

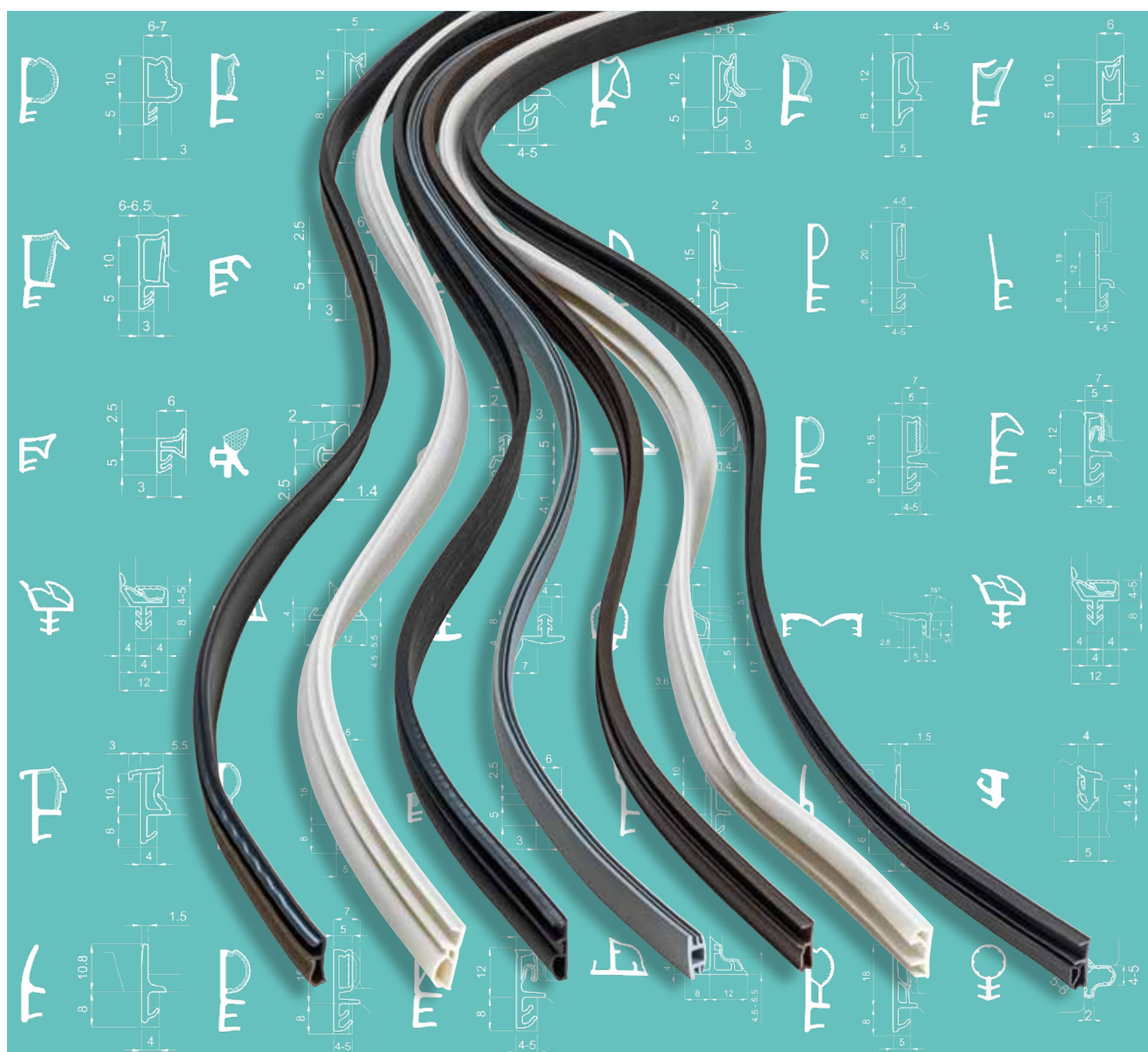


TECHNOLOGY IN MOTION

Stay Tight!

MACO WEATHER SEALS

A SMALL COMPONENT WITH A LARGE EFFECT



maco.eu

Weather seals in a system

Why MACO?

As a global hardware manufacturer with decades of experiences we know the potential problems that poor weather seals can cause your windows and doors. Sometimes a forgotten component but nevertheless an important one in ensuring a high performing window and door. To help, we are able to offer our expertise in this area with a complete range that works in perfect harmony with MACO hardware in your windows and doors. For the perfect interplay of sealing geometries and material properties ensuring the best in high performing manufacturing to suit every groove and pivot point on your window and door sash, we can help.

By working together with our combined expertise and decades of experience in development and knowhow which is supported by our state of the art computer simulation, we know what and where the high demand areas are. Designing and creating the best for fit weather seals that can support your windows and doors.



A MACO Seal is not just a seal

Do weather seals matter if you already have triple glazing, reinforced profiles and multiple locking points? Yes, MACOs Adapta weather seals provide the finishing touches – the perfect final sealing closure.

The differences are in the detail.

LENGTH V-STRUCTURE

increases damping and sealing properties

HARD COATING

with protective function

OPTIMISED HEAD and HEAD LIP for clean installation on the frame profile.

STABLE BUMPER for damped, quiet closing.

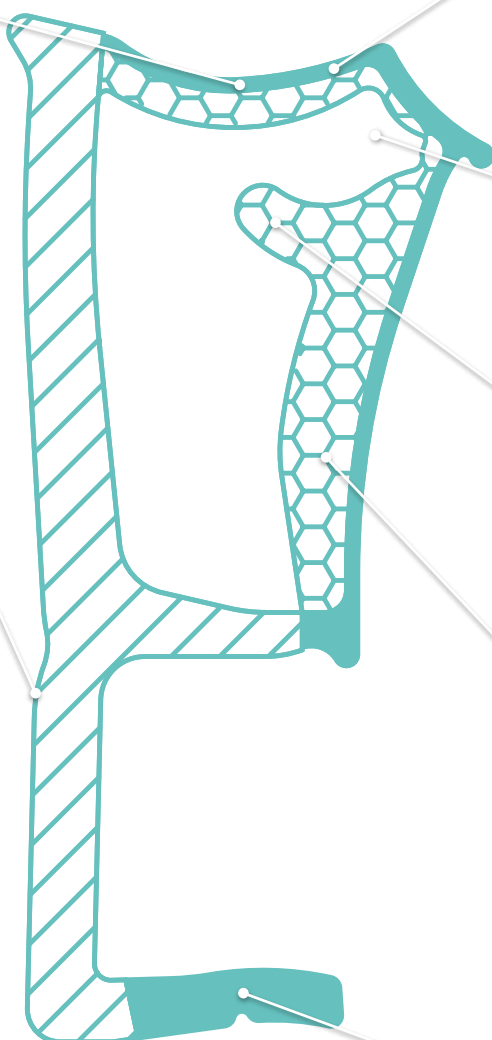
CLOSED CELL MICRO-FOAM for comfortable closing pressure and high tolerance compensation.

HARD SEALING BACKTER

for easy installation. It protects against overstretching during insertion and stabilises the head geometry.

SEAL FOOT

with new universal foot lip for 4 to 5 mm grooves - optimised to simplify insertion into and removal from the groove. Important for the hold of the seal.

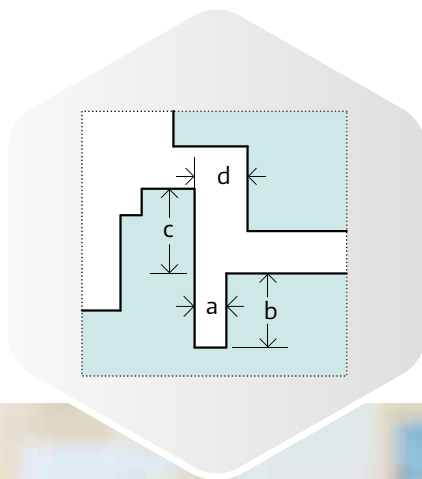


Sealing jungle?

How to find the right weather seal

Determine your use case and we will guide you to the correct weather seal. Support is provided by TOM, MACO's online technical catalogue. It helps you to filter and configure the right product for the right application, from the element to the application area, in the element, via the groove dimensions, the height and rebate gap and also to the materials and colours.

You will always receive up to date product information including article data sheets, both online and offline. This also applies to the overview of open orders, delivery notes and invoices. So that you can find the information you want and need easily all in one place.



Largest variety of materials

At MACO, you have the widest selection of materials for each requirement, each in foamed (TE, EE, SE) or compact version (PC, TC, EC, SC).

Silicone

Silicone is available in all colours and boasts excellent closing pressure values even at unfavourable pivot points in flush-mounted sashes (as opposed to overlay windows), high reset characteristics even in harsh climatic conditions and excellent UV and weather resistance for temperatures up to 200 °C.



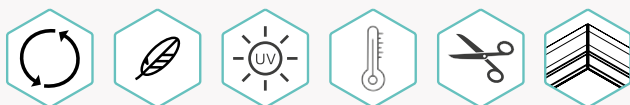
EPDM

With its foamed function range, EPDM offers soft closing pressure for high operating comfort and an excellent reset characteristic. It is well suited at the limit of its temperature range. EPDM is top quality for top windows and is 100% UV resistant in black. Some other colours are possible.



TPE

Due to its thin profile geometry, TPE (Thermoplastic Elastomer) enables maximum soft closing and has a good ability to reset. TPE excels in UV, weather and temperature resistance. In addition, it delights fabricators as it can be welded for corner processing.



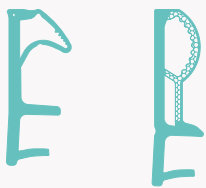
PVC

PVC (Polyvinyl Chloride Thermoplastic) is a useful material when the colour selection is decisive, as it can be extruded in any colour. It is as versatile as it is practical in corner processing, can be welded and can be notched in the corner. It is preferably used in interior doors.



Performance characteristics that make the difference

High operating comfort due to suitable closing pressure, no air permeability and great temperature resistance make all the difference. These aspects along with another vital criteria of a seal is its reset and long-term reset characteristics. These decide how elastic a seal is and how well it returns to its shape, even if windows remain closed for a long time or are exposed to adverse temperatures. Lastly but certainly not least, the handles show how well the seal works as it then rotates more or less easily.



These key figures measure the differences in performance, such as **W34466** the front door seal SC6004a (left), which is better in reset capacity than **W36243** of the front door seal TE3006 (right)

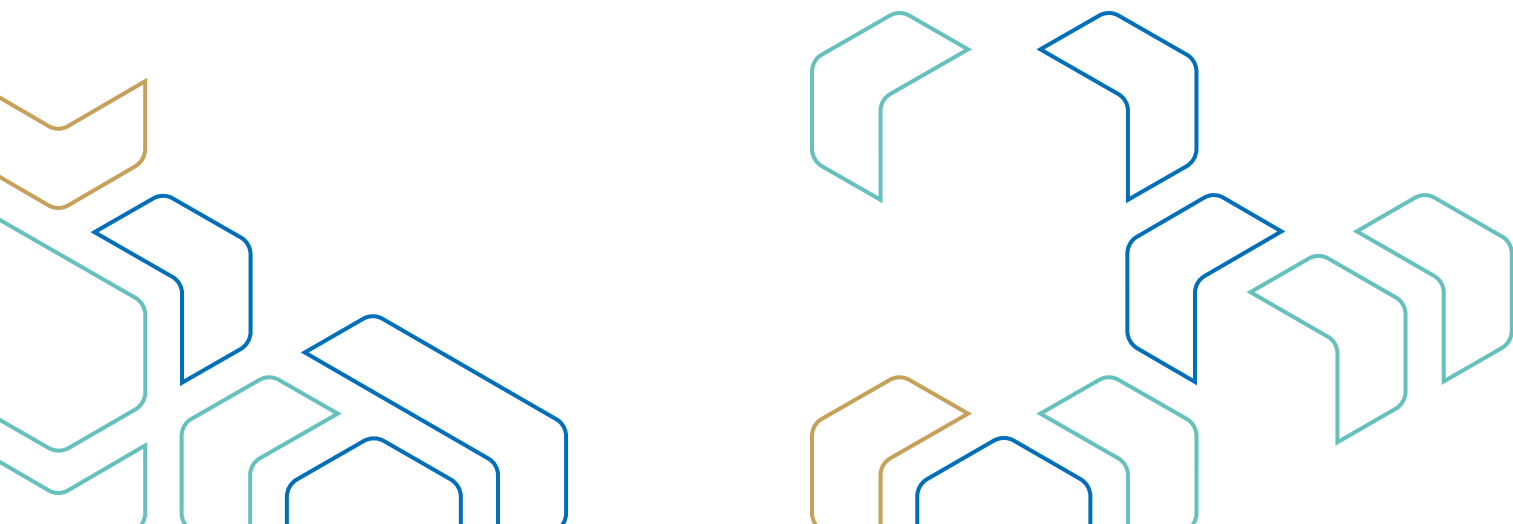
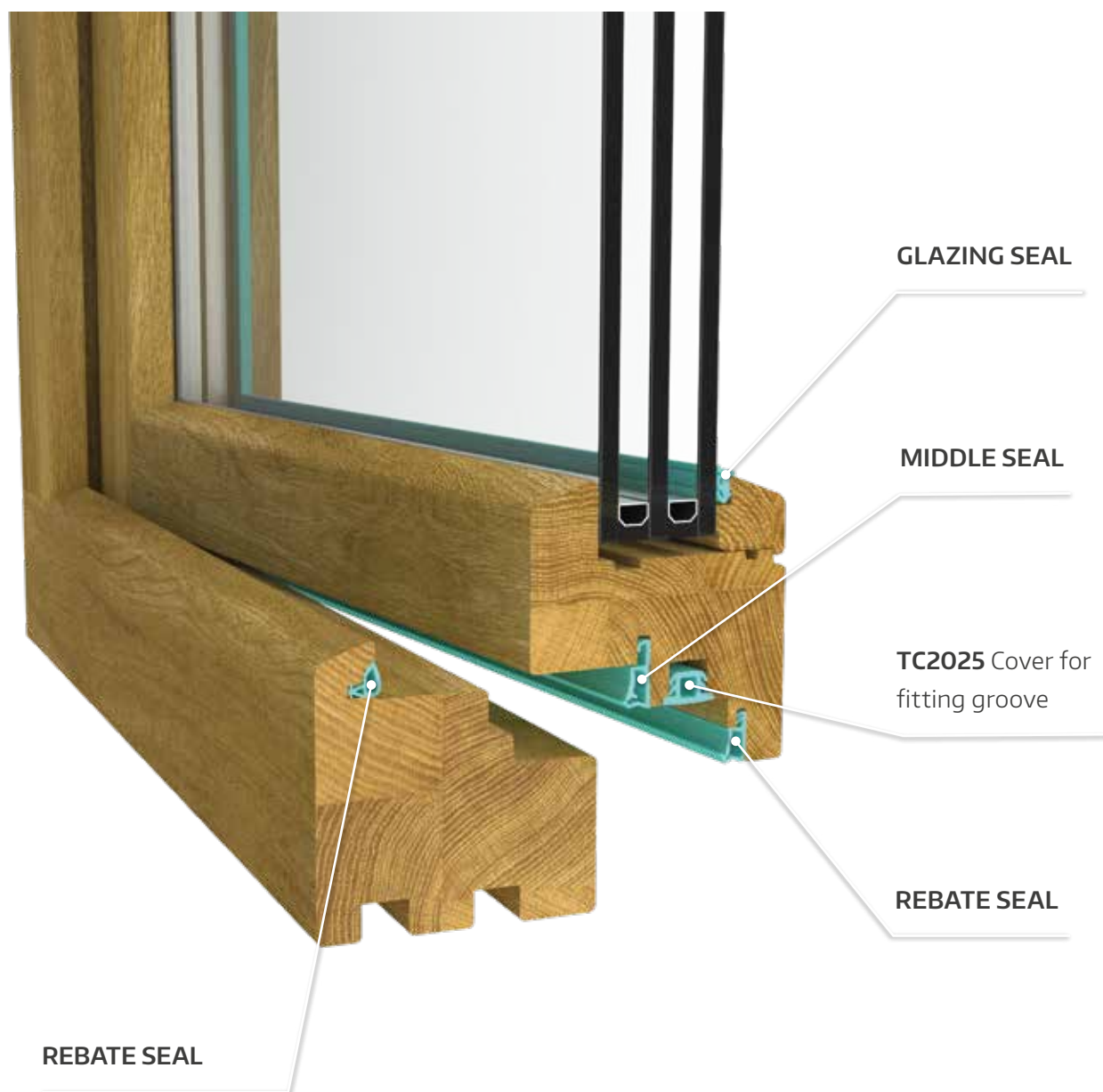
W	3	4	4	6	6
Category	Effective area	Closing pressure	Operating temperature	Reset characteristics	Long-term reset characteristics
Seal type	Difference in mm between the full size of the seal and the size achievable in the effective area	Required force (N/m) for compression in its effective area	Temperature range in which the seal works reliably	Characteristics of a seal in %, according to compression of the sealing geometrics at max. operating temperature and the ability to reset to its original shape at the limits of its effective area	Reset ability of the material according to long-term continuous compression and upper application temperature for simulated aging
W or G	1 – 9	1 – 9	1 – 6	0 – 7	0 – 7

W: stands for "Weather Seals" or dynamic seal for centre or roll-over seal

G: stands for "Gasket" or static seal e.g. glazing seal

Window seals for all timber and timber-alu profiles

The entire portfolio and descriptions can be found in the online Technical Catalogue on maco.eu.

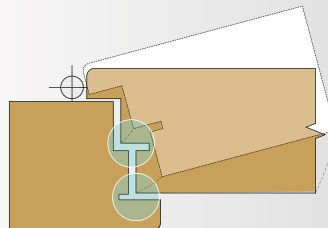


Door seals

Overlay and flush-mounted

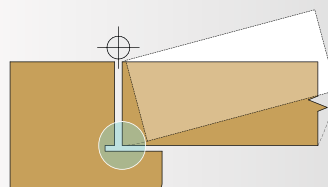
In the case of front door seals, the choice is between a seal for an overlay door sash and a seal for a flush-mounted door sash, where the seal is used much more. Flush-mounted means a greater challenge than an overlay door leaf, because the movement of the seal edge for the sealing geometry is more demanding.

Overlay



Front door seals in overlay door sash

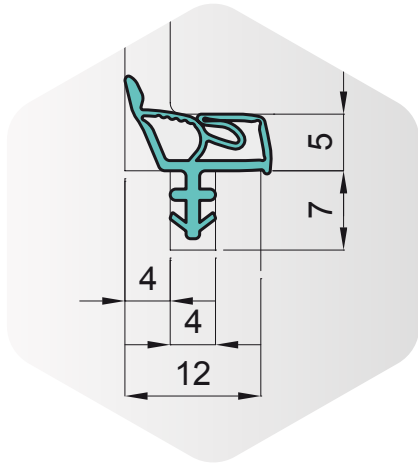
Flush-mounted



Door seals in flush-mounted door sash



Interior door seal with industry-leading sound insulation

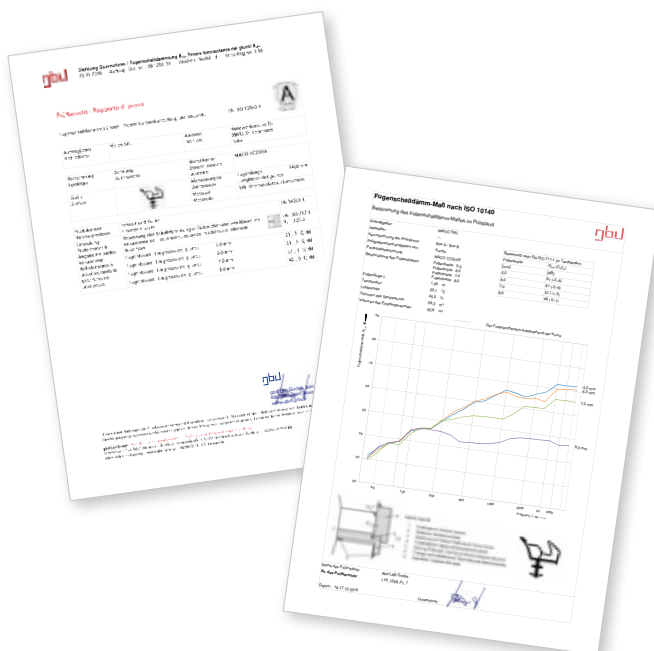


For special requirements
TC2015f



Displayed below

is the test report of the
gbd-Lab, number L19/1298_01
with joint sound insulation of 61
dB according to EN ISO 10140-1
for joint widths of five and six
millimetres.



Timber interior doors, which are
equipped with the TC2015f, achieve the
best sound insulation in the industry.
The low wall thickness allows a
comfortable closing pressure and a high
level of tightness.



Bottom door or drop-down seals

Bottom door sealing examples

Drop-down seals are not only suitable as a cold stop on exterior doors or apartment doors in multi-family houses. They are also useful on kitchen doors in private homes to stop odours or in the home office to stop sounds. And they create accessibility, as due to the lack of rebate, floors can be laid continuously without using thresholds.



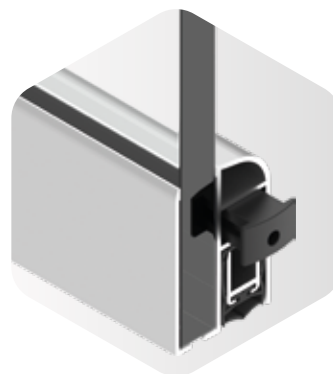
Sound-proofing
54 dB 15 x 30



Self-regulating
12 x 30



Mini 12 x 12



For glass doors



Lift&Slide seals

Seals for sashes and frames

TC2024A

Made connected
for the guide rail



TC2023

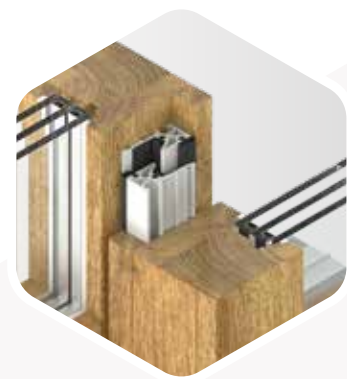
Made connected for
the drive gear side and
threshold



SC6001

connected in the corners

Seal tracks



PVC

with silicone seal
for 28 mm
sash spacing

PVC

with integrated seal for
narrow cross bars



Especially with sliding doors, the quality differences of a seal and its guide track have a huge effect. After all, this perfect duo with its multi-chamber system not only keeps the heat fully where it belongs, but also meets all the requirements for wind and rain tightness. And it contributes significantly to easy and smooth sliding. Closing pressure and noise is drastically reduced minimised.



Many advantages ...



Tight and energy-efficient



Wide range of materials

PVC, TPE, EPDM, Silicone
foamed and compact



High **UV-** and
Weather resistance



Temperature resistance



Durable
powerful thanks to
absolute consistency



Weldable for the
corner processing



Corner processing
with simple angle
cut - whether 45° or 90°
can be linked



Effective **sound insulation** with
industry-leading values



Excellent reset characteristics
tight over many years

And benefits ...



Perfect fit
in the groove



Sample order
over 6 metres for testing
available at any time



**Optimised quantity
packaging**



Online support
configurator, test reports,
certificates, security info and
datasheets available



The **closing pressure** is
perfect, the closing force
remains comfortable



**Wide variety
of colours**

Our Service

Do you know what your window can and must do? Depending on the location, altitude, noise level or environment, this can be very different. We are at your side to ensure that you can provide your customers with the best advice for their specific location, choose appropriate designs, dimensions and components and produce them legally compliant. Benefit from our consulting, testing and licensing service.



Your Success

This small component has a great effect. You will experience this at the latest in the MACO test centre, where you can test your elements for weather resistance - are they rainproof, heat and soundproof?

TBDK testing and burglary prevention? We'll show you what matters. Rely on our expertise and the comprehensive tests that we can carry out. This ensures that you always know what's important and that your elements meet the exact requirements. You will then receive your test certificates from a notified inspection body.

And you don't have to retest every element. We have the largest portfolio of test certificates that you can use in the licensing process and thus produce quickly and cheaply.



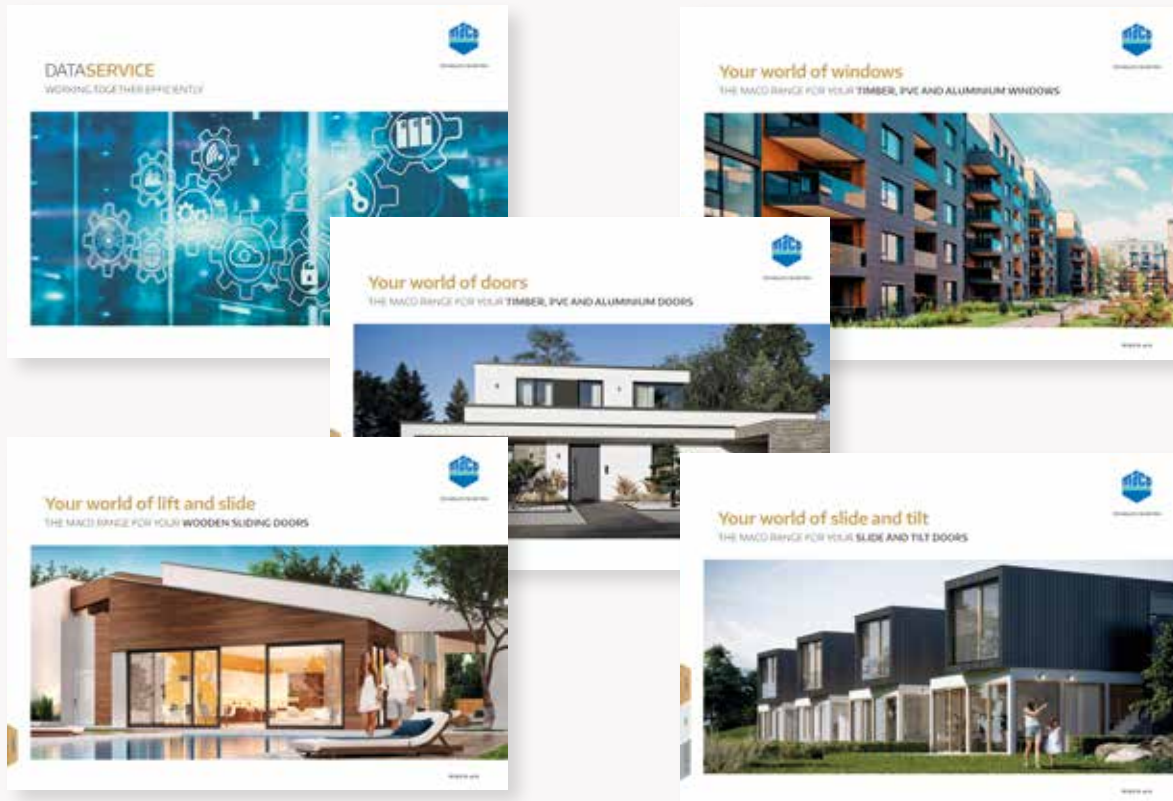
MACO seals are well known for their quality

In black and white, the Komo certification certifies the quality that is important in the Dutch market as a pre-requisite for any project along with participation in tenders.



Would you like everything from a single source?

With us you get complete solutions for your large surfaces, windows and doors – for timber, PVC and aluminium. Experience our versatile systems range with comprehensive service included. Discover more of this on our website www.maco.eu or contact your MACO customer advisor.



MACO near you:
www.maco.eu/contact



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