

Technical recommendation for handle heights for Roto NX and Roto NT hardware

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1 Recommendations for the handle heights of turn and tilt and turn windows

The recommendation of the handle heights is intended to ensure comfortable and safe operation of the window elements, especially with tilt and turn windows. Despite compliance with the handle heights specified here, depending on the installation situation, the sash weight and the profile geometry, higher operating forces may occur when closing the window sash - especially from the tilt position.

According to EN 13126-8, the closing force should not exceed 100 N (this corresponds to a weight force of approx. 10 kg). This requirement applies to the complete window when installed and cannot be guaranteed by a single component of the window alone.

It is the responsibility of the window manufacturer to determine the correct handle height to meet the interests of his customers without limiting the functionality and ease of use of the window.

2 General

In general, it is recommended that the point of application of force for operating the window is located as centrally as possible in order to ensure that the force is distributed as evenly as possible and to minimise sash twisting.

3 Turn-Only Windows

When opening and closing side-hung sashes, it is not necessary to overcome the weight of the sash. No special recommendation for the handle height is necessary here. In principle, it is possible to place the handle at the very bottom of the sash for pure side-hung sashes. This arrangement is often necessary for windows with barrier-free construction requirements.

4 Tilt&Turn windows

In the case of window sashes that have to be closed from a tilt position, the weight of the window sash and the position of the glass centre of gravity must be taken into account when closing. In principle, the higher the handle seat, the easier it is to close the sash from the tilt position. For practical (accessibility) and optical reasons, however, such an arrangement is not always possible. In the case of low handle heights, it may be necessary under certain circumstances to use a second hand to assist in closing the sash from the tilt position in order to ensure safe enclosure.

The handle heights specified in the Roto installation documents for tilt and turn windows for espagnolettes with constant handle heights are based on many years of experience and should not be exceeded even when using espagnolettes with variable handle heights.

Up to sash rebate height **minimal handle height**

[mm]	[mm]
480	120
600	170
800	263
1000	413
1200	513
1800	563
2600 (3000)	1000