

Series overview

FB : Concept

Outer frame

- **Profile :**
46mm-wide tubular profile with 15mm, 22mm and 42mm chambers.
- **Assembly :**
Mitre-cut using self-locating, pin or crimp corner cleats.
- **Options :**
Architraves held in place using stainless clips. Screwed or clipped flashing. Outer frames with integrated architrave

Flush opening frame:

- **Profile :**
55mm-wide tubular profile with 15mm, 22mm and 42mm chambers.
- **Assembly :**
Mitre-cut using self-locating, pin or crimp corner cleats.
- **Infill volumes :**
6-33mm. Up to 57mm with rebate adaptor. 20mm rebate height.

Basic opening frame: Opening frame = Outer frame

- **Profile:**
46mm-wide tubular profile with 10mm, 15mm, 22mm and 42mm chambers.
- **Assembly:**
Mitre-cut using self-locating, pin or crimp corner cleats.
- **Infill volumes:**
6-33mm. 20mm rebate height.
- **Drip mould:**
External on opening frame lower transom

Door opening frame and locking patio door

- **Profile:**
46mm-wide tubular profile (basic or flush) and 42mm chambers.
- **Assembly:**
Mitre-cut using self-locating, pin or crimp corner cleats.
- **Infill volumes:**
6-33mm. 20mm rebate height.

Weathering

- **Principle:**
Main weathering on rear side using EPDM wraparound gaskets.
- **Outer frame:**
Drainage via oblong aperture in integrated rebate and pressure balancing.

- **Flush opening frames and door:**
Rebate drainage via oblong aperture and pressure balancing.
- **Basic opening frame:**
Rebate drainage via oblong aperture and channelling via drip mould.

ACCESSORIES

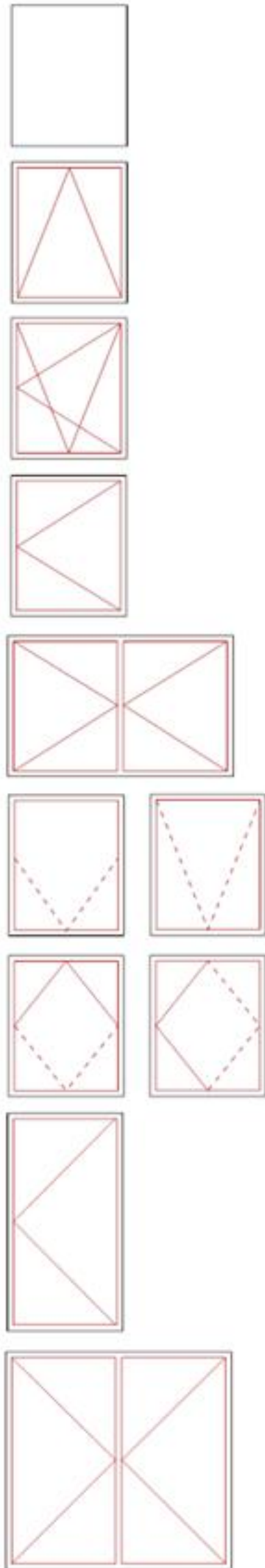
- Stainless screws.
- Bushed hinges screwed onto outer frame and aluminium insert on opening frame.
- ¼ turn espagnolette for in-opening window and additional locking point for large heights.
- For 2-leaf window, latch, sash bolt or rod closing mechanisms available.
- Tilt-and-turn hardware with 2-position espagnolette, fool-proof mechanism and supplements for outside dimensions.
- Friction stay for top-hung window and turn handle.
- Turn handle and friction stay for opening limiter (top-hung butt-hinged window).
- Horizontal- and vertical-pivot windows: braked pivot with 15° and 180° locking positions, closing with turn handles, perimetral closing option.
- 1- or 3-point locks for doors and patio doors, 3-body hinge.

Composite frames

- Range of mullions/transoms for required inertia, standard steel reinforcement available.
- Linking using screw channels or ¼ turn pin connector.
- GB slider integration profile.
- PB door integration profile and hinges.
- Sill profile for exposed sites or continuous profile effect.
- Expansion profile.
- Wide selection of outer frame profiles. (with integrated architrave, subframe outer frame, etc...)

Installation

- One-piece subframe.
- Outer frame reconstituted subframe with peripheral flashing or sills.
- Jamb mounted with clipped flashing cladding.
- For renovation on existing outer frame.
- Plates for embedding and anchoring.



**The conception and dimensions of the systems presented in this catalogue are in compliance with the French and / or European regulations applicable at the time of the realization of the document. The aluminium fabricator and/or consultant are entitled to check if these conceptions and dimensions have to be adapted according to local legislation and all other relevant norms and standards.*

Series overview

FB performance

Type	Classification		W	H
1-leaf window	A3 EE VE	Internal test SOCOTEC R 0894/24	800	1500
2-leaves window	A3 EE VE	CEBTP test n°2323-6-259 CERFF certificate n°1537	1600	1550
T/T 1-leaf window	A* ₄ E* _{A9} V* _{C4}	CEBTP test n°E223-01-08	1200	1600
T/T 2-leaves window	A3 EE VE	Internal test Q 1293/13	1200	1400
Bottom-hung window	A3 EE VE	Internal test SOCOTEC R 0894/25	1200	600
Top-hung window	A3 EE VE	Internal test Q 0295/02	1500	1800
Top-hung window	A3 EE VE	Internal test Q 0295/01	900	1200
Top-hung butt-hinged window	A3 EE VE	Internal test Q 0295/03	1500	1500
Pivot set window	A* ₃ E* ₁₂₀₀ V* _{C4}	CEBTP test n° 0800-04	1600	1800
2-leaf patio door	A* ₄ E* _{9A} V* _{A2}	CEBTP test n° E213-2-335	1400	2150
2-leaf patio door with 3-point lock	A3 E3 V2	Internal test Q 0196/18	2200	2250

Series overview

FB performance

■ Acoustic performance:

Sound Reduction							
Tests carried out as per standards NF S31 - 051 - ISO 140 - ISO 177							
Frame dimensions H x W – (1.48m x 1.46m)							
Serie	Application	Glass	Measurement n°	Results			
				Surrounding sound	Traffic sound	RW	
FB	T/T	10.6.4	624351	37 dB (A)	35 dB (A)	37 dB	
	2 leaves	4.12.4	624353	34 dB (A)	30 dB (A)	35 dB	
	2 leaves	10.6.4	624354	38 dB (A)	35 dB (A)	38 dB	
	2 leaves	40.31 (FA9/12/10)	624498	39 dB (A)	37 dB (A)	39 dB	
	2 leaves	6.10.4	624500	35 dB (A)	32 dB (A)	36 dB	
	Frame dimensions H x W – (1.48m x 1.23m)						
	T/T	4.12.4		624352	33 dB (A)	29 dB (A)	33 dB
	T/T	40.31 (FA9/12/10)		624494	40 dB (A)	38 dB (A)	40 dB

■ Thermal performance:

Window surface transmission factor without thermal break						
Window and patio door						
Window type	Glazing types and nominal thickness of air layer in double glazing (mm)		*K of window only (Kn)	Average K value day and night (Kn)		
				*Without shutter	With highly heat-permeable shutter	With normally heat-permeable shutter
Casement open-in window	Single glazing		6.15	4.95	4.55	4.00
	Double glazing	6	4.55	3.85	3.60	3.20
		8	4.45	3.80	3.55	3.15
		10	4.35	3.75	3.50	3.10
		12	4.30	3.70	3.45	3.05
Casement open-in patio door	Single glazing		6.25	5.00	4.60	4.05
	Double glazing	6	4.55	3.85	3.55	3.20
		8	4.45	3.75	3.50	3.15
		10	4.35	3.70	3.45	3.10
		12	4.30	3.65	3.40	3.05
*Window only = no shutter or shade						
* Without shutter = without shade						

Series overview

FB performance

- Dimensions and maximum weight per opening frame:

Type	Max. opening frame H	Max opening frame W	Max opening frame weight	Type	H maxi Opening frame	L maxi Opening frame	Poids maxi Opening frame
10mm chamber				22mm chamber			
1 and 2-leaf window	1400	800	60	Top-hung with small friction stay	2150	600	50
T/T with 3139* hardware	1300	600	50	Top-hung with large friction stay	2150	1600	80
T/T with 3132* hardware	1300	1300	60	Top-hung butt-hinged	1200	1500	60
Bottom-hung	600	1200	60	Pivot set	1800	1600	80
15mm chamber				Vertical-pivot	1600	1800	80
				42mm chamber			
1 and 2-leaf window	2150	900	60	Door and 3-point lock patio door			
T/T with 3139* hardware	2150	600	50	2150	1100	100 ***	
T/T with 3132* hardware	2150	1500	80				
Bottom-hung	900	1600	60				

* *If H > 600 or W > 1200, use 2 face-mounted sash bolts or 1 fanlight closer*

** *With 3 3151 or 3251 hinges*

With 2 hinges, max. W = 1200mm and max. weight = 45kg

*** *With 3 3251 hinges*

With 3151 hinges, max. weight = 80kg

* *On private premises, W > 1300*

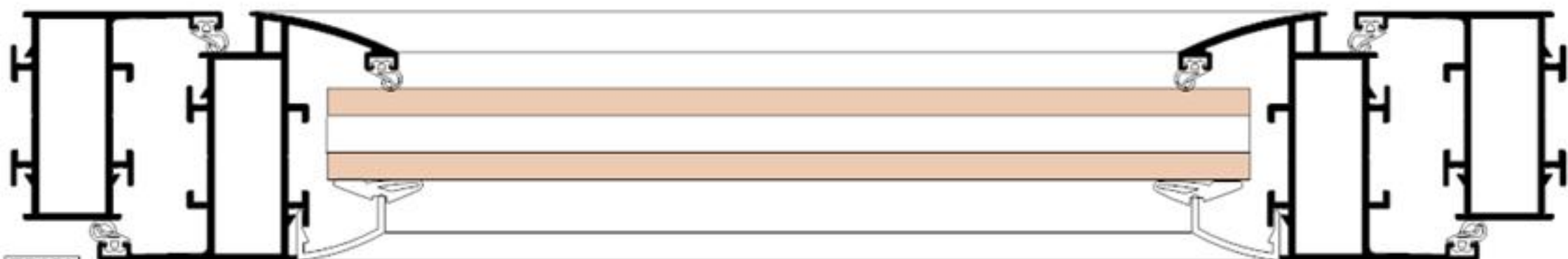
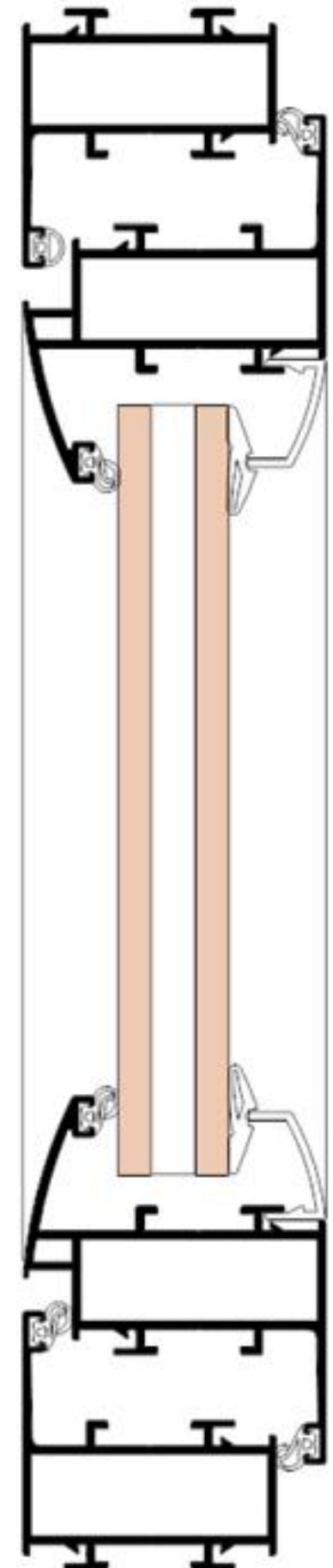
* *In public places, to avoid any deliberate or accidental misuse of the fool-proof mechanism leading to the opening frame «feathering», installing lock 3196 is strongly recommended.*

Series overview

Flush opening frame

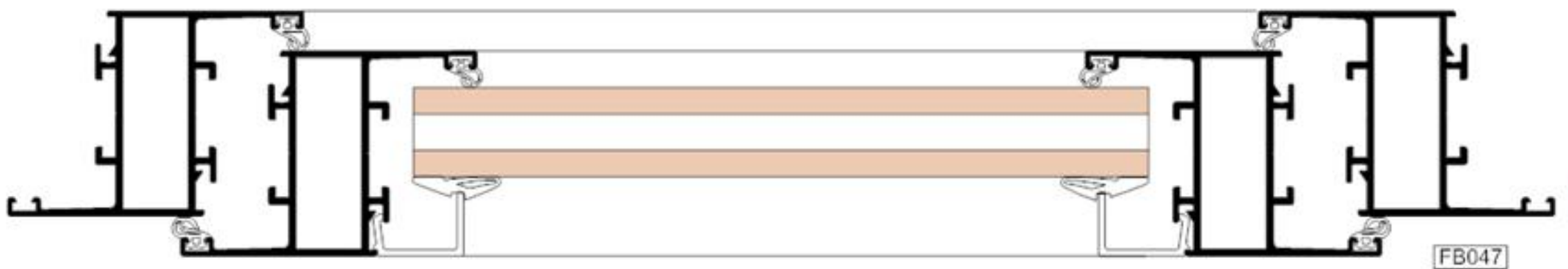
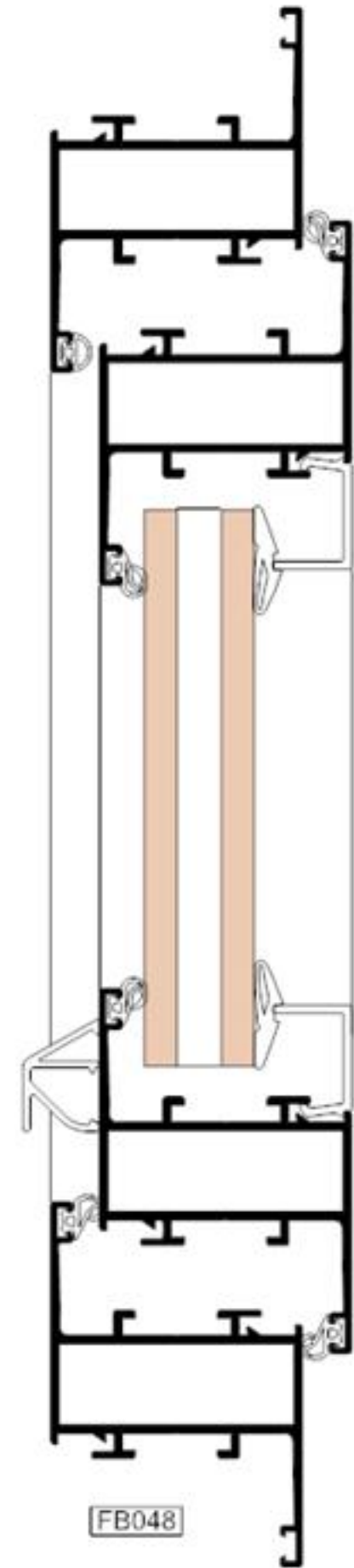


FB046



FB053

Series overview
Basic opening frame



TECHNAL