MADE IN GERMANY

Window sill and patio connections planned to perfection!

Universal thermally insulated window sill and screed connection components

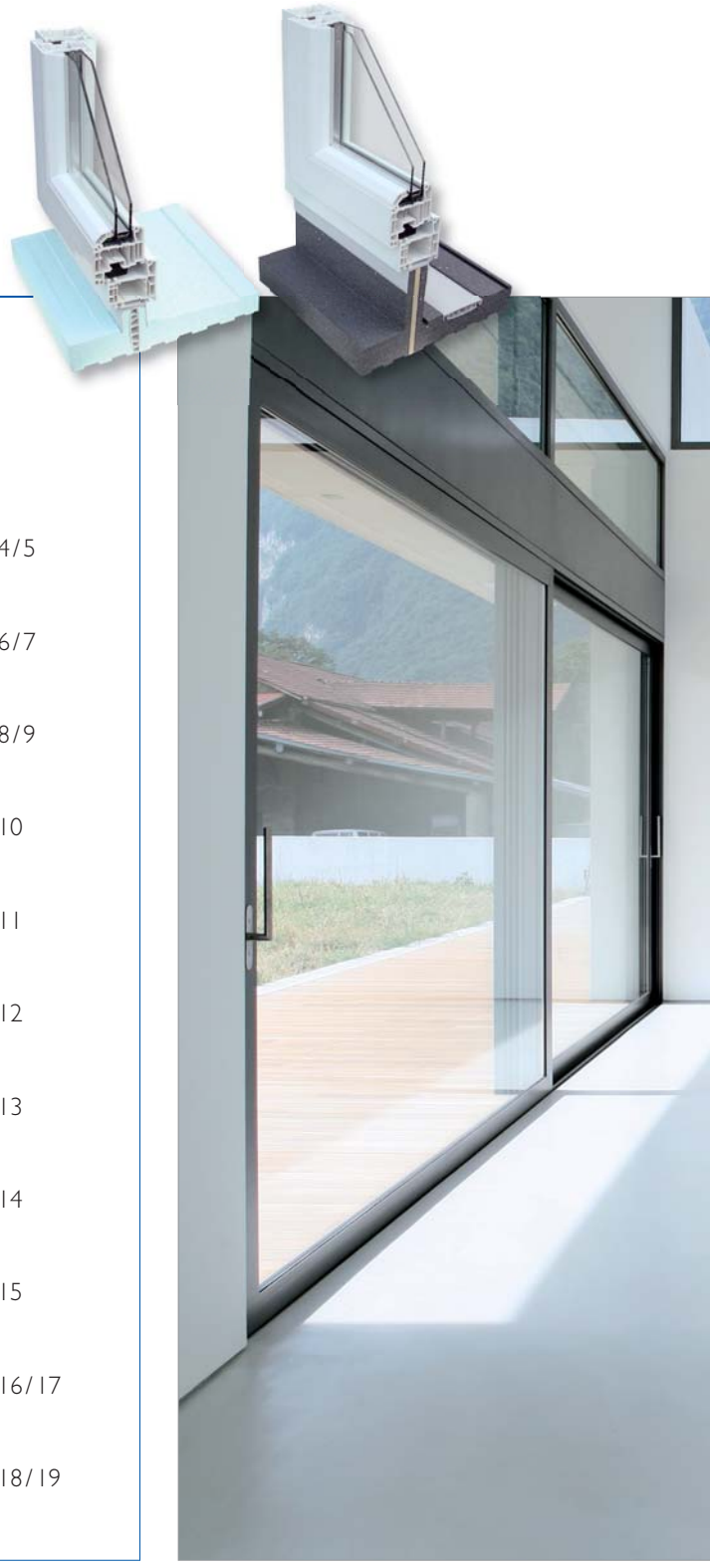
www.beck-heun.de

Beck+Heun
SYSTEME FÜR HAUS UND BAU

Easy, fast and economical

The ideal solution for window sill and screed connections

In the past, there was no optimal method for making reliable window sill and screed connections, so heat losses and leaks were common. The Thermo range of universal window sill and screed connection components from Beck+Heun provides a perfect solution for your building projects and fulfils your every wish for ease of architectural design and installation.



CONTENTS

Connection components for every requirement

For roller shutters, venetian blinds, or windows without shading units

Window sill and screed connection components are available for every conceivable requirement and every wall thickness. We can also supply suitable components for special formats. You can obtain window sill and screed connection components for roller shutter or venetian blind boxes or for window modules without a shading unit. Since the components facilitate easy planning and installation, any previously planned shutter boxes can be effortlessly accommodated.

Window sill connection components

THERMO-FBA-RG
Window sill connection with Beck+Heun shutter box closed on the room side

THERMO-FBA-SHADOW
Window sill connection with Beck+Heun venetian blind box system

THERMO-FBA-UNI
Window sill connection without shading unit

Screed connection components

THERMO-EAE-RG
Screed connection with Beck+Heun shutter box closed on the room side

THERMO-EAE-SHADOW
Screen connection with Beck+Heun venetian blind box

THERMO-EAE-UNI
Screed connection without shading unit

THERMO-EZM
Supplementary screed module

With a patio connection, the convenient supplementary screed module gives you the option of fitting the window to a flush or raised patio construction.


Window sill connection with THERMO-FBA


Screed connection with THERMO-EAE

Eliminating thermal bridges in buildings

with reliable, technically sophisticated Thermo components

Innovative window sill and screed connection components from Beck+Heun are designed to minimise heat losses from thermal bridges and to ensure perfect structural integration and faultless installation. Thanks to many years of continuous product improvements, these contemporary prefabricated building components meet the demands of modern cost-effective construction. In addition to consistently conforming to applicable building physics guidelines, they offer numerous advantages:

Advantages for owners and builders

- A more comfortable living space
- Eliminates draughts and cold areas near the bottom window connection
- Suitable for new construction and renovation
- Compatible with Beck+Heun roller shutter and venetian blind systems
- Complies with stringent energy savings regulations
- Window insulation panel with optimised thermal bridge characteristics for low-energy building construction
- Easy, simple installation
- Compliance with building physics guidelines increases the residential value of the building

Advantages for architects

- Cost-effective solution for new construction and renovation
- Innovative solution with defined window location in the masonry
- Special designs possible
- Architectonic solutions for façade design
- Trouble-free installation in large window walls
- Suitable for all types of masonry
- Tender specification texts available at www.beck-heun.de

Advantages for installers

- Made-to-measure solutions available for all wall thickness
- Proper thermal insulation and sealing of the sill area
- Avoids thermal bridges
- Installation during the shell construction phase is easily possible and eliminates the need for costly subsequent joint insulation
- Suitable for use in new buildings as well as remodelling and renovation work
- Dimensions comply with Beck+Heun roller shutter and venetian blind systems

Material

The components are made from EPS rigid polystyrene foam (WLG 035) or optionally Neopor (WLG 032) and guarantee durability, reliability and stability. The thermal insulation panels are prepared for a patio connection or an aluminium or stone window sill.

Excellent thermal insulation characteristics

EPS rigid polystyrene foam (WLG 035) and Neopor (WLG 032) have excellent thermal insulation characteristics and decouple the interior and exterior environments. In addition to reducing energy costs, they provide soundproofing.

Extensive building component testing

Beck+Heun Thermo components are fully resistant to driving rain. At differential test pressures up to 600 Pa, no water entry through the connection joint was seen in tests for resistance to driving rain.

TEST TYPE	RESULT
Air permeability up to 1000 Pa in new condition	a < 0,1 m^3 / (m h $daPa^{2/3}$)
Resistance to driving rain up to 600 Pa in new condition	No water entry
Simulated short-term load ▪ Temperature cycle load: 10 cycles (+60 °C – 15 °C) ▪ Wind load: pressure/suction 200 cycles up to 1000 Pa	 No detectable changes No detectable changes
Air permeability up to 1000 Pa after short-term load	a < 0,1 m^3 / (m h $daPa^{2/3}$)
Resistance to driving rain up to 600 Pa after short-term load	No water entry
Wind load pressure/suction up to 2000 Pa after short-term load	No permanent deformation
Wind load safety test 3000 Pa after short-term load	No impairments

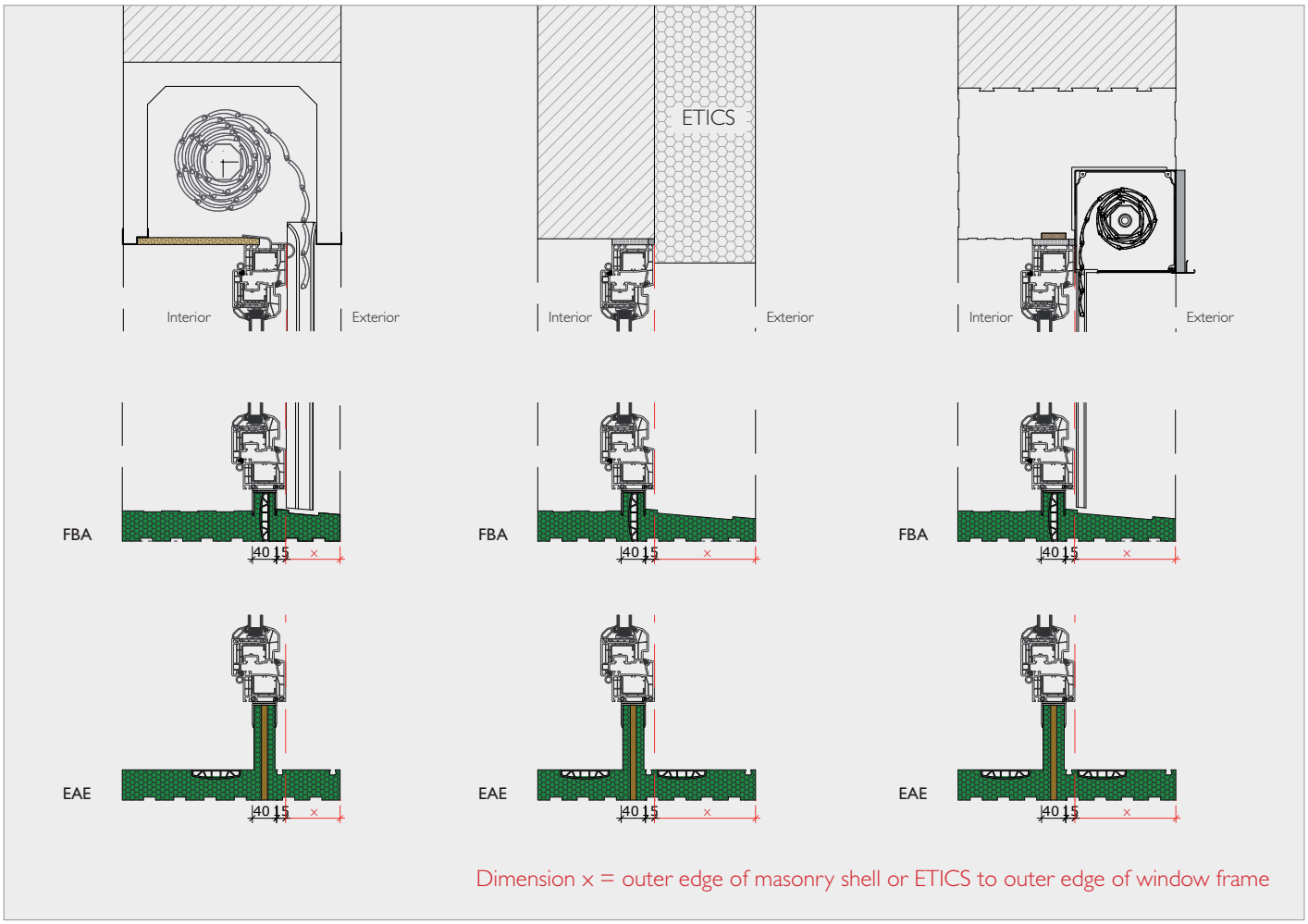
Excerpt from building component test and test report for ROKA-CO_2MPACT:
Test of connection properties and attachment between window, connection components and building structure in new condition and after simulated short-term loads. Tests for airtightness, resistance to driving rain, mechanical loads and connections to the building structure.

Easy design and installation

Suitable for every requirement

Size it up

You can easily define the exact window installation point, with full design flexibility. The decisive factor is always dimension x, which is referenced to the outer edge of the wall structure and therefore defines the outer edge of the window frame.

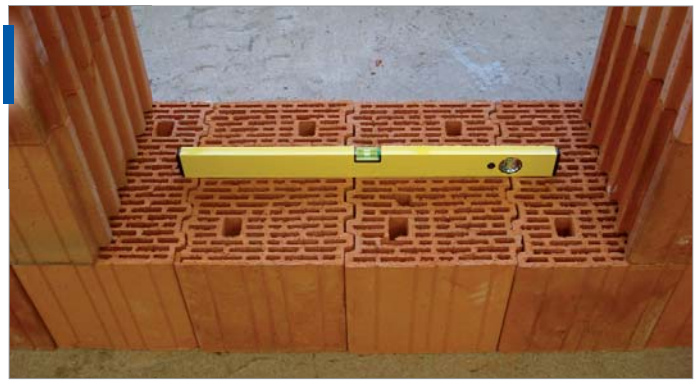


Dimension x = outer edge of masonry shell or ETICS to outer edge of window frame

Installation of Thermo connection components

The connection components can be used in all situations and are suitable for all requirements. The components, all of which can be installed with a minimum of effort, ensure reliability and stability and form a sealed barrier between inside and outside.

1



Check the sill for dimensional accuracy.

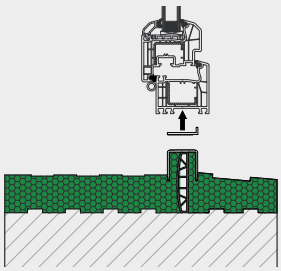
2

Glue the Thermo component in place and align it

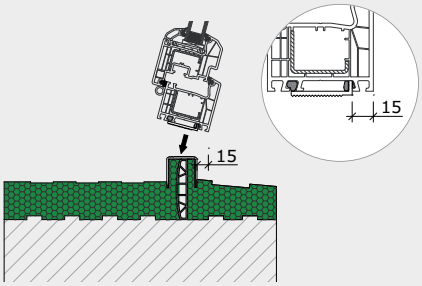
3

Set the window frame with attached L profile and caulk in place

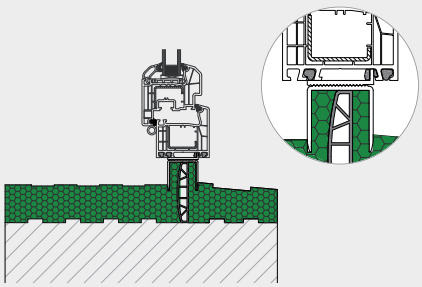
Window installation



Glue the L profile to the window profile (L profile height and width matched to window profile)



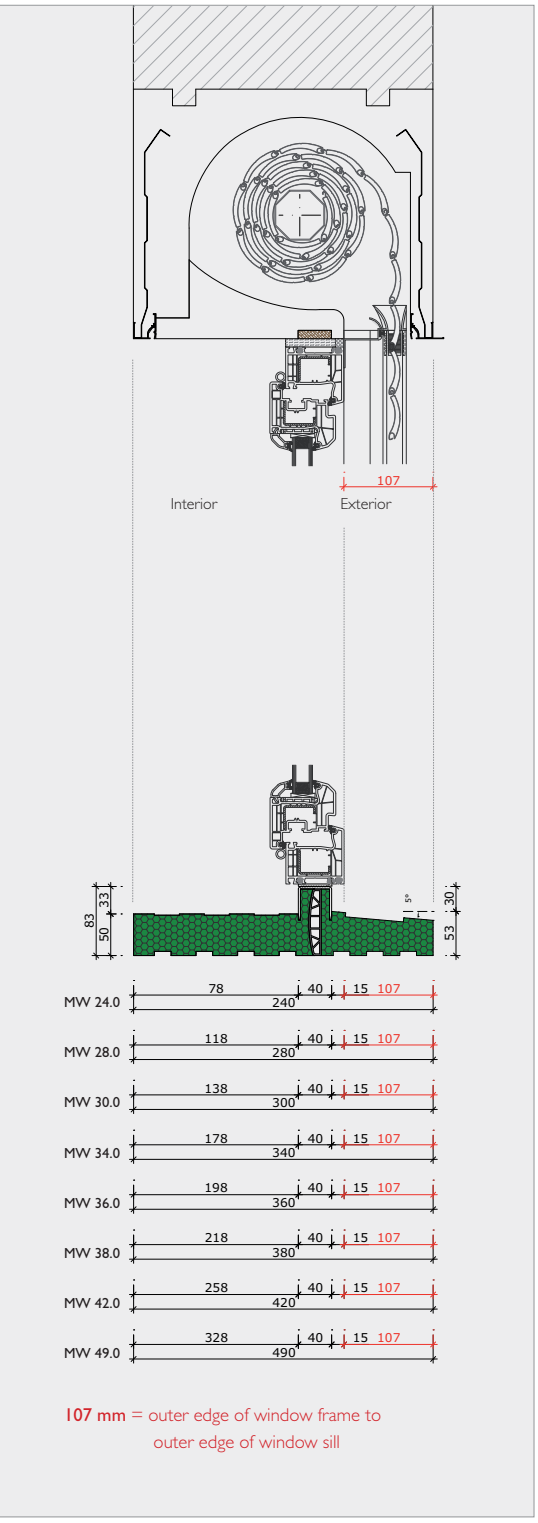
Glue the L profile to the U profile (15 mm from outer edge) and caulk the connection between the L profile and the window frame (Beck+Heun Cosmoplast MS 46 adhesive, coverage: 1 tube per approx. 1.50 m)



Caulk the bottom and sides of the window frame 40 mm (Beck+Heun Cosmoplast MS 46 adhesive)

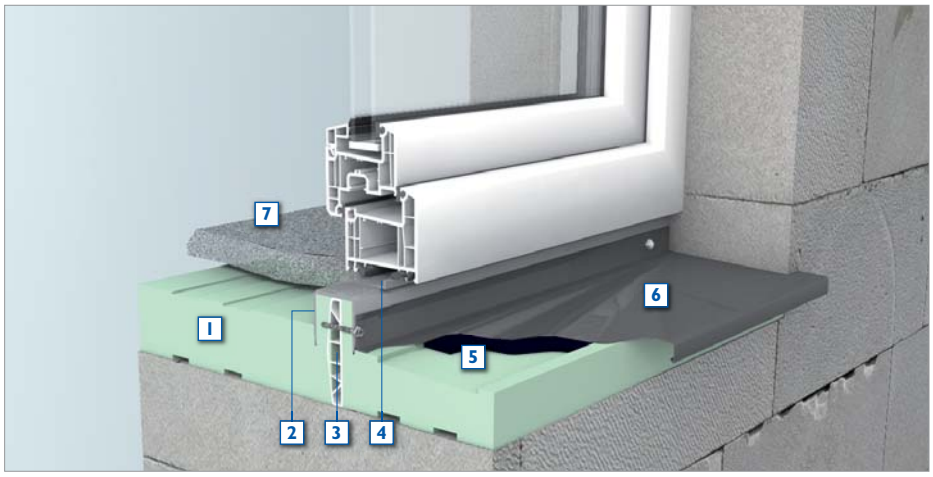
THERMO-FBA-RG

Window sill connection with shutter box



107 mm = outer edge of window frame to outer edge of window sill

Components for non-standard wall dimensions available on request



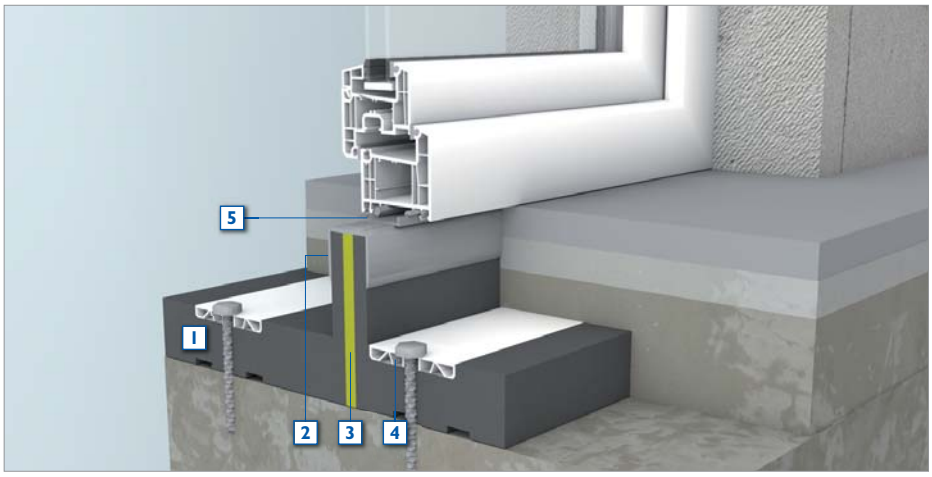
1 THERMO-FBA-RG window sill connection component
2 Window unit support profile
3 Structural profile for vertical load transfer and screw fastening of window sill
4 L profile for gluing to window profile
5 Recess for sound-deadening strip
6 Aluminium or stone window sill, thickness 30 mm max., 5° slope
7 Interior window sill, thickness 30 mm max.

EPS rigid polystyrene foam (WLG 035) or Neopor (WLG 032) thermal insulation panel, prepared for an aluminium or stone external window sill and an interior window sill to be fitted below the window casing

- Interior insulation thickness 50 mm, exterior insulation thickness 53 mm with 5° slope
- Height below window frame 33 mm interior, 30 mm exterior
- Exterior window setback 107 mm (outer edge of window frame)
- Window frame projection at exterior window sill connection 15 mm
- Window frame projection at interior window sill connection 5 mm (60 mm window frame), 15 mm (70 mm window frame), or 25 mm (80 mm window frame)
- Window sill thickness interior and exterior 30 mm max.
- 3 mm recess for soundproofing foil and glue

THERMO-EAE-RG

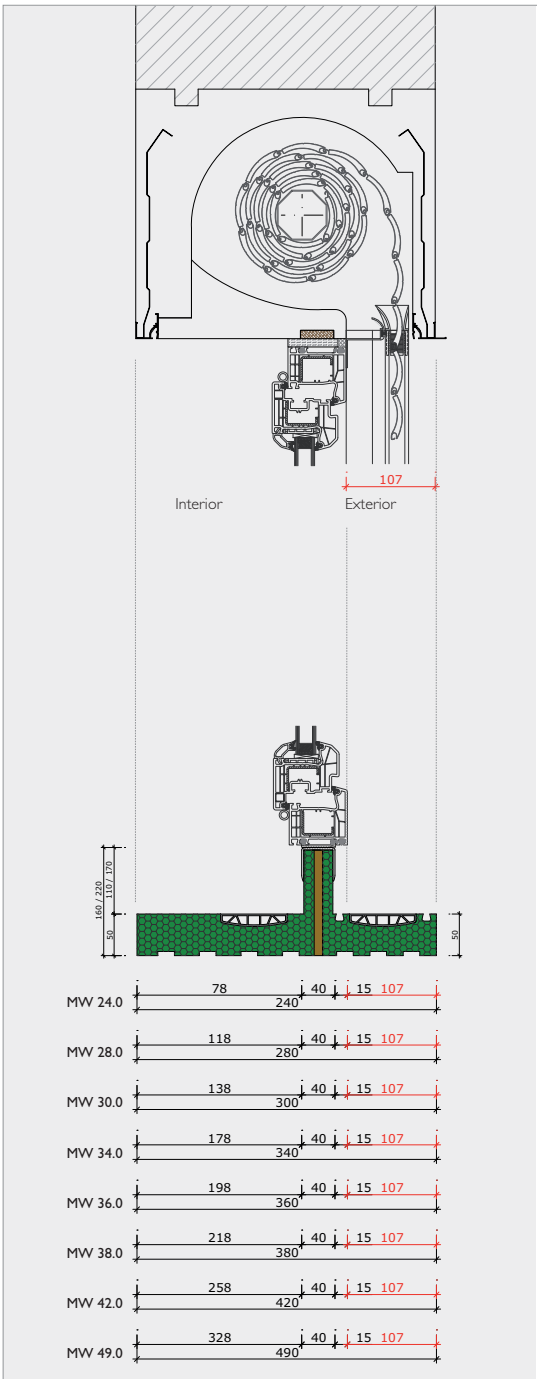
Screed connection with shutter box



1 THERMO-EAE-RG screed connection component
2 Window unit support profile
3 Structural profile for load transfer
4 Structural profile to receive horizontal load
5 L profile for gluing to window profile

EPS rigid polystyrene foam (WLG 035) or Neopor (WLG 032) thermal insulation panel, prepared for lower window connection in the screed region. Can optionally be used for a patio connection or for a supplementary module for an aluminium or stone window sill.

- Interior and exterior insulation thickness 50 mm
- Height below window frame 110 mm withheight 160 mm or 170 mm with height 220 mm
- Exterior window setback 107 mm (outer edge of window frame)
- Window frame projection at external window sill connection 15 mm or patio covering connection 15 mm
- Window frame projection at interior floor covering connection 5 mm (60 mm window frame), 15 mm (70 mm window frame), or 25 mm (80 mm window frame)
- Textured steel reinforcing frame (35 mm) at height of 180 mm or more
- Optional supplementary module available for exterior window sill
- Supplementary module factory fitted or fitted on site
- Screed insulation strips and fixingmaterial to be provided by customer

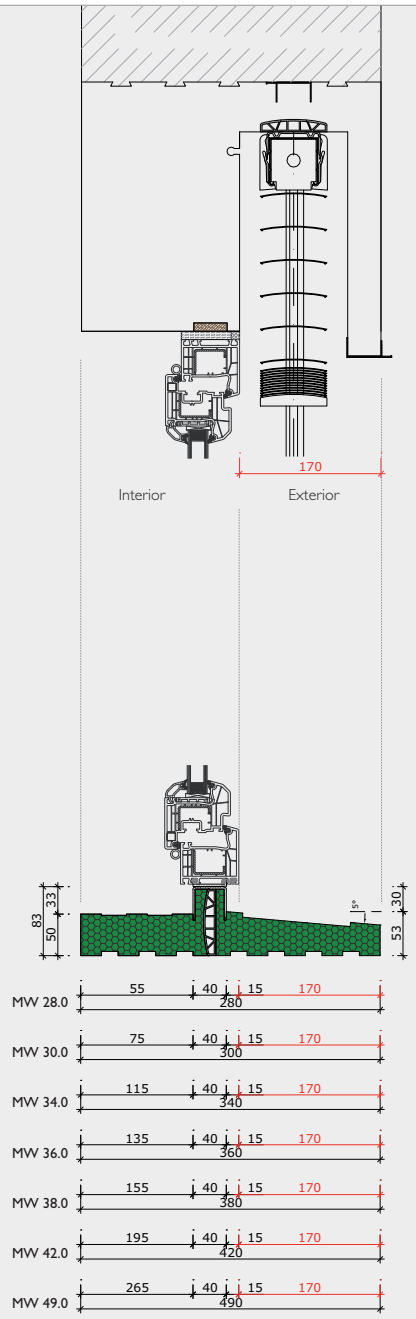


107 mm = outer edge of window frame to outer edge of window sill

Components for non-standard wall dimensions available on request

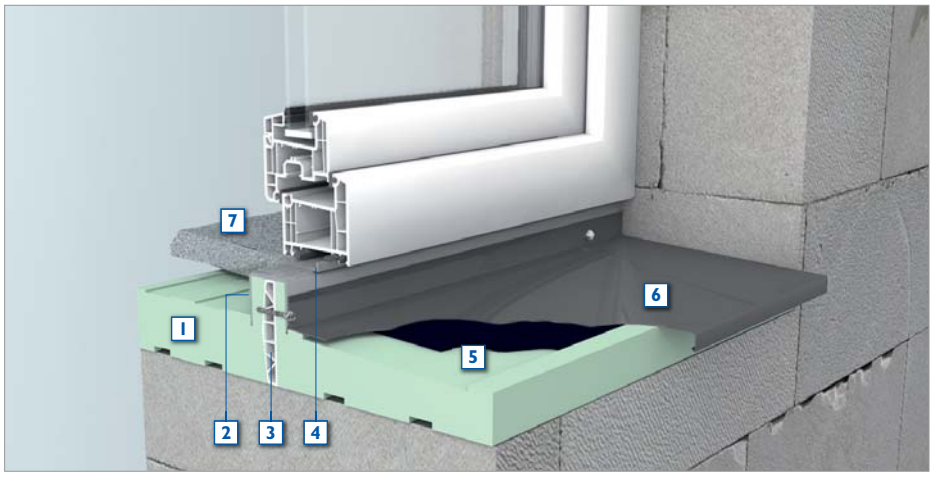
THERMO-FBA-SHADOW

Window sill connection with venetian blind box



170 mm = outer edge of window frame to outer edge of window sill

Components for non-standard wall dimensions available on request



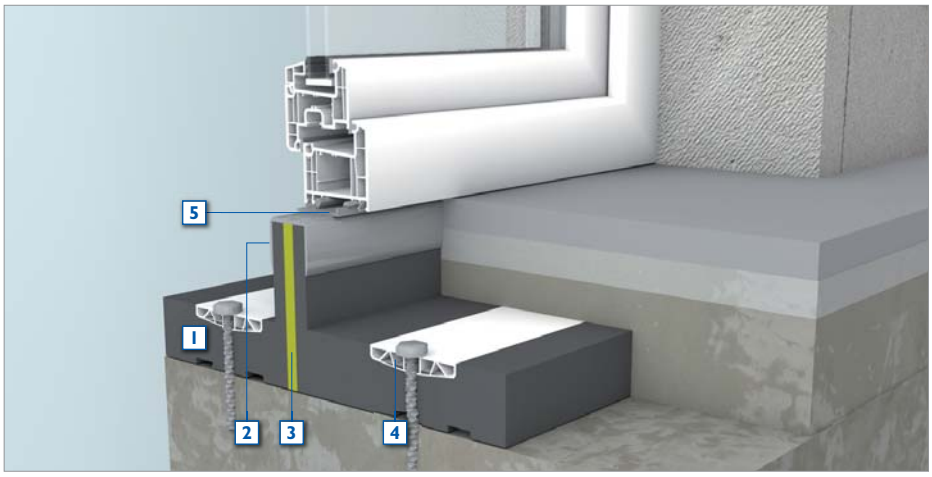
1 THERMO-FBA-SHADOW window sill connection component
2 Window unit support profile
3 Structural profile for vertical load transfer and screw fastening of window sill
4 L profile for gluing to window profile
5 Recess for sound-deadening strip
6 Aluminium or stone window sill, thickness 30 mm max., 5° slope
7 Interior window sill, thickness 30 mm max.

EPS rigid polystyrene foam (WLG 035) or Neopor (WLG 032) thermal insulation panel, prepared for an aluminium or stone external window sill and an interior window sill to be fitted below the window casing

- Interior insulation thickness 50 mm, exterior insulation thickness 53 mm with 5° slope
- Height below window frame 33 mm interior, 30 mm exterior
- Exterior window setback 170 mm (outer edge of window frame)
- Window frame projection at exterior window sill connection 15 mm
- Window frame projection at interior window sill connection 5 mm (60 mm window frame), 15 mm (70 mm window frame), or 25 mm (80 mm window frame)
- Window sill thickness interior and exterior 30 mm max.
- 3 mm recess for soundproofing foil and glue

THERMO-EAE-SHADOW

Screed connection with venetian blind box



1 THERMO-EAE-SHADOW screed connection component
2 Window unit support profile
3 Structural profile for load transfer
4 Structural profile to receive horizontal load
5 L profile for gluing to window profile

EPS rigid polystyrene foam (WLG 035) or Neopor (WLG 032) thermal insulation panel, prepared for lower window connection in the screed region. Can optionally be used for a patio connection or for a supplementary module for an aluminium or stone window sill.

- Interior and exterior insulation thickness 50 mm
- Height below window frame 110 mm with height 160 mm or 170 mm with height 220 mm
- Exterior window setback 170 mm (outer edge of window frame)
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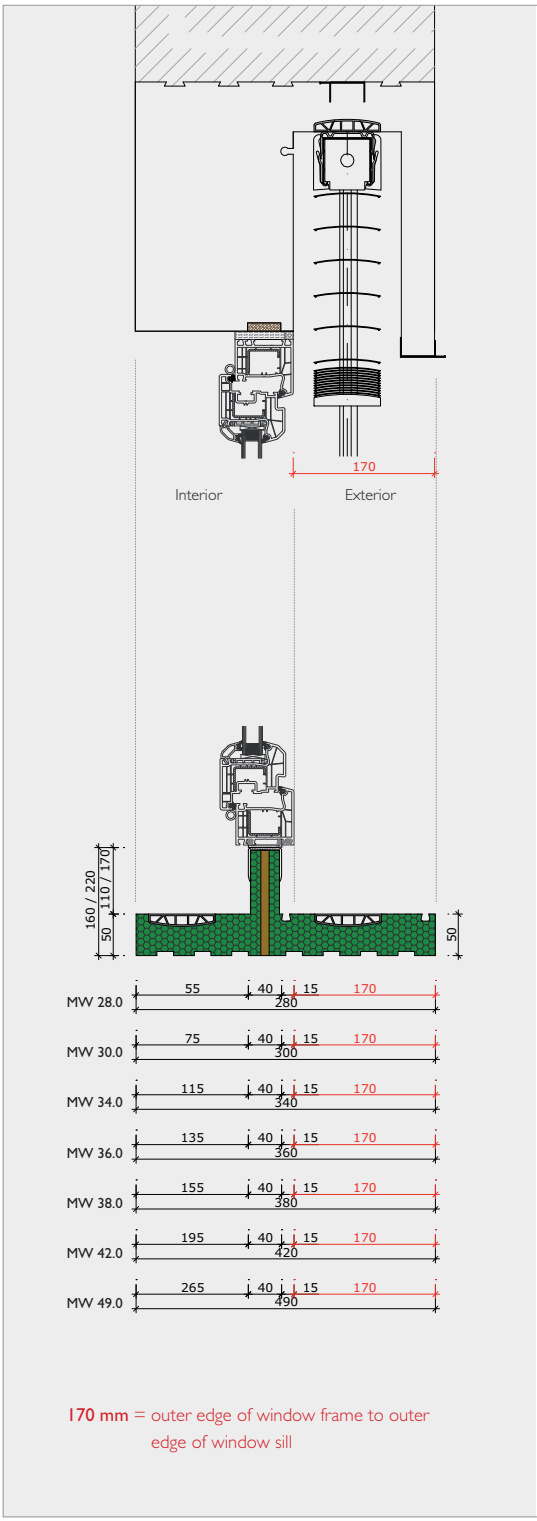
- Window frame projection at interior floor covering connection 5 mm (60 mm window frame), 15 mm (70 mm window frame), or 25 mm (80 mm window frame)
- Textured steel reinforcing frame (35 mm) at height of 180 mm or more
- Optional supplementary module available for exterior window sill
- Supplementary module factory fitted or fitted on site
- Screed insulation strips and fixingmaterial to be provided by customer

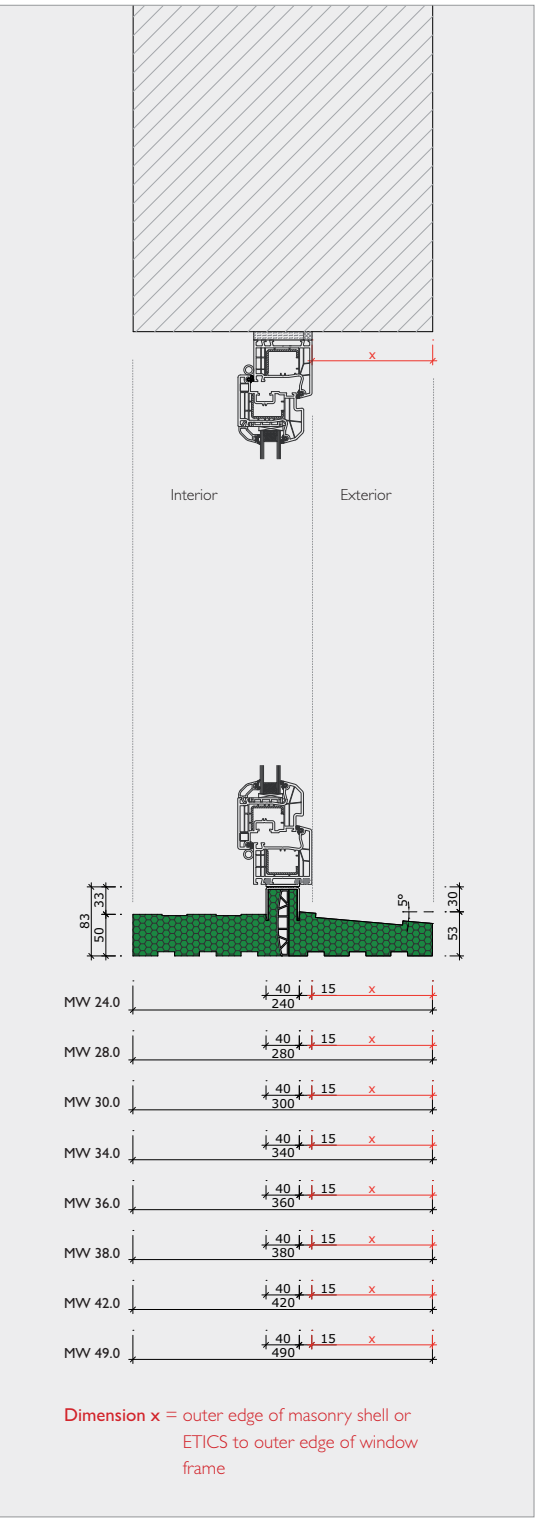


170 mm = outer edge of window frame to outer edge of window sill

Components for non-standard wall dimensions available on request

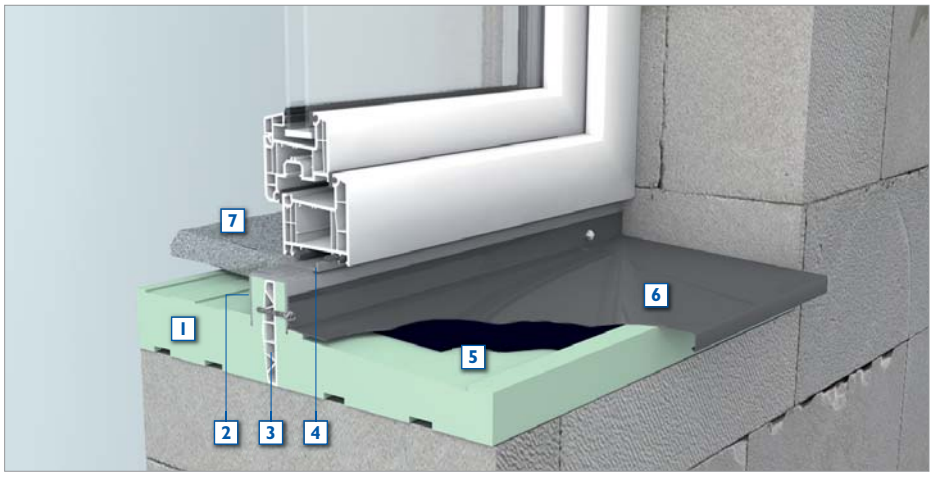
THERMO-FBA-UNI

Window sill connection without shading unit



Dimension x = outer edge of masonry shell or ETICS to outer edge of window frame

Components for non-standard wall dimensions available on request



1 THERMO-FBA-UNI window sill connection component
2 Window unit support profile
3 Structural profile for vertical load transfer and screw fastening of window sill
4 L profile for gluing to window profile
5 Recess for sound-deadening strip
6 Aluminium or stone window sill, thickness 30 mm max., 5° slope
7 Interior window sill, thickness 30 mm max.

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- Interior insulation thickness 50 mm, exterior insulation thickness 53 mm with 5° slope
- Height below window frame 33 mm interior, 30 mm exterior
- Window setback (x) to outer edge of window frame (projection 15 mm)
- Window frame projection at exterior window sill connection 15 mm
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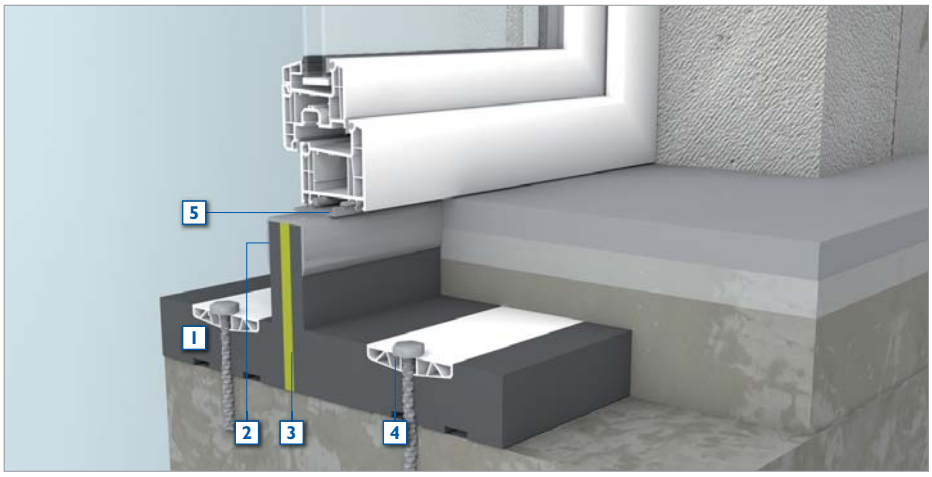
- Window sill thickness interior and exterior 30 mm max.
- 3 mm recess for soundproofing foil and glue

THERMO-EAE-UNI

Screed connection without shading unit



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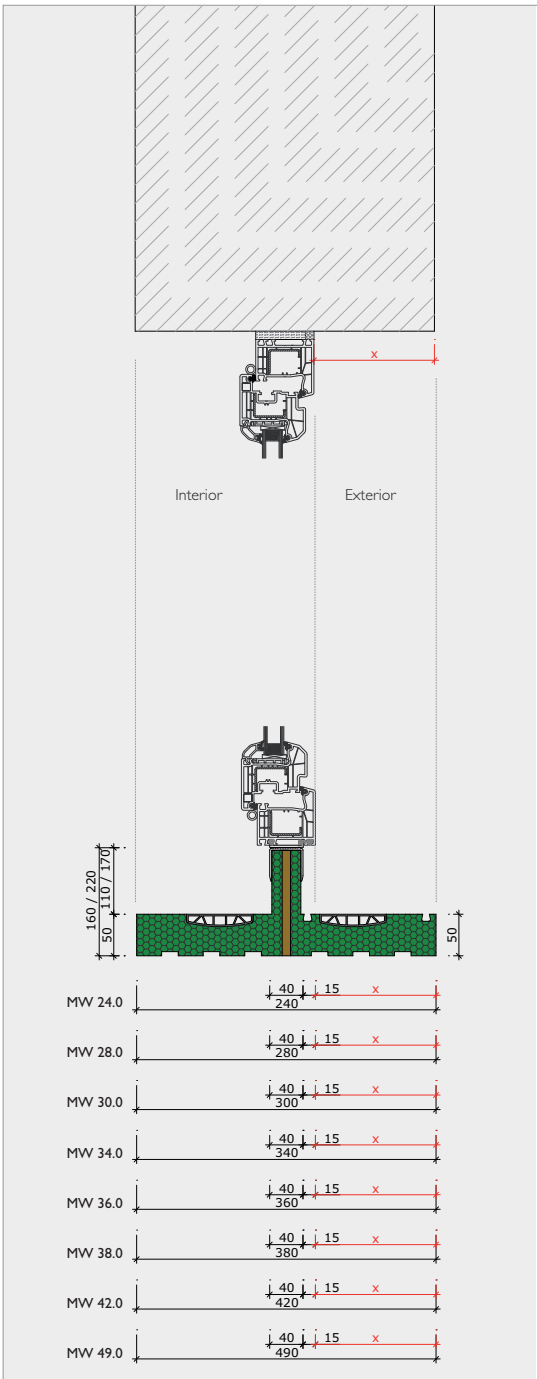
- Screed insulation strips and fixingmaterial to be provided by customer



Dimension x = outer edge of masonry shell or ETICS to outer edge of window frame

Components for non-standard wall dimensions available on request

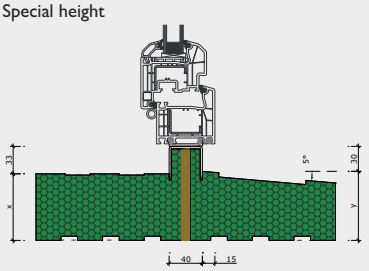
Special connection options

The right connection component for every application

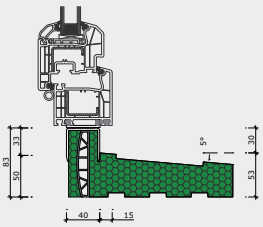
Special solutions for window sill connections

Round bays and corner profiles (inside and outside) available on request

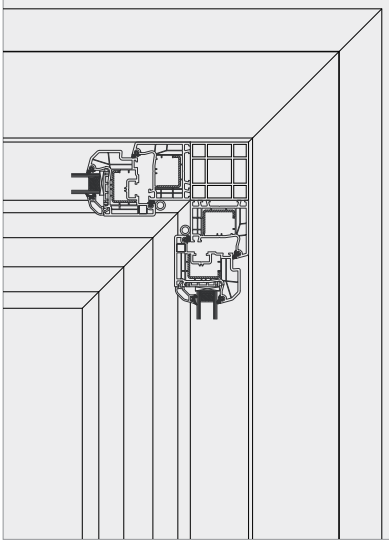
Special height



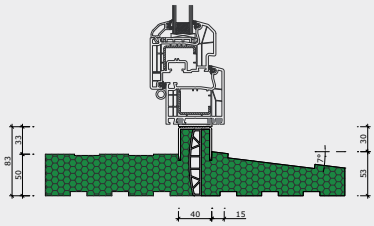
Exterior window sill connection only



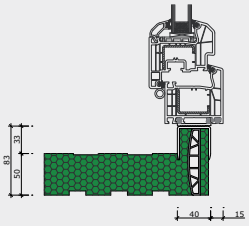
Outside corner reinforcement



Slope >5° or <5°



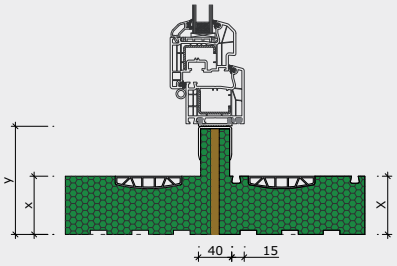
Interior window sill connection only



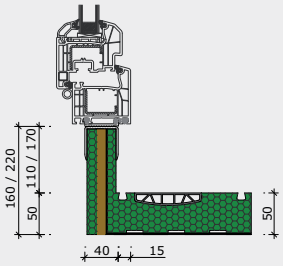
Components for non-standard wall dimensions available on request

Special solutions for screed connection

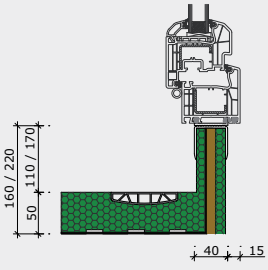
Special height



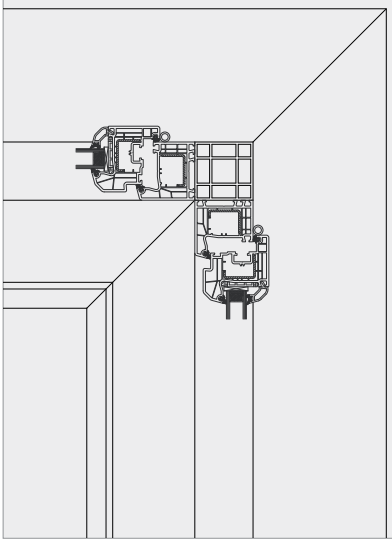
Exterior screed connection only



Interior screed connection only



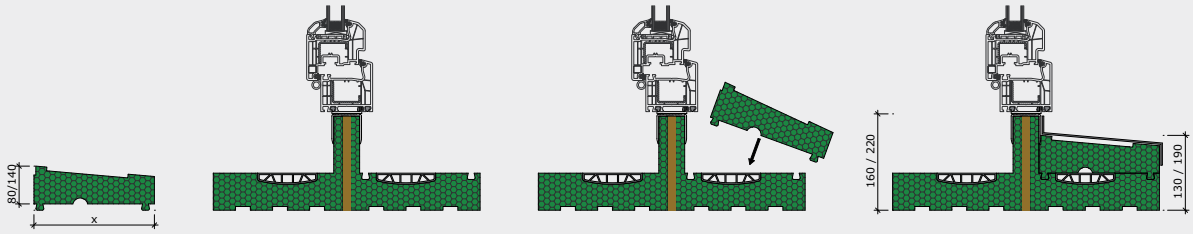
Outside corner reinforcement



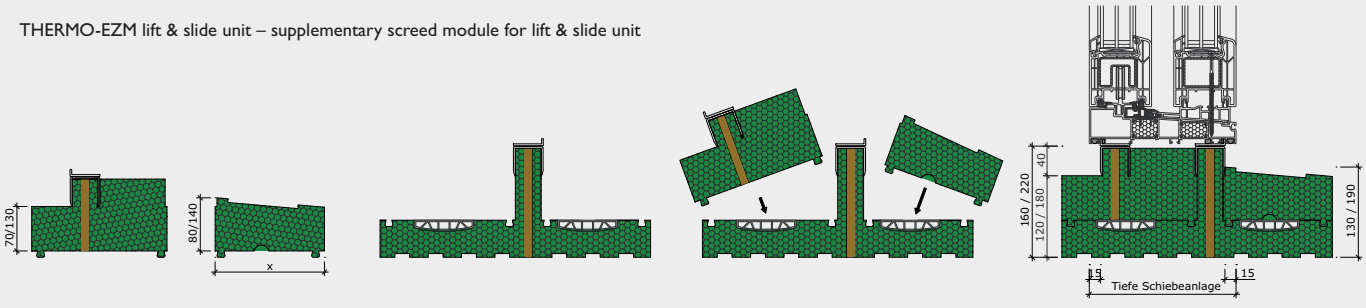
Components for non-standard wall dimensions available on request

Special solutions with supplementary modules

THERMO-EZM window sill – supplementary screed module for window sill



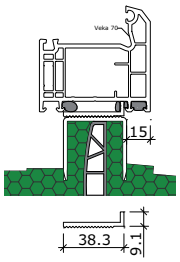
THERMO-EZM lift & slide unit – supplementary screed module for lift & slide unit



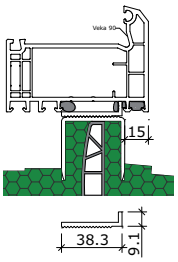
Suitable for all types of window profile

Versatile window sill and screed connection components

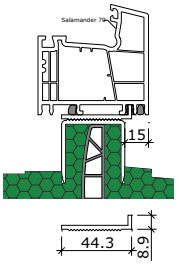
VEKA - 70



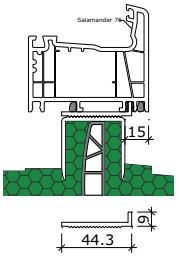
VEKA - 90



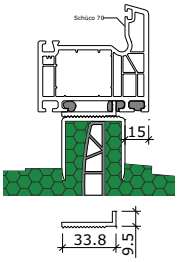
SALAMANDER 70



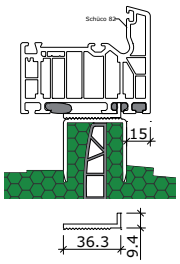
SALAMANDER 76



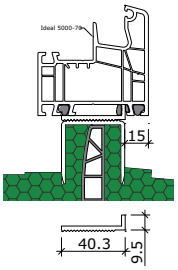
SCHÜCO 70



SCHÜCO 82



IDEAL 5000-70



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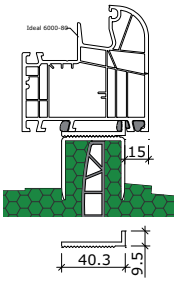

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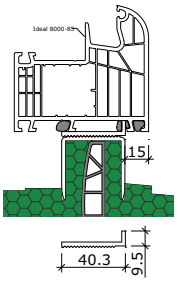
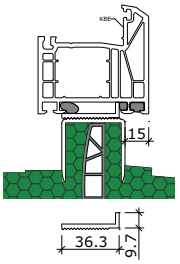
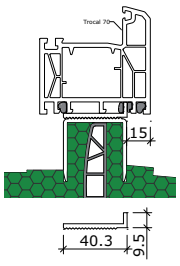


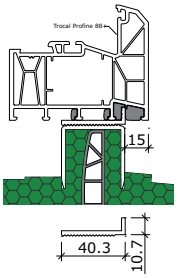
KBE 370



TROCAL 70



TROCAL PROFINE 88+



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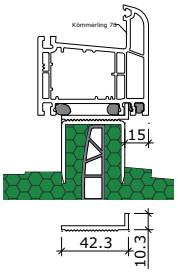
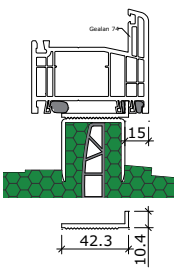


GEALAN 74



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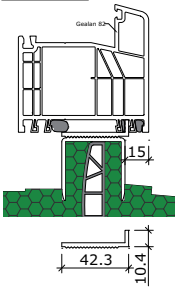

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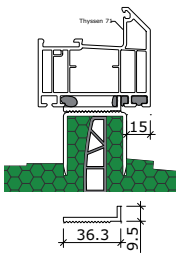

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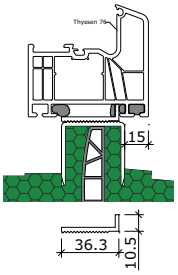
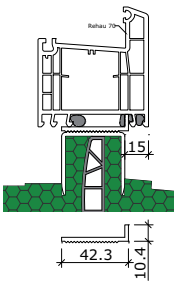
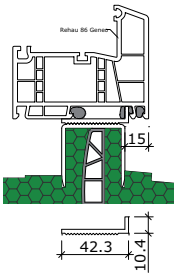


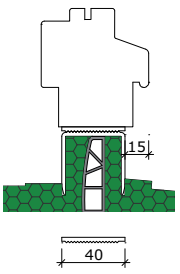
REHAU 70



REHAU 86 GENEO



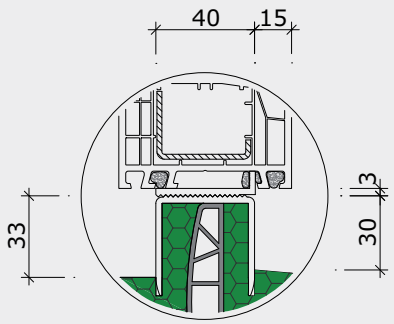
HOLZFENSTER



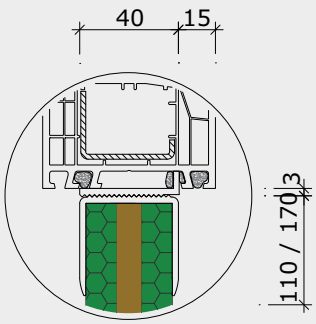
The height, width and length of the L profile are individually matched to each window profile.

Window frame caulking

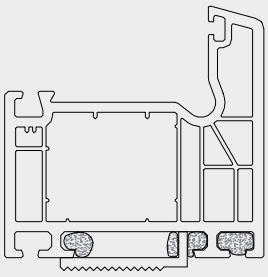
Resistance to driving rain is assured by gluing the L profile to the toothed U profile and caulking along the sides of the outer window frame recess.



Window sill connection



Screed connection



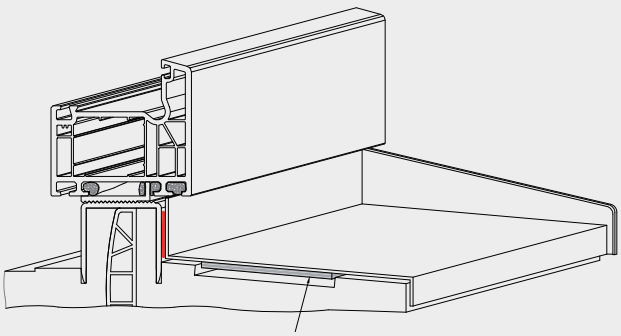
Window frame caulking on bottom and sides

Window sill caulking

The standard 15 mm window frame projection allows either aluminium or stone window sills to be used.

Aluminium window sill

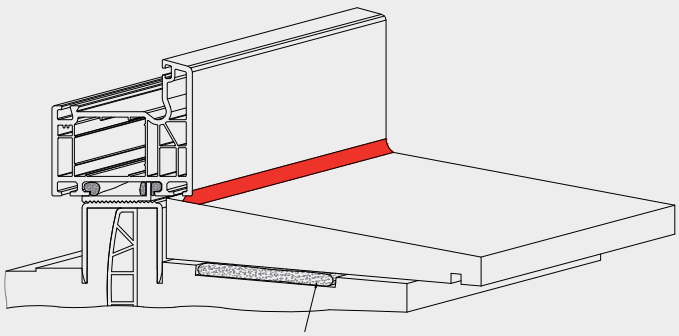
Exterior window frame caulking



Recess for sound-deadening strip

Stone window sill

Connection caulking, window with exterior stone window sill



Recess for adhesive

Beck+Heun
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