

# **FFI Tilt Turn Multipoint Systems**

one handle activates multiple lock points, and two window functions

Functional Fenestration Inc (FFI) has European Tilt Turn multipoint window systems designed to meet architectural needs for large openings, and to help meet performance requirements for secure alignment, warp-prevention and hurricane testing. Tilt Turn provides 2 functions in one window: hopper and casement.



tilt turn windows by Cascade Woodwork, CO www.cascadewoodwork.com









#### **Benefits** of Tilt Turn

- One handle operation: tilts in as a hopper window; turns in as a casement window.
- High strength and security from multipoint locking on all 4 sides.
- Airtight and weather-sealed with continuous gasketing on all 4 sides.
- Multipoints help prevent warping, even for very tall sashes.
- Standard 16mm Eurogroove milling is universal for all European multipoints.
- Tilt turn fulfills green building goals for natural ventilation and daylight.
- Hopper windows offer highly efficient air flow for natural ventilation design.
- Casement windows allow ease of cleaning and emergency egress.

## **Applications** for Tilt Turn

- For wood, PVC/vinyl, wood/aluminum combo or composite sashes.
- For in-swing windows, to provide natural ventilation.
- For large double-glazed and triple-glazed window, up to 300 lbs.
- · Can be used with roll-down screens.

#### **Features** of Tilt Turn

- Locks are cold-forged steel for extra strength, only from AGB.
- Adjustable locking cams, with anti-mishandling device.
- Backsets: 15 mm, 25 mm, or 40 mm.
- Strikes: 4 mm airgap for flush-mount, or 12 mm airgap for surface-mount.
- Choice of rebate: 15 mm for wood, 18 mm for wood or PVC, or 20 mm for PVC.
- Lock spindle hub: for 7 mm square spindle.
- Silver finish salt-spray tested to 1,000 hours corrosion-resistance.

### **More System Options**

- Mushroom cams are an upgrade for extra strength in hurricane testing.
- Arch top (round top) tilt turn option.
- 'Axis 13 mm' option for thicker profiles up to 3-5/8" (92 mm).

**Learning how to make tilt turn windows** - **Alpine Technical Workshops** are multi-day classes in the production of European solid-wood windows & doors, especially tilt turn windows and lift slide doors. Organized through a partnership between Cascade Woodwork, Rangate Tooling, Martin Woodworking Machinery, and Functional Fenestration, classes are held in Colorado and offer a wealth of product information, guidance with tooling, and access to a unique woodworking community. **Visit www.alpineworkshops.com** or call 888.810.2522 for information.

Tilt Turn Accessories - many are compatible with AGB, G-U, Hoppe, Winkhaus and other multipoints.

- Window handles with 7 mm square spindle and DK 3-click movement.
- Drip rail (drainage channel) in aluminum, colors: dark brown or white.
- Gasketing (weatherseal) in brown or white.

See FFI catalog pages G-9 to G-14. Ask for the FFI Tilt Turn Calculator to create parts lists and quotes.

Contact FFI Customer Service for more information: 800-677-0228 or service@fenestration.net



# **FFI Multipoint Locks for Windows**

one handle activates multiple lock points

Functional Fenestration Inc (FFI) has European Multipoint Window Locks designed to meet architectural needs for large openings, and to help meet performance requirements for secure alignment, warp-prevention and hurricane testing. Multipoint locks are for casement or awning windows.







casement windows



# **Benefits** of Window Multipoints

- Multipoints help prevent warping, even for very tall sashes.
- Standard 16mm Eurogroove milling is universal for all European window, door & tilt turn multipoints.
- Large, operable windows fulfill green building goals for natural ventilation and daylight.
- · Casement windows allow ease of cleaning and emergency egress.

# **Applications** for Window Multipoints

- For wood, PVC/vinyl, wood/aluminum combo or composite sashes.
- For casement windows, awning windows or sidelites; inswing or outswing sashes.
- For casement sash heights from 18-1/2" up to 7'10" tall.
- · Can be used with roll-down screens.

## **Features** of Window Multipoints

- · Locks are cold-forged steel for extra strength, only from AGB.
- · Adjustable locking cams, with no-cam options also available.
- Backsets: 15 mm, 25 mm, or 40 mm.
- Extensions in three heights allow very flexible sizing.
- Strikes: 4 mm airgap for flush-mount, or 12 mm airgap for surface-mount.
- Shootbolts are included, optional non-shootbolt terminals are available.
- Variable handle height, simply cut the lock bottom and/or add extensions.
- Lock spindle hub: for 7 mm square spindle.
- Flexible positioning of lock points—on top, bottom or side of sash.
- Silver finish salt-spray tested to 1,000 hours corrosion-resistance.

### **More System Options**

- Optional corner drives and terminals are alternatives to top and bottom shootbolts.
- Mushroom cams are an upgrade for extra strength in hurricane testing.

## **Multipoint Accessories**

Many parts are compatible with AGB, G-U, Hoppe, Winkhaus and other window multipoints.

- Window handles with 7 mm square spindle and optional DK 3-click movement.
- Strikes for shootbolts, in brass or silver.
- · European screw hinges.

See FFI catalog pages G-1 to G-8 for more Window Multipoint information.

**Ask for the FFI Window Multipoint Calculator** to create parts lists and quotes.

Contact FFI Customer Service for more information: 800-677-0228 or service@fenestration.net