**BF Window Hardware (Formal Regulations)**

**Applicable to batimet TA35 Systems**

This section deals with descriptions of the various basic hardware for the respective type of window opening. With due consideration of load transduction, additional parts such as tapes and locking devices or additional shear mountings are used in accordance with the measurement tables from batimet. Further additional parts such as turnstiles, opening restrictors, locks, and handles are described separately.

There is a 10-year guaranty for full functioning of tilt & turn hardware.

There must be opportunities provided for service and maintenance of the hardware. If, because of the sash sizes specified in the tender, special measures must be taken to ensure long-term use (adhesives for glazing, special screws, reinforcement of profiles and hardware etc.), then these shall be taken into account under the item specified, without separate description. Proof of the long-term functioning of the building part must be submitted in written form including confirmation from the system provider.

**BF 01 Tilt&Turn Hardware, Windows**

Concealed Tilt&Turn hardware with one-hand operation for sash loads up to 200 kg, open in tilt position to 175 mm. All hardware parts, including shears and the lower corner bearings are not visible when sash is closed. The hardware is equipped with an effective blocking device to prevent wrong handling in turn and tilt movements, the corner bearings are secured against the sash being lifted out. Shears and corner bearings restrict the opening of the sash in turning position to 90°. The individual parts of the hardware such as bar pieces, corner pieces, bearings, buffer, discharge bearings, and Tilt&Turn shears are self-instructing. Mounting of these parts in the grooves of the rebate area of the wood profile must interlock. Corner bearings, shears, and locking devices must be adjustable. All hardware must be made of non-corroding materials.

Sash rebate width: 280 – 1,600mm

Sash rebate height: 280 – 3,000mm

Sash weight: up to max. 200 kg, up to 300 kg as turning window only

Handle position: constant, central/variable

**BF 02 Tilt&Turn Hardware, French Doors**

Concealed Tilt&Turn hardware with one-hand operation for sash loads up to 200 kg, open in tilt position to 175 mm. All hardware parts, including shears and the lower corner bearings are not visible when sash is closed. The hardware is equipped with an effective blocking device to prevent wrong handling in turn and tilt movements, the corner bearings are secured against the sash being lifted out. Shears and corner bearings restrict the opening of the sash in turning position to 90°. The individual parts of the hardware such as bar pieces, corner pieces, bearings, buffer, discharge bearings, and Tilt&Turn shears are self-instructing. Mounting of these parts in the grooves of the rebate area of the wood profile must interlock. Corner bearings, shears, and locking devices must be adjustable. All fittings must be made of non-corroding materials. In addition, the hardware must be provided with a vertical locking device (hinge and handle side), a roller snap, and a door-pull handle. The floor cill is barrier-free in conformity with DIN 18040 with a threshold height of 20 mm, impermeable to driving rain and thermally separated.

Sash rebate width: 280 – 1,600mm

Sash rebate height: 280 – 3,000mm

Sash weight: up to max. 200 kg, up to 300 kg as turning only

Handle position: constant, central/variable

**BF 03 Tilt&Turn Hardware, French Doors, lockable inside and outside**

Concealed Tilt&Turn hardware with one-hand operation for sash loads up to 200 kg, open in tilt position to 175 mm. All hardware parts, including shears and the lower corner bearings are not visible when sash is closed. The hardware is equipped with an effective blocking device to prevent wrong handling in turn and tilt movements, the corner bearings are secured against the sash being lifted out. Shears and corner bearings restrict the opening of the sash in turning position to 90°. The individual parts of the hardware such as bar pieces, corner pieces, bearings, buffer, discharge bearings, and Tilt&Turn shears are self-instructing. Mounting of these parts in the grooves of the rebate area of the wood profile must interlock. Corner bearings, shears, and locking devices must be adjustable. All fittings must be made of non-corroding materials. In addition, the hardware must be provided with a vertical locking device (hinge and handle side), a roller snap, box operation with PZ mesh, a profile cylinder with knob and door handle fitting. The French window can be locked from the outside and from the inside when closed and in tilt position. The floor cill is barrier-free in conformity with DIN 18040 with a threshold height of 20 mm, impermeable to driving rain and thermally separated.

Sash rebate width: 280 – 1,600mm

Sash rebate height: 280 – 3,000mm

Sash weight: up to max. 200 kg, up to 300 kg as turning only

Handle position: constant, central/variable

**BF 06 Tilt&Turn/Turn Floating Mullion Hardware, Windows**

Concealed floating mullion hardware with one-hand operation comprising a tilt&turn hardware and a turn hardware with one-hand operation, for sash loads up to 200 kg, open in tilt position to 175 mm. All hardware parts, including shears and the lower corner bearings are not visible when sash is closed. The hardware is equipped with an effective blocking device to prevent wrong handling in turn and tilt movements, the corner bearings are secured against the sash being lifted out. Shears and corner bearings restrict width of opening of the sash in turning position to 90°. The individual parts of the fittings such as bar pieces, corner pieces, bearings, buffer, discharge bearings, and Tilt&Turn shears are self-instructing. Mounting of these parts in the grooves of the rebate area of the wood profile must interlock. Corner bearings, shears, and locking devices must be adjustable. All hardware must be made of non-corroding materials. The turning sash is locked via a French sash operation lever in the rebate.

Sash rebate width: 280 – 1,600mm

Sash rebate height: 280 – 3,000mm

Sash weight: up to max. 200 kg, up to 300 kg as pivot only

Handle position: constant, central/variable

**BF 12 Tilt&Turn Hardware for Tilt-First Windows**

Concealed Tilt&Turn hardware with one-hand operation for sash loads up to 200 kg, open in tilt position to 175 mm as in BF 01 but here with tilt-first hardware. Overlying hinge side with central locking concealed in the rebate and operation with “Tilt-First” technology for secure ventilation, as preferred in schools, nurseries, and old-people’s homes.

The tilt position is attained when the window handle on the closed window is turned upward vertically by 90°. Only when the window handle is then turned by a further 90° (vertical position), the hardware is in a turn position. The turn position shall be enabled by means of a closing cylinder integrated in the window handle. The window handle can then no longer be turned further to “open” without the right key. With integrated anti-slam safety.

Sash rebate width: 280 – 1,600mm

Sash rebate height: 280 – 3,000mm

Sash weight: up to max. 200 kg, up to 300 kg as turning only

Handle position: constant, central/variable

**BF 40 Tilt&Turn Hardware (Fully Concealed)**

The same as hardware BF 01 but as fully concealed model. All components must be invisible from the outside when integrated in the rebate of the window. No bands or cover caps should be visible.

Sash rebate width: 330 – 1.400mm

Sash rebate height: 280 – 2.600mm

Sash weight: up to max. 150 kg, up to 300 kg as hardware BF 01

Handle position: constant, central/variable

**BF 80 Turning Lock with Cylinder**

Model is the same as BF 01 but with an additional lockable turning lock with cylinder.