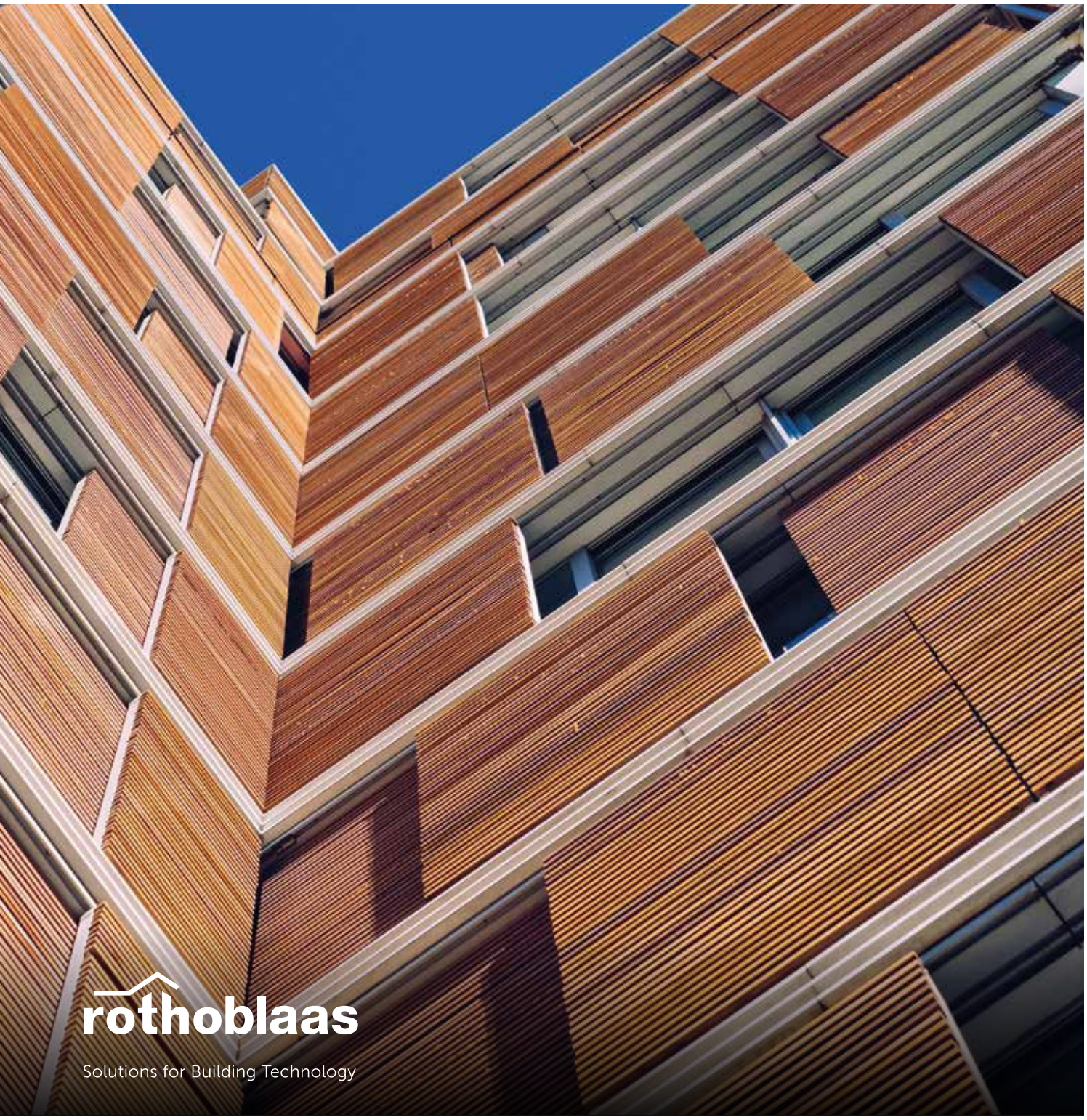
FAÇADES

Protection, waterproofing, safety



rothoblaas

Solutions for Building Technology

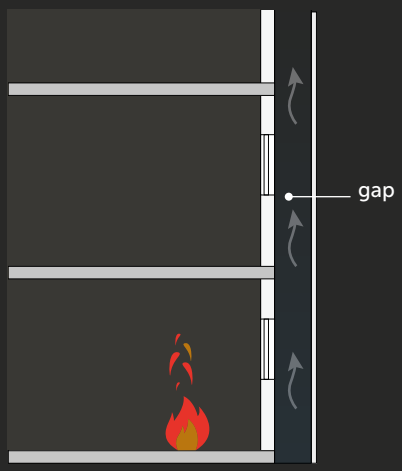
VENTILATED FAÇADES AND FIRE

All building typologies have to consider fire safety issues, depending on the regulations in force and the intended use. This was done in order to minimise the causes of fire, ensure the stability of the structure and limit the spread of flames both inwards and towards neighbouring buildings, guaranteeing the safety of the occupants and access for rescue teams. In order to minimise this type of risk, it is essential to rely on the right components and to carefully design them. Our ventilated façade solutions minimise risks by limiting the spread of flames in the event of an internal or external fire.

FIRE SPREAD PHASES IN A VENTILATED FAÇADE

1.

In the event of a fire starting inside the building, the flames initially spread to the room where they started. Modern buildings with ventilated façades are designed to take full advantage of the chimney effect of the ventilated façade, to reap the benefits of the upward movement of air in the gap between the cladding and the insulating layer. It is precisely this phenomenon that can give rise to problems in the event of a fire.

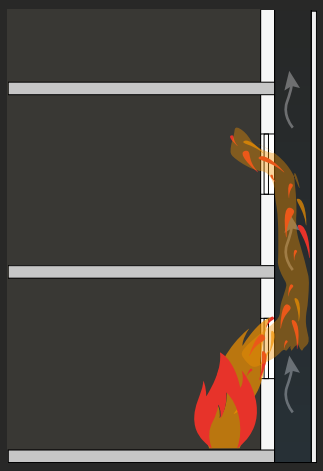


2.

In the event of a fire, the chimney effect of the ventilated façade could cause problems as it could direct the flames into the ventilation space, pushing them towards the upper floors of the building.

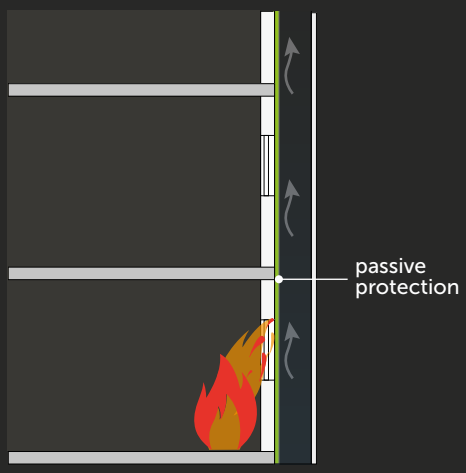
CHIMNEY EFFECT

The chimney effect is a physical phenomenon, at the basis of how traditional chimneys work, taken up by the world of architecture to ensure that, by exploiting the upward movement of hot air generated inside ventilated façades, a continuous cycle is created and the housing comfort of the building is increased.



3.

Careful fire protection design includes active or passive protection devices within the design with the purpose to prevent the spread of any flames. Rothoblaas proposes the use of self-extinguishing membranes and tapes as a passive façade solution. If no preventive measures are taken, the combustion of materials could lead to flames on the upper floors. The same concepts also apply in the case of a fire developed outside the building.



BARRIER ALU FIRE A2 SD2500

REFLECTIVE AIR VAPOUR BARRIER FIRE REACTION CLASS A2-s1,d0

A2-s1,d0

NON-COMBUSTIBLE A2-s1,d0

Product tested according to EN 13501-1 and classified as non-combustible material.

ENERGY EFFICIENCY

The reflectivity of the membrane improves the energy performance of the construction panels: reflecting heat inwards up to 95% it increases thermal resistance.

TRASPIR ALU FIRE A2 430

REFLECTIVE HIGHLY BREATHABLE MEMBRANE

A2-s1,d0

NON-COMBUSTIBLE A2-s1,d0

Membrane tested according to EN 13501-1 and classified as non-combustible material.

REFLECTIVE

Thanks to its ability to reflect up to 95% of the heat, it improves the thermal performance of the construction panels.

SELF-ADHESIVE MEMBRANES

The addition of a high-performance adhesive is the range upgrade of Rothoblaas membranes. The self-adhesive version of the membranes allows quick installation, protection of timber on the worksite and, above all, the possibility of prefabricating a waterproofed timber panel.

Discover BARRIER, BARRIER ALU, VAPOR IN, CLIMA CONTROL, VAPOR, TRASPIR and BITUM on our website.

TRASPIR EVO 300

HIGHLY BREATHABLE MONOLITHIC MEMBRANE

EN 13501-1
B-s1,d0

MONOLITHIC

The monolithic structure of the membrane guarantees excellent durability over time, thanks to the special polymers used.

9 MONTHS UV STABILITY

9 months resistance to UV rays with full exposure to radiation and no protection. Heat-resistant up to 120 °C.

EXCEPTIONAL TEMPERATURE RESISTANCE

It passed the artificial ageing test involving exposure to UV light for 5000 hours. Heat-resistant up to 120 °C.

TRASPIR EVO UV 210

HIGHLY BREATHABLE MONOLITHIC MEMBRANE RESISTANT TO UV RAYS

EN 13501-1
B-s1,d0

MONOLITHIC

The monolithic structure of the membrane guarantees excellent durability over time, thanks to the special polymers used.

B-s1,d0

Flame retardant certification, Euroclass reaction to fire B-s1, d0 based on EN 13501-1.

PERMANENT UV STABILITY

Permanent resistance to UV rays with exposure with open joints up to 50 mm wide, and with up to 40% of the surface uncovered.

THE BEST DEFENCE? IT' S PASSIVE!

Play in advance and handle fire problems with passive protection solutions: **design your building by incorporating Rothoblaas tapes, sealants and membranes.**

STRUCTURES AND FIRE BEHAVIOUR

REACTION TO FIRE

The reaction to fire class is an indicator that provides an assessment of whether or not the material contributes to fire. Different material behaviours correspond to different classes, ranging from non-combustible products to extremely flammable materials.

European classification according to EN 13501-1

	Class A1	non-combustible products
	Classes A2, B, C, D, E	combustible products, as their participation in the fire increases
	Class F	indicates materials with Non-Determined Performance (NDP) or that do not reach Class E
	s1, s2, s3	are the three values indicating the optical density of smoke
	d0, d1, d2	are the three values indicating the danger of dripping

WATER, AIR, FIRE, WIND, STEAM

The ideal membrane responds to the climatic factors of the geographical areas in which we construct our timber buildings. Using the right membranes contributes to increased living comfort and building quality.
Climate regions and solutions can be found in the **TAPES, MEMBRANES AND SEALANTS catalogue**

FRONT BAND UV 210

UNIVERSAL SINGLE-SIDED TAPE, HIGHLY RESISTANT TO UV RAYS

UV

EN 13501-1
B-s1,d0

AESTHETICS

Support made of monolithic TRASPIR EVO UV 210 membrane for excellent aesthetic performance even when applied with TRASPIR EVO 300.

REACTION TO FIRE B-s1,d0

Self-extinguishing tape that does not spread the flame in case of fire, contributing to the passive protection of the structure.

FIRE STRIPE GRAPHITE

FLEXIBLE INTUMESCENT GASKET

UL 94
V0

INTUMESCENT

Even in the event of fire, it does not release gases or harmful substances. Asbestos-free, its intumescence is due to the presence of graphite.

HERMETIC

Because of its ability to expand, the profile ensures that fumes, gases and flames are blocked from room temperature up to over 500°C.

FACADE BAND UV

UNIVERSAL SINGLE-SIDED TAPE, RESISTANT TO UV RAYS

UV STABILITY

Ideal for façade sealing and for overlapping on UV-ray resistant membranes.

INVISIBLE

Developed for application on TRASPIR for façade and TRASPIR EVO 300 for excellent aesthetic performance.

TERRA BAND UV

BUTYL ADHESIVE TAPE

DECKS AND FACADES

Ideal for protecting joists from water and UV rays. Can be used for both patios and façades, protecting and extending the life of the wooden joists.

PERMANENT UV STABILITY

The aluminised support guarantees unlimited resistance to UV radiation that can penetrate between open joints of patios and façades.

FLEXI BAND UV

UNIVERSAL SINGLE-SIDED ADHESIVE TAPE WITH HIGH UV STABILITY AND RESISTANCE

UV STABILITY AND AGEING

The special carrier is designed to offer excellent UV stability, while maintaining mechanical and adhesion properties over time due to excellent ageing resistance.

HEAT-RESISTANT UP TO 120°C

The combination of glue and polypropylene carrier makes it possible to achieve very high thermal stability without compromising the glue adhesion and viscosity.

BLACK BAND

UNIVERSAL SINGLE-SIDED BUTYL TAPE

EXTRAORDINARY
Universal and expandable up to 300%, it effectively seals any crack on the most widely used construction materials.

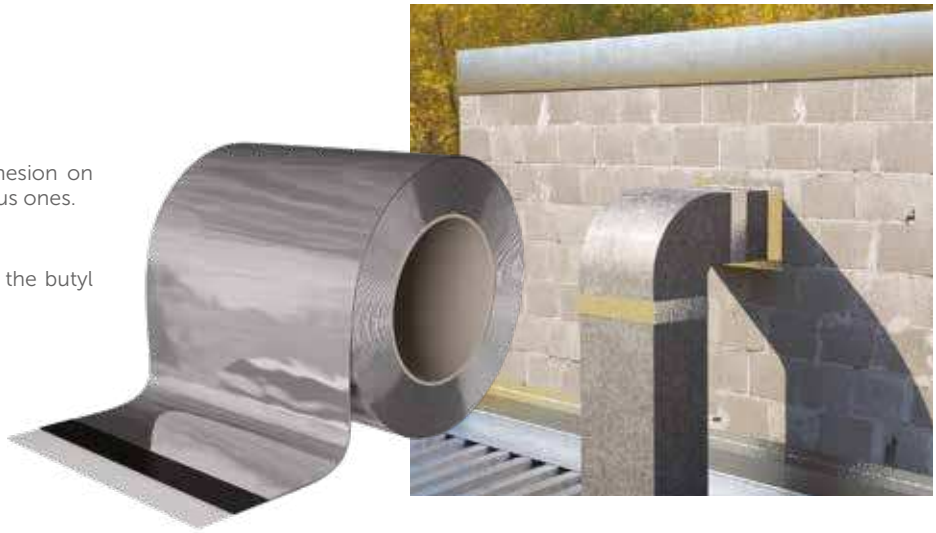
PRACTICAL
Ideal for easy sealing on difficult nodes and very irregular surfaces; self-sealing even at low temperatures.

ALU BUTYL BAND

REFLECTING BUTYL ADHESIVE TAPE

BUTYL
The butyl composition offers excellent adhesion on the most common surfaces, even very porous ones.

UV-STABLE
The reinforced aluminium coating protects the butyl mixture, guaranteeing that the seal lasts.



WINDOW BAND

SELF-EXPANDING SEALING TAPE FOR WINDOWS/DOORS

MS SEAL

MS POLYMER HIGH ELASTICITY SEALANT

HBS EVO

COUNTERSUNK SCREW

C4 EVO COATING

VGZ EVO

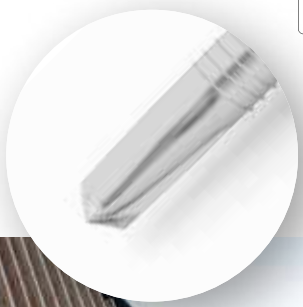
FULL THREAD SCREW WITH CYLINDRICAL HEAD

C4 EVO COATING

SBD

TIMBER-TO-STEEL SELF-DRILLING DOWEL

VIDEO



TBS EVO

FLANGE HEAD SCREW

C4 EVO COATING

DGZ

DOUBLE THREADED SCREW FOR INSULATION

MY PROJECT SOFTWARE

TERRALOCK

CONNECTOR FOR DECKING

VIDEO

RELATED PRODUCTS

KKT A4 | AISI316
Cone-shaped concealed head screw

KKF AISI410
Pan head screw

WKF

ANGLE BRACKETS FOR FACADES

RELATED PRODUCTS

LBS
Round head screw for plates

SKR-SKS
Screw anchor for concrete

DISC FLAT

REMOVABLE CONCEALED CONNECTOR

VIDEO

CE ETA 19/0706

RELATED PRODUCTS

KOS
Hexagonal head bolt

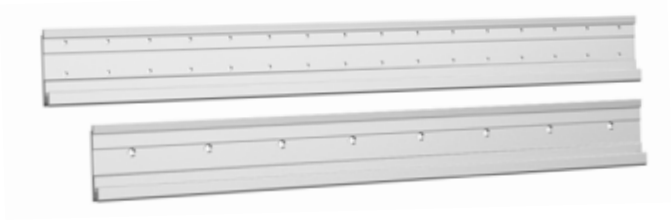
MET
Threaded rods, nuts and washers

LOCK FLOOR TIMBER

CONCEALED TIMBER-TO-TIMBER CONNECTOR

VIDEO

CE ETA-19/0831



RELATED PRODUCTS

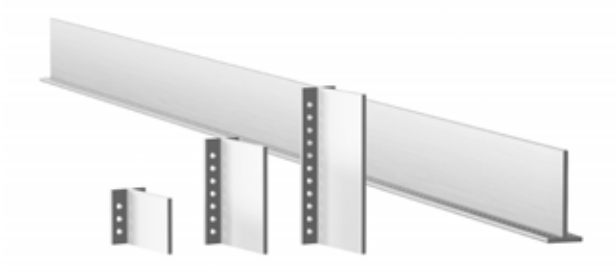
LOCK
Coupling hidden fastener

ALU MINI

CONCEALED BRACKETS WITH AND WITHOUT HOLES

VIDEO

CE ETA 09/0361



RELATED PRODUCTS

ALU MIDI AND ALU MAXI
Concealed brackets with and without holes

MET

THREADED RODS, NUTS AND WASHERS

AB1 A4

R120 SEISMIC C1

CE1 STAINLESS STEEL HEAVY-DUTY EXPANSION ANCHOR

HYB FIX

SEISMIC C2 CE ETA-20/1285

HIGH-PERFORMANCE HYBRID CHEMICAL ANCHOR

HYB-FIX is the high-performance hybrid chemical anchor ideal for extra-heavy anchor systems and for recasting with reinforcing bars. The urethane-methacrylate resin is certified for fire resistance F120 and is CE marked option 1 for cracked and non-cracked concrete.

It is also effective on wet concrete and concrete with submerged holes and is certified in seismic performance category C2 (M12-M24).

WING

ANCHOR POINT FOR WORK AT HEIGHT AND IN SUSPENSION

VIDEO

Extremely robust and reliable.

Can be used both for suspended work (1 person) and for protection against falls from height (3 people).

H-RAIL OVERHEAD

HORIZONTAL OVERHEAD RIGID ANCHOR LINE

VIDEO

H-RAIL OVERHEAD is the overhead rail lifeline which, thanks to the special plates, can be installed directly on different types of substructure. The rail allows operators to work with their hands free and in safety by using sliding and retractable devices.

PERSONAL PROTECTIVE EQUIPMENT

HELMETS

Line of helmets for work at height, on construction site or in industrial areas. Adjustable and ready to assemble head lamps and other accessories.

HARNESSES

Semiprofessional and professional harnesses for fall protection, positioning and rope access work.

ROPES AND CONNECTORS

Abrasion resistant work ropes featuring great handling, to be combined with connectors available in a wide range of shapes, sizes and breaking strengths.

Discover our **PPE** proposal for safety on construction sites and at work. Visit our website or request the **FALL PROTECTION AND SAFETY** catalogue from your trusted agent. **www.rothoblaas.com/safe**

rothoblaas | Solutions for Building Technology

FASTENING

Screws for timber | Plates and connectors | XEPOX epoxy adhesive
CLT slab-to-column connections | Terraces and facades
Anchors for concrete

AIRTIGHTNESS AND WATERPROOFING

Tapes and sealants | Roof and ventilation elements | Membranes

SOUNDPROOFING

Resilient profiles | Soundproofing layers | Sealants

FALL PROTECTION

Lifeline and rail systems | Anchor points | Collective protection
Personal Protective Equipment

TOOLS AND MACHINES

Carpentry tools | Measurement | Templates | Construction site protection
Transport and Lifting | Wood repair | Drill bits and cutters | Machines

rothoschool

STAY SAFE

Safety on the construction site is only guaranteed if the right choices are made upstream. Follow Rothoschool training courses, keep up to date on risks, fall protection systems and personal protective equipment. Depending on the subject, the courses are theoretical or practical. Discover the programme and take advantage of early booking.

Discover all our courses!
rothoblaas.com/school

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