALL KIT FOR SANITARY APPLICATIONS

From January 17, 2012 to January 16, 2017

ETA-01/0002 valid from June 8, 2007 to June 7, 2012

Eltete Oy/Ab

FI-07901 Loviisa

Tämä hyväksyntä sisältää

This European Technical Approval
contains

sivuja/liitteitä

pages/annexes

10 sivua sisältäen 1 liitteen

10 pages including 1 annex



Eurooppalainen tekninen hyväksyntäorganisaatio
European Organisation for Technical Approvals

I LEGAL BASES AND GENERAL CONDITIONS

1. This European Technical Approval is issued by t VTT Expert Services Oy 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 products¹, modified by the Council Directive 93/68/EEC of 22 July 1993²; and Regulation (EC) N° 1882/2003 of the European Parliament and the Council ³,
 - Laki rakennustuotteiden hyväksynnästä (230/2003) luvut 3 ja 10, Ympäristöministeriön asetus rakennustuotteiden hyväksynnästä 3 § sekä Ympäristöministeriön 18.12.2009 antama valtuutus päätös (19/629/2009).
 - Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex of Commission Decision 94/23/EC ⁴;
 - Guideline for European Technical Approval of « Internal partition kits for use as non-loadbearing walls», ETAG 003, edition December 1998.
2. VTT Expert Services Oy is authorised to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant (for example concerning the fulfilment of assumptions made in this European Technical Approval with regard to manufacturing). Nevertheless, the responsibility for the conformity of the products with the European Technical Approval and for their fitness for the intended use remains with the holder of the European Technical Approval.
3. This European Technical Approval is not to be transferred to manufacturers or agents of manufacturer other than those indicated on page 1; or manufacturing plants other than those indicated on page 1 of this European Technical Approval.
4. This European Technical Approval may be withdrawn by VTT Expert Services Oy pursuant to Article 5 (1) of the Council Directive 89/106/EEC.
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6. The European Technical Approval is issued by the approval body in English. 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, 30.8.1993, p. 1
3. Official Journal of the European Union N° L 284, 31.10.2003, p. 25
4. 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 the product and intended use

The ELTETE partition wall kit comprises tooled side- and front partition wall sheets, door leaves, door handles, hinges, locks and legs, either in standard or customer- specified dimensions. The wall sheets and door leaves are made of either 10 or 13 mm thick compact high pressure laminate (EN 438-1) or 24 mm thick board, which comprises of damp proof particle board (class P5 according to the standard EN 312 -5) or moisture resistant plywood (EN 636-3) coated with high pressure laminates on both sides. Door hinges, door handles, locks and turning knobs as well as their fastening screws are included in the system. The walls are framed with anodised or sometimes powder coated aluminium alloy profiles which are used in fastening walls to each other and to the load bearing structure.

The standard sizes of the components are as follows:

- Door leaf 1947 x 602 x (wall panel thickness) mm, with three hinges (one in the middle, two 210 mm from the corners) and lock in the middle.
- Wall panel height 1980 mm (total thickness 10 or 24 mm)
- Total height of the partition wall including 120 mm legs about 2100 mm
- Total height of the partition wall including 170 mm legs about 2150 mm and when possible horizontal upper bearers 2229 mm
- Wall panel height 1830 mm (total thickness 13 mm)
- Total height of the partition wall including 170 mm legs and horizontal upper bearers, 2070 mm (2000 – 2150 mm)
- Cabin unit and door wall width typically 900 mm. The width of the whole system according to the order.
- Side wall width normally 1200 mm (900 - 1600 mm)

The ELTETE partition wall kit stands on its legs and the height of the wall kit is below room height. The partition wall kit is used to construct one - to twenty or more separate cabins in front of the load bearing structure.

The partition wall kit is fastened to the load bearing structure with vertically to the load bearing wall fastened aluminium profiles into which the side wall vertical edges are fastened. The side walls and front walls are fastened into each other with vertical aluminium profiles. The distance between the side walls is normally 900 +/- 100 mm. The distance between the load bearing back wall and the door wall vary between 900- 1600 mm.

The ELTETE partition wall kit comprise non-load bearing walls mainly for sanitary applications. These types of the partition walls allows sight protection, but are not intended to be used for protection against noise, heat or fire.

The provisions made in this ETA are based on an assumed intended working life for a partition kit of 25 years provided that the kit is subjected to appropriate use and maintenance. The indications given on the working life cannot be interpreted as a guarantee given by the producer or the approval body, but are to be used as a means for selecting the appropriate product in relation to the expected economically reasonable working life of the works.

2. Characteristics of product and methods of verification

2.1 Characteristics of the product

2.1.1 Components of the partition kit

The product is available in the range given in part II, section 1, and has the characteristics listed in tables 1, 2 and 3 in paragraph 2.2

Each delivery package bears the ETA holder's identification mark, the commercial name, parts catalogue and installation instructions.

The partition system shall be supplied as complete kits.

2.2 Methods of verification

The assessment of the fitness of use of the internal partition kit for the intended use in relation to the requirements for safety in case of fire, hygiene health and environment, safety in use, protection against noise, energy economy and heat retention in relation to the Essential Requirement from 2 to 6 has been made in accordance with the "ETAG 003:1998 Guideline for European Technical Approval for Internal Partition Kits for Use as Non-load bearing Walls".

Where the guideline allows for classification and/ or choice the following selections have been made:

ER2 Safety in case of fire

Reaction to fire: EN 13501-1, Euroclass F

Resistance to fire: No performance determined

ER3 Hygiene, health and environment

Chemical composition of the materials used in partition kit has been submitted to the Approval Body.

Release of formaldehyde, asbestos, pentachlorophenol and other dangerous substances:

- Release of formaldehyde from wall/door sheets are according to the following:
 - Damp-proof particle board without coatings,
EN 120: ≤ 8 mg HCHO/100g dry board (class E1)
 - plywood, EN 120: ≤ 2 mg HCHO/100g dry board (class E1)
 - plywood, EN 717-2: $\leq 0,5$ mg/ h m²
 - High pressure laminate 10 and 13 mm sheets, EN 717-2: $\leq 0,04$ mg/h m²
 - High pressure laminate (0,7 mm) ENV 717-1: $\leq 0,05$ mg/m³
- Release of asbestos, pentachlorophenol and other dangerous substances:
 - Not determined
- In addition of the specific clauses relating to dangerous substances contained in this European Technical Approval, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products directive, these requirements need also to be compiled with, when and where they apply.

- ETA holder will submit a written declaration whether or not the product contain dangerous substances according to the regulations when and where relevant in the member states of destination, and shall list these substances.

Water vapour permeability:

No performance determined.

ER4 Safety in use

Resistance to horizontal loads:

- Resistance to structural damage from soft body impact load - 50 kg bag: ISO 7892:1988, ISO/DIS 7893:1990 and annexes B and C of the guideline, according to the table below.
- Resistance to structural damage from hard body impact load - 1kg steel ball: ISO 7892:1988 and ISO/DIS 7893:1990 and annexes B and C of the guideline, according to the table below.
- Resistance to structural damage from eccentric vertical loads:
Not relevant, no performance determined
- Safety against personal injuries by contact
Assessment of the geometry, edges and surfaces has been done with satisfactory results.

The evaluated use categories – Structural damage - are as follows:

Product type	Use category
10 mm thick compact high pressure laminate board	Category I
13 mm thick compact high pressure laminate board	Category I
22 mm thick damp proof particle board (class P5) and moisture resistant plywood coated with high pressure laminates on both sides, total thickness about 24 mm	Category IVa

ER5 Protection against noise

Air borne sound insulation: Not relevant, no performance determined

Sound absorption: No performance determined

ER6 Energy economy and heat retention

Thermal resistance: Not relevant, no performance determined

Thermal inertia: Not relevant, no performance determined

Aspects of durability and serviceability

Robustness and rigidity:

- Resistance to functional failure from soft body impact load - 50 kg bag: ISO 7892:1988, ISO/DIS 7893:1990 and annexes B and C of the guideline. According to the table below.
- Resistance to functional failure from hard body impact load - 0,5 kg steel ball: ISO 7892:1988 and ISO/DIS 7893:1990 and annexes B, C and D of the guideline. According to the table below.
- Resistance to functional failure from eccentric vertical load: ISO/DIS 8413:1990
Influence of eccentric vertical load caused by door leaves tested.

- Resistance to functional failure from point loads parallel or perpendicular to the surface: ISO/DIS 8413:1990: No performance determined. No objects are installed and supported by the partition boards.
- Rigidity of partitions to be used as a substrate for ceramic tiling: No performance determined. Partitions are not used as a substrate for ceramic tiling.
- Resistance of door hinges: Door hinges resist of at least 1000 N vertical load when door is open and load is directed to outer and upper corner of the door.

The evaluated use categories - Functional failure – are as follows:

Product type	Use category
10 mm thick compact high pressure laminate board	Category III
13 mm thick compact high pressure laminate board	Category III
22 mm thick damp proof particle board (class p5) and moisture resistant plywood coated with high pressure laminates on both sides, total thickness about 24 mm.	Category III

Resistance to deterioration:

- Physical agents
Hygrothermal conditions: No performance determined. Surface materials of the kit resist influence of short term condensing water. The temperatures and humidity conditions are similar on both sides of the wall kit.
- Chemical agents: No performance determined. Surface materials (high pressure laminates and anodised aluminium) resist influence of neutral cleaning agents.
- Biological agents: No performance determined. Regular cleaning takes place normally in the sanitary spaces.

3. Evaluation of conformity and CE marking

3.1 Attestation of conformity system

The attestation of conformity applied to this product specified by the European Commission in Mandate Construct 97/243 REV.1, Annex 3 are the following:

System 3

- For uses subject to regulations on dangerous substances
- with safety in use category IV

System 4

- For all other partitions, including partitions with reaction to fire classes A1 (without testing), D, E and F

3.2 Responsibilities

3.2.1 Tasks for the ETA holder, Factory production control

The manufacturer continues to operate a factory production control system. All elements, requirements and provisions adopted by the manufacturer are documented. This ensures that the product conforms to this ETA:

The manufacturer shall only use raw materials supplied with the relevant inspection documents as laid down in the prescribed test plan by the manufacturer. The raw materials shall be subject to control by the manufacturer before acceptance. Checks on incoming materials, such as partition boards, aluminium profiles and locks shall include control of certificates of conformity presented by suppliers (comparison with nominal values) by verifying dimensions and inspections of material properties reports, e.g. emissions and mechanical properties.

The dimensions of manufactured deliveries are checked in accordance with dimensions declared in the order.

The frequency of controls (raw materials, dimensions, appearance/ possible surface damages) is laid down in the prescribed quality control plan.

The results of the factory production control are recorded and evaluated. The record shall include:

- Designation of the product, type of basic materials and components used and their control.
- Dates (from to) of manufacture of the partition system including the dates of the testing of basic materials and components or testing of the system
- Results of control and comparison with the requirements
- Signature of the person responsible for factory production control.

3.2.2 Tasks for the manufacturer, Initial type testing

System 3

Deliver initial type tests of the relevant product characteristics (release of dangerous substances, safety against personal injuries by contact and resistance to dynamic loads) by an approved laboratory.

System 4

Perform initial type testing of all other properties of the product and its components not dealt under system 3.

3.3 CE-marking

The CE-marking shall be affixed to each delivery of partition kit. The symbol “CE” shall be accompanied by the following information:

- Identification of the product
- Name or identification mark of producer and manufacturing plant

- The last two digits of the year in which the CE marking was affixed
- Number of the European Technical Approval and ETAG-Reference
- Use categories of structural and functional failure
- Characteristics of the partition kit where no performance determined approach is used

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

4.1 Manufacturing

The partition wall kits are manufactured in accordance with the provisions laid down in the European technical Approval.

The components of the partition wall kits listed below are delivered to the manufacturing site according to the specifications and rules defined in the documented quality control system of ELTETE Oy.

The components of the system are:

- Wall panels and door leaves of high pressure laminate sheets, thickness 10 or 13 mm
- Wall panels and door leaves of damp-proof particle boards covered with high pressure laminate on both sides, thickness 24 mm
- Anodised or powder coated aluminium alloy profiles for framing and fastening of wall sheets, thickness 1.25 +/- 0.20 mm, 1.5 +/- 0.20 mm or 1.7 +/- 0.20 mm, and shape U, H, L or bow depending partly on the model of the wall system.
- Steel screws for fastening the profiles into sheets and steel screws for fastening the partition walls into load bearing structure
- Steel hinges for doors
- Hardware; locks and handles for doors. Handles and visible lock parts can be coated with chrome, brass, plastic or paint

4.2 Installation and design rules

4.2.1 Design rules

The partition wall systems have impact resistance classes according to the point 2. If the walls are designed with wider width dimensions than used in the evaluation the impact resistance classes are not valid.

The partition wall systems are normally installed indoors with normal indoor temperature and moisture conditions, with periodically higher moisture content typical to the sanitary spaces. When the products are used in spaces with continuous high air humidity the selected design of the wall system shall be according to the instructions of the manufacturer.

4.2.2 Installation

The partition wall system will be installed according to the separate installation instructions of the manufacturer.

4.2.3 Maintenance and repair

The assessment of the fitness for use is based on the assumption that abrasion and minor impact damage are inevitable and shall be easy to repair. Normal maintenance include regular weekly or daily cleaning with moist towel and neutral cleaning agents. In case of damage change of damaged part shall take place. All the wall and other components are changeable.

4.2.4 Responsibility of the manufacturer

It is the responsibility of the ETA holder to ensure that the information of the partition kit and related component requirements and their fabrication is given to the persons concerned. This information may be made by reproduction of the respective parts of the European Technical Approval. In addition all installation data shall be shown clearly on the package and/or on an enclosed instruction sheet.

On behalf of VTT Expert Services Oy

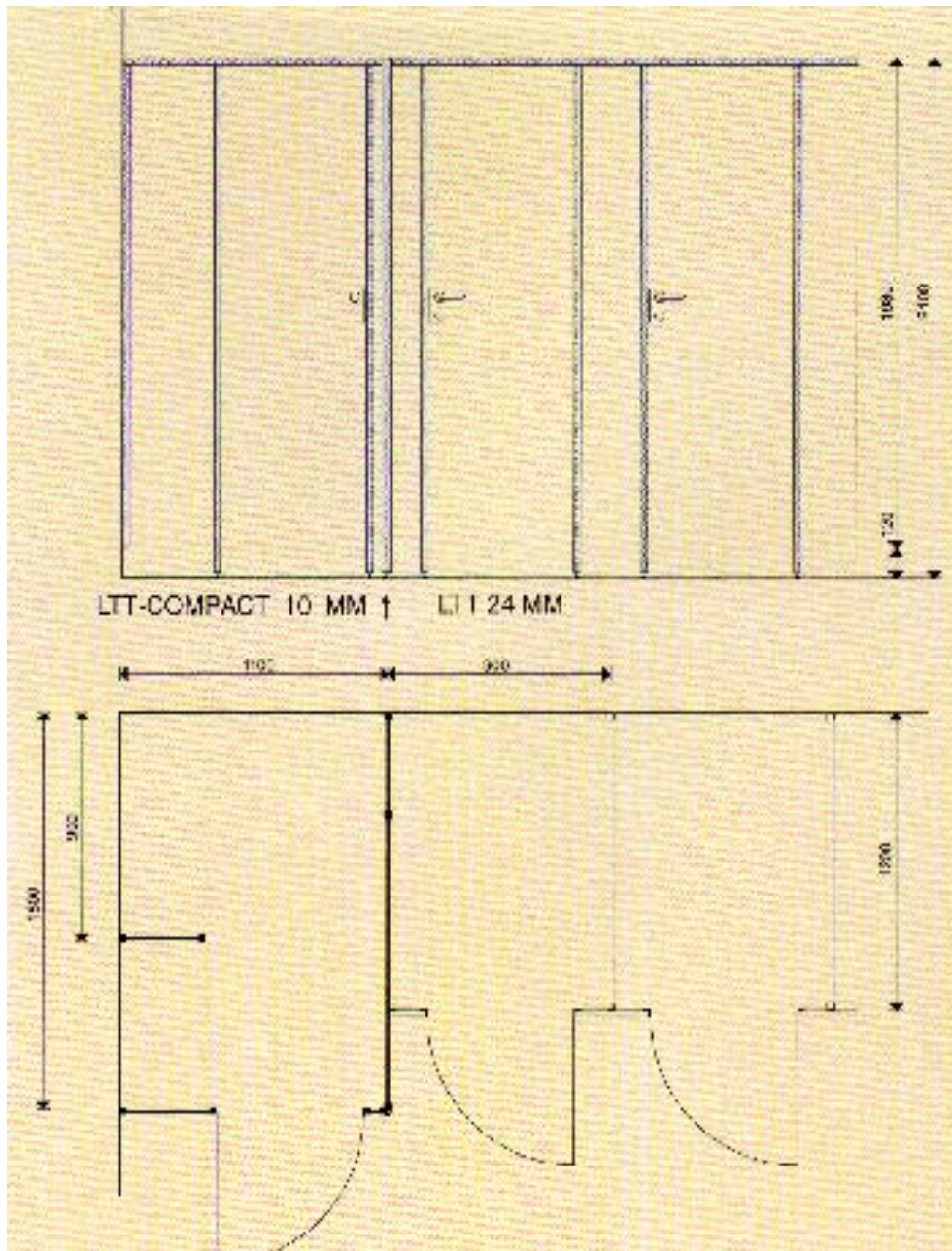
Espoo January 17, 2012



Lina Markelin-Rantala
Team Manager



Liisa Rautiainen
Assessment Manager



An example of the ELTETE partition kit