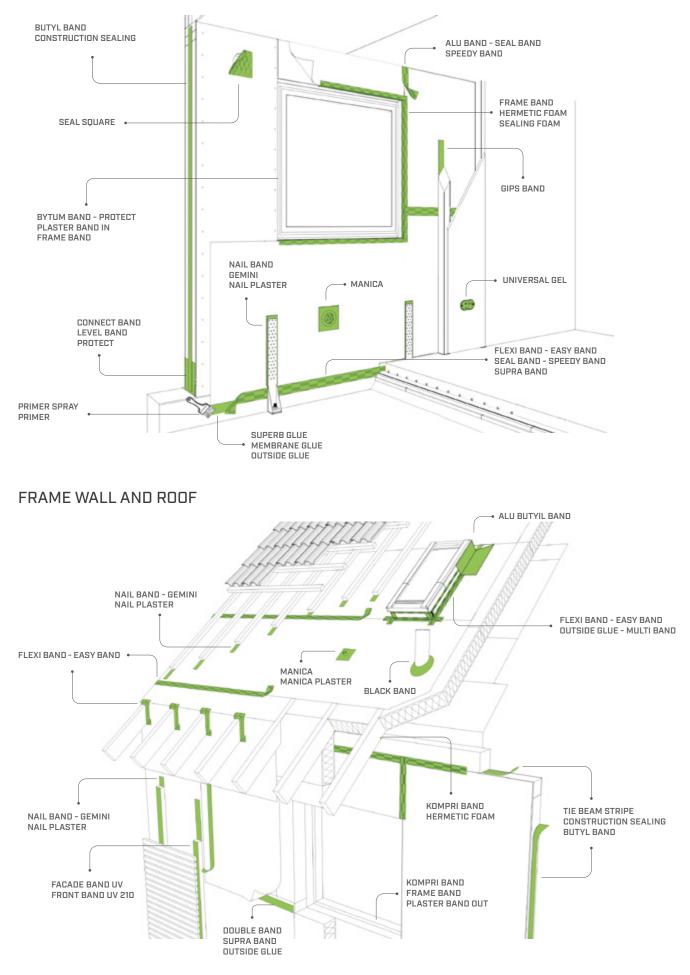
TIMBER FRAME

Solutions to design and build with frame systems



APPLICATION SETTINGS

FRAME WALL WITH WINDOW (internal view)

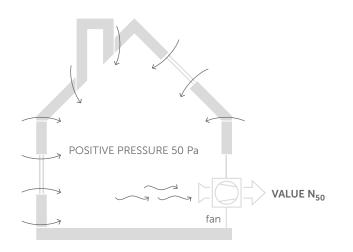


QUALITY BUILDING

Modern building requires attention to be paid to issues that just a few years ago were considered secondary: energy savings, noise reduction, resistance to earthquakes or other exceptional natural events all of these are areas closely connected to the application of advanced technology and quality products.

INSPECTION TOOLS

With the **BLOWER DOOR TEST** a building is subjected to positive pressure of 50 Pa, while the quantity of air that filters from the surfaces which enclose the casing is measured. The value n_{50} [1/h] expresses the ratio between the volume of air dispersed in an hour and the total volume of the building.

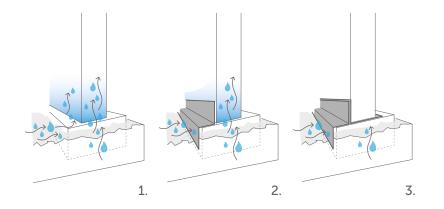


VALUES N₅₀ [1/h]

- Passive house < 0,6/h
- Building with low energy consumption < 2,0/h
- Building with forced ventilation system ≤ 1,5/h
- Conventional building < 3,0/h

ATTENTION TO DETAILS

The durability of wood is closely connected to protection from water: proper installation is necessary to impede external infiltration, humidity coming from the subsoil and unsatisfactory sealing.



REDUCING ENERGY CONSUMPTION

Numerous studies show that energy use in buildings causes over 40% of global $\rm CO_2$ emissions.

Greater attention paid to reducing energy consumption during design is essential for both the environment and for economic savings.

MATERIALS

Wood, a sustainable material.

INDOOR AIR QUALITY Improved air quality, improved quality of life.

RENEWABLE SOURCES Environmental sustainability and primary energy sources.

VENTILATION Controlled air exchange for excellent comfort.

WATER Reducing water consumption.

LOCATION

Importance of positioning and solar contributions.

- 1. CRITICALITY Humidity due to capillary action.
- 2. SIDE PROTECTION Bituminous membranes, bituminous bands.
- 3. VERTICAL PROTECTION Continuous waterproof sheaths, bituminous and butyl bands.

TIMBER FRAME | 3

ALU START

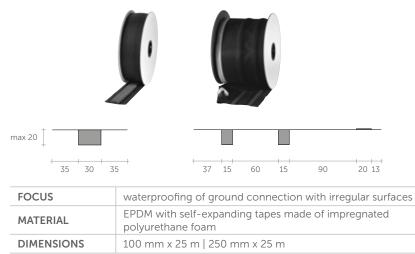
ALUMINIUM SYSTEM FOR THE CONNECTION OF BUILDINGS TO THE GROUND



| FOCUS | raising and levelling of TIMBER FRAME panels | |
|-----------|---|--|
| WIDTH | from 100 to 160 mm | |
| STRENGTH | in all stress directions | |
| FASTENERS | LBA, LBS, SKR-E, AB1, VIN-FIX PRO, EPO-FIX PLUS | |



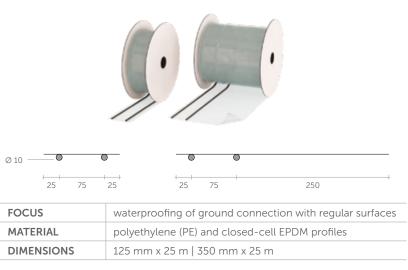
SEALING WALL BARRIER FOR IRREGULAR FOUNDATIONS





LEVEL BAND

SEALING WALL BARRIER FOR FOUNDATIONS







CE

-ETA



CE EN 13984



PROTECT SELF-ADHESIVE BUTYL BAND, CAN BE PLASTERED

EN 13707 EN 13969 EN 14967

CE ETA-19/0100



| FOCUS | waterproofing and sealing of ground connection and window/door frames | |
|------------|--|--|
| MATERIAL | adhesive butyl compound with polypropylene (PP) fabric support, and separation layer | |
| DIMENSIONS | 330 mm x 10 m 500 mm x 10 m | |
| THICKNESS | 1 mm | |



GROUND BAND SELF-ADHESIVE BITUMINOUS MEMBRANE



| FOCUS | self-sealing and self-adhesive | |
|------------|--|--|
| MATERIAL | bituminous compound spread on high density polyethylene film (PE) and separation layer | |
| DIMENSIONS | 200 mm x 20 m 500 mm x 20 m 1000 mm x 20 m | |
| THICKNESS | 1,5 mm | |



SA R120

SEISMIC C2

SCREW ANCHOR FOR CONCRETE CE1



| FOCUS | screw for concrete |
|----------|---------------------------------|
| HEAD | hexagonal head with mock washer |
| DIAMETER | from 8 to 16 mm |
| LENGTH | from 80 to 290 mm |
| | |





ANGLE BRACKET FOR TENSILE LOADS



| FOCUS | tensile joints |
|-----------|-------------------------------------|
| HEIGHT | from 340 to 740 mm |
| THICKNESS | 3,0 mm |
| FASTENERS | LBA, LBS, VIN-FIX PRO, EPO-FIX PLUS |

TITAN F

ANGLE BRACKET FOR SHEAR FORCES







| FOCUS | shear joints |
|-----------|---|
| HEIGHT | 71 mm |
| THICKNESS | 3,0 mm |
| FASTENERS | LBA, LBS, VIN-FIX PRO, EPO-FIX PLUS, SKR, AB1 |

WZU

ANGLE BRACKET FOR TENSILE LOADS



| FOCUS | timber frame struts fastening |
|-----------|-------------------------------|
| HEIGHT | from 90 to 480 mm |
| THICKNESS | from 2,0 to 4,0 mm |
| FASTENERS | LBA, LBS, VIN-FIX PRO |











6 | TIMBER FRAME

WHT PLATE C CONCRETE PLATES FOR TENSILE LOADS



| FOCUS | tensile joints on concrete |
|-----------|--|
| HEIGHT | 440 540 mm |
| THICKNESS | 3,0 mm |
| FASTENERS | LBA, LBS, SKR, VIN-FIX PRO, EPO-FIX PLUS |

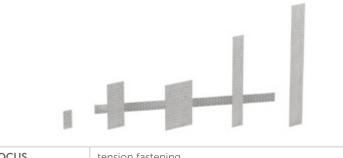
TITAN PLATE T TIMBER PLATES FOR SHEAR LOADS





| FOCUS | timber-to-timber shear joint |
|-----------|------------------------------|
| HEIGHT | 200 300 mm |
| THICKNESS | 3,0 mm |
| FASTENERS | LBA, LBS |

LBV PERFORATED PLATES



| FOCUS | tension fastening |
|-----------|---------------------|
| HEIGHT | from 120 to 1200 mm |
| THICKNESS | from 1,5 to 2,5 mm |
| FASTENERS | LBA, LBS |





Design simply, quickly and intuitively! Discover how easy it is to find the best solutions for your projects. **www.rothoblaas.com**

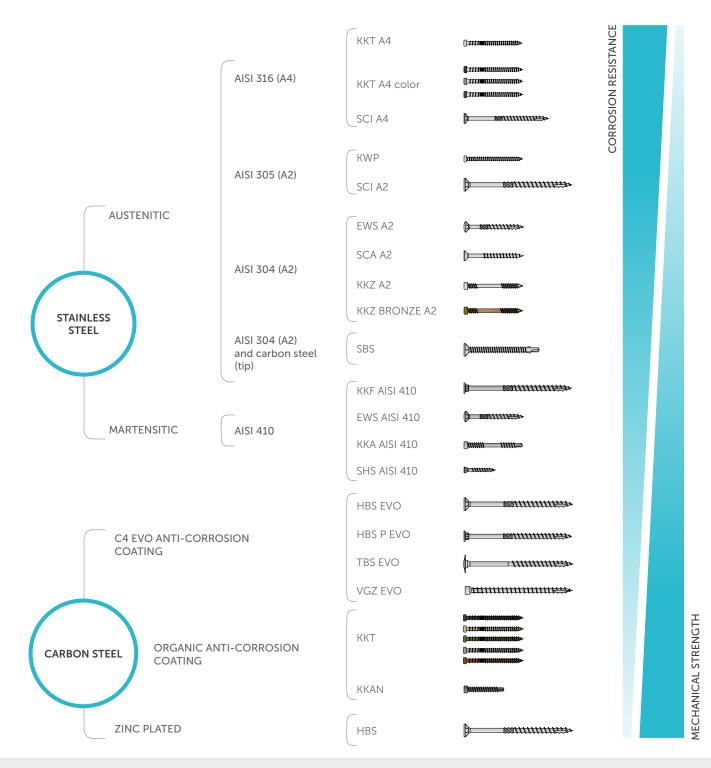






CE EN 14545

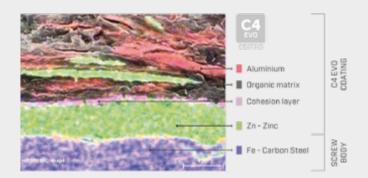
MATERIALS AND COATINGS



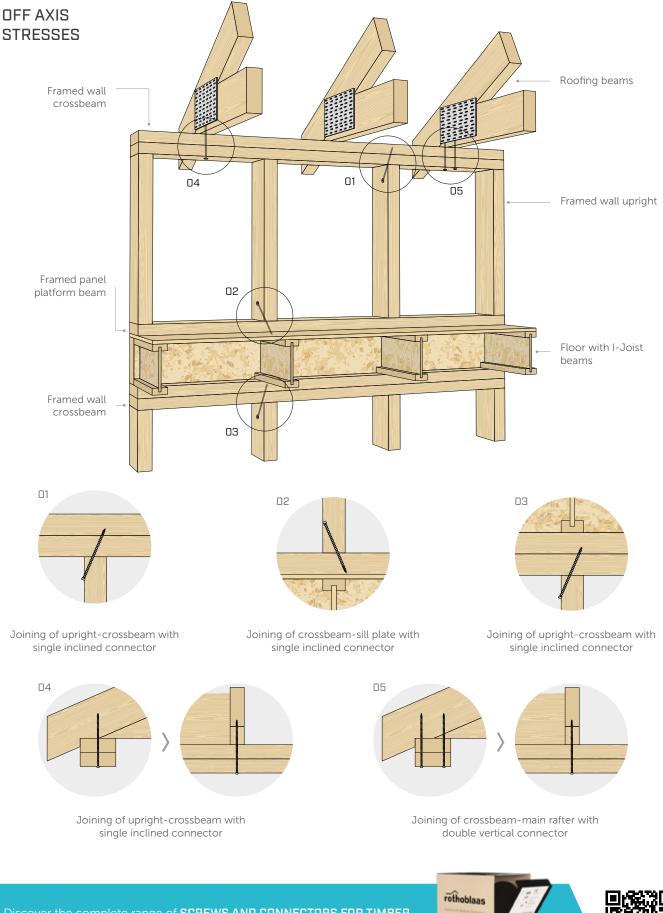
C4 EVO COATING

Is a multilayer coating composed of:

- An external functional layer of epoxy matrix with aluminium flakes of around 15-20 μ m, which gives the coating optimum resistance to mechanical and thermal stresses. The aluminium flakes also serve, when required, as sacrificial cathodes for the metal base of the screw.
- A central binding layer for the external functional layer.
- An internal layer of around 4 μm zinc microns which acts as an additional layer of corrosion resistance.



CEILING-TO-WALL JOINTS



Discover the complete range of **SCREWS AND CONNECTORS FOR TIMBER** on our website or request the catalogue from your trusted agent. **www.rothoblaas.com**

rot plaas



FOCUS



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| Not SELLE SALVERS |
| |
| |

| HEAD | countersunk with under-head ribs |
|----------|----------------------------------|
| DIAMETER | from 3,5 to 12,0 mm |
| LENGTH | from 30 to 600 mm |
| | |

extremely complete range

HBS SOFTWOOD BULK

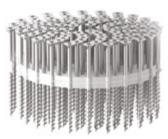






| FOCUS | maxi package |
|----------|----------------------------------|
| HEAD | countersunk with under-head ribs |
| DIAMETER | 5,0 6,0 mm |
| LENGTH | from 60 to 160 mm |





| FOCUS | HBS bound screw |
|----------|----------------------------------|
| HEAD | countersunk with under-head ribs |
| DIAMETER | from 4,0 to 6,0 mm |
| LENGTH | from 30 to 80 mm |

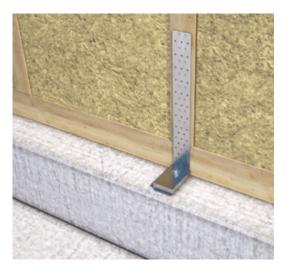
























| FOCUS | threaded, annular ring nail |
|----------|-----------------------------|
| HEAD | flat |
| DIAMETER | 4,0 6,0 mm |
| LENGTH | from 40 to 100 mm |

TBS FLANGE HEAD SCREW



| FOCUS | screw with built-in washer |
|----------|----------------------------|
| HEAD | flange |
| DIAMETER | from 6,0 to 10,0 mm |
| LENGTH | from 40 to 520 mm |

VGZ EVO FRAME

MINI FULL THREAD SCREW WITH CYLINDRICAL HEAD

| FOCUS | connector for narrow sections, ideal for outdoor use in service class 3 |
|----------|---|
| HEAD | cylindrical, countersunk |
| DIAMETER | 5,3 5,6 mm |
| LENGTH | from 80 to 160 mm |

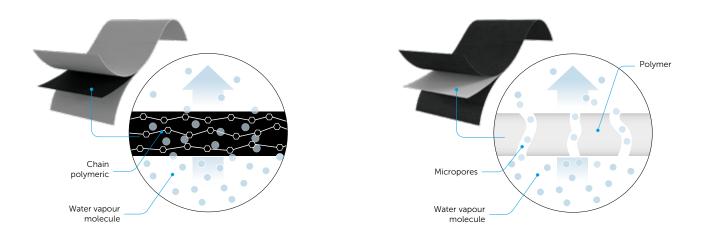
MEMBRANES

MONOLITHIC

Membranes with a homogeneous and continuous functional layer. The permeance of monolithic membranes is provided by the ability of the polymer of which they are composed to make a **CHEMICAL INTERACTION** with water molecules. Some polymers, in fact, are able to activate a chemical interaction with water molecules and therefore to be crossed through, thus becoming breathable.

MICROPOROUS

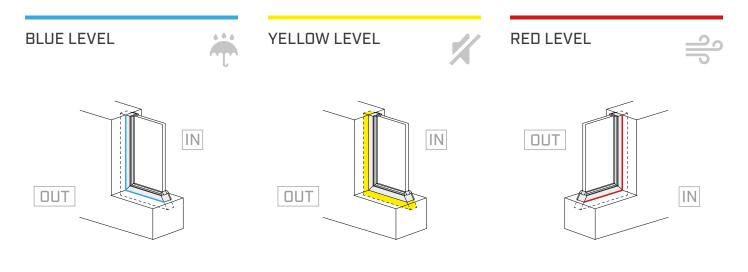
Membrane with functional microporous layer, obtained through mechanical processing during the production. Permeability to water vapour is entrusted to the **CAPILLARY PRINCIPLE:** the water molecule passes through the micropores in the vapour check film, enclosed in one or two protective layers.



DOORS, WINDOWS AND STRUCTURE

THREE LEVELS OF PROTECTION

The three level method, which is used often in most European countries, identifies thermal and acoustic insulation levels for proper placement of doors and windows. To obtain maximum performance, it is important to take care in all design stages. Rothoblaas offers specific solutions for each of the three levels.



This is the most external level, that guarantees protection against weather. If not properly treated, it can create infiltration problems that lead to the formation of condensation and mould.

Intermediate level, which must guarantee thermal/acoustic performance and mechanical fixing. Problems can arise from the fact that frequently the materials that insulate well against noise are not equally effective against cold. Most internal level, generally the most neglected. Must guarantee airtightness to avoid formation of condensation in installation joints, which could damage the insulating solutions used in the primary node.

EASY BAND UNIVERSAL SINGLE-SIDED TAPE



| FOCUS | sealing of membranes and construction elements both indoor and outdoor |
|------------|---|
| MATERIAL | polyethylene (PE) support with acrylic glue, reinforcing grid and separation layer |
| DIMENSIONS | 50 mm x 25 m 60 mm x 25 m |
| ADVANTAGES | versatile and stable even at high temperatures |



SINGLE-SIDED TAPE FOR INDOOR USE



CE EN 13984



| FOCUS | sealing of membranes and construction elements in indoor environment |
|------------|---|
| MATERIAL | hydrorepellant impregnated paper support, acrylic glue and separation layer |
| DIMENSIONS | 60 mm x 40 m |
| ADVANTAGES | available in version with pre-cut liner to facilitate placement in corners |



FRAME BAND

SELF-EXPANDING SEALING TAPE FOR WINDOW/DOOR FRAMES



| FOCUS | sealing of windows/doors with great soundproofing power |
|------------|---|
| MATERIAL | precompressed polyurethane foam impregnated with fire- proof substances and polyethylene (PE) film |
| DIMENSIONS | 54 mm x 30 m 74 mm x 30 m |
| ADVANTAGES | suitable to replace the three levels of protection (see intro) without additional products |



AIR-TIGHTNESS AND WATERPROOFING are synonyms of building quality, durability and housing comfort. Discover our solutions on our website or request the catalogue from your trusted agent. **www.rothoblaas.com**



BARRIER ALU REFLECTIVE AIR VAPOUR BARRIER

| FOCUS | waterproof, it completely blocks the passage of va- pour and reflects heat internally |
|------------------------------|--|
| MASS PER UNIT AREA | from 100 to 200 g/m ² |
| WATER VAPOUR TRANSMISSION | versions from Sd > 150 to Sd > 1500 m |
| SPECIAL | 3,0 m versions with reaction to fire class B-s1, d0 |

VAPOR

VAPOUR STOP CONTROL LAYER

| FOCUS | waterproof, it blocks vapour |
|------------------------------|-------------------------------------|
| MASS PER UNIT AREA | from 100 to 225 g/m ² |
| WATER VAPOUR TRANSMISSION | versions from Sd = 4 m to Sd = 40 m |
| SPECIAL | 3,0 m versions |

CLIMA CONTROL MEMBRANE WITH VARIABLE DIFFUSION

| FOCUS | waterproof, it regulates the passage of vapour thanks to the variable Sd |
|------------------------------|--|
| MASS PER UNIT AREA | from 80 to 160 g/m ² |
| WATER VAPOUR TRANSMISSION | variable diffusion, between Sd = $0,2$ and Sd = 5 m |
| SPECIAL | membrane with variable diffusion |
| | |









-







CE EN 13984

TRASPIR

HIGH PERFORMANCE BREATHABLE



| FOCUS | waterproof, it allows the passage of vapour |
|------------------------------|---|
| MASS PER UNIT AREA | from 75 to 270 g/m ² |
| WATER VAPOUR TRANSMISSION | Sd < 0,05 m |
| SPECIAL | versions with SINTEF, CSTB, BBA certification |









| FOCUS | highly waterproof, it allows the passage of vapour |
|------------------------------|--|
| MASS PER UNIT AREA | from 90 to 360 g/m ² |
| WATER VAPOUR TRANSMISSION | Sd < 0,2 m |
| SPECIAL | functional monolithic layer (EVO) for excellent durability |



NET ROLL FLEXIBLE VENTILATED UNDER-RIDGE



| FOCUS | protection of the roof ventilation section |
|------------|---|
| ADVANTAGES | ventilation strap stitched and glued to pleated wings, durable |
| MATERIAL | polypropylene (PP) ventilation grid and aluminium strips with adhesive butyl rope |
| DIMENSIONS | 310 mm x 5 m 390 mm x 5 m 390 mm x 20 m |





ANCHOR FOR TRANSPORTING PREFABRICATED ELEMENTS AND CLT PANELS

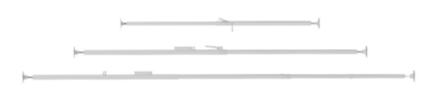


| FOCUS | can be used for axial and transversal loads |
|------------|--|
| MATERIAL | very high strength bright zinc plated carbon steel |
| DIMENSIONS | 185 mm |
| ADVANTAGES | maximum capacity 1300 kg |

GIRAFFE

ASSEMBLY SUPPORT





| FOCUS | precise length adjustment by means of the side handle |
|------------|---|
| MATERIAL | GIR3000 and GIR4000 in zinc plated steel GIR2200 and GIR6000 in extruded aluminium 6060 |
| DIMENSIONS | 2200-3000-4000-6000 mm |
| ADVANTAGES | GIR3000 equipped with quick adjustment with automatic fastener |



MANTIS

LIFTING BELT FOR TRANSPORT WALLS AND PRECAST ELEMENTS





| FOCUS | 7:1 safety factor |
|------------|-------------------------|
| MATERIAL | polyester |
| DIMENSIONS | 50 or 100 cm |
| ADVANTAGES | maximum capacity 800 kg |







XEPOX TWO COMPONENTS EPOXY ADHESIVE



| FOCUS | structural gluing |
|-------------|---|
| TYPES | joints with rods, joints with perforated or sandblasted plates |
| RANGE | 5 products to adapt to all installation requirements |
| APPLICATION | applicable by spray, brush, percolation or spatula depending on viscosity |

VIN-FIX

VINYL ESTER CHEMICAL ANCHOR WITHOUT **STYRENE**



| FOCUS | cracked, non-cracked concrete and seismic category C2 |
|------------|---|
| MATERIAL | vinyl ester without styrene based |
| FORMAT | 300 ml 420 ml |
| ADVANTAGES | suitable for dry, wet concrete or submerged holes |

HERMETIC FOAM

HIGH PERFORMING SOUNDPROOFING SEALING FOAM



| FOCUS | elastic sealing for regular and irregular joints on the most common materials |
|------------|---|
| MATERIAL | closed-cell polyurethane compound with high elasticity |
| FORMAT | 750 ml |
| ADVANTAGES | tested for noise reduction up to 60 dB |

Get the most out of our solutions, thanks to the support of our highly qualified **TECHNICAL CONSULTANTS**, always available to designers, technicians and installers. www.rothoblaas.com/technical-support













FULL THREAD SCREW WITH CYLINDRICAL HEAD







| FOCUS | 45° connections, reinforcements and couplings |
|----------|---|
| HEAD | cylindrical, countersunk |
| DIAMETER | 5,3 5,6 7,0 9,0 11,0 mm |
| LENGTH | from 80 to 600 mm |

ALU MIDI

CONCEALED BRACKET WITH AND WITHOUT HOLES



| FOCUS | concealed joints |
|-----------------|----------------------------------|
| TIMBER SECTIONS | from 80 x 100 mm to 200 x 520 mm |
| STRENGTH | R _{v,k} up to 150 kN |
| FASTENERS | LBA, LBS, SBD, STA, SKR |



METAL HANGERS WITH EXTERNAL WINGS



| FOCUS | visible joint |
|------------|----------------------------------|
| DIMENSIONS | from 40 x 110 mm to 200 x 240 mm |
| THICKNESS | 2,0 2,5 mm |
| FASTENERS | LBA, LBS, SKR, VIN-FIX PRO |
| | |









TIMBER FRAME | 19

LOCK T TIMBER CONCEALED HOOK TIMBER-TO-TIMBER CONNECTOR



SPEED

FOCUS

MATERIAL

DIMENSIONS

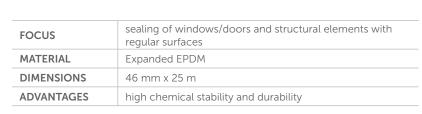
UNIVERSAL SINGLE-SIDED TAPE WITHOUT SEPARATION LAYER

| ADVANTAGES | no separation liner to reduce waste and time |
|------------|--|
| | |
| | |

60 mm x 25 m | 300 mm x 25 m

indoor and outdoor

LUNSIRULIJUN SEALING COMPRESSIBLE SEAL FOR REGULAR JUNCTIONS















sealing of membranes and construction elements both

polyethylene (PE) support with acrylic glue and reinforcing grid

| LBS |
|--------|
| |
| |
| Y BAND |
| |

FIELDS OF USE

ROLL DIMENSIONS

MASS PER UNIT AREA

PROTECTION FROM RISING DAMP (Sd)

MATERIAL

ALADIN STRIPE

RESILIENT SOUNDPROOFING PROFILE

SILENT FLOOR

MATERIAL

THICKNESS

DIMENSIONS

FIELDS OF USE

ROLL DIMENSIONS

DYNAMIC STIFFNESS S'

MATERIAL

APPLICABLE LINEAR LOAD

RESILIENT UNDERSCREED FOIL

∆LW * 28 dB **SILENT STEP**

SUBSTRATE MADE OF POLYETHYLENE SERVING AS A VAPOUR BARRIER

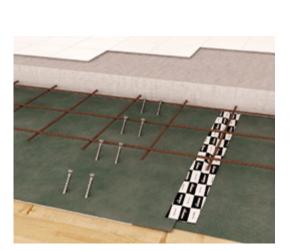
5,0 mm x 1,05 m x 10 m

underscreed

27 MN/m³

Our **SOUNDPROOFING SOLUTIONS** guarantee the highest standards in











Extruded and expanded EPDM

dividable pre-cut strips from 95 to 115 mm

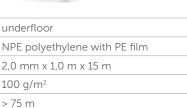
elastoplastomeric bitumen coupled with polyester felt

5,0 and 7,0 mm

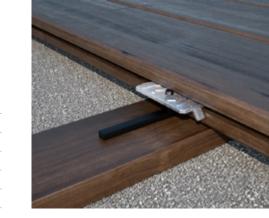
from 2,0 to 30 kN/m











FLAT - FLIP

FOCUS

COLUMNS

FASTENERS

HEIGHT

FOCUS

CLADDING

FASTENERS

BOARDS

JOINTS

CONNECTORS FOR DECKING

R10 - R20 - R30

ADJUSTABLE POST BASE

TRASPIR EVO UV HIGHLY BREATHABLE MONOLITHIC MEMBRANE

extremely precise joints

symmetrical grooving

KKTN540, KKAN440

7,0 mm

black anti-rust coating | zinc plated

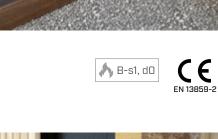
RESISTANT TO UV RAYS

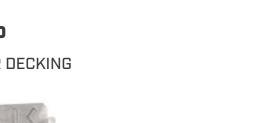
FOCUS permanent UV stability

| MASS PER UNIT AREA | 210 g/m ² |
|------------------------------|---|
| WATER VAPOUR TRANSMISSION | Sd < 0,15 m |
| SPECIAL | 3.0 m versions with reaction to fire class B-s1, d0 |
| | |

















adjustable height after assembly

adjustable from 140 to 250 mm

from 80 x 80 mm to 240 x 240 mm

HBS PLATE EVO, SKR, VIN-FIX PRO



| FOCUS | ideal for timber beams with reduced cross-section, from a minimum of 38 x 68 mm |
|--------------|--|
| MATERIAL | 1.4016 stainless steel grade AISI430 |
| FIELD OF USE | min. timber structure 114 mm (38 + 38 + 38) x 68 mm |





HOOK EVO 2.0

••••









| FOCUS | versatile fastening according to the type of tiles on the roof |
|--------------|---|
| MATERIAL | 1.4301 stainless steel grade AISI304 |
| FIELD OF USE | min. timber structure 80 x 100 mm min. concrete structure 120 mm |







ANCHOR POINT



| FOCUS | low visual impact, ideal for installation on roofs in historic centres |
|--------------|---|
| MATERIAL | 1.4404 stainless steel grade AISI316 EN AW-6060 aluminium |
| FIELD OF USE | min. timber structure: 100 x 100 mm concrete structure in combination with KRAKEN sup- port: min. 40 mm |





A wide range of access and transit products to carry out operations in total safety. Discover them on our website or request the FALL PROTECTION AND SAFETY catalogue from your trusted agent. www.rothoblaas.com/safe



| FOCUS | ideal as an anchor point in multiple environments, it allows the operator to safely access |
|--------------|--|
| MATERIAL | 1.4016 stainless steel grade AISI430 |
| FIELD OF USE | min. timber structure 100 x 100 mm min. concrete structure 140 mm |

min. steel structure 5 mm



ΕN

795:2012 A+C

CEN/TS

16415:2013

CEN/TS 16415:2013

UNI 11578:2015 C

UNI

11578:2015 A+C

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VIDEO

TOWER

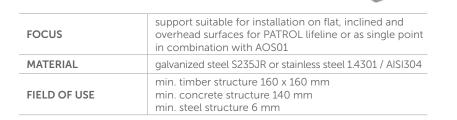
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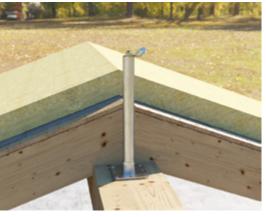
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EN 795:2012 C





| FOCUS | convenient kit including terminals, dissipators, interme- diate and rope for the construction of a of 10-15 or 25 m. lifeline |
|--------------|---|
| MATERIAL | 1.4301 stainless steel grade AISI304 - EN-AW 6082 aluminium |
| FIELD OF USE | usable on TOWER, TOWER XL, SHIELD, SHIELD 2.0, COPPO supports |



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





Solutions for Building Technology

FASTENING

Screws for timber | Plates and connectors | Anchors for concrete

AIRTIGHTNESS AND WATERPROOFING

Stops and barriers | Breathable | Sheaths | Tapes and profiles Sealants | Accessories

SOUNDPROOFING

Resilient profiles | Soundproofing layers | Sealants

FALL PROTECTION

Lifeline | Lifeline components | Single points | Collective protection and accesses | PPE | Fastening systems and accessories

TOOLS AND MACHINES

Transport and lifting | Carpentry tools | Templates





THE RIGHT TRAINING FOR A SUCCESSFUL FUTURE!

Training programmes that deal with the most current topics in the field of designing and constructing timber buildings, but not limited to. Qualified speakers and stimulating teaching programmes: the perfect combination to keep up to date with the main topics related to the world of timber constructions.





O1TFRAME1EN

Rotho Blaas Srl

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