

|                                 |                          |
|---------------------------------|--------------------------|
| Uniclass<br>L3811+L411+L413:P43 | EPIC<br>C421+D11+D13:X46 |
| CI/SfB<br>(21.4)+(31.4)+(31.5)  | Xh4                      |

September 2007

**sapa:**

Architectural **Aluminium** Solutions



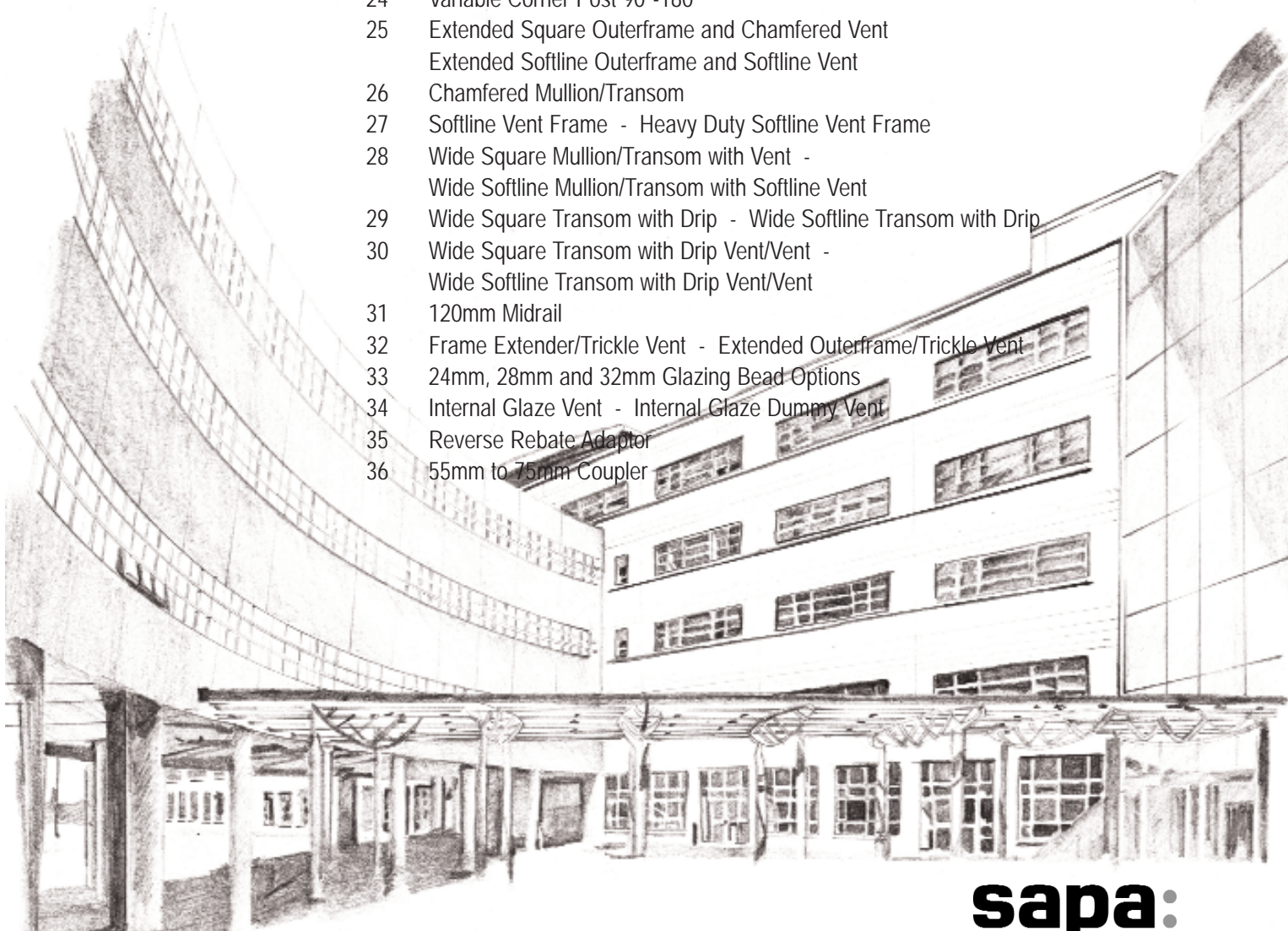
## Dualframe 75mm Casement Windows

Technical Data Sheet

**Sapa Building System**

## Dualframe

|    |   |
|----|---|
| 3  | Design features   |
| 4  | Performance data  |
| 6  | Support services  |
| 7  | Profile inertia values  |
| 10 | General arrangements  |
| 11 | Jamb/Vent - Mullion/Vent  |
| 12 | Fixed Light Jamb - Mullion Vent/Vent  |
| 13 | Head Vent   |
| 14 | Transom Vent - Subcill/Vent   |
| 15 | Subcill/Fixed Light/Square Bead - Drainage Tray/Fixed Light/Square Bead                         |
| 16 | Concealed Frame to Frame Coupler -<br>Lightweight Concealed Frame to Frame Coupler              |
| 17 | Frame to Frame Expansion Coupler  |
| 18 | Heavy Duty Coupling Box Mullion   |
| 19 | 150° Baypole - 135° Baypole   |
| 20 | 90° External Corner Post  |
| 21 | 90° Internal Corner Post  |
| 22 | Variable Baypole 162°-175° - Variable Baypole 133°-163°   |
| 23 | Variable Baypole 115°-134°  |
| 24 | Variable Corner Post 90°-180°   |
| 25 | Extended Square Outerframe and Chamfered Vent<br>Extended Softline Outerframe and Softline Vent |
| 26 | Chamfered Mullion/Transom   |
| 27 | Softline Vent Frame - Heavy Duty Softline Vent Frame  |
| 28 | Wide Square Mullion/Transom with Vent -<br>Wide Softline Mullion/Transom with Softline Vent     |
| 29 | Wide Square Transom with Drip - Wide Softline Transom with Drip                                 |
| 30 | Wide Square Transom with Drip Vent/Vent -<br>Wide Softline Transom with Drip Vent/Vent          |
| 31 | 120mm Midrail   |
| 32 | Frame Extender/Trickle Vent - Extended Outerframe/Trickle Vent                                  |
| 33 | 24mm, 28mm and 32mm Glazing Bead Options  |
| 34 | Internal Glaze Vent - Internal Glaze Dummy Vent   |
| 35 | Reverse Rebate Adaptor  |
| 36 | 55mm to 75mm Coupler  |



- **Contemporary Design:** Dualframe signifies a new era in aluminium fenestration, with products that have been specifically designed to comply with the ever increasing complexity of Building Regulations, British Standards and other regulatory demands.
- **Superior thermal performance:** Dualframe comfortably exceeds the requirements of Part L 2006 of the Building Regulations (2006) for both thermal insulation and air permeability, and has been designed to be compliant with future anticipated changes. Where required, Dualframe 75 casement can achieve an 'A' Window Energy Rating.
- **Dual colour capability:** All Dualframe products can have differing finishes internally and externally.
- **Integrated design:** The Dualframe suite consists of casement, pivot, tilt/turn, sliding and reversible windows, single and double leaf doors and glazed roofing, all of which can be combined to form composite units.
- **Unique polyamide thermal barrier:** With integral bead retention leg to minimise projection of opening lights (patent applied for).
- **Accreditation:** Dualframe casement and tilt/turn windows have been awarded BSI Kitemarks to BS4873 'Specification for aluminium alloy windows' and BS7950 'Specification for enhanced security performance of casement and tilt/turn windows for domestic applications'.

Dualframe doors have been awarded BSI PAS023-1 : 1999, 'General performance requirements for door assemblies; Part 1 - single leaf door assemblies to dwellings' and PAS024-1 : 1999 'enhanced security performance requirements for door assemblies; Part 1 - single leaf external door assemblies to dwellings'.

Dualframe casement, tilt/turn windows and Dualframe doors meet the Secured by Design specification.

Dualframe 75 casement can achieve an 'A' Window Energy Rating (WER) where required.

- **Choice of appearance:** Chamfered and Softline profiles are available to many products within the Dualframe suite, options of internal or external beading (including BS7950 compliant security) are also available.
- **Ease of maintenance:** The integration of a 'Eurogroove' features enables use of industry standard hardware, available from a variety of sources so that the product is competitive and easily maintained.

### ■ Product

Dualframe 75mm outward opening side and top hung casement windows

### ■ Design Variants

Can be constructed to form fixed and opening lights either as combination frames or as separate coupled lights.

### ■ Compatibility

Can also be integrated with other products from the Dualframe range and with Sapa Elegance 52 curtain walling.

### ■ Application

Suitable for installation in new build or replacement projects in residential, commercial or public buildings.

### ■ Finishes

A wide range of polyester powder coat finishes is available to BS EN 12206:1 2004. Anodised finishes are to BS 3987 Grade AA25 etch silver with a range of special anodised finishes on application.

For more details, or to talk to a Project Consultant, contact the Marketing Department on 01684 853500.



www.securedbydesign.com



FM01154



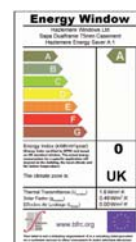
BS 4873  
Licence No. KM74159



BS 7950  
Licence No. KM74141



PAS 23-1 and  
PAS 24-1  
Licence No. KM90215





**Composition and Manufacture**

Aluminium profiles are extruded from aluminium alloy 6063 or 6060 T6 complying with the recommendations of BS EN 755-9:2001.

Weatherstripping is polypropylene backed woven pile and polyurethane foam enclosed in a polythene sheath, set in undercut grooves in the sash.

The thermal barrier section is achieved using two separate aluminium extrusions and two polyamide extrusions mechanically jointed to form a single compound profile. (Except on some coupling mullions where a 'pour and cut' polyurethane resin thermal break is used).

Frame members are mitre cut at 45 degrees. Corners are reinforced with stainless steel corner ties and extruded aluminium corner cleats. All joints are sealed against water entry during fabrication.

**Weather Performance**

When tested in accordance with BS 6375: Part 1, all products listed in this data sheet, when manufactured, installed and glazed strictly to the details outlined in the Product Manual, will exceed exposure category '2400 Special'.

|                  |                           |
|------------------|---------------------------|
| Water Tightness  | 600 Pascals (static test) |
| Air Permeability | 600 Pascals               |
| Wind Resistance  | 2400 Pascals*             |

\* Exposure category varies with Width/Height of window and mullion/transom used, as these are the only unsupported members. An accurate figure can be obtained using BS 6399: Part 2 calculations and the inertia values given in the Product Manual.

**Authority**

BS 4873: Aluminium alloy windows

BS 6375-1: Performance of windows: Classification for weathertightness and guidance on selection and specification.

BS 6375-2: Performance of windows. Specification for operation and strength characteristics.

BS 7950: Specification for enhanced security performance of casement and tilt/turn windows for domestic applications.

BS 6262: Code of practice for glazing for buildings.

BS EN 755-9: Aluminium and aluminium alloys. Extruded rod/bar, tube and profiles. Profiles, tolerances on dimension and form.

BS 3987: Specification for anodic oxide coatings on wrought aluminium for external architectural applications.

BS EN 12206:1 2004: Specification for powder organic coatings for application and stoving to aluminium alloy extrusions, sheet and perforated sections for external architectural purposes.

BS EN 10077-2: Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 2: Numerical method for frames.outerframe.

**Size Limitations****Standard Casement - Side Hung**

| Stay Size  | 8"    | 12"   | 16"   | Butt Hinge |
|------------|-------|-------|-------|------------|
| Max Width  | 400   | 600   | 700   | 700        |
| Max Height | 1200  | 1300  | 1300  | 1300       |
| Max Weight | 18kg  | 22kg  | 24kg  | *          |
| Min Width  | 302   | 358   | 601   | *          |
| Min Height | 424** | 424** | 424** | 424**      |

**Standard Casement - Top Hung**

| Stay Size  | 6"    | 8"    | 10"   | 12"   | 16"   | 20"   | 24"   | Butt Hinge |
|------------|-------|-------|-------|-------|-------|-------|-------|------------|
| Max Width  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200       |
| Max Height | 300   | 350   | 400   | 550   | 750   | 1000  | 1200  | 1200       |
| Max Weight | 10kg  | 12kg  | 16kg  | 20kg  | 21kg  | 24kg  | 35kg  | *          |
| Min Width  | 424** | 424** | 424** | 424** | 424** | 424** | 424** | 424**      |
| Min Height | 250   | 301   | 351   | 401   | 551   | 751   | 1001  | *          |

**Heavy Duty Casement - Side Hung**

| Stay Size  | 10"   | 16"   | Butt Hinge |
|------------|-------|-------|------------|
| Max Width  | 660   | 838   | 838        |
| Max Height | 1524  | 1829  | 1829       |
| Max Weight | 37kg  | 45kg  | *          |
| Min Width  | 302   | 661   | *          |
| Min Height | 424** | 424** | 424**      |

**Heavy Duty Casement - Top Hung**

| Stay Size  | 10"   | 12"   | 16"   | 22"   | Butt Hinge |
|------------|-------|-------|-------|-------|------------|
| Max Width  | 1600  | 1600  | 1600  | 1600  | 1600*      |
| Max Height | 635   | 787   | 1090  | 1500  | 1500       |
| Max Weight | 38kg  | 47kg  | 55kg  | 75kg  | *          |
| Min Width  | 424** | 424** | 424** | 424** | 424**      |
| Min Height | 302   | 636   | 788   | 1091  | *          |

All sizes given are in millimetres, all maximum sizes relate to the overall size of the vent frame and not the outerframe.

\*See Page 5 Hardware and Security

\*\* Minimum sizes can be reduced to 302mm when using Cockspur handles.

### Hardware and Security

The Dualframe casement window is available as standard with a multi-point locking system, comprising rods moving in opposing directions, with opposing centre cam and end shootbolts operated by "autolock" handles with key deadlocking.

Hinges as standard are stainless steel, projecting friction stays with optional restricted and egress variants.

Extruded aluminium butt hinges with stainless steel pins are available as an option.

Optional Vector Excluder hinge protectors must be used when enhanced security to BS7950 is required.

The Dualframe casement window system (in both externally and internally beaded formats), has been tested to BS7950 and BS 4873 in certain configurations, details upon request.

\*Butt Hinges - Each hinge will carry a maximum of 20Kg in both side hung and top hung applications. Where a top hung vent is hung from a transom, this figure should be reduced to 15Kg per hinge and the maximum width of the vent restricted to 1500mm.

These butt hinges are primarily designed for use with folding openers, remote operating gear or electronic actuators. Where they are fitted in conjunction with espag gear or cockspur handles, suitable friction restrictors must also be used.

Note that a weatherbar must always be fitted over butt hinge opening lights, unless there is a soffit or similar to give protection. Therefore DF300 outerframe cannot be used where a soffit does not exist because the weatherbar cannot be fitted.

Other hardware specifications are available (eg for remote operation, trickle ventilators), consult Sapa Building Systems Ltd for details.

### Glazing

Drainage in accordance with details listed in the Product Manual meets the requirements of 'Ventilated and Drained Glazing System', as specified in BS6262 for thickness and type. Insulating glass units of 24mm up to 32mm can be accommodated as standard, other depths can be accommodated on request.

Fixed/Opening Lights: Glass set against extruded synthetic rubber gaskets retained in undercut grooves within an aluminium bead profile. Final retention of the glass is achieved by the application of a co-extruded PVCu/ synthetic rubber wedge gasket between the inner face of the glass and the frame.

### Thermal Performance

Dualframe 75mm can meet and surpass the area weighted average U values stipulated in Part L of the Building Regulations. Lower U-values can be achieved using double glazed units with enhanced thermal insulation, such as 'soft coat' low emissivity glass, argon gas filling and thermally broken spacer bars.

An 'A' Window Energy Rating (WER) can be achieved where required.

### Site Work

Fabrication, installation and glazing service is available through a nationwide network of fabricators & installers. For details of suitable fabricators & installers, please contact our Marketing Department on 01684 853500.



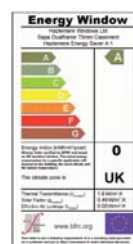
[www.securedbydesign.com](http://www.securedbydesign.com)



BS 4873  
Licence No. KM74159



BS 7950  
Licence No. KM74141

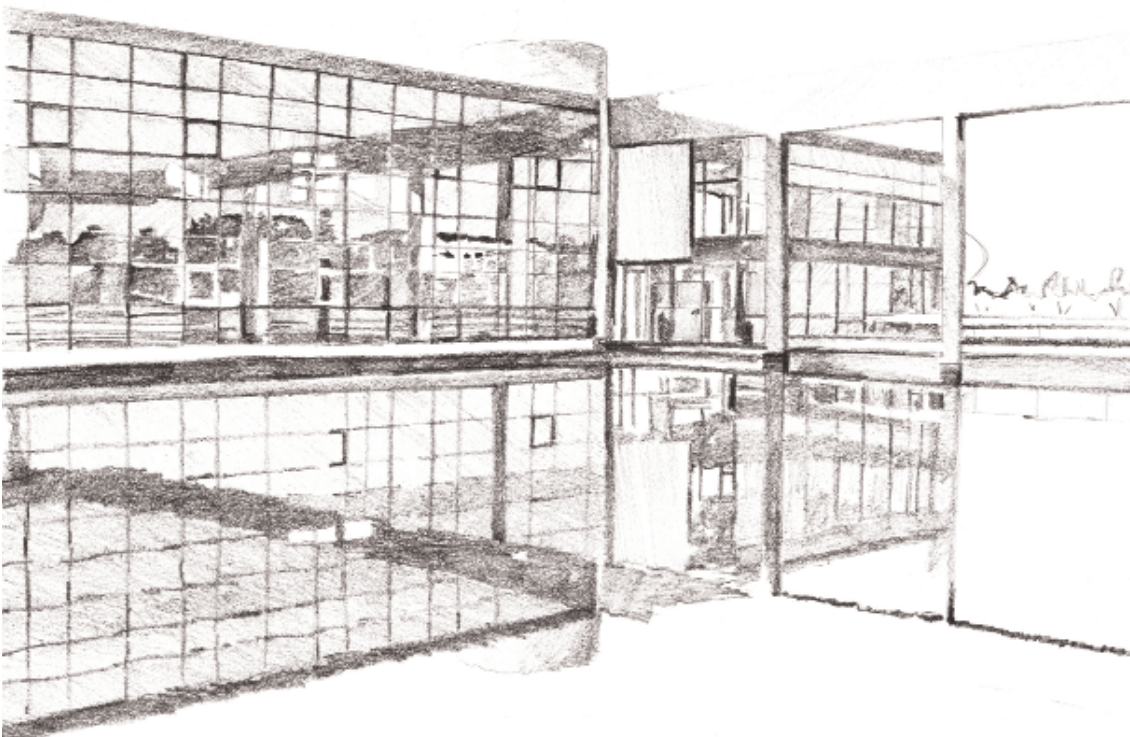


- Our field based Project Consultants, working with our in-house Contracts Design and Administration team, provide UK specifiers with specialist advice concerning the correct application of products, giving guidance on Building Regulations, British Standards and other issues such as product specifications, usage, maintenance and safety. Complementary to this, our Product Support Department has an invaluable reservoir of experience on every aspect of our product range.
- We also appreciate that the specification process is influenced by client demands to obtain best value, and to that end, we can participate in site visits, your design meetings and budgetary planning. We can assist with written specification documents (which can be supplied in either an NBS format, or your own specification layout) and supported by samples, literature and drawings for consultation or planning issues.
- Taking this partnership approach through the whole project allows on-site monitoring of manufacturing and installation ensuring the specifier always has professional support from a worldwide group. Drawing on one of the largest fabricator and installer networks in the UK, we can provide details of specialist contractors who will quote or tender competitively for any type of contract.
- For specification assistance or details of fabricators and installers, please call our Marketing Department on 01684 853500.

#### ■ Sapa Group




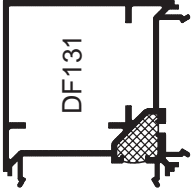








Sapa Building Systems Limited is a member of the worldwide Sapa Group. We develop and market high value-added profiles in aluminium and are the leading independent producer of aluminium profiles in the world, with customers in Europe, North America and Asia. In the UK, the Sapa Group has extensive multi-site extruding, re-melt, anodising and polyester powder coating facilities, offering total control and a fast and co-operative response.

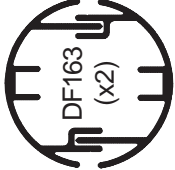





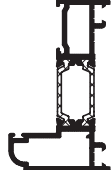


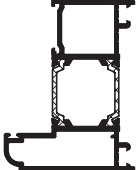


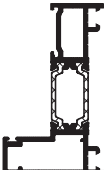


Backed by the resources of the Group, Sapa Building Systems Limited offers architects and specifiers a wide range of innovative aluminium systems for curtain walling, doors, windows and specialist applications. With a wealth of European knowledge and experience our company incorporates the highly respected Glostal, Monarch and RC System brands that have satisfied the demands of specifiers for over four decades. Our company systems have been approved under BS EN ISO 9001:2000 and we have been recognised as an Investor in People for over three years.

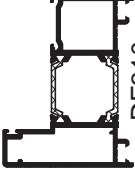








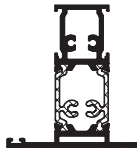


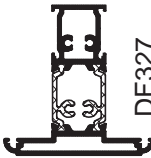




PROFILE INERTIA VALUES

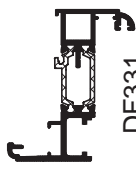
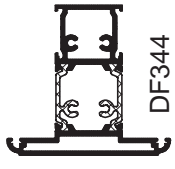
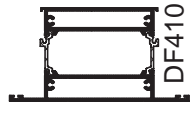
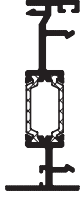
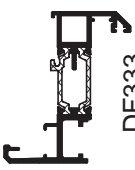
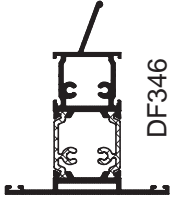
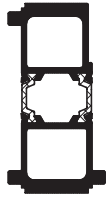
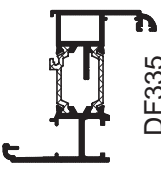
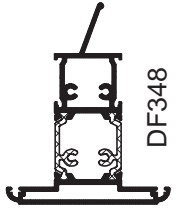
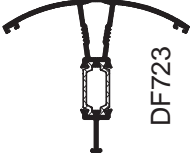
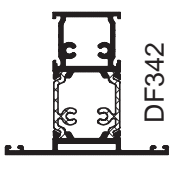
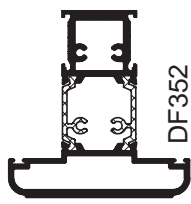

The following pages give information on the inertia values of the integral mullions, transoms, baypoles and coupling mullions. BS 6399 Part 2 must be used to calculate the inertia value required.

| Profile  | Inertia (mm <sup>4</sup> )   |
|--|--|
| <br>DF122   | <br>161,075   |
|  | <br>2,930     |
| <br>DF131   | <br>639,861   |
|  | <br>659,240   |
| <br>DF138  | <br>338,423  |
|  | <br>115,967 |
| <br>DF139 | <br>283,774 |
|  | <br>55,080  |

| Profile   | Inertia (mm <sup>4</sup> )   |
|---|--|
| <br>DF163 (x2) | <br>228,932   |
|   | <br>129,348   |
| <br>DF269      | <br>55,843    |
|   | <br>6,248     |
| <br>DF304      | <br>178,544   |
|   | <br>27,226    |
| <br>DF305     | <br>222,833  |
|   | <br>67,130  |
| <br>DF309    | <br>165,465 |
|   | <br>47,603  |

| Profile  | Inertia (mm <sup>4</sup> )   |
|--|--|
| <br>DF310   | <br>227,945   |
|  | <br>70,307    |
| <br>DF324   | <br>111,371   |
|  | <br>17,407    |
| <br>DF325   | <br>144,952   |
|  | <br>25,948    |
| <br>DF326  | <br>138,640  |
|  | <br>36,062  |
| <br>DF327 | <br>175,923 |
|  | <br>49,618  |

PROFILE INERTIA VALUES

| Profile  | Inertia (mm <sup>4</sup> ) | Profile  | Inertia (mm <sup>4</sup> ) | Profile  | Inertia (mm <sup>4</sup> )   |
|--|----------------------------|--|----------------------------|--|--|
| <br>DF331   | ↙<br>144,814               | <br>DF344   | ↙<br>193,769               | <br>DF410   | ↙<br>308,535   |
|  | ↘<br>36,292                |  | ↘<br>72,009                |  | <br>DF711 |
| <br>DF333   | ↙<br>145,670               | <br>DF346   | ↙<br>209,575               | <br>DF714   |  |
|  | ↘<br>36,715                |  | ↘<br>55,090                |  | ↘<br>72,340  |
| <br>DF335  | ↙<br>176,027               | <br>DF348   | ↙<br>176,722               | <br>DF723  | ↙<br>167,251   |
|  | ↘<br>61,567                |  | ↘<br>61,975                |  | ↘<br>342,537   |
| <br>DF342 | ↙<br>155,242               | <br>DF352 | ↙<br>105,544               | <br>DF724 | ↙<br>162,597   |
|  | ↘<br>54,757                |  | ↘<br>105,544               |  | ↘<br>105,544   |




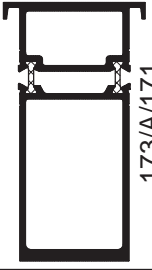


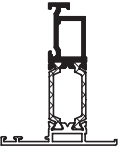
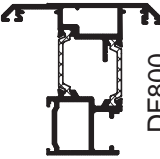
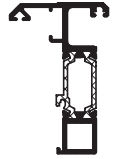
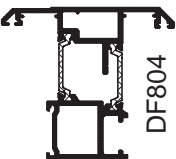
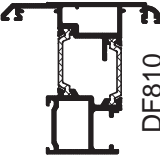
75mm Casement Window


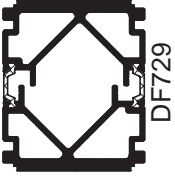
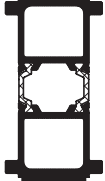
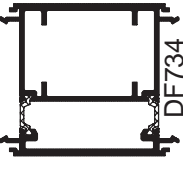
**DUALFRAME**

PROFILE INERTIA VALUES

**sapa:**

| Profile  | Inertia (mm <sup>4</sup> ) | Inertia (mm <sup>4</sup> ) |
|--|----------------------------|----------------------------|
| <br>16021       | ↓<br>53,629                | ↓                          |
|  | ↑<br>9,051                 | ↑                          |
| <br>16022       | ↓<br>378,702               | ↓                          |
|  | ↑<br>49,252                | ↑                          |
| <br>16023       | ↓<br>154,527               | ↓                          |
|  | ↑<br>27,187                | ↑                          |
| <br>173/A/171 | ↓<br>843,547               | ↓                          |
|  | ↑<br>180,056               | ↑                          |

| Profile  | Inertia (mm <sup>4</sup> ) | Inertia (mm <sup>4</sup> ) |
|--|----------------------------|----------------------------|
| <br>DF735   | ↓<br>102,612               | ↓                          |
|  | ↑<br>15,595                | ↑                          |
| <br>DF800   | ↓<br>169,931               | ↓                          |
|  | ↑<br>106,253               | ↑                          |
| <br>DF801   | ↓<br>108,363               | ↓                          |
|  | ↑<br>26,955                | ↑                          |
| <br>DF804  | ↓<br>184,302               | ↓                          |
|  | ↑<br>127,924               | ↑                          |
| <br>DF810 | ↓<br>169,688               | ↓                          |
|  | ↑<br>106,183               | ↑                          |

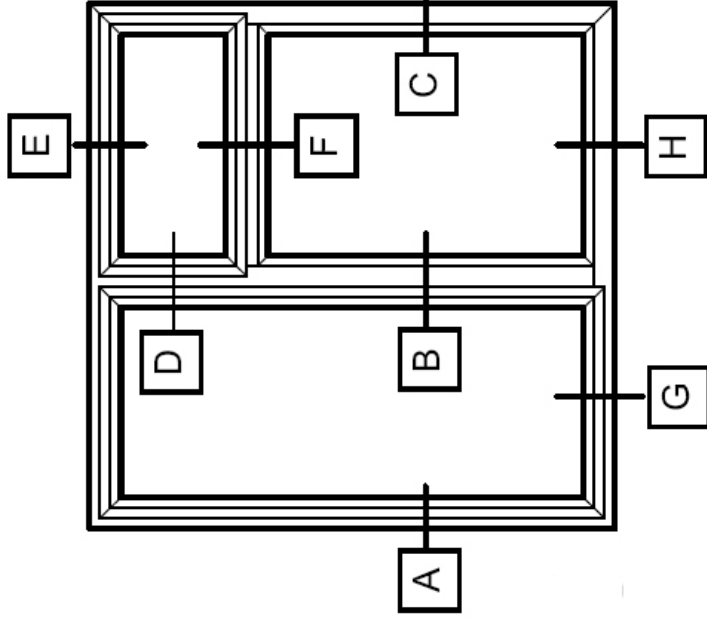
| Profile  | Inertia (mm <sup>4</sup> ) | Inertia (mm <sup>4</sup> ) |
|--|----------------------------|----------------------------|
| <br>DF725   | ↓<br>147,017               | ↓                          |
|  | ↑<br>21,456                | ↑                          |
| <br>DF729   | ↓<br>738,637               | ↓                          |
|  | ↑<br>412,253               | ↑                          |
| <br>DF730 | ↓<br>411,283               | ↓                          |
|  | ↑<br>69,611                | ↑                          |
| <br>DF734 | ↓<br>651,786               | ↓                          |
|  | ↑<br>608,189               | ↑                          |

## DUALFRAME 75mm Casement Window

# sapa:

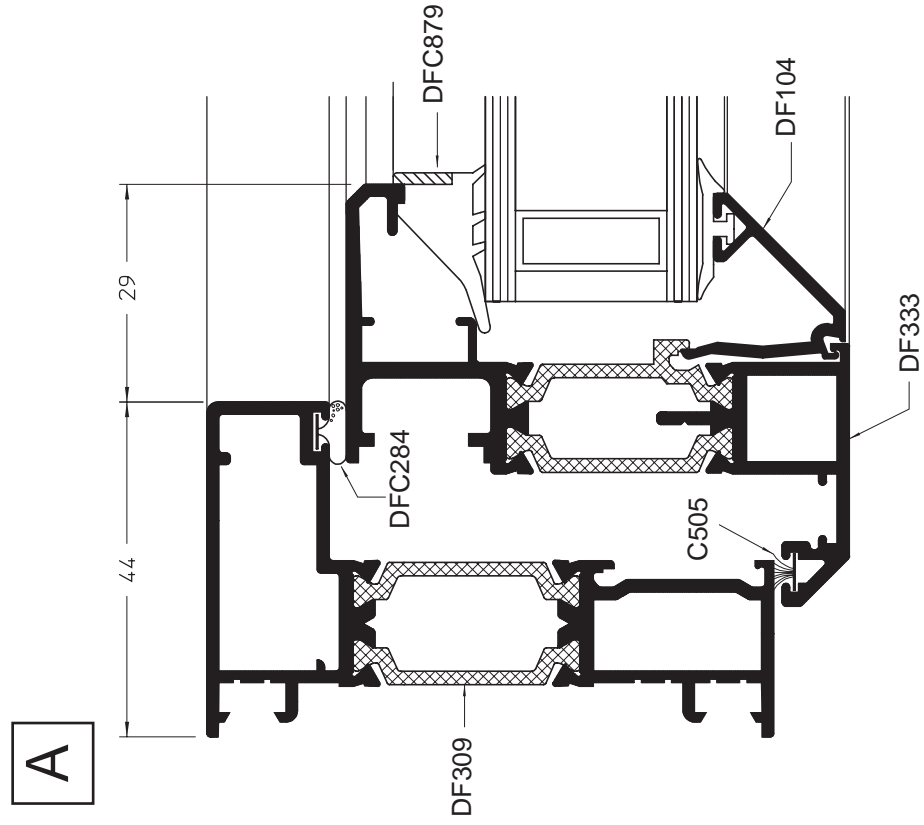
### GENERAL ARRANGEMENTS

| Detail | Elevation  | Page |
|--------|--|------|
| A      | Jamb/Vent - Mullion/Vent   | 11   |
| B      | Fixed Light Jamb - Mullion Vent/Vent   | 12   |
| C      | Head Vent  | 13   |
| D      | Transom Vent - Subcill/Vent  | 14   |
| E      | Subcill/Fixed Light/Square Bead  | 15   |
| F      | Drainage Tray/Fixed Light/Square Bead  | 16   |
| G      | Concealed Frame to Frame Coupler - Lightweight Concealed Frame to Frame Coupler          | 17   |
| H      | Frame to Frame Expansion Coupler   | 18   |
|        | Heavy Duty Coupling Box Mullion  | 19   |
|        | 150° Baypole - 135° Baypole  | 20   |
|        | 90° External Corner Post   | 21   |
|        | 90° Internal Corner Post   | 22   |
|        | Variable Baypole 162°-175° - Variable Baypole 133°-163°                                  | 23   |
|        | Variable Baypole 115°-134°   | 24   |
|        | Variable Corner Post 90°-180°  | 25   |
|        | Extended Square Outerframe and Chamfered Vent  | 26   |
|        | Extended Softline Outerframe and Softline Vent   | 27   |
|        | Chamfered Mullion/Transom  | 28   |
|        | Softline Vent Frame - Heavy Duty Softline Vent Frame                                     | 29   |
|        | Wide Square Mullion/Transom with Vent - Wide Softline Mullion/Transom with Softline Vent | 30   |
|        | Wide Square Transom with Drip - Wide Softline Transom with Drip                          | 31   |
|        | Wide Square Transom with Drip Vent/Vent - Wide Softline Transom with Drip Vent/Vent      | 32   |
|        | 120mm Midrail  | 33   |
|        | Frame Extender/Trickle Vent  | 34   |
|        | Extended Softline Outerframe/Trickle Vent  | 35   |
|        | 24mm, 28mm and 32mm Glazing Bead Options   | 36   |
|        | Internal Glaze Vent - Internal Glaze Dummy Vent  |      |
|        | Reverse Rebate Adaptor   |      |
|        | 55mm to 75mm Coupler   |      |

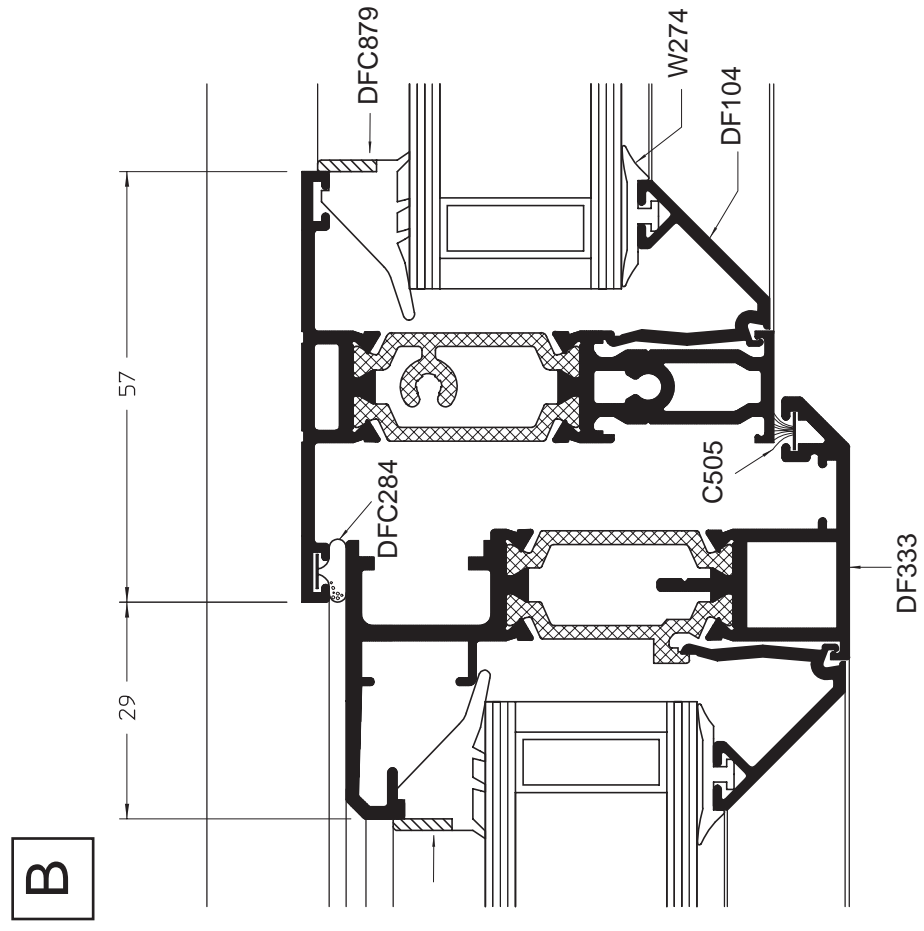


These drawings illustrate a number of the available profile combinations. Other combinations are available please consult Sapa Building Systems for further details.

Jamb / Vent

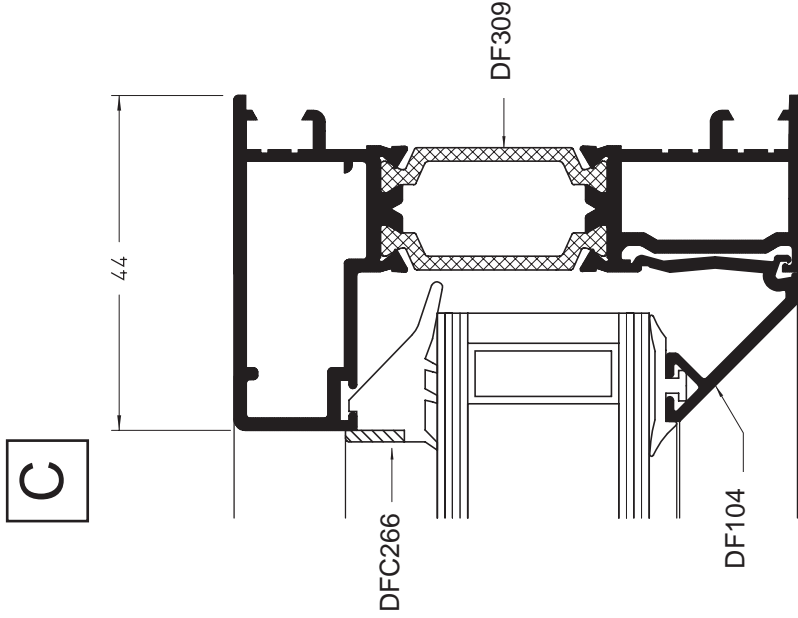


Mullion / Vent

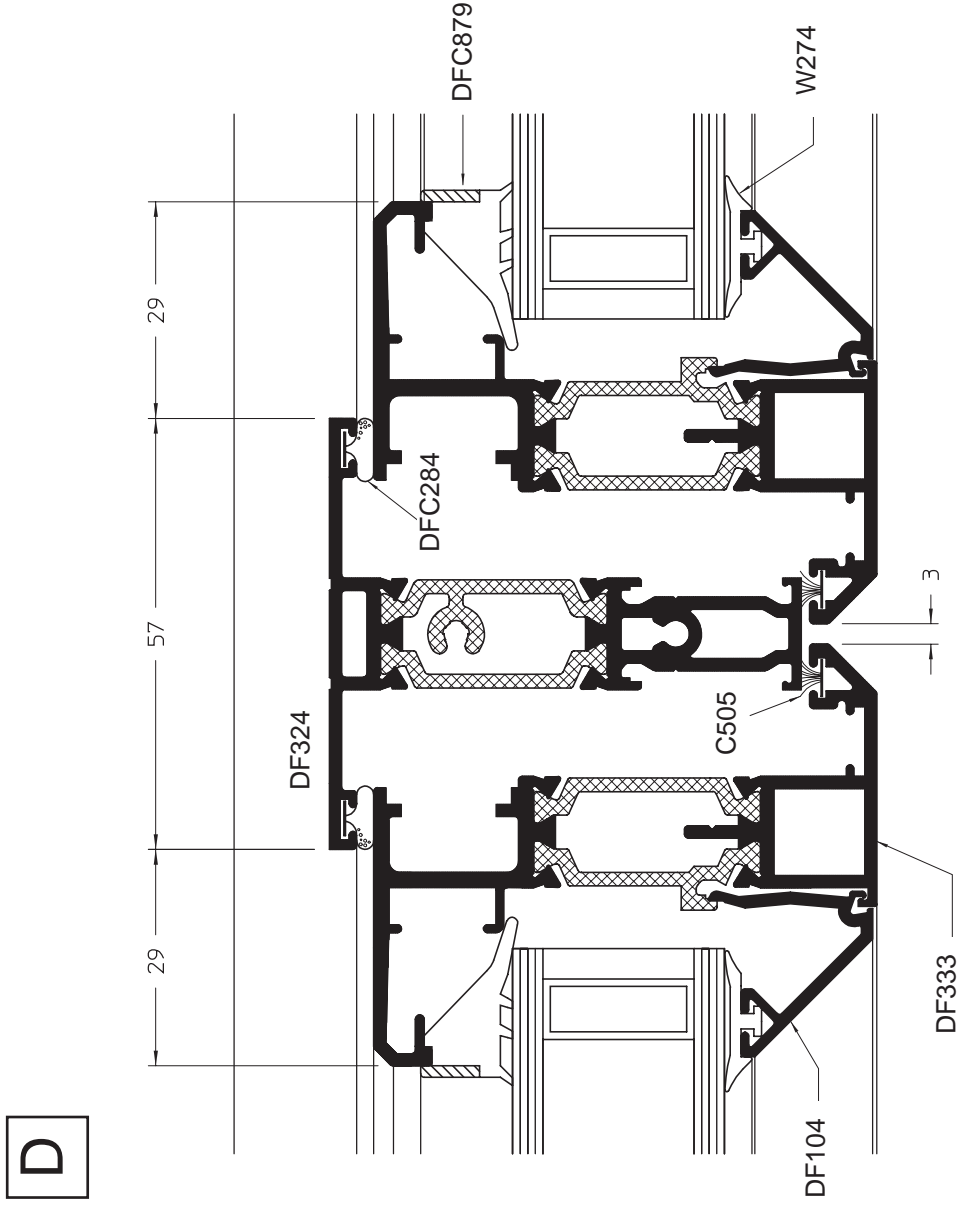


GENERAL ARRANGEMENTS

Fixed Light Jamb



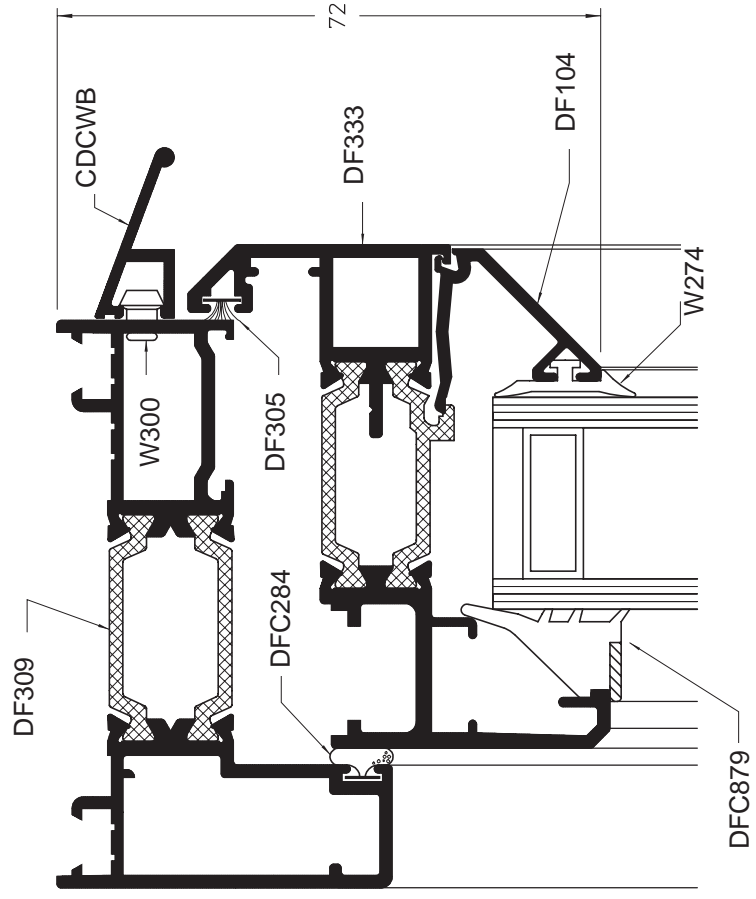
Mullion Vent / Vent





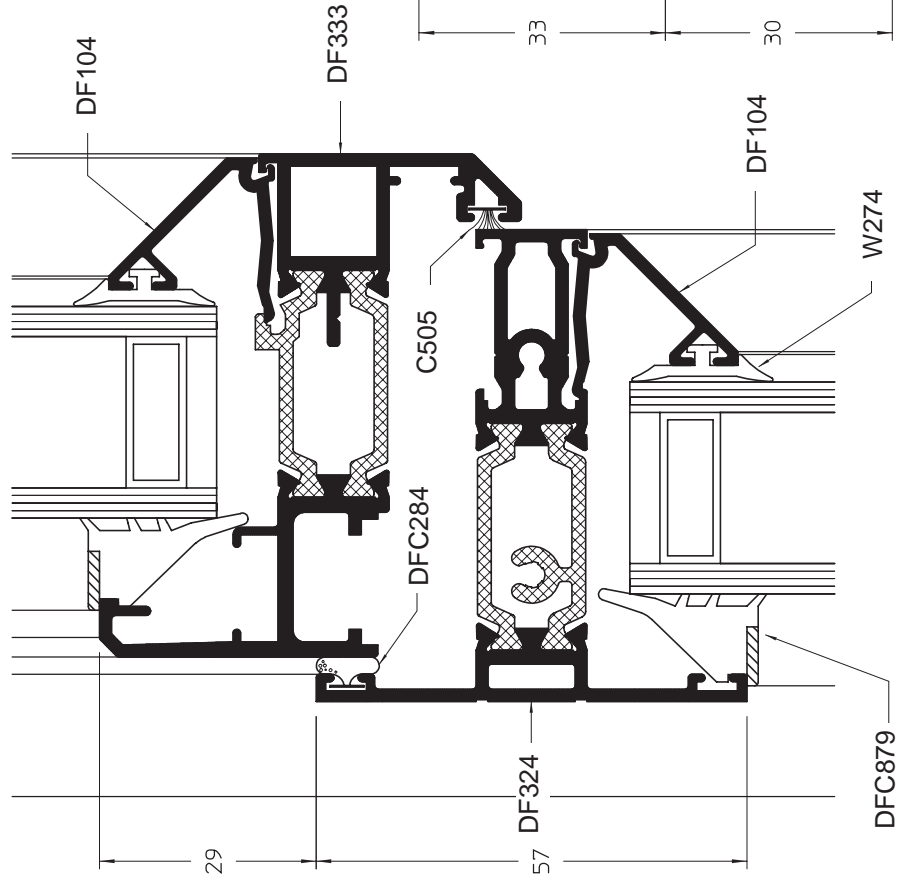
## Head / Vent

E

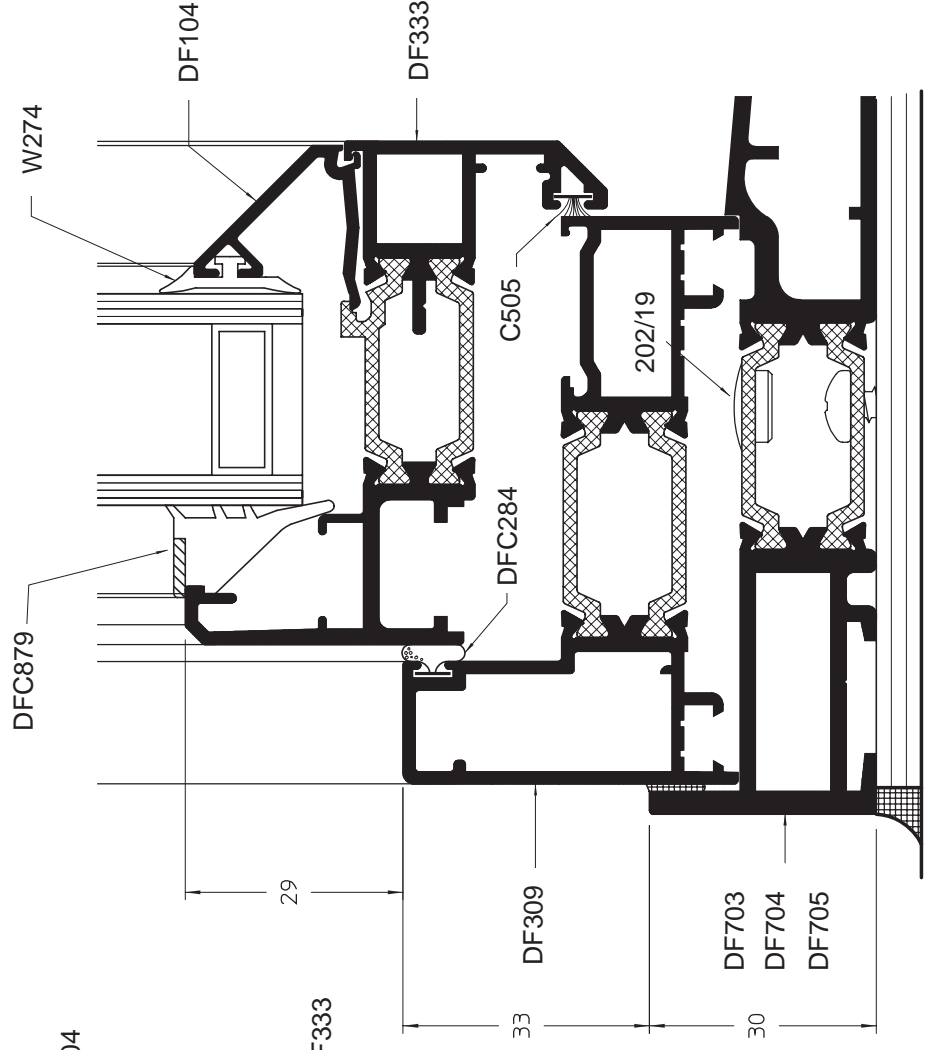


GENERAL ARRANGEMENTS

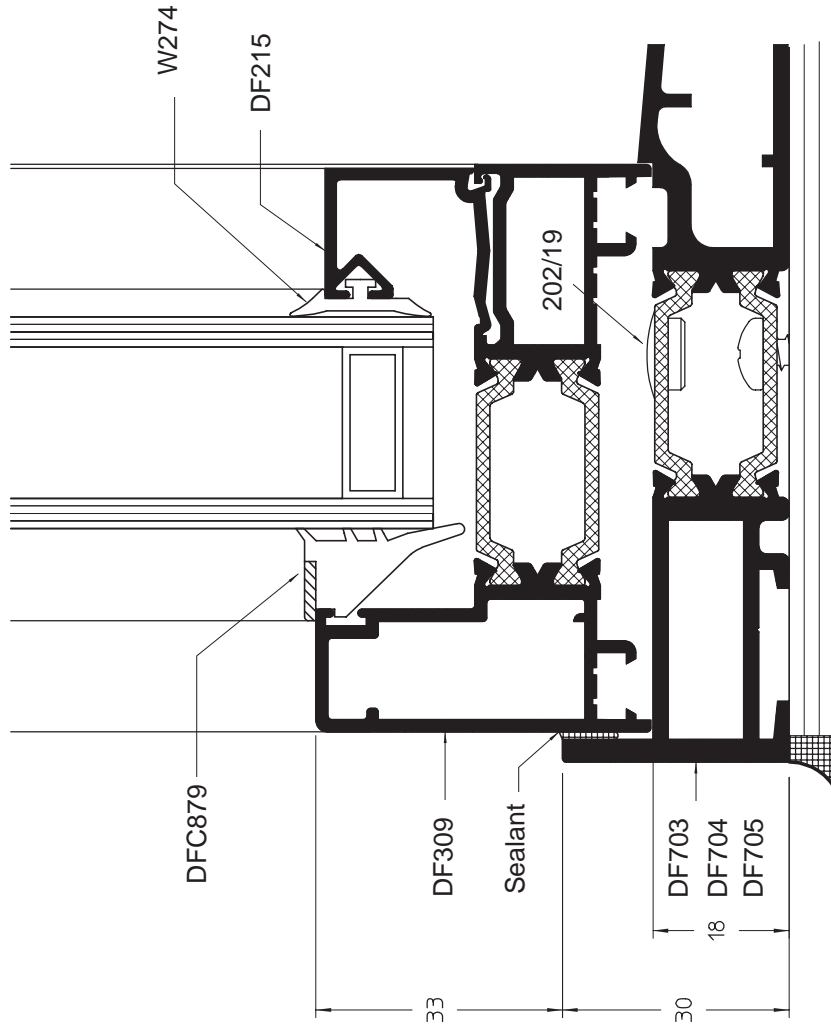
Transom / Vent



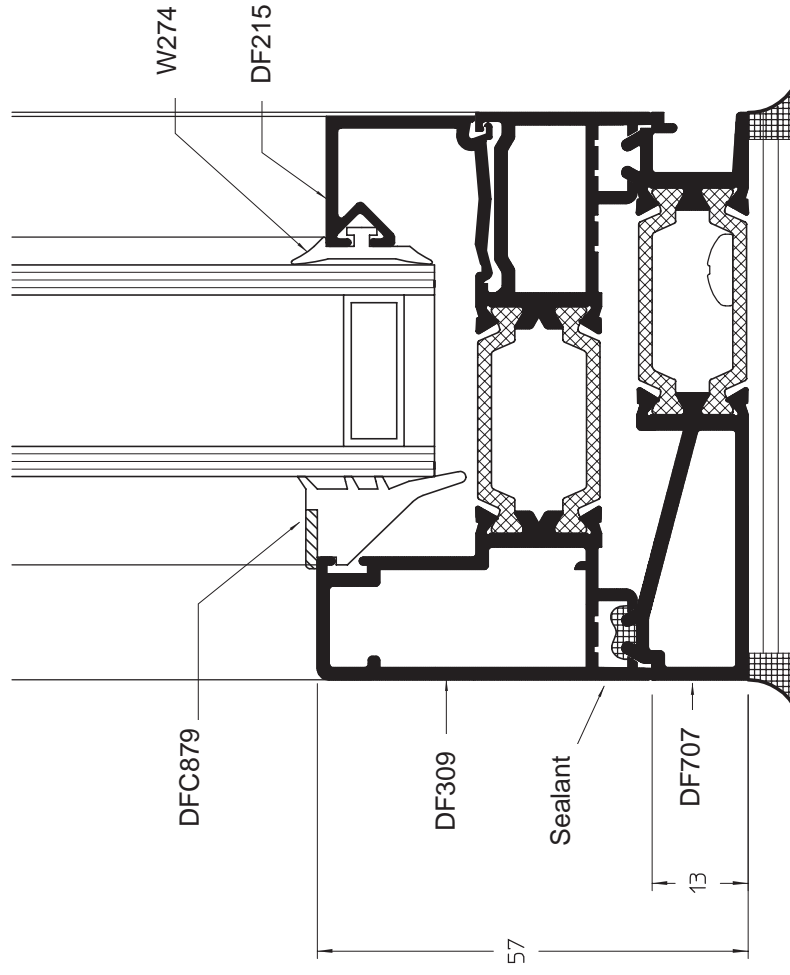
Subcill / Vent



Subcill / Fixed Light / Square Bead



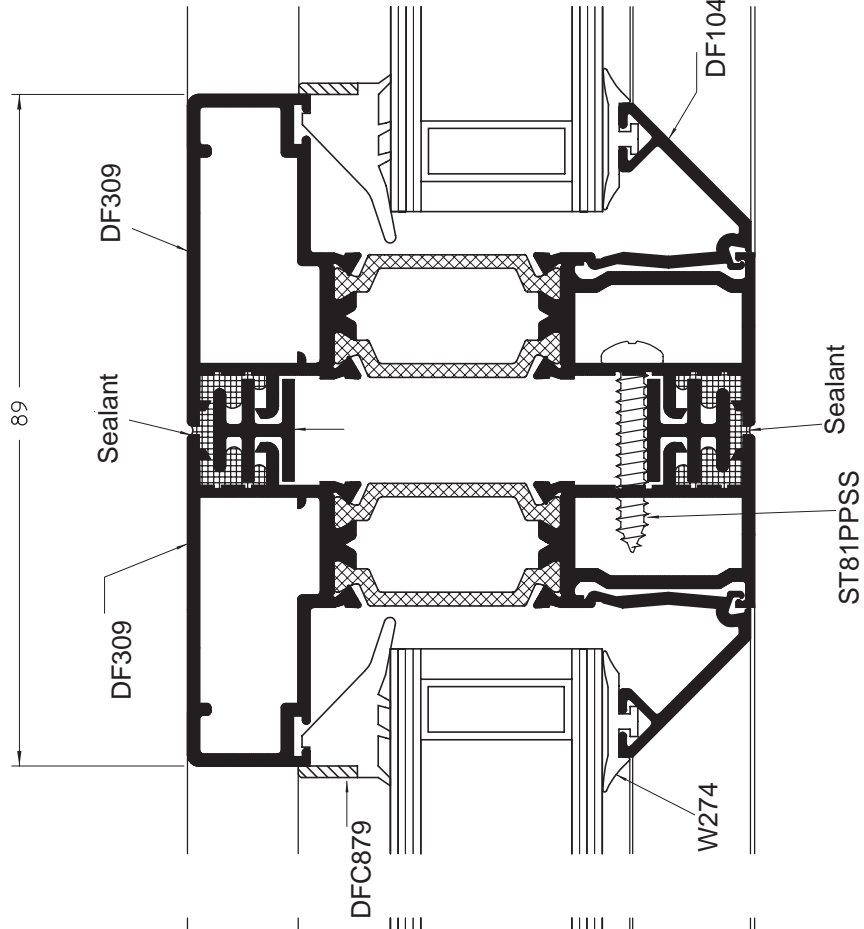
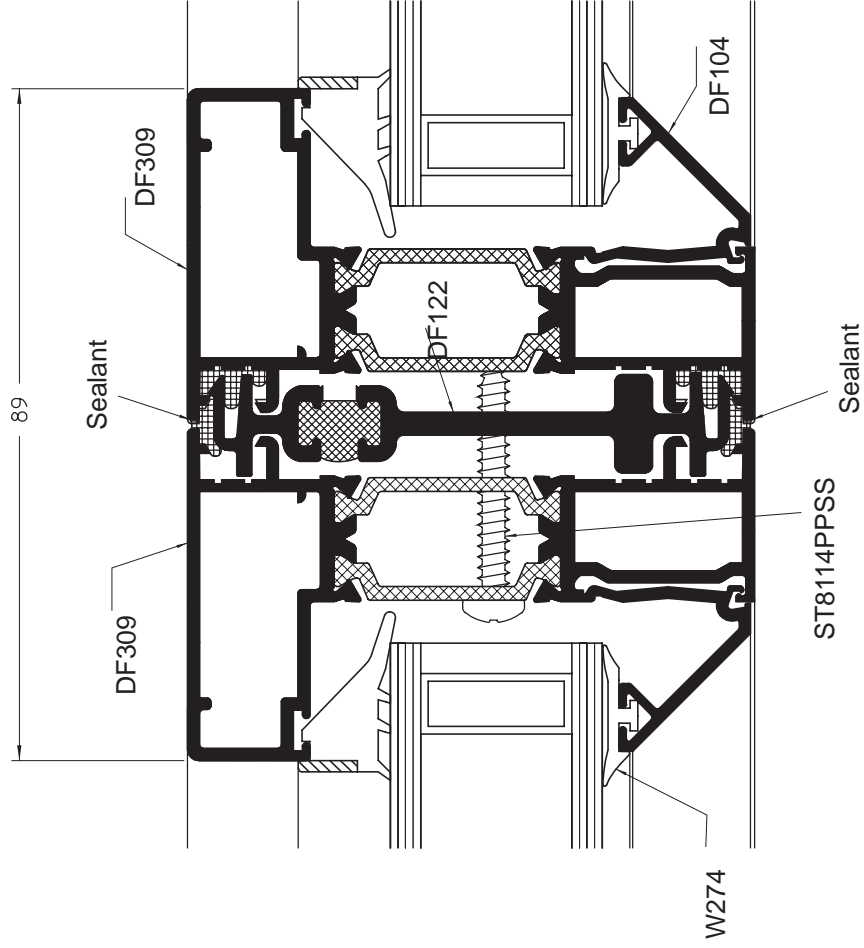
Drainage Tray / Fixed Light / Square Bead



GENERAL ARRANGEMENTS

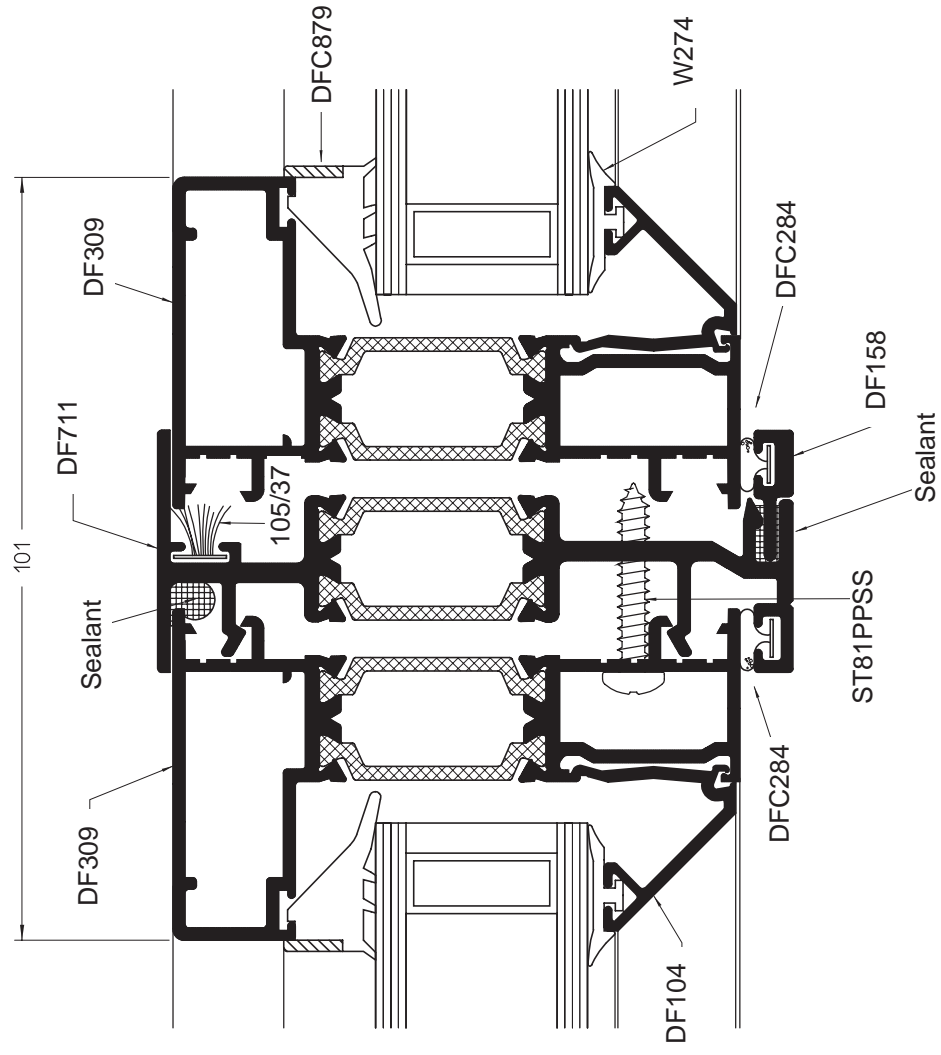
Concealed Frame to Frame Coupler

Lightweight Concealed Frame to Frame Coupler

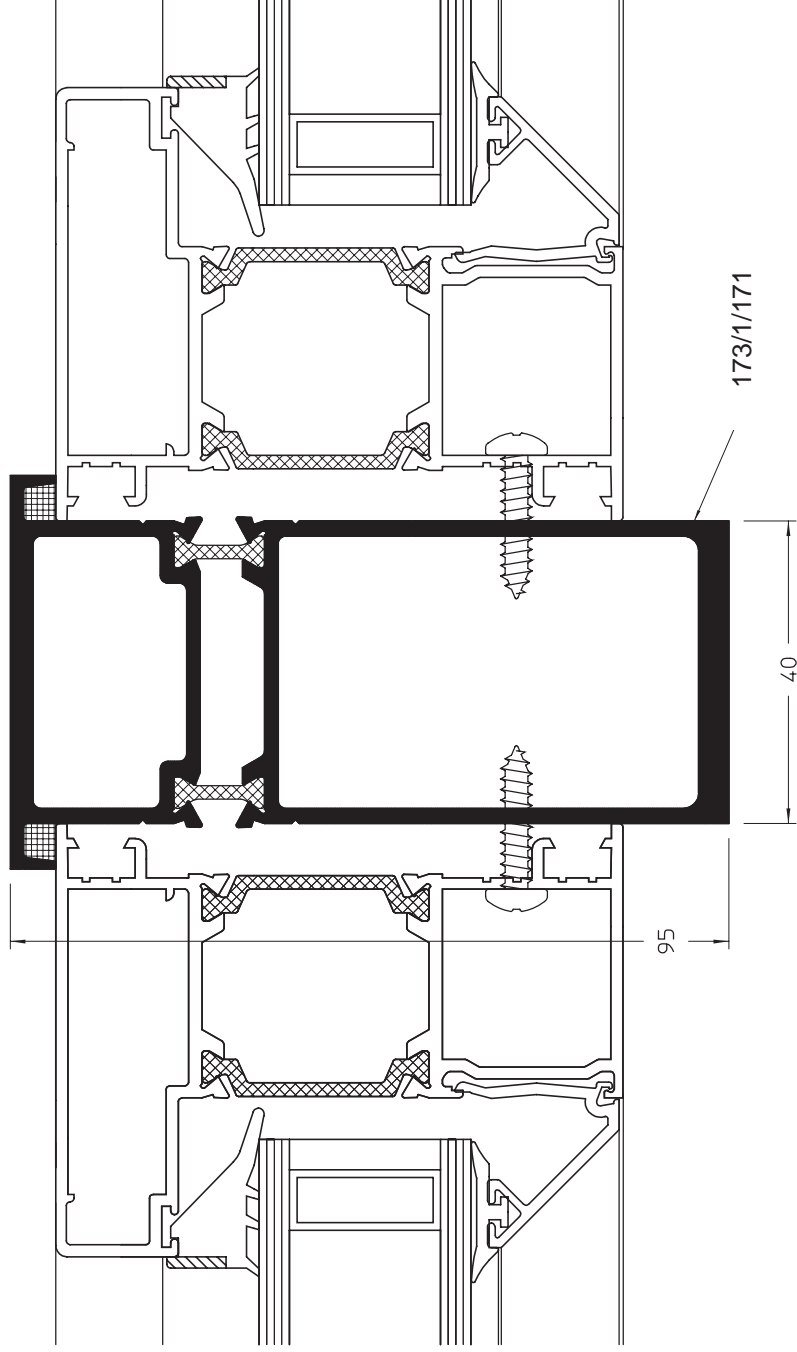




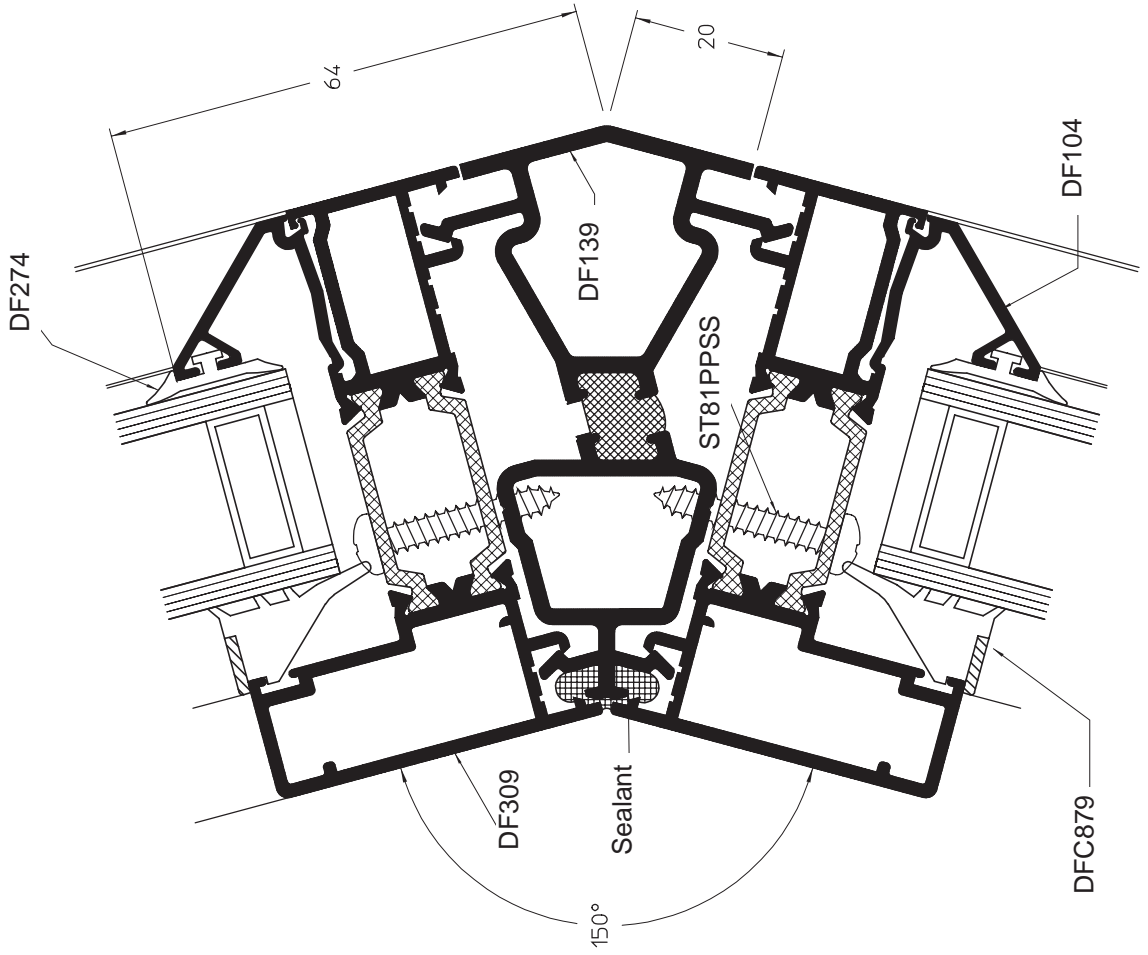
### Frame to Frame Expansion Coupler



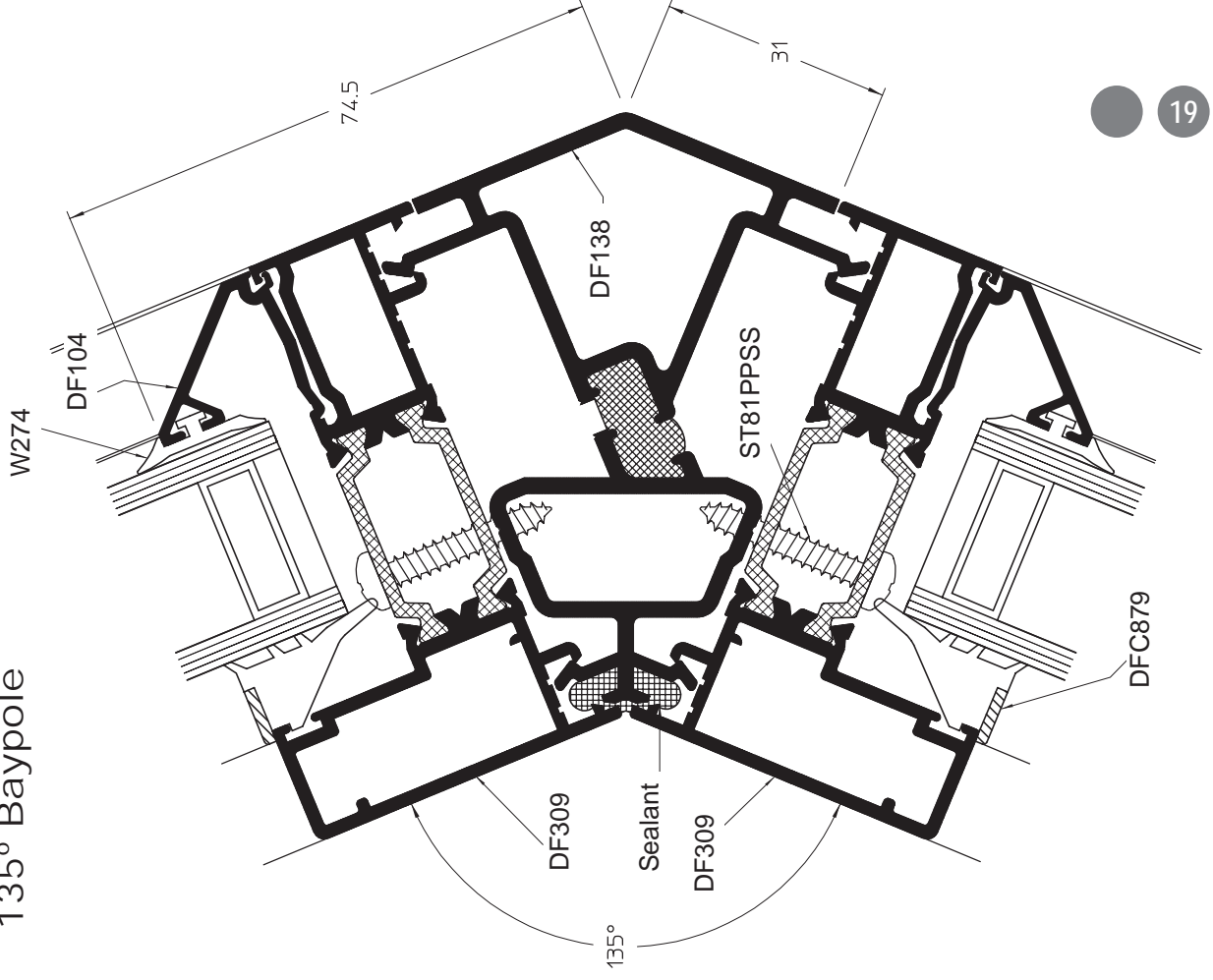
### Heavy Duty Coupling Box Mullion



150° Baypole



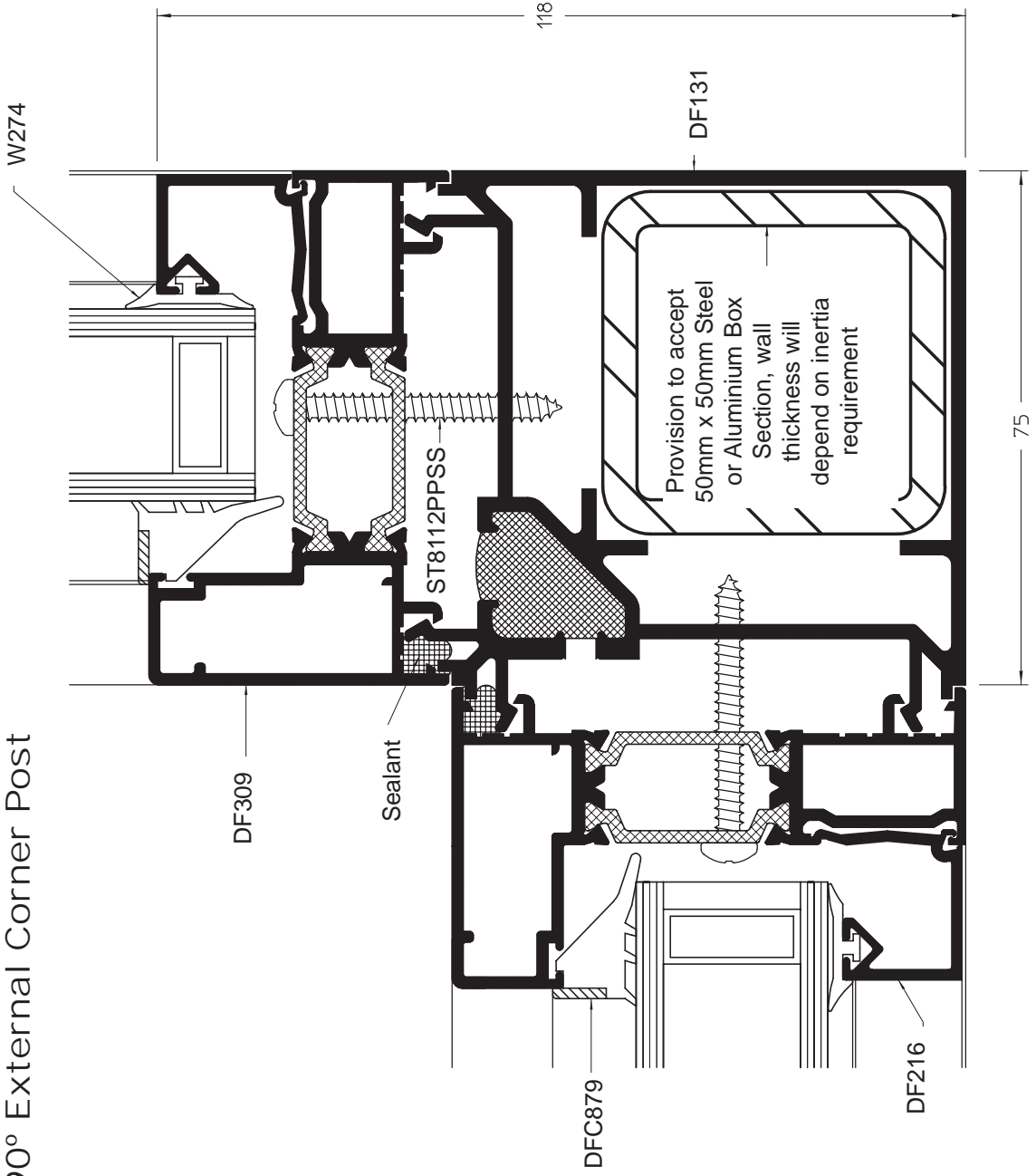
135° Baypole



## DUALFRAME 75mm Casement Window

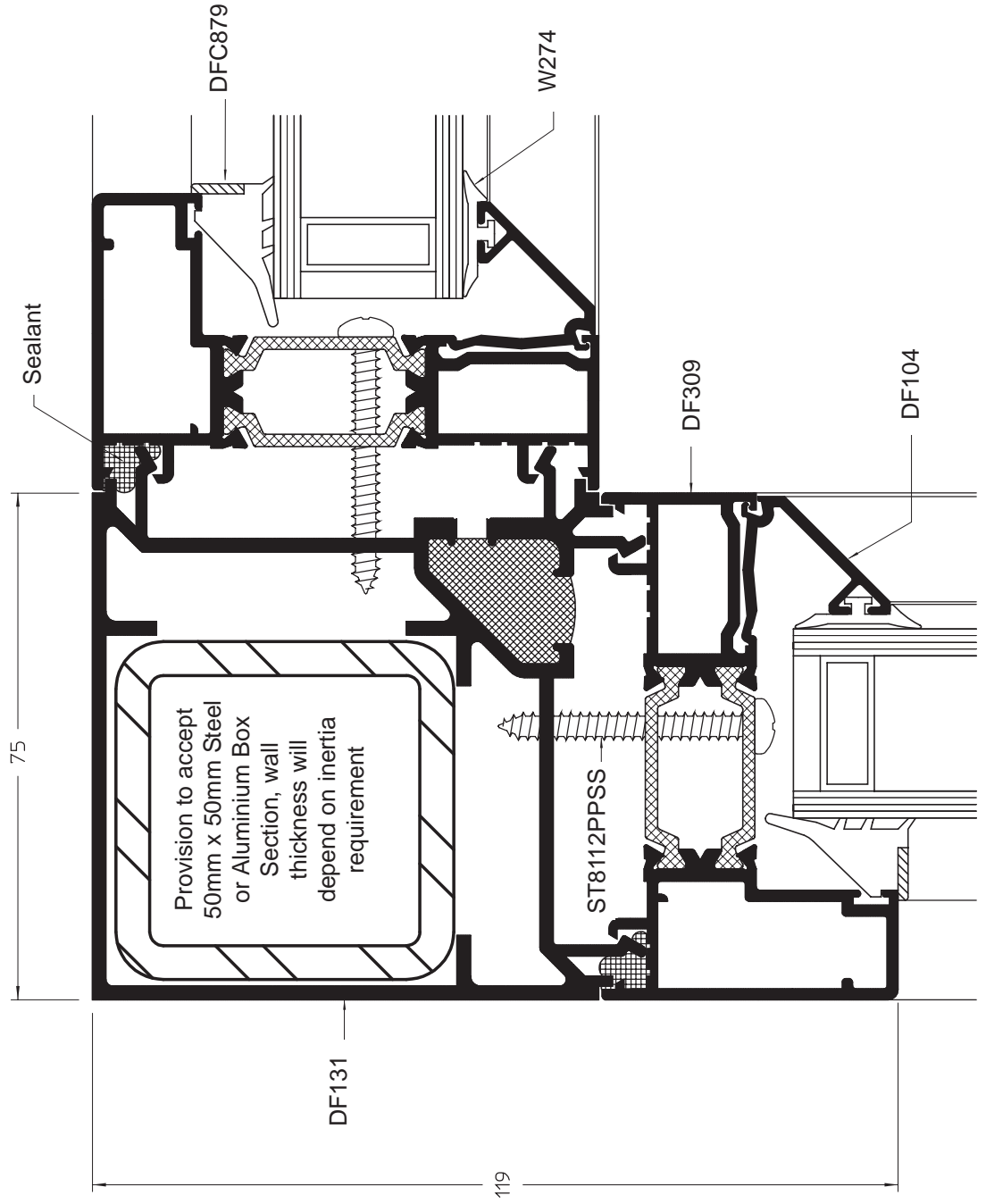
### GENERAL ARRANGEMENTS

### 90° External Corner Post

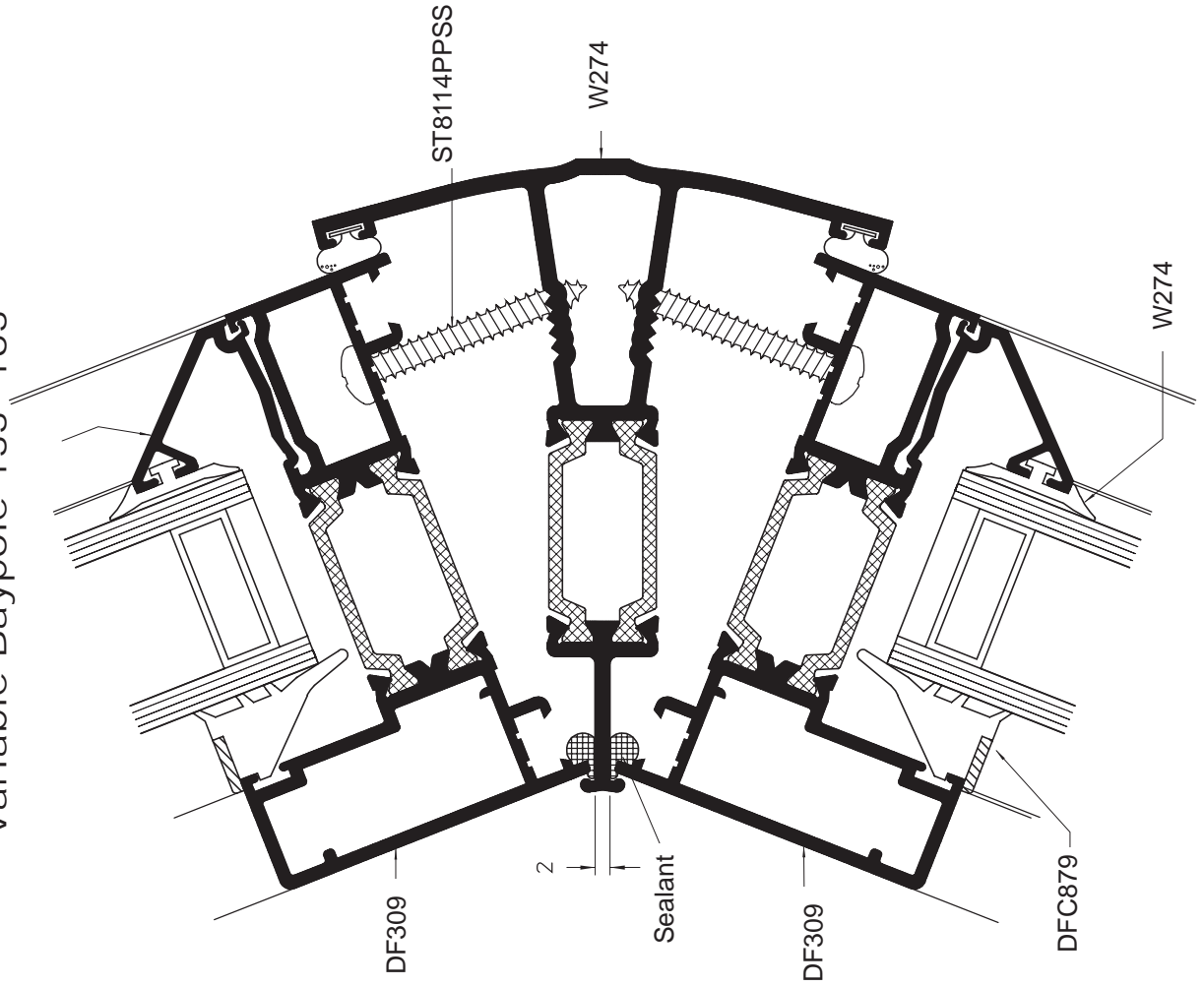




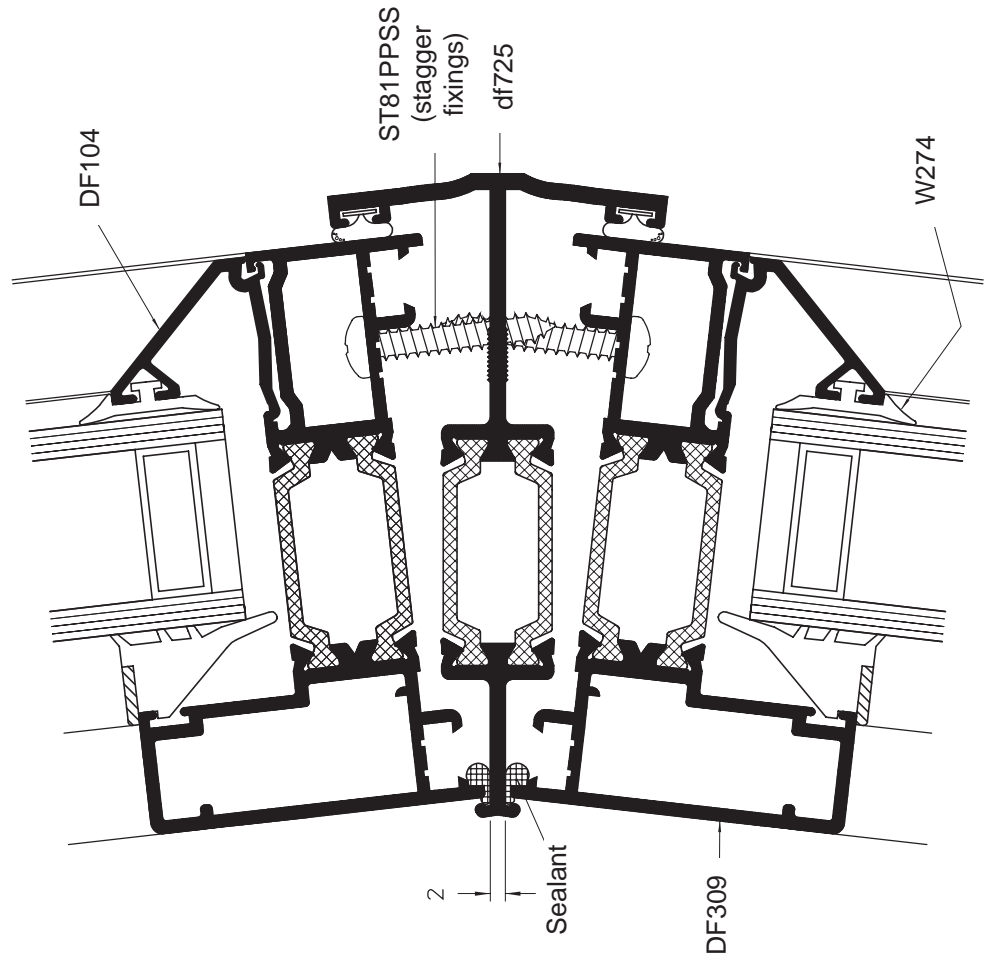
90° Internal Corner Post



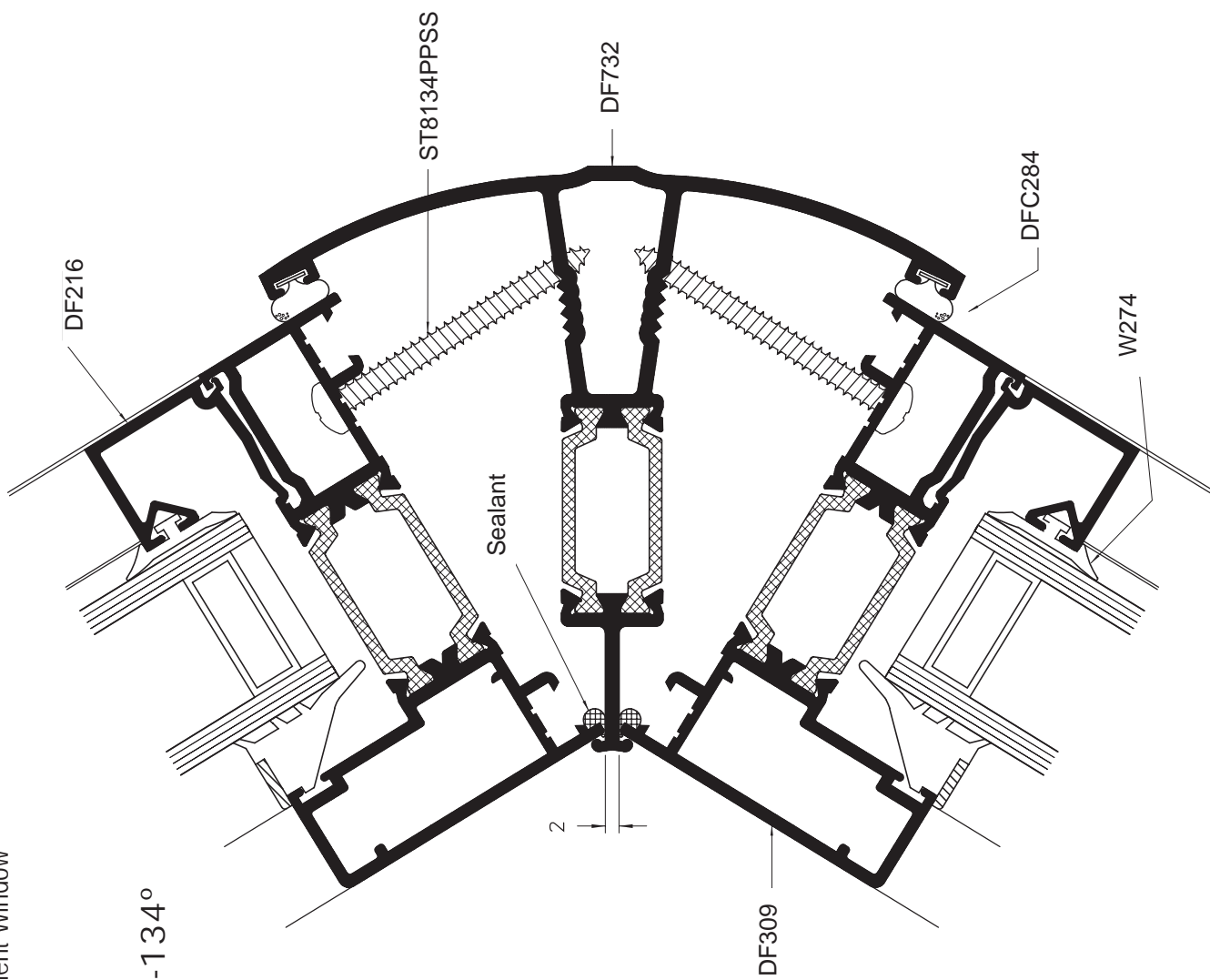
Variable Baypole 133°-163°



Variable Baypole 162°-175°



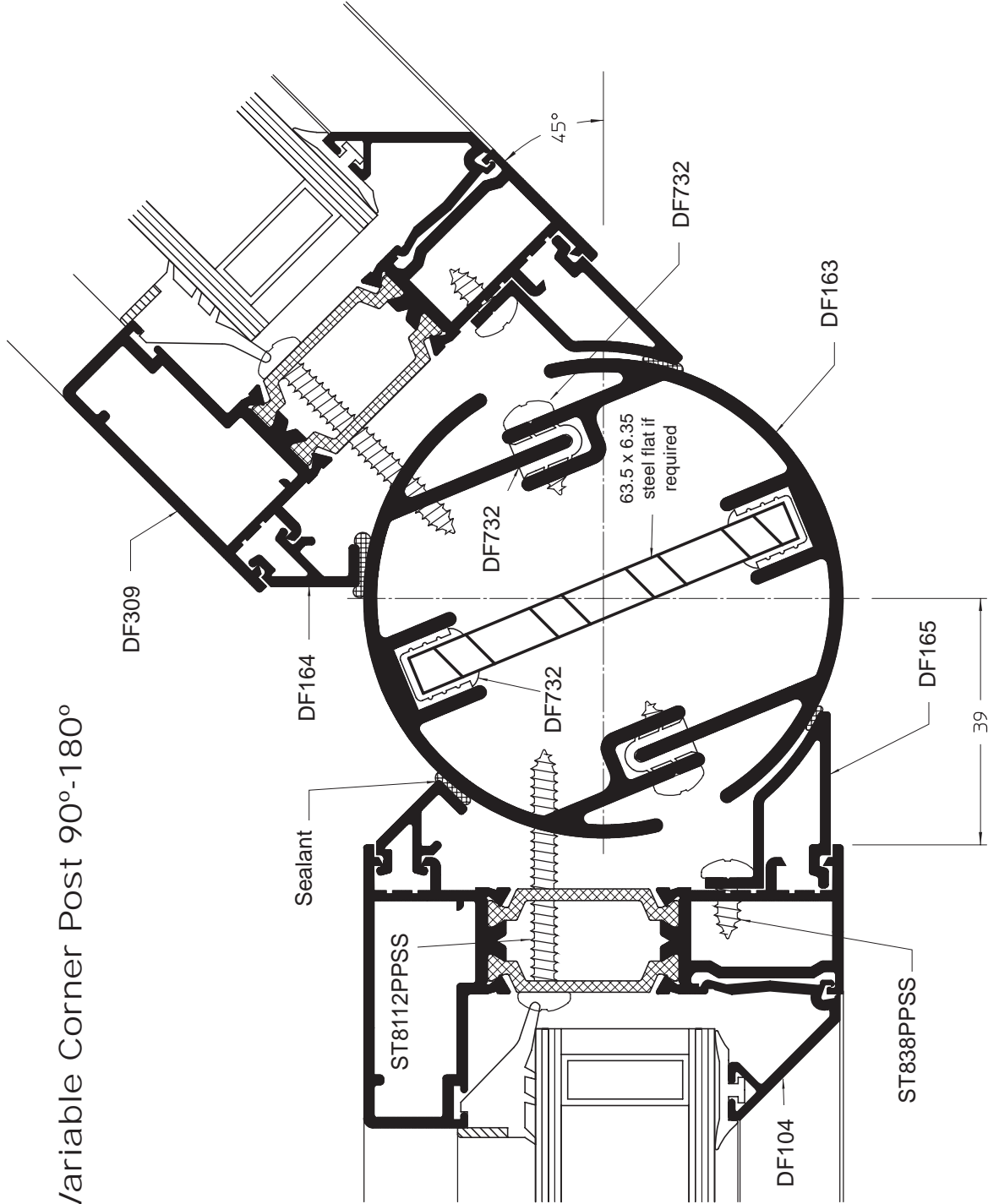
Variable Baypole 115°-134°  
Softline Frame Option



DUALFRAME 75mm Casement Window

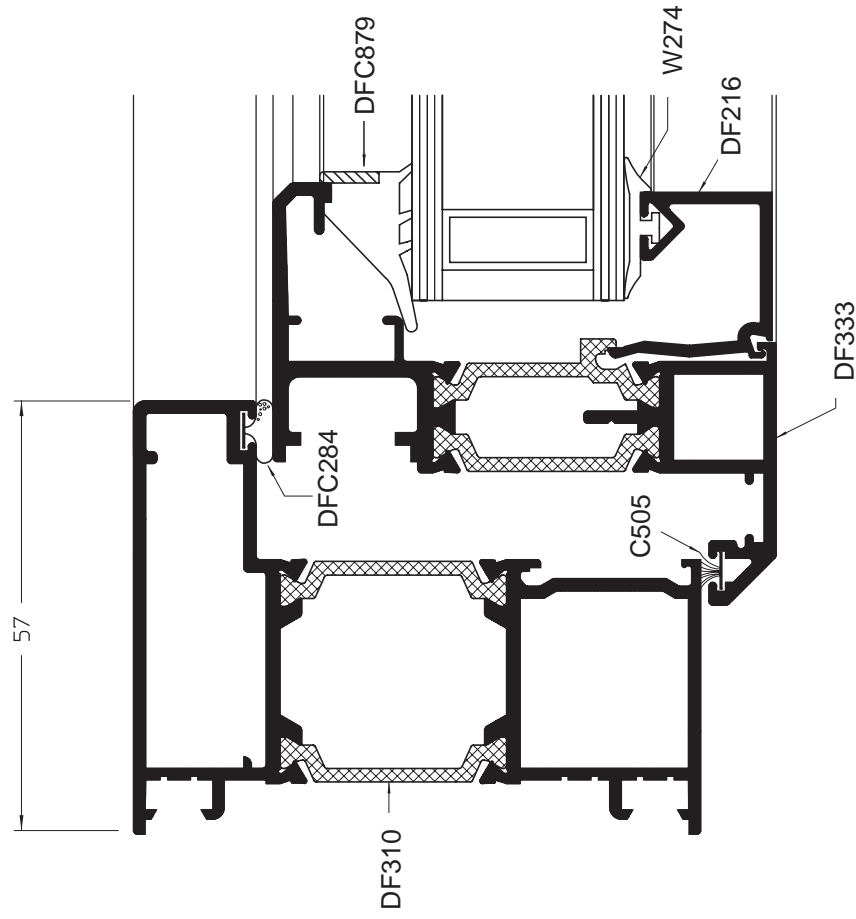
GENERAL ARRANGEMENTS

Variable Corner Post 90°-180°

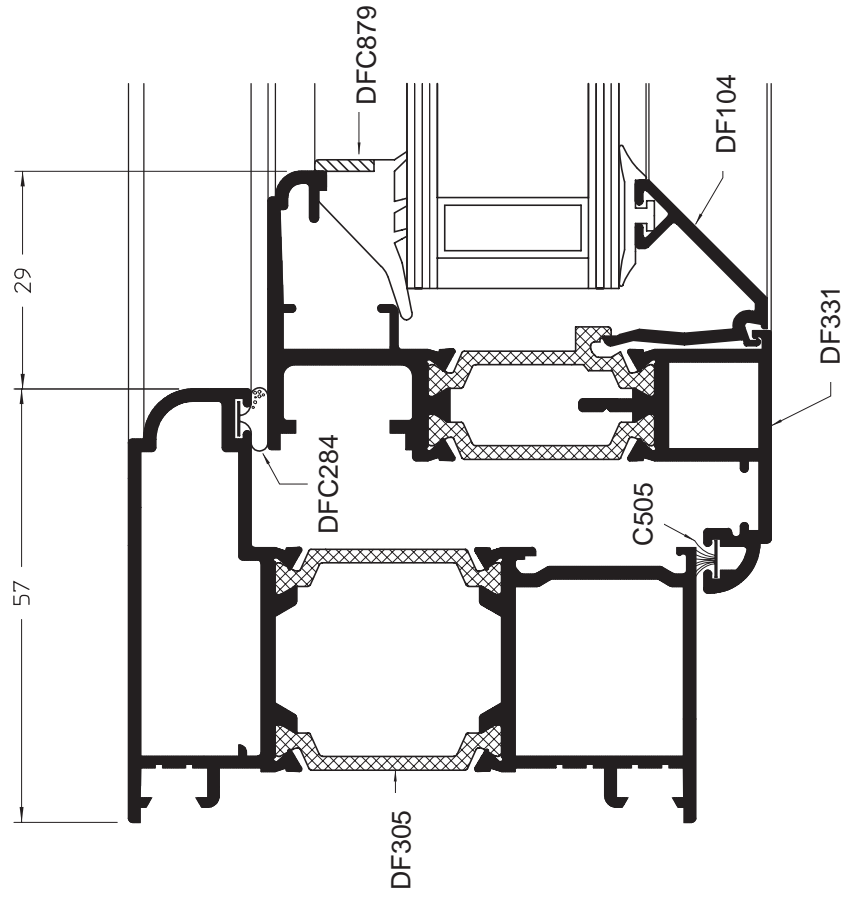




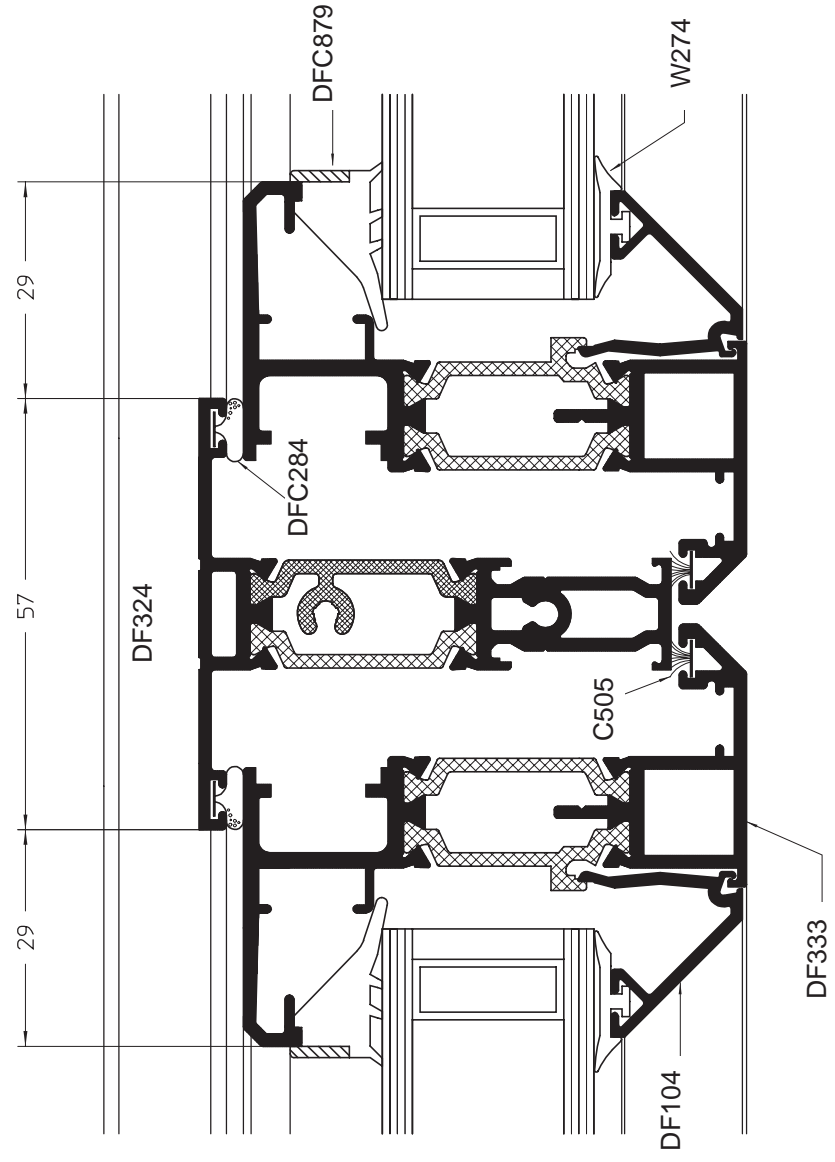
Extended Square Outerframe and Chamfered Vent



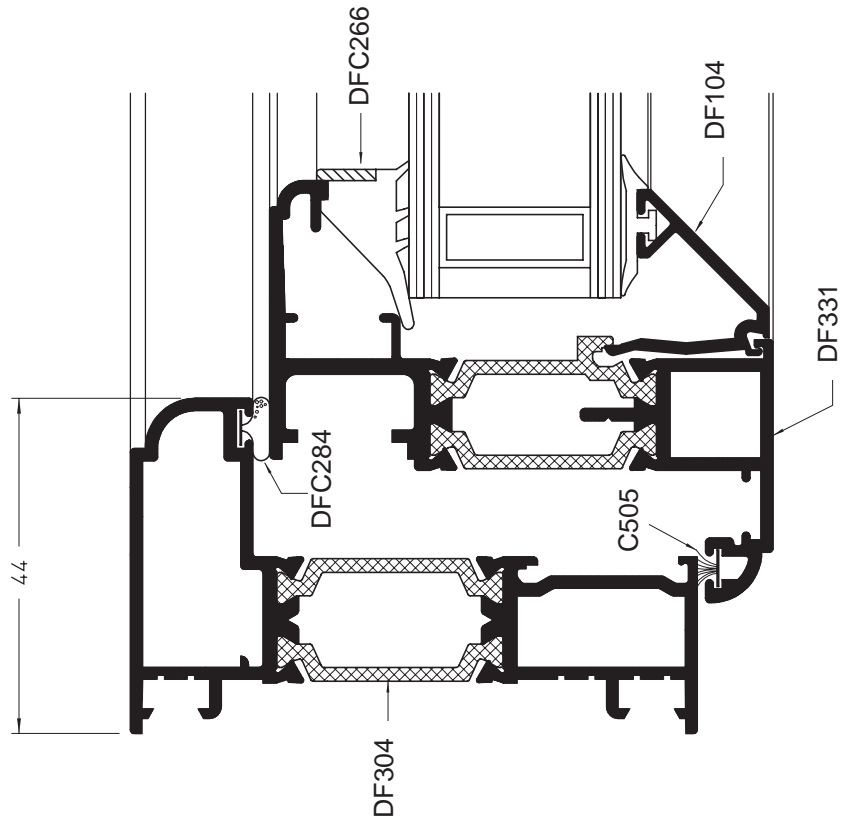
Extended Softline Outerframe and Softline Vent



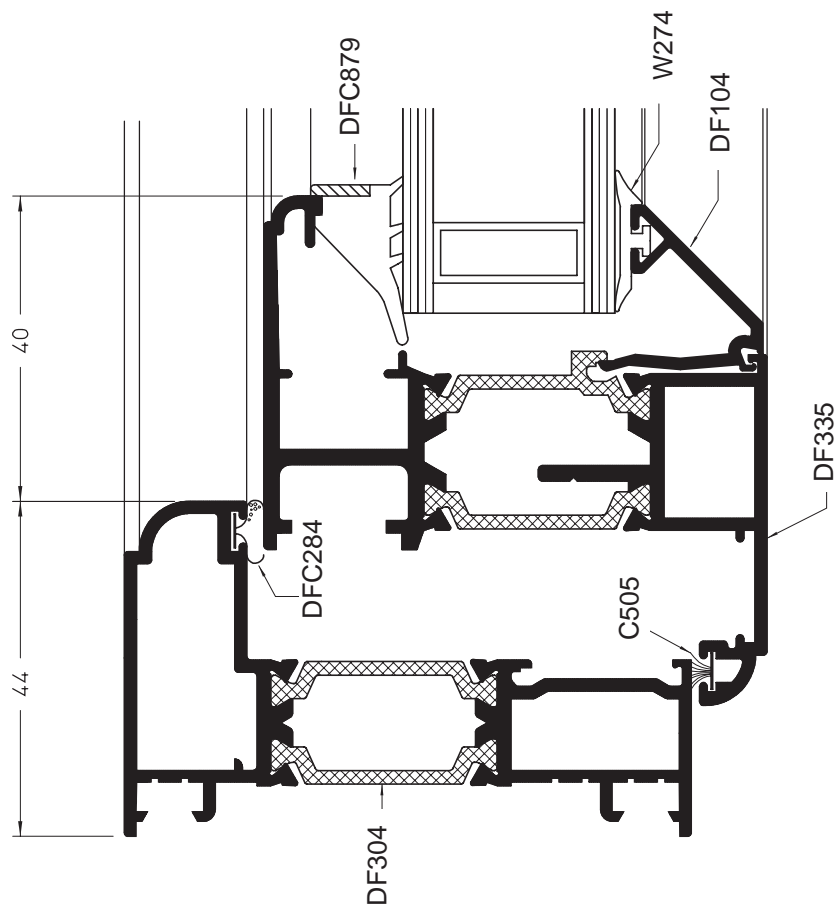
Chamfered Mullion/Transom



Softline Vent Frame

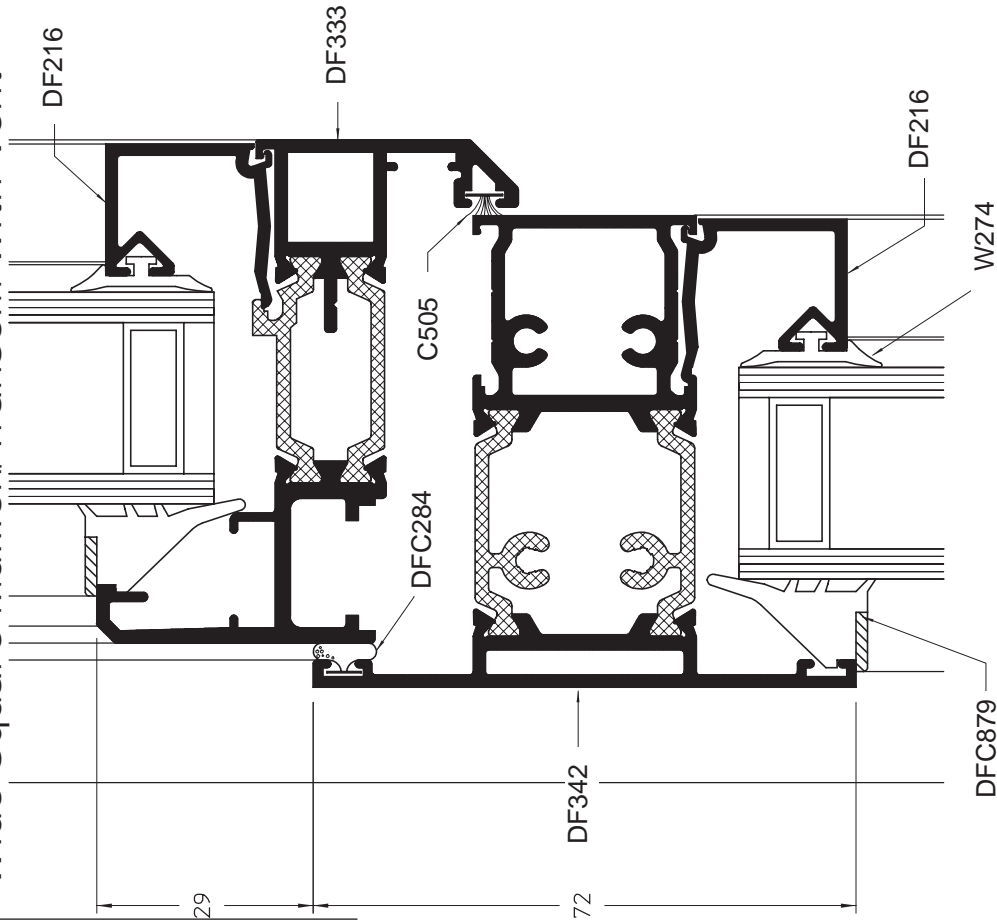


Heavy Duty Softline Vent Frame

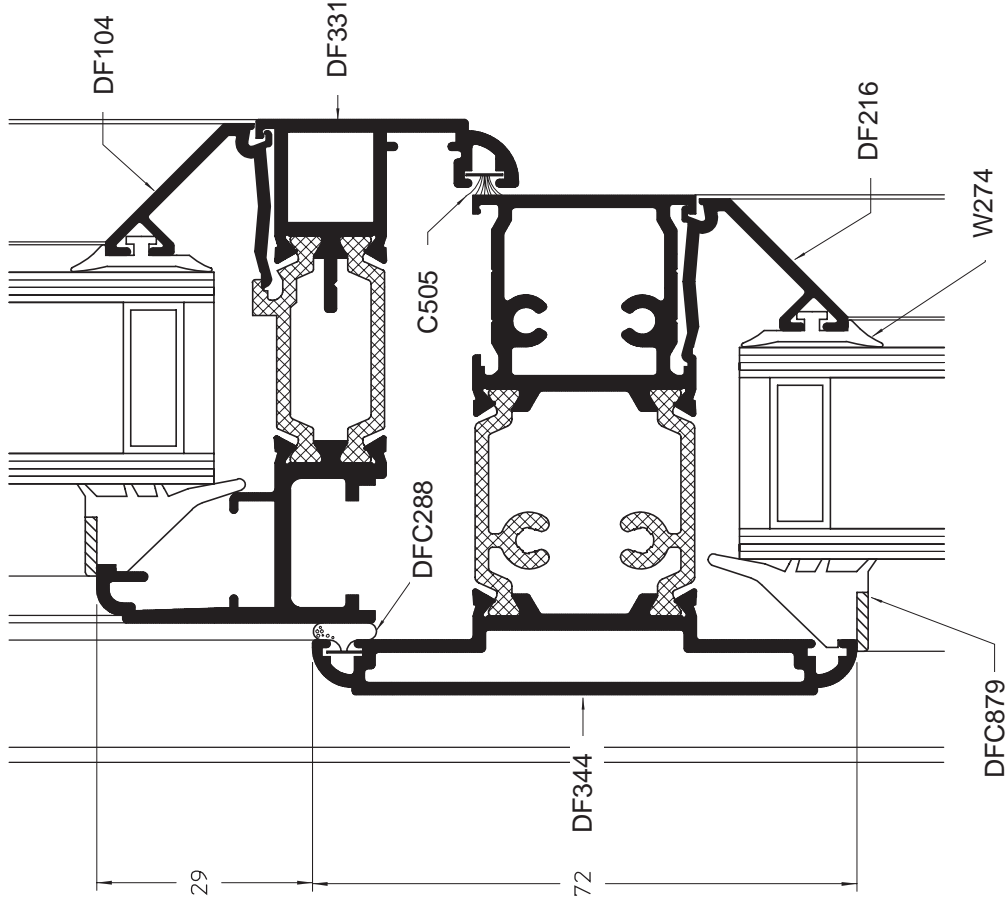


GENERAL ARRANGEMENTS

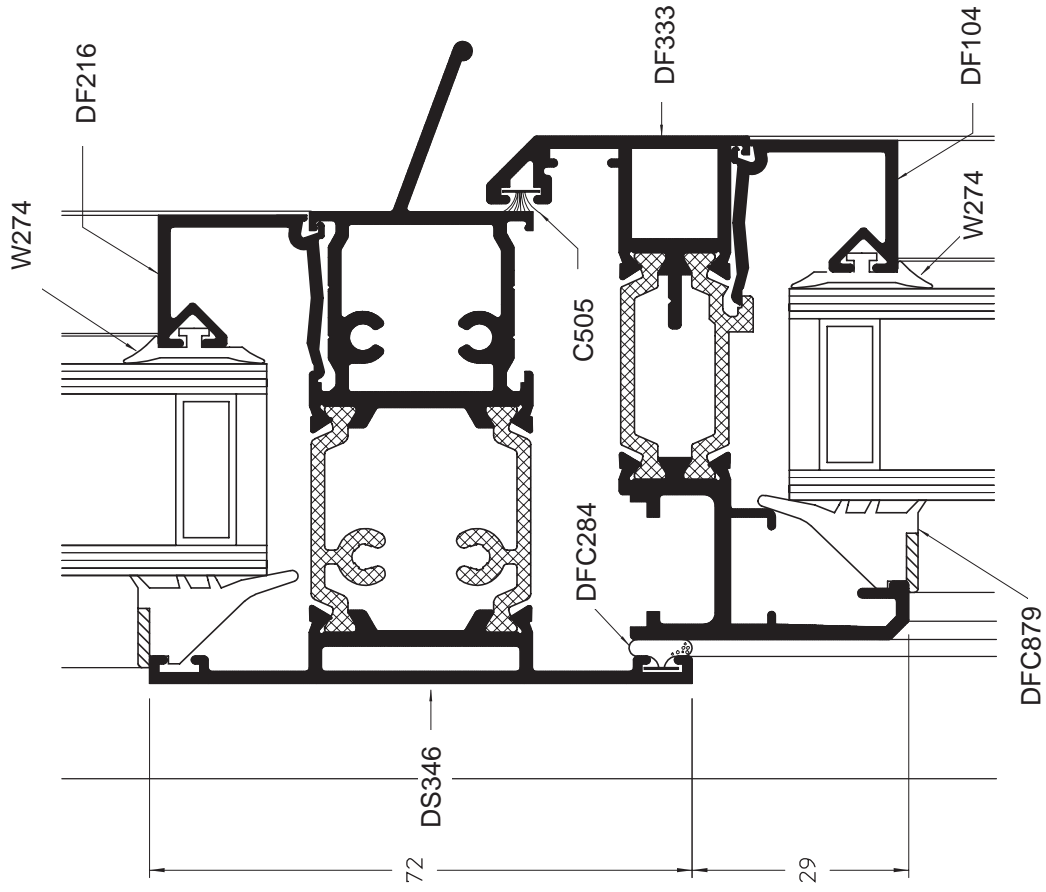
Wide Square Mullion/Transom with Vent



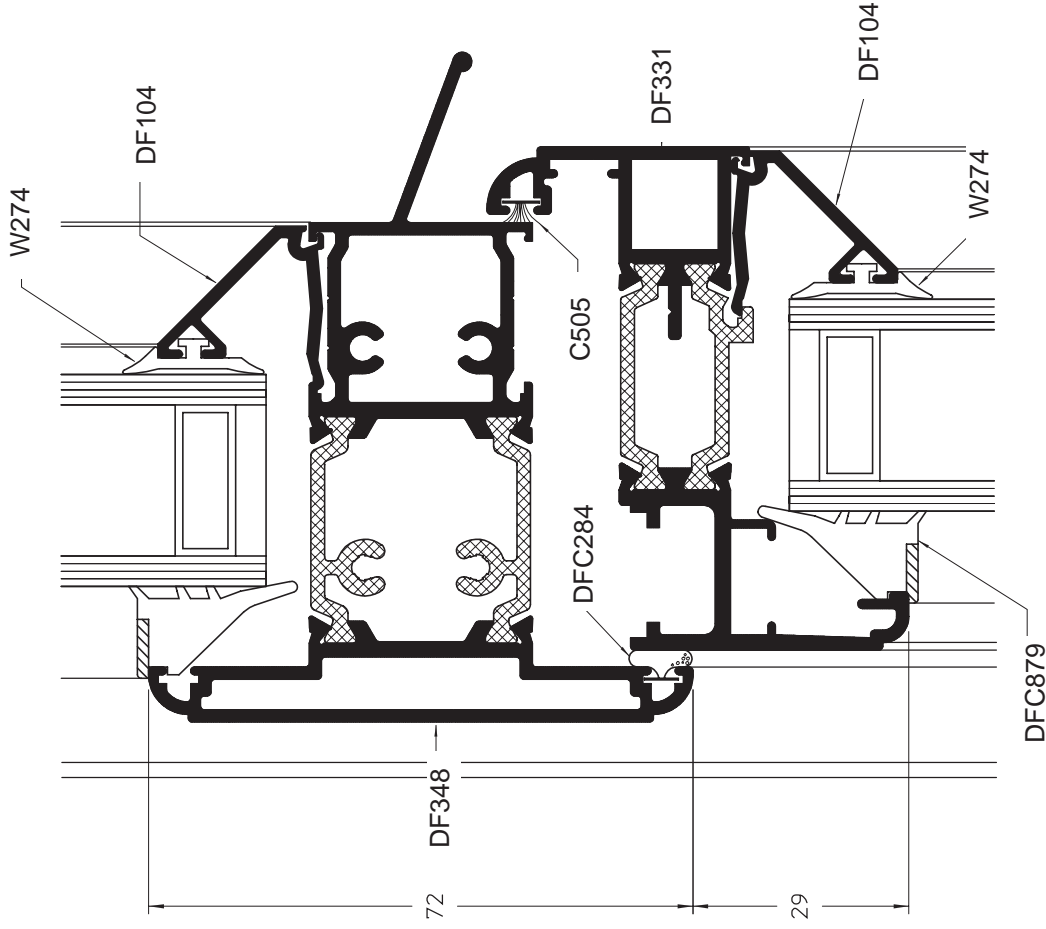
Wide Softline Mullion/Transom with Softline Vent



Wide Square Transom with Drip



Wide Softline Transom with Drip

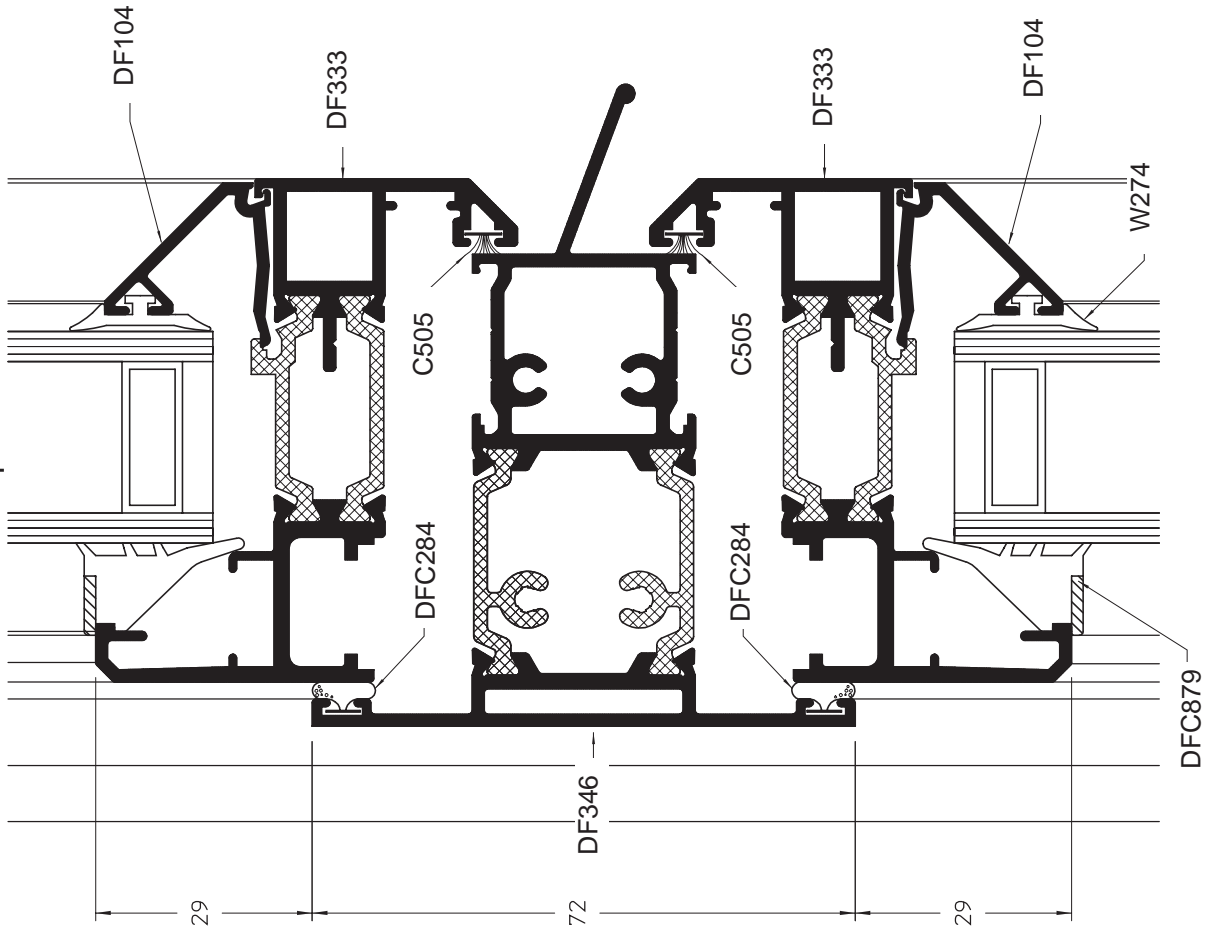


**DUALFRAME**

75mm Casement Window

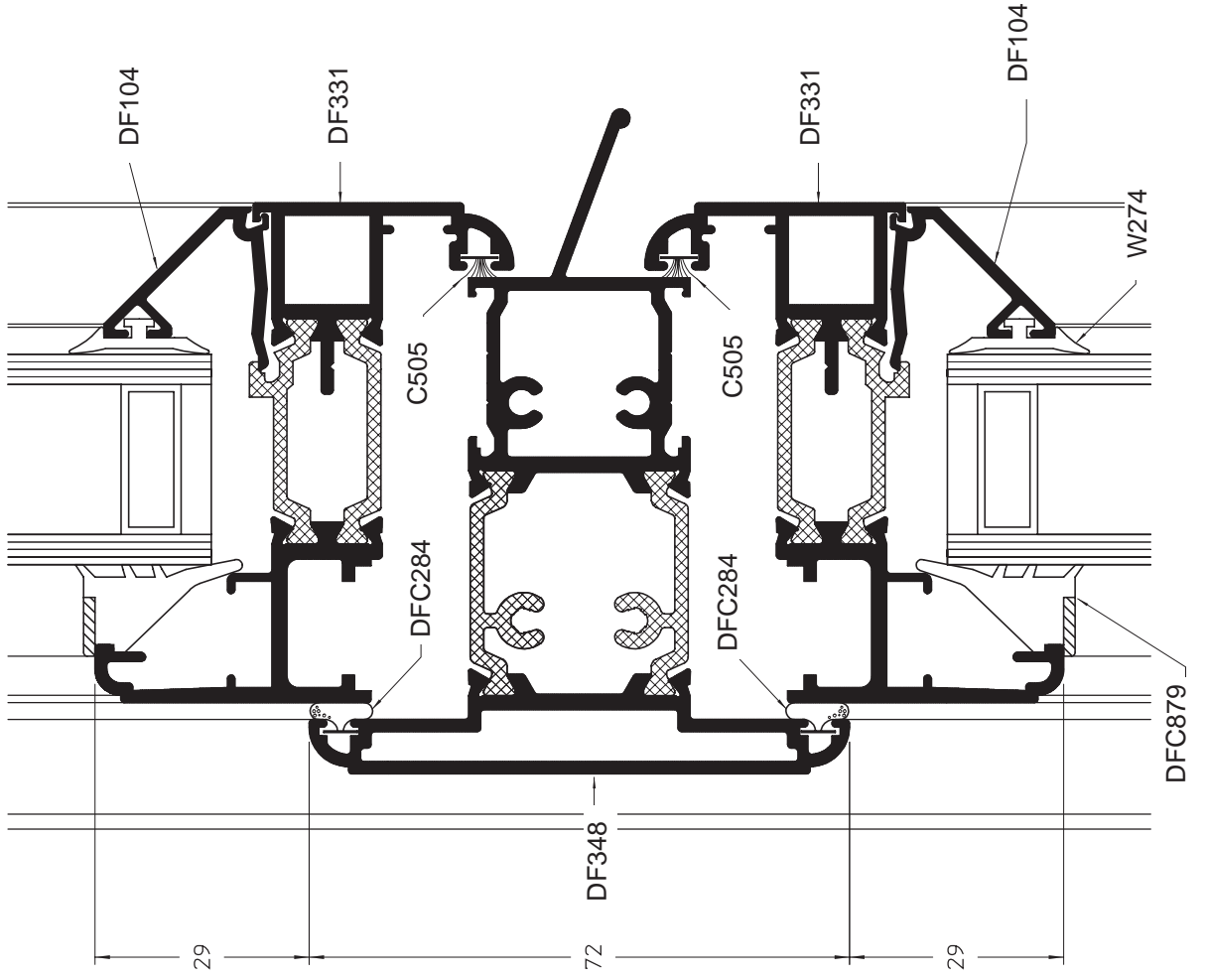
Wide Square Transom with Drip Vent / Vent

GENERAL ARRANGEMENTS

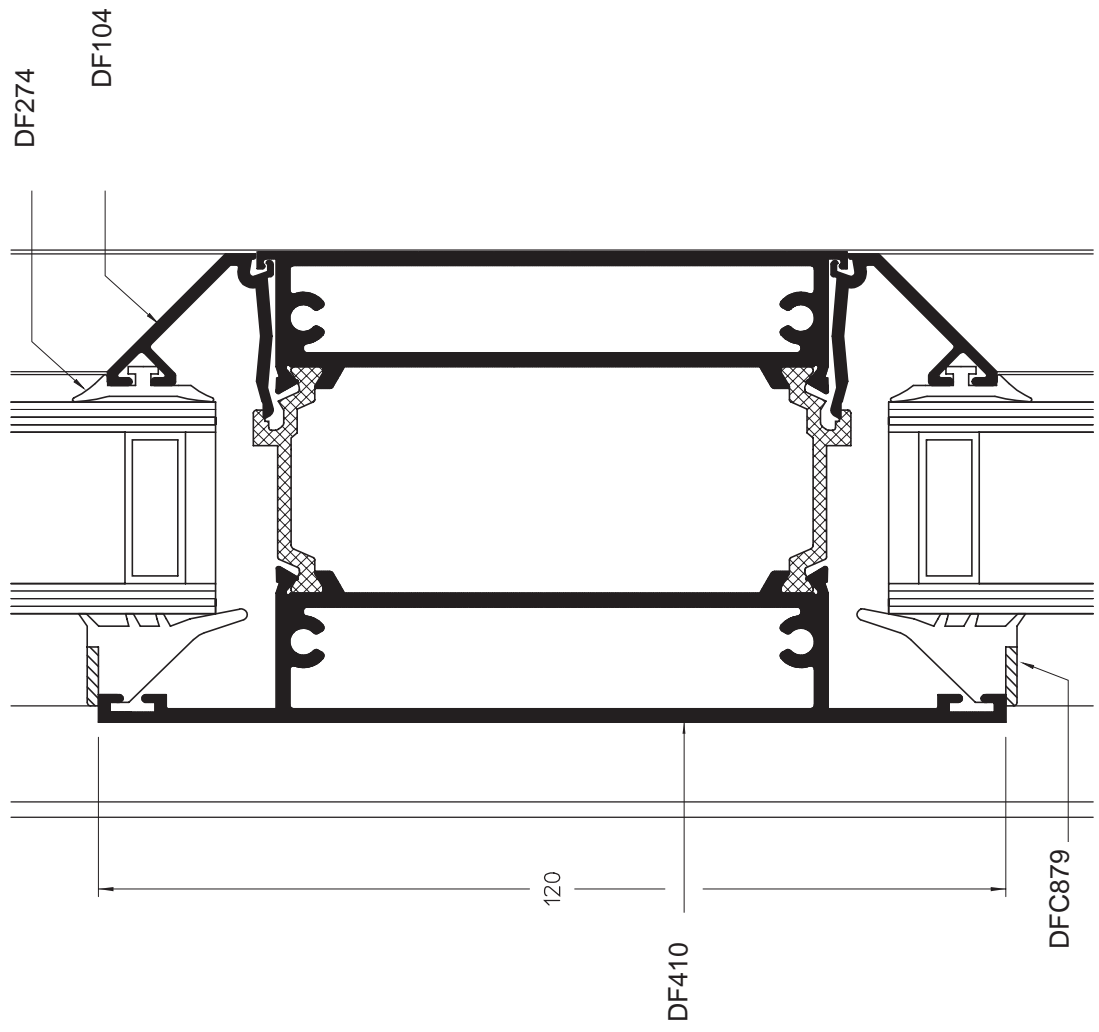


**sapa:**

Wide Softline Transom with Drip Vent / Vent



## 120mm Midrail

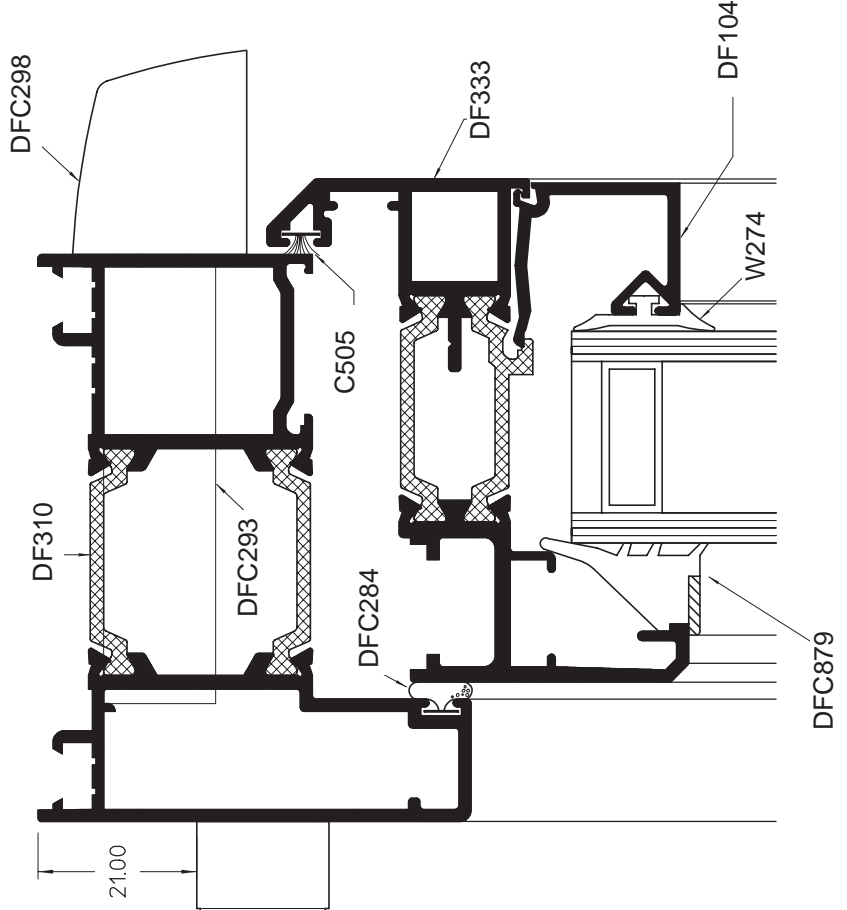
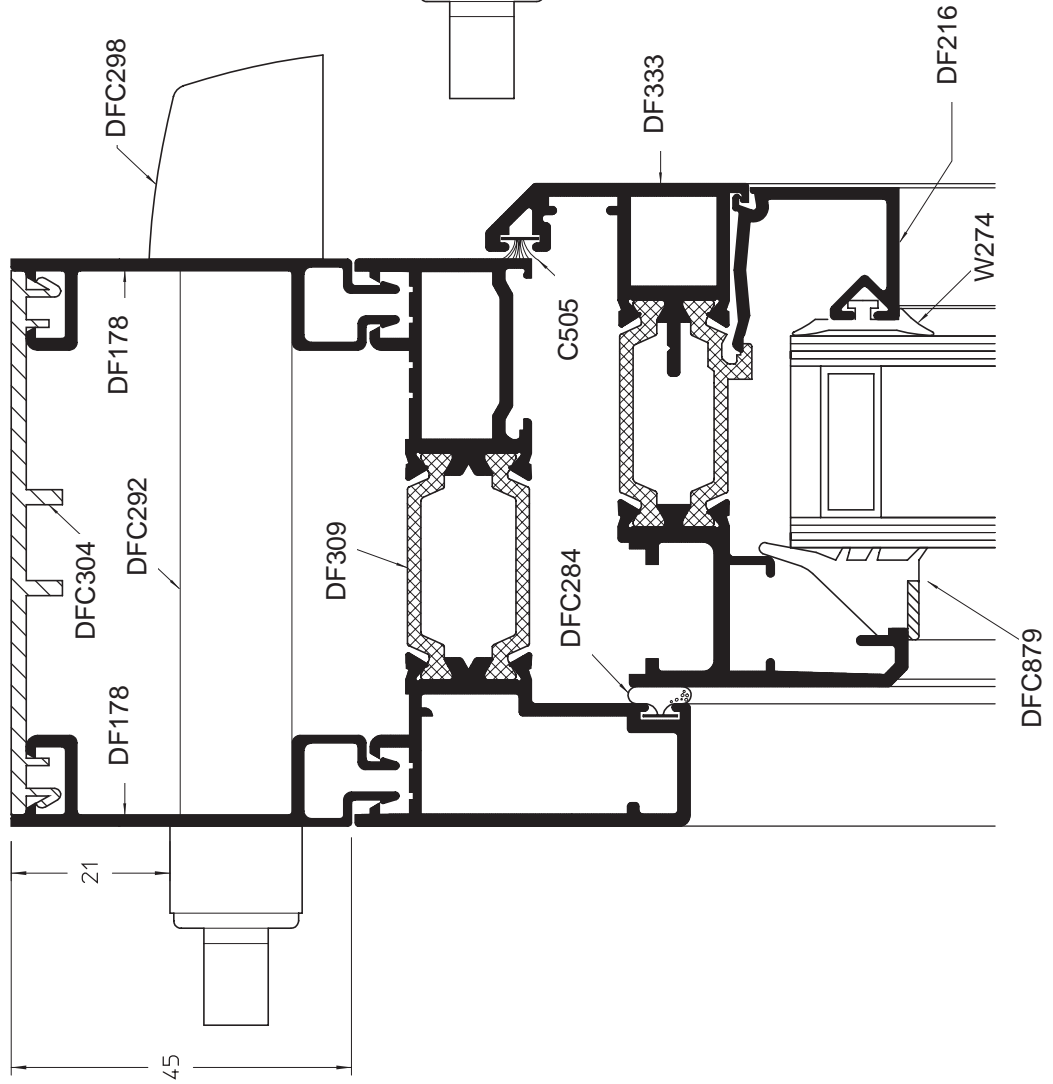




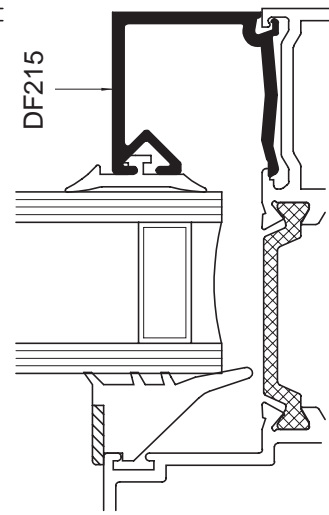
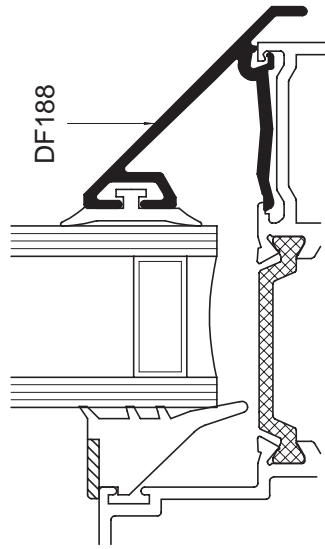
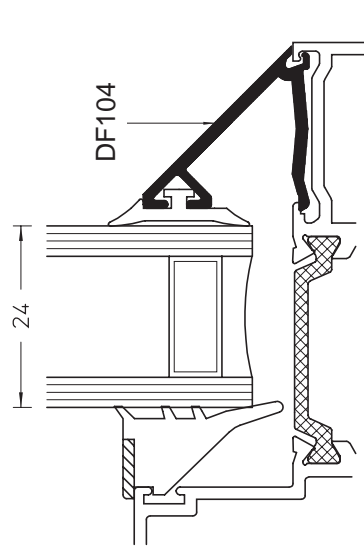
GENERAL ARRANGEMENTS

**Frame Extender / Trickle Vent**

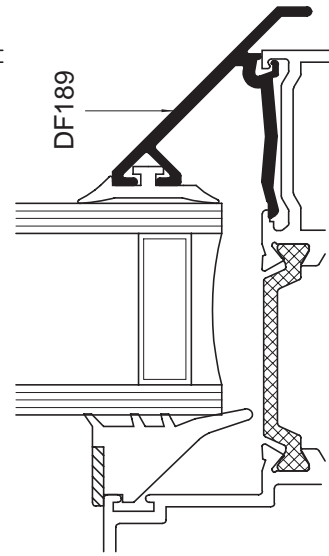
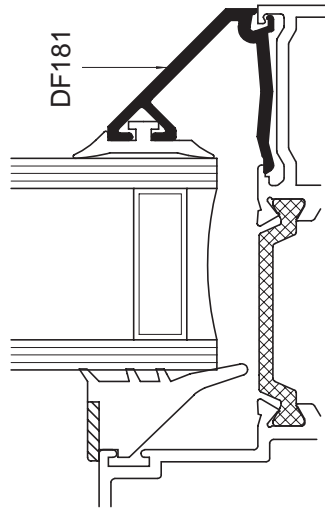
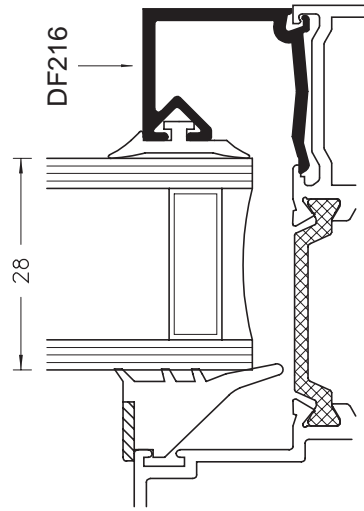
**Extended Outerframe / Trickle Vent**



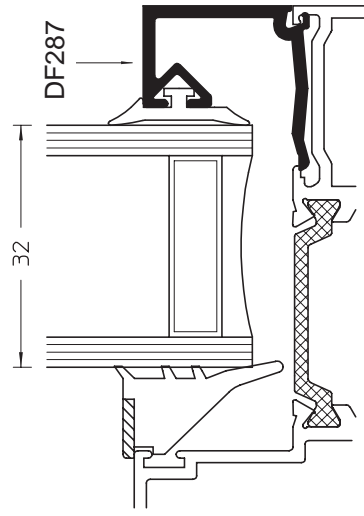
24mm Glazing Bead Options



28mm Glazing Bead Options



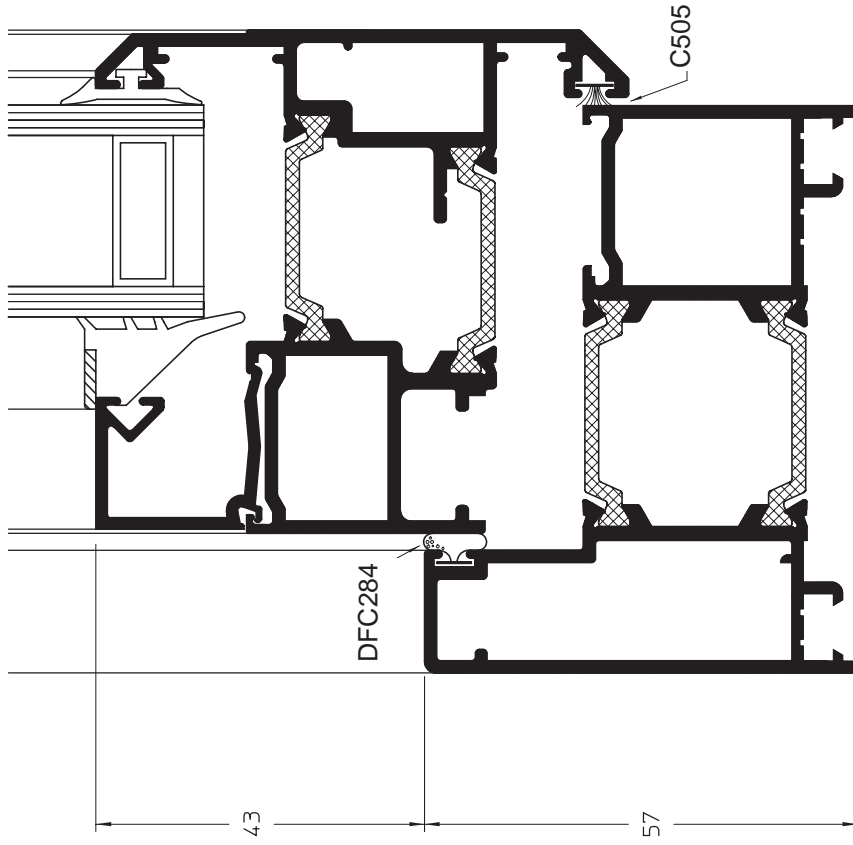
32mm Glazing Bead Options



GENERAL ARRANGEMENTS

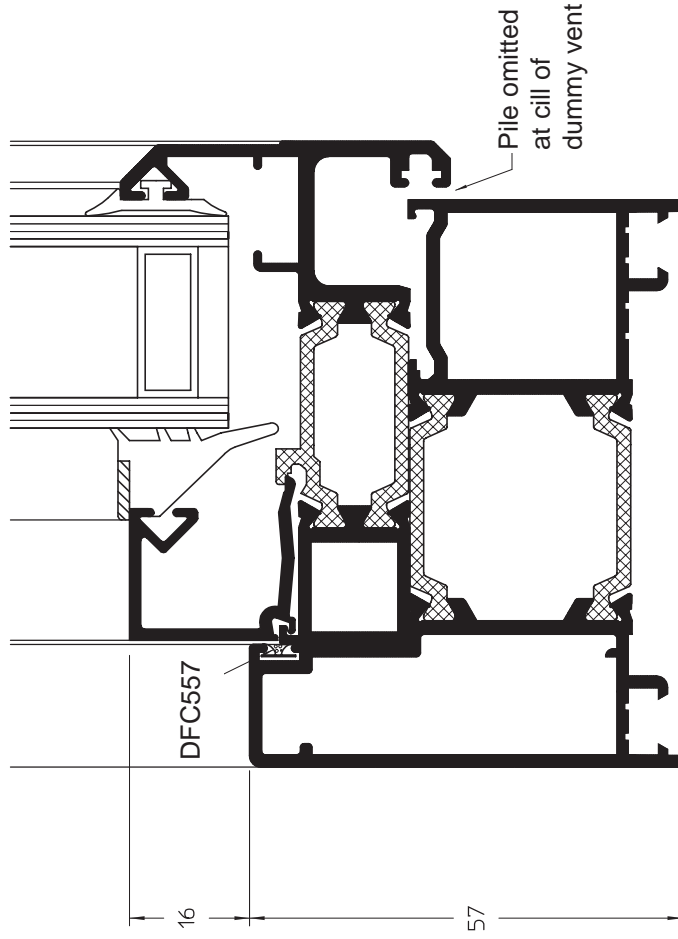
Internal Glaze Vent

(Showing Extended Square Frame & Square Bead)

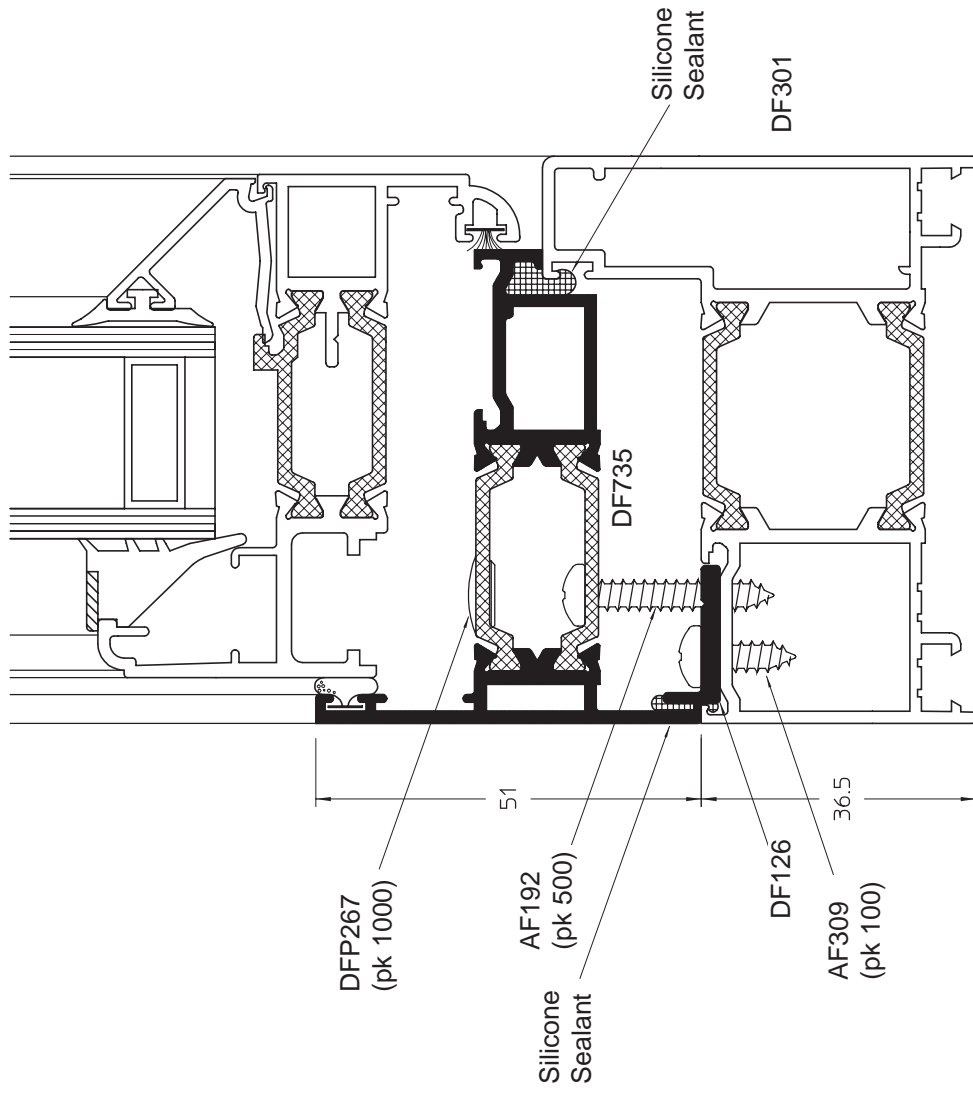


Internal Glaze Dummy Vent

(Showing Extended Square Frame - note that square beads must always be used with Internal Glaze Dummy Vent)



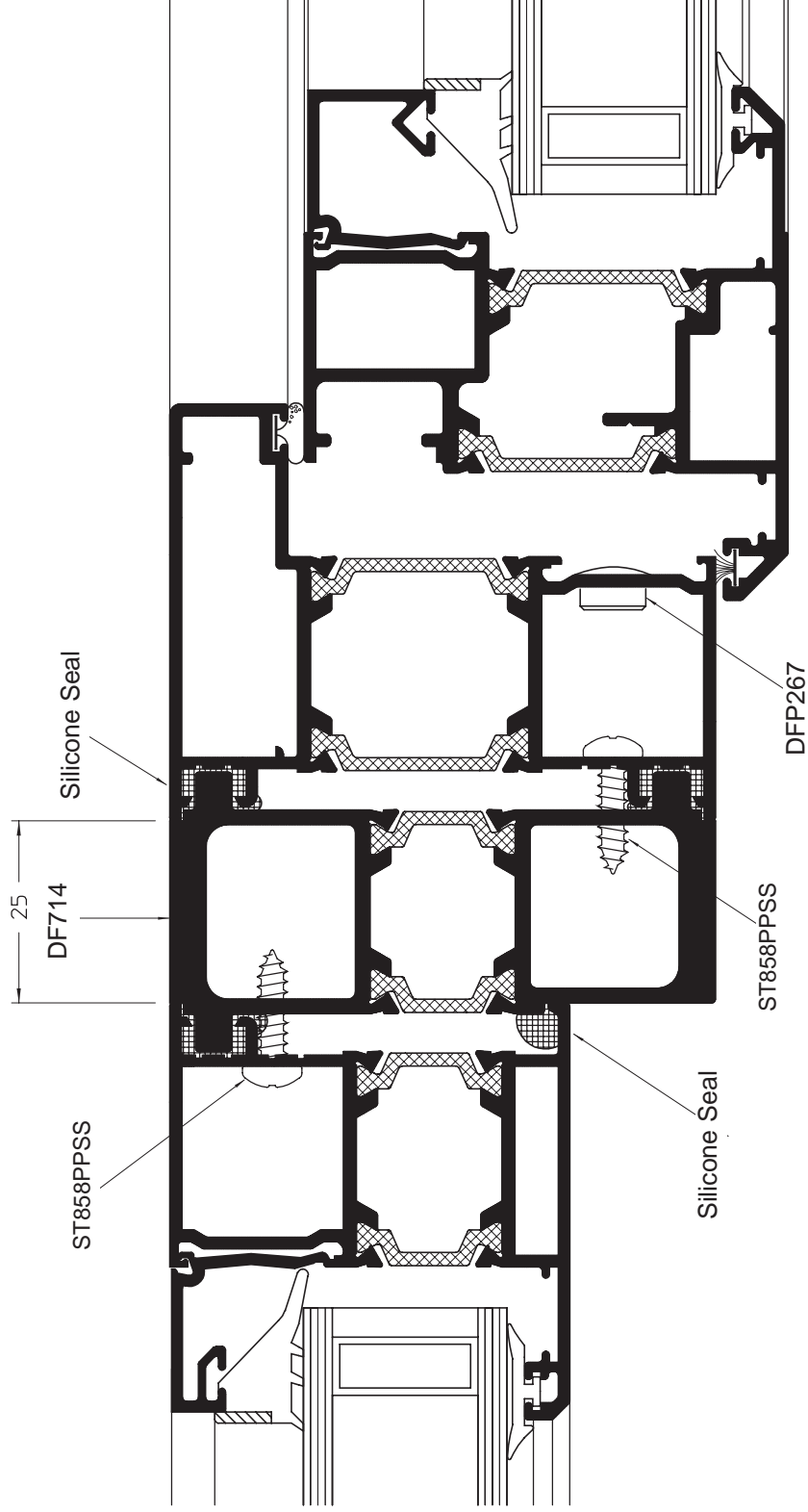
### Reverse Rebate Adaptor



## GENERAL ARRANGEMENTS

**55mm to 75mm Coupler**

(Showing extended square frame - Note for use with 55mm glaze in profiles only)



**sapa:**

This page has been left intentionally blank



**sapa:**

This page has been left intentionally blank



**sapa:**

This page has been left intentionally blank

Our policy is one of continuous development and consequently we reserve the right to vary the products and their performance specification shown in this literature without notice.

All products and systems which Sapa supply are supplied subject to Sapa's standard Terms and Conditions of Sale which may vary from time to time.

This Technical Data Sheet is for specification guidance only. It should not be relied on for manufacturing or installation details which must instead be obtained from Sapa Building Systems' Fabrication Manuals. For further assistance please contact one of our Project Consultants by calling the Marketing Department on the number below.

© Sapa Building Systems Limited. This data sheet is issued subject to the condition that it shall not be reproduced without the consent of Sapa Building Systems Limited in writing

Brochure reference DFC63 0907

**Sapa Building Systems Limited**

Postal address Alexandra Way, Ashchurch, Tewkesbury, Gloucestershire GL20 8NB  
Telephone 01684 853500 Fax 01684 851850  
E-mail [info@sapabuildingsystems.co.uk](mailto:info@sapabuildingsystems.co.uk) Website [www.sapabuildingsystems.co.uk](http://www.sapabuildingsystems.co.uk)

