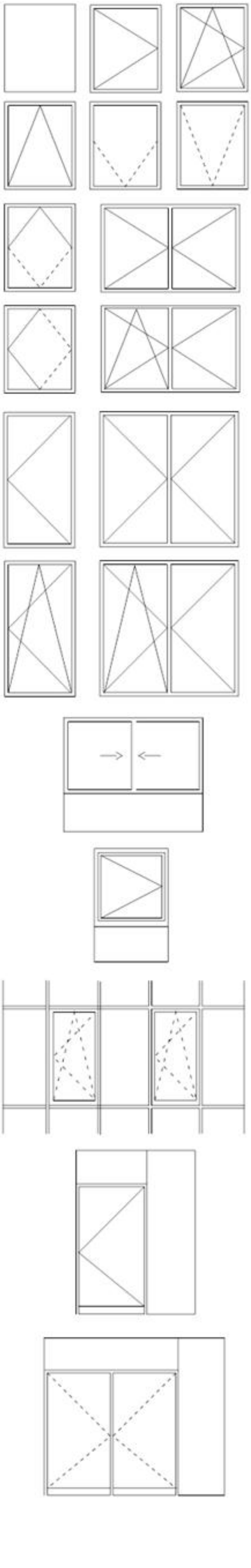
TECHNAL®



FXi product overview

Product overview

OUTER FRAME

- 3-chamber, thermal-break, 52 mm-module tubular profiles
- Mitre-cut assembly using self-locating crimp or pin corner cleats to join cut sections
- Flush rebate bracket
- Infill volumes identical to those for fixed lights from 14 – 35 mm.
- Marine quality EPDM wraparound gaskets with reduced flashing
- Square or rounded mitre-cut glazing beads
- Drainage via oblong apertures protected by storm deflectors
- Drainage concealed in outer frame groove.

- Options:

• Drainage concealed in top or bottom fixed light transom using patented drainage spouts

• Subframe outer frame

• Outer frame with integrated architrave

• Grooveless outer frame

OPENING FRAME

- 3-chamber, thermal-break, 60 mm-module tubular profiles flush with outer frame on outside
- Mitre-cut assembly using self-locating crimp or pin corner cleats to join cut sections
- Support bracket in external tubing
- Flush rebate bracket
- Infill volumes identical to opening lights from 14 – 35 mm.
- Marine quality EPDM wraparound gaskets with reduced flashing
- Square or rounded mitre-cut glazing beads
- Drainage via concealed oblong apertures
- Aluminium plugs for 2-leaf windows in identical colour to profiles
- Rounded central rebate. Identical window and patio door opening frames.

- **Options** :

• ECLAT type rounded central rebate with centred handle and reduced 115mm sight line

• Locking opening frame for patio door

ACCESSORIES

- Aluminium or zamak accessories
- Adjustable aluminium hinges with polyamide bushings and stainless shafts
- Tilt-and-turn hardware for 90kg weight with 130kg option. Identical appearance for tilt-and-turn and in-opening hardware on inside for 2-leaf frames.
- TECHNAL® designed handle and latch
- Stainless screws
- 1- or 3-point locking for patio doors with rods in rebate
- Bottom-hung in-opening handle 'SF' option for tilt-first T/T version
- Square-shaft handle option with embedded espagnolette and 43mm escutcheon

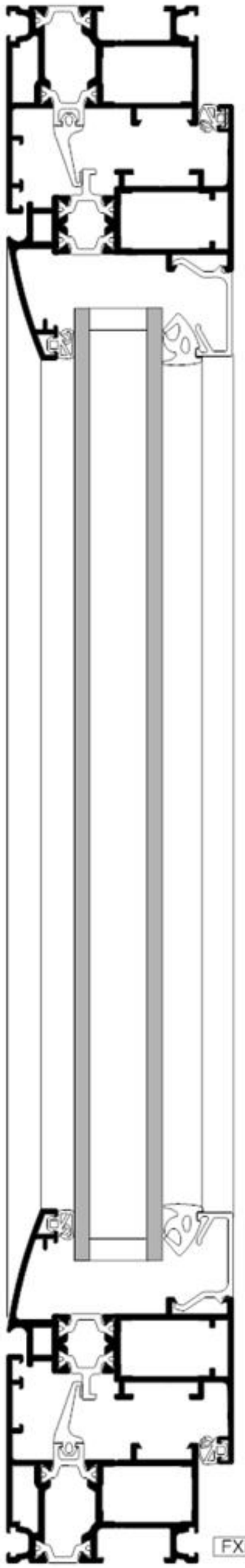
APPLICATIONS

- Fixed frame
- In-opening, 1 and 2-leaf window and patio-door
- Tilt-and-turn 1 and 2-leaf window and patio-door
- Bottom-hung window
- Horizontal-pivot window
- Vertical-pivot window
- Top-hung window
- Top-hung window on butt hinges
- 1 and 2-leaf locking patio door
- ECLAT version window and patio-door
- 1 leaf window on bottom fixed light composite frame
- FXi composites
- GXi series sliding frame composites
- PXi series integration
- MX series integration

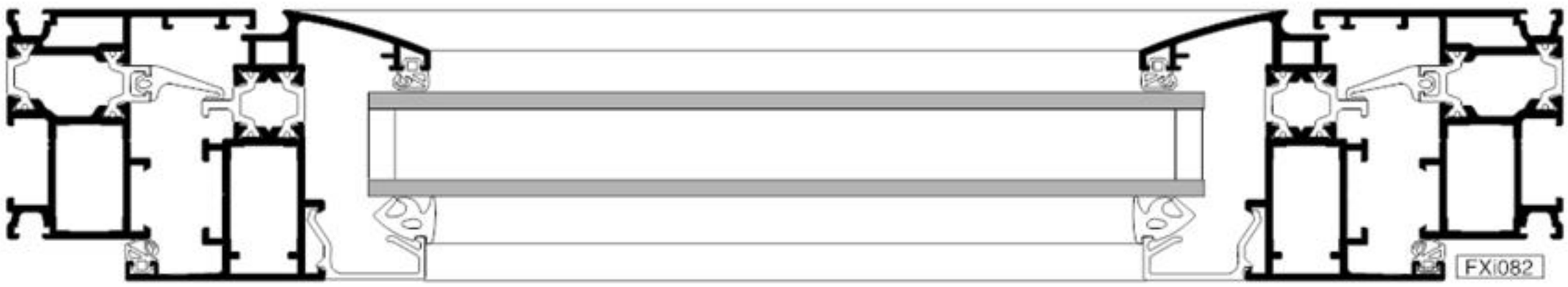
INSTALLATION

- Using jackscrews
- Using fixing lugs specially designed to avoid thermal bridges
- Flashing for additional 80-160 mm linings
- Outer frame with integrated subframe for 100 mm lining
- Single-piece inside sill for 100 – 120 mm offset sill installation

Vertical section scale 1/2



Horizontal section scale 1/2



TECHNAL®

FXi performance

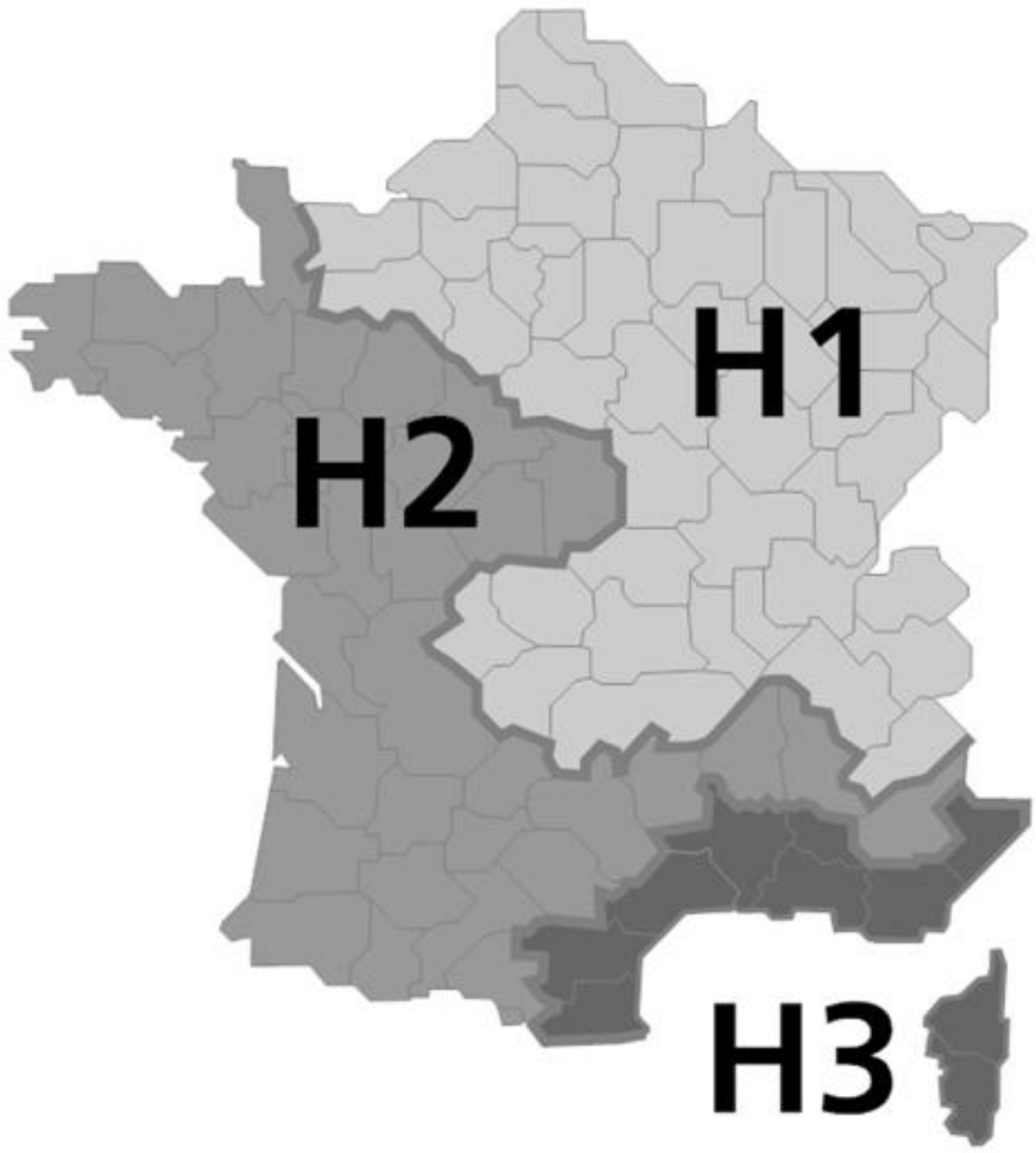
Thermal performance

Regulation

New building and renovations with planning permission		Zone H1 - H2	Zone H3
		RT2000	RT2000
Reference values for window only	Uw	2.4	2.6
Reference values for window with shutter	Ujn	2.0	2.3
Maximum authorised values	Uw	2.9	
Maximum authorised values with compensation (walls, floors, roofing	Uw Ujn	Acceptable thermal peformance lies between reference values and 2.9	

Uw and Ujn values certified by the CSTB:
study EWT/HTO 2001-388
+ mesure iFT 2003-402
23458/2

CSTB
le génie de la construction



Shutter values

ΔR-values by shutter type according to ThU 2000 (EN 13125)	ΔR m².K/W
- Accordion-type shutter, adjustable-louver shutter including all-metal external venetian blinds, swing shutters or fixed-louvred shutters	0.08
- Shutter without louvres in deployed position, aluminium roller shutters	0.14
- PVC roller shutter (thickness < or = 12 mm) - Sliding louvred shutter or PVC swing shutter, wooden swing shutter (thickness < 22mm)	0.19
- Sliding fixed-louvred PVC shutter and wooden swing shutter (thickness > 22 mm) - PVC roller shutter (thickness > 12mm)	0.25
- ref V303 40 mm PVC roller louver blind ref V302 60 mm PVC roller louver blind	0.22 0.26

FXi performance

Thermal performance

Glass values

Glass	U-values according to glazing components Vertical glazing – certified emissivity according to ThU 2000 (EN 673)					
	emissivity	AIR or ARGON airspace thickness (mm)	Glazing U- value with AIR airspace		Glazing Ug-value with 85% ARGON 15% AIR airspace	
			Glass thickness			
			4+4	4+10	4+4	4+10
Clear standard	**0.89**	6	3.3			
		8	3.1			
		10	2.9			
		12	2.8			
		14	2.8			
		16	2.7			
Sunergy (Glaverbel)	**0.28**	6	2.8	2.8	2.5	2.5
		8	2.5	2.5	2.2	2.2
		10	2.3	2.3	2.1	2.1
		12	2.2	2.2	2.0	1.9
		14	2.1	2.0	1.9	1.8
		16	2.0	2.0	1.8	1.8
		18	2.0	2.0	1.8	1.8
		20	2.0	2.0	1.9	1.8
K Glass (Pilkington) Planibel K Glass (Glaverbel)	**0.16**	6	2.7	2.6	2.3	2.3
		8	2.3	2.3	2.0	2.0
		10	2.1	2.1	1.8	1.8
		12	1.9	1.9	1.7	1.7
		14	1.8	1.8	1.6	1.6
		16	1.7	1.7	1.5	1.5
		18	1.7	1.7	1.6	1.5
		20	1.8	1.7	1.6	1.6
Luxguard low e 1.1 Luxguard low e 1.3	**0.10**	6	2.6	2.5	2.2	2.2
		8	2.2	2.2	1.9	1.9
		10	2.0	2.0	1.7	1.7
		12	1.8	1.8	1.5	1.5
		14	1.7	1.6	1.4	1.4
		16	1.6	1.6	1.4	1.4
		18	1.6	1.6	1.4	1.4
		20	1.6	1.6	1.4	1.4
Planibel Plus (Glaverbel)	**0.09**	6	2.6	2.5	2.2	2.1
		8	2.2	2.2	1.9	1.8
		10	2.0	1.9	1.6	1.6
		12	1.8	1.8	1.5	1.5
		14	1.6	1.6	1.4	1.4
		16	1.6	1.5	1.3	1.3
		18	1.6	1.5	1.4	1.3
		20	1.6	1.6	1.4	1.4
Planitherm Futur N (SGG) Planibel Top N Thermo Plus Energy (Glaverbel)	**0.05**	6	2.5	2.5	2.1	2.1
		8	2.1	2.1	1.8	1.7
		10	1.9	1.9	1.5	1.5
		12	1.7	1.7	1.4	1.4
		14	1.5	1.5	1.2	1.2
		16	1.4	1.4	1.2	1.2
		18	1.4	1.4	1.2	1.2
		20	1.5	1.4	1.2	1.2
Optitherm SN (Pikington i Plus S (Interpane) i Plus colourless 52/29 i Plus blue 40/23	**0.04 certified**	8	2.1	2.1	1.7	1.7
		10	1.8	1.8	1.5	1.5
		12	1.6	1.6	1.3	1.3
		14	1.5	1.5	1.2	1.2
		16	1.4	1.4	1.2	1.2
		18	1.4	1.4	1.2	1.2
		20	1.4	1.4	1.2	1.2
i Plus SE (Interpane) i Plus sun I Plus neutre 73/39 Planistar (SGG) Planitherm ultra N (SGG)	**0.03 certified**	12	1.5	1.4	1.2	1.2
		14	1.4	1.4	1.1	1.1
		16	1.4	1.4	1.2	1.1
		18	1.4	1.4	1.2	1.2
		20				
i Plus colourless 50/25 - 68/34 i Plus natura 67/34	**0.02 certifié**	14	1.4	1.4	1.1	1.1
		16	1.3	1.3	1.1	1.1
		18	1.3	1.3	1.1	1.1
		20	1.4	1.3	1.1	1.1

list given for example purposes, other glass available

Glazing solar factors	g	
	Glass thickness	
	4+4	6+6
Clear Climalit	0.76	0.72
Clear Antelio		0.48
Cool Lite SS108		0.12
Clear Planibel	0.78	0.75
Green Planibel	0.54	0.46
Grey Thermobel Stopsol		0.32
Clear Sunergy	0.54	0.52
Green Sunergy		0.33
Azure Sunergy		0.36
K Glass	0.72	0.69
Planibel K Glass	0.74	0.71
Luxguard low e 1.1	0.65	
Luxguard low e 1.3	0.65	
Planibel Plus	0.67	0.65
Planitherm Futur N	0.63	0.60
Planibel Top N	0.64	0.62
Thermo Plus Energy	0.39	0.39
Optitherm	0.63	
i Plus S	0.43	
i Plus colourless 52/29	0.32	0.32
i Plus blue 40/23	0.26	0.26
i Plus SE	0.54	
i Plus sun	0.43	
i Plus neutre 73/39	0.43	0.42
Planistar	0.42	0.41
Planitherm ultra N	0.63	0.60
I Plus colourless 50/25	0.28	0.28
i Plus colourless 68/34	0.38	0.38
I Plus nature 67/34	0.38	0.38

list given for example purposes, other glass available

TECHNAL®

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FXi performance

Thermal performance

■ Values for 1-leaf and 2-leaf windows

	Uw value of glass unit centre pane (W/m².K)	Uw value of window only (W/m².K)	Ujn (W/m².K) for complementary thermal resistance ΔR (m².K/W) of: (see table of shutter types)			
			0.08	0.14	0.19	0.25
1-leaf window W = 1.25 m H = 1.48 m With HF008 outer frame + HF001 opening frame	1.1	1.8	1.7	1.6	1.6	1.5
	1.2	1.9	1.8	1.7	1.6	1.6
	1.3	1.9	1.8	1.7	1.6	1.6
	1.4	2.0	1.9	1.9	1.8	1.7
	1.5	2.1	1.9	1.9	1.8	1.7
	1.6	2.1	1.9	1.9	1.8	1.7
	1.7	2.2	2.0	1.9	1.9	1.8
	1.8	2.3	2.1	2.0	2.0	1.9
	1.9	2.3	2.1	2.0	2.0	1.9
	2.0	2.4	2.2	2.1	2.0	2.0
	2.1	2.5	2.3	2.2	2.1	2.0
	2.2	2.6	2.4	2.3	2.2	2.1
	2.3	2.6	2.4	2.3	2.2	2.1
	2.4	2.7	2.5	2.3	2.2	2.2
	2.5	2.8	2.5	2.4	2.3	2.2
	2.6	2.8	2.5	2.4	2.3	2.2
	2.7	2.9	2.6	2.5	2.4	2.3
2-leaf window W = 1.45 m H = 1.48 m With HF008 outer frame + HF001 opening frame + HF001 mullion	1.1	2.1	1.9	1.9	1.8	1.7
	1.2	2.1	1.9	1.9	1.8	1.7
	1.3	2.2	2.0	1.9	1.9	1.8
	1.4	2.2	2.0	1.9	1.9	1.8
	1.5	2.3	2.1	2.0	2.0	1.9
	1.6	2.4	2.2	2.1	2.0	2.0
	1.7	2.4	2.2	2.1	2.0	2.0
	1.8	2.5	2.3	2.2	2.1	2.0
	1.9	2.5	2.3	2.2	2.1	2.0
	2.0	2.6	2.4	2.3	2.2	2.1
	2.1	2.7	2.5	2.3	2.2	2.2
	2.2	2.7	2.5	2.3	2.2	2.2
	2.3	2.8	2.5	2.4	2.3	2.2
	2.4	2.8	2.5	2.4	2.3	2.2
	2.5	2.9	2.6	2.5	2.4	2.3
	2.6	2.9	2.6	2.5	2.4	2.3
	2.7	3.0	2.7	2.6	2.5	2.4
	RT2000: maximum value of door and window pane-only Uw coefficients is 2.9 for new buildings.					

max. glass thickness 35 mm (55 mm with rebate widener ref 2100)

Sw glazing solar factor (including any solar protection)	Sw solar factor winter		Sw solar factor summer	
	Default value α according to joinery colour			
	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue
1-leaf window - W = 1.25 m x H = 1.48 m				
0.1	0.08	0.09	0.09	0.12
0.2	0.14	0.16	0.15	0.18
0.3	0.21	0.23	0.22	0.25
0.4	0.28	0.29	0.28	0.31
0.5	0.34	0.36	0.35	0.38
0.6	0.41	0.43	0.42	0.45
0.7	0.48	0.49	0.48	0.51
0.8	0.54	0.56	0.55	0.58
2-leaf window - W = 1.45 m x H = 1.48 m				
0.1	0.07	0.10	0.09	0.12
0.2	0.13	0.16	0.15	0.18
0.3	0.19	0.22	0.21	0.24
0.4	0.25	0.28	0.27	0.30
0.5	0.31	0.34	0.33	0.36
0.6	0.38	0.40	0.39	0.42
0.7	0.44	0.46	0.45	0.48
0.8	0.50	0.52	0.51	0.54

FXi performance

Thermal performance

■ Values for ECLAT 1-leaf and 2-leaf windows	Uw value of glass unit centre pane (W/m².K)	Uw value of window only (W/m².K)	Ujn (W/m².K) for complementary thermal resistance ΔR (m².K/W) of: (see table of shutter types)			
			0.08	0.14	0.19	0.25
2-leaf ECLAT window W = 1.45 m H = 1.48 m With HF008 outer frame + HF001 opening frame + FF001 + FF002 central mullion	1.1	< 2.0	1.9	1.8	1.7	1.7
	1.2	2.0	1.9	1.8	1.7	1.7
	1.3	2.1	1.9	1.9	1.8	1.7
	1.4	2.2	2.0	1.9	1.9	1.8
	1.5	2.2	2.0	1.9	1.9	1.8
	1.6	2.3	2.1	2.0	2.0	1.9
	1.7	2.3	2.1	2.0	2.0	1.9
	1.8	2.4	2.2	2.1	2.0	2.0
	1.9	2.5	2.3	2.2	2.1	2.0
	2.0	2.5	2.3	2.2	2.1	2.0
	2.1	2.6	2.4	2.3	2.2	2.1
	2.2	2.6	2.4	2.3	2.2	2.1
	2.3	2.7	2.5	2.3	2.2	2.2
	2.4	2.8	2.5	2.4	2.3	2.2
	2.5	2.8	2.5	2.4	2.3	2.2
	2.6	2.9	2.6	2.5	2.4	2.3
	2.7	2.9	2.6	2.5	2.4	2.3
2-leaf ECLAT window W = 145 m H = 2.18 m With HF008 outer frame + HF001 opening frame + FF001 + FF002 central mullion	1.1	1.9	1.8	1.7	1.6	1.6
	1.2	< 2.0	1.9	1.8	1.7	1.7
	1.3	2.0	1.9	1.8	1.7	1.7
	1.4	2.1	1.9	1.9	1.8	1.7
	1.5	2.1	1.9	1.9	1.8	1.7
	1.6	2.2	2.0	1.9	1.9	1.8
	1.7	2.3	2.1	2.0	2.0	1.9
	1.8	2.3	2.1	2.0	2.0	1.9
	1.9	2.4	2.2	2.1	2.0	2.0
	2.0	2.5	2.3	2.2	2.1	2.0
	2.1	2.5	2.3	2.2	2.1	2.0
	2.2	2.6	2.4	2.3	2.2	2.1
	2.3	2.7	2.5	2.3	2.2	2.2
	2.4	2.7	2.5	2.3	2.2	2.2
	2.5	2.8	2.5	2.4	2.3	2.2
	2.6	2.9	2.6	2.5	2.4	2.3
	2.7	2.9	2.6	2.5	2.4	2.4
	RT2000: maximum value of door and window pane-only Uw coefficients is 2.9 for new buildings.					

Sw glazing solar factor (including any solar protection)	Default value α according to joinery colour			
	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue
2-leaf ECLAT window - W = 1.45 m x H = 1.48 m				
0.1	0.08	0.10	0.09	0.12
0.2	0.14	0.16	0.15	0.18
0.3	0.20	0.22	0.21	0.24
0.4	0.26	0.28	0.27	0.31
0.5	0.32	0.34	0.33	0.37
0.6	0.38	0.40	0.39	0.43
0.7	0.45	0.47	0.46	0.49
0.8	0.51	0.53	0.52	0.55
2-leaf ECLAT patio-door - W = 145 m x H = 2.18 m				
0.1	0.08	0.10	0.09	0.12
0.2	0.14	0.16	0.15	0.18
0.3	0.21	0.22	0.22	0.25
0.4	0.27	0.29	0.28	0.31
0.5	0.34	0.35	0.34	0.38
0.6	0.40	0.42	0.41	0.44
0.7	0.46	0.48	0.47	0.51
0.8	0.53	0.55	0.54	0.57

TECHNAL®

FXi performance
Thermal performance

■ Values for 1-leaf patio-door and 2-leaf patio-door

	Uw value of glass unit centre pane (W/m².K)	Uw value of window only (W/m².K)	Ujn (W/m².K) for complementary thermal resistance ΔR (m².K/W) of: (see table of shutter types)			
			0.08	0.14	0.19	0.25
1-leaf window W = 1.25 m H = 1.48 m With HF008 outer frame + HF001 opening frame	1.1	1.7	1.6	1.5	1.5	1.4
	1.2	1.8	1.7	1.6	1.6	1.5
	1.3	1.9	1.8	1.7	1.6	1.6
	1.4	1.9	1.8	1.7	1.6	1.6
	1.5	2.0	1.9	1.8	1.7	1.7
	1.6	2.1	1.9	1.9	1.8	1.7
	1.7	2.1	1.9	1.9	1.8	1.7
	1.8	2.2	2.0	1.9	1.9	1.8
	1.9	2.3	2.1	2.0	2.0	1.9
	2.0	2.4	2.2	2.1	2.0	2.0
	2.1	2.4	2.2	2.1	2.0	2.0
	2.2	2.5	2.3	2.2	2.1	2.0
	2.3	2.6	2.4	2.3	2.2	2.1
	2.4	2.7	2.5	2.3	2.2	2.2
	2.5	2.7	2.5	2.3	2.2	2.2
	2.6	2.8	2.5	2.4	2.3	2.2
	2.7	2.9	2.6	2.5	2.4	2.3
2-leaf window W = 1.45 m H = 1.48 m With HF008 outer frame + HF001 opening frame + HF001 central mullion	1.1	< 2.0	1.9	1.8	1.7	1.7
	1.2	2.0	1.9	1.8	1.7	1.7
	1.3	2.1	1.9	1.9	1.8	1.7
	1.4	2.2	2.0	1.9	1.9	1.8
	1.5	2.2	2.0	1.9	1.9	1.8
	1.6	2.3	2.1	2.0	2.0	1.9
	1.7	2.3	2.1	2.0	2.0	1.9
	1.8	2.4	2.2	2.1	2.0	2.0
	1.9	2.5	2.3	2.2	2.1	2.0
	2.0	2.5	2.3	2.2	2.1	2.0
	2.1	2.6	2.4	2.3	2.2	2.1
	2.2	2.7	2.5	2.3	2.2	2.2
	2.3	2.7	2.5	2.3	2.2	2.2
	2.4	2.8	2.5	2.4	2.3	2.2
	2.5	2.9	2.6	2.5	2.4	2.3
	2.6	2.9	2.6	2.5	2.4	2.3
	2.7	3.0	2.7	2.6	2.5	2.4
	RT2000: maximum value of door and window pane-only Uw coefficients is 2.9 for new buildings.					

max. glass thickness 35 mm (55 mm with rebate widener ref 2100)

Sw glazing solar factor (including any solar protection)	Sw solar factor winter		Sw solar factor summer	
	Default value α according to joinery colour			
	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue	0.4 White. yellow. orange. light red	1.0 Black. dark brown. dark blue
1-leaf window - W = 1.25 m x H = 2.18 m				
0.1	0.08	0.09	0.09	0.11
0.2	0.15	0.16	0.16	0.18
0.3	0.22	0.23	0.23	0.25
0.4	0.29	0.30	0.29	0.32
0.5	0.36	0.37	0.36	0.39
0.6	0.43	0.44	0.43	0.46
0.7	0.50	0.51	0.50	0.53
0.8	0.57	0.58	0.57	0.60
2-leaf window - W = 1.45 m x H = 2.18 m				
0.1	0.08	0.10	0.09	0.12
0.2	0.14	0.16	0.15	0.18
0.3	0.20	0.22	0.21	0.25
0.4	0.26	0.28	0.27	0.31
0.5	0.33	0.35	0.34	0.37
0.6	0.39	0.41	0.40	0.43
0.7	0.45	0.47	0.46	0.50
0.8	0.52	0.54	0.53	0.56

FXi performance

Thermal performance

■ **Values for fixed frame and 1-leaf horizontal pivot window**

	Uw value of glass unit centre pane (W/m².K)	Uw value of window only (W/m².K)	Ujn (W/m².K) for complementary thermal resistance ΔR (m².K/W) of: (see table of shutter types)			
			0.08	0.14	0.19	0.25
Fixed frame W = 1.25 m H = 1.48 m with HF008 outer frame	1.1	1.7	1.6	1.5	1.5	1.5
	1.2	1.8	1.7	1.6	1.6	1.5
	1.3	1.8	1.7	1.6	1.6	1.5
	1.4	1.9	1.8	1.7	1.6	1.6
	1.5	< 2.0	1.9	1.8	1.7	1.7
	1.6	2.1	1.9	1.9	1.8	1.7
	1.7	2.2	2.0	1.9	1.9	1.8
	1.8	2.2	2.0	1.9	1.9	1.8
	1.9	2.3	2.1	2.0	2.0	1.9
	2.0	2.4	2.2	2.1	2.0	2.0
	2.1	2.5	2.3	2.2	2.1	2.0
	2.2	2.5	2.3	2.2	2.1	2.0
	2.3	2.6	2.4	2.3	2.2	2.1
	2.4	2.7	2.5	2.3	2.2	2.2
	2.5	2.8	2.5	2.4	2.3	2.2
	2.6	2.9	2.6	2.5	2.4	2.3
	2.7	2.9	2.6	2.5	2.4	2.3
1-leaf horizontal pivot window W = 1.25 m H = 1.48 m with HF008 outer frame + inversor FF042 + HF028 opening frame	1.1	2.2	2.0	1.9	1.9	1.8
	1.2	2.2	2.0	1.9	1.9	1.8
	1.3	2.3	2.1	2.0	2.0	1.9
	1.4	2.4	2.2	2.1	2.0	2.0
	1.5	2.5	2.3	2.2	2.1	2.0
	1.6	2.5	2.3	2.2	2.1	2.0
	1.7	2.6	2.4	2.3	2.2	2.1
	1.8	2.7	2.5	2.3	2.2	2.2
	1.9	2.8	2.5	2.4	2.3	2.2
	2.0	2.8	2.5	2.4	2.3	2.2
	2.1	2.9	2.6	2.5	2.4	2.3
	2.2	3.0	2.7	2.6	2.5	2.4
	2.3	3.1	2.8	2.6	2.5	2.4
	2.4	3.1	2.8	2.6	2.5	2.4
	2.5	3.2	2.9	2.7	2.6	2.5
	2.6	3.3	3.0	2.8	2.7	2.6
	2.7	3.4	3.0	2.9	2.7	2.6
	RT2000: maximum value of door and window pane-only Uw coefficients is 2.9 for new buildings.					

max. glass thickness 35 mm (55 mm with rebate widener ref 2100)

Sw glazing solar factor (including any solar protection)	Sw solar factor winter		Sw solar factor summer	
	Default value α according to joinery colour			
	0.4 White. yellow. orange. light red	**1.0** Black. dark brown. dark blue	**0.4** White. yellow. orange. light red	**1.0** Black. dark brown. dark blue
Fixe frame - W = 1.25 m x H = 2.18 m				
0.1	0.08	0.10	0.09	0.11
0.2	0.16	0.17	0.16	0.19
0.3	0.23	0.25	0.24	0.26
0.4	0.31	0.32	0.32	0.34
0.5	0.39	0.40	0.39	0.41
0.6	0.46	0.47	0.47	0.49
0.7	0.54	0.55	0.54	0.56
0.8	0.61	0.62	0.62	0.64
1-leaf horizontal pivot window - W = 1.25 m x H = 1.48 m				
0.1	0.09	0.11	0.10	0.14
0.2	0.16	0.19	0.17	0.21
0.3	0.23	0.26	0.25	0.28
0.4	0.31	0.33	0.32	0.36
0.5	0.38	0.41	0.39	0.43
0.6	0.45	0.48	0.46	0.50
0.7	0.53	0.55	0.54	0.58
0.8	0.60	0.62	0.61	0.65

FXi performance

Acoustic and weathering performance

Acoustic performance:

Sound insulation measurements Tests carried out according to NF S31 – 051 -ISO 140 and ISO 177 standards					
Frame dimensions H x W (1.48 m x 1.47 m)					
Applications	Glass	Measurement reference	Results		
			RW	RA	RA,tr
In-opening 2-leaf window	Climalit 4/12/4	625389	34 dB	33 dB	30 dB
In-opening 2-leaf window	35-20 4/6/10	625391	37 dB	37 dB	34 dB
In-opening 2-leaf window	38-23 44-1R/6/8	625392	39 dB	39 dB	36 dB
In-opening 2-leaf window	40-31 44-1R/12/10	625390	40 dB	39 dB	38 dB

Sound insulation measurements Tests carried out according to NF S31 – 051 -ISO 140 and ISO 177 standards					
Frame dimensions H x W (1.48 m x 1.23 m)					
Applications	Glass	Measurement reference	Results		
			RW	RA	RA,tr
T/T	Climalit 4/12/4	625395	33 dB	32 dB	30 dB
T/T	35-20 4/6/10	625394	37 dB	37 dB	35 dB
T/T	38-23 44-1R/6/8	625396	40 dB	40 dB	38 dB
T/T	38-23 44-1R/6/8	625393	42 dB	41 dB	39 dB
T/T*	Stratophone 66/2-15-10	AC 3999	45 dB	43 dB	41 dB

*Trials carried out with offset glazing bead **FJ189**

Estimated values: results to be confirmed by Technical Evaluation Document

Air-wind-water performance:

Applications	Overall dimensions mm (H x W)	Test reference n°	Classification
1-leaf in-opening window	1210 x 1050	Test CEBTP n°E223.01.013	$A^*_4\ E^*_{A9}\ V^*_{C4}$
Top-hung window	1800 x 1470	Test n°0800-01	$A^*_4\ E^*_{1200}\ V^*_{C4}$
Horizontal pivot window	2190 x 2500	Test n°0800-03	$A^*_4\ E^*_{600}\ V^*_{C3}$
FXi 2-leaf on bottom light	1660 x 2160	Test CEBTP n°E223.01.005	$A^*_4\ E^*_{A8}\ V^*_{C4}$

Maximum dimensions

Type	Opening frame max. H	Opening frame max. W	Opening frame max. weight
In-opening window	1600	1000	(see charts)
In-opening patio door	2150	1000	(see charts)
T/T window	1600	1200	80 kgs (see charts)
T/T patio door	2150	1200	80 kgs(see charts)
Bottom-hung	800	1200	60 kgs with 2 sash bolts if **W > 800**
Small friction stay top-hung	1200	1750	80 kgs
Large friction stay top-hung	2000	1500	120 kgs
Horizontal-pivot	2200	2500	200 kgs
Vertical-pivot	2150	1800	150 kgs
Top-hung butt-hinged	1500	1500	60 kg with 2 hinges 80 kg with 3 hinges or W > **1200**
Locking door and patio door	2150	1000	(see charts)