

**SCOPE**

The AM Profiles Design-5 Tilt & Turn timber aluminium clad composite window system is available in the following range of open in styles and fixed light arrangements:

- Tilt before Turn
- Side hung open in
- Bottom hung open in
- Fixed lights – beads to the inside

**INTERNAL TIMBER**

The timber sections of the window are jointed in traditional mortise and tenoned fashion. FSC accredited solid or engineered Pine is offered but some hardwoods can be obtained dependant on environmental impact. Choice of aesthetic detail is possible subject to volume.

**TIMBER FINISH**

Water based preservative primer and clear or opaque finish up to 90 microns.

**EXTERNAL ALUMINIUM**

Aluminium extruded from alloy EN AW-6063 T6 in accordance with BS EN-755. Polyester powder coated to BS 6496-1984 with full RAL and BS range available or anodised to BS 3987.

**SYSTEM DETAILS**

The Design-5 Tilt & Turn product is available as constructed frames – timber, aluminium or both or as fully fabricated glazed or unglazed windows. Having constructed integral frames and sashes in both timber and aluminium and secured the purpose

designed nylon clips to the timber, the aluminium is pressed home onto the clips. The aluminium component can only be removed if the clips are turned through 90 degrees by the use of a special tool. The system is fully drained and vented to ensure long lasting sealed unit and timber performance.

**FURNITURE AND FITTINGS**

The Design-5 Tilt & Turn window can accommodate a wide range of gearing designed for this standard euro-groove and hardware space arrangement. The gearing used is a standard high quality 'off the shelf' type available from a number of suppliers. The T&T window manufactured by AM Profiles features the Roto NT gearing. The Roto NT tilt first 'R' hinge system is designed to carry 100kg. The handle offered generally is the Roto LINE handle which has a child restrictor built in. It has to be unlocked with the handle slightly turned to gain the 'turn' / full open for cleaning position. This handle gives a reasonable level of safety for high rise installations - other handles and restriction can be supplied.

**TRICKLE VENTILATION**

A wide variety of through-frame, through-sash or glazed in trickle ventilation options are available.

**GASKETS**

The windows multiple seal is produced using a range of standard industry gaskets.

**GLAZING**

Generally the opening and fixed glazed areas of the window are manufactured to accommodate 28mm double glazed units but other unit sizes, 44mm triple glazing for example, can also be accommodated.

**PERFORMANCE**

Test dated 11 November 2008

- EN12210 Wind Load – Class C3 / B3
- EN12208 Water Tightness – Class E 900Pa
- EN 12207 Air Tightness – Class 4 (the most airtight classification)
- EN12400 Mechanical Durability – Class 2

**Security.** The window has been security tested and AM Profiles is a Secured-By-Design license holder.

**Thermal.** The Design-5 Tilt and Turn window conforms to Document L and J and for guidance the an overall window performance  $U_w$   $W/m^2K$  of below 1.5 on the standard design (with 1.2 centre pane 28mm units) and an overall window U value performance of below 1.0 using a sealed unit with a  $U_g$  of 0.6 and including warm edge spacer technology.

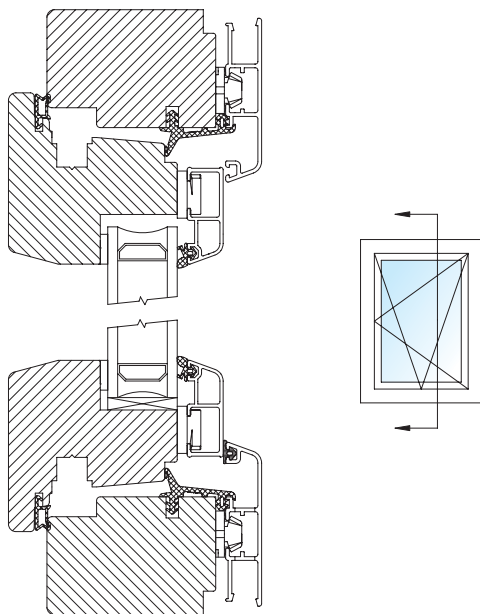
**SYSTEM VARIATIONS**

The window can be manufactured and glazed to meet improved thermal levels as low as the PassivHaus standard of 0.8  $W/m^2K$ .

**ANCILLARY PROFILES**

Various frame sight-line, projecting cill, aesthetic main section options and coupling profiles are available.

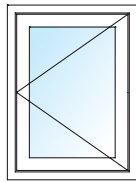
For further information please consult our technical sales manual. For assistance on glass options or performance requirements please contact our Technical Team.



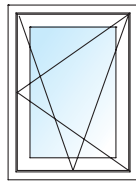
Drawings not to scale

Due to AM Profiles policy of continued improvement, we reserve the right to alter specifications without prior notice.

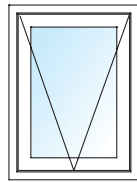
### Design-5 Tilt & Turn Options



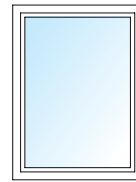
**Design-TT1**  
Turn only.



**Design-TT2**  
Tilt & Turn.

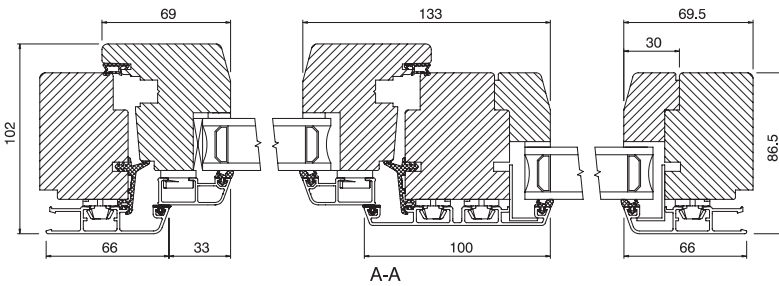
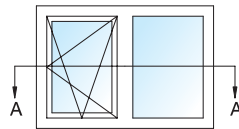


**Design-TT3**  
Tilt only.

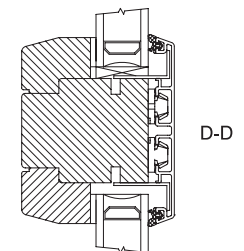
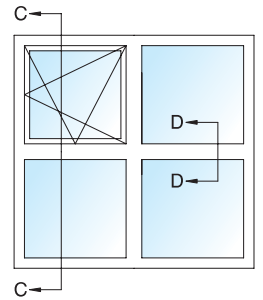
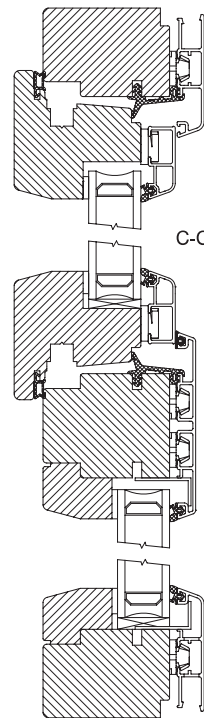


**Design-TT4**  
Internally beaded fixed light.

### TILT & TURN/INTERNALLY BEADED FIXED LIGHT



### VERTICAL SECTIONS



### TILT & TURN SASH/SASH

