



DURATION WINDOWS

Duratherm Composite Windows

Flush Casement Window Technical Manual



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Introduction

The Duratherm casement window system described in this manual is suitable for domestic or commercial applications, both as replacement windows for existing buildings, and for installation into new buildings.

The Duratherm system is a high insulation composite timber and aluminium window range, complemented by a matching door and curtain wall system. Hybrid combines the advantage of the long life and low maintenance of aluminium externally with the high insulation, environmentally focused benefits of responsibly sourced engineered timber internally.

System Specifications

Sections

The external face is constructed from aluminium alloy extrusion to BS EN 755-9: 2008, from 6063 T6 alloy. The internal timber is high quality 100% PEFC UK accredited oak or spruce. Laminated window scantlings, in principle knotless, vertical grain in accordance with DIN EN 204 D4.

Finish

The external aluminium alloy extrusion is pre-treated and finished either;
 a) Anodised to BS3987: 1991, grade AA25 to a natural self colour.
 b) Polyester powder organic coating to BS EN 12206-1:2004.

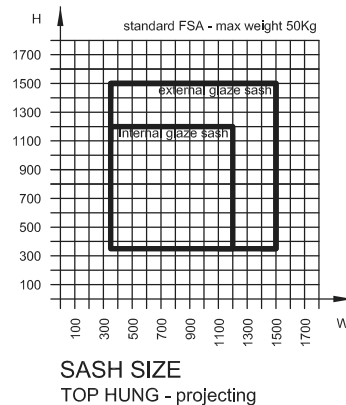
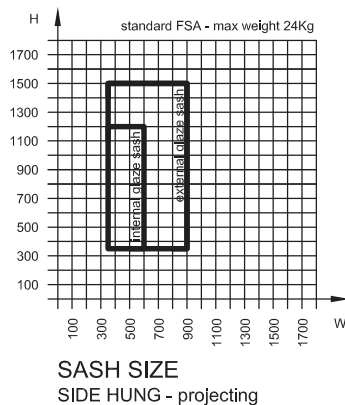
Glazing

Glass is internally or externally glazed using double glazed 28mm sealed units, carried out to the recommendations of BS.6262. Gasketry is manufactured in accordance with BS3734. Glass is retained in position with beads and for externally glazed vents tape gaskets are used to assist with security. 32mm sealed units can be installed into internally glazed ovolo sash if required.

Hardware

Windows are available with a wide range of high quality furniture and hardware in everything from contemporary to traditional styles. High security hardware options provide advanced security and have been tested to BS7950.

Recommended Size Limitations



Technical Specifications

The sizes detailed below are for guidance only, if the sizes you require are less than the minimum or exceed our maximum recommended sizes - please ask our technical department for advice.

Recommended Sizes (mm)	Int. Glazed Side Hung	Int. Glazed Top Hung	Ext. Glazed Side Hung	Ext. Glazed Top Hung
Min. Width	350mm	350mm	350mm	350mm
Max. Width	600mm	1200mm	900mm	1500mm
Min. Height	350mm	350mm	350mm	350mm
Max. Height	1200mm	1200mm	1500mm	1500mm
Max. Weight	24kg	50kg	24kg	50kg

The above statistics apply when using the standard FSA. Consult the graphs for more detailed information.

Window Performance Testing

These windows have been fully tested in accordance with BS6375-1 for weather and BS7950: 1997 for security.

Air Permeability (BS EN 1026):	600 Pa
Water tightness (BS EN 1027):	600 Pa
Resistance to Wind Load (BS EN 12211):	2400 Pa
Thermal Performance (U-value):	1.5 W/m ² k


The above statistics apply for a CEN 1230mm x 1480mm window with an externally glazed ovolo vent. Please ask for glass spec and more information on U values, as they will differ depending on your chosen vent and glass.

Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

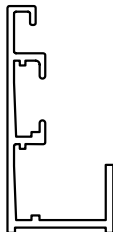


Key Timber & Aluminium Sections


ALUMINIUM SECTIONS



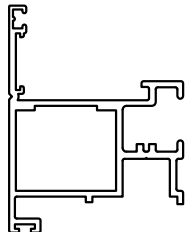
HA121
Aluminium Outerframe




HA124
Aluminium
Curtain Wall Insert



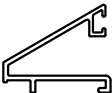
HA125
Standard Aluminium Vent




HA180
Aluminium
Security Sash




HA157
Aluminium Bead Clip



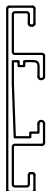
HA113
28mm Ext. Glazed
Fixed Lite Glazing Bead




HL181
Int. Glazed
Bead Retainer



HA127N
Hinge Support

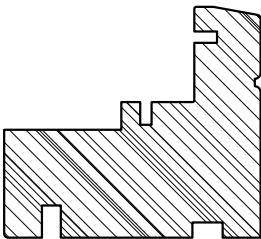


HA123
Aluminium
Transom / Mullion

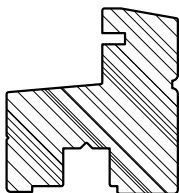


HA126N
Vent Hinge Support

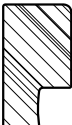
TIMBER SECTIONS




HT205
Timber Outerframe



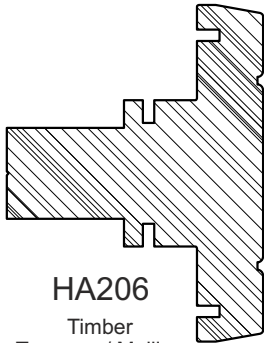
HT202
Standard Timber Vent



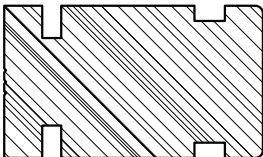
HT207
Timber
Security Vent



HT005
Timber
Security Bead



HA206
Timber
Transom / Mullion

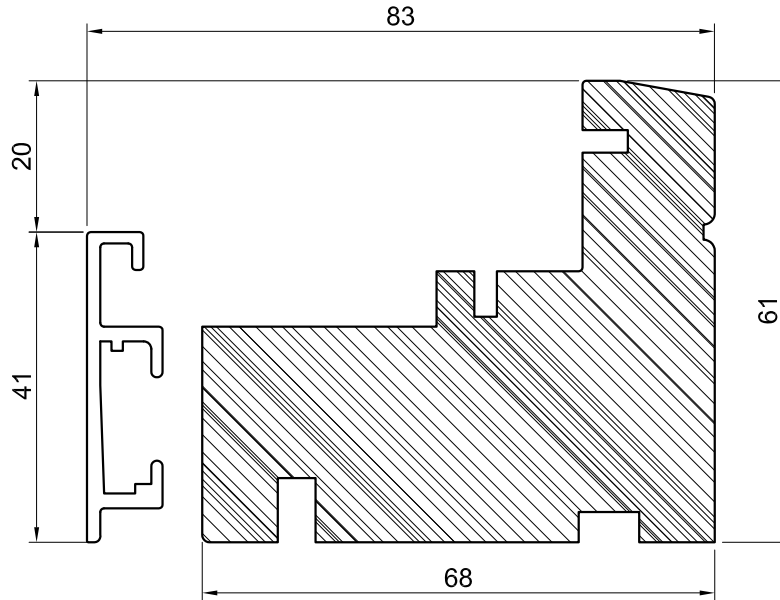


HT101
Timber
Head Extension

Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.



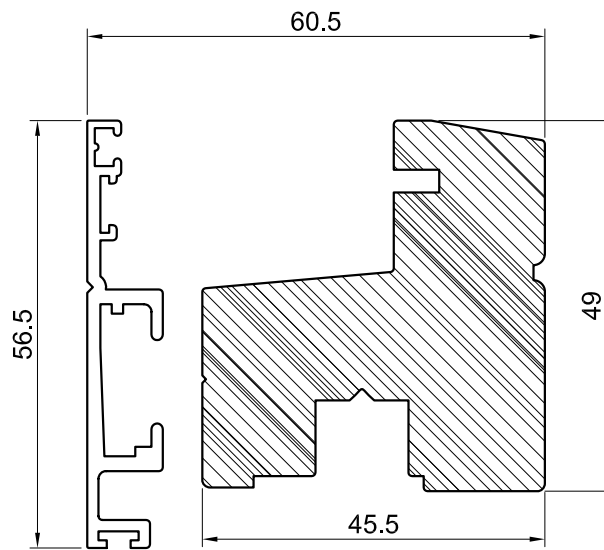
Outerframe



HA121
Aluminium

HT205
Timber

Ext. Glazed Flush Casement Vent



HA125
Aluminium

HT202
Timber

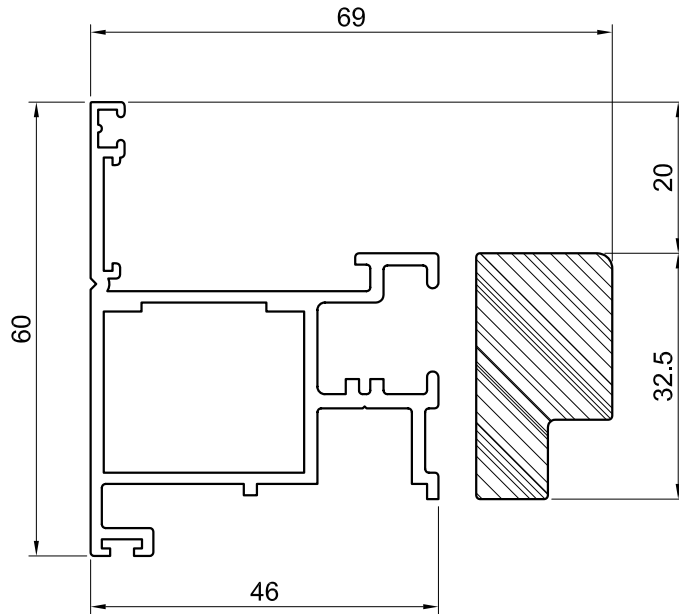
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Profile Identification



DURATION
WINDOWS

Int. Glazed Flush Casement Security Vent



HA180
Aluminium

HT207
Timber

Transom / Mullion



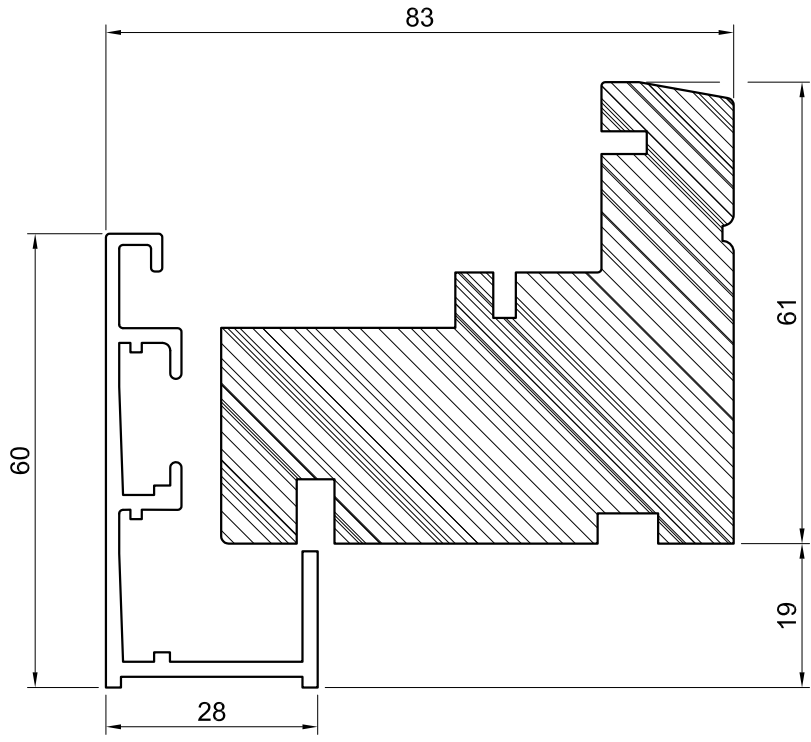
HA123
Aluminium

HT206
Timber

Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

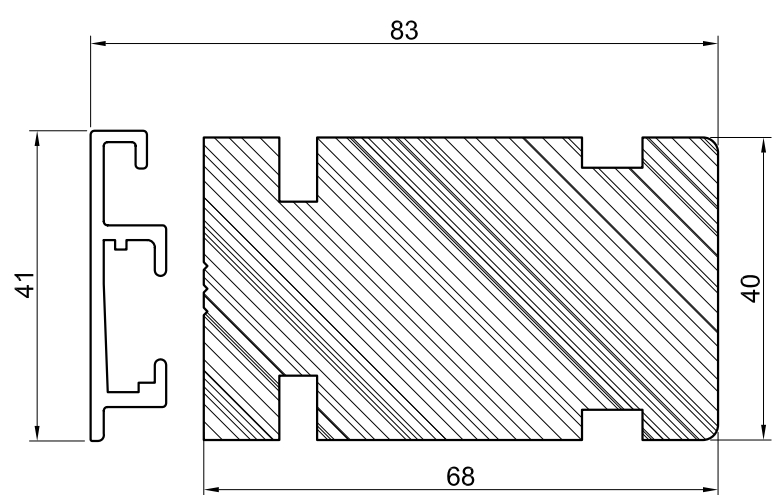


Outerframe with Curtain Wall Insert



HA124 Aluminium HT205 Timber

40mm Head Extension



HA121 Aluminium HT101 Timber

Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

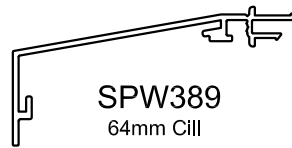


Projection Cill Profile

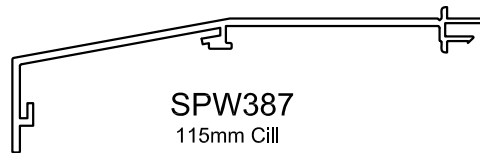
ALUMINIUM SECTIONS



SPW499698
200mm Cill



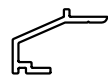
SPW389
64mm Cill



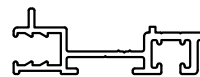
SPW387
115mm Cill



SPW386
165mm Cill

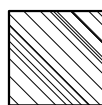


HA168
Cill Extension



SPW384
Window Cill Adaptor

TIMBER SECTIONS



HT401
Timber Pack



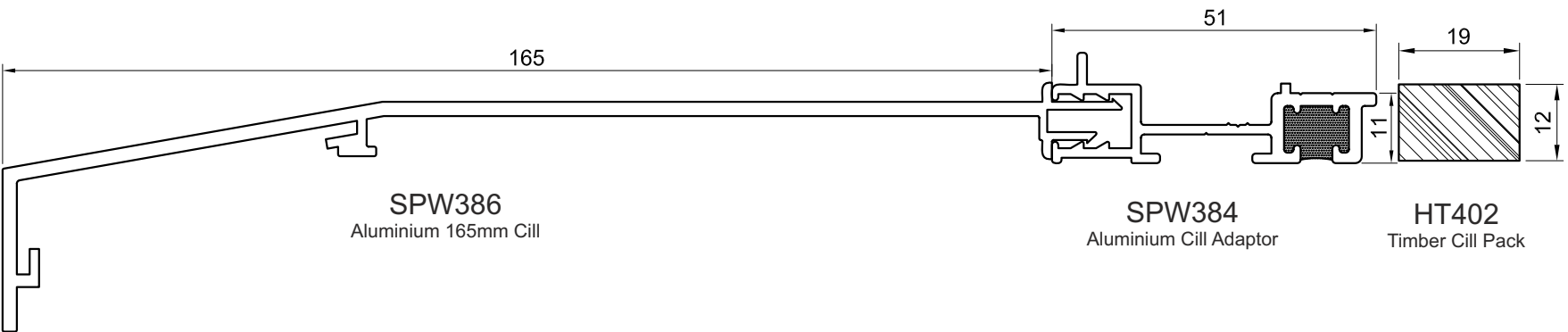
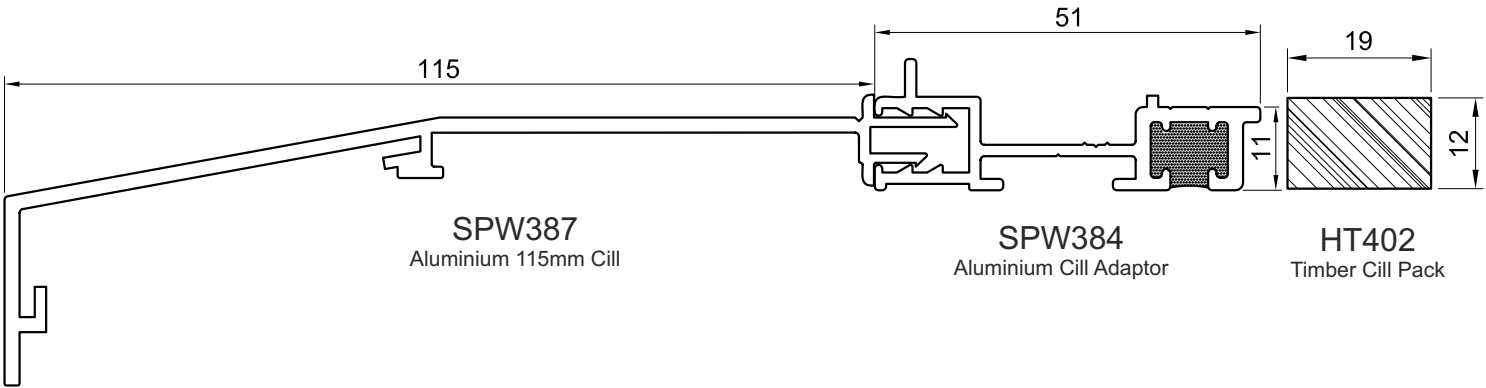
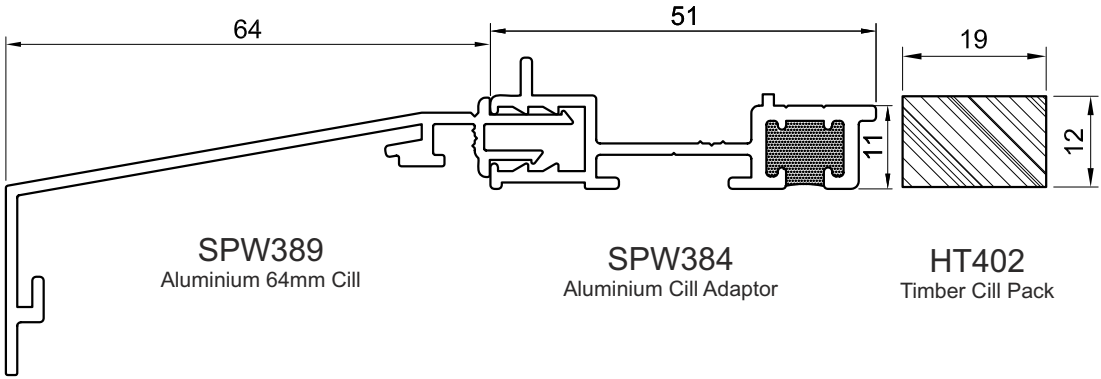
HT402
Timber Pack

Profile Identification



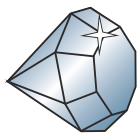
DURATION
WINDOWS

64mm, 115mm & 165mm Projection Cill



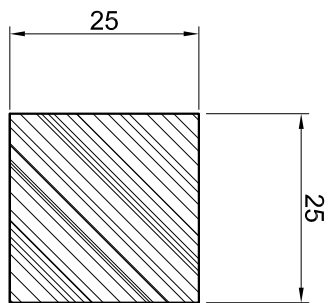
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Profile Identification

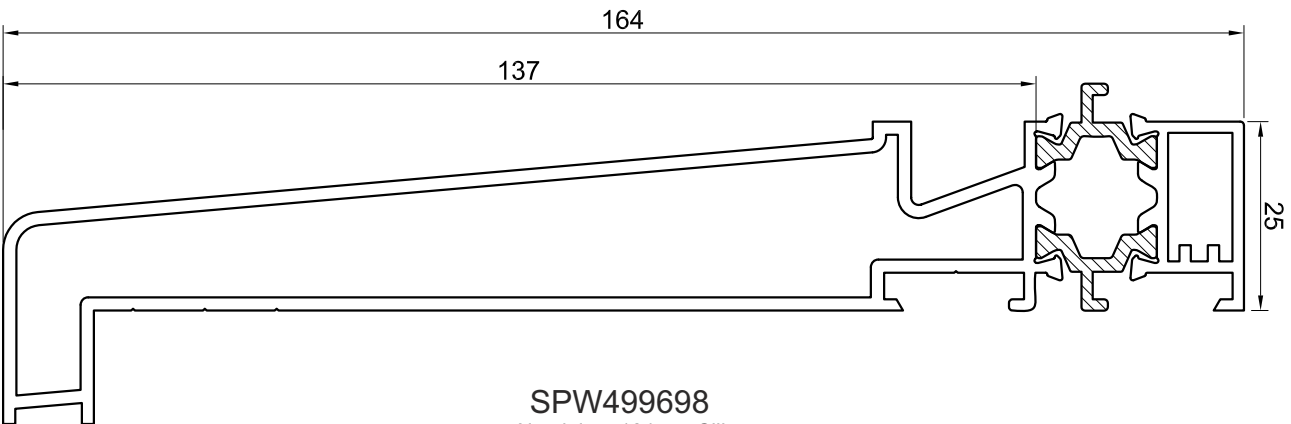


DURATION
WINDOWS

200mm Projection Cill



HT401
Timber Cill Pack



SPW499698
Aluminium 164mm Cill
(200mm including cill pack)

Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

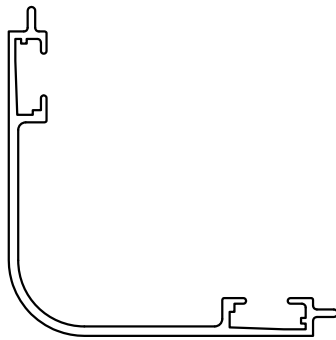


Bays Profiles

ALUMINIUM SECTIONS

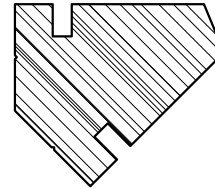


HA164
45° Aluminium Corner Post



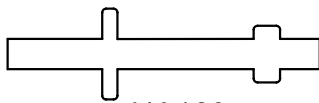
HA165
90° Aluminium Corner Post

TIMBER SECTIONS



HT404
Timber Corner Post

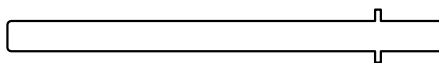
Coupling Bars & Add Ons



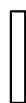
HA160
Reinforced Coupler



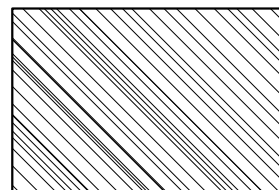
HT403
Timber Coupler
Cover Cap



HA145
Reinforced Coupler



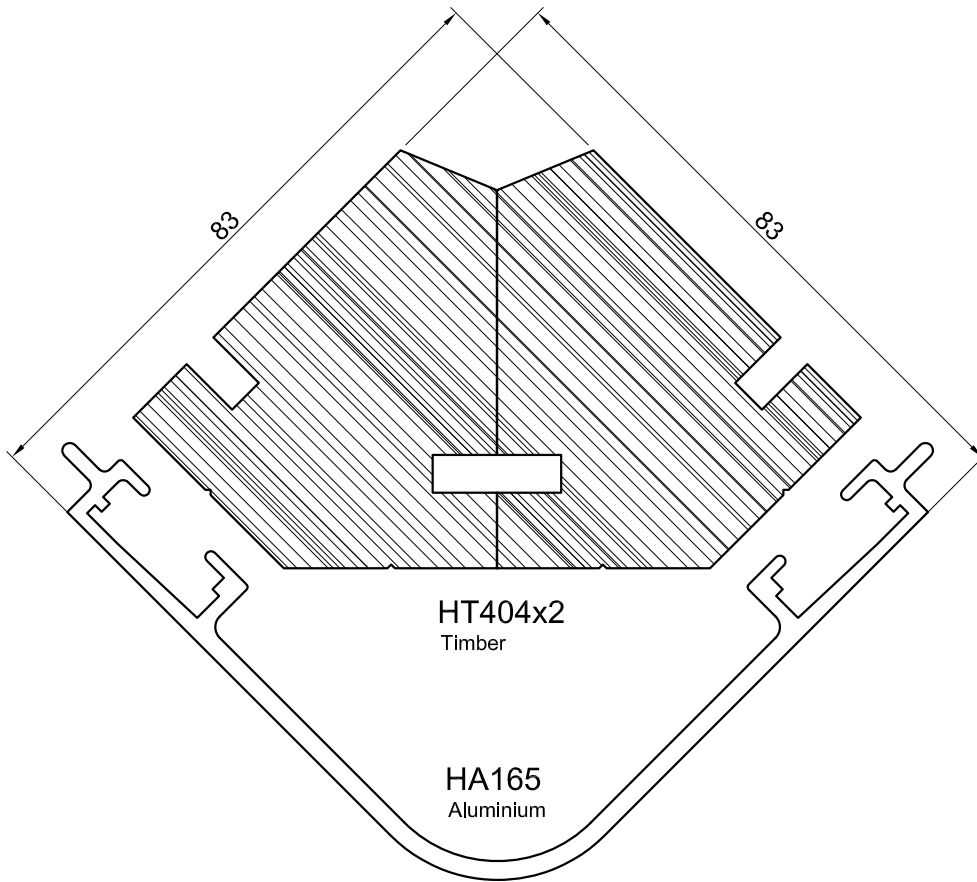
AE25X4
Aluminium
Georgian Astragal Bar



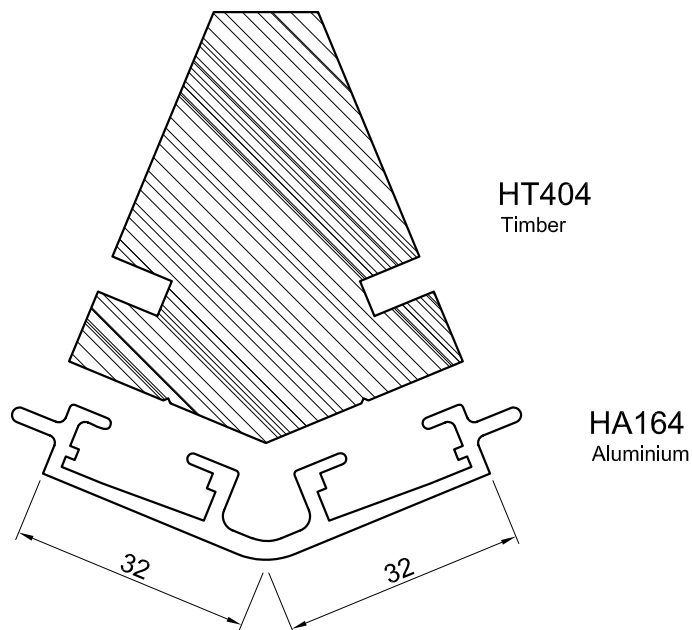
HT75050
Timber
Transom / Mullion Reinforcing



90° Bay Pole



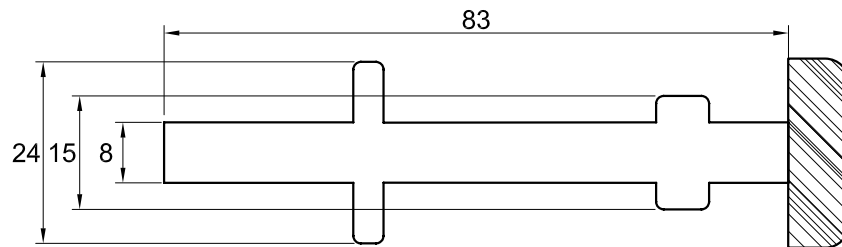
45° Bay Pole



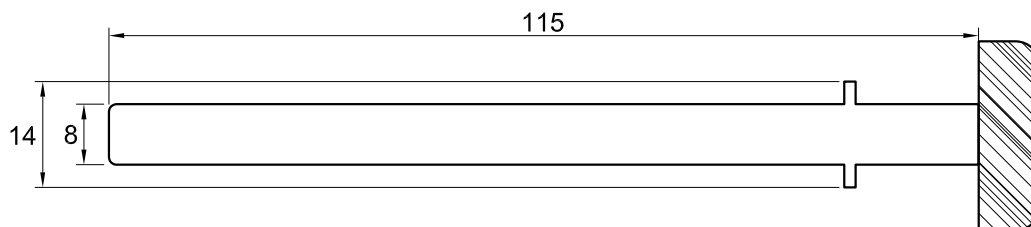
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HA160 Reinforced Coupler



HA145 Reinforced Coupler

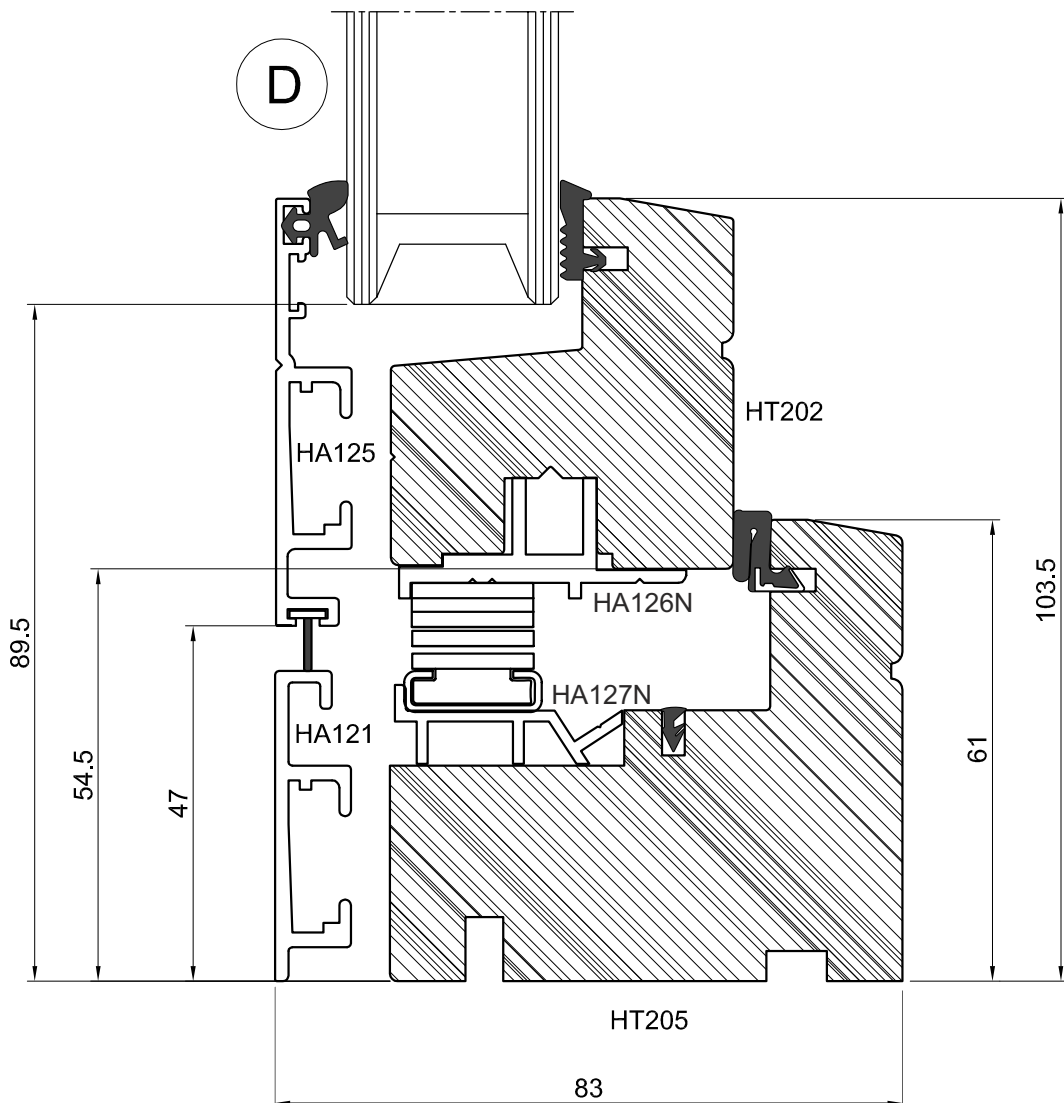
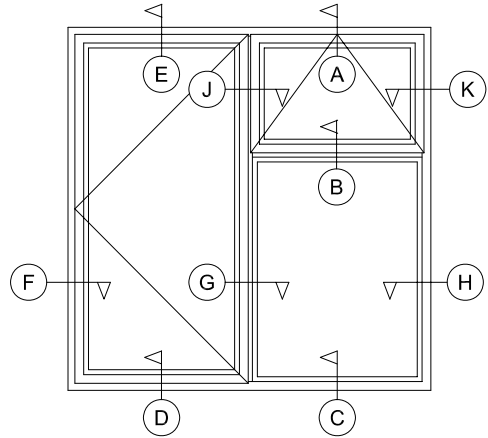


Section Identification



DURATION
WINDOWS

Ext. Glazed Opener Bottom Section



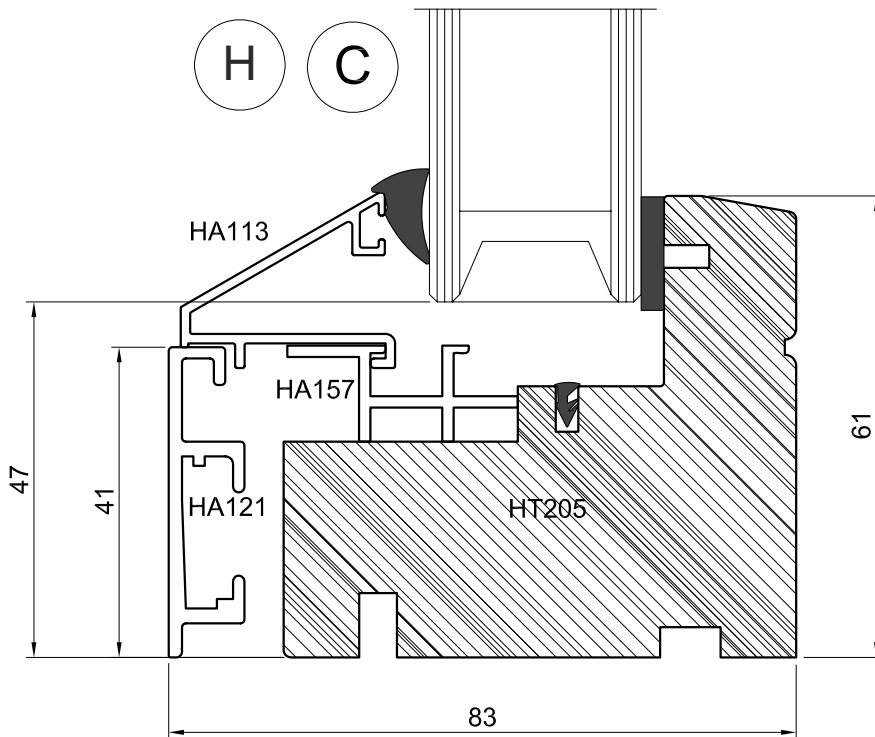
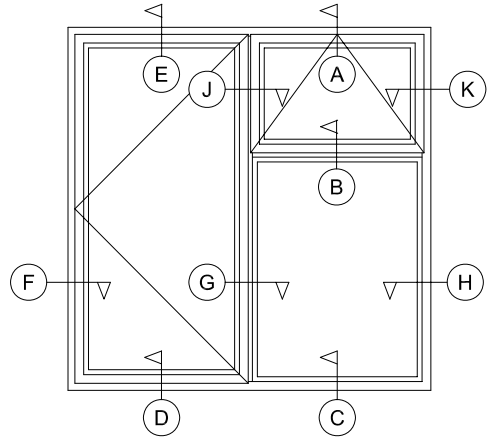
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Section Identification



**DURATION
WINDOWS**

Ext. Glazed Fixed Lite



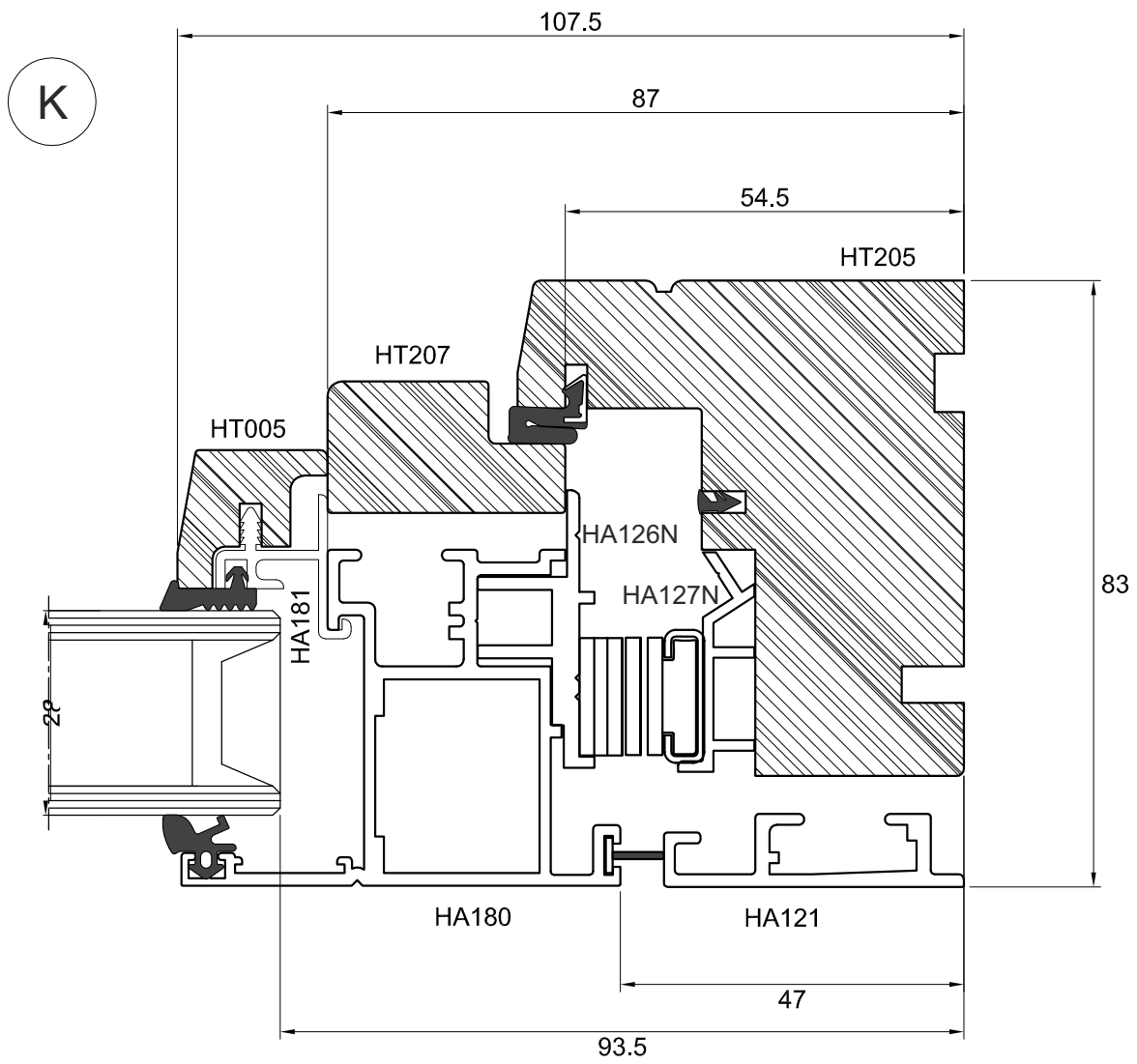
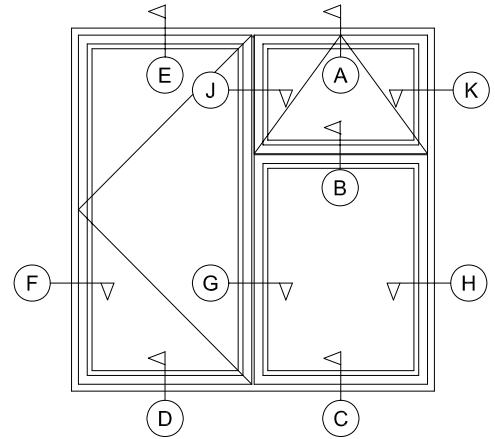
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Section Identification



**DURATION
WINDOWS**

Int. Glazed Top Hung Jamb



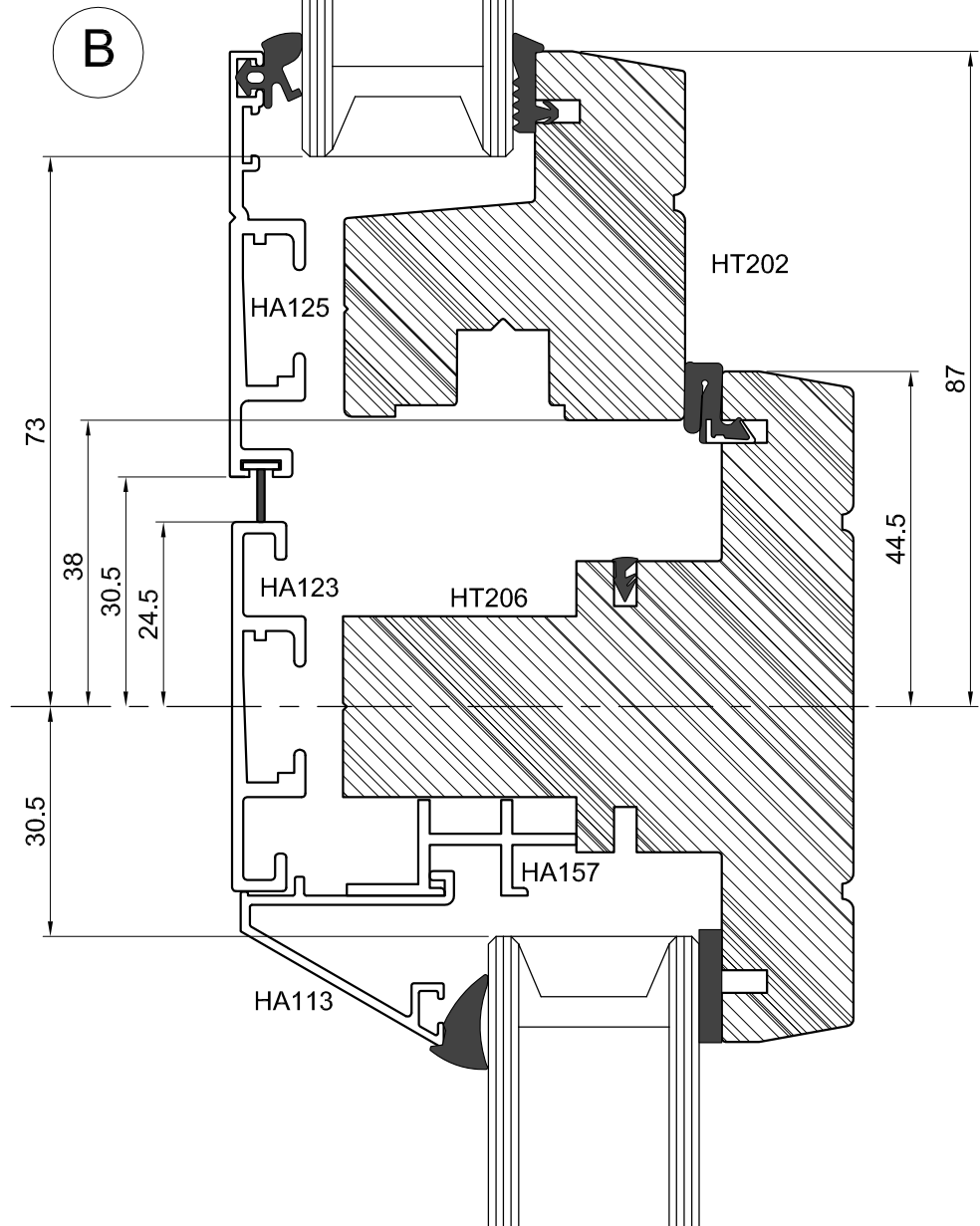
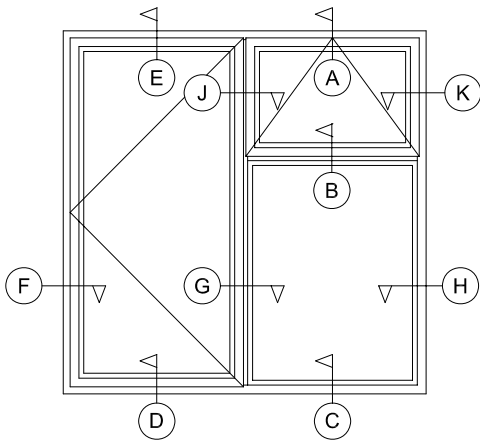
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Section Identification



**DURATION
WINDOWS**

Transom - Ext. Glazed Vent / Opener Over A Fixed



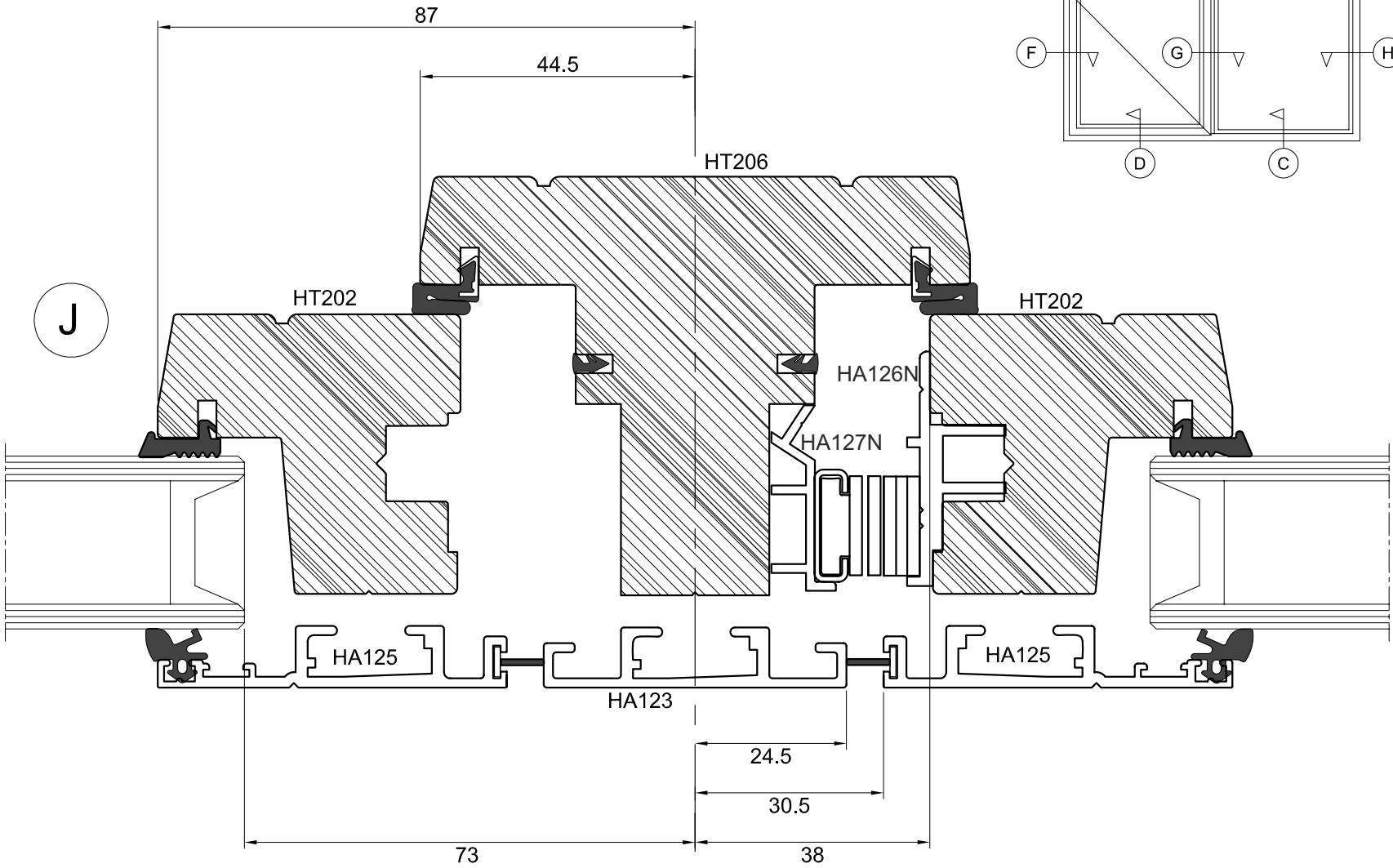
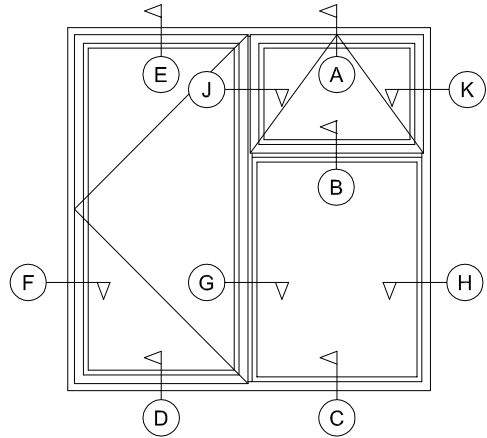
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Section Identification



DURATION
WINDOWS

Ext. Glazed Mullion - Opener Next To An Opener



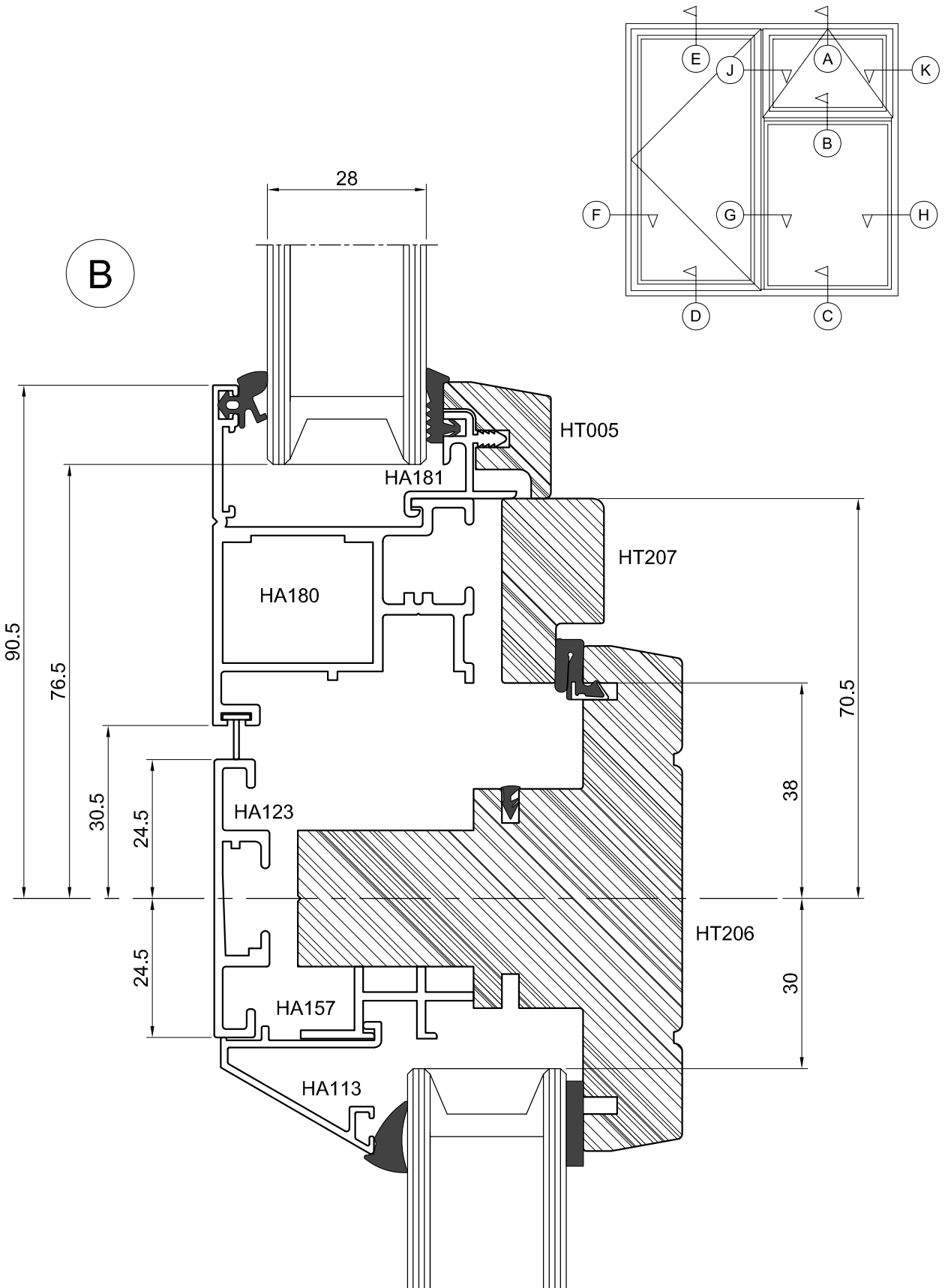
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Section Identification



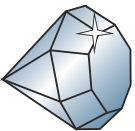
**DURATION
WINDOWS**

Transom - Int. Glazed Vent / Opener Over A Fixed



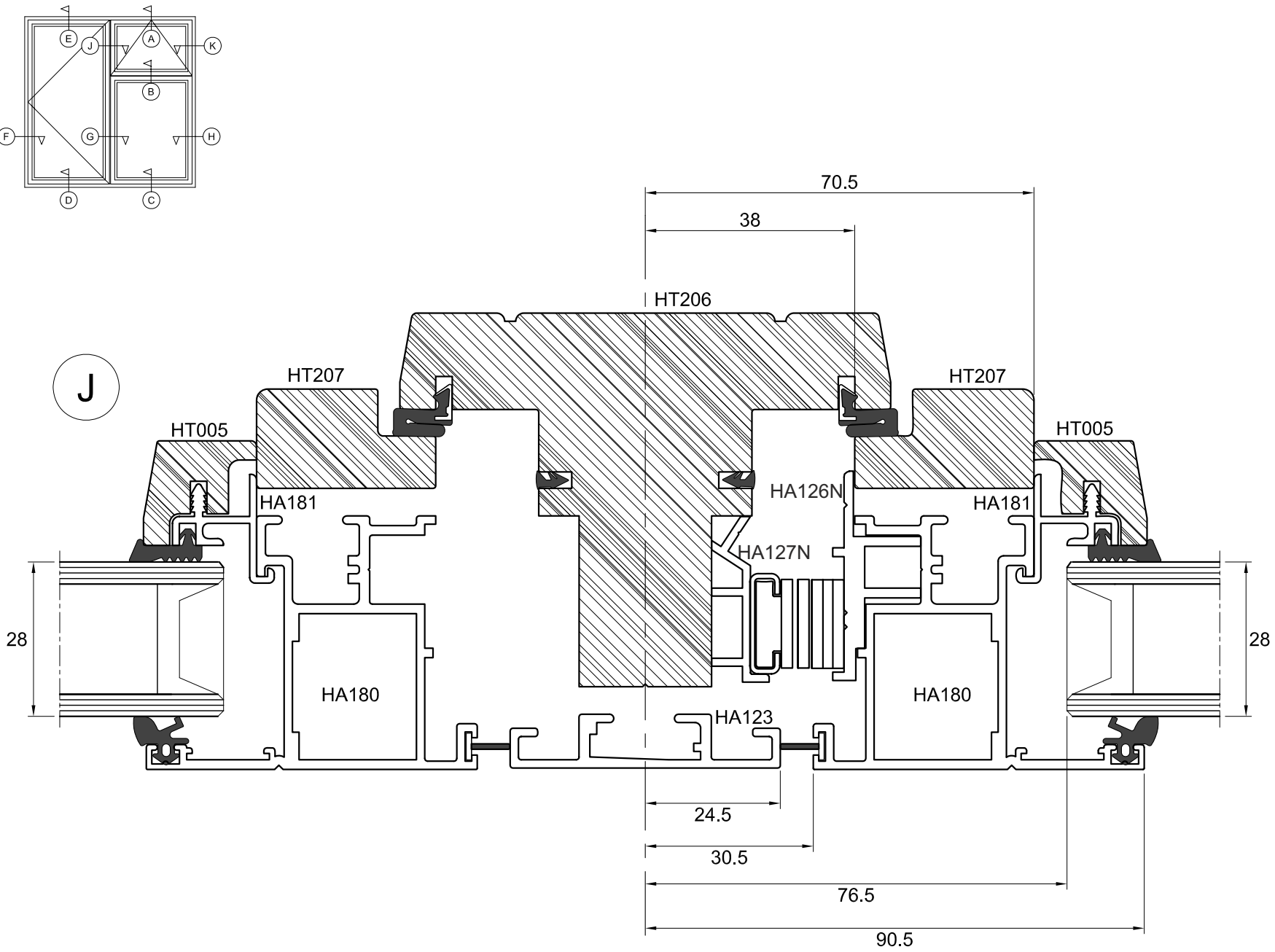
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Section Identification



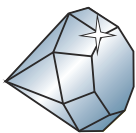
DURATION
WINDOWS

Int. Glazed Mullion - Opener Next To An Opener



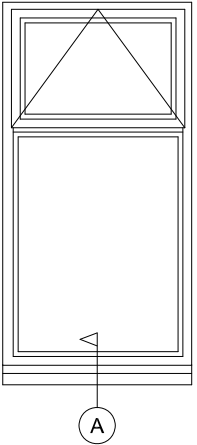
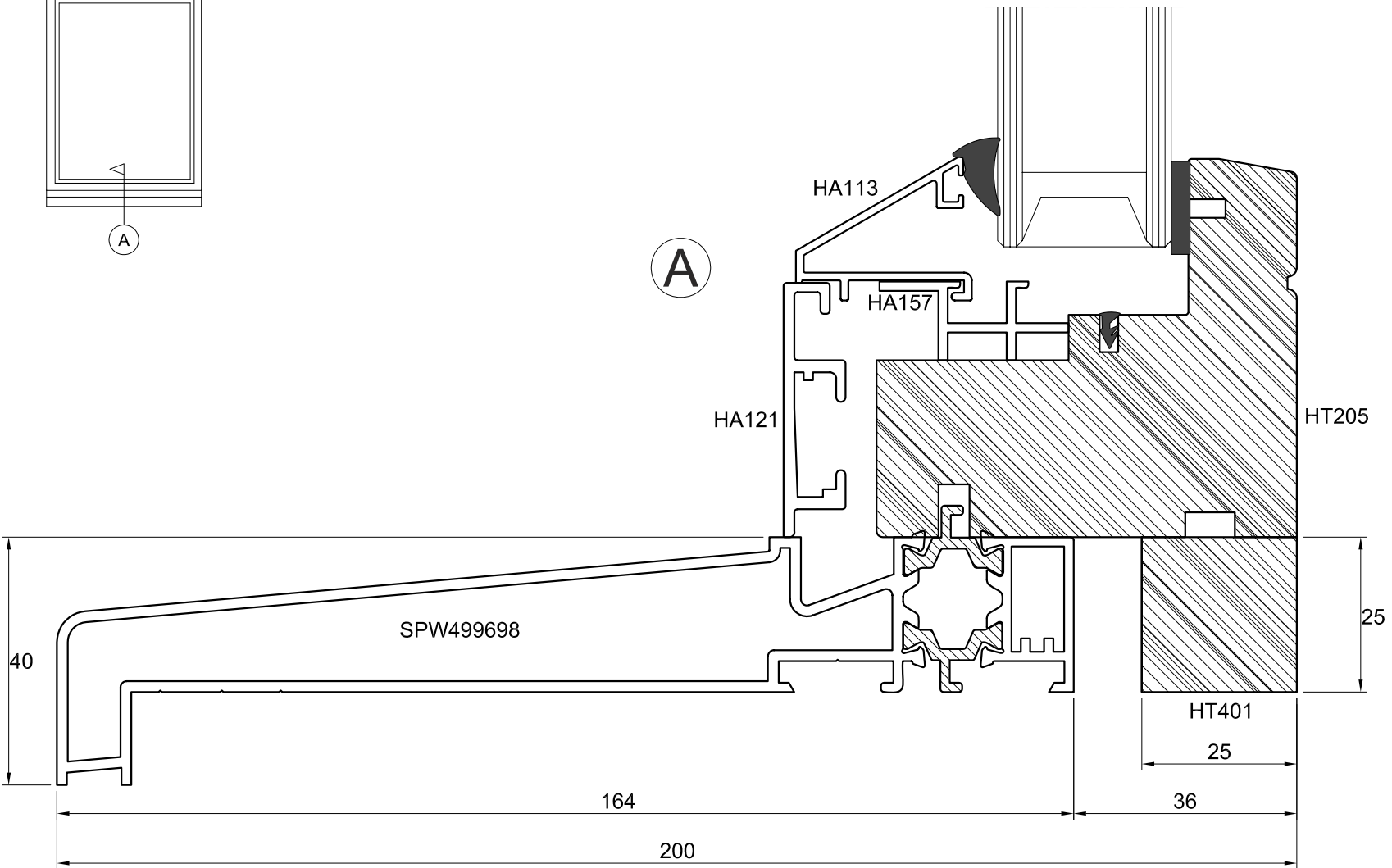
Duratation Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Projection Cill Details



DURATION
WINDOWS

Ext. Glazed Fixed Lite With A 150mm Projection Cill



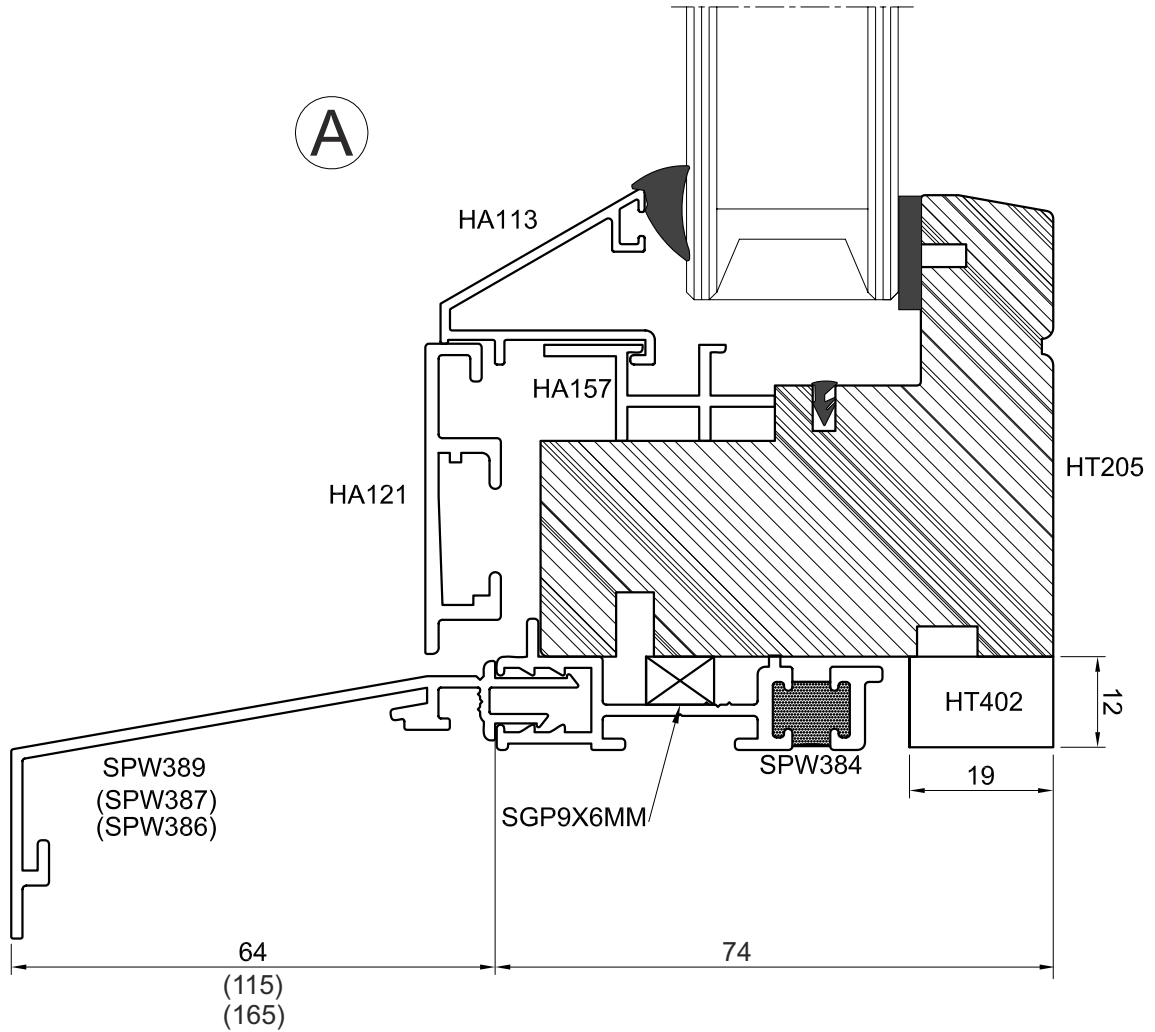
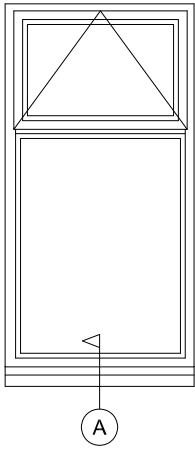
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Projection Cill Details



DURATION
WINDOWS 01.09

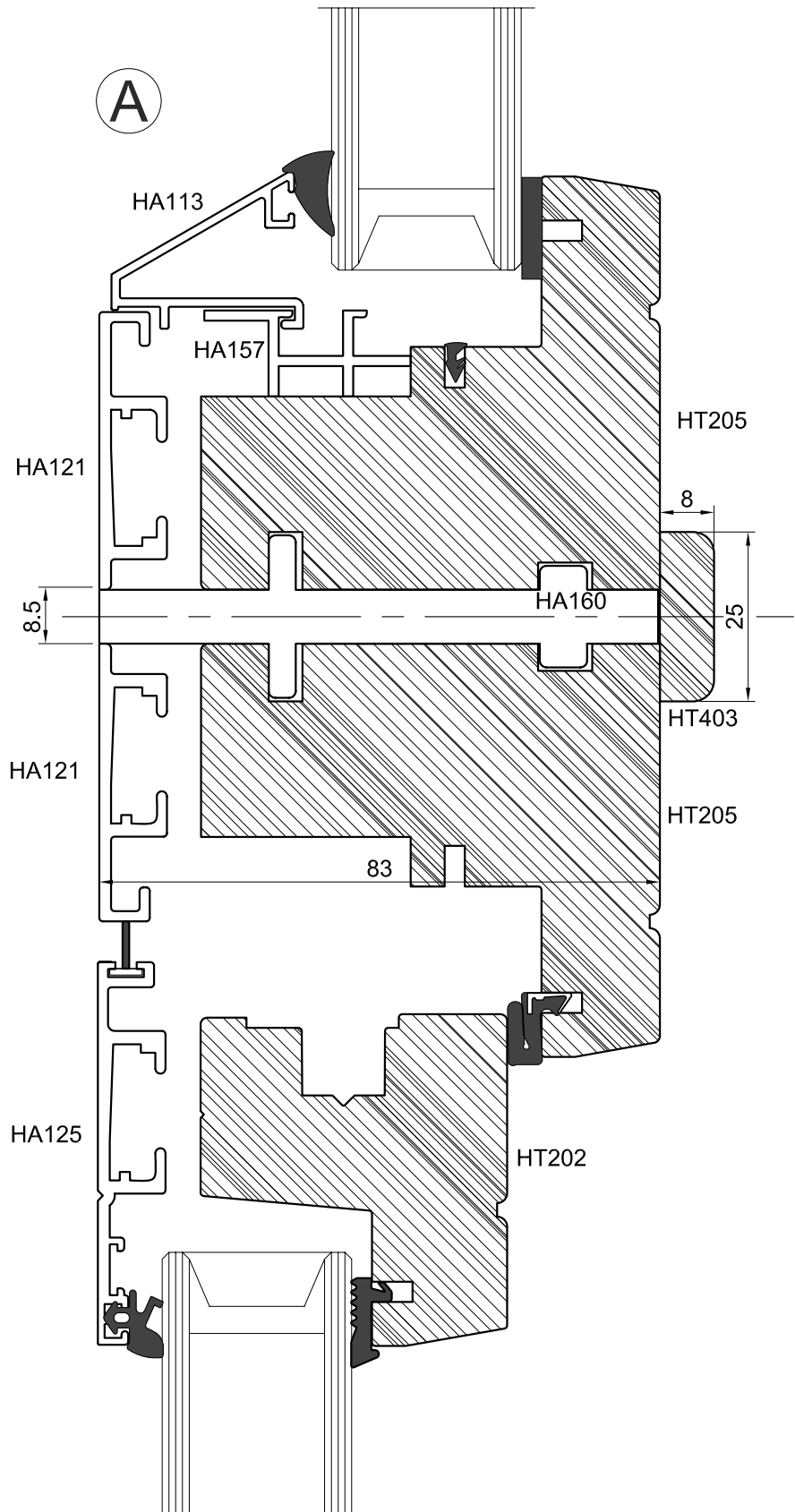
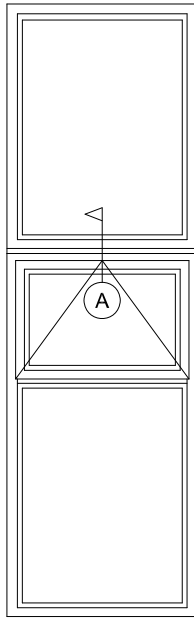
Ext. Glazed Fixed Lite With A 64mm Projection Cill



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.



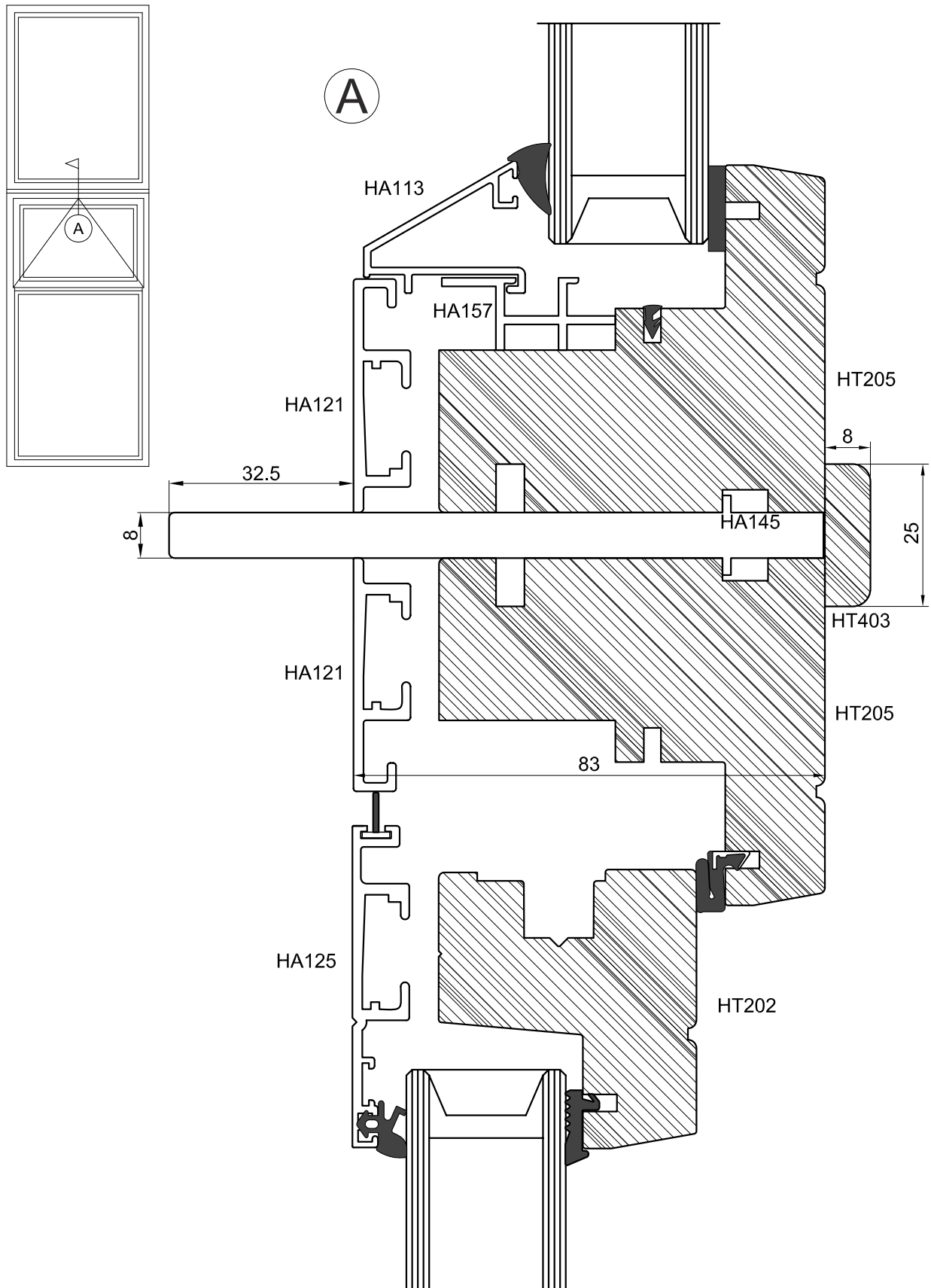
HA160 Reinforced Coupler Detail



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.



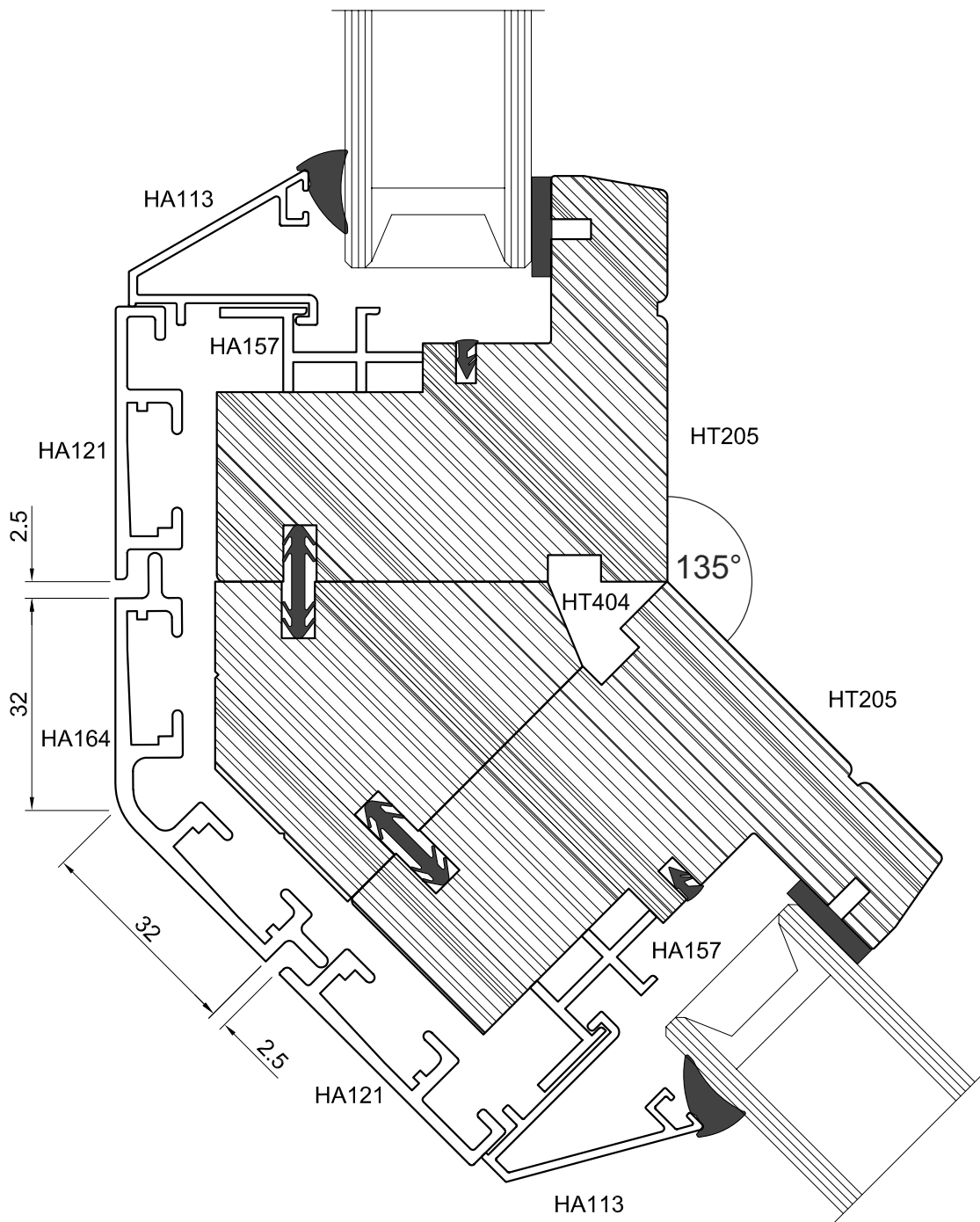
HA145 Reinforced Coupler Detail



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.



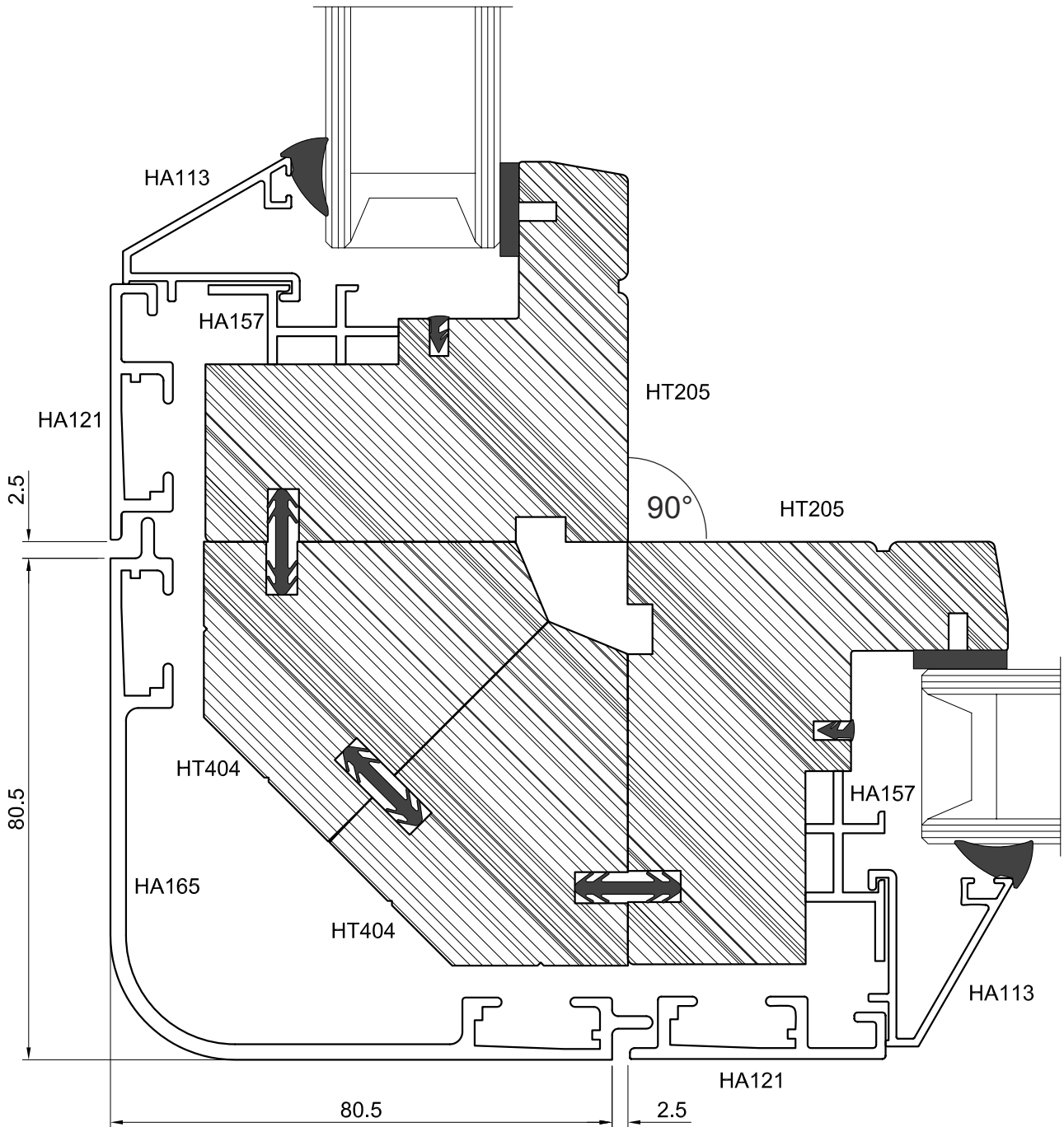
135° Corner Post



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.



90° Corner Post



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

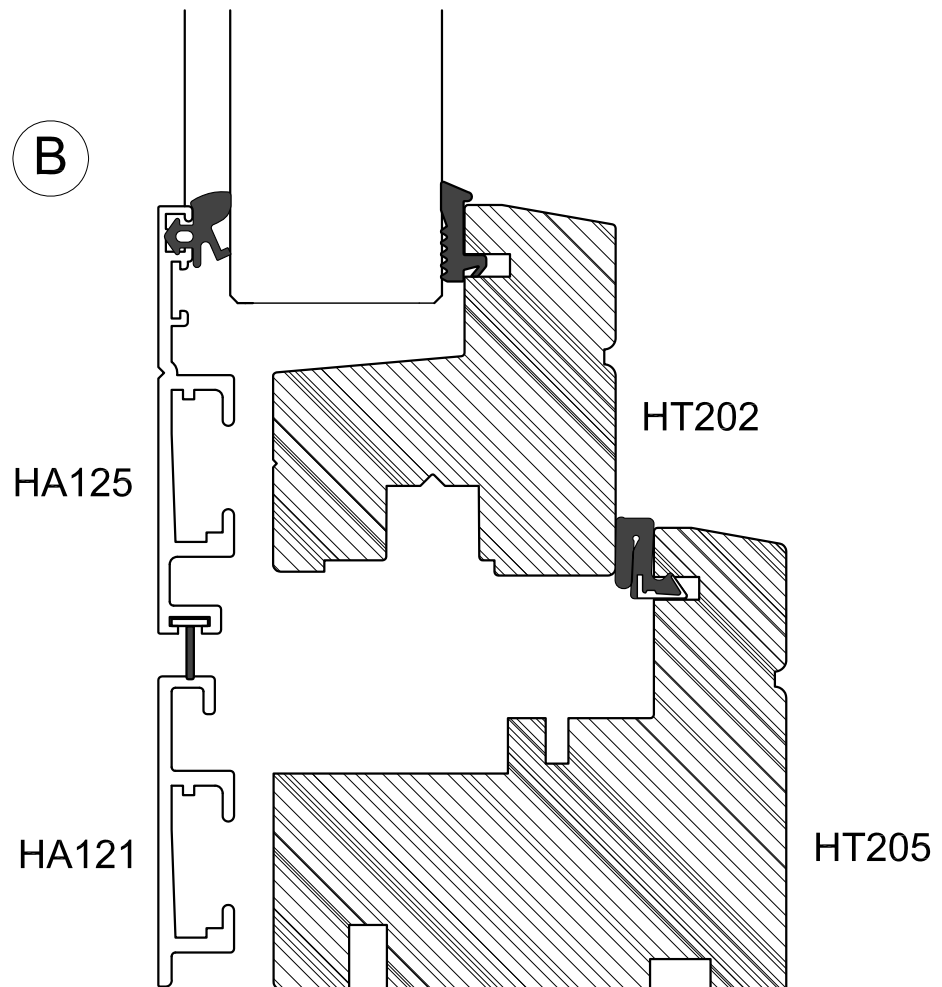
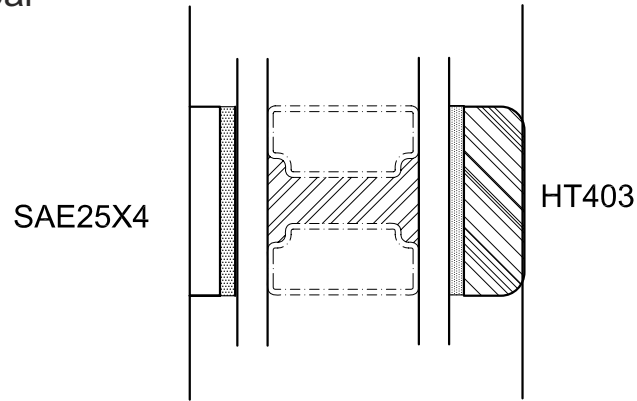
Astragal Bars



DURATION
WINDOWS

Ext. Glazed Georgian Style Astragal Bar Detail

Flat Georgian Bar



Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

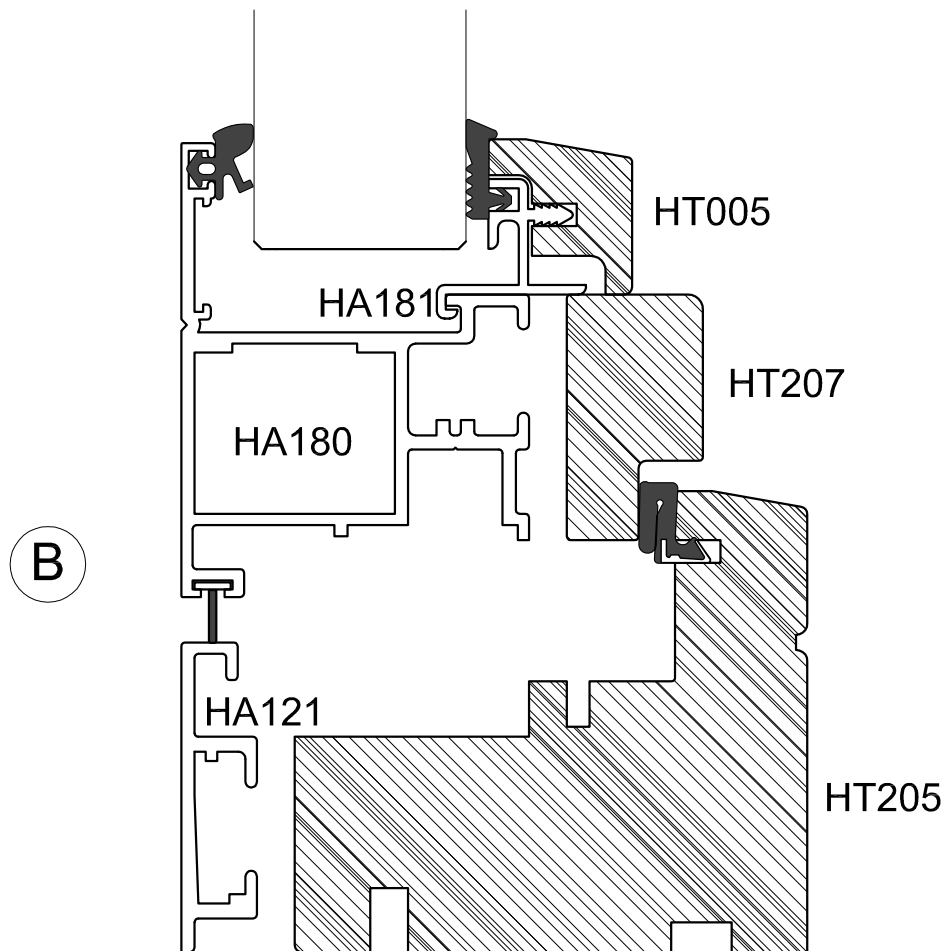
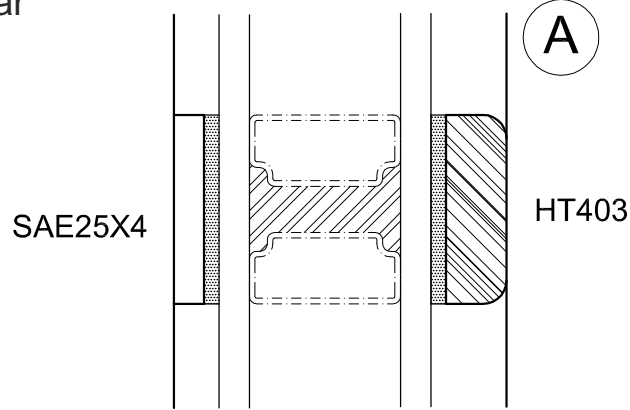
Astragal Bars



DURATION
WINDOWS

Int. Glazed Georgian Style Astragal Bar Detail

Flat Georgian Bar



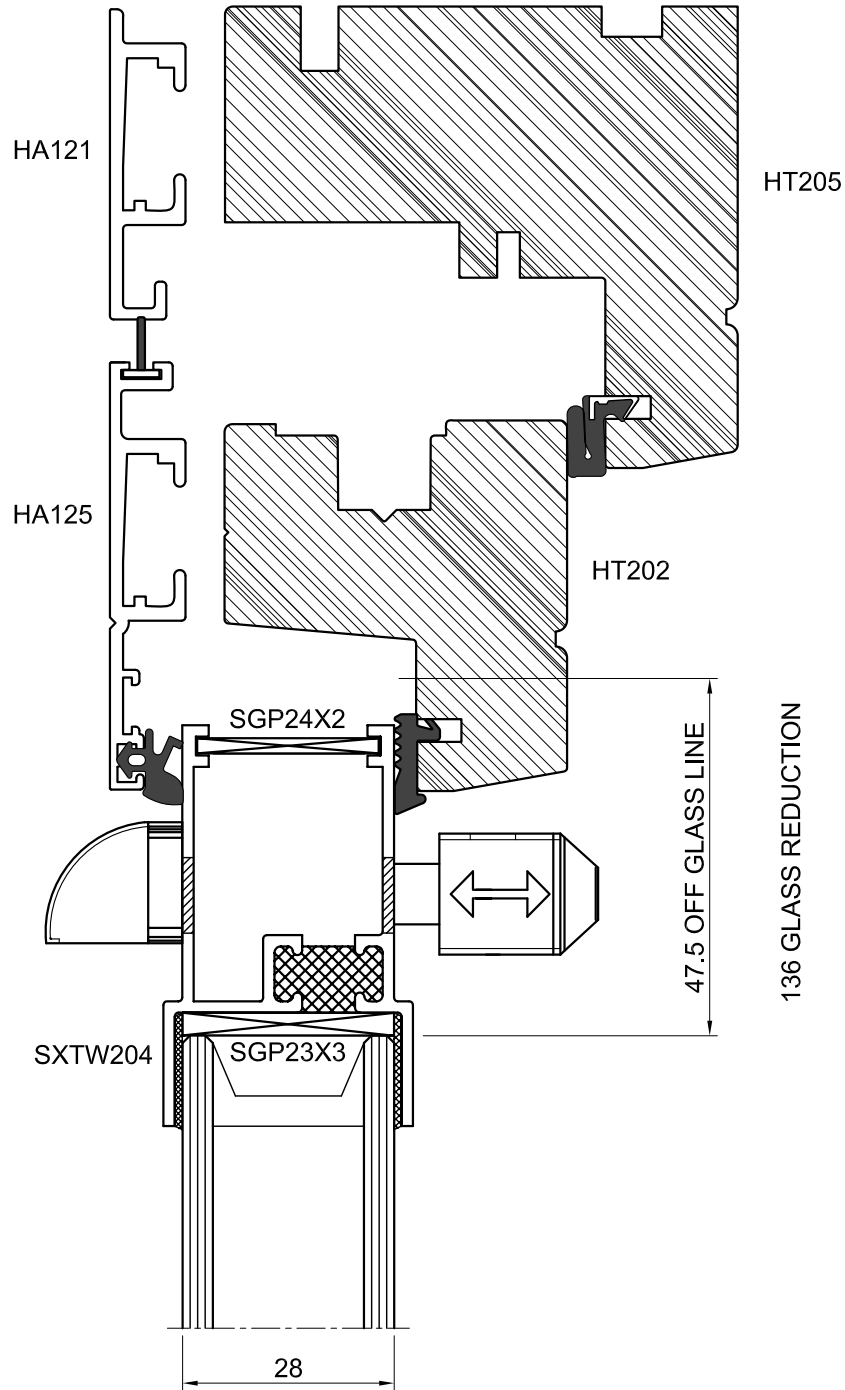
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Trickle Vent Details



DURATION
WINDOWS

Ext. Glazed In Trickle Vent



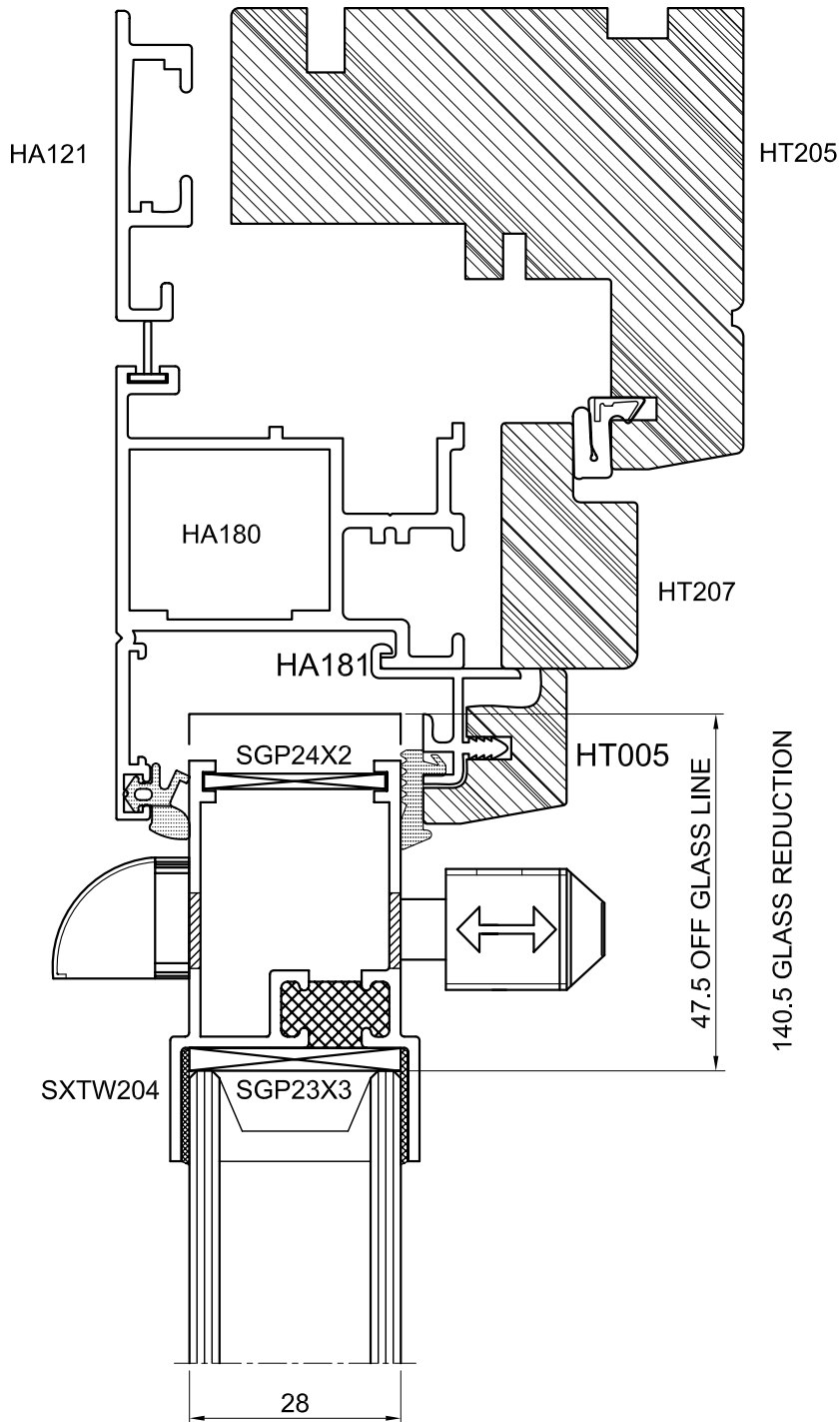
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Trickle Vent Details



DURATION
WINDOWS

Int. Glazed In Trickle Vent



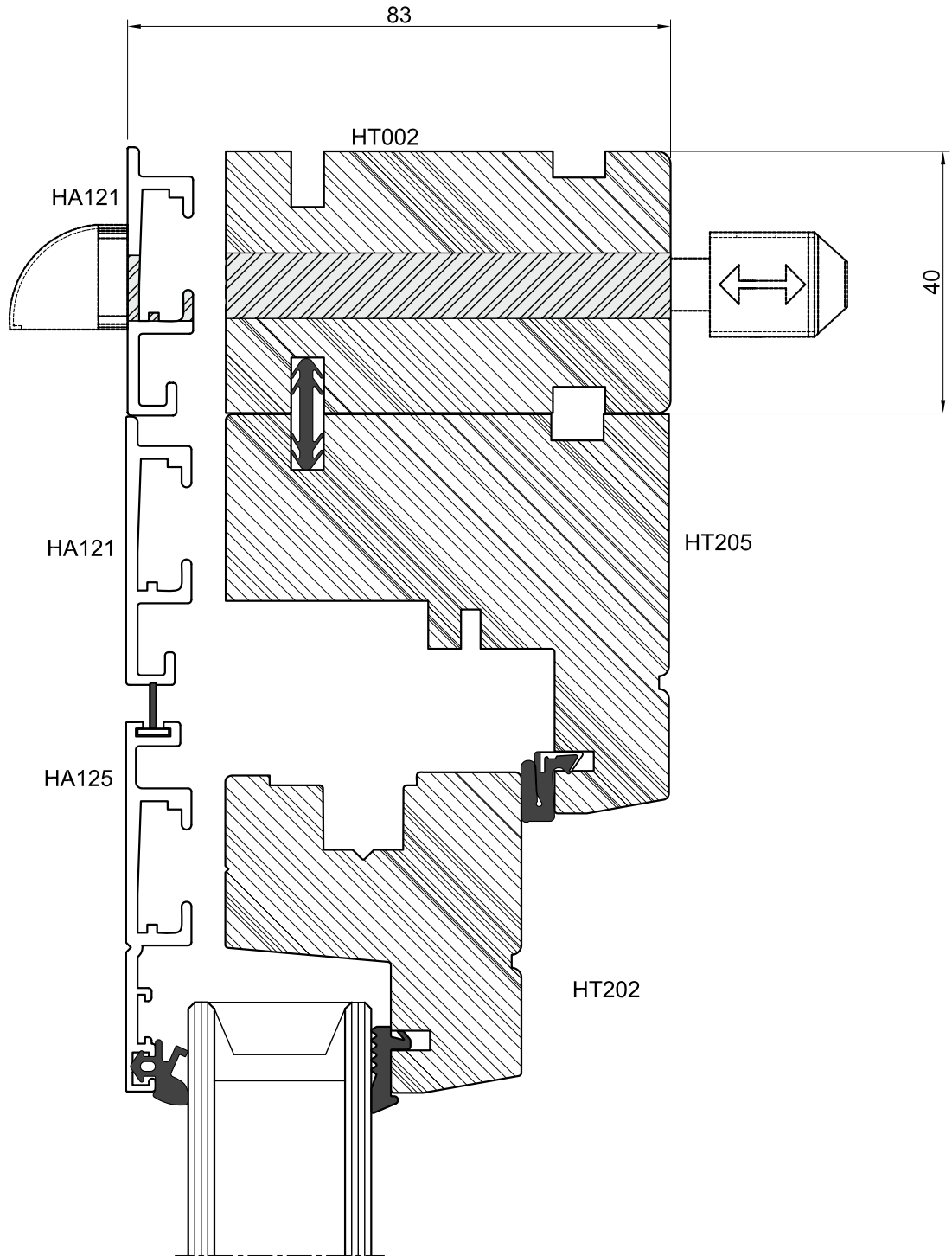
Duration Windows reserves the right to make changes to the product specification as technical developments dictate, and without prior notice. Pictures shown are for illustrative purposes and are not binding in detail, colour or specification.

Trickle Vent Details



DURATION
WINDOWS

Add On Trickle Vent - Using 40mm Head Extension



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