



Installation instructions for Hanno®-Injection Block

Handling the cartridge

Store and transport the cartridges upright with the cap at the top. To open the cartridge, unscrew the cap (do not cut off as with conventional cartridges). Screw the cannula adapter provided onto the open cartridge. Place the injection cannula with its protective cover onto the adapter and lock by rotating slightly (around ½ a turn). You can now remove the protective cover and inject the PU injection resin into the joint sealing tape using a common cartridge gun with a maximum transmission ratio of 18:1.

Please note

To prevent injury and contamination, you can close the cannula again using the protective cover between injection processes. In case of longer interruptions or breaks, you can remove the cannula (by rotating slightly again) and close the cannula adapter using the adapter cap provided, or remove the cannula adapter completely and close the cartridge using the original cap. The cannula adapter, cannula and adapter cap can be cleaned using common PU gun foam cleaner for multiple use.

Please store and transport in upright position. Mechanical pressure on the cartridge must be avoided. Only use cartridge guns with a maximum transmission ratio of 18:1.

Window installation

Install the window with multifunctional tapes from the Hannoband®-3E product range using suitable fasteners. Select a joint sealing tape dimension – cut width and joint tolerance range – suitable for the given window frame width and the construction joint width to be sealed, and install it according to the installation guidelines. Align the window frame in the window opening and secure it with wedges, air cushions or similar. Ensure that these wedges or air cushions are not placed in areas in which the injection resin will be injected. Now install the window with suitable fasteners.

Recommended PU injection resin amounts for 3E tapes – by tape size and joint width

(Please determine the required resin amounts for the calculated load transfer value by using our static and injection quantity tool at www.hanno.com)

Tape size	Joint width [mm]	Recommended injection quantity [ml]	Recommended number of injection points [spacing approx. 15 mm]		Injection quantity per injection point [ml]
X / 4-9	4	5.00 [10.00]	3 [4]	single row	1.50 [2.50]
	9	15.00 [20.00]	3 [4]	single row	5.00 [5.00]
X / 6-15	6	10.00 [10.00]	3 [4]	single row	3.50 [2.50]
	10	15.00 [20.00]	3 [4]	single row	5.00 [5.00]
	15	25.00 [35.00]	3 [4]	single row	8.50 [9.00]
X / 10-20	10	15.00 [20.00]	3 [4]	single row	5.00 [5.00]
	15	25.00 [35.00]	3 [4]	single row	8.50 [9.00]
	20	35.00 [45.00]	6 [8]	double row	6.00 [5.50]
X / 15-30	15	25.00 [30.00]	3 [4]	single row	8.50 [7.50]
	20	30.00 [40.00]	6 [8]	double row	5.00 [5.00]
	25	40.00 [55.00]	6 [8]	double row	6.50 [7.00]
	30	50.00 [65.00]	6 [8]	double row	8.50 [8.00]

Values in brackets for RC2/RC3 elements

Achievable load transfer values for mentioned PU injection resin quantities

Standard spacer block: 0.937 kN/spacer block
 Spacer block for RC2/RC3: 1.230 kN/spacer block

Installation instructions for Hanno®-Injection Block (continued)



Creation of the injection block

Once the multifunctional tape has expanded and the joint is visually closed, the Hanno®-Injection Resin can be injected into the multifunctional tape.

Determine the relevant points/areas into which the injection resin shall be injected. Ensure that the window reveal in these areas is solid and strong enough to bear the window loads.

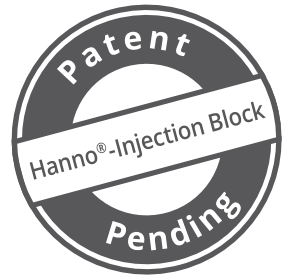
Inject the recommended resin amount for the specific joint width – split in at least three separate injections with a distance of ca. 15 mm. Please determine the quantity of resin necessary for spacer blocks and load-bearing support blocks by using the static calculation and injection quantity tool available at www.hanno.com or for spacer blocks without required load-bearing properties by using the „Recommended PU injection resin amounts“ table on the first page. The amounts for unlisted joint widths can be determined by calculating the mean (use the scale on the cartridge as guidance). Insert the injection cannula ca. 10–30 mm deep into the joint sealing tape at the centre of the joint width (respectively evenly spread across the joint width in case of multiple multiple row injections); the injection depth and the corresponding later position of the spacer blocks must be tailored to the individual profile of the blind frame in order transfer the loads properly into the reveal of the window opening.

Depending on its compression rate, multifunctional tapes may generate relatively high counterpressure in the joint, therefore the injection should be done carefully with sufficient pressure. During the injection process, the cannula can be moved slightly towards the injection direction in order to achieve better spread of the resin in the multifunctional tape. Please wait a few seconds before extracting the cannula until the pressure of the injection resin has reduced and it has spreaded within the joint sealing tape tape. This prevents the resin from unnecessary spilling out of the tape.

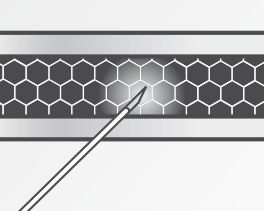
Once the Hanno®-Injection Resin has cured, the window weight load and payloads can safely be transferred into the wall and the preliminary blocks or wedges can be removed. The multifunctional tape will shortly seal these gaps.

Please note

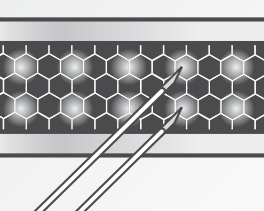
The injection resin is relatively fluid; to prevent unnecessary contamination from leaking or dripping resin when the cannula is pulled out, the cartridge should be turned to a vertical position with the cannula pointing upwards as quickly as possible and the cannula should be closed with the protective cap.



Single row injection



Injection in multiple rows



in Germany
Hanno Werk GmbH & Co. KG
Hanno-Ring 3–5
30880 Laatzen
Germany
Telephone +49 5102 7000 0
Fax +49 5102 7000 102
info@hanno.com
www.hanno.com

in Switzerland
Hanno (Schweiz) AG
Gewerbestraße 10
4450 Sissach
Switzerland
Telephone +41 619 7386 02
Fax +41 619 7386 03
info@hanno.ch
www.hanno.ch

in the USA
Hanno Werk GmbH & Co. KG
c/o German American Chamber of Commerce, Inc.
80 Pine Street, 24th Floor
New York, NY 10005, USA
Telephone +1 646 405 1038
Fax +1 646 405 1027
info@hanno.com
www.hanno.com