Processing notes
Winflex®
Sealing tapes for window connecting joints

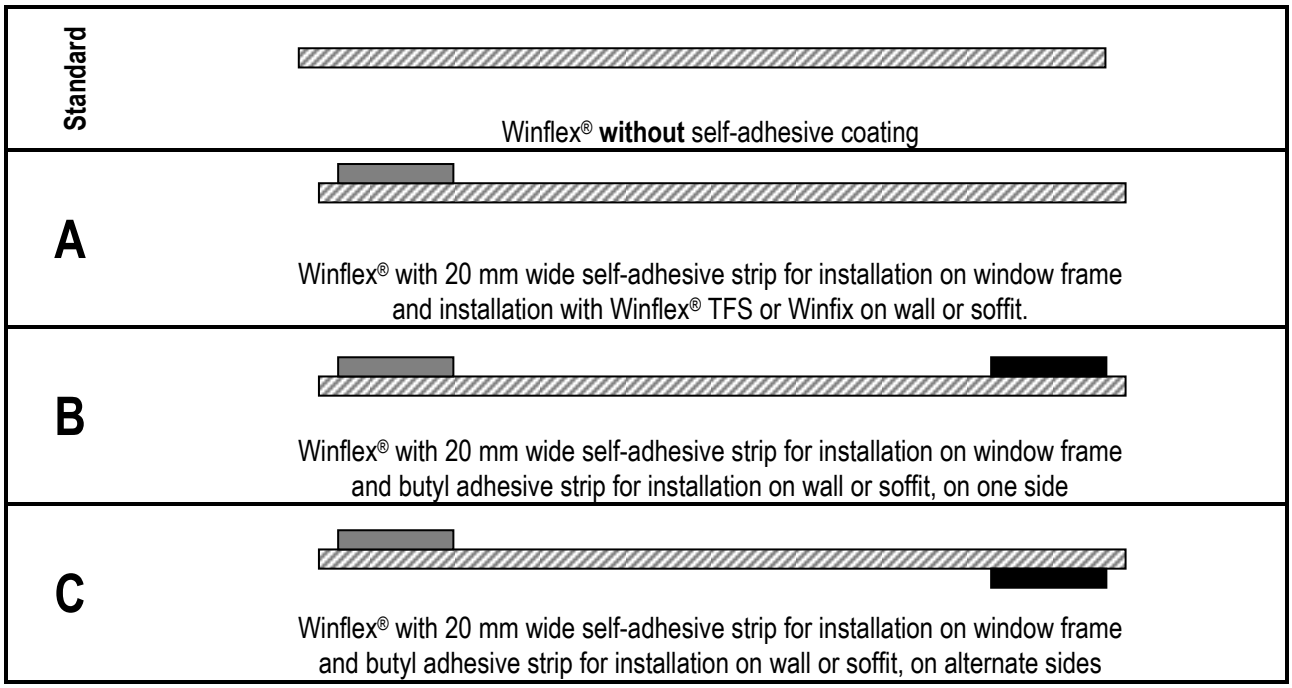
Our joint sealing tapes Winflex® are a system of high-quality sealing tapes for fast and reliable sealing of connection joints on windows and outer doors according to the valid and legally binding EnEV, the DIN 4108 – 7 as well as recommendations of the guidelines of the German RAL quality assurance association for windows and doors.
The combination of Winflex® inside and Winflex® outside ensures a correct building physical gradient of the sd-value of > 10 / 1 inside / outside, without permitting moisture penetration from the outside of the joint.

For the **exterior brickwork connection:**	for the **interior brickwork connection:**
Winflex® exterior (white = vapour permeable)	Winflex® interior (red = vapour-proof)

Winflex® interior and Winflex® exterior consist of a both-sided tape covered with non-woven material and are ductile in the cross direction due to their special build-up, which enables them to ideally accommodate building movements. Lasting sealing of connecting joints is ensured by this specific flexibility. Winflex® interior and Winflex® exterior may be plastered or painted on to. The reveal connection can alternatively be carried out lastingly and reliably with a self-adhesive strip of butyl rubber adhesive or with our pasty, white adhesives Winflex® TFS or Winfix from the tubular bag, so that reveal unevenness can be reliably compensated and lastingly sealed.

Winflex® interior and Winflex® exterior are available in the following versions:

Versions:



Tab. 1: Different Winflex® version
When using versions with butyl rubber adhesive strip, an additional mechanical mount or additional adhesion with Winflex® TFS or Winfix is required for foil width of more than 150 mm (facade area).

Exterior sealing:
Winflex® exterior is water vapour permeable according to DIN EN ISO 12 572 and driving rain-proof.

Fig. 1: Winflex® exterior version A | Winflex® exterior version B | Winflex® exterior version C

Interior sealing:
Winflex® interior is water-vapour-proof according to DIN EN ISO 12 572 and air-proof according to DIN 4108.

Fig. 2: Winflex® interior version A | Winflex® interior version B | Winflex® interior version C

In order to optimally utilise the benefits of our Winflex® system and to avoid errors we would like to point out some important processing guidelines.

Surface:
It must be ensured before beginning work that the surface is stable, sufficiently even (flat coated), clean, dry, dust-, grease- and oil-free. Possibly given parting agents are to be removed.

Absorbing, mineral surfaces and untreated wood: We recommend priming the surface. This particularly applies to strongly absorbent surfaces such as concrete, stone, aerated concrete, finery and brick. We recommend our Multi Primer for this purpose.

Fig. 3: reveal primed with Multi Primer

You can alternatively mix our Fasatan® TFK adhesive with the appropriate Fasatan® Cleaner / Thinner. Mixing ratio 1: 1 (volumetric content Fasatan® TFK adhesive to Fasatan® Cleaner / Thinner)
The Fasatan® TFK portion is to be increased in the case of strongly absorbent surfaces (aerated concrete, Poroton)

Solvent-sensitive surfaces: We recommend our pasty adhesives Winflex® TFS or Winfix for improvement of the adhesion for solvent-sensitive surfaces such as polystyrene or other PS foams and plastics, which are incompatible with our Multi Primer.

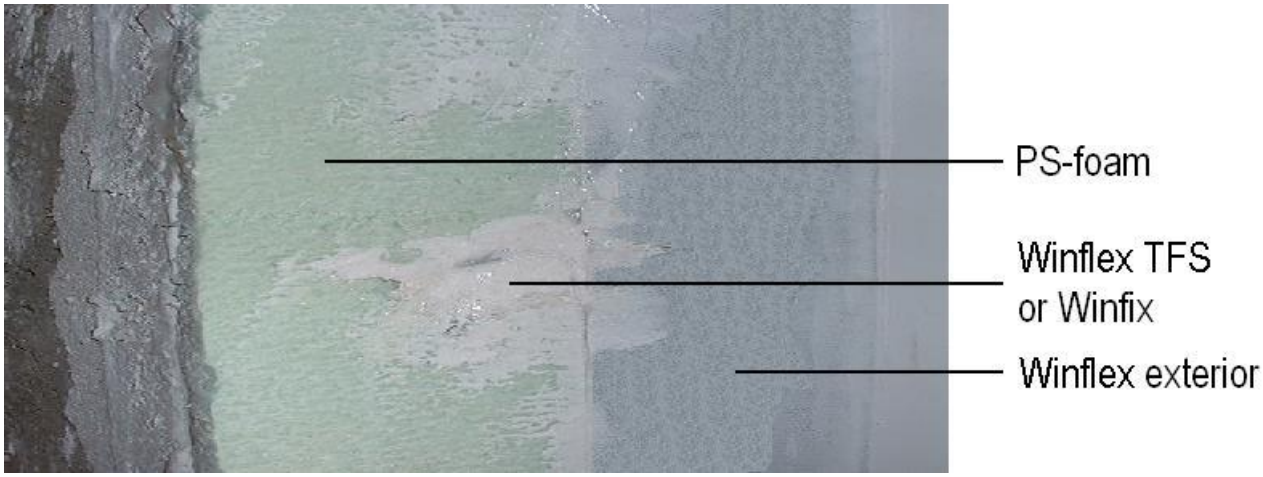


Fig. 4: Winflex® TFS or Winfix on polystyrene for improvement of the adhesion and as level compensation

Non-absorbent, metallic surfaces: The use of a primer is not necessary for smooth metals. But we recommend cleaning with Cosmofen 60, in order to remove dirt remainders and / or parting agents.

Non-absorbent, plastic surfaces such as PP or PVC: It is usually not necessary to use a primer for smooth, non-absorbent plastic surfaces such as PP or PVC. We nevertheless recommend cleaning with Cosmofen 20, in order to remove dirt and / or parting agent remainders.
Wood treated with oily glazes: Our tapes may not be used on these surfaces. Glaze may not be applied to locations, where the tapes are mounted, if such frames are sealed with our tapes. A primer is additionally used as prime coat for absorbent mineral surfaces.
Wooden surfaces varnished with acrylic paint: Wood varnished with acrylic paint does not need to be pre-treated. Parting agents are also not to be expected in this case.
On damp surfaces the primer adhesion is reduced or is lost. Processing of window connection tapes with butyl adhesive strips such as Winflex® version B and C on damp surfaces, even when using a primer, must therefore be rejected in practice! The Winflex® TFS and Winfix adhesives possess sufficient adhesion on slightly damp (= matte-damp) surfaces however, so that Winflex® type A can also be processed with these adhesives on slightly damp surfaces. However processing on areas with standing water and drop formation is naturally not possible even with these adhesives.
There is the possibility to compensate unevenness on **rough, uneven surfaces** such as reveals without float coat with our pasty adhesive Winflex® TFS and therefore to create a sufficiently even, stable underground for our connection tapes.
It is quite practical from the building physical aspect to work with polystyrene hard foam boards, as known from thermal insulation compound systems, with suitable adhesives for thermal insulation compound systems in the case of extremely uneven reveals. This results on the one hand in an optimal reveal thermal insulation, on the other hand in a sufficiently smooth reveal for professional mounting of our window connection tapes.

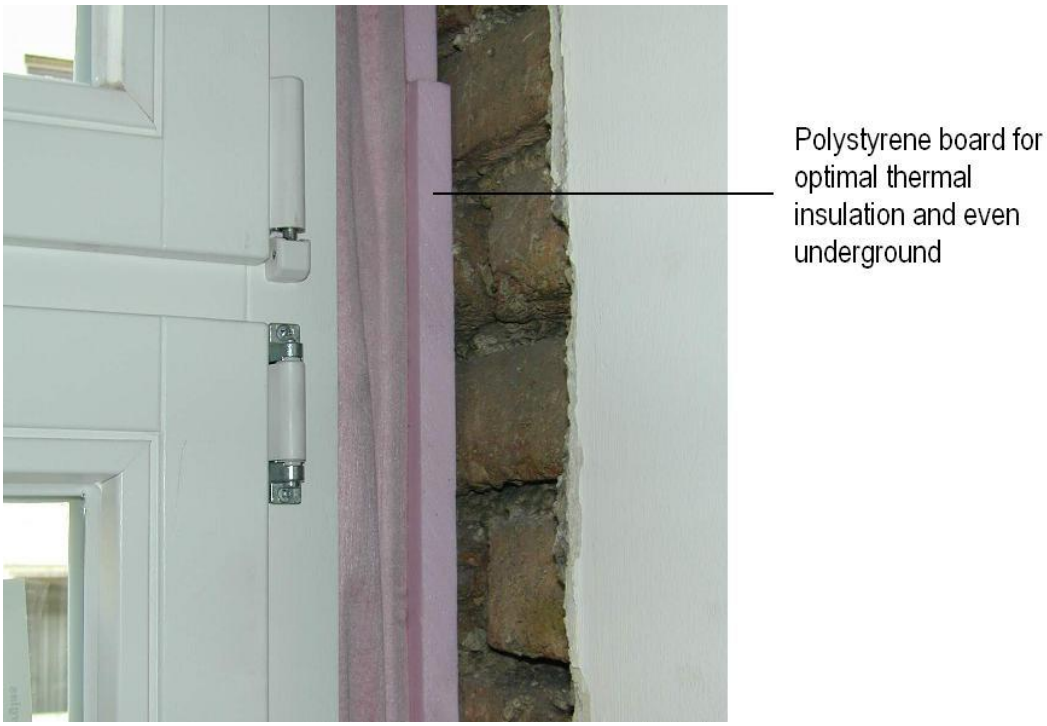


Fig. 5: professionally bonded polystyrene hard foam board for an optimal reveal thermal insulation and a sufficiently even underground for mounting our window connection tapes

Processing temperature: Processing at temperatures below the freezing point should be avoided in practice, since processing at temperatures below freezing point is always connected with the formation of hoar frost and ice on the component to be bonded! We therefore recommend a processing temperature of at least + 5 ° C (building component temperature – this can possibly deviate substantially from the air temperature).

Preparation of mounting:

Processing our Winflex® tapes is just as fast and reliable with a bit of training and consideration of some important points as with a pre-compressed joint sealing tape.
When mounting, differentiate between the version C (both adhesive strips on alternate sides), which is adhered to the face of frames or profiles, the type B (both adhesive strips on one tape side), which is adhered to the interior or exterior of the frame or profile and the type A, which is generally processed in the same way as Winflex® types C and B but with an additional adhesive from the tubular bag (Fig. 1. – 2.).

Winflex® version C:
Type C of our Winflex® interior and Winflex® exterior tapes is mounted into the reveal prior to inserting the frame. Cut tape strips with approx. 5 – 10 cm excess length on both ends for all four sides of the frame for this purpose. These strips are adhered to the face of the frame with the special self-adhesive coating, so that the tapes project on both sides by approx. 5 – 10 cm (according to cut length). The white covering foil is detached slightly from the special adhesive (not completely) and the Winflex® tape is fixed with the special self-adhesive coating. The tape is subsequently mounted by continuous pressing of the self-adhesive coating onto the frame face and by detaching the white covering foil. This is particularly easy on timber frames with a smooth face. The tape must be mounted in the frame centre on the thermal separation of the function level on metal or plastic frames, whereby it must be ensured that the adhesive surface is large enough (s. Fig. 6).

Fig. 6: mounting of Winflex® inside version C on the face of a plastic frame with approx. 5 – 10 cm corner projection

Now apply our Winflex® TFS or Winfix adhesive directly onto the projecting tapes at the frame corners (intersections) and bond the projecting tapes together with the special adhesive tapes. The tapes are therefore now also reliably and tightly connected to the frame corners (s. Fig. 7).

Fig. 7: Corner formation by applying Winflex® TFS or Winfix adhesive and for bonding the special adhesive strips

Generously apply Winflex® TFS or Winfix to the reveal corners before setting the frame into the reveal. The frame can now be inserted into the reveal, whereby the projecting and bonded tape ends at the corners only need to be folded in one direction.

Fig. 7: Winflex® TFS or Winfix for sealing corners – tape ends are pressed firmly into the adhesive

The reveal frame can be subsequently aligned and the gap between reveal and frame filled with PU-foam according to requirements. Do not use too much foam, so as to prevent the tapes being forced away when the foam rises and hardens.
The tapes are subsequently adhered to the reveal. The covering material is continuously detached from the butyl rubber adhesive and the tapes are continuously pressed into the reveal to avoid the formation of air bubbles. Winflex® must thereby assume the underground outlines. We recommend the use of a pressing roller.
Possibly given mounting plates must be equalised by means of Winflex® TFS or Winfix adhesive (as described for rough, uneven surfaces).

Additionally ensure that the tape lies loosely in a loop shape between frame and reveal and is never mounted under tension between frame and reveal. Plaster cracks would result later otherwise! Also ensure that the loop for the internal window sill is large enough.

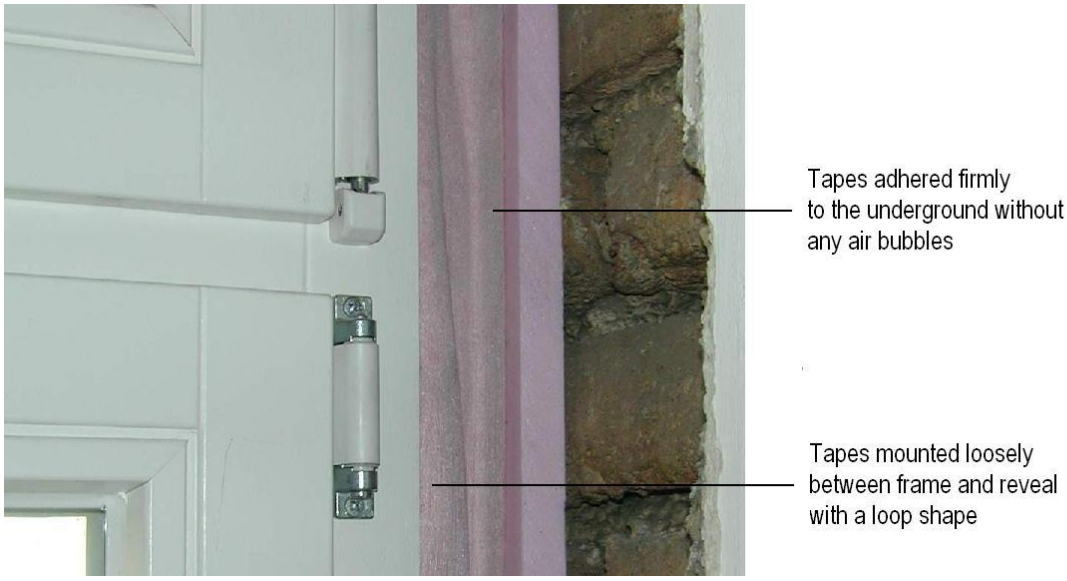


Fig. 9: mounting of Winflex® onto the reveal

The tape ends folded in the corners are pressed firmly into the Winflex® TFS or Winfix adhesive, so that the tape ends are completely embedded in the adhesive (Fig. 8.). This ensures reliable sealing of the connecting joint and there is still the possibility to move Winflex® in one or another direction.

Winflex® version A:
Winflex® version A can be processed in precisely the same way as Winflex® version C, only that version A is not adhered to the reveal with an attached butyl rubber adhesive, but with the pasty adhesives Winflex® TFS or Winfix from the tubular bag.

Winflex® version B:
The window frame is inserted into, aligned and attached to the reveal prior to mounting the sealing tapes as well as the cavity between window and wall filled with insulation material when using mono tapes.

Fig. 10: frame prior to mounting of Winflex® tapes version B

It must also be ensured that white Winflex® TFS or Winfix adhesive is generously applied before inserting the frame component into the reveal corners (similar to Fig. 8.).
Cut tape strips with approx. 5 – 10 cm excess length on both ends for all four sides of the frame, as was the case for version C. A strip is subsequently adhered to the window frame with the special self-adhesive coating covered by white foil. The procedure is carried out as in the case of Winflex® version C via detaching the covering foil piece by piece, fixing the self-adhesive coating on the frame component and by subsequent continuous pressing of the self-adhesive coating onto the frame and by detaching the covering foil.
Ensure that the Winflex® tape is not inserted into the frame by more than 10 mm, since the plasterer as following handicraft may otherwise not be able to apply enough plaster to cover the tape (s. Fig. 11).

Fig. 11. Winflex® version B inserted into the frame by max. 10 mm

Winflex® version B is then immediately bonded to the reveal. The covering material is continuously detached from the butyl rubber adhesive as in the case of version C and the tapes are continuously pressed into the reveal to avoid the formation of air bubbles. The joint sealing tape must thereby assume the underground outlines. We recommend the use of a pressing roller (similar to Fig. 9.).
It must be ensured that possibly given mounting plates are equalised by means of Winflex® TFS or Winfix (as described for rough, uneven surfaces).
Additionally ensure that the tape lies loosely in a loop shape between frame and reveal as in the case of version C and is never mounted under tension between frame and reveal. Plaster cracks would otherwise result later! Also ensure that the loop for the internal window sill is large enough.
The tape ends of the tape in the corners are pressed firmly into the previously applied Winflex® TFS or Winfix adhesive, so that the tape ends are completely embedded in the adhesive. This ensures reliable sealing of the connecting joint and there is still the possibility to move Winflex® in one or another direction.
Proceed in the same way with the remaining three connection tape ends, whereby Winflex® TFS or Winfix is always applied to the already mounted tape, if a new strip overlaps Winflex® in corners with an already mounted joint sealing tape strip, so that the ends of the new tape can also be firmly pressed into the adhesive and the tape ends are completely embedded in the adhesive. This ensures that the Winflex® tapes, version B, reliably seal the connecting joint.

Winflex® version A:
Winflex® version A can be processed in precisely the same way as Winflex® version B, only that type A is not adhered to the reveal with an attached butyl rubber adhesive, but with the pasty adhesives Winflex® TFS or Winfix from the tubular bag

Another tip:
If a roller-shutter casing is mounted onto the window, which inevitably has a connection to the outside, ensure in all cases that the side faces of the frame component are sealed in the corners top left and right top to the reveal and to the roller-shutter cabinet with Winflex® TFS or Winfix adhesive. Otherwise cold, damp air can penetrate over the roller-shutter cabinet into the connecting joint at this location and "fall" down laterally along the frame component, if the lateral space between frame and reveal is not completely and lastingly filled with foam. This would render the sealing of the window connection joint useless! This is especially necessary on the frame face side of strongly profiled metal or plastic frames.

Please contact the responsible technical adviser at any time, if you have further questions. He will advise you competently and also work out a solution for your specific application.

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