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European Organisation for
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Organisation Européenne
pour l'évaluation technique

European Technical Assessment - ETA 18/0528 of 18/07/2018

(English language translation; the original version is in Italian)

GENERAL PART

Trade name of the construction product

**TAURUS in the versions "TAURUS" and
"TAURUS dB"**

Product family to which the construction
product belongs

**PAC 21: INTERNAL & EXTERNAL WALL AND
CEILING FINISHES. INTERNAL PARTITION
KITS.**

**Internal partition kits for use as non-
loadbearing walls**

Manufacturer

**Centrufficio Loreto S.p.A.
Viale A. Doria 17
I - 20124 Milano (MI) - Italy**

Manufacturing plant

**Via R. Sanzio 22
I - 20090 Segrate (MI) - Italy**

This European Technical Assessment
contains:

**14 pages, including 3 Annexes which form an
integral part of this Assessment**

This European Technical Assessment is
issued in accordance with Regulation (EU)
n° 305/2011, on the basis of

**ETAG 003 edition 2012 used as European
Assessment Document (EAD)**

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SPECIFIC PARTS

1. TECHNICAL DESCRIPTION OF THE PRODUCT

"Taurus" is an internal partition kit for use as non-loadbearing wall, whose function is to divide building interiors and is designed and installed in accordance with the Manufacturer's design and installation instructions, deposited with ITC-CNR. In addition, the kit supplies the performance of reaction to fire and airborne sound insulation, and its characteristics can be described as follows.

"Taurus" partition (partition wall total nominal thickness: mm 100) consists of a zinc coated steel structure composed by perimetric profiles, vertical uprights and horizontal crosses to which both blind wood-based and double-glazed panels with an aluminium frame with exteriorly aligned glasses, are fixed through hooks. Structural components made of steel, uprights and crosses, are provided with PVC gaskets. Partition is equipped with a level-adjusting system in contact with floor which allows to compensate differences of level of about 20 mm (± 10 mm.) Glazed units can be provided with Venetian blinds as an accessory.

"Taurus dB" is the partition version with sound insulation performance, equipped with "Stratophone" and/or "Optiphon" acoustic glass panes, "ISHOLsint DUO massa" insulation product (in between particleboards panels) and "Kronstik" and "Polistik EVA" gaskets.

In order to support the realization of partitions with the kit "Taurus", façade elements, which can be assembled according to a vertical layout, are collected in an abacus of the modules as shown in Annexes 1-3. In the aim of achieving the design height and width, lateral and upper blind panels are cut to the desired size on the building site.

The kit "Taurus" comprises elements and components which are factory-produced by suppliers and placed on the market by the Manufacturer. The Manufacturer who is entitled of this European Technical Assessment is ultimately responsible for the kit.

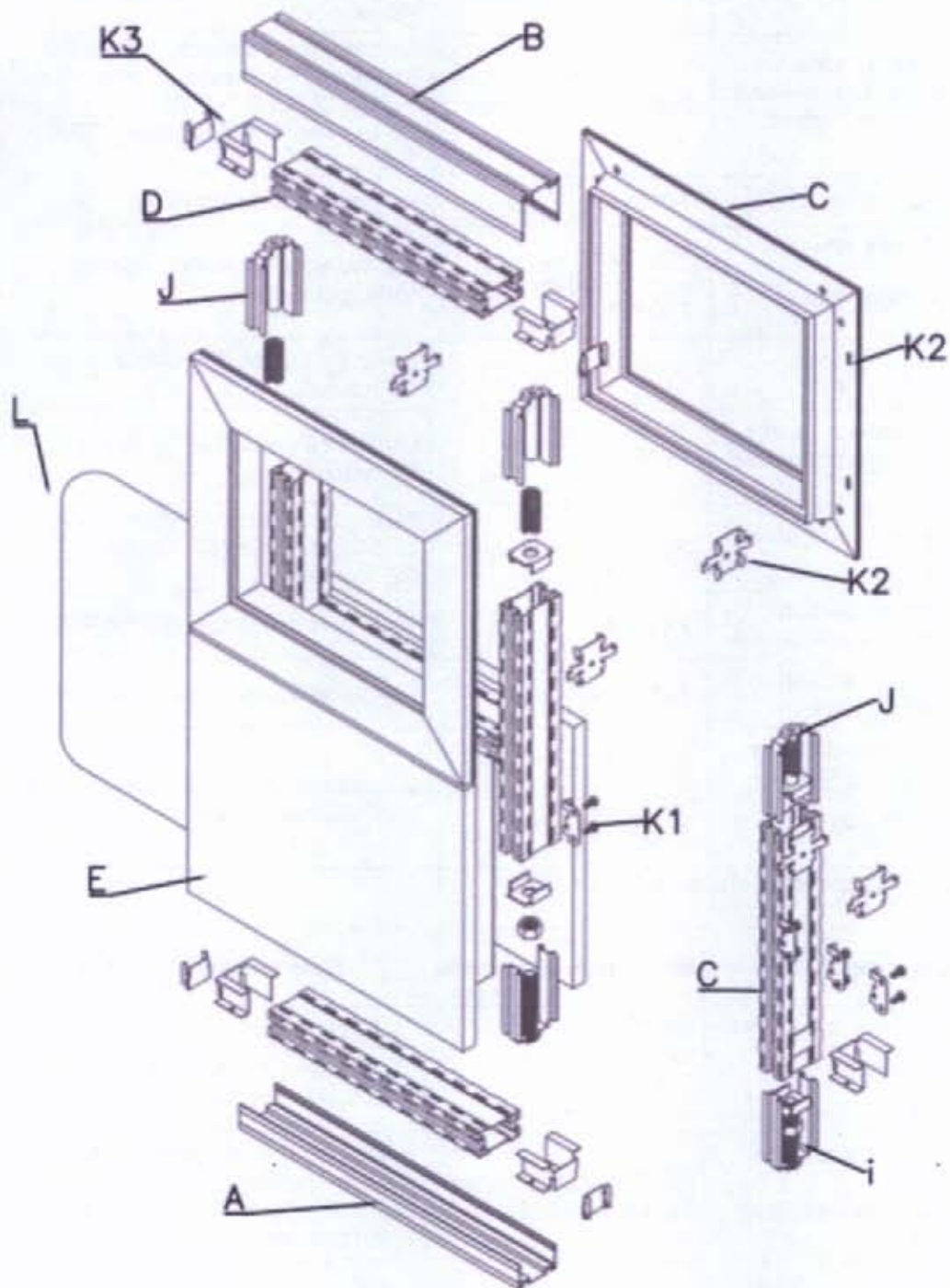
The kit consists of the components listed in the tables and shown in the drawings of the following pages¹:

STRUCTURAL ELEMENTS AND ACCESSORIES (GASKETS AND FIXINGS)	Supplier's code	Thickness	Material
Vertical structural element (upright)	F003766	1 mm	Zinc coated steel according to EN 10346
Horizontal structural element (cross)	F003766	1 mm	
Upper pusher with compensation spring	F003875	2,5 mm (plate)	Zinc coated steel sheet for cold forming DC03 (EN 10130)
Lower foot adjustable by screw	F003875	2,5 mm (plate)	
Upper perimetric profile (rail)	F003766 F007411	0,6 mm	Zinc coated steel according to EN 10346. Coated with polyester varnish
Lower perimetric profile (rail)	F003766 F007411	0,6 mm	
Gasket with balloon-shaped section for vertical and horizontal structural members	F007049		Rigid-plasticized co-extruded PVC
Hook for fastening crosses to uprights	F003875	1,5 mm	Zinc coated steel sheet for cold forming DC03 (EN 10130)
Plugs for perimetric fixing of the partition	F001656		Nylon plug mm Ø 6 x L 30
Double sided adhesive for partition fixing to floor (max partition dimensions: L mm 4000, h mm 3000)	F004082		Double coated adhesive tape: closed cell polyethylene foam with acrylic adhesive

Tab. 1: Structural elements and accessories

¹ The Manufacturer may change, under his own responsibility, some of the suppliers of a component, but only provided that the characteristics and the performances of the new components and the final performances of the system do not change at all. These changes must be fully recorded within the Factory Production Control documents in order to grant full traceability.

"Taurus" partition



- | | | | |
|----|--|----|--|
| B | Upper rail | E | Wood based panels fastened through hooks |
| J | Upper pusher | K1 | Hook for fastening wood based panels to uprights |
| C | Vertical upright | C | Profiles for aluminium glazed frames |
| A | Lower rail | K2 | Slots for inserting hooks |
| I | Stabilizing lower adjustable foot | K2 | Hooks for fastening glazed frames to uprights |
| D | Horizontal cross | L | Insulating panel in between opposite particleboards panels |
| K3 | Hook for fastening crosses to uprights | | |

FAÇADE PANELS, GLAZED FRAMES AND ACCESSORIES (GASKETS AND FIXINGS)	Supplier's code	Thickness	Material characteristics
Resin-bonded particleboards panels, overlaid (melamine finished) with ABS edges, for opaque units	F003675	18 mm	Formaldehyde class E1 (EN 13986) Content of Pentachlorophenol < 0,8 mg/kg (CEN/TR 14823)
Resin-bonded particleboards panels, with addition of flame-retardant, overlaid (melamine finished), with ABS edges, for opaque units	F003675	18 mm	Formaldehyde class E1 (EN 13986) Content of Pentachlorophenol < 0,8 mg/kg (CEN/TR 14823) CE Marked (Certificate 0987-CPR-198)
Adhesive for panel edge gluing	F003199		Polyurethane adhesive
"Standard" profile for double-glazed glass frame	F003526		EN AW-6060 Aluminium alloy (EN 15088), anodized
Thin profile for double-glazed glass frame	F003526		
"Stratobel" glass panes for double-glazed glass frame	F007243	33.1	Laminated glass (EN 14449) CE marked
"Stratophone" and/or "Optiphon" acoustic glass panes for double-glazed glass frame	F007243	33.1 33.2	Laminated glass (EN 14449) CE marked
"Optifloat" glass panes for double-glazed glass frame	F003945	5 mm	Thermally toughened soda lime silicate safety glass (EN 12150-1) CE marked
Gasket with balloon-shaped section used with "standard" glass frame profile	F007049		Rigid-plasticized co-extruded PVC
Gasket with balloon-shaped section used with thin glass frame profile	F007049		Rigid-plasticized co-extruded PVC
Hook for fastening wood based panels to uprights	F003875	1,3 mm	Zinc coated steel sheet for cold forming DC03 (EN 10130)
Double hook for fastening glazed frames to uprights	F003875	0,9 mm	

Tab. 2: Façade panels, glazed frames and accessories

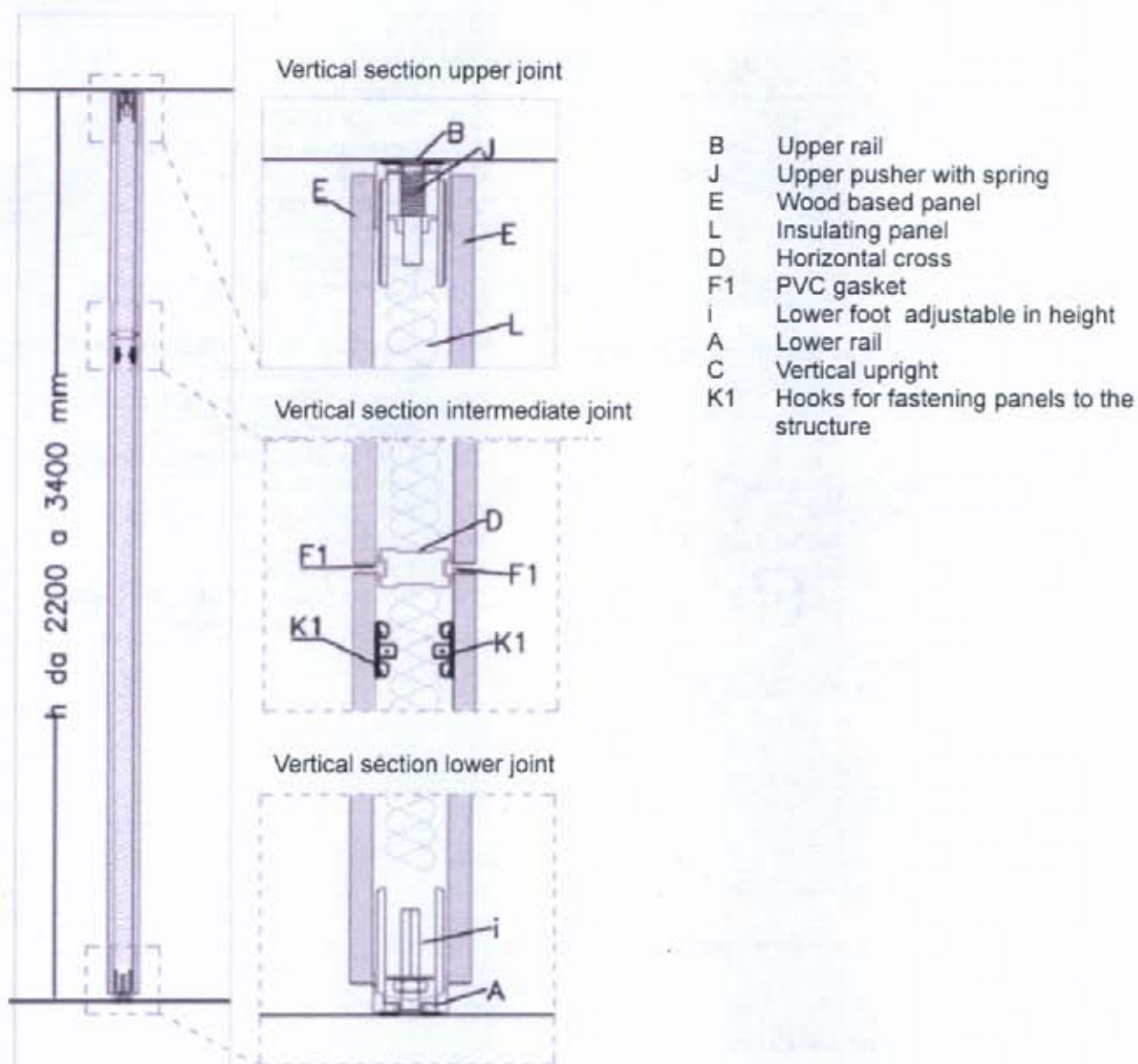
INSULATION PRODUCTS	Brand-name/thickness	Material characteristics
Factory made mineral wool (MW) panels: – unfaced or – enveloped in polyethylene bags	ISHOLRock 40 ISHOLRock 40 bag Thickness mm 40 Density 40 kg/m ³	MW-EN 13162 CE marked (unfaced panels) Reaction to fire class A1
– Polyester fibre panel to be coupled with plastic board – Plastic material board to be coupled with polyester fibre panel	ISHOLsint DUO massa Thickness mm 27	Polyester fibre panel mm 25 thick and 50 kg/m ³ density with plastic material board interposed mm 2 thick with 4 kg/m ² surface mass

Tab. 3: Insulation products

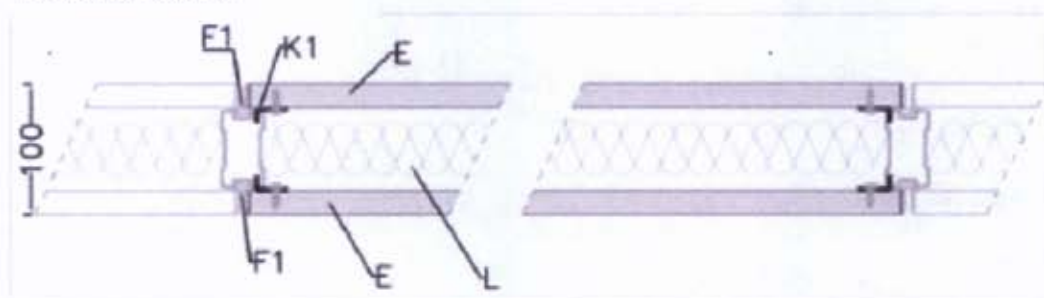
GASKETS - ADHESIVES	Brand-name	Material characteristics
Gasket/ adhesive gasket to be applied on upper/ lower perimetric profiles and along partition perimeter	Polistik EVA	Closed-cell EVA (ethylene vinyl acetate); with acrylic glue in the adhesive version
Adhesive gasket along glass pane perimeter	Kronstik	Self-adhesive EPDM rubber

Tab. 4: Gaskets and adhesives

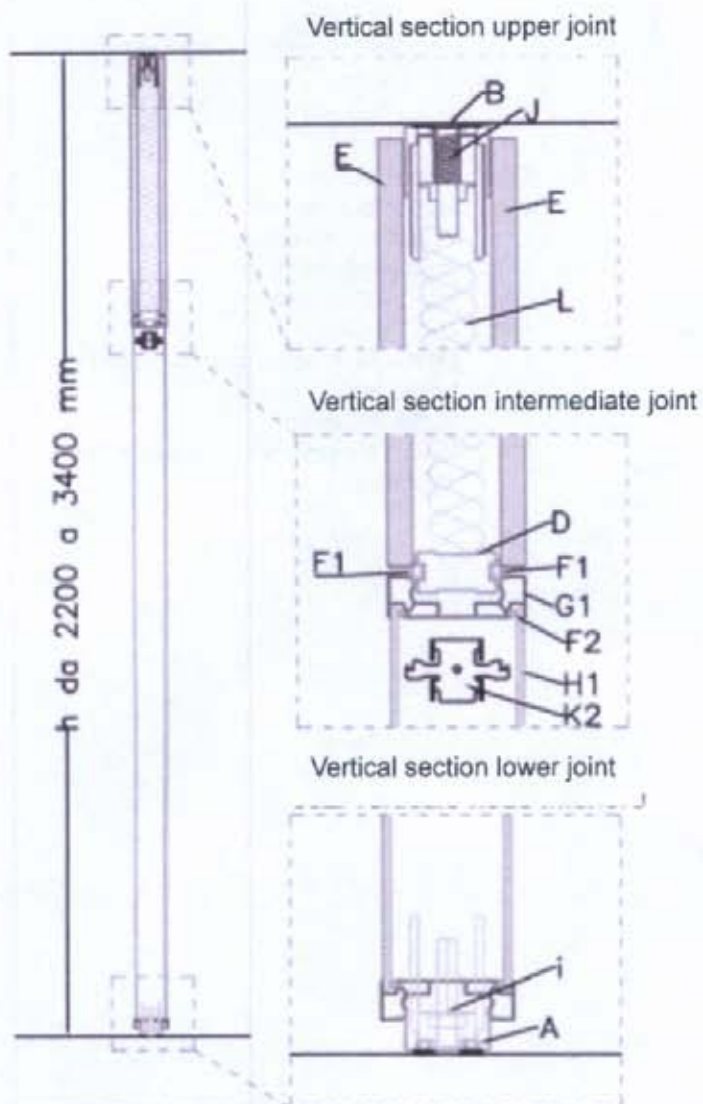
"Taurus" blind partition



Horizontal section

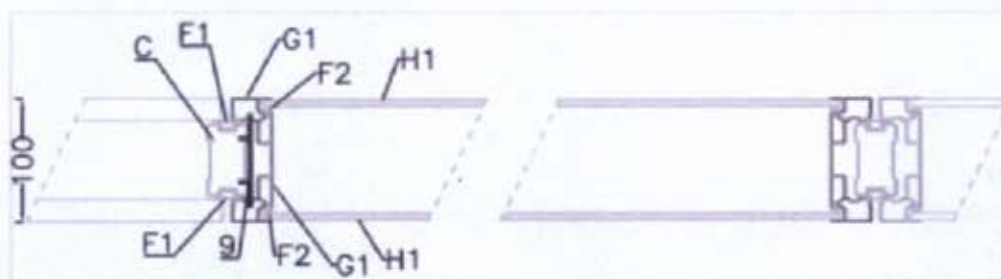


"Taurus" glazed partition

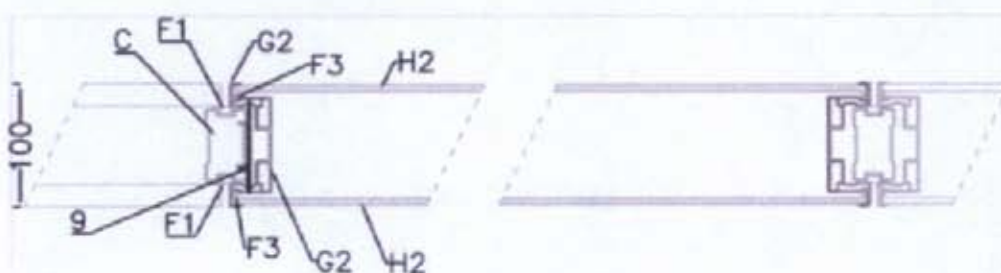


- B Upper rail
- C Vertical upright
- J Upper pusher with spring
- E Wood based panel
- L Insulating panel
- D Horizontal cross
- F1 PVC gasket
- i Lower foot adjustable in height
- A Lower rail
- G1 Standard aluminium profile for double-glazed glass frame
- G2 Thin aluminium profile for double-glazed glass frame
- F2 PVC gasket with balloon-shaped section
- F3 PVC small gasket for glass
- H1 Laminated glass 3+3
- H2 Laminated glass 3+3
- K2 Double hook for fastening glazed frames to the structure

Standard profile for double-glazed frame

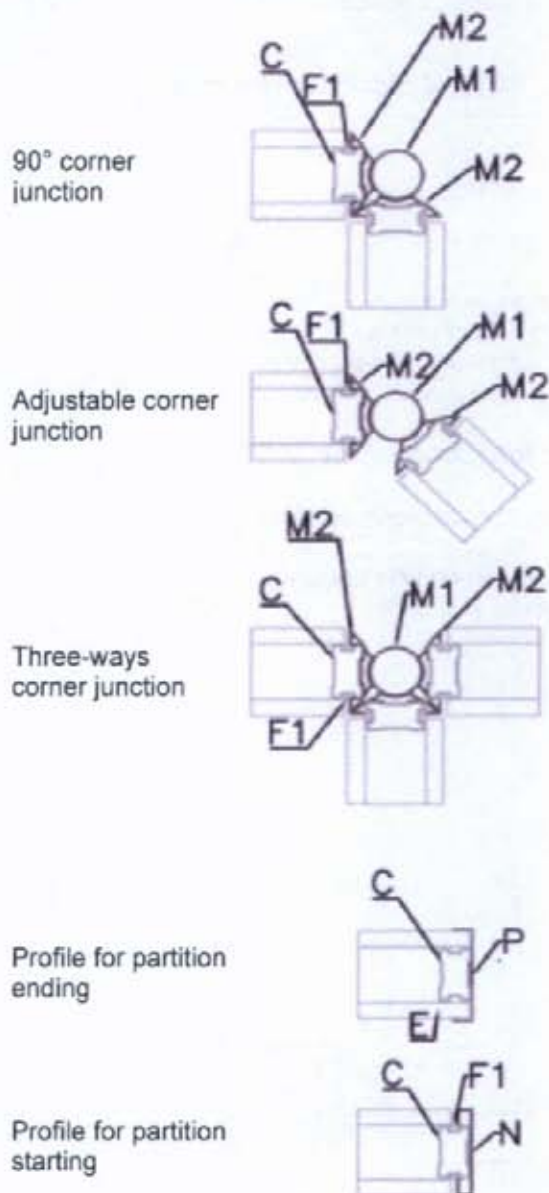


Thin profile for double-glazed frame



PROFILES FOR PARTITION STARTING, ENDING AND FOR CORNER JUNCTIONS	Supplier's code	Thickness	Material
Profile for partition starting	F003961	mm 1,2	EN AW-6060 Aluminium alloy (EN 15088), coil coated Reynolux®
Profile for partition ending	F003961	mm 1,2	
Tubular profile and adjusting profile for corner junctions identified as follows: <ul style="list-style-type: none"> - variable corner junction - 90° corner junction - three ways corner junction 	F003526		EN AW-6060 Aluminium alloy (EN 15088), anodized

Tab. 5: Profiles for partition starting, ending and for corner junctions



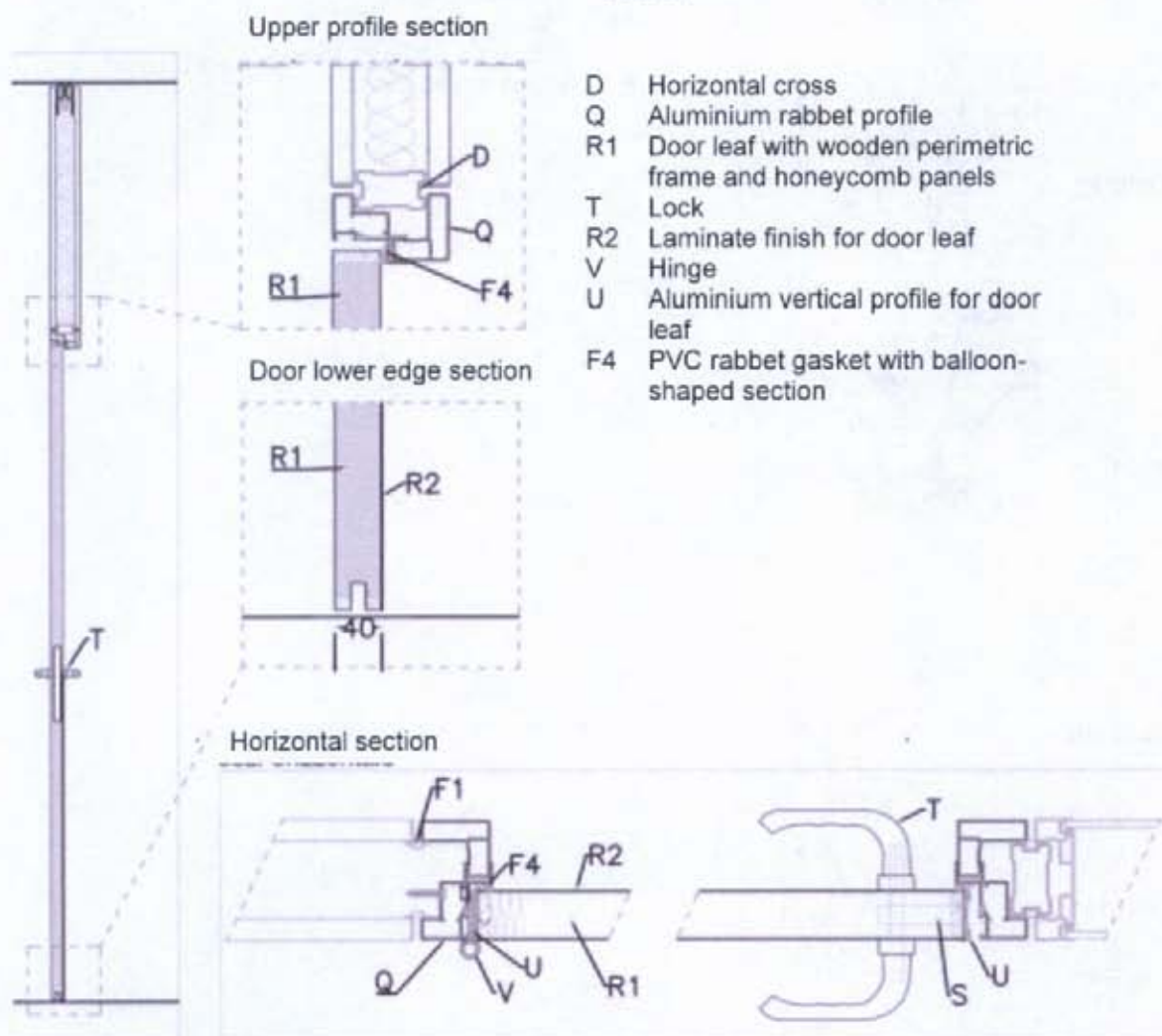
Corner junctions:

- M1 Aluminium tubular profile
- M2 Aluminium adjusting profile
- C Vertical upright
- F1 PVC gasket
- P Profile for partition ending
- E Wood based panel

DOORS, PROFILES AND GASKET FOR DOORS	Supplier's code	Thickness	Material/Material characteristics
Glazed door with glass door leaf (with bevelled edges)	F003945	10 mm	Soda Lime Silicate glass CE marked (EN 572-9) thermally toughened according to EN 12150
Honeycomb panel blind door leaf, vertically edged with aluminium profiles	F004449	MDF mm 4 + internal panel mm 28	Composite panel: two MDF panels, overlaid (laminate finish), and a cardboard honeycomb panel interposed, with fir tree hardwood frame. MDF panels: formaldehyde class E1 (EN 13986)
Vertical profiles for blind door leaf panel edging	F003526		EN AW-6060 Aluminium alloy (EN 15088), anodized
Door rabbet frame	F003526		
Rabbet gasket with balloon-shaped section	F007049		PV Rigid-plasticized co-extruded PVC

Tab. 6: Doors, profiles and gasket for doors

Doors



2. SPECIFICATION OF THE INTENDED USE IN ACCORDANCE WITH ETAG 003 USED AS EUROPEAN ASSESSMENT DOCUMENT (EAD)

"Taurus" is intended to be used as a lightweight relocatable partition system for offices and public buildings (Table 1 ETAG 003, Categories A-B, C1-C4 and D1-D2), with an average air temperature range from 5° C to 35° C and an average daily air relative humidity range from 20% R.H. to 75% R.H. The Manufacturer declares an assumed average working life of 25 years.

2.1 Aspects related to the performance of the product

This ETA is issued for "Taurus" on the basis of admitted information/data, deposited at ITC-CNR which identify the kit that was assessed. Only the components described in clause 1 with characteristics in accordance with clause 3 of this ETA can be used for the system "Taurus".

Manufacturing process scheme is deposited with ITC-CNR. Packaging, transport and storage of the components and of the ancillary materials has to be such that the products are protected from moisture during transport and storage. The components have to be protected against damage and well identified as part of the system "Taurus".

The information about installation and recommendations about the installers' qualification are provided with the technical documentation from the Manufacturer (Installation Manual), and it is his responsibility to assure that the information about design and installation of the system "Taurus" are effectively communicated to the concerned people. The information can be given using reproductions of the respective parts of this European Technical Assessment. Design of the internal partition system shall comply with the characteristics of "Taurus" as well as with national regulations, and particularly concerning fire. The system has to be installed into indoor spaces with normal indoor temperature and moisture conditions (see clause 2).

For the maintenance operations of the partition "Taurus" the Manufacturer recommends to follow the instructions below.

- Keep the construction product clean through appropriate periodical clean-up in order to preserve the product original characteristics.
- Do not use water or liquid cleansers directly shed onto the surface to be cleaned, utilize a well-wrung cloth damp with water and neutral detergents, paying much attention in the proximity of electrical devices.
- Do not to use jets of water or of liquid floor cleansers so as to avoid accidental splashing which could cause damage to the partition portions in contact with floor.
- Do not use alkaline cleansers nor cleansers which contain abrasives, soda and solvents.
- Do not use pumice, metallic scourers nor other abrasives.
- It is not recommended that wax or other protective treatments are used. In case a treatment is needed, before treating the whole surface it is advisable to carry out a preliminary test on a small hidden area, to be sure that the selected product does not cause damage to the product finish neither alters the product colour and/or matt finish.
- Do not hang pictures, mirrors, lamps etc. on the partition wall without prior approval by the Manufacturer, in order to avoid damages, structural weakening and/or danger from unexpected electric contacts.
- Do not vehemently slam glazed doors.
- Highly irradiating thermal sources such as stoves and radiators may cause damage to the partition. Therefore an adequate distance from these elements must be kept.
- Extraordinary maintenance operations may sometimes be needed because of the small structural settlements works are susceptible of (giving rise to alterations in horizontal and vertical spacings between façade panels).
- It is absolutely required from people in charge of cleaning not to lean ladders against partition glazed units.
- Always make reasonable use of cleaning products; exceeding in the use of cleaning products may cause seepage through gaskets and/or profiles, resulting in halos and stains on the panel surface located towards the inner side of partition.
- It is recommended that mechanical parts are subjected to regular maintenance with the utilization of lubricants suitable for hinges.

3. PERFORMANCES OF THE PRODUCT AND REFERENCE TO THE METHODS USED FOR ITS ASSESSMENT

The tests for performance assessment of "Taurus" were carried out in compliance with ETAG 003 Edition 2012 according to the test methods reported herein; performances are valid as long as the kit components fully correspond to those described in § 1.

BWR	Essential characteristic	Performance
2	Reaction to fire	
	According to Delegated Regulation (EU) 2016/364	Classification
	"Taurus" with mm 18 thick wood based panels, melamine finished with ABS edges, and mineral wool panels interposed	D-s2,d0
2	Fire resistance	No Performance Determined
3	Release of dangerous substances	No Performance Determined
3	Water vapour permeability	No Performance Determined
3	Water permeability	Not relevant
4	Resistance to dynamic loads as for structural damage: Use Category	
	According to ISO 7892, ISO/DIS 7893, ETAG 003	Soft body – 50 kg bag IV a 400 Nm
	"Taurus" either blind or double-glazed units assembled in a vertical layout, up to a partition height of mm 3100	Hard body – 1 kg ball IV a 10 Nm Use Category IV a
4	Resistance to eccentric vertical loads as for structural damage	No Performance Determined
4	Resistance to horizontal linear static loads	No Performance Determined
4	Safety against personal injury by contact	The geometry of the system does not contain any sharp and cutting edges and there is no risk of abrasion or cutting people or people's clothing rising from the nature of the surfaces
5	Airborne sound insulation: wall configurations and related values expressed in dB	
	According to EN ISO 10140-2; EN ISO 717-1	R_w C C_{tr}
	"Taurus dB" blind units, cm 100 wide, with mm 18 thick wood based panels, melamine finished, internally provided with "ISHOLsint DUO massa" insulation product	44 dB -2 dB -6 dB
	"Taurus dB" double-glazed units, cm 100 wide, with acoustic laminated glass panes - 33.1 on one side and 33.2 on the other side - plus lateral blind infill wood based panels cm 40 wide, internally provided with "ISHOLsint DUO massa" insulation product	43 dB -2 dB -7 dB
5	Sound absorption	No Performance Determined
6	Thermal resistance	No Performance Determined
6	Thermal inertia	No Performance Determined

BWR	Essential characteristic	Performance
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7 Aspects of durability and serviceability	Resistance to dynamic loads as for functional failure: Use Category		
	According to ISO 7892, ISO/DIS 7893, ETAG 003	Soft body – 50 kg bag	Hard body – 0.5 kg ball
	"Taurus" either blind or double-glazed units assembled in a vertical layout, up to a partition height of mm 3100	IV	IV
		120 Nm	6 Nm
	Use Category IV		
	Resistance to eccentric vertical loads as for functional failure	No Performance Determined	
	Resistance to point loads	No Performance Determined	
	Rigidity of partitions for ceramic tiling	No Performance Determined	
	Resistance to deterioration caused by physical agents	Test not required	
	Resistance to deterioration caused by chemical agents	Test not required	
	Resistance to deterioration caused by biological agents	Not relevant	

4. ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE

4.1 System of assessment and verification of constancy of performance

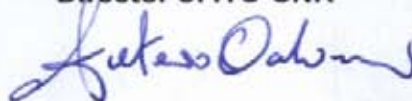
According to the European Commission decision n. 98/213/EC, revised by EC decision n. 2001/596/EC, the system of assessment and verification of constancy of performance applied to this product (see Annex V to Regulation (EU) n. 305/2011) is System 3, considering the Safety in use Category IV.

4.2 Technical details necessary for the implementation of the AVCP system, as envisaged in ETAG 003 used as European Assessment Document - EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ITC-CNR.

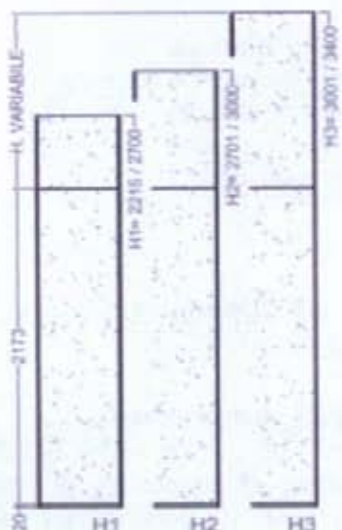
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by ITC – CNR

Prof. Antonio Occhiuzzi
Director of ITC-CNR

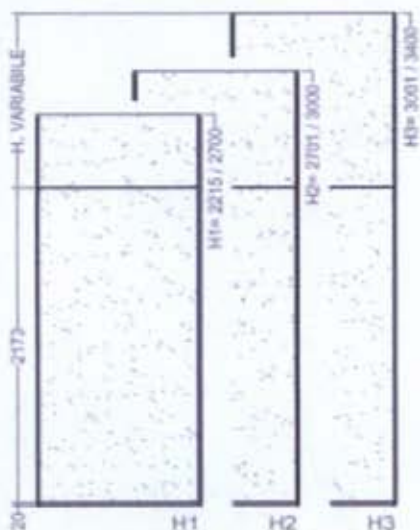


Annex 1 ETA 18/0528: Abacus of "Taurus" blind partition

BLIND PARTITION UNITS 500 mm WIDE



BLIND PARTITION UNITS 1000 mm WIDE
Door unit insertable



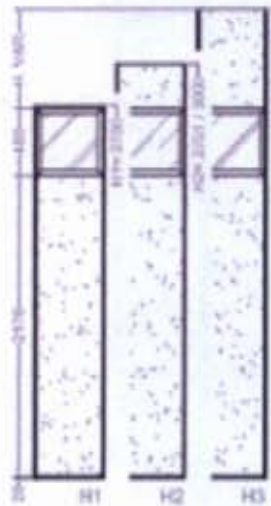
Annex 2 ETA 18/0528: Abacus of "Taurus" glazed partition

02 TYPOLOGY
GLASS FROM 2196
UP TO 2676

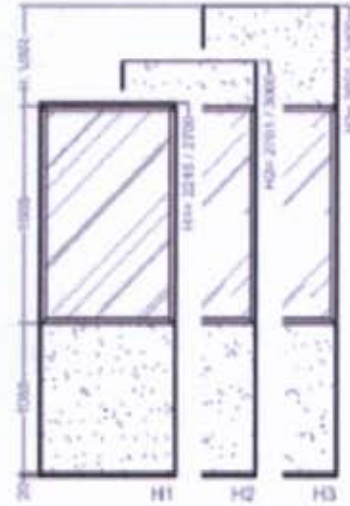
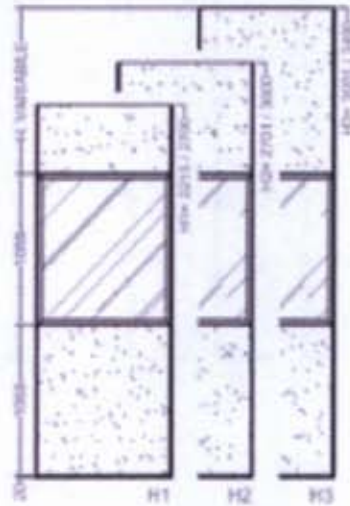
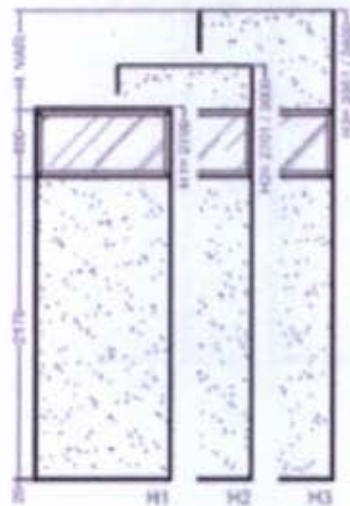
03 TYPOLOGY
GLASS FROM 1108
UP TO 2196

04 TYPOLOGY
GLASS FROM 1108
UP TO 2676

L 500mm



L 1000mm

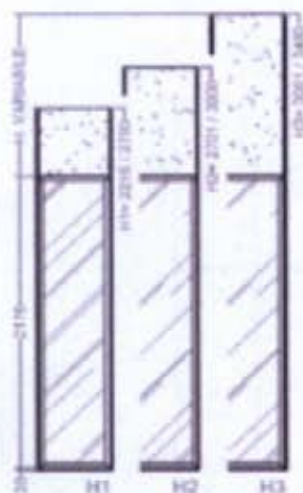


Annex 3 ETA 18/0528: Abacus of "Taurus" glazed partition

05 TYPOLOGY GLASS
FROM 20 UP TO 2196

06 TYPOLOGY GLASS
FROM 20 UP TO 2676

L 500mm



L 1000mm

