

NK Windows – Why Tilt and Turn (T&T)?

Date: July 2016

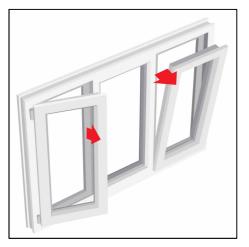
Tilt and turn windows and doors were first developed in Germany in the 1940s and are now widely used throughout the UK and Europe. Although available in New Zealand for 20+ years, the T&T system is relatively unknown and is often met with surprise and intrigue.

NK Windows offers many opening systems, including traditional New Zealand favourites: outward opening awning and casement styles. However, T&T offers benefits that awning and casement openings do not.

<u>Please note:</u> all T&T features apply to both windows and doors, but for simplicity this document refers only to windows.

T&T Operation

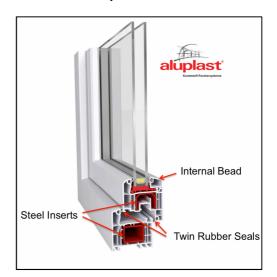
T&T windows provide dual functionality i.e. they allow the same sash unit to both tilt inwards and turn inwards – simply determined by the handle position.



Inside view: in the image shown above, both opening units hinge: 1) vertically to turn inwards, and 2) horizontally at the bottom to tilt inwards.

Security benefits

T&T windows provide multipoint locking on 2, 3 or 4 sides as standard depending on the size of the window. On most non-locking sides a hidden compression device is used to stop the frame flexing or lifting if someone attempts to pry it open (see image over page). These features provide exceptional security benefits and peace of mind. Internal glazing beads mean the glass can only be installed and removed from inside the house – it cannot be removed externally.



Hidden steel reinforcement inserts on all 4 sides, regardless of window size, provide further rigidity and security.

Highly secure glazing options provide world-class resistance against the most determined attempt at forced entry.

Safety benefits

The tilt opening provides excellent ventilation security at street level and is impossible for a child to climb out of. Push button and key locking handle options provide additional peace of mind.

Emergency egress in the case of fire is made simple with the turn position option.

Opening restrictors are available to ensure turn-opened windows only open to a pre-determined distance, again providing safety for young children.





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Compression device (a.k.a. "mushroom") helps prevent forced entry and complies with European break-in resistance standard DIN EN 1627 RC3

Ventilation benefits

The tilt position allows daytime gentle air movement ventilation whilst maintaining high levels of security and safety with a 120mm opening. The tilt position can be safely used during periods of rain.

In the turn position, large amounts of ventilation can be achieved quickly.

A night venting option is available that provides a 10mm tilt opening.

Cleaning benefits

The turn position allows easy access to the exterior frame and glass surfaces for safe cleaning.



Generic benefits and options

The following features and benefits are available on all NK Windows's windows and doors:

- High performance thermal and noise insulation.
- High UV resistance.
- Wide variety of glazing options including tints, safety, security, and thermal options.
- Steel inserts on all 4 sides for greater strength.
- A wide range of colours and textures including singleside colour.
- Fire resistant and retardant PVC frames.
- Twin rubber seals to assist with thermal and sound insulation.
- Various additional opening hardware security options including keypad and wireless entry.
- Various privacy options including blinds, tints and entrance door peep holes.
- Various cat doors including electronically controlled.
- Very simple cleaning with diluted household detergent.
- Professional installation by our own team of experienced staff.
- Precision-engineered 5 chamber PVC profiles from Aluplast in Germany – the home of PVC window technology.
- Environmentally friendly manufactured PVC.

NK Windows is very proud to be the supplier of choice for the first 10 Homestar Built rated home in New Zealand built by Bob Burnett. Our high-performance offering as supplied to 75% of all clients was used in this house – double-glazing with argon gas and Low-E coating.

