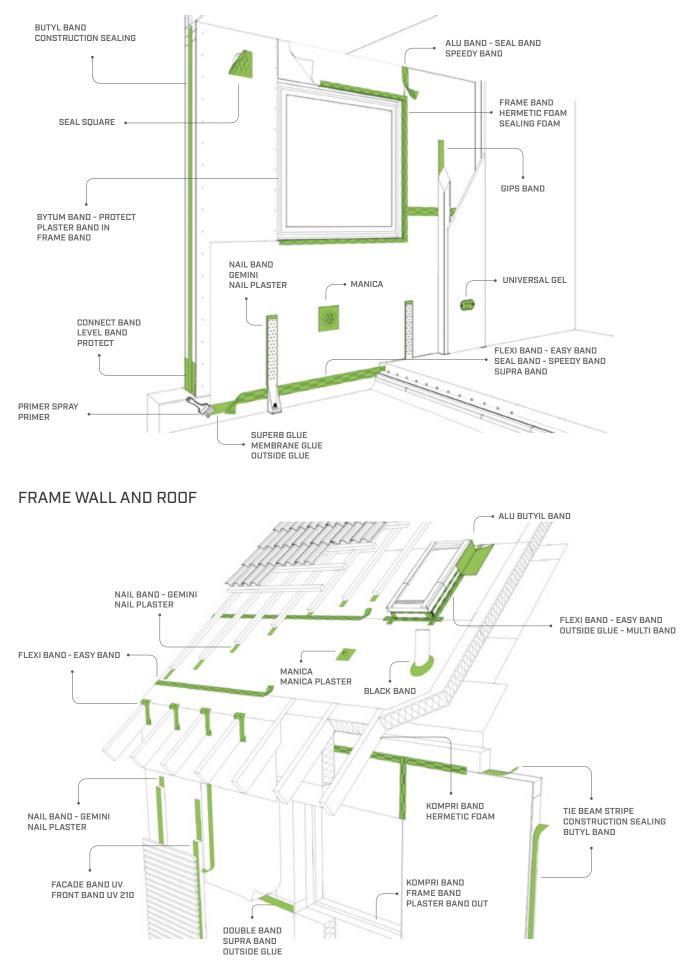
TIMBER FRAME

Solutions to design and build with frame systems



APPLICATION SETTINGS

FRAME WALL WITH WINDOW (internal view)

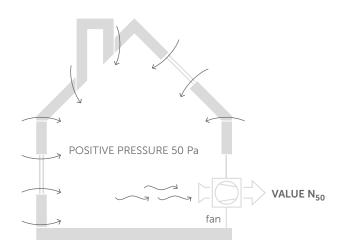


QUALITY BUILDING

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.

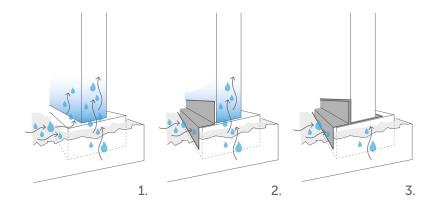


VALUES N₅₀ [1/h]

- 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

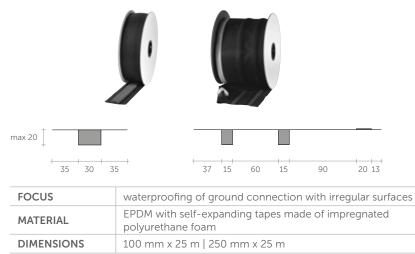
ALUMINIUM SYSTEM FOR THE CONNECTION OF BUILDINGS TO THE GROUND



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	



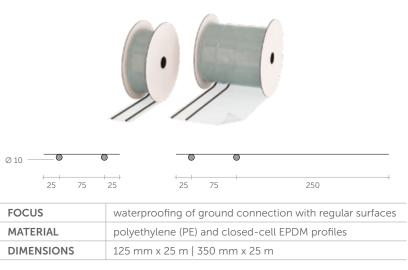
SEALING WALL BARRIER FOR IRREGULAR FOUNDATIONS





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

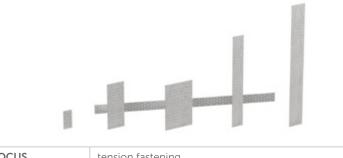
TITAN PLATE T TIMBER PLATES FOR SHEAR LOADS





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**

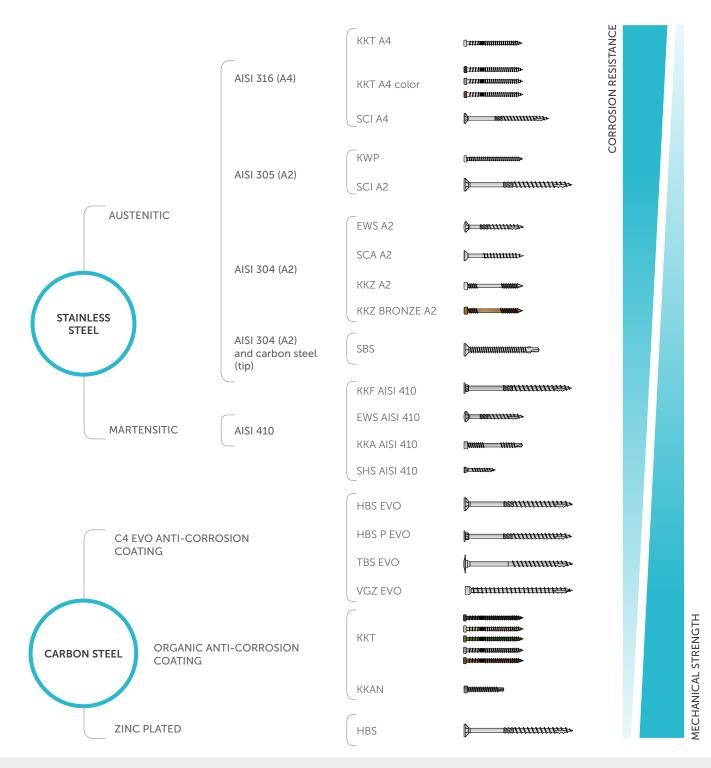






CE EN 14545

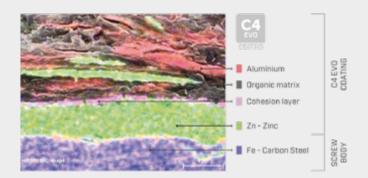
MATERIALS AND COATINGS



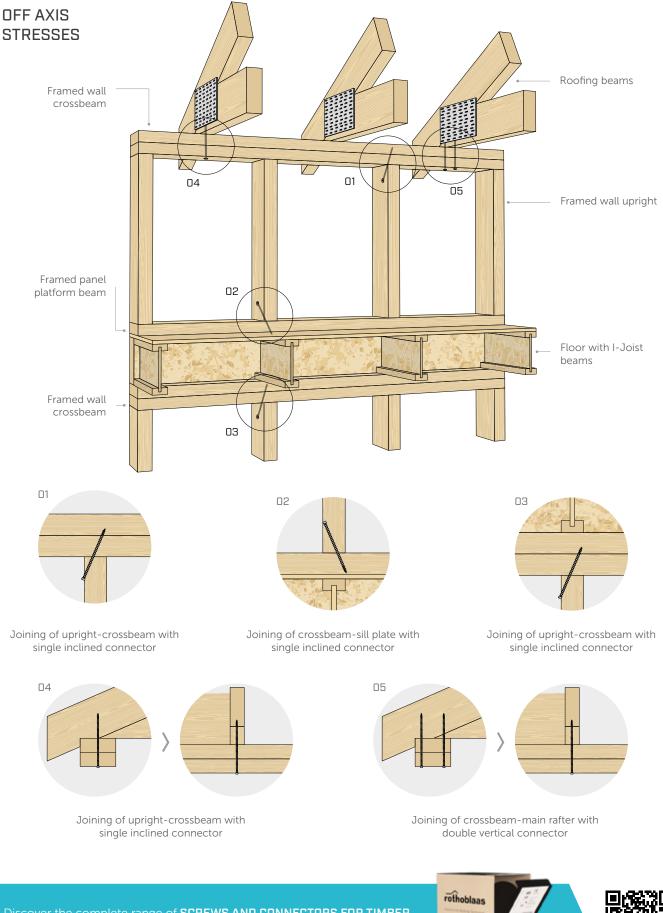
C4 EVO COATING

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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CONTRACTOR OF THE OWNER
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Son y a girls
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Settle Start Start Start
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

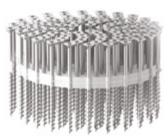






FOCUS	maxi package
HEAD	countersunk with under-head ribs
DIAMETER	5,0 6,0 mm
LENGTH	from 60 to 160 mm





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

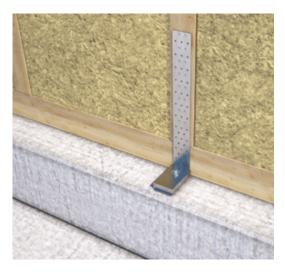
























FOCUS	threaded, annular ring nail
HEAD	flat
DIAMETER	4,0 6,0 mm
LENGTH	from 40 to 100 mm

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

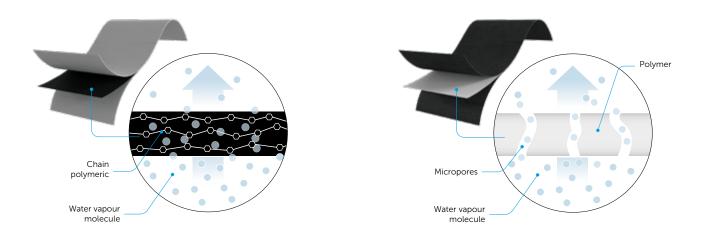
MEMBRANES

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

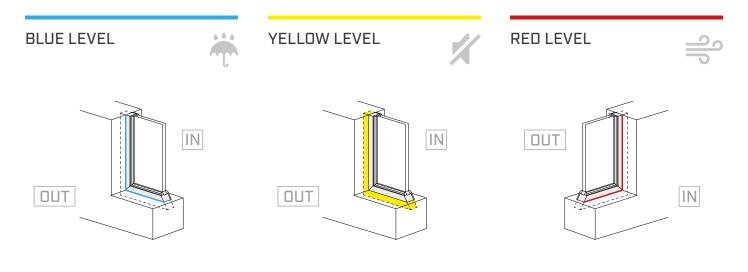
Membrane with functional microporous layer, obtained through mechanical processing during the production. Permeability to water vapour is entrusted to the **CAPILLARY PRINCIPLE:** the water molecule passes through the micropores in the vapour check film, enclosed in one or two protective layers.



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

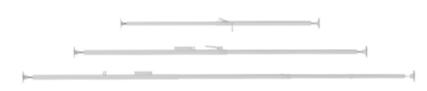


FOCUS	can be used for axial and transversal loads
MATERIAL	very high strength bright zinc plated carbon steel
DIMENSIONS	185 mm
ADVANTAGES	maximum capacity 1300 kg

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

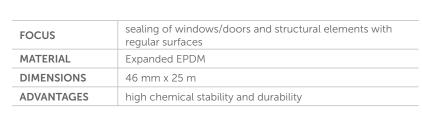
UNIVERSAL SINGLE-SIDED TAPE WITHOUT SEPARATION LAYER

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

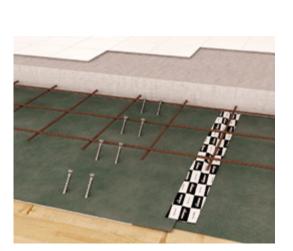
5,0 mm x 1,05 m x 10 m

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

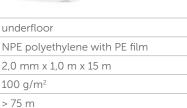
elastoplastomeric bitumen coupled with polyester felt

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

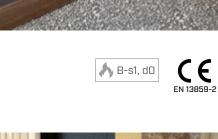
RESISTANT TO UV RAYS

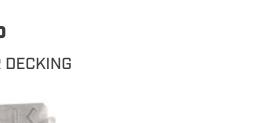
FOCUS permanent UV stability

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

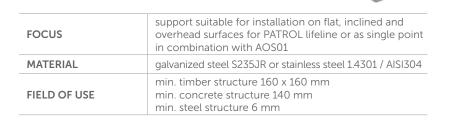
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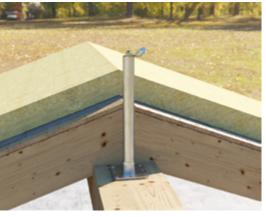
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EN 795:2012 C





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

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Screws for timber | Plates and connectors | Anchors for concrete

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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.





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