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Notching seal corners with pliers



Fig.: ZANGE-90F



Fig.: ZANGE-90B

Area of application of the pliers:

For notching sealing profiles for doors and windows.

If seals are located in a plane of the window into which rainwater can penetrate, welding of the sealing frame corners is preferable and notching of the corners is unsuitable.

Types of pliers:

- Classification according to application:
 - F for sash installation
 - B for frame / outer frame installation
 - 05 for notching the sealing foot of the overlap seal in double-sash windows to accommodate the corner piece
 - HA for sealing profiles for wood/aluminium windows
- Classification according to cutting angle / cut shape:
 - 0° - for straight cuts (start, end)
 - 90° - for right-angled frame corners
 - L-Schnitt – for notching sealing feet for corner pieces

Available spare parts:

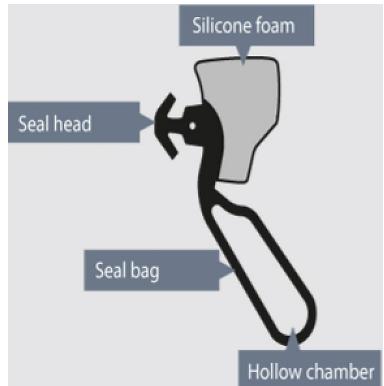
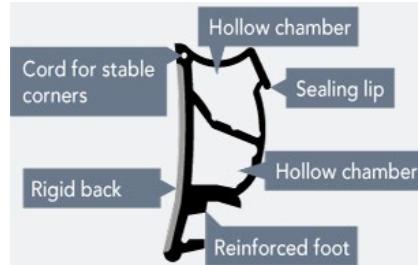
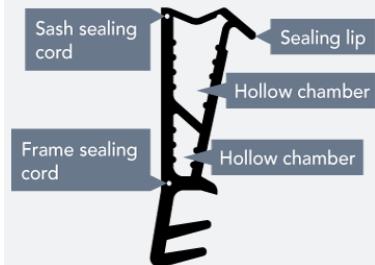
- Blades
- Springs
- Plates
- Rollers

Procedure – basic principles for correct notching:

Example front door seal
SF1017 with 2 threads

Example window seal
AFK2054

Example dry glazing seal
SGFK31207



- Sealing profiles should always contain a securing or stretch thread to prevent tearing of the seal corner during installation. The thread also serves as stretch protection so that the seal cannot be overstretched during installation.
- Seals that can be installed both in the sash rebate and in the frame / outer frame, such as our silicone front door seals, require 2 threads and must be processed with different pliers.



Securing thread / sash rebate

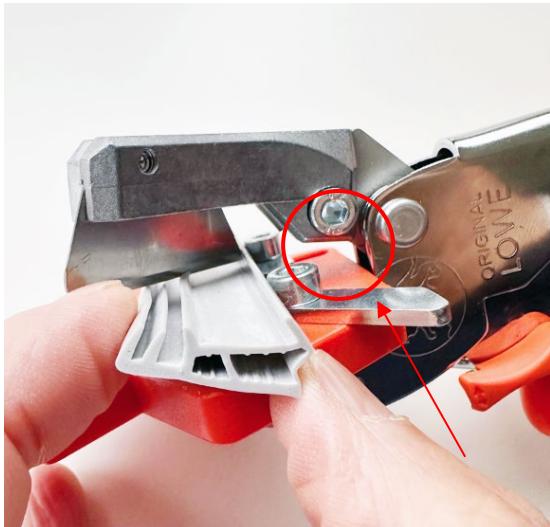


Securing thread / frame / outer frame

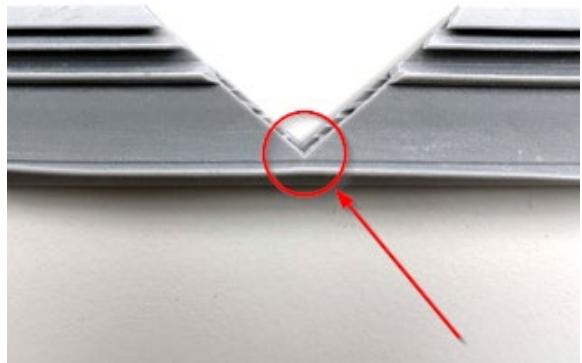
Seal corner for sash installation:

- The sealing lip must not be cut during notching, so that the sealing plane is not interrupted and no condensation water can penetrate into the window rebate.
- If the cut is made close to the sealing lip, this results in a clean corner after notching.
- The correct cut should be made as deep as possible so that the seal corner lies as flat as possible during installation. This is achieved by slightly tilting the seal during notching.

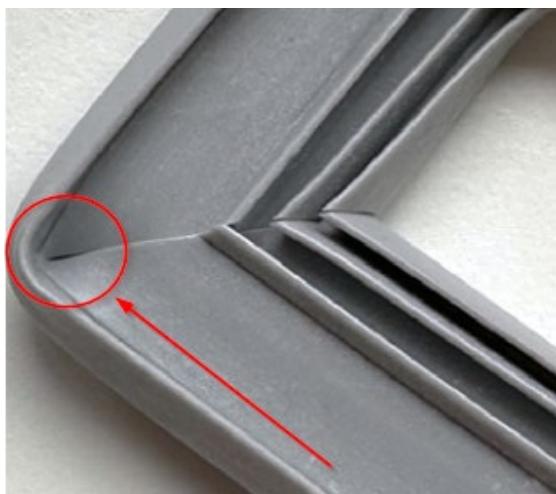
CORRECT:



Tilting the seal during notching

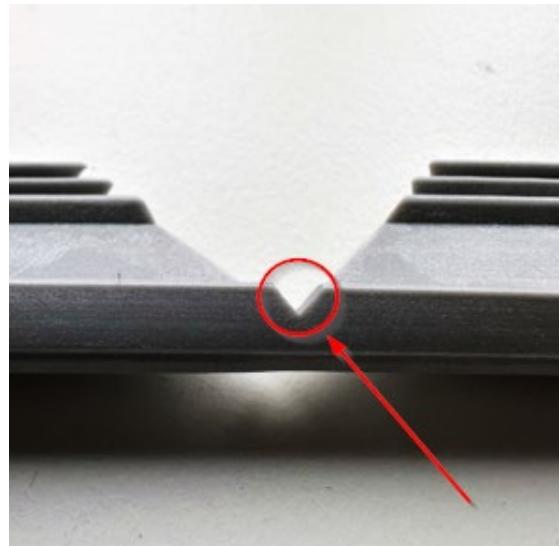
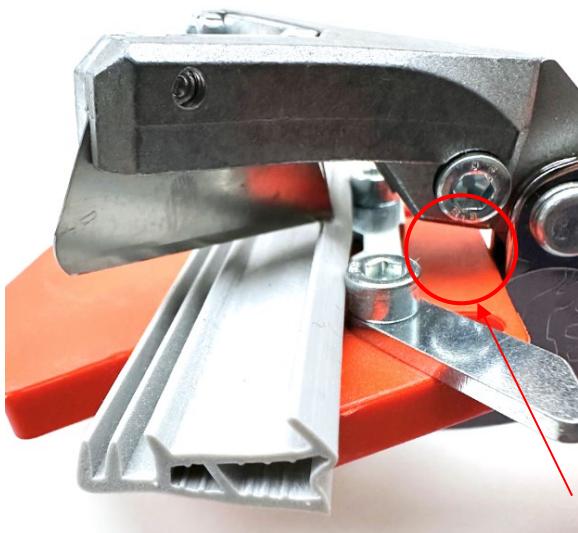


Perfect cut for a sash corner



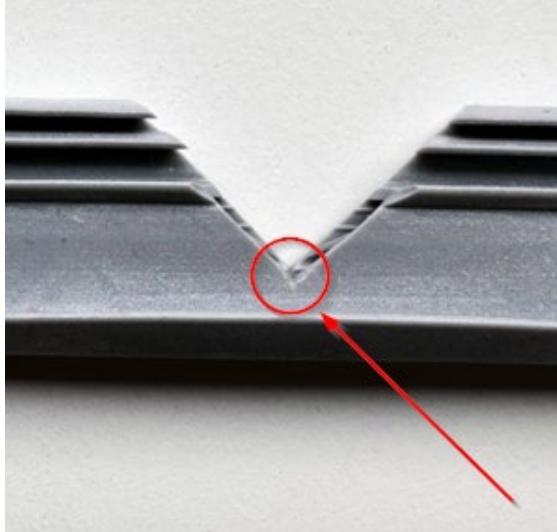
Clean corner

INCORRECT:



Here the sealing lip is cut. This interrupts the sealing plane and moisture can penetrate into the rebate area.

INCORRECT:



Cut is not deep enough. Residual material bends up at the corner.

Seal corner for frame / outer frame installation:

CORRECT:



Y-cut for frame installation

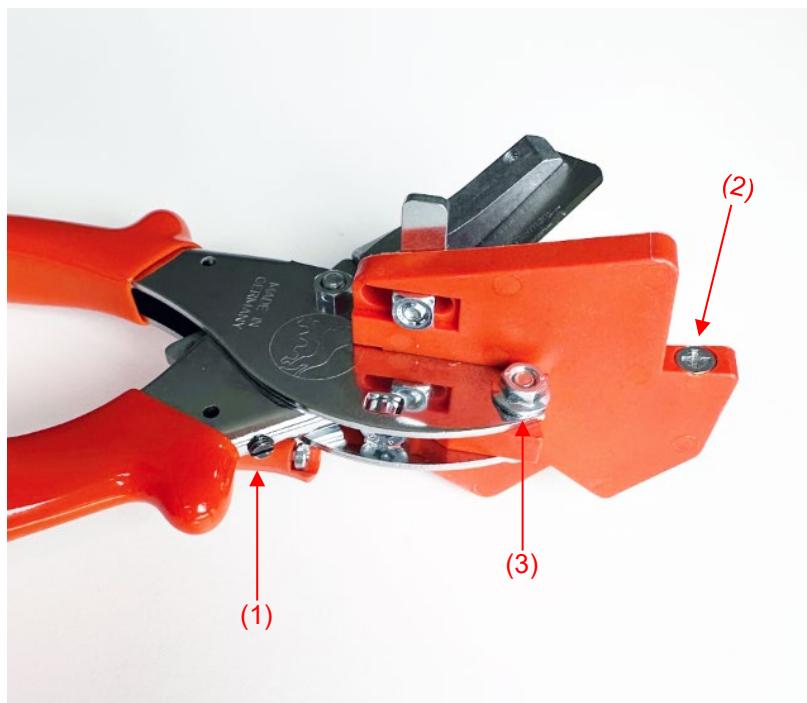
INCORRECT:



Sealing lip for frame installation is cut here

Pliers – preparing the settings:

- The blades must cut well and be correctly positioned in the pliers; special attention must be paid when changing blades.
- The depth stop is adjusted to the desired cut shape of the respective sealing profile. As mentioned, the cut should be as deep as possible, but without cutting the sealing lip or the thread during notching.
- The handle width of the pliers can be adjusted to the hand size of the operator.
- The adjusting screw on the stop plate serves for oversize when notching corners.
- The safety lever is used to close the pliers when not in use.



- (1) Adjusting screw for handle width
- (2) Adjusting screw for corner oversize
- (3) Adjusting screw for stop plate

PLIERS for sash rebate or frame / outer frame:



ZANGE-90F for sash rebate
(V-CUT)



Zange-90B for frame
(Y-CUT)



Depth stop V-cut



Depth stop Y-cut

Creating a sealing frame for a window:

To ensure that a seal permanently seals the window, it is processed all around to form a sealing frame. Depending on the window system, the seal is inserted in the sash rebate and overlap or in the frame / outer frame. The processing technique differs for sash rebate / overlap and frame / outer frame. Different types of pliers are used (as described above):

Flügel/Überschlag:	V-Schnitt	ZANGE-90F
Blend-/Stockrahmen:	Y-Schnitt	ZANGE-90B

Single-sash windows:

- Start at the top centre and insert the seal tension-free into the sealing groove up to approx. 30 cm before the window corner.
- (2) Place the pliers on the window corner using the provided stop and notch the seal corner.
- (3) This is what the notched seal corner looks like.
- (4) Press the notched seal corner tension-free into the window corner.
- (5) Carry out the remaining 3 corners identically. Goll seals for notching are all equipped with a thread as stretch protection, so that the seals cannot be overstretched during installation.
- (6)(7) For the straight cut that must be made at the end at the top of the window, the pliers have a separate stop to ensure a right-angled cut.
- Seal corners must be notched so that the sealing lip is not cut (see instructions on previous pages).
- (8) Finished sealing frame corners in the sash rebate and in the overlap



(1)



(2)



(3)



(4)



(5)



(6)



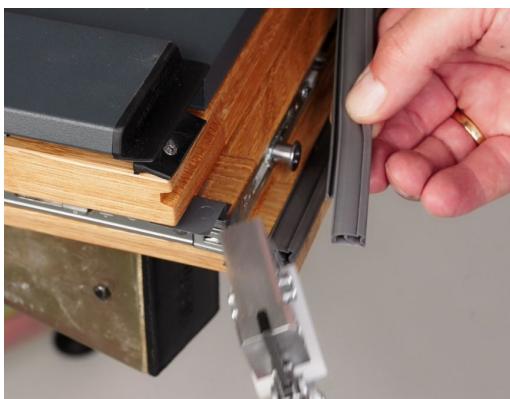
(7)



(8)

Double-sash window without mullion (instructions for inactive sash – 3-sided):

- The sealing frame for the inactive sash is made on three sides.
- On the meeting stile side, a corner piece (matching the sealing profile used) is required at the top and bottom of the inactive sash to ensure sealing between inactive and active sash and for the overall system.
Therefore, the corner pieces are supplied in pairs (1 corner piece for the top and 1 for the bottom).
- (9) To accommodate the corner piece for certain sealing profiles (e.g. AFK2054 and AFK2613), the sealing foot must be notched with an L-cut using the ZANGE-ZA05.
- (10) The corner piece and the seal can now be installed in the window groove.



(9)



(10)