



77 WINDOW SYSTEM

ALUK[®]

77 WINDOW SYSTEM



The new 77 window system is designed to meet the most demanding British and European performance requirements, including thermal, weathering and security - ideal for any building, whether refurbishment or new build, high rise or low rise.

With a wide variety of styles and configurations to choose from, the 77 window system is AluK's highest performance casement window, available in single or dual colour options, including anodised finishes. High levels of thermal performance are achieved by incorporating technologies such as thermal polyamides, insulated centre seals and foam insertions. Moreover, the 77 window system integrates with AluK curtain wall and door systems.

WINDOW PRODUCT SELECTOR

KEY: - No ● Yes

	77IW	77IW HI	77IWE	77IWE HI
	OPEN IN		OPEN OUT	
PERFORMANCE				
Security PAS 24*	●	●	●	●
FEATURES				
Punched openings	●	●	●	●
Triple glazing	●	●	●	●
Ribbon windows	●	●	●	●
100 mm restriction	●	●	●	●
Vent profile options	●	●	-	-
Mullion/Transom options	●	●	●	●
Trickle ventilation	●	●	●	●
Integrated with AluK's Curtain Walling	●	●	●	●
Dual colour option	●	●	●	●
BRE Green Guide rating (Resi/Comm)	A, B Rated	A, B Rated	A, B Rated	A, B Rated
HARDWARE				
Locking handle	●	●	●	●
Multi-point locking	●	●	●	●
Folding opener	-	-	●	●
Releasable and fixed restrictors available	-	-	●	●
WINDOW TYPES				
Top hung	-	-	●	●
Side hung	●	●	●	●
Bottom hung	●	●	●	●
Tilt & turn	●	●	-	-
APPLICATIONS				
New build	●	●	●	●
Renovation	●	●	●	●
Heavy commercial	●	●	●	●

*PAS 24 dependent on specific components used.

FABRICATION

The 77 window system can be fabricated using either a mechanical (pinned or screwed) or crimped process, with chevron corner supports. Weathering is achieved with an EPDM centre seal and single and dual EPDM gaskets.

SIZES & GLAZING

The 77 window system is available in the following options:

	GLAZING MAX WEIGHT	GLAZING MIN SIZE	GLAZING MAX SIZE	INTERNALLY GLAZED	EXTERNALLY GLAZED
Top hung (77IWE)	180 Kg	24 mm	50 mm	●	-
Side hung (77IWE)	55 Kg	24 mm	50 mm	●	-
Fixed light (77IWE)	300 Kg	24 mm	50 mm	-	●
Tilt & turn (77IW)	130 Kg	24 mm	56 mm	●	-
Bottom hung (77IW)	60 Kg	24 mm	56 mm	●	-
Side hung (77IW)	100 Kg	24 mm	56 mm	●	-
Fixed light (77IW)	300 Kg	24 mm	58 mm	●	-

PERFORMANCE & SECURITY

The 77 window system has been independently security tested to PAS 24: 2016 and weather tested to BS 6375 1-3: 2015. Details of AluK product tests are available from our Technical Services Department.

	AIR INFILTRATION BS EN 12207:2000	WATER TIGHTNESS BS EN 12208:2000	WIND RESISTANCE BS EN 12210:2000
77IWE (open out)	Class 4 (600 Pa)	E1050 (1050 Pa)	C5 (2400 Pa)
77IW (open in)	Class 4 (600 Pa)	E1200 (1200 Pa)	C5 (2000 Pa)

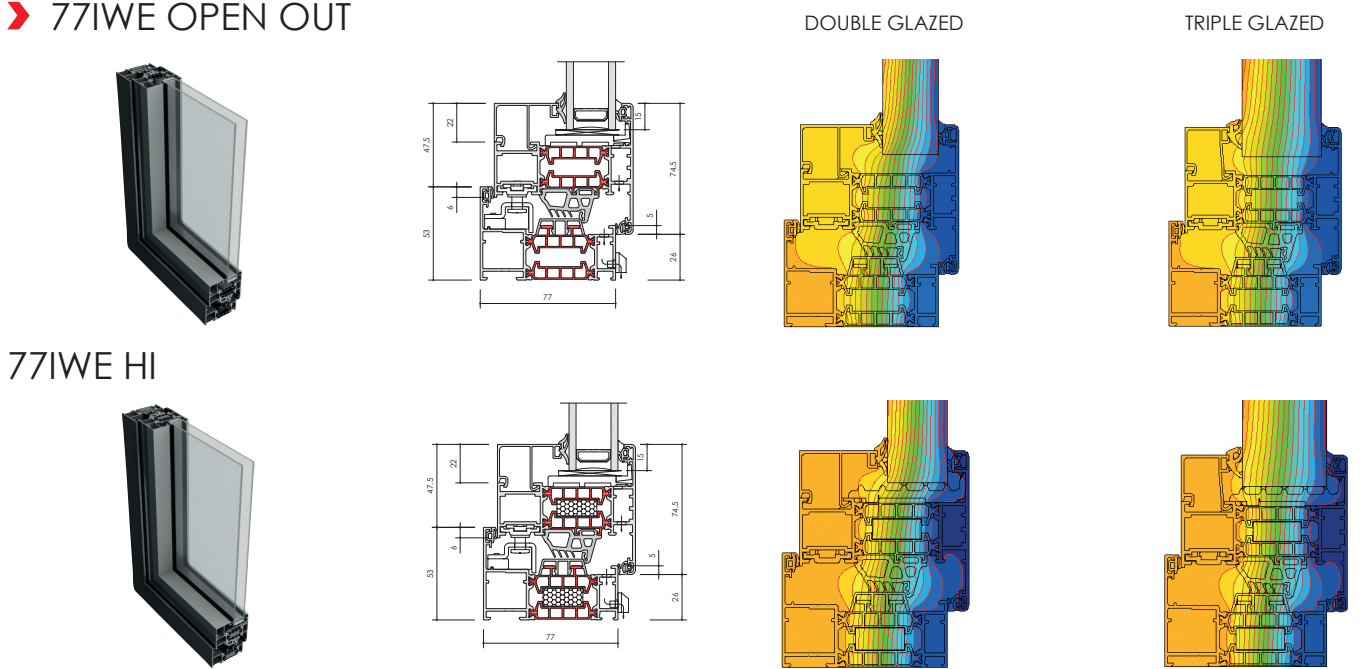
77IWE Side hung next to side 1846 mm x 1897 mm
77IWE Top hung next to fixed light 1897 mm x 2085 mm (500 mm x 2085 mm F/L)
77IW TBT next to fixed light 1400 mm x 2200 mm (1400 mm x 830 mm F/L)

THERMAL PERFORMANCE

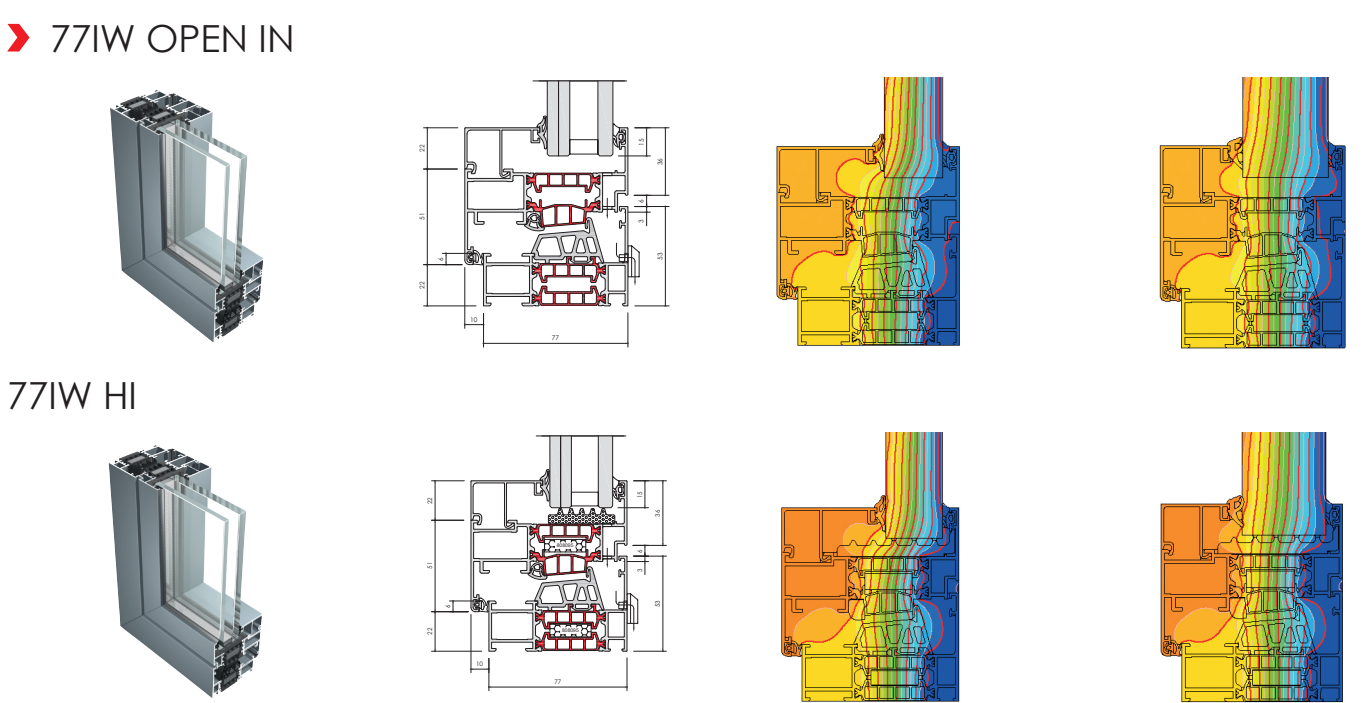
With ever increasing demand from building regulations for greater thermal performance, the 77 window system can meet the demands of today's building specifications.

		77IWE	77IWE HI	77IW	77IW HI
BR443 1230 mm X 1480 mm configuration					
Glass	Double glazed unit	1.0 W / m²K	1.0 W / m²K	1.0 W / m²K	1.0 W / m²K
	Triple glazed unit	0.7 W / m²K	0.7 W / m²K	0.7 W / m²K	0.7 W / m²K
Overall Uw	Double glazed unit	1.4 W / m²K	1.3 W / m²K	1.4 W / m²K	1.2 W / m²K
	Triple glazed unit	1.2 W / m²K	1.0 W / m²K	1.1 W / m²K	1.0 W / m²K

77IWE OPEN OUT



77IW OPEN IN



77IWE - OUTWARD OPENING WINDOW SYSTEM

77IWE OPEN OUT PRODUCT SELECTOR

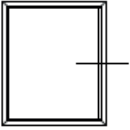
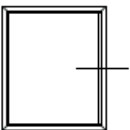
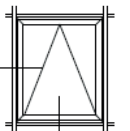
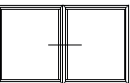
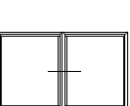
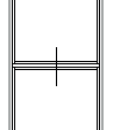
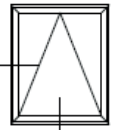
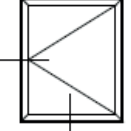
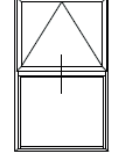
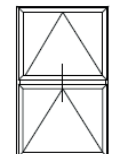
KEY: - No ● Yes

		77IWE HI	77IWE
		OPEN OUT	
PERFORMANCE AND ACCREDITATIONS			
Weather performance (BS 6375: 1-3: 2015)	Air permeability (Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
	Water tightness (Pa)	E1050 (1050 Pa)	E1050 (1050 Pa)
	Wind resistance (Pa)	C5 (2400 Pa)	C5 (2400 Pa)
Security to PAS 24		PAS 24	PAS 24
Uw (double glazing) with warm edge spacer*		1.3 W / m²K	1.4 W / m²K
Uw (triple glazing) with warm edge spacer**		1.0 W / m²K	1.2 W / m²K
BRE Green Guide rating (Resi/Comm)		A, B Rated	A, B Rated
Kitemark / Q Mark		●	●
OPTIONS			
Side hung		●	●
Top hung		●	●
Bottom hung		●	●
SYSTEM DEPTH			
mm		77	77
DESIGN FEATURES			
Triple glazing (50 mm)		●	●
Punched out openings		●	●
100 mm restriction		●	●
Trickle ventilation		●	●
Sightlines		100 mm	100 mm
HARDWARE			
Multi point		●	●
Single locking		●	●
Hardware groove		AluK groove	AluK groove
Locking handles		●	●
Folding openers		●	●
Friction stays and hinges		●	●
Butt hinges		●	●
FINISHES			
Single colour		●	●
Dual colour option		●	●
Textured		●	●
Anodized		●	●
MAXIMUM WINDOW SIZES (mm)			
Top hung*	Size (mm)	1500 mm x 1800 mm	1500 mm x 1800 mm
	Max. weight (Kg)	180 Kg	180 Kg
Side hung*	Size (mm)	838 mm x 1800 mm	838 mm x 1800 mm
	Max. weight (Kg)	55 Kg	55 Kg

*U values based on CEN size 1230 x 1480. Based upon warm edge spacer bar (PSI value less than or equal to 0.04) & a UG of 1.0 w/m²K.
**U values based on CEN size 1230 x 1480. Based upon warm edge spacer bar (PSI value less than or equal to 0.04) & a UG of 0.7 w/m²K.
†Height and width limitations dependent on glass weight. Please check with our Technical Services Department.

➤ 77IWE OPEN OUT WINDOW APPLICATIONS

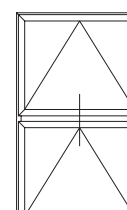
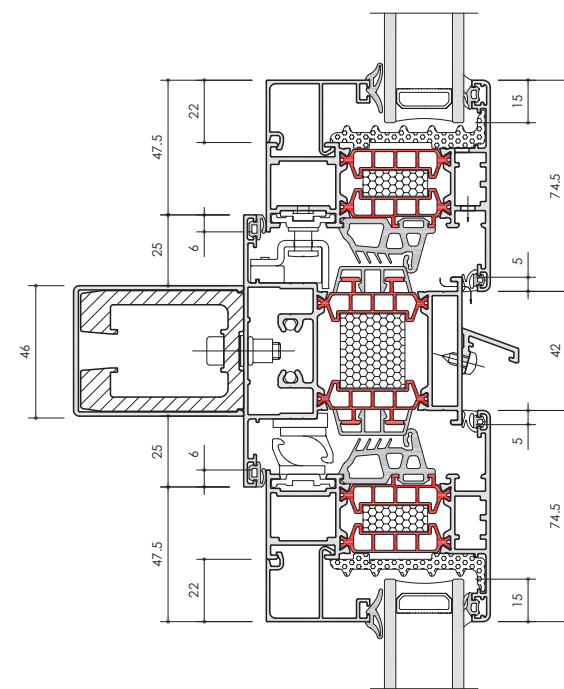
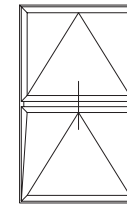
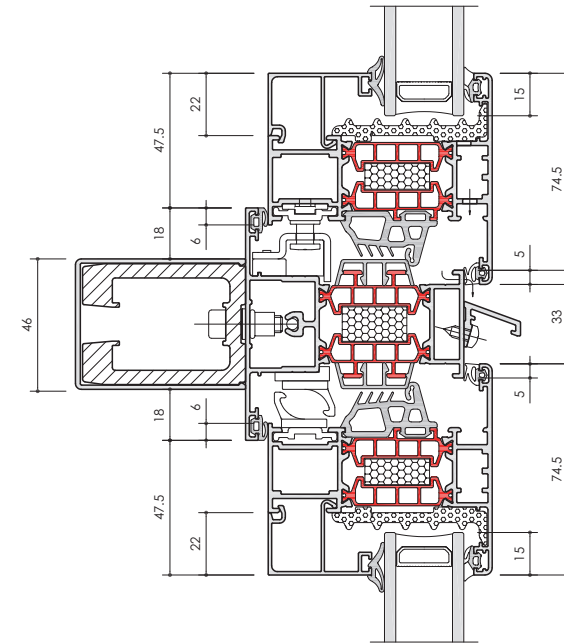
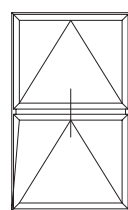
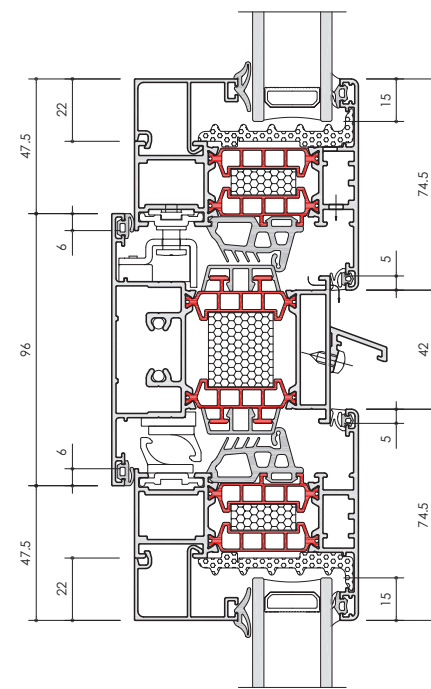
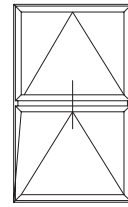
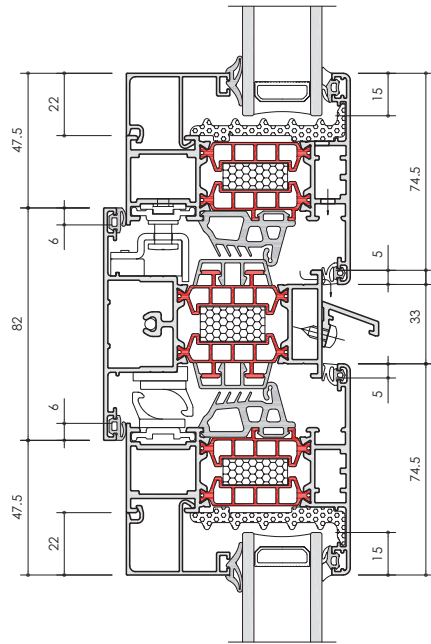
Typical elevations

KEY: - No ● Yes		
ELEVATION	TITLE	SBD COMPLIANT
	Fixed (outside glazed) Double glazed units	●
	Fixed (outside glazed) Triple glazed units	●
	Curtain wall insert	●
	Fixed light panels Expansion coupling	●
	Fixed light panels Variable corner coupling	●
ELEVATION	TITLE	SBD COMPLIANT
	Glazed transom/mullion Glazed transom/mullion Reinforced	●
	Top hung	●
	Side hung	●
	Fixed-vent transom/mullion Fixed-vent transom/mullion Reinforced	●
	Vent-vent transom/mullion Vent-vent transom/mullion Reinforced	●

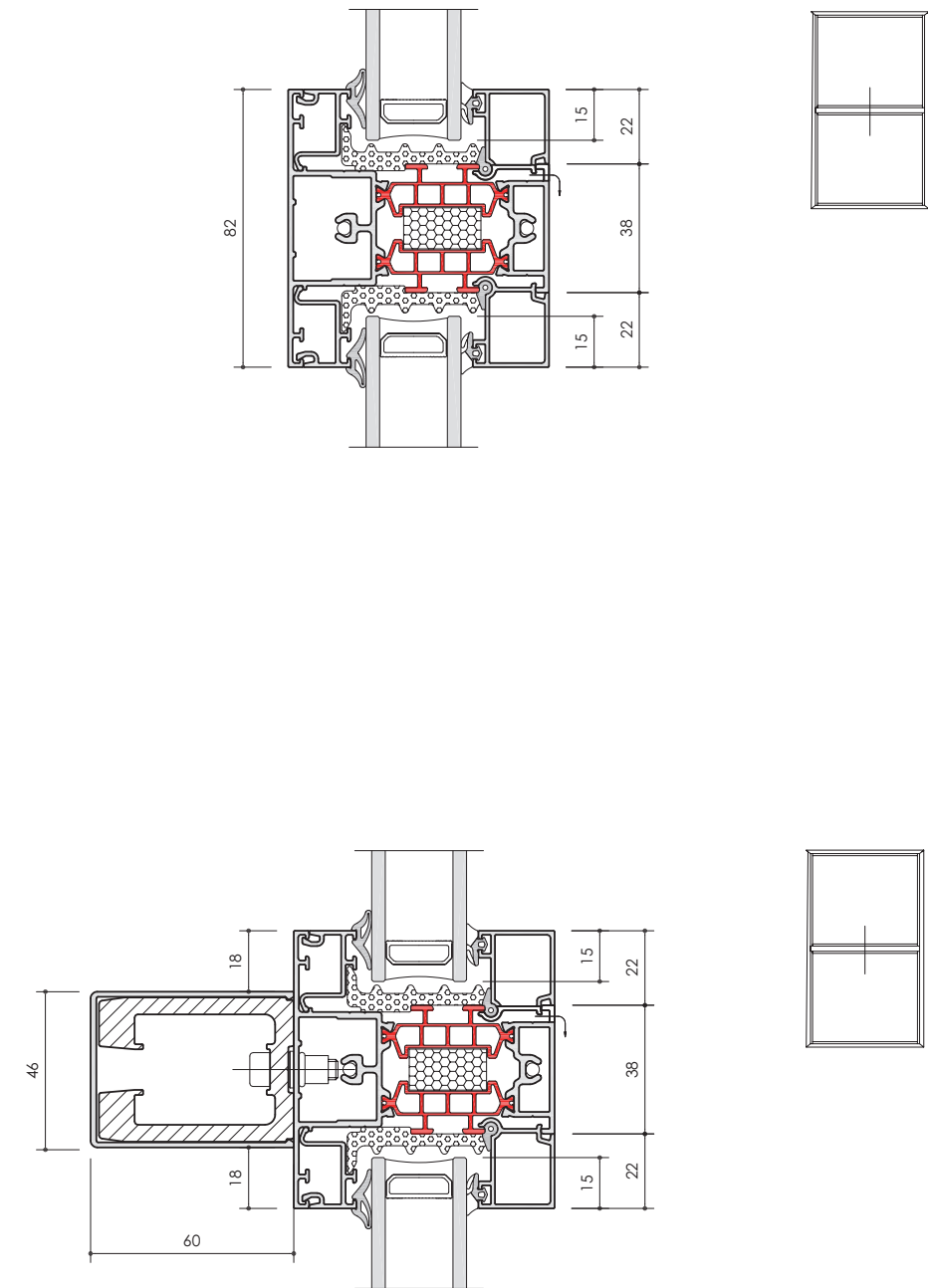
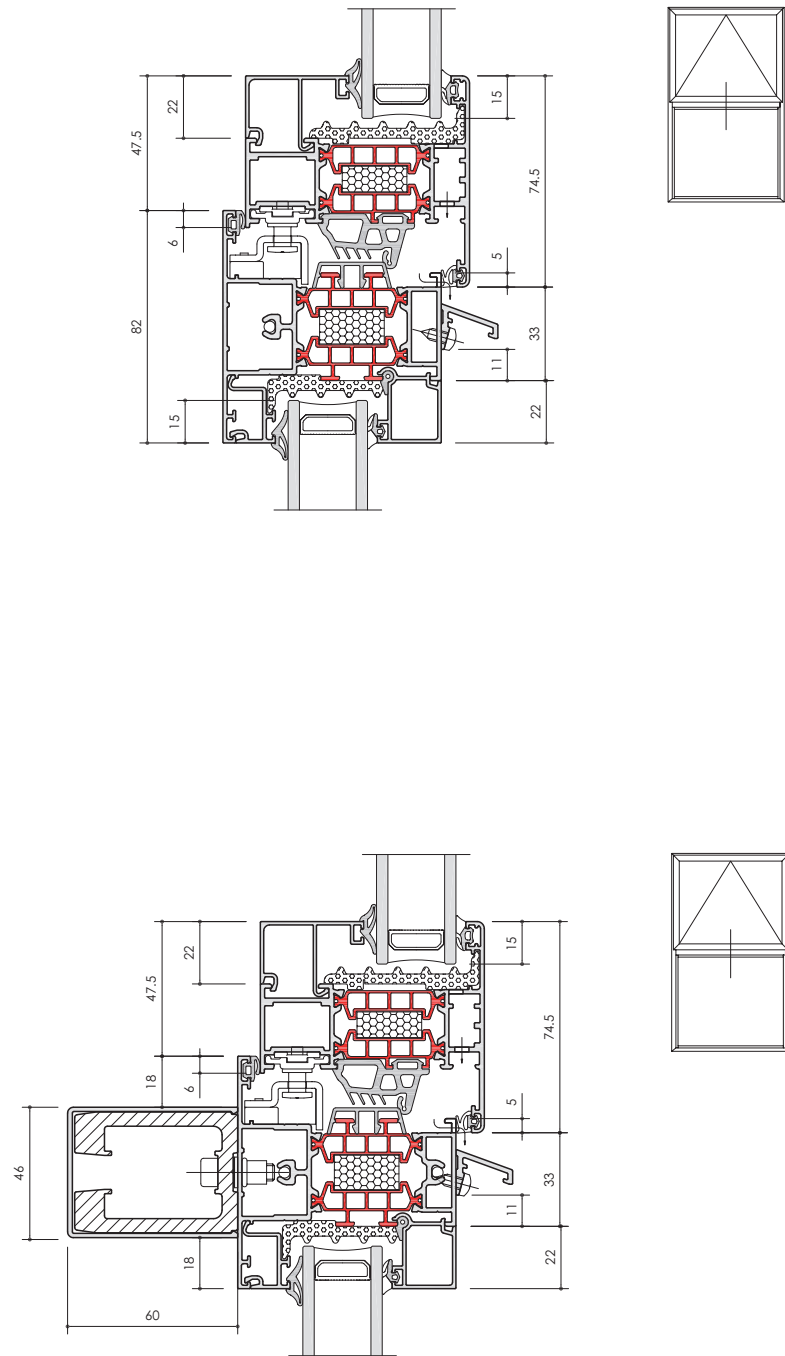
➤ 77IWE OPEN OUT FRAME AND VENT SIZE OPTIONS



➤ 77IWE OPEN OUT TRANSOM & MULLION DETAILS

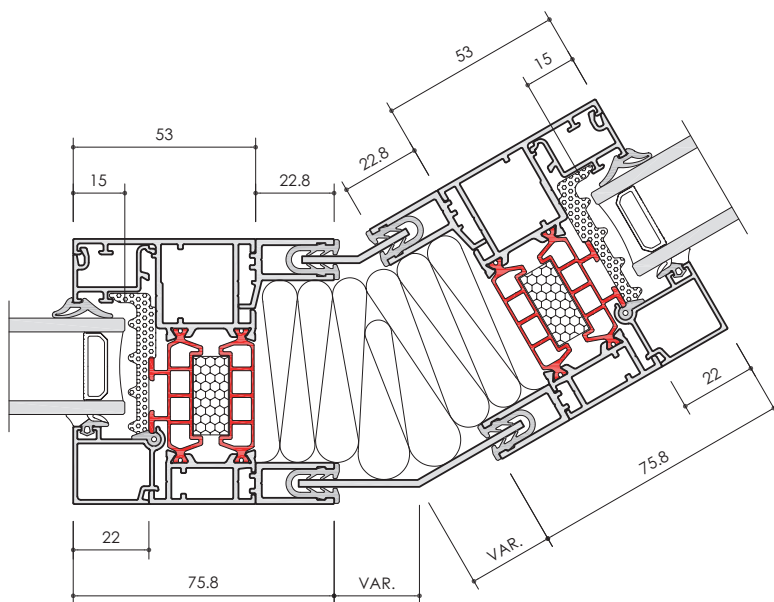
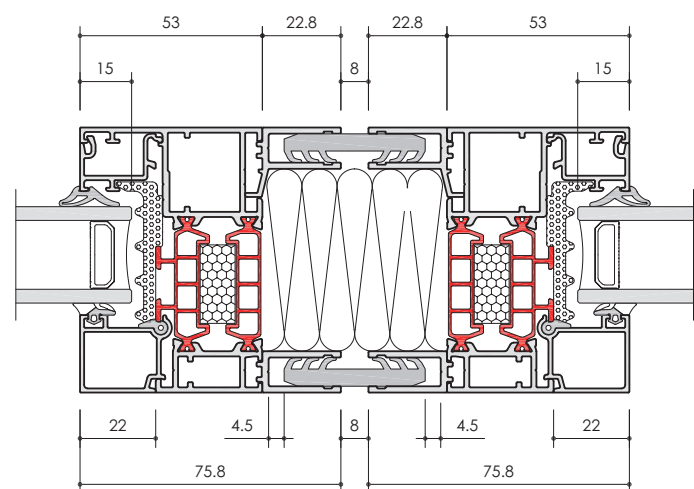


➤ 77IWE OPEN OUT TRANSOM & MULLION DETAILS



77IW - INWARD OPENING WINDOW SYSTEM

77IWE OPEN OUT WINDOW EXPANSION JOINT



77IW OPEN IN PRODUCT SELECTOR

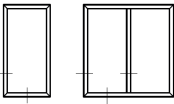
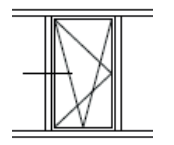
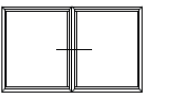
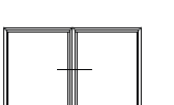
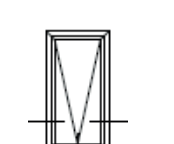
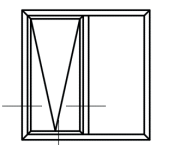
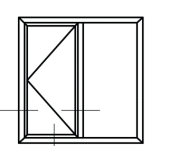
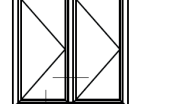
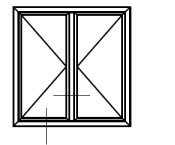
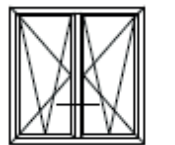
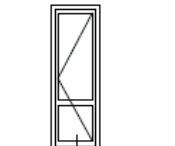
KEY: - No ● Yes

		77IW HI	77IW
		TILT TURN / OPEN IN	
PERFORMANCE AND ACCREDITATIONS			
Weather performance (BS 6375: 1-3: 2015)	Air permeability (Pa)	Class 4 (600 Pa)	Class 4 (600 Pa)
	Water tightness (Pa)	E1200 (1200 Pa)	E1200 (1200 Pa)
	Wind resistance (Pa)	C5 (2000 Pa)	C5 (2000 Pa)
Security to PAS 24		PAS 24	PAS 24
Acoustic Rw (with standard glazing)		Rw = 45 (-2;-6) dB	Rw = 45 (-2;-6) dB
Uw (double glazing) with warm edge spacer*		1.2 W / m²K	1.4 W / m²K
Uw (triple glazing) with warm edge spacer**		1.0 W / m²K	1.1 W / m²K
BRE Green Guide rating		A, B Rated	A, B Rated
Kitemark / Q Mark		●	●
OPTIONS			
Tilt & turn		●	●
Side hung		●	●
Bottom hung		●	●
SYSTEM DEPTH			
mm		77	77
DESIGN FEATURES			
Triple glazing (50 mm)		●	●
Punched out openings		●	●
100 mm restriction		●	●
Trickle ventilation		●	●
Sightlines		95 mm	95 mm
HARDWARE			
Multi point		●	●
Single locking		●	●
Hardware groove		AluK groove	AluK groove
Locking handles		●	●
Butt hinges		●	●
FINISHES			
Single colour		●	●
Dual colour option		●	●
Textured		●	●
Anodized		●	●
MAXIMUM WINDOW SIZES (mm)			
Tilt turn*	Max. size (mm)	1500 mm x 2100 mm	1500 mm x 2100 mm
	Min. size (mm)	460 mm x 550 mm	460 mm x 550 mm
	Max. weight (Kg)	130 Kg	130 Kg
Side hung*	Max. size (mm)	1400 mm x 1800 mm	1400 mm x 1800 mm
	Min. size (mm)	500 mm x 600 mm	500 mm x 600 mm
	Max. weight (Kg)	100 Kg	100 Kg
Bottom hung*	Max. size (mm)	2000 mm x 1100 mm	2000 mm x 1100 mm
	Min. size (mm)	460 mm x 500 mm	460 mm x 500 mm
	Max. weight (Kg)	60 Kg	60 Kg

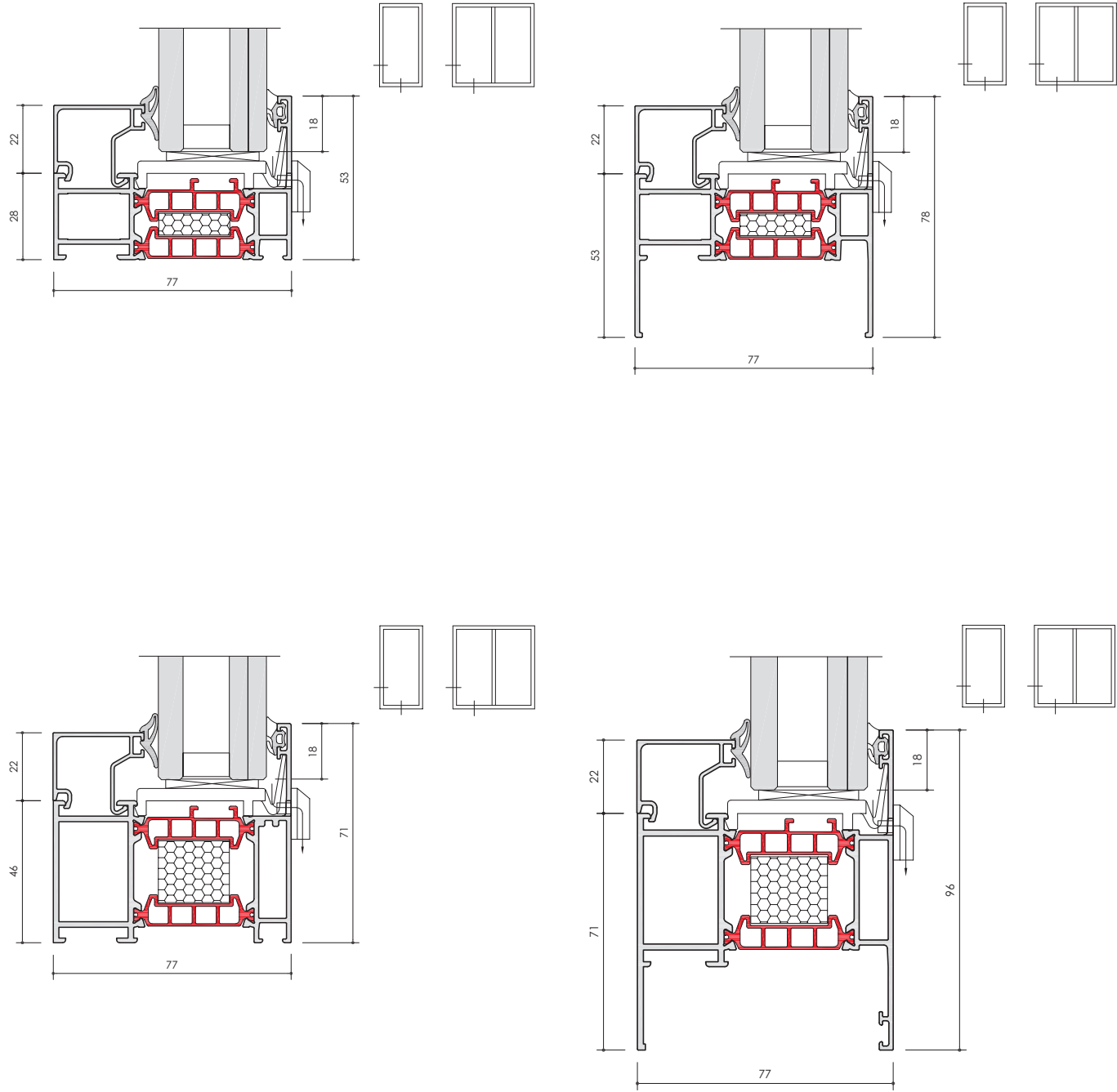
*U values based on CEN size 1230 x 1480. Based upon warm edge spacer bar (PSI value less than or equal to 0.04) & a UG of 1.0 w/m²K.
**U values based on CEN size 1230 x 1480. Based upon warm edge spacer bar (PSI value less than or equal to 0.04) & a UG of 0.7 w/m²K.
⁺Height and width limitations.

➤ 77IW OPEN IN WINDOW APPLICATIONS

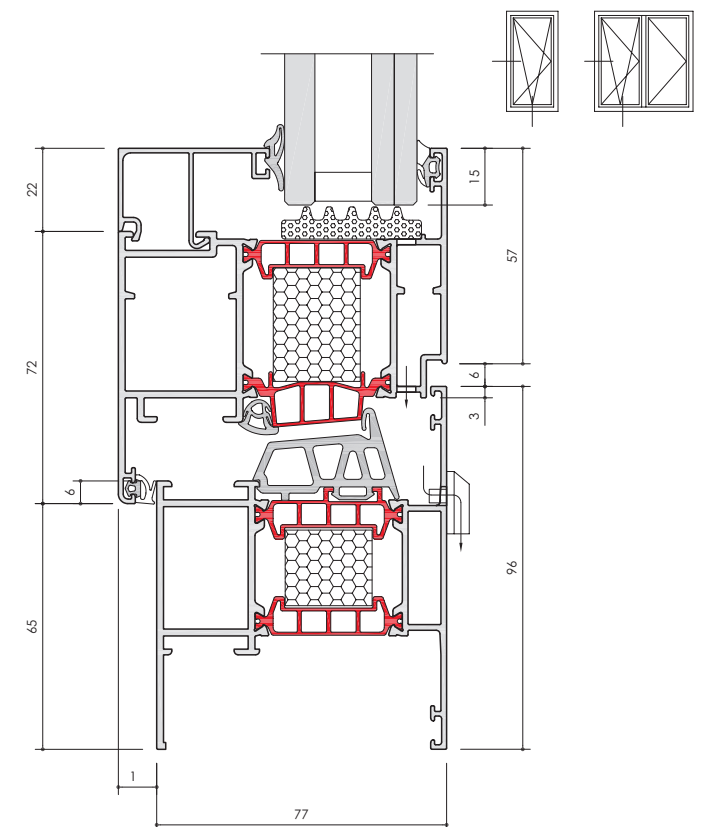
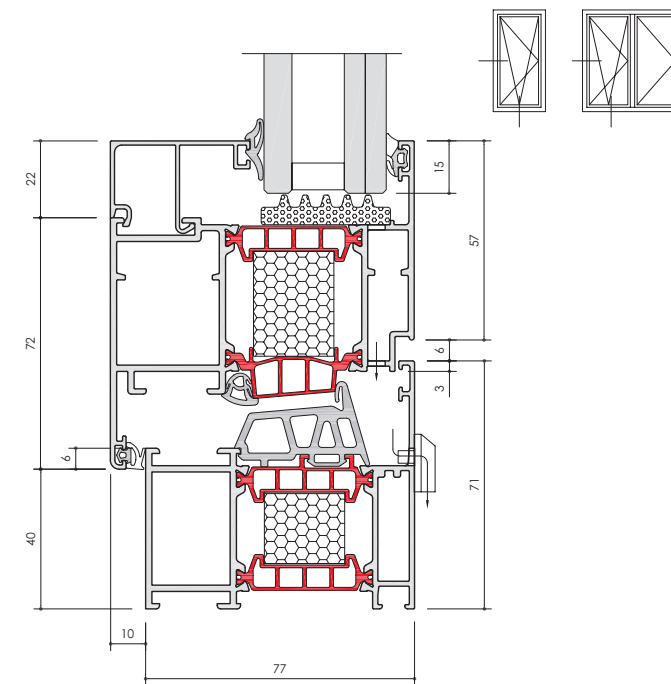
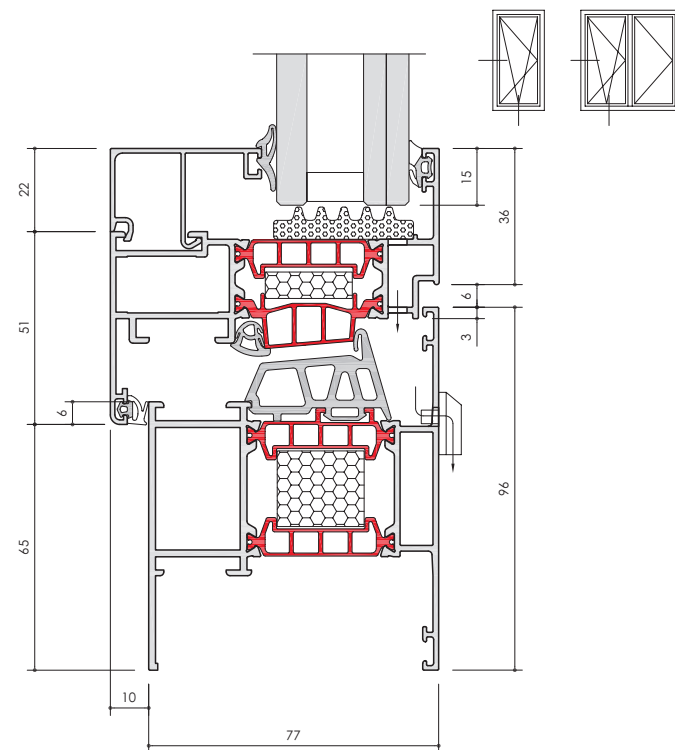
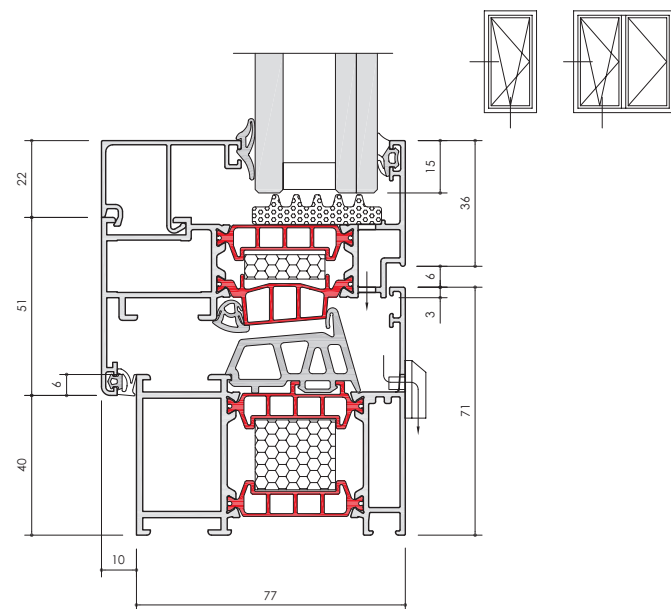
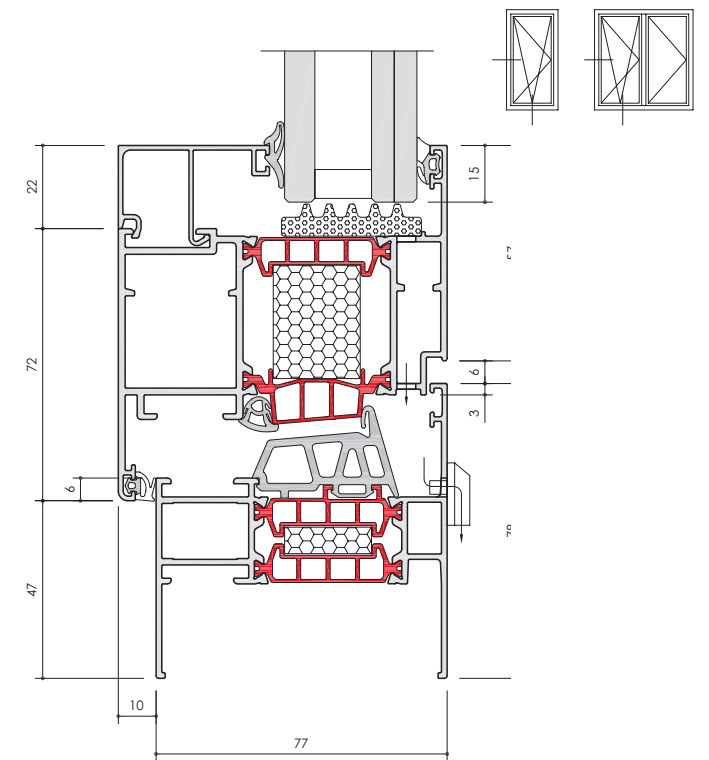
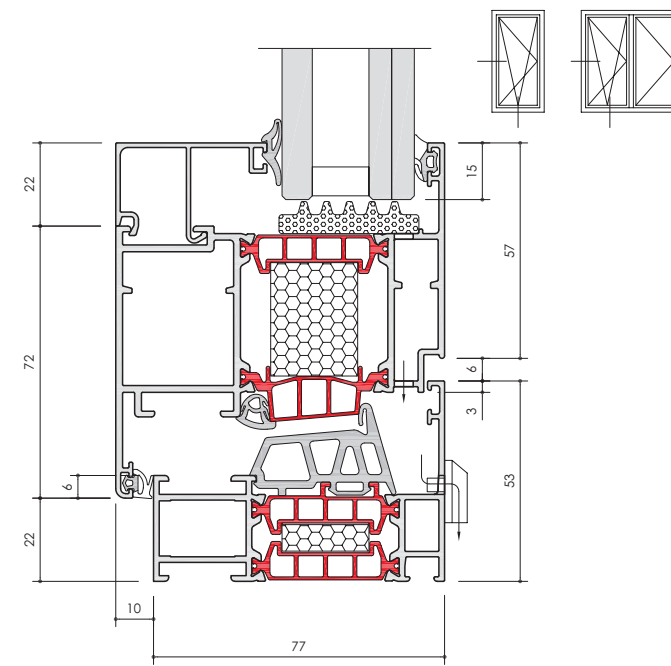
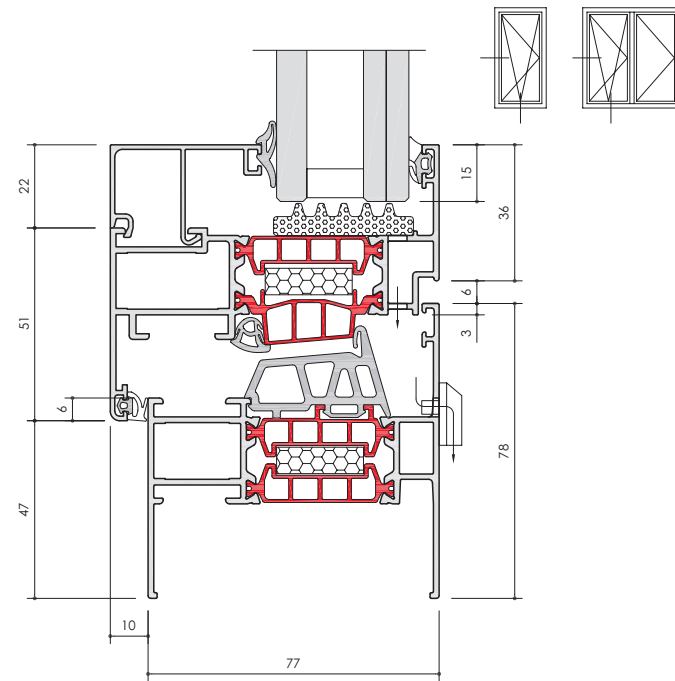
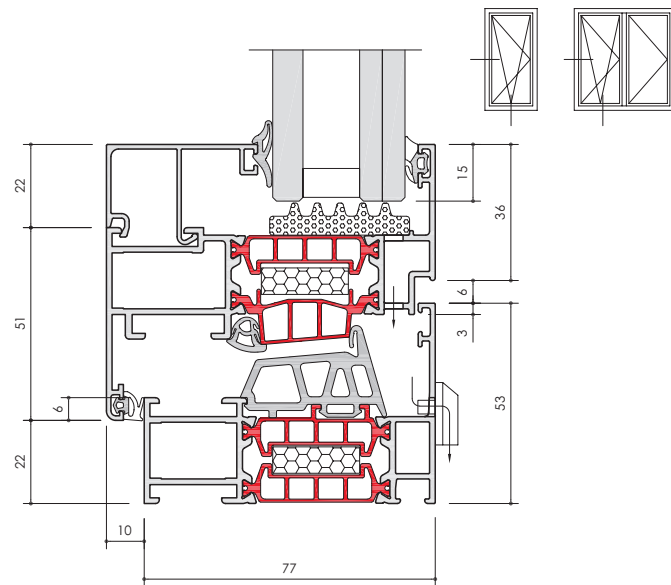
Typical elevations

KEY: - No ● Yes		
ELEVATION	TITLE	SBD COMPLIANT
	Fixed (inside glazed)	●
	Curtain wall insert	●
	Fixed light panels Expansion coupling	●
	Fixed light panels Variable corner coupling	●
	Bottom hung	-
	Bottom hung - fixed	-
	Side hung	-
ELEVATION	TITLE	SBD COMPLIANT
	Side - side hung (outer frame/transom/mullion)	-
	Side - side hung (transom/mullion)	-
	Tilt before turn window	●
	Vent-fixed transom/mullion (tbt)	●
	Vent-vent transom/mullion (tbt)	●
	Vent-vent transom/mullion (tbt)	●
	Balcony window (tbt) Balcony window + threshold (tbt)	●

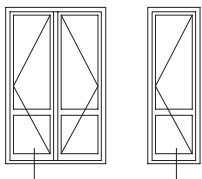
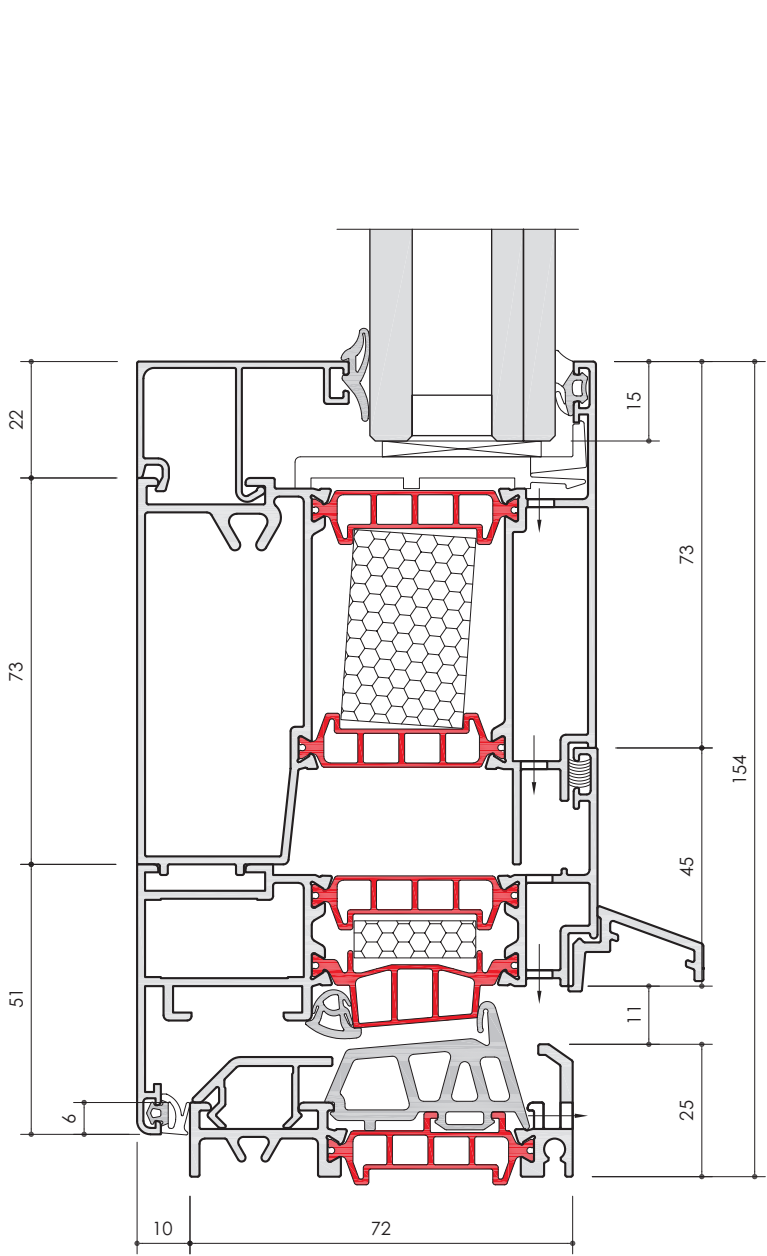
➤ 77IW OPEN IN FRAME AND VENT SIZE OPTIONS



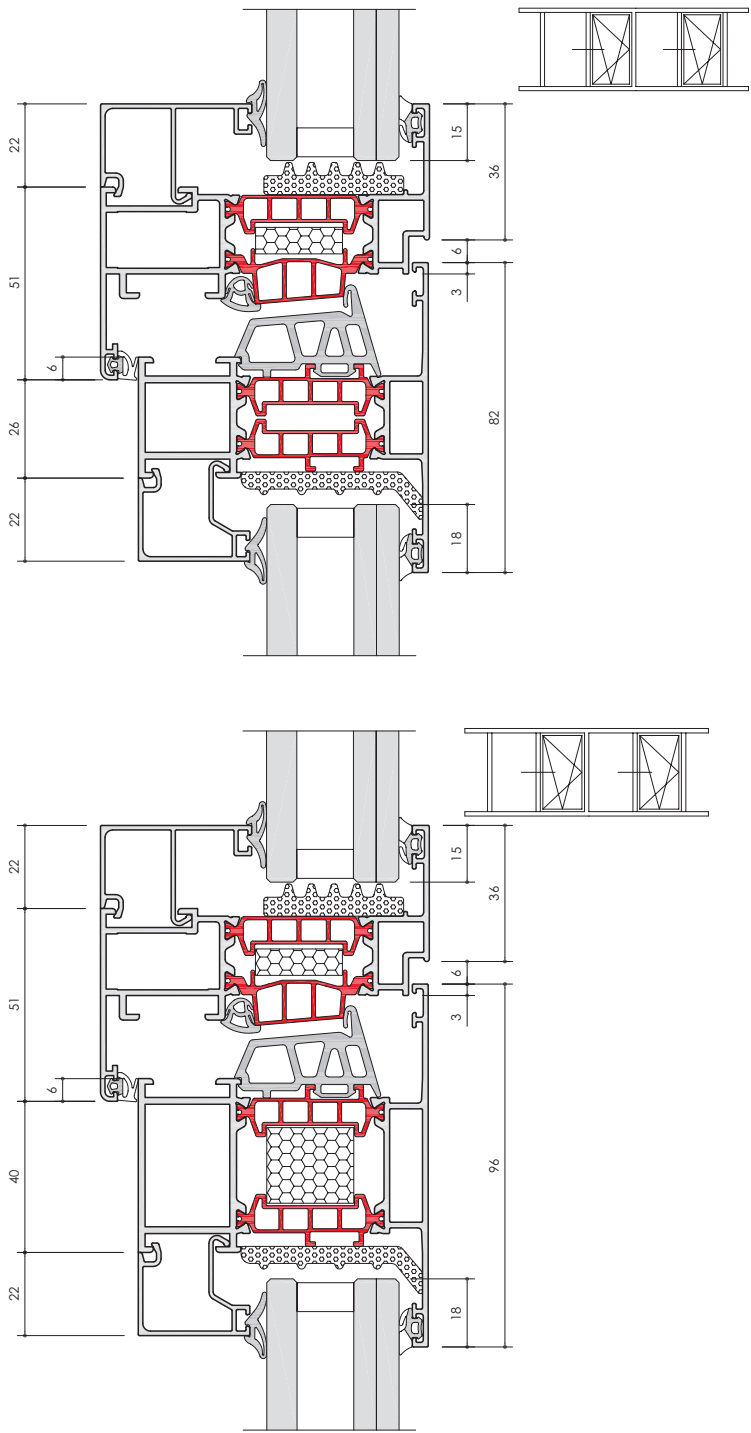
➤ 77IW OPEN IN FRAME AND VENT SIZE OPTIONS



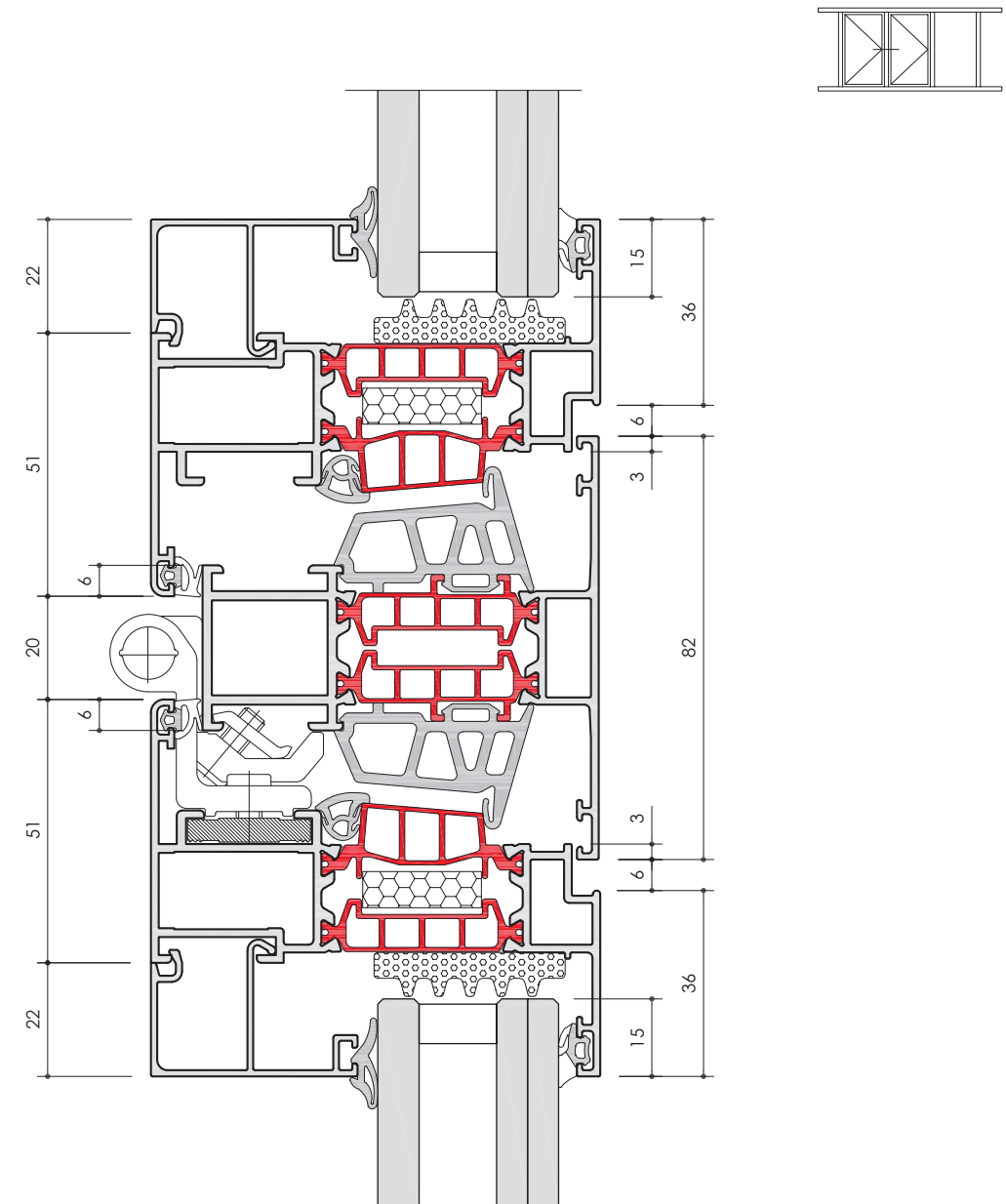
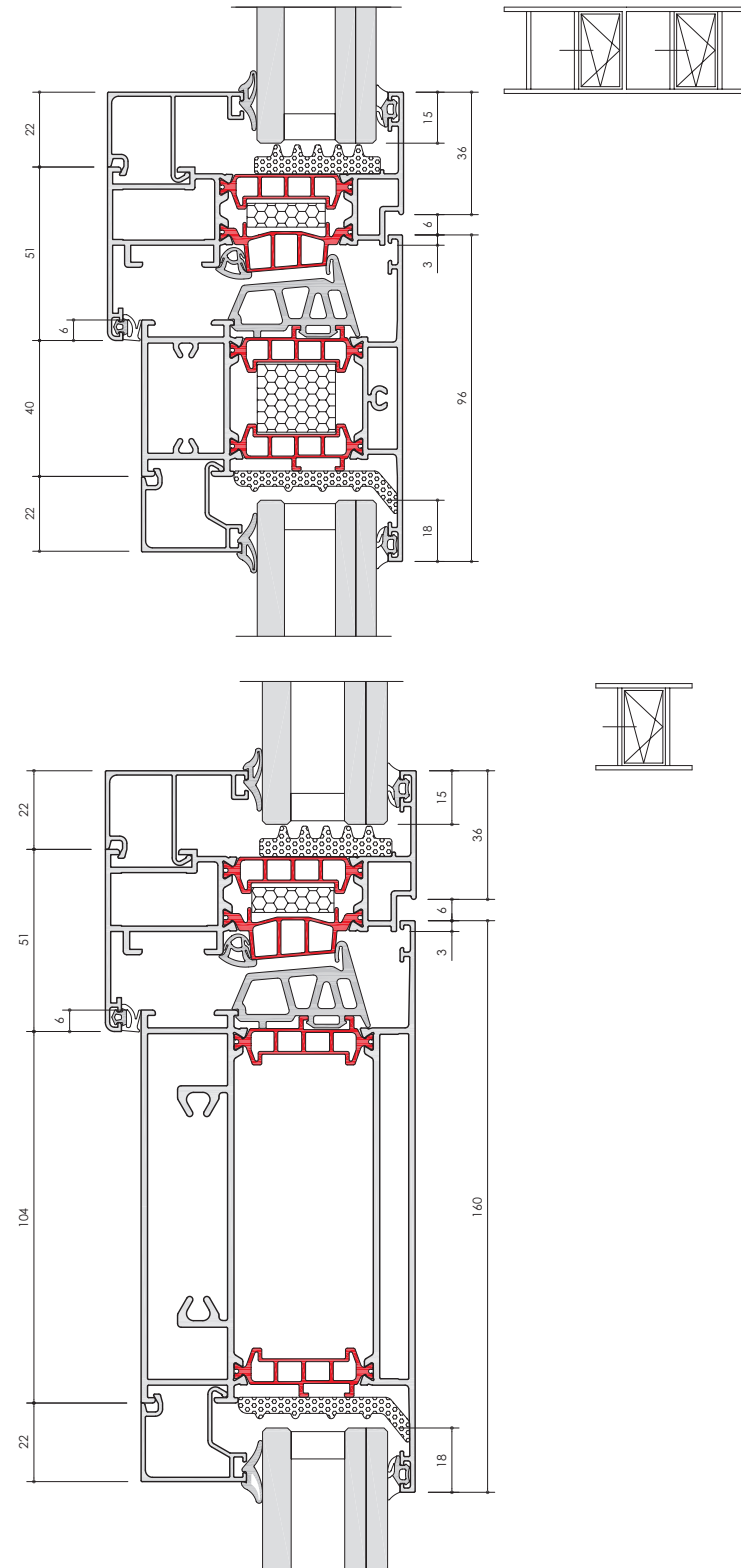
➤ 77IW OPEN IN FRAME AND VENT SIZE OPTIONS



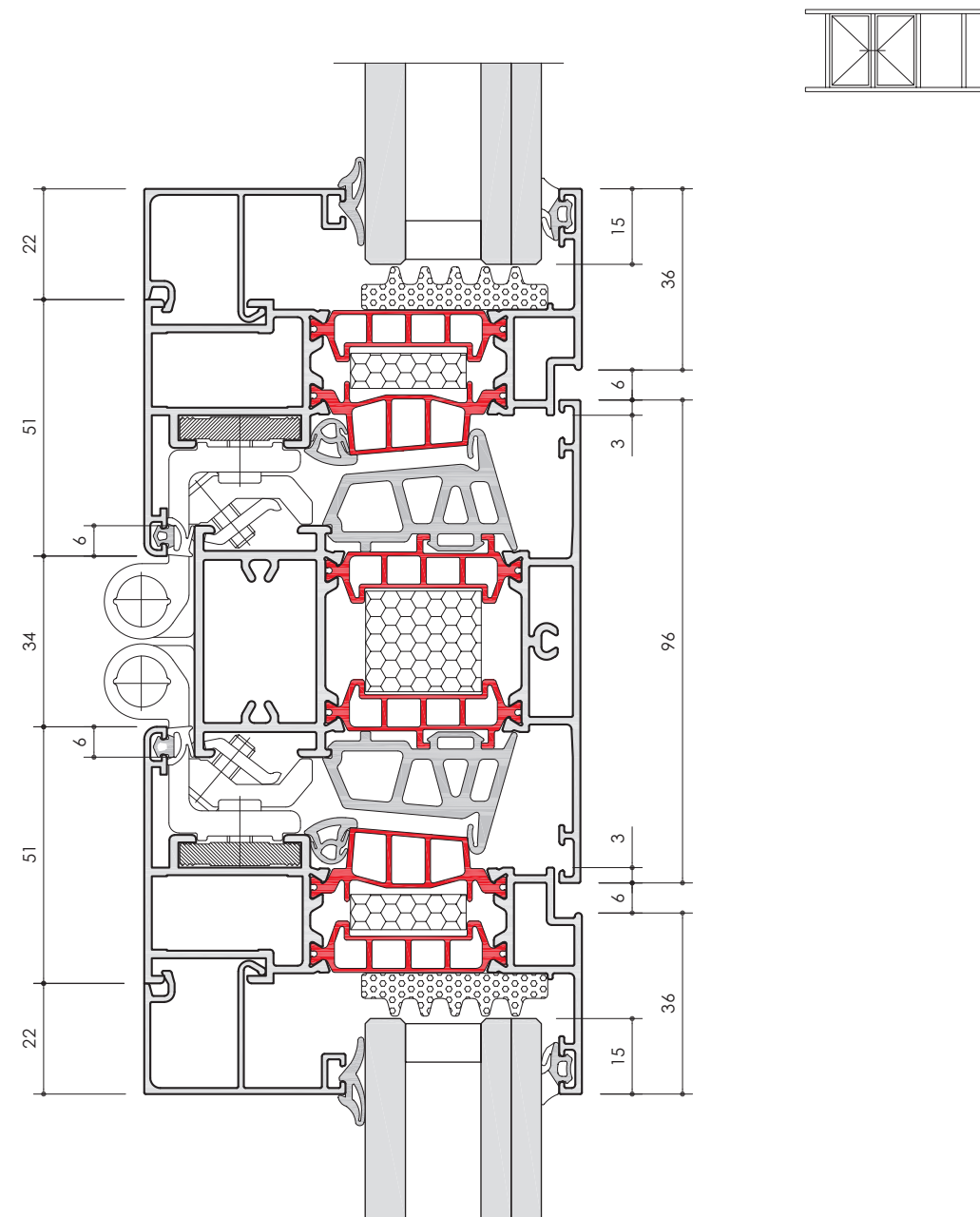
➤ 77IW OPEN IN TRANSOM & MULLION DETAILS



➤ 77IW OPEN IN TRANSOM & MULLION DETAILS



➤ 77IW OPEN IN TRANSOM & MULLION DETAILS



SERVICE & SUPPORT

➤ BIM

AluK is one of the first UK manufacturers to provide a comprehensive selection of BIM objects. BIM components for our window, door and curtain walling systems are currently available from the National BIM Library and the BIMStore in Revit and IFC formats.

➤ TECHNICAL SUPPORT

AluK offers our specification clients a range of dedicated support services to help them with compliance.

➤ TECHNICAL SERVICES

Our dedicated technical services team provide immediate support to all technical queries from installation, product and specification guidance to acoustic and U-Value calculations.

➤ ALUK ACADEMY

From CPDs and toolbox talks to hands-on training at our Academy Centre, we have a wide range of training options available to customers.

➤ PROJECT CONSULTANTS

Our Project Consultants are able to help with design, system selection, construction details and project specifications. Highly experienced, they are dedicated in offering support and guidance through sector-specific requirements.





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