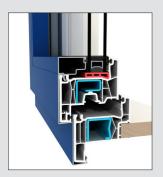
# Awning and Casement Windows



Standard window frame with awning sash.

# **Key Features**

- Hidden steel reinforcing is included in most uPVC frames to ensure shape stability and structural
- Standard outward opening windows available as well as a tilt-and-turn window with inward opening casement and hopper window feature (see next
- Outward opening windows locked by an espagnolette, multi-point locking system using an Urbo style handle.



Window frame and sash with Aluclip exterior.



Chair frame and sash.



Awning sash and transom - exterior view.



Urbo hardware on sash.

# **Specifications**

### **Dimensions**

Recommended maximum awnings 1500mm high x 900mm wide, casements 1500mm high x 800mm wide.

### Standard Glass Thickness

24mm IGU

## Thermal Values

U-value 1.458 R-value 0.686

#### Performance

Tested to Extra High wind zone

# **Design Considerations**

- Awning windows provide good weather cover when open; casements less so
- Care needed if projecting on to walkways and decks
- Restrictor stays can limit opening in such situations
- Caution is required for the use of casements which open directly into prevailing winds.





# Tilt-and-Turn Windows





Tilt and turn frame and sash.

# **Key Features**

- Tilt-and-turn windows open inwards in casement (side opening) and hopper (top opening) mode
- Window operation is by a lever handle which is turned from the locked downwards position horizontally for casement opening and vertically for hopper window mode
- In hopper window mode the top of the sash is held by a folding steel arm in the open position
- Casement window mode requires careful consideration from a weathering and obstruction point of view
- Hidden steel reinforcing is included in most uPVC frames to ensure shape stability and structural excellence.



Opening sash in hopper window mode.



Casement lock keeper on window jamb.



Inward opening sashhopper window mode.



Multi-point locking available with Urbo hardware.

## **Specifications**

### **Dimensions**

Inward opening casement and hopper windows (tilt-and-turn) 1500mm high x 800mm wide

### Standard Glass Thickness 24mm IGU

Thermal Values U-value 1.458 R-value 0.686

#### Performance

Tested to Extra High wind zone

## **Design Considerations**

- Inward opening tilt-and-turn windows avoid outward projection but need to be treated with caution from a weathering perspective when open in casement mode
- Inward opening casement mode needs careful attention in the open position to avoid contact with room occupants.



