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(31.5)	Xt4

June 2005

sapa:

75mm HP Entrance Door



INNOVATORS IN ALUMINIUM

Dualframe

GLOSTAL

MONARCH

RC
System

DUALFRAME

Dualframe

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- The new Sapa Dualframe range signifies a new era in aluminium fenestration, with products which have been specifically designed to comply with changes to the Building Regulations which apply to thermal performance, both now and in the future.
- Superior thermal performance: comfortably exceeds the 2002 Part L requirements and designed to be compliant with future updates to the Building Regulations.
- Dual colour capability: different colours can be selected internally and externally.
- A complete suite of profiles to form single or double, open in or out doors.
- Low threshold version to comply with Building Regulations Approved Document M.
- Doors tested and awarded Kitemarks to PAS023 and 024
- Suited window system Kitemarked to BS7950 'Specification for enhanced security performance of casement and tilt/turn windows for domestic applications'.
- Unique polyamide strip with integral bead retention leg to minimise external projection of the opening lights (Patent applied for)
- Across the Dualframe range, standard or 'softline' transoms, mullions and outer-frames are available to achieve traditional or contemporary appearance.
- Locks are of Eurogroove construction with three hook locks and central latch with optional top and bottom shoot-bolts available.
- Die cast handles which can be powder coated to match the door colour.



BS 4873
Licence No. KM74159



BS 7950
Licence No. KM74141

■ Product

Dualframe 75mm HP Entrance Door

The range is designed to meet high performance requirements in a variety of applications

■ Design Variants

Single or double doors, open in and open out, standard or low threshold

■ Application

Suitable for installation in new build or refurbishment projects, particularly residential, educational and light commercial applications.

■ Compatibility

Designed to be compatible with other Sapa aluminium products. Will couple to other Dualframe 75mm and 55mm systems, Dualframe roof and Moniframe system.

■ 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.

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 BS6375:Part 1:1989 all products listed in this data sheet, when manufactured, installed and glazed strictly to the enclosed details, will achieve the following exposure categories:

Single Door	Open in	Open out
Water Tightness	300pa	600pa
Air Permeability	300pa	600pa
Wind Resistance*	2400pa	2400pa
Exposure Category	2400	2400 special

Double Doors	Open in	Open out
Water Tightness	200pa	600pa
Air Permeability	300pa	600pa
Wind Resistance*	1200pa	1200pa
Exposure Category	1200	1200 special

Low threshold

Single Door	Open in	Open out
Water Tightness	150pa	300pa
Air Permeability	300pa	600pa
Wind Resistance*	2400pa	2400pa
Exposure Category	2400	2400 special

Low threshold

Double Doors	Open in	Open out
Water Tightness	200pa	300pa
Air Permeability	200pa	600pa
Wind Resistance*	1200pa	1200pa
Exposure Category	1200	1200 special

Note - performance information relates to both glaze in and glaze out kitted products.

*Exposure category varies with width/height of door and mullion/transom used, as these are the only unsupported members.

Authority

BS6262: Code of practice for glazing for buildings

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

Pr EN 10077-2: Thermal performance of windows, doors and shutters – calculation of thermal transmittance – Part 2: Numerical method for frames

BS: PAS 23-1: 1999 General performance requirements for door assemblies

BS: PAS 24-1: 1999 Enhanced security performance requirements for door assemblies

Note: To conform to the requirements of PAS 023 and 024, doors must be to an identical specification to those tested, and fabricated in accordance with the Product Manual.

Size Limitations

Fixed light - maximum area 5 sq.m

Door Limitations*Single doors*

Minimum width 650mm

Maximum width 1050mm*

Minimum height 2000mm (3 Point std handle position)

Minimum height 1850mm (3 Point cut down from both ends)

Minimum height 2100mm with optional top and bottom shoot bolts

Maximum height 2230mm*

Maximum height 2200mm with optional top and bottom shoot bolts.

Double doors

Minimum width 1247mm

Maximum width 2046mm*

Minimum height 2000mm (3 Point std handle position)

Minimum height 1850mm (3 Point cut down from both ends)

Minimum height 2100mm with optional top and bottom shoot bolts

Maximum height 2230mm*

Maximum height 2200mm with optional top and bottom shoot bolts.

The MAX leaf weight for all doors is 75kg.

*These sizes are only available as special order kits.

Hardware Security

Doors are hung on extruded aluminium hinges with stainless steel pins and nylon bushes.

Powder coated to match the door. Locks are of Eurogroove construction with three hooks and central latch. A full length stainless steel faceplate is fitted. Optional top and bottom shoot-bolts are also available. On double doors the slave leaf is secured by means of a similar slave lock having only top and bottom shoot bolts. Die cast handles with die cast back-plates can be powder coated to match the door. Cylinders are of 5-pin anti-drill construction. All keeps are adjustable and are made from pressed stainless steel. To achieve compliance with PAS024, specific hardware must be used. Optional hinge security claws are available.

Glazing

Drainage in accordance with details listed in this manual meets the requirements of 'ventilated and drained glazing systems', as specified in BS6262. Glass must conform to BS6262 for thickness and type. Insulating glass units of 24mm and 28mm can be accommodated.

Door leaves: 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.

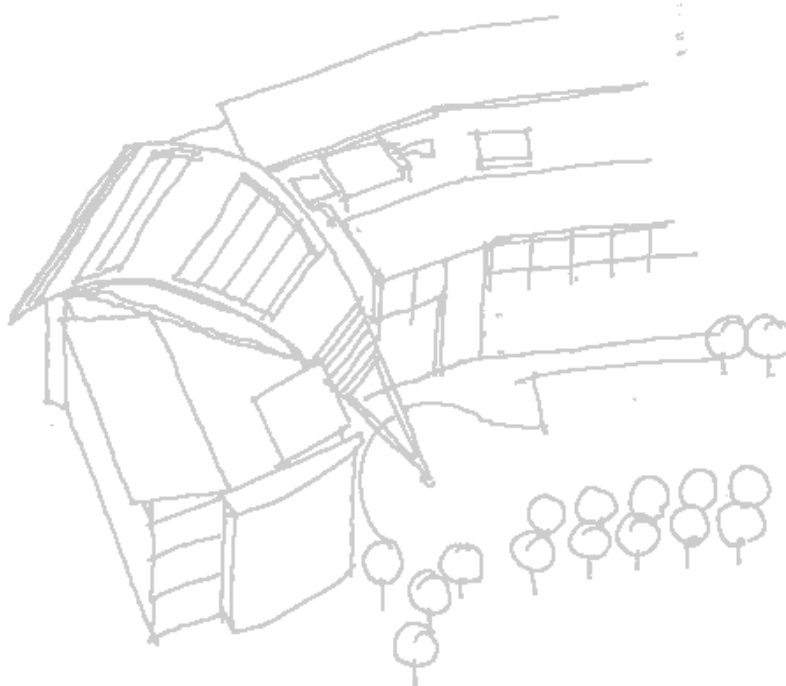
Thermal Performance

Dualframe 75mm complies to Part L of the Building Regulations 2002, using only hard coat low emissivity glass and standard spacers to the double glazed units. 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.

Site Work

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

- 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, design meetings and budgetary planning. Design stages can be formalised through 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.




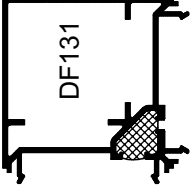

■ Sapa Group


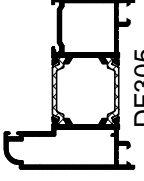
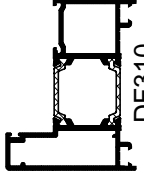
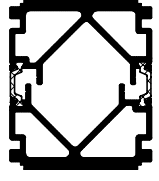
Sapa Building Systems is a member of the worldwide Sapa Group. We develop and market high value-added profiles in aluminium and are the leading independent producer of aluminium profiles in the world, with customers in Europe, North America and Asia. In the UK, the Sapa Group has extensive multi-site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

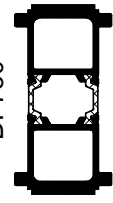
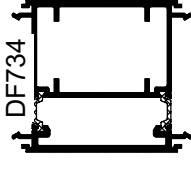
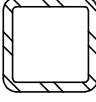





Backed by the resources of the Group, Sapa Building Systems offers architects and specifiers a wide range of innovative aluminium systems for curtain walling, doors, windows and specialist applications. With a wealth of European knowledge and experience our company incorporates the highly respected Glostal, 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 information on this page shows the inertia values of baypoles and the coupling mullion. BS6399 Part 2 must be used to calculate the inertia required.

Profile	Inertia
 DF122	161,075
 DF131	2,930
 DF138	659,240
	639,861
	338,423
	115,967

Profile	Inertia
 DF139	283,774
 DF305	55,080
 DF310	222,833
 DF729	67,130
	227,945
	70,307
	738,637
	412,253

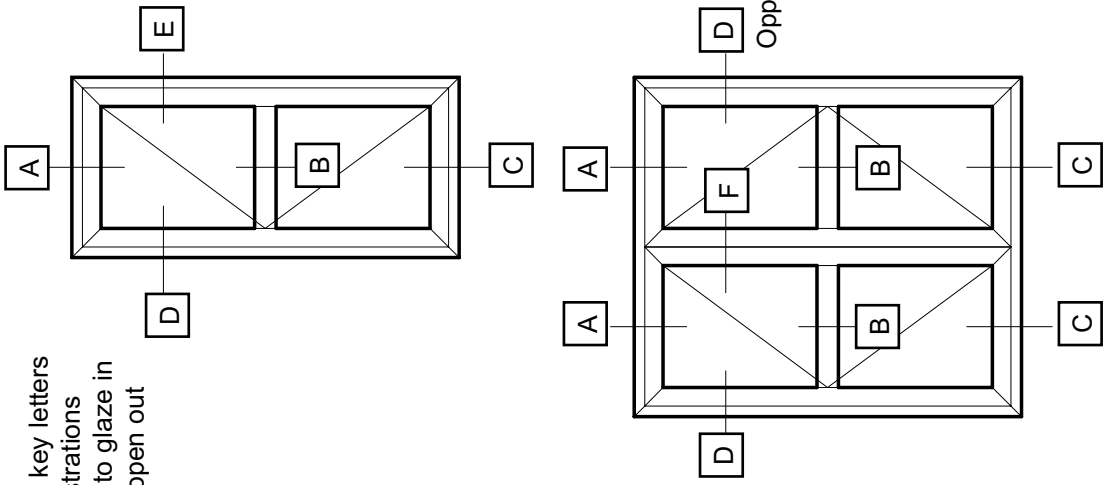
Profile	Inertia
 DF730	411,283
 DF734	69,661
 50 x 50 x 5 Steel	651,786
 Not by Sapa	608,189
 40 x 40 x 3.2 Steel	947,200 (Aluminium basis)
 Not by Sapa	947,200 (Aluminium basis)
 Not by Sapa	333,435 (Aluminium basis)
 Not by Sapa	333,435 (Aluminium basis)

Detail	Page	Detail	Page
A	9	J	31
B	10	K	32
C	11	L	33
C	12	M	34
C	13	G	35
C	14	H	36
D	15	J	37
E	16	J	38
F	17	K	39
A	18	L	40
B	19	M	41
C	20		42
C	21		43
D	22		44
E	23		45
F	24		46
G	25		47
H	26		48
J	27		49
J	28		50
J	29		51
J	30		
		Open Out Glaze Out Door Drainage Tray	
		Open Out Glaze In Door Head	
		Open Out Glaze In Door Midrail	
		Open Out Glaze In Door Cill	
		Open Out Glaze In Low Threshold	
		Open Out Glaze In Door Subcill	
		Open Out Glaze In Door Drainage Tray	
		Open Out Glaze In Door Hinge Jamb	
		Open Out Glaze In Door Lock Jamb	
		Open Out Glaze In Door Meeting Stile	
		Open In Glaze In Door Head	
		Open In Glaze In Door Midrail	
		Open In Glaze In Door Cill	
		Open In Glaze In Low Threshold	
		Open In Glaze In Door Hinge Jamb	
		Open In Glaze In Door Lock Jamb	
		Open In Glaze In Door Meeting Stile	
		90° External Corner Post	
		90° Internal Corner Post	
		135° Baypole	
		150° Baypole	
		24mm Glazing Bead Options	
		28mm Glazing Bead Options	
		Trickle Vent With Open In & Open Out Door	
		50mm In-Line Heavy Duty Post	
		25mm Heavy Duty Coupler	
		75mm In-Line Post	

DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

Note that the key letters on these illustrations are common to glaze in open in and open out doors

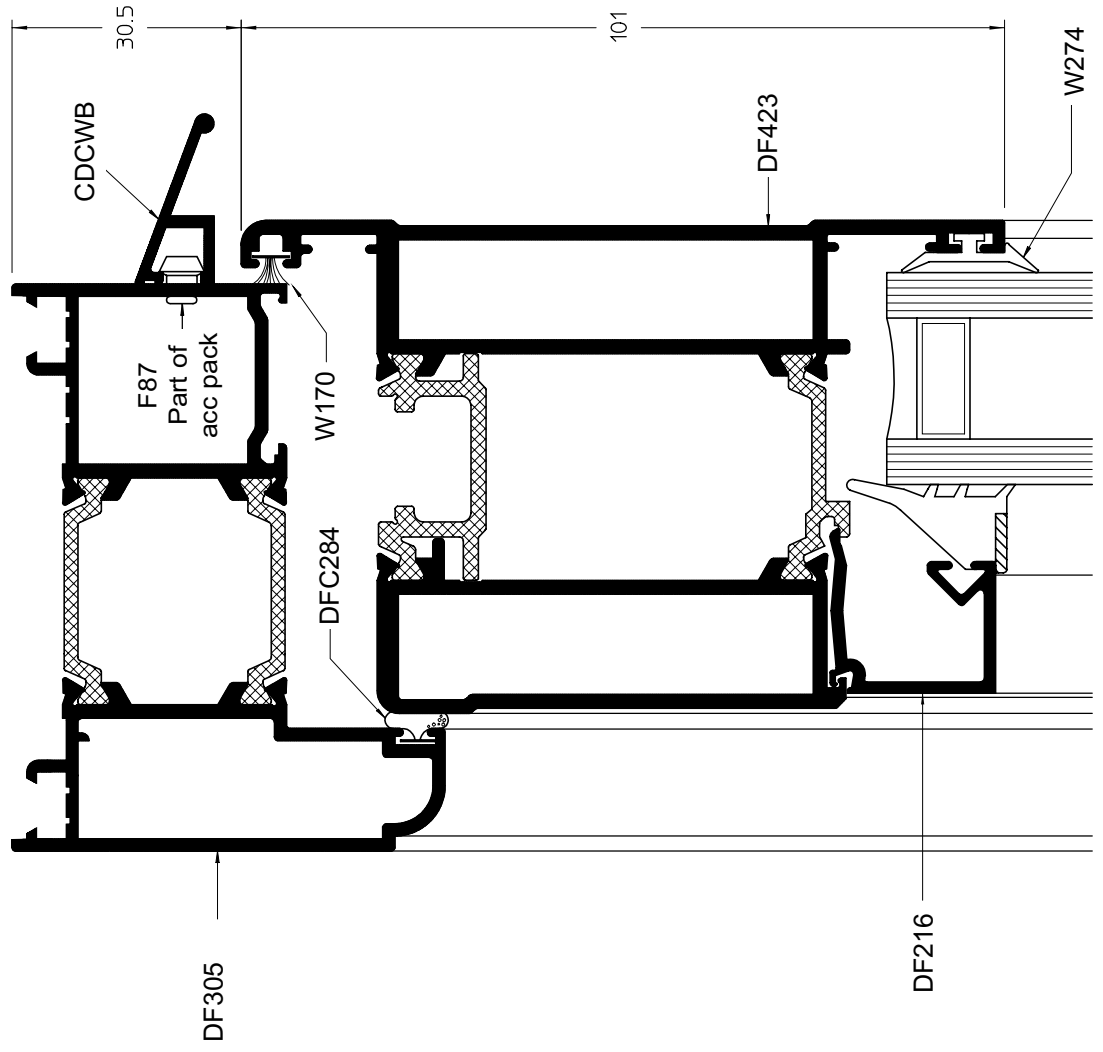


These drawings illustrate a number of the available profile combinations. Other combinations are available please consult Sapa Building Systems for further details.

GENERAL ARRANGEMENTS

A **Open Out
Glaze In
Door Head**

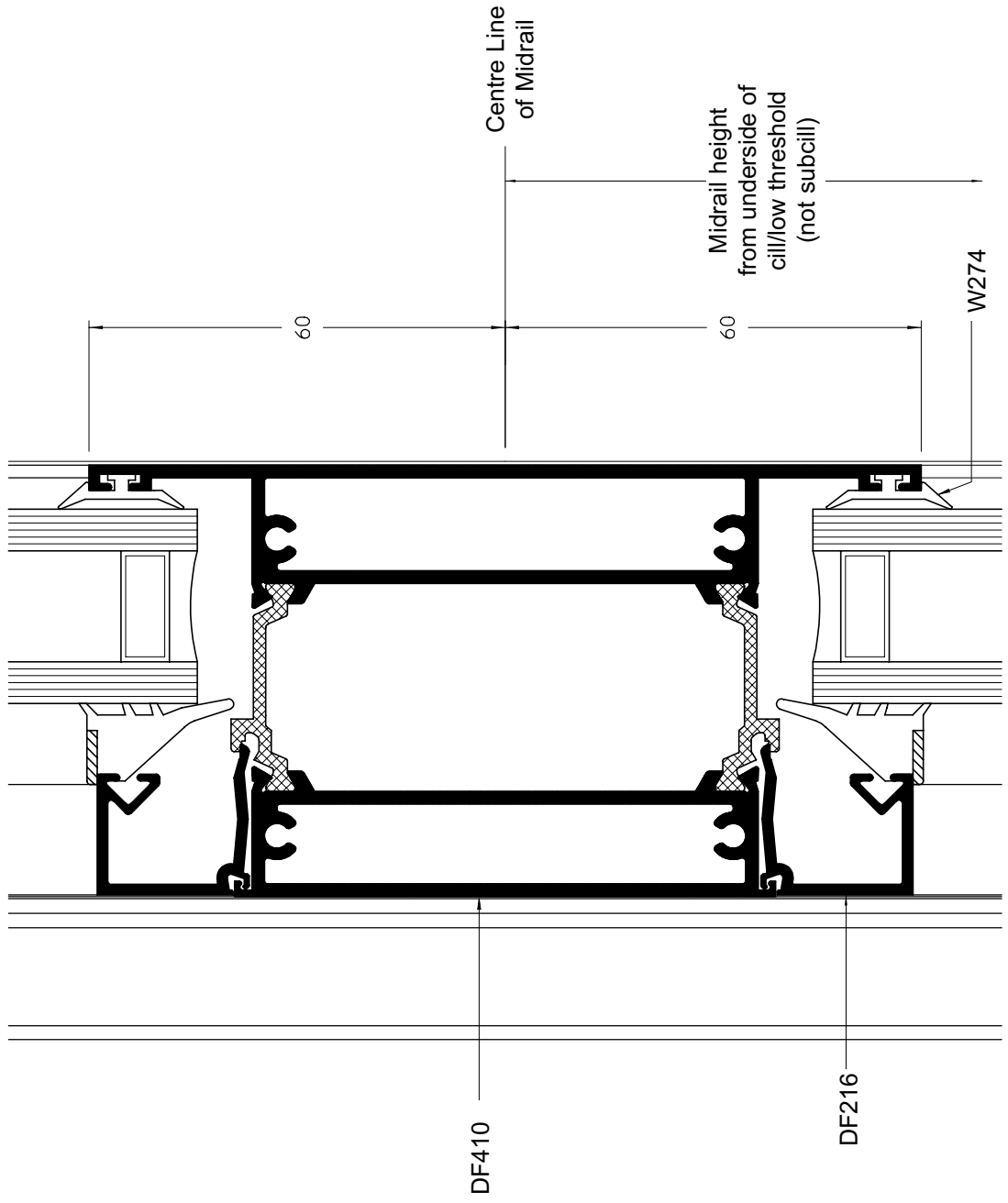
Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

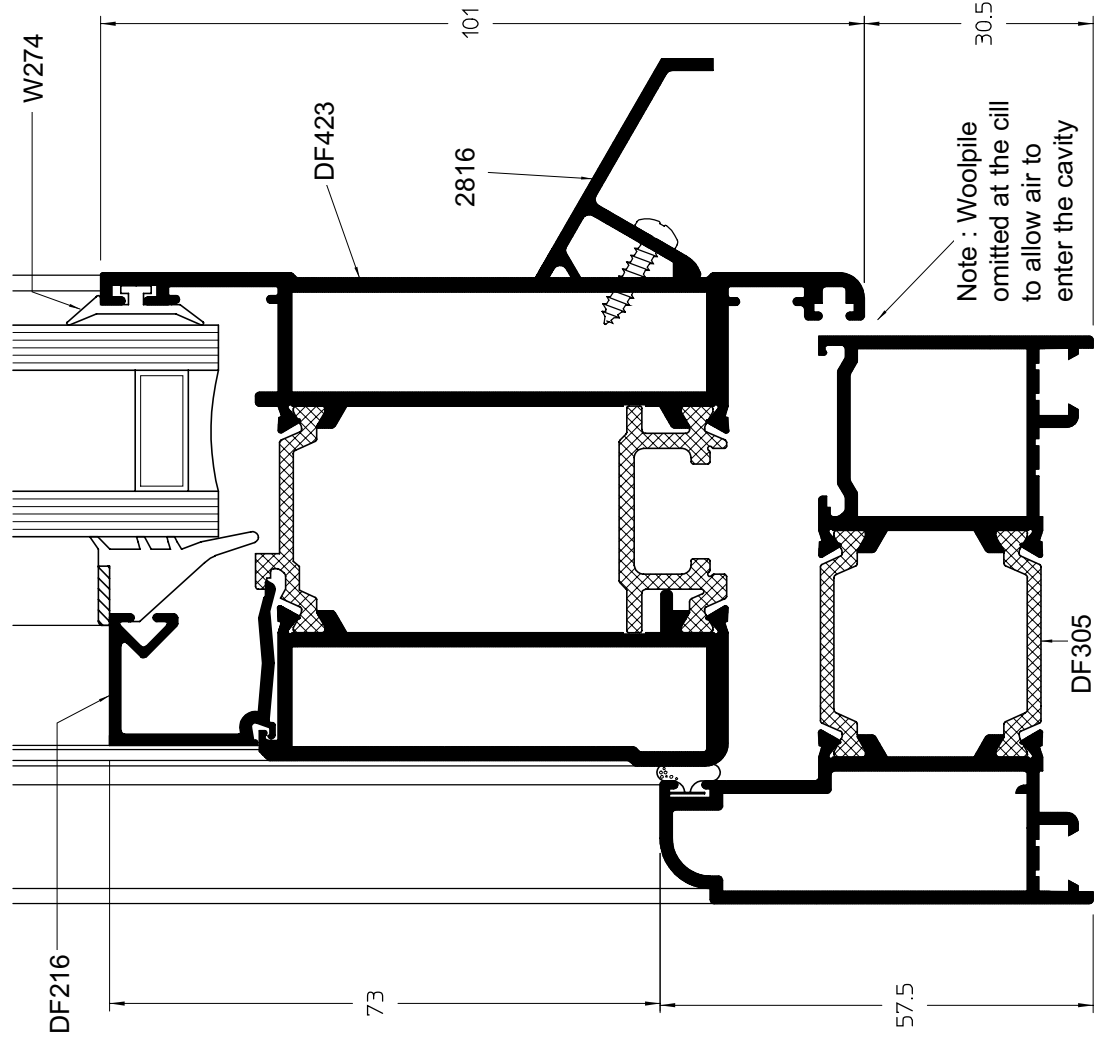
B Open Out Glaze In Door Midrail



GENERAL ARRANGEMENTS

C **Open Out
Glaze In
Door Cill**

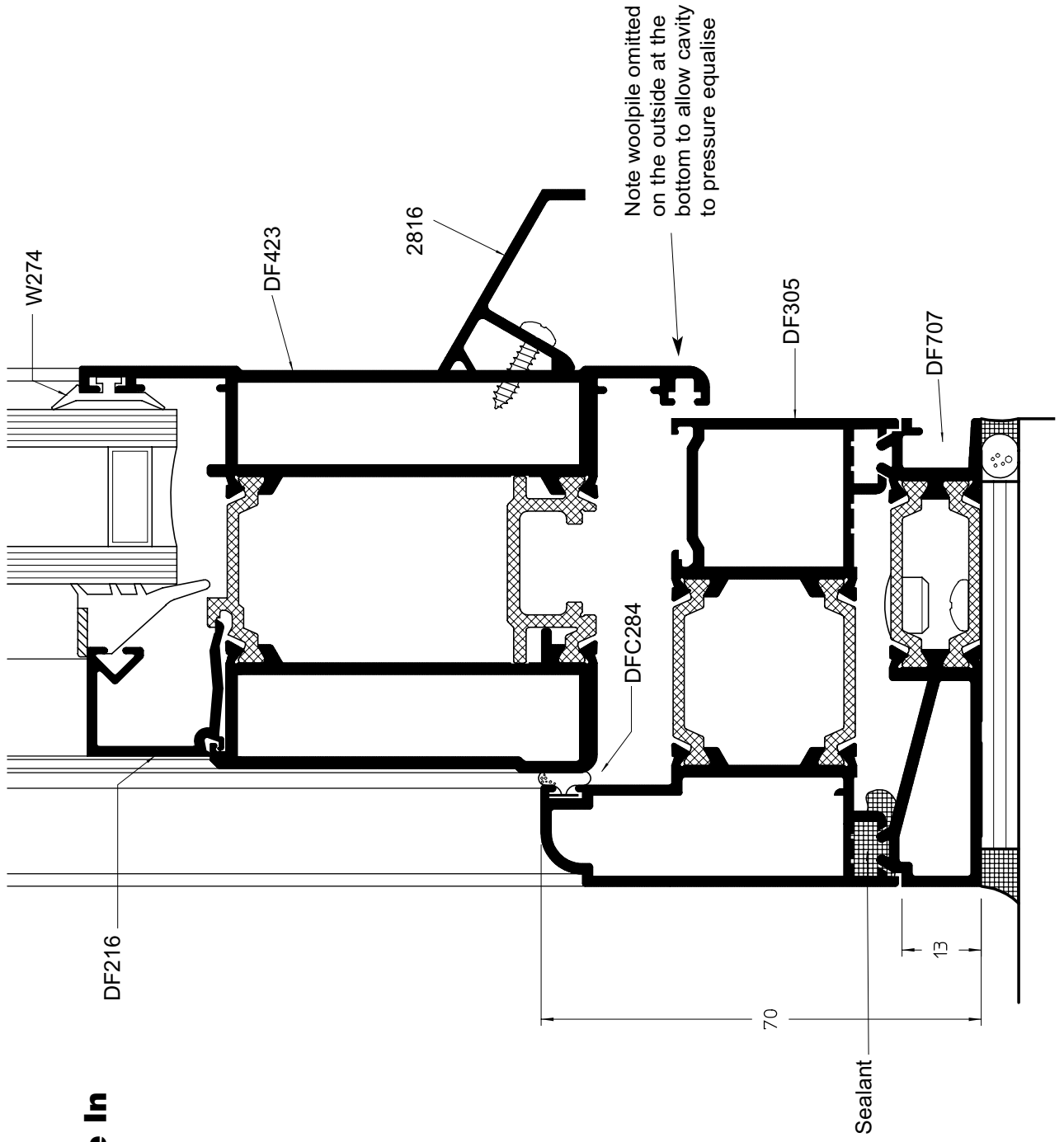
Outerframe Options:-
DF305 Sofline (shown)
or DF310 Square



DUALFRAME 75mm HP Entrance Door

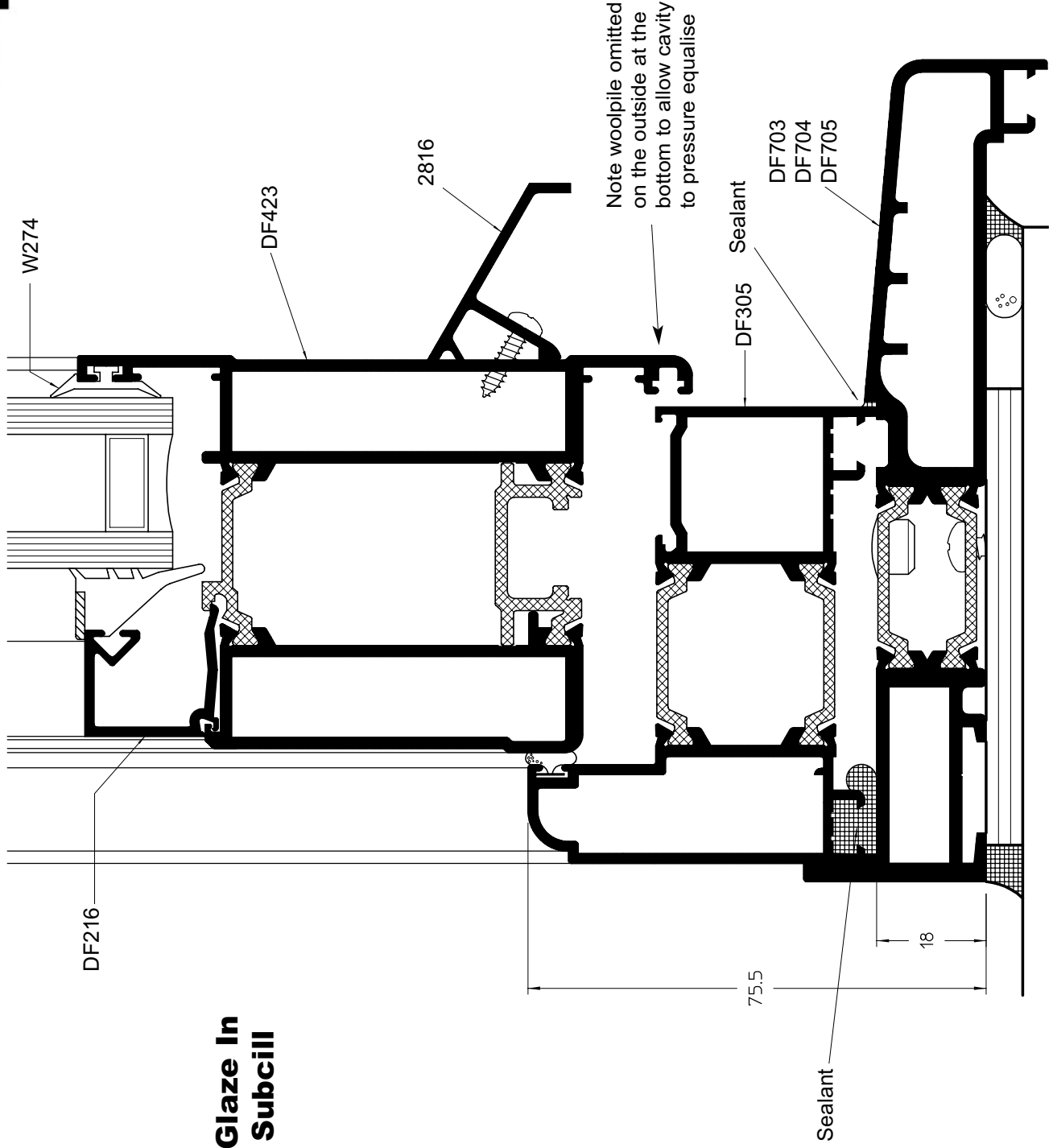
GENERAL ARRANGEMENTS

C **Open Out Glaze In**
Low Threshold



Note drainage tray can be used in the same orientation with open in doors

C **Open Out Glaze In Door With Subcill**



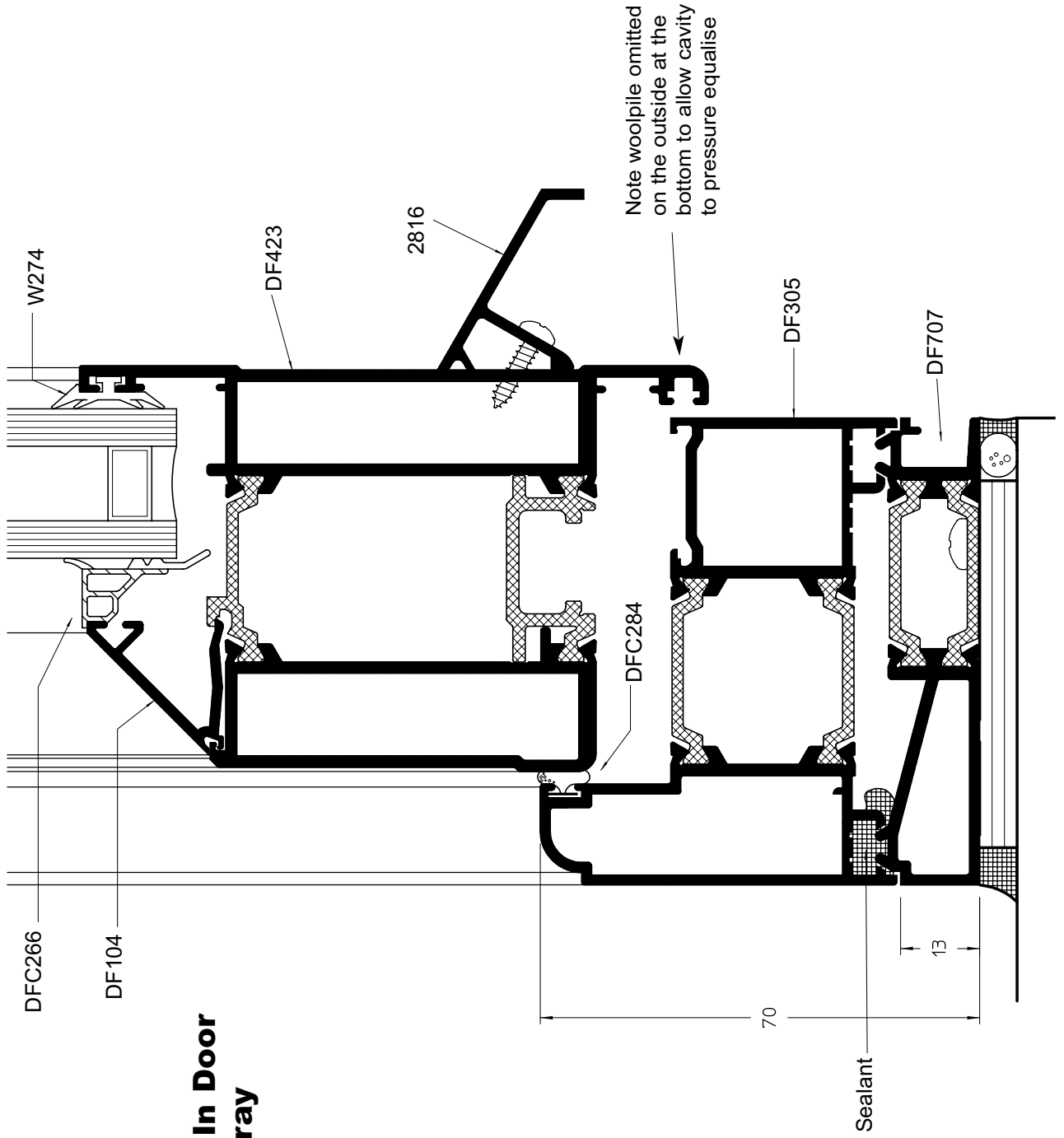
Outerframe Options:-
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or DF310 Square

DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

C **Open Out Glaze In Door With Drainage Tray**

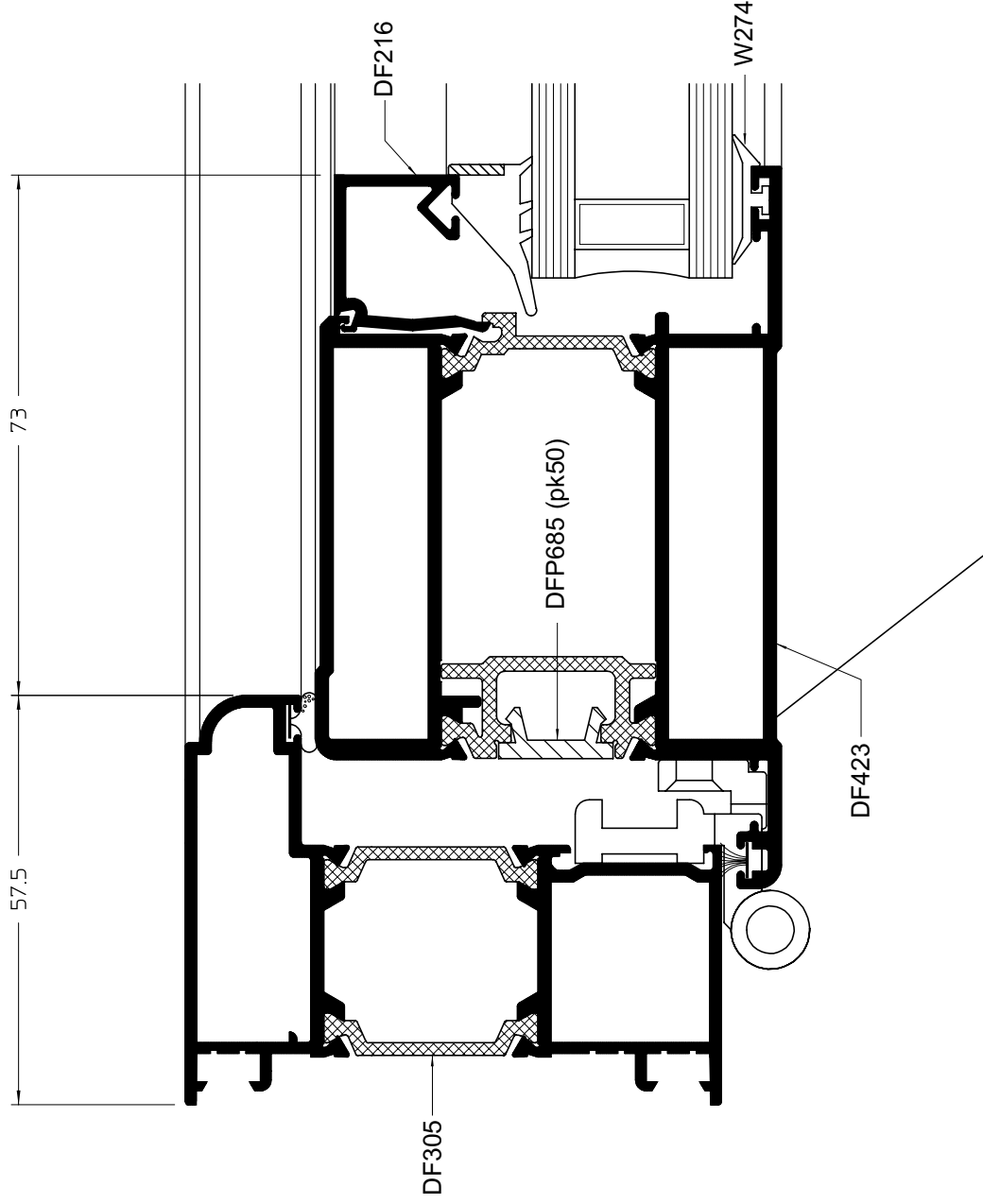
Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



Note drainage tray can be used in the same orientation with open in doors

GENERAL ARRANGEMENTS

D **Open Out Glaze In Hinge Jamb**



Outerframe Options:-
DF305 Softline (shown)
or DF310 Square

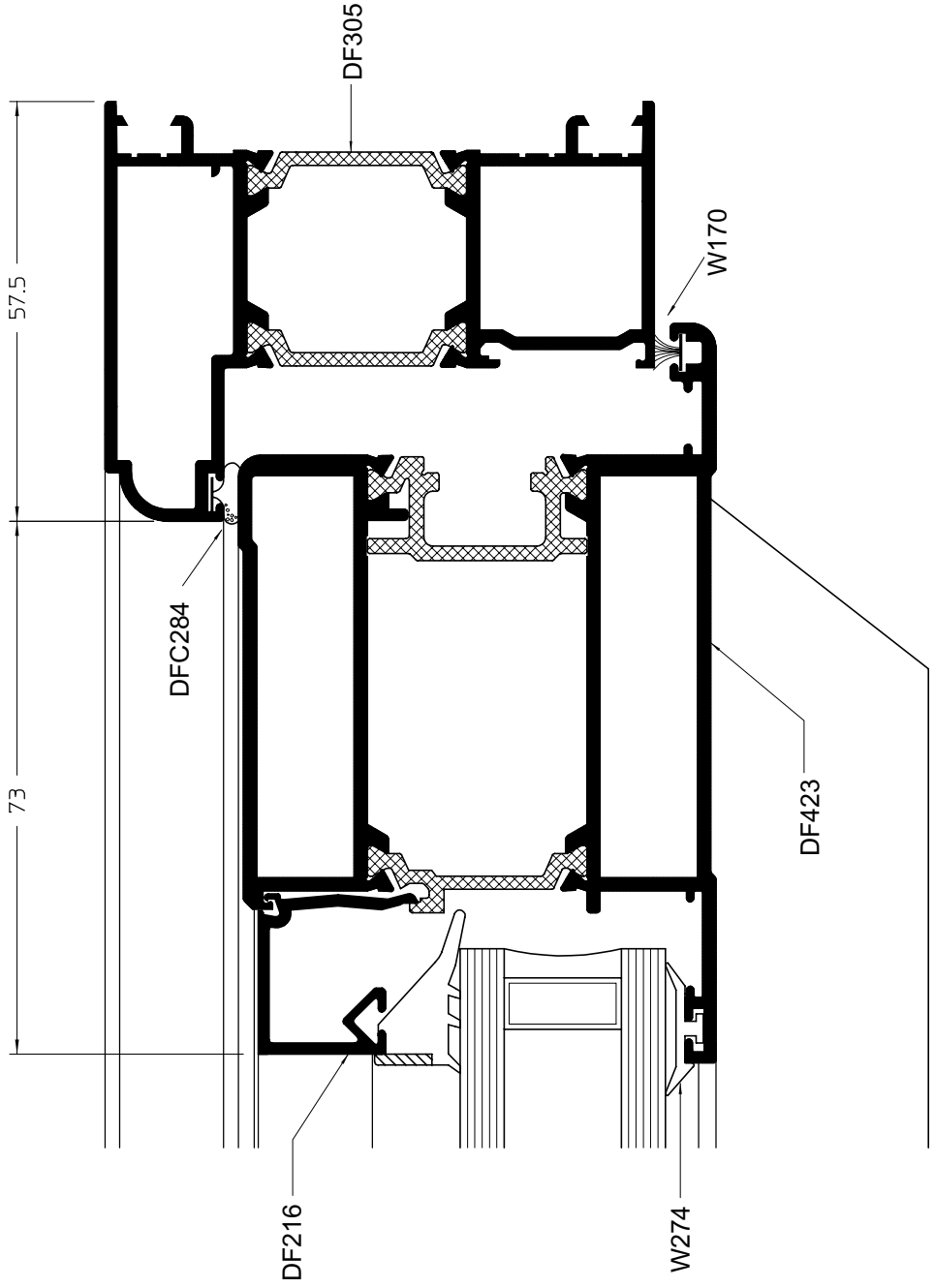
DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

E

**Open Out Glaze In
Lock Jamb**

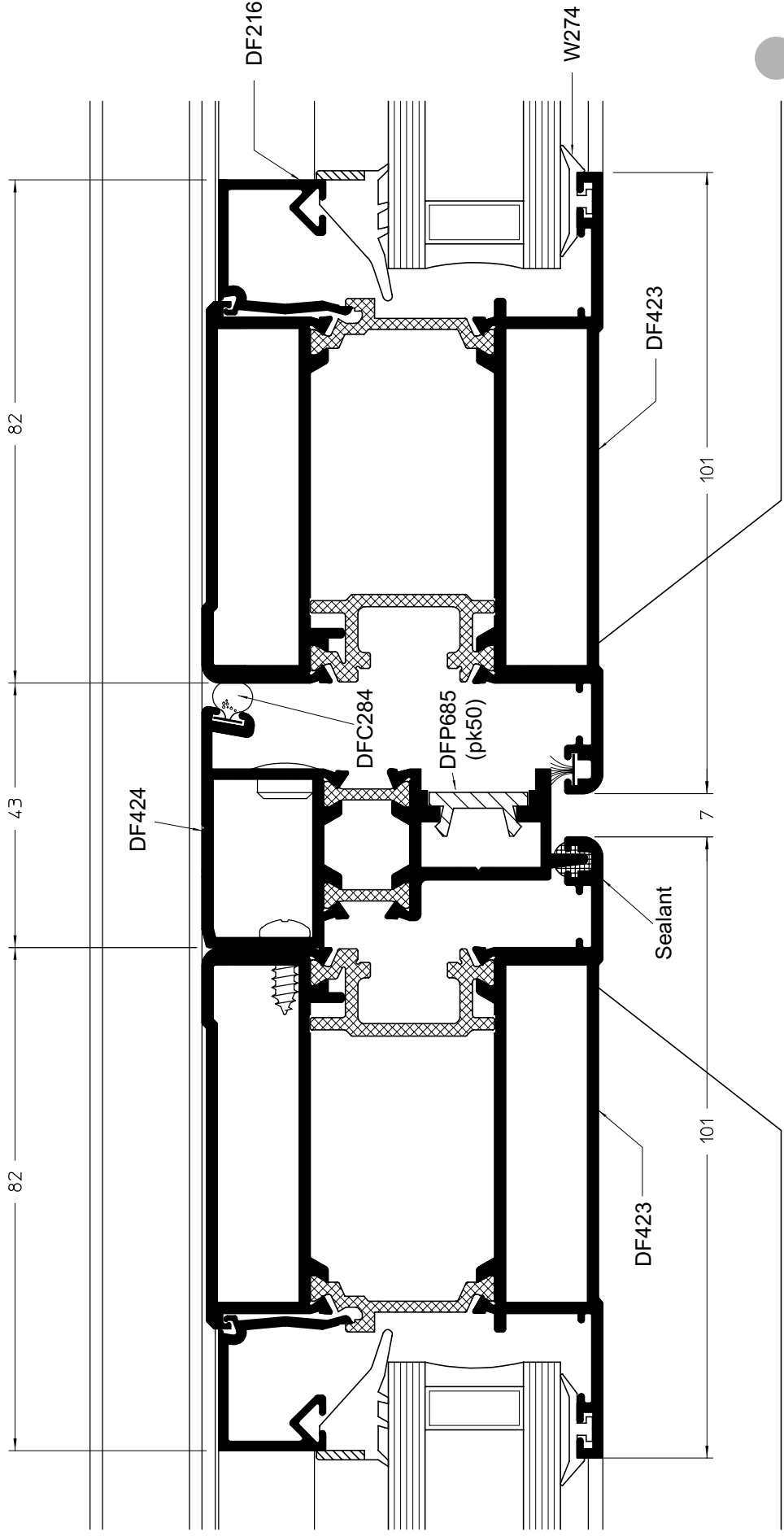
Outerframe Options:-
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or DF310 Square



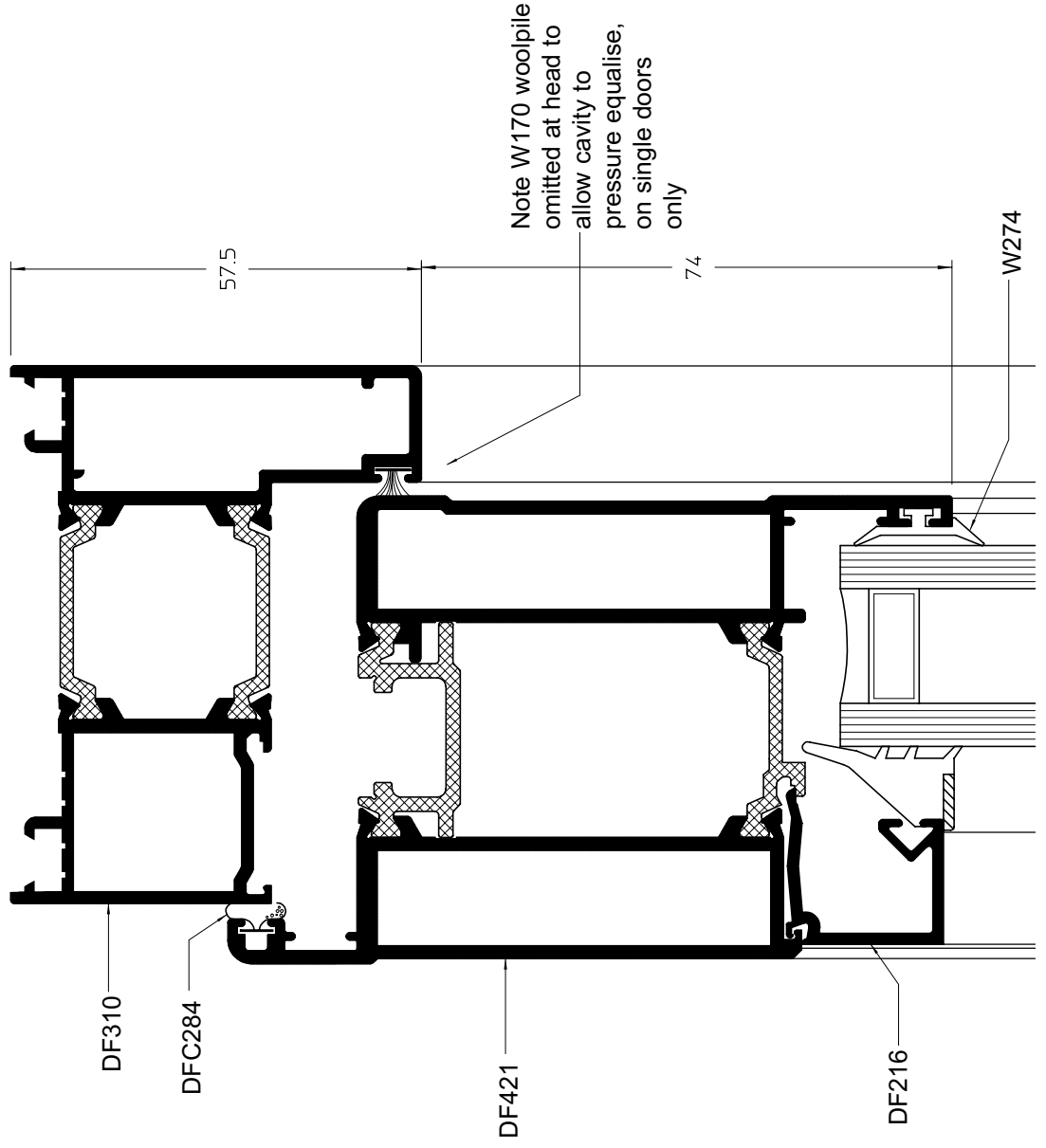
GENERAL ARRANGEMENTS

F

Open Out Glaze In Door Meeting Stiles (RH Master)

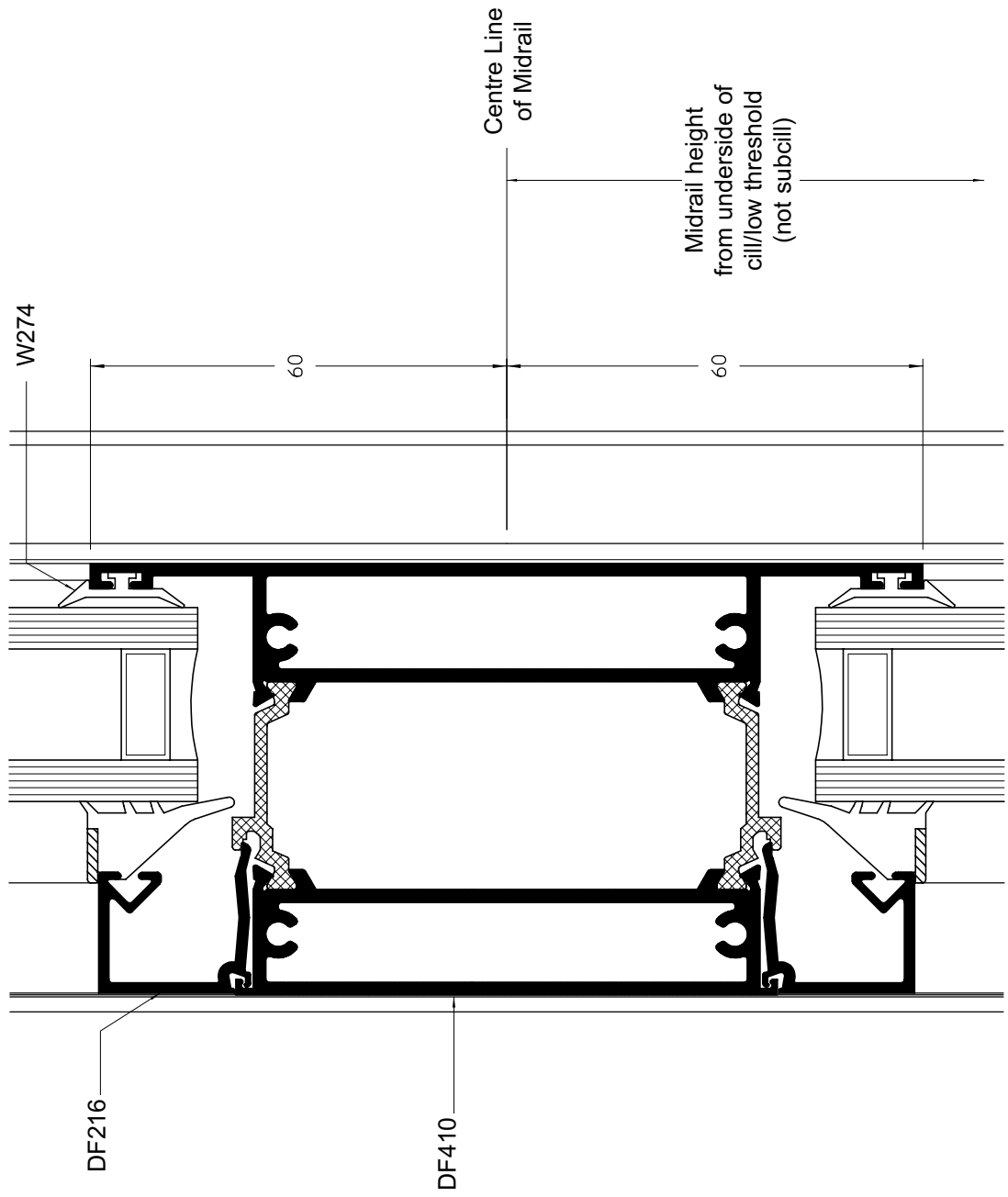


A **Open In Glaze In Door Head**



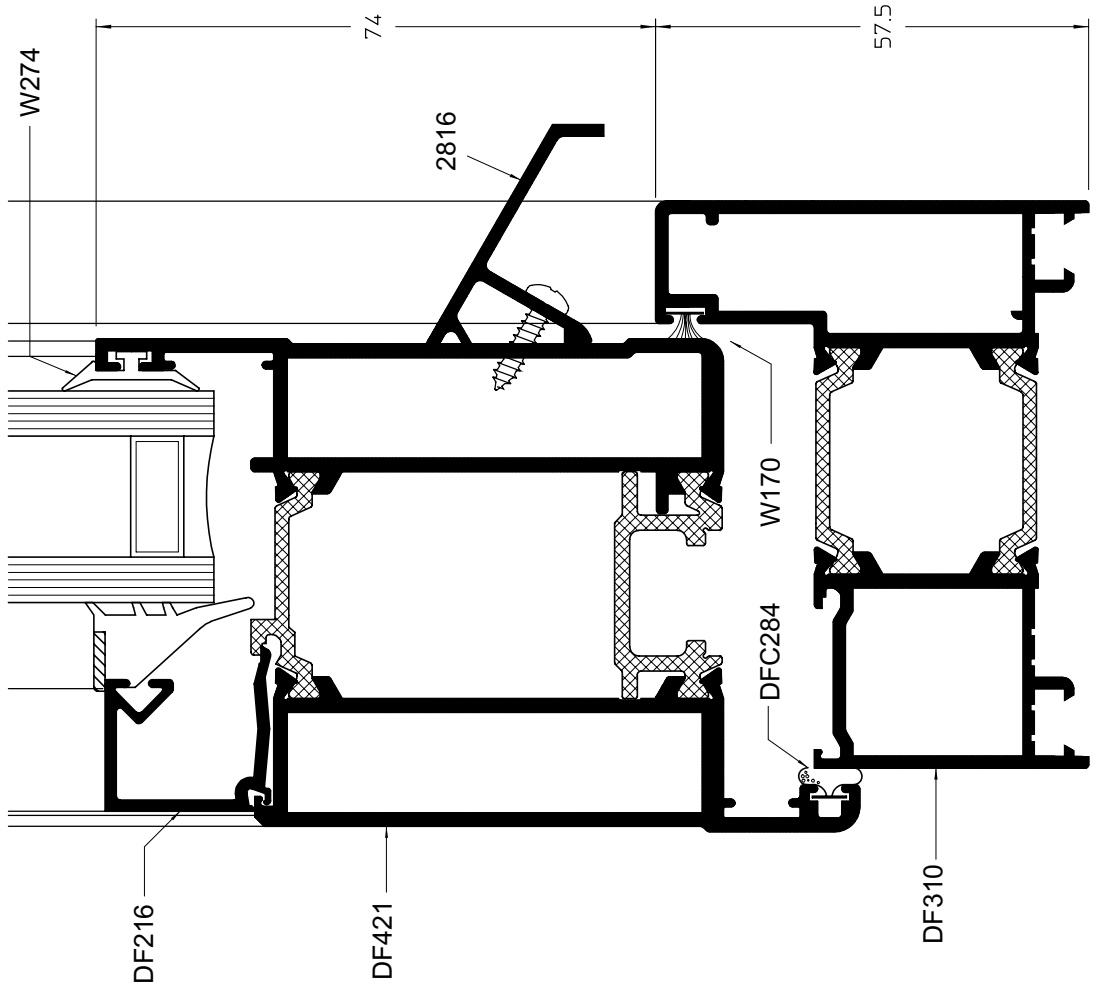
Outerframe Options:-
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or DF310 Square

B **Open In Glaze In Door Midrail**

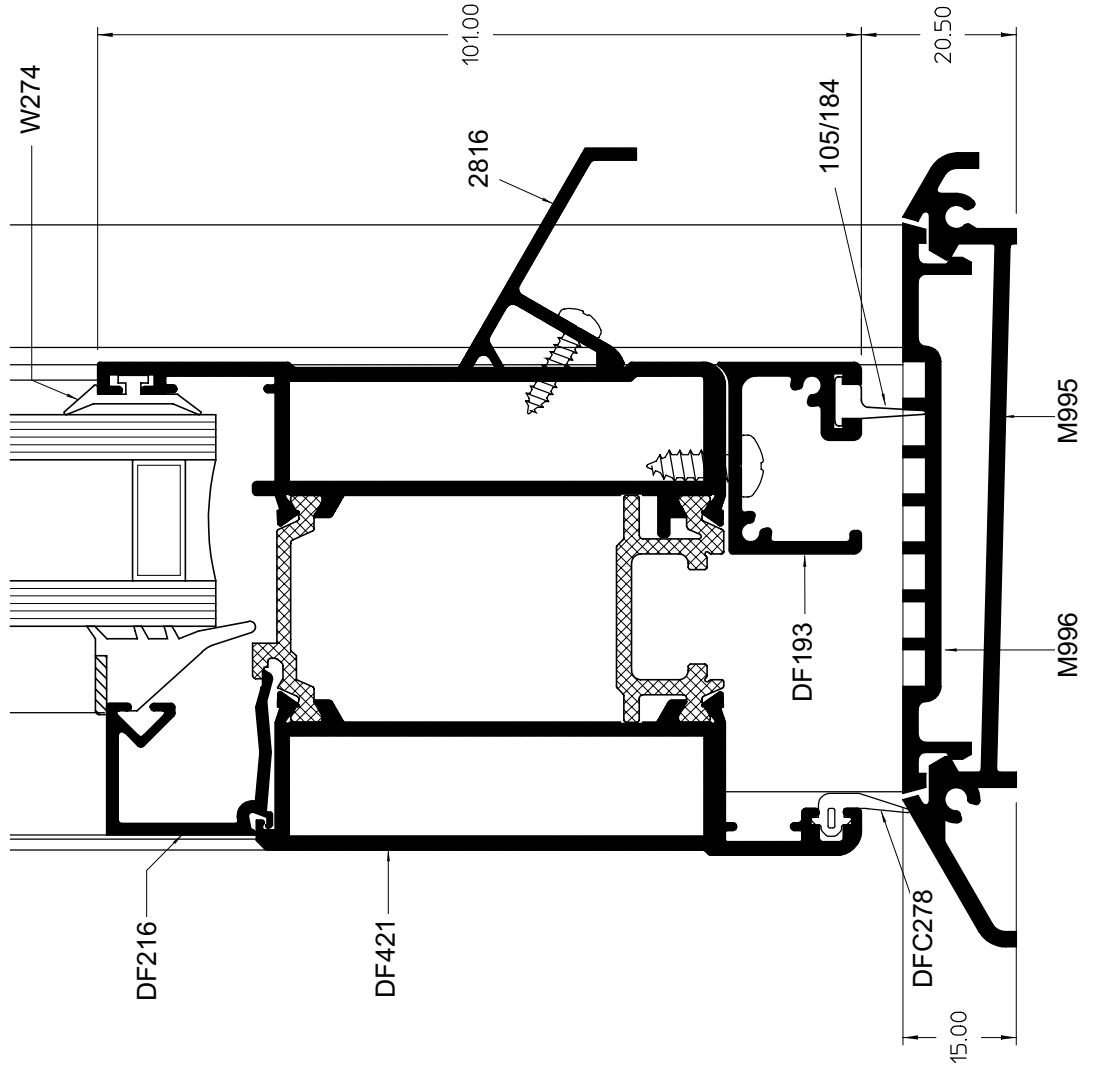


C **Open In Glaze In Door Cill**

Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



C Open In Glaze In Low Threshold

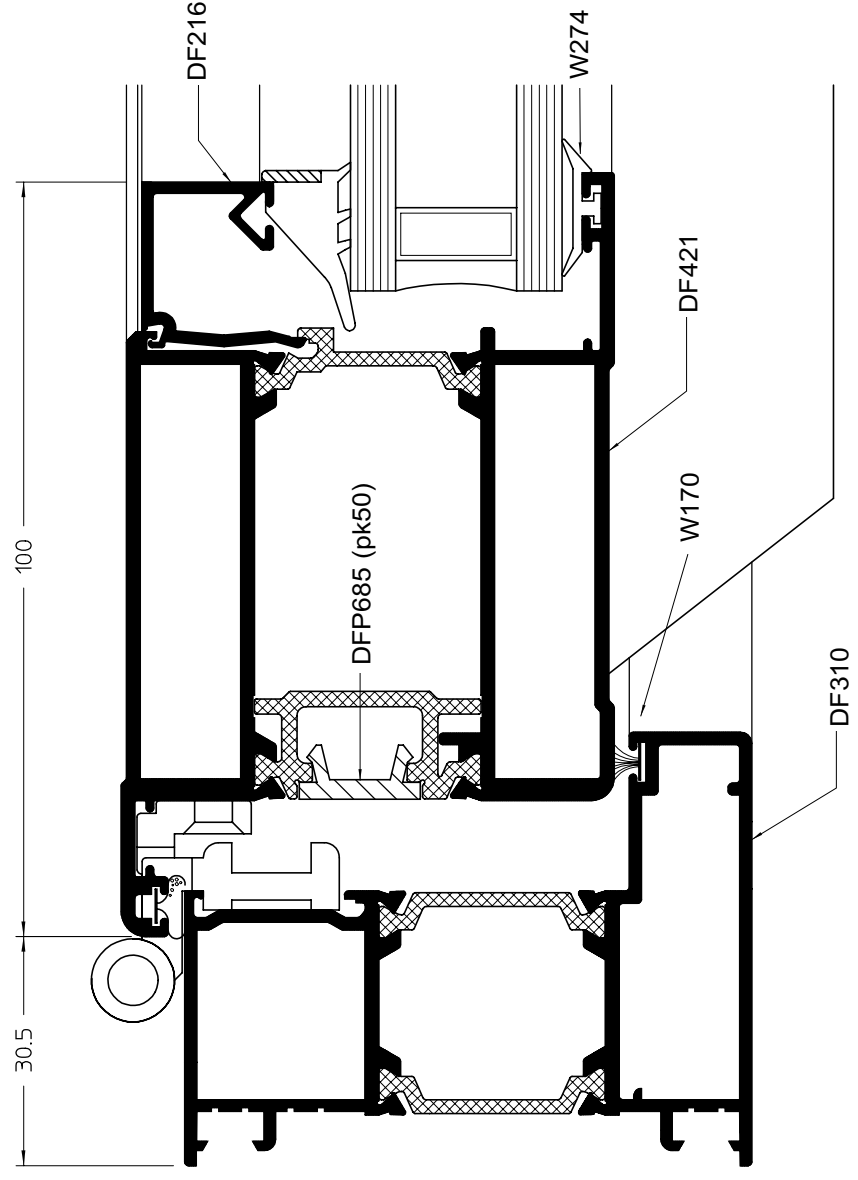


DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

D **Open In Glaze In Door Hinge Jamb**

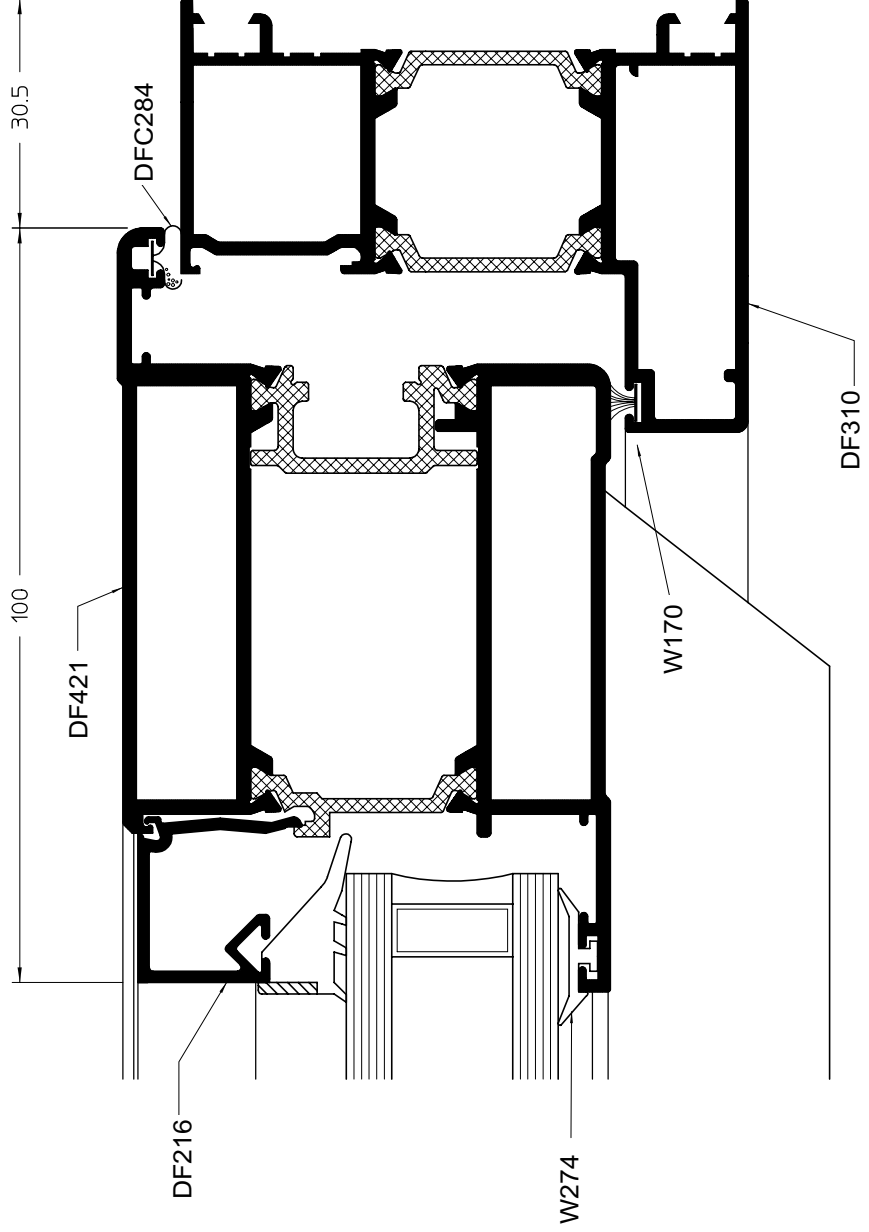
Outerframe Options:-
DF305 Sofline (shown)
or DF310 Square



GENERAL ARRANGEMENTS

E **Open In Glaze In Door Lock Jamb**

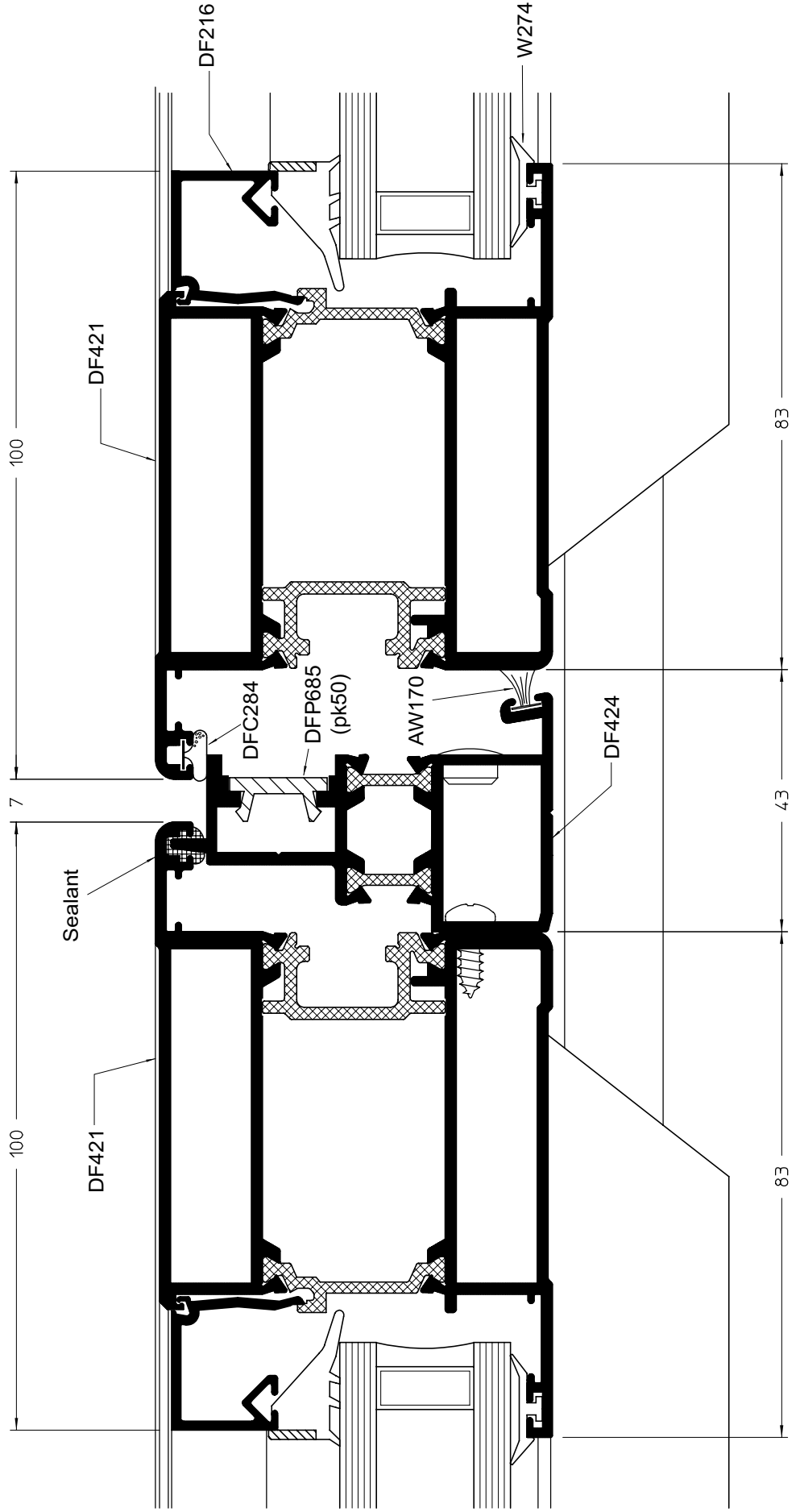
Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

F **Open In Glaze In Door Meeting Stile (RH Master)**



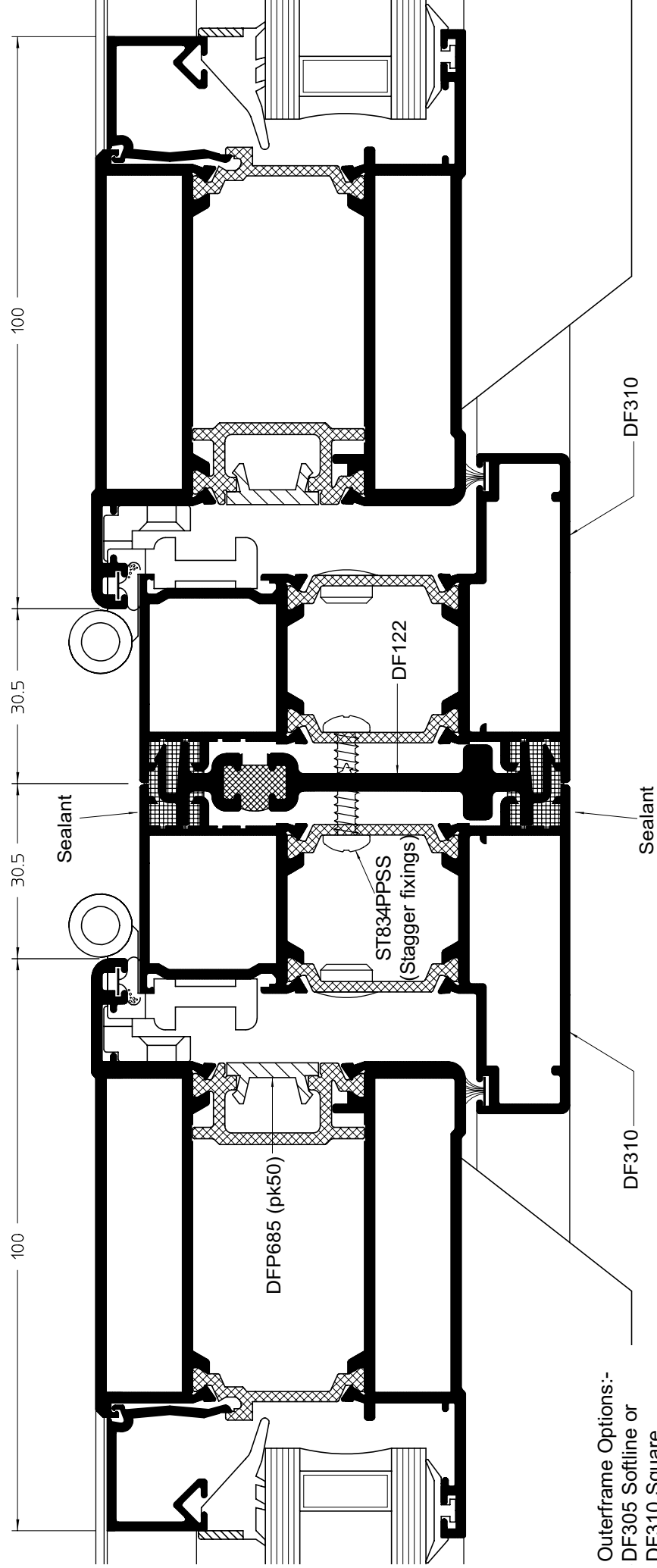
DUALFRAME

75mm HP Entrance Door

sapa:

GENERAL ARRANGEMENTS

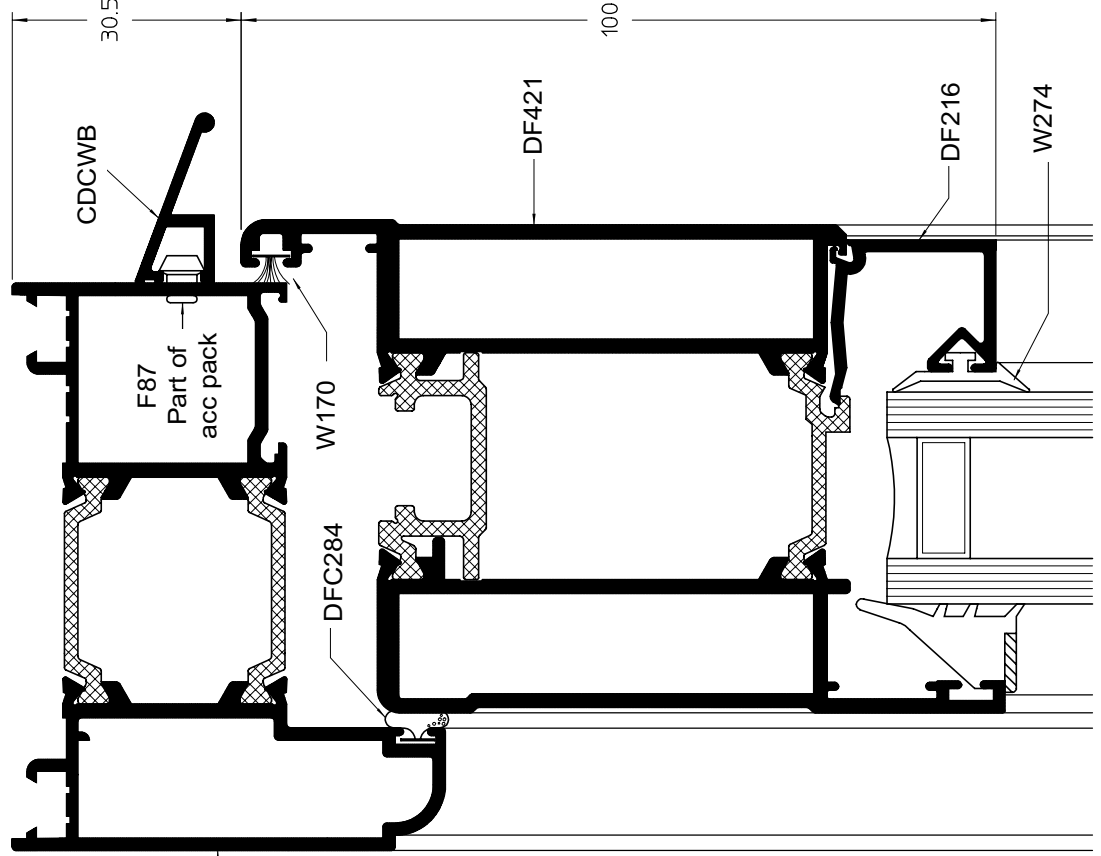
**Concealed Coupling
Open In Glaze In**



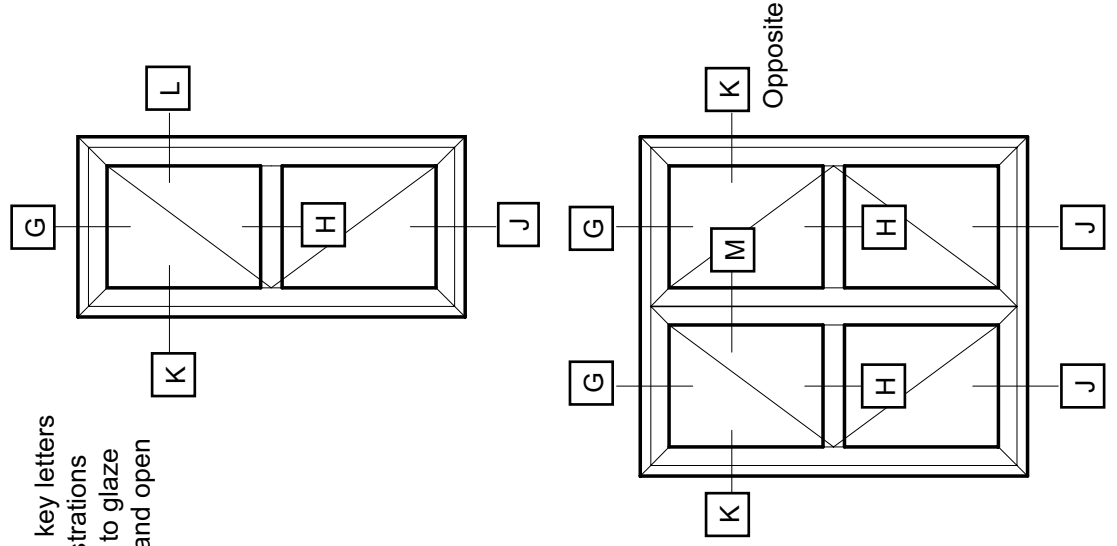
GENERAL ARRANGEMENTS

G **Open Out Glaze Out Door Head**

Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



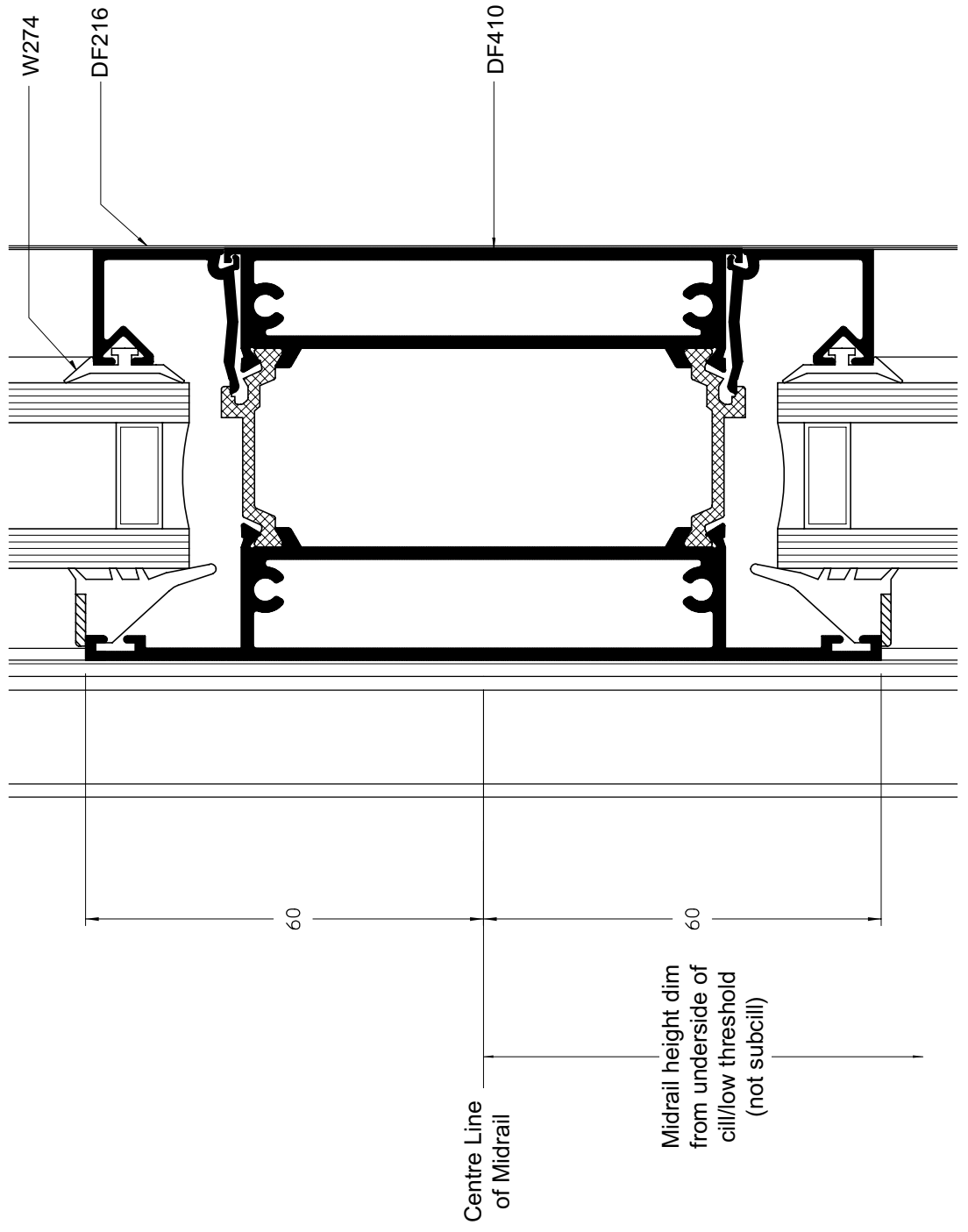
Note that the key letters on these illustrations are common to glaze out, open in and open out doors



DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

H Open Out Glaze
Out Door Midrail

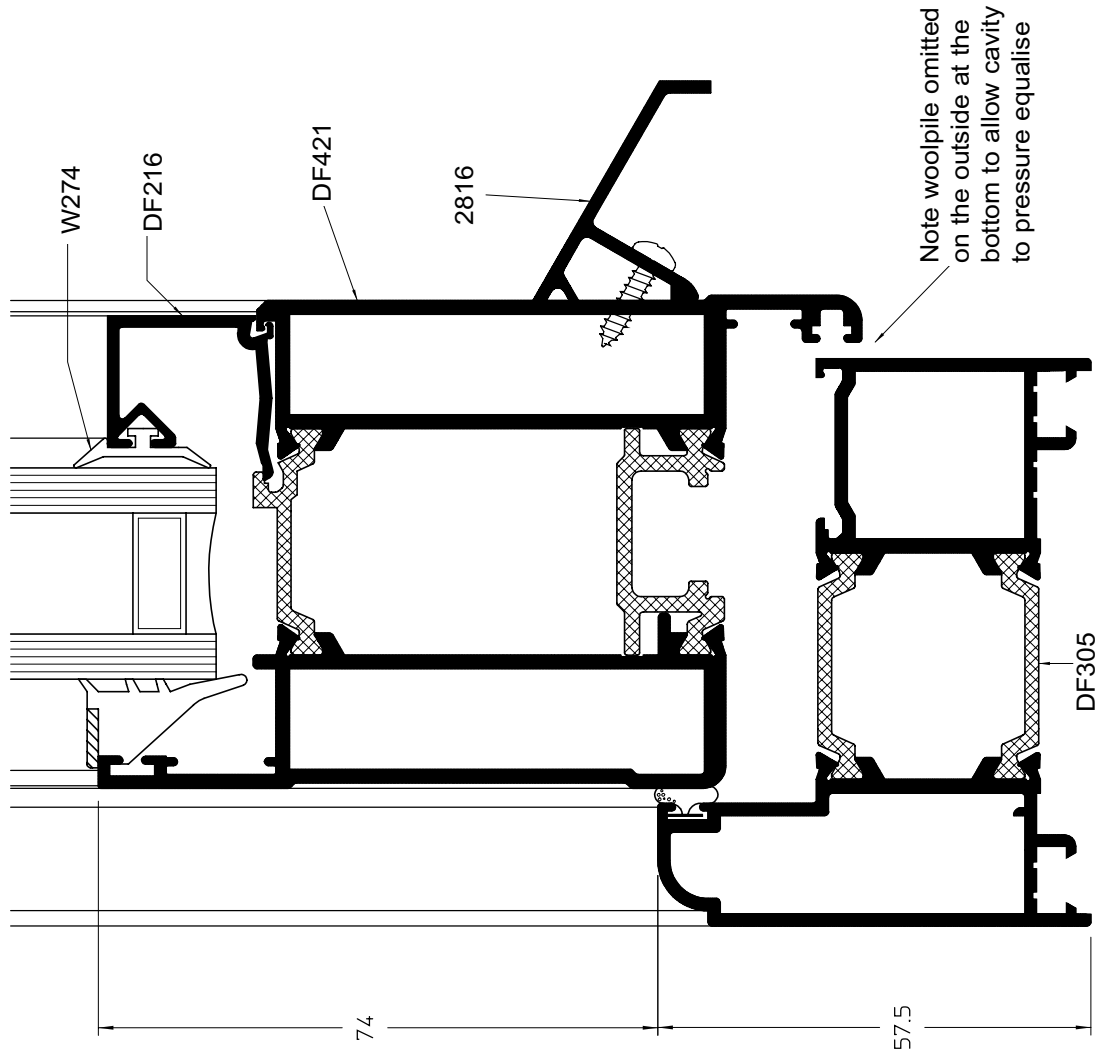


DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

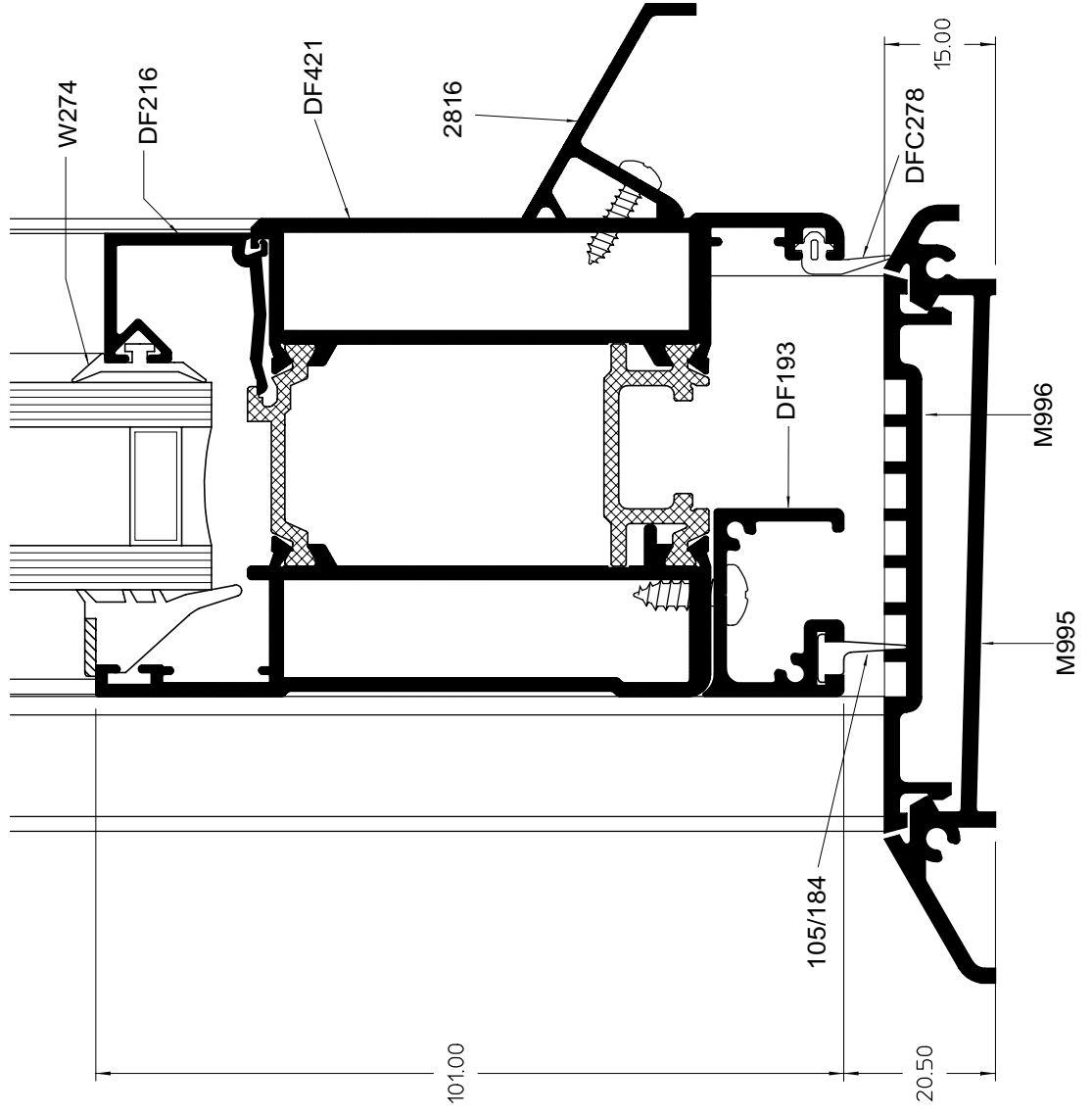
J **Open Out Glaze
Out Door Cill**

Outerframe Options:-
DF305 Sofline (shown)
or DF310 Square



GENERAL ARRANGEMENTS

J **Open Out Glaze Out
Low Threshold**

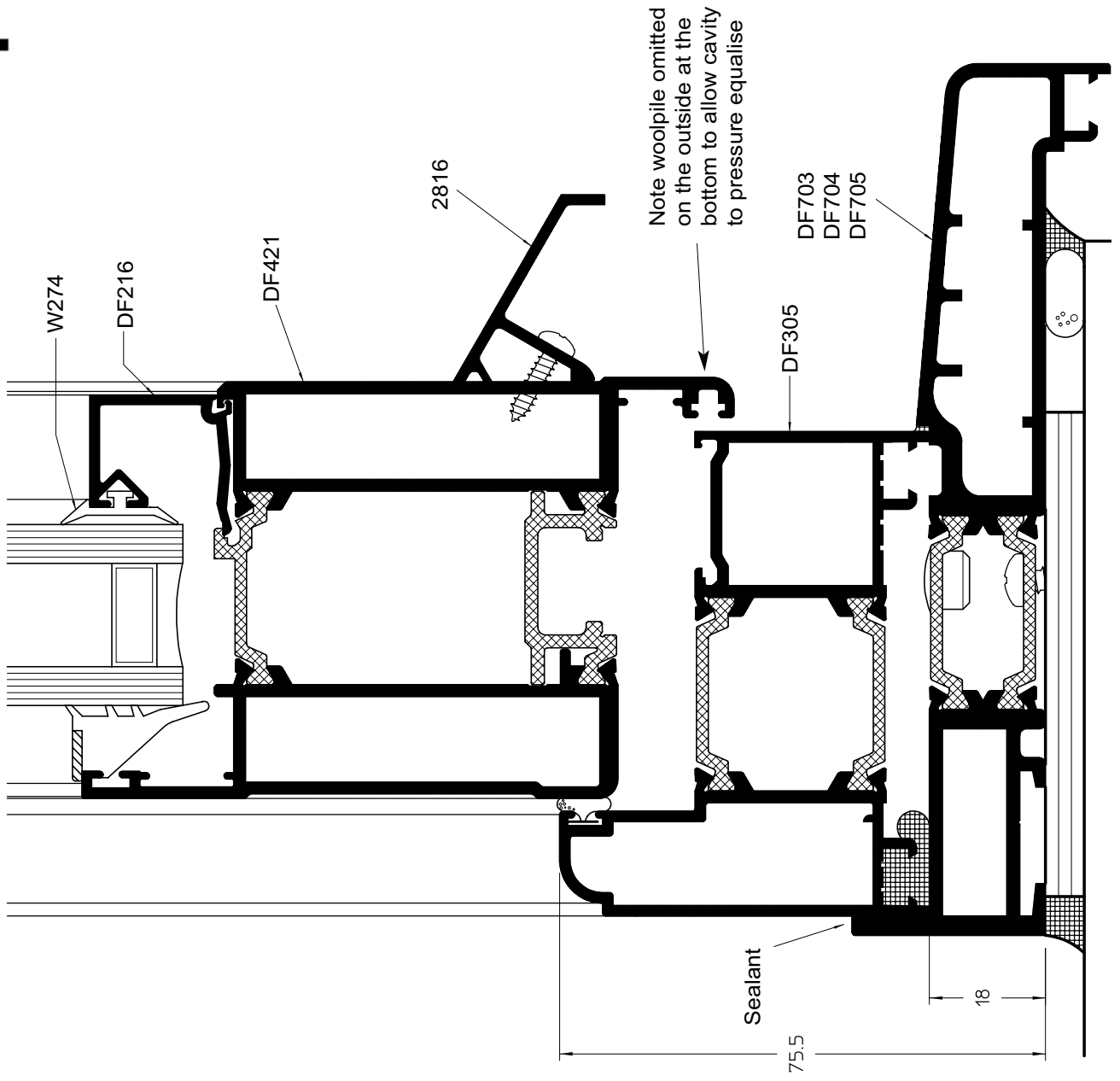


DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

J **Open Out Glaze**
Out Door Subcill

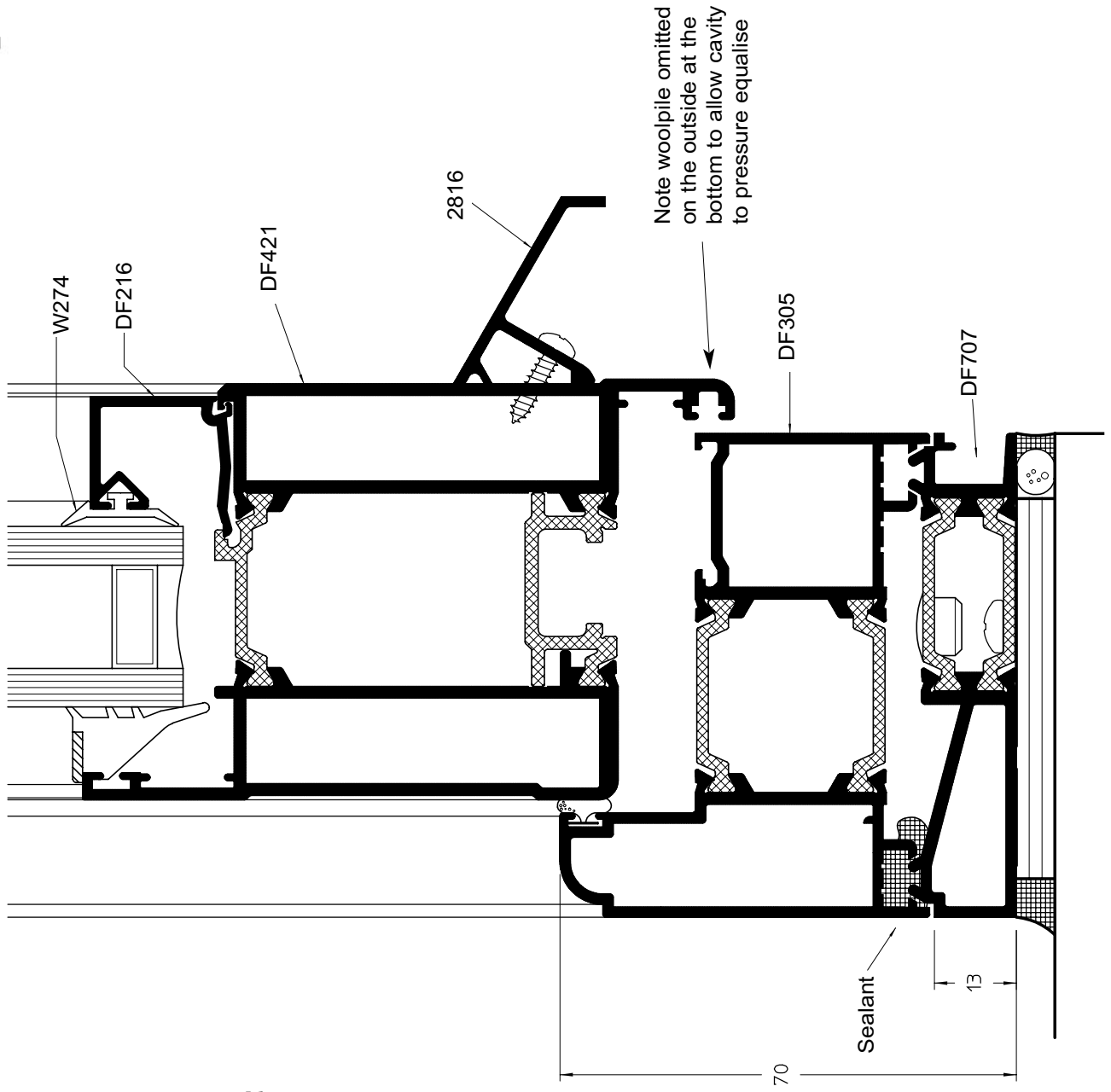
Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



GENERAL ARRANGEMENTS

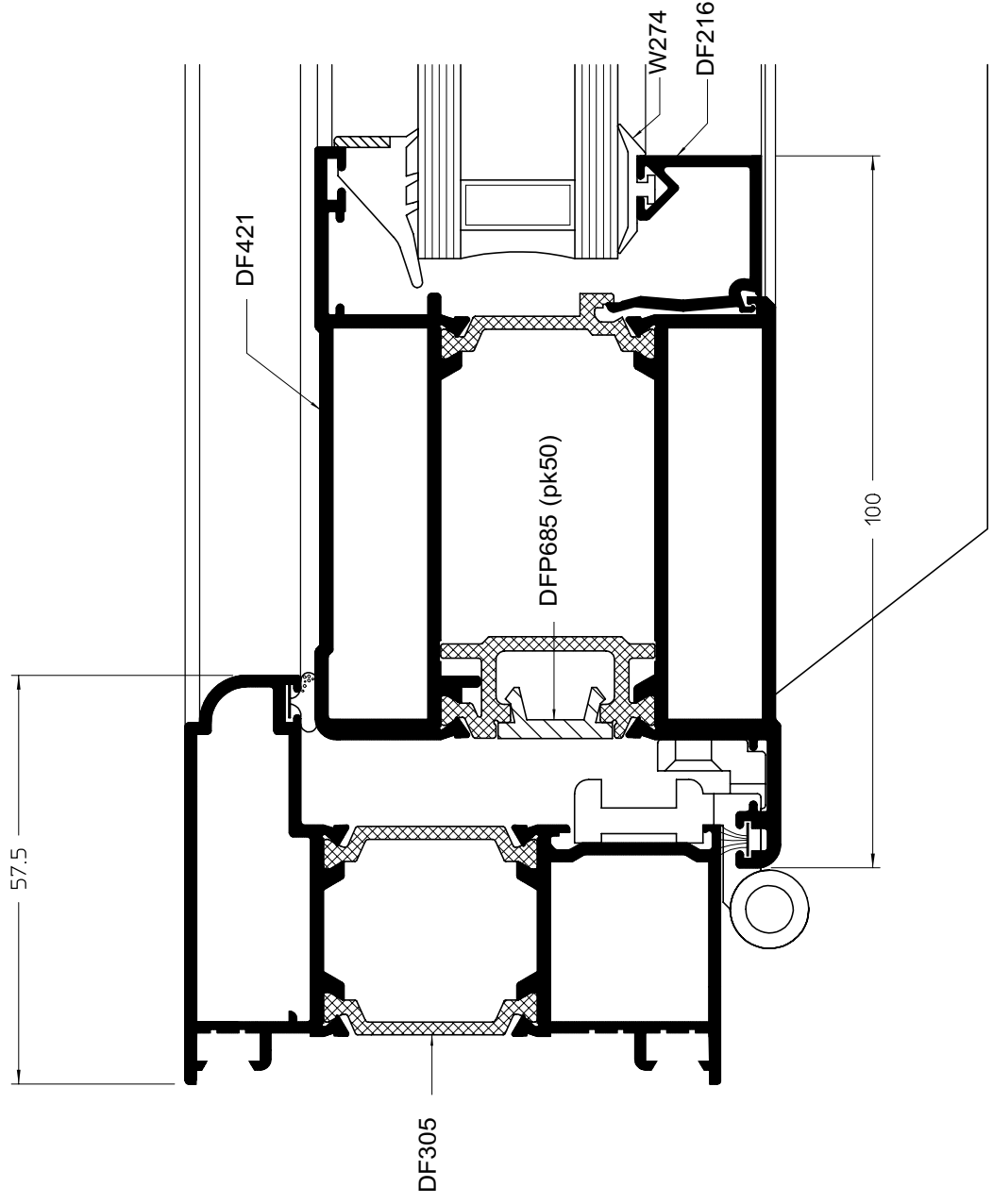
J **Open Out Glaze Out Door Drainage Tray**

Outerframe Options:-
DF305 Softline (shown)
or DF310 Square



DUALFRAME 75mm HP Entrance Door

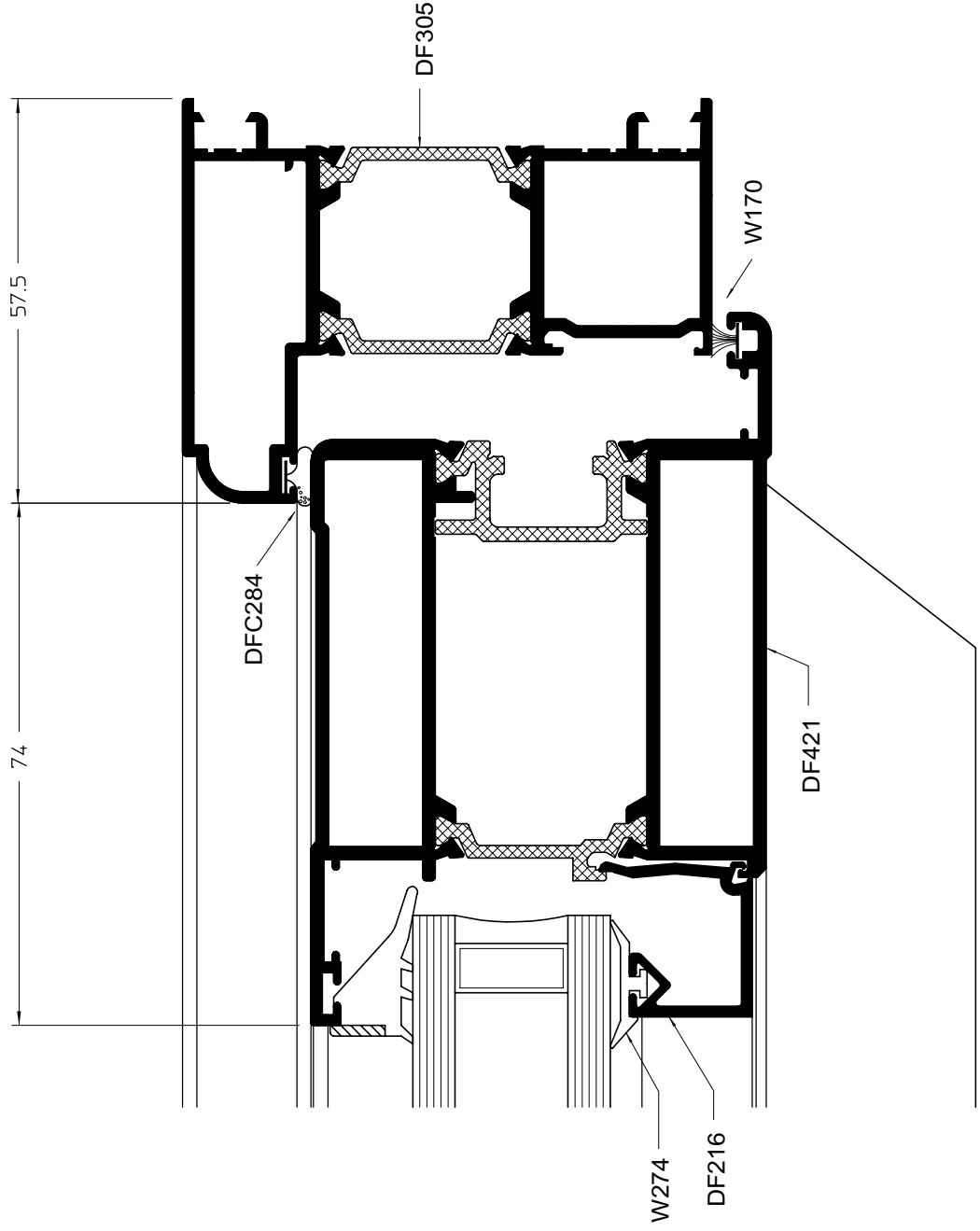
GENERAL ARRANGEMENTS

K **Open Out Glaze Out
Door Hinge Jamb**

Outerframe Options:-
DF305 Sofline (shown)
or DF310 Square

GENERAL ARRANGEMENTS

L Open Out Glaze Out Door Lock Jamb

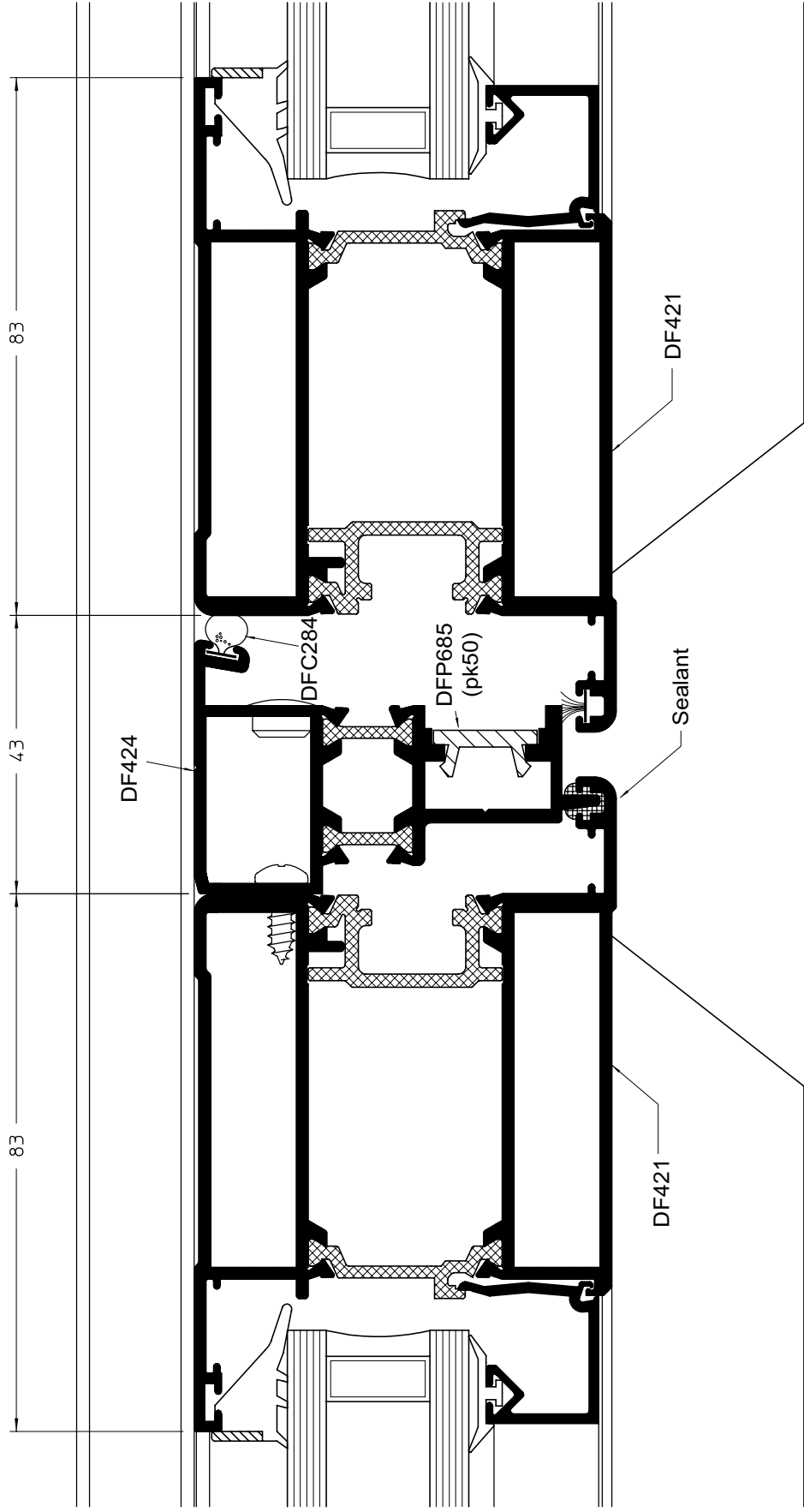


Outerframe Options:-
DF305 Sofline (shown)
or DF310 Square

DUALFRAME 75mm HP Entrance Door

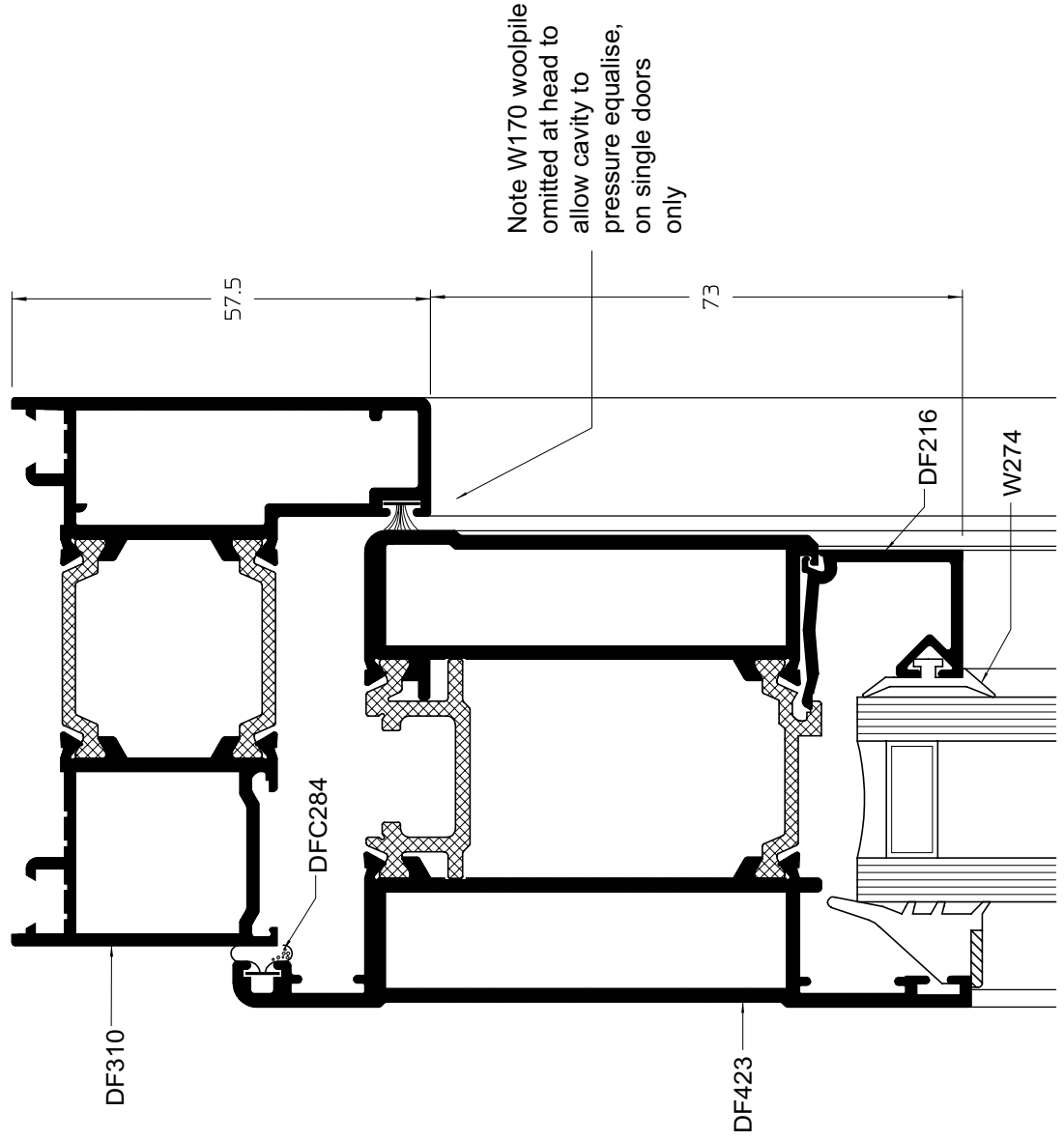
GENERAL ARRANGEMENTS

M **Open Out Glaze Out Door Meeting Stiles (RH Master)**



G **Open In Glaze Out**
Door Head

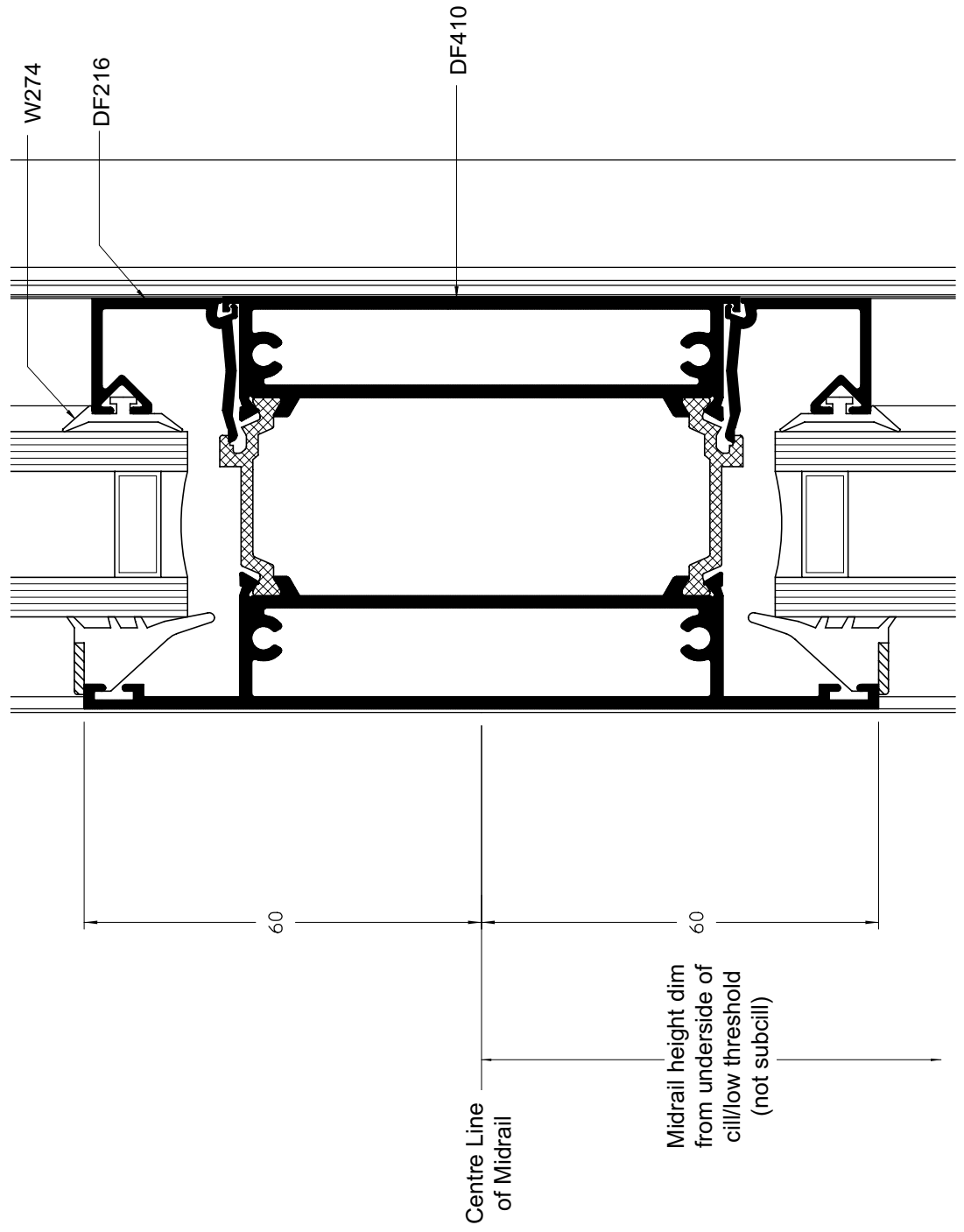
Outerframe Options:-
DF305 Softline or
DF310 Square (shown)



DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

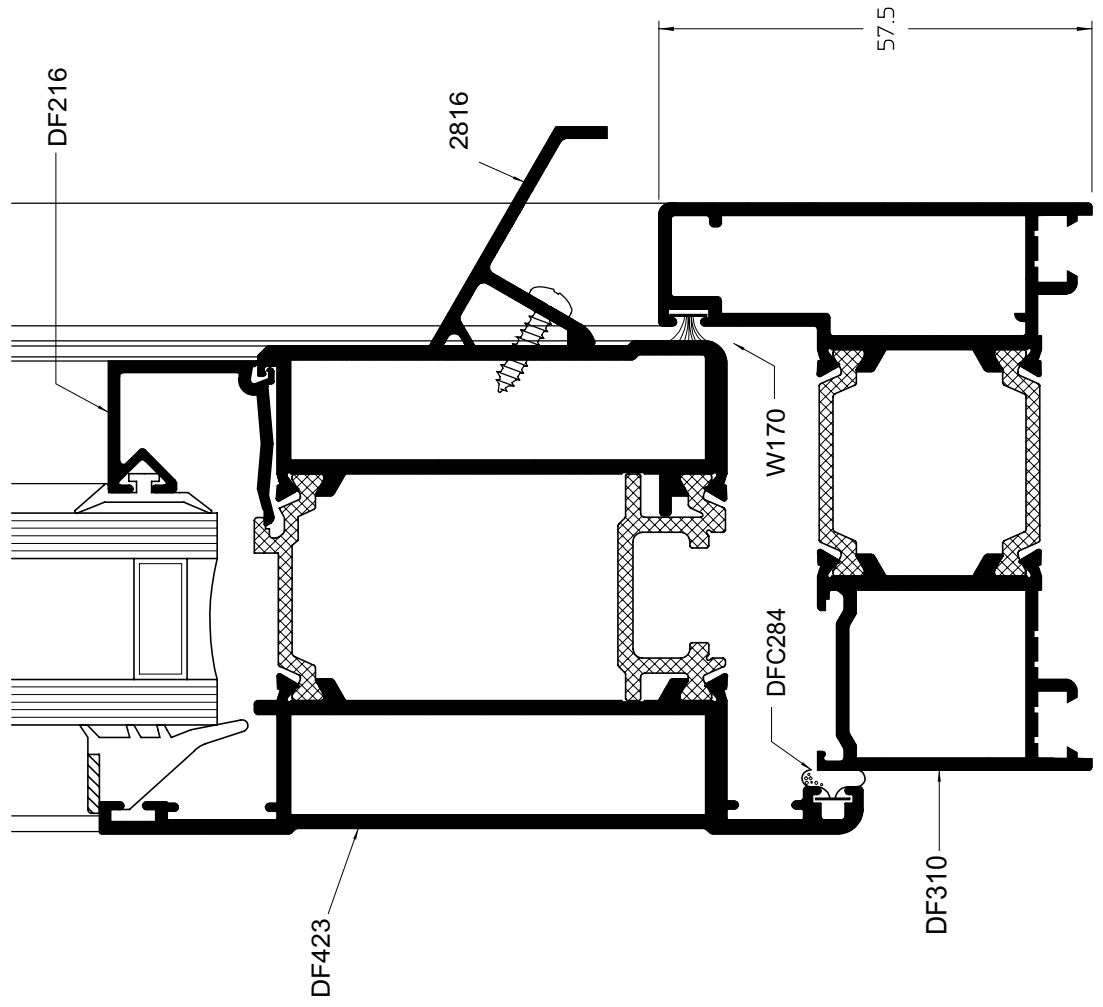
H

**Open In Glaze Out
Door Midrail**


GENERAL ARRANGEMENTS

J **Open In Glaze Out**
Door Cill

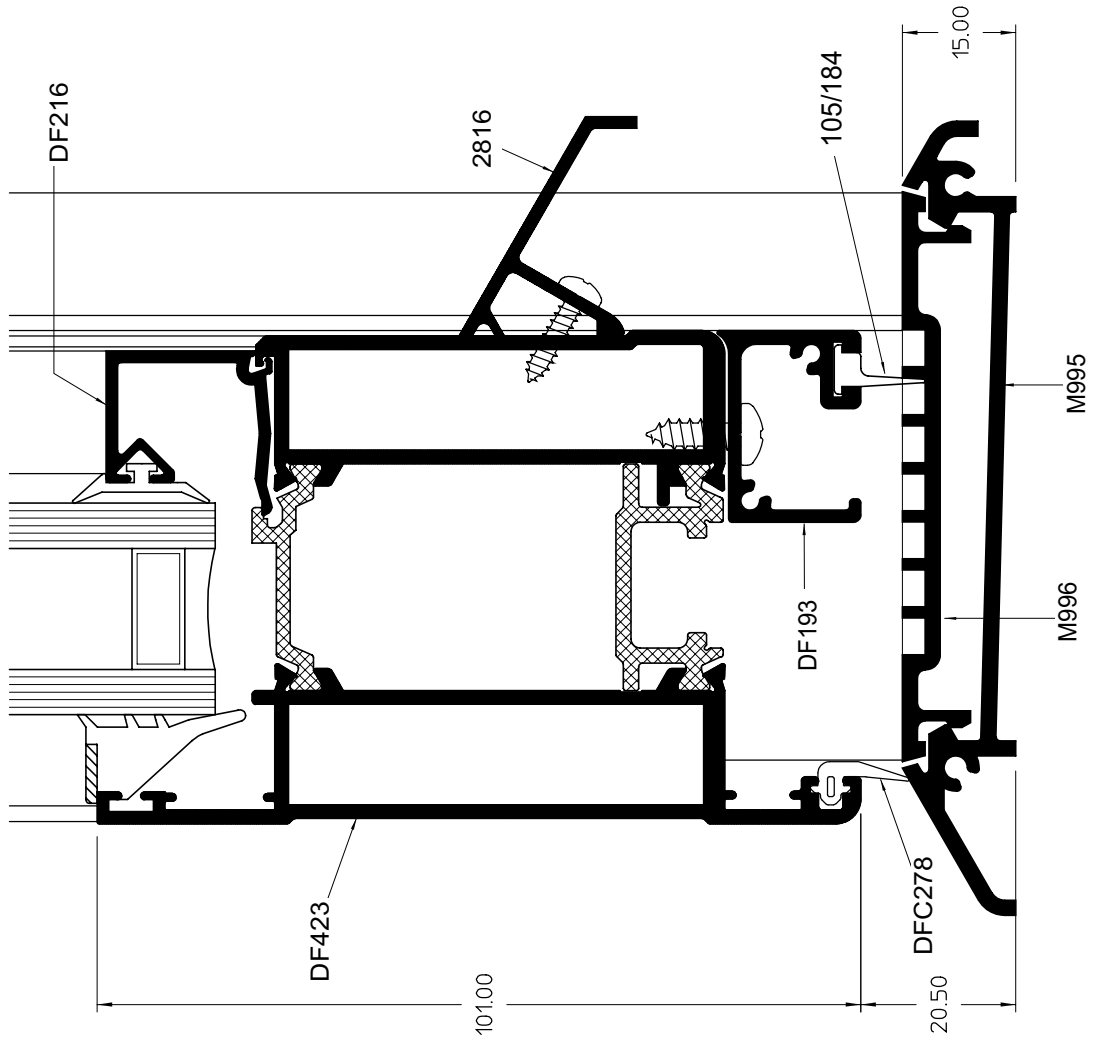
Outerframe Options:-
DF305 Softline or
DF310 Square (shown)



DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

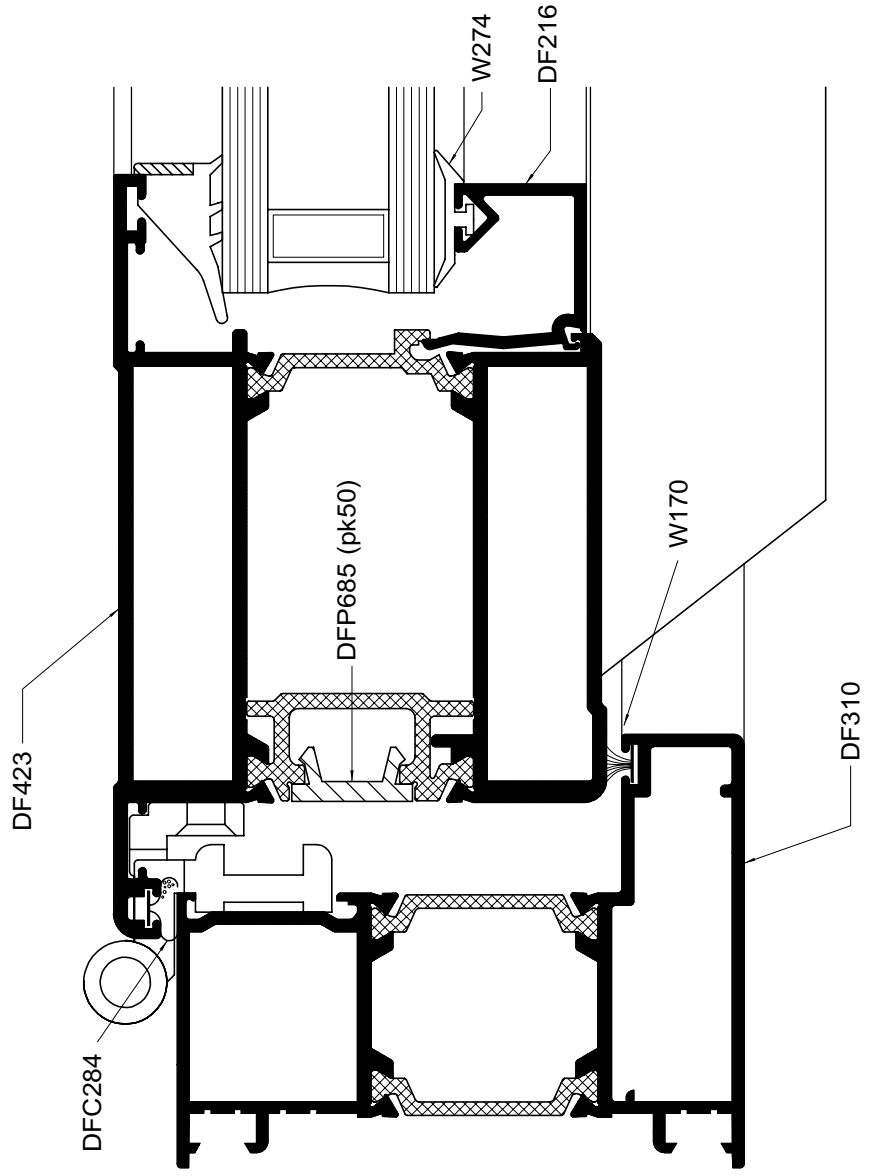
J **Open In Glaze Out**
Low Threshold



GENERAL ARRANGEMENTS

K **Open In Glaze Out
Door Hinge Jamb**

Outerframe Options:-
DF305 Softline or
DF310 Square (shown)

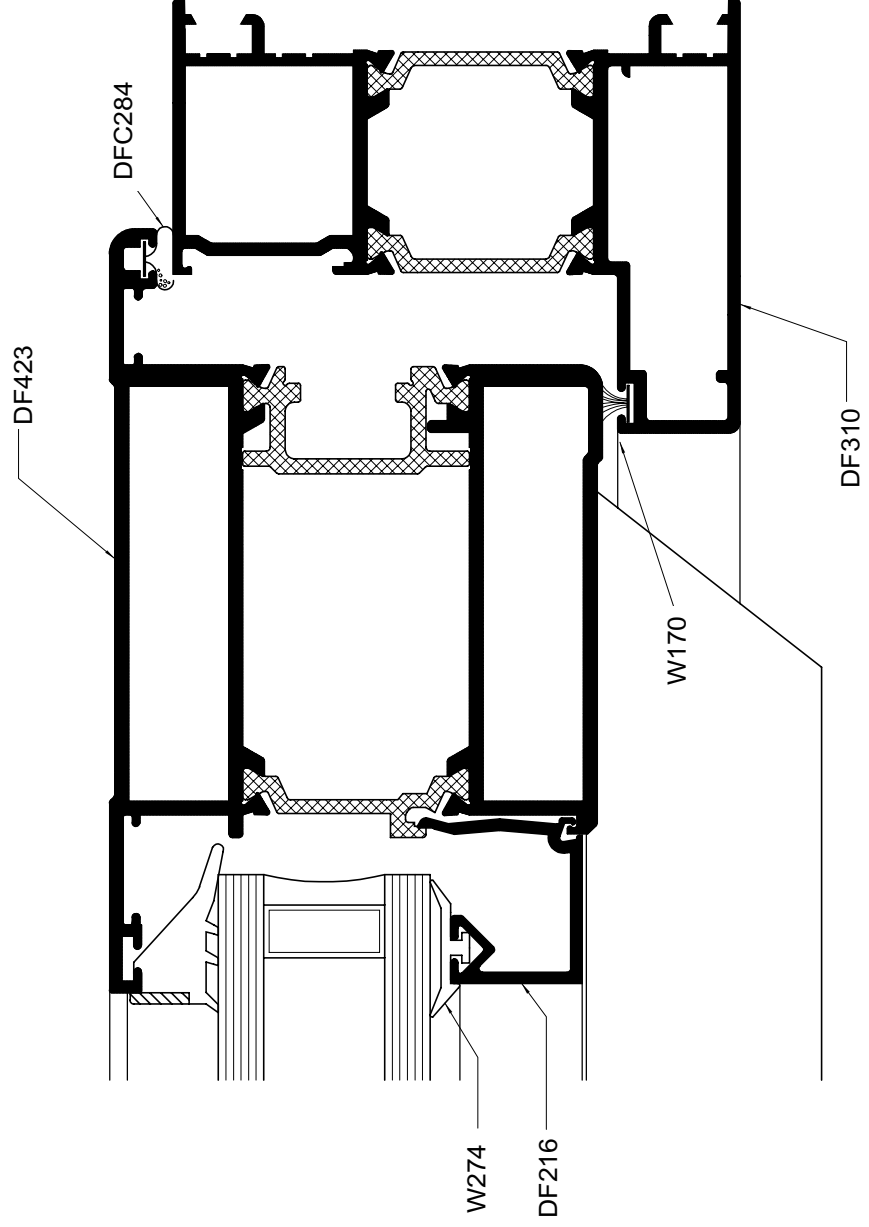


DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

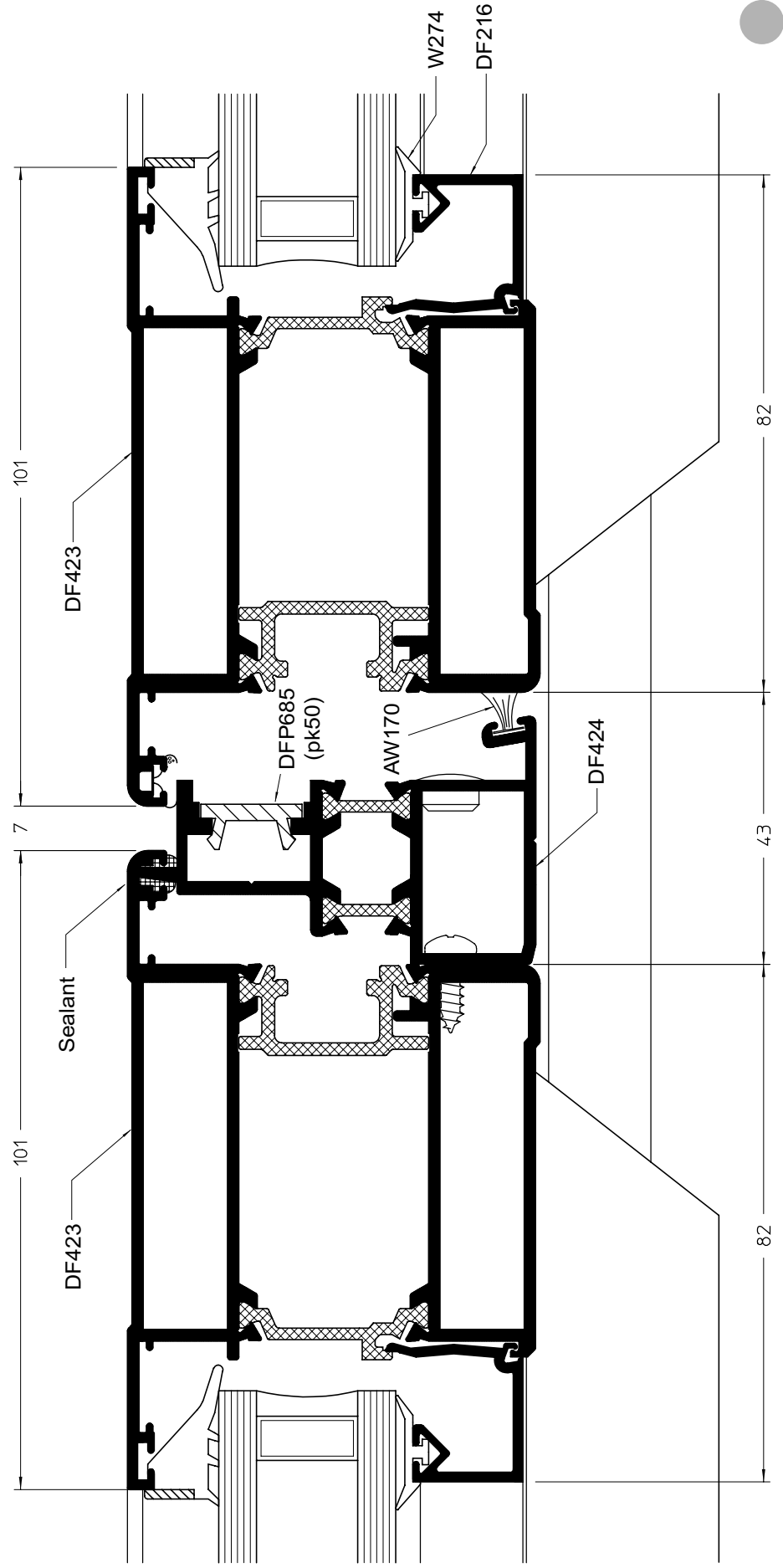
**Open In Glaze Out
Door Lock Jamb**

Outerframe Options:-
DF305 Softline or
DF310 Square (shown)



GENERAL ARRANGEMENTS

M **Open In Glaze Out Door Meeting Stiles (RH Master)**



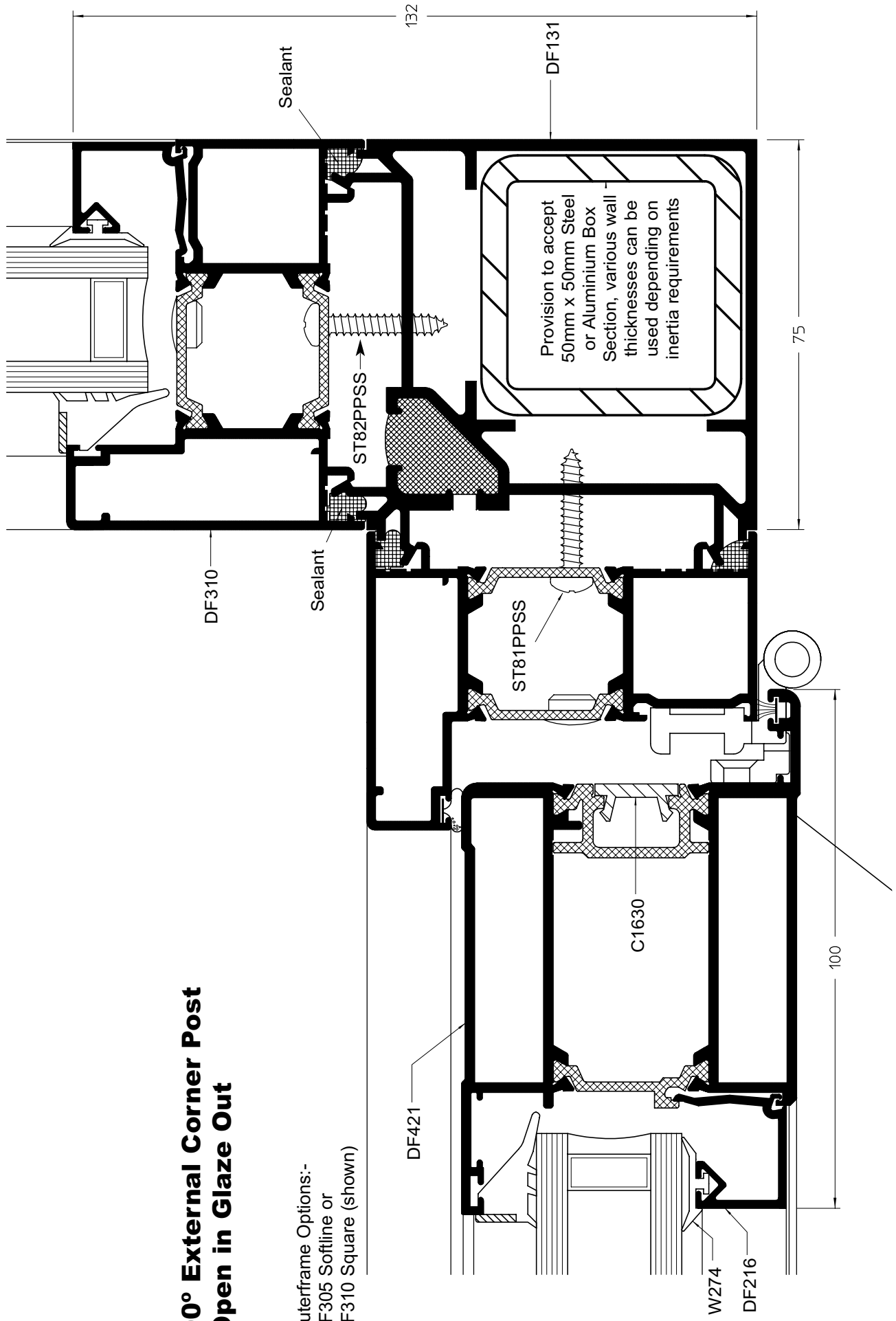
DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

**90° External Corner Post
Open in Glaze Out**

Outerframe Options:-

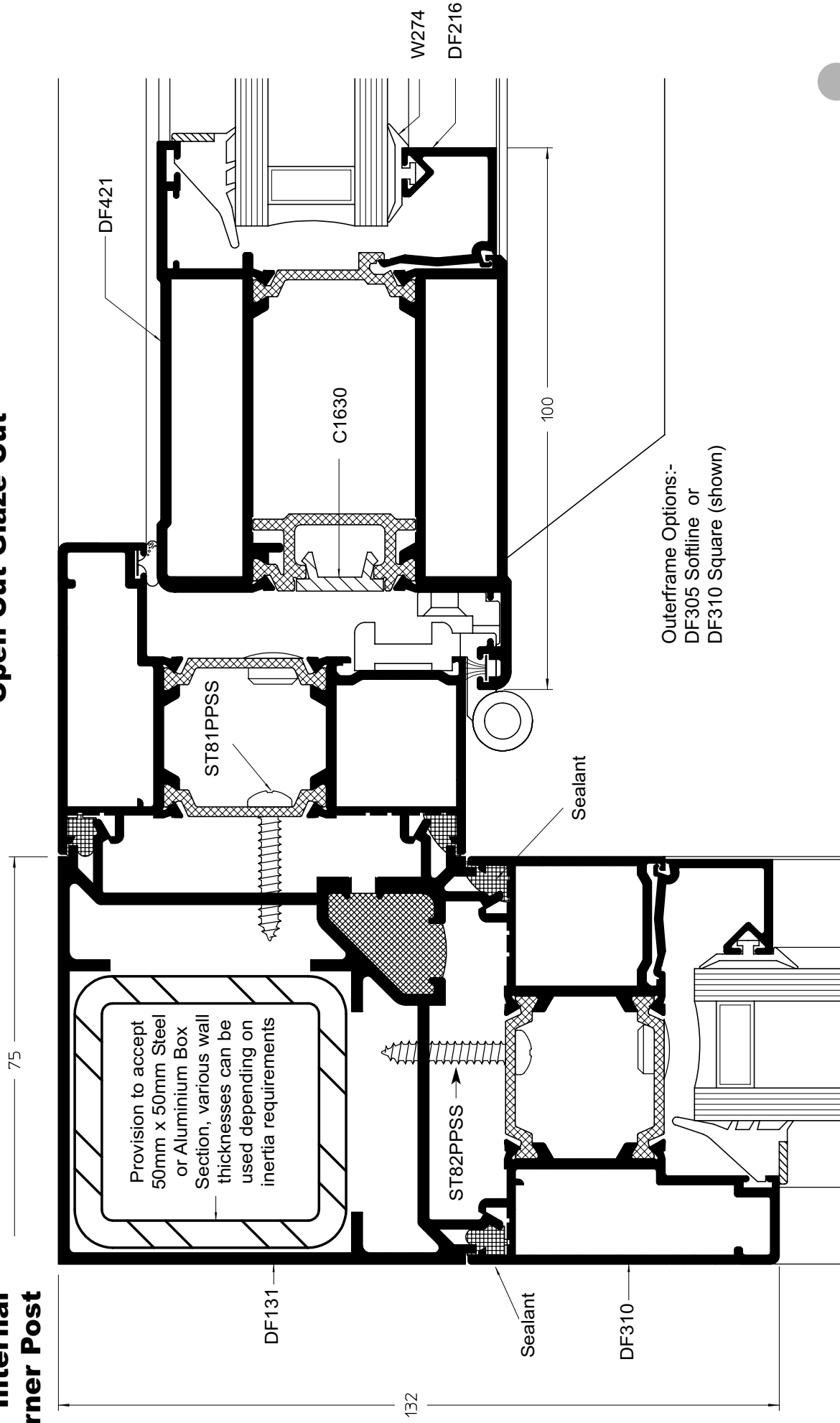
- DF305 Softline or
- DF310 Square (shown)



GENERAL ARRANGEMENTS

90° Internal Corner Post

Open Out Glaze Out

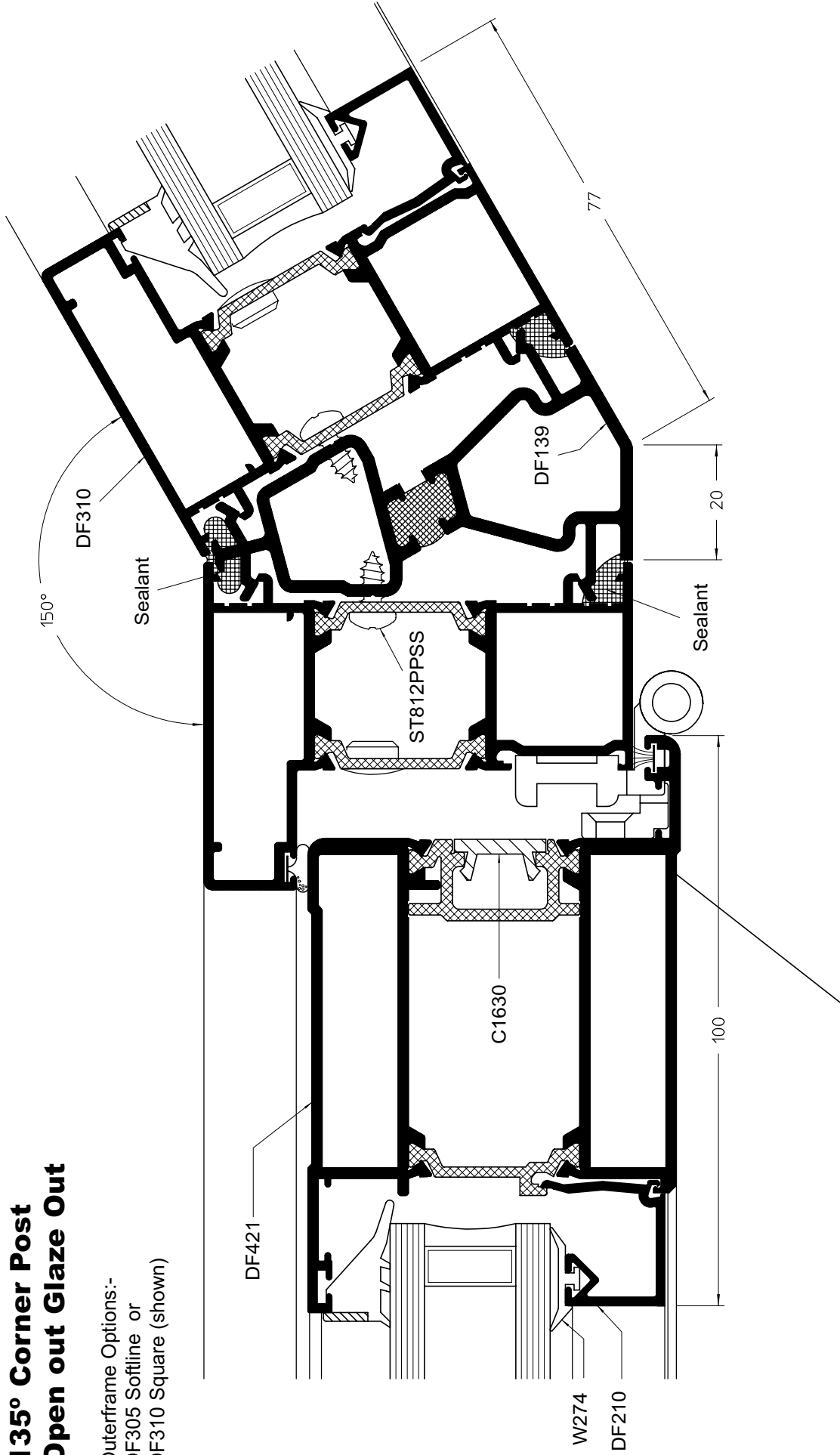


DUALFRAME 75mm HP Entrance Door

GENERAL ARRANGEMENTS

**135° Corner Post
Open out Glaze Out**

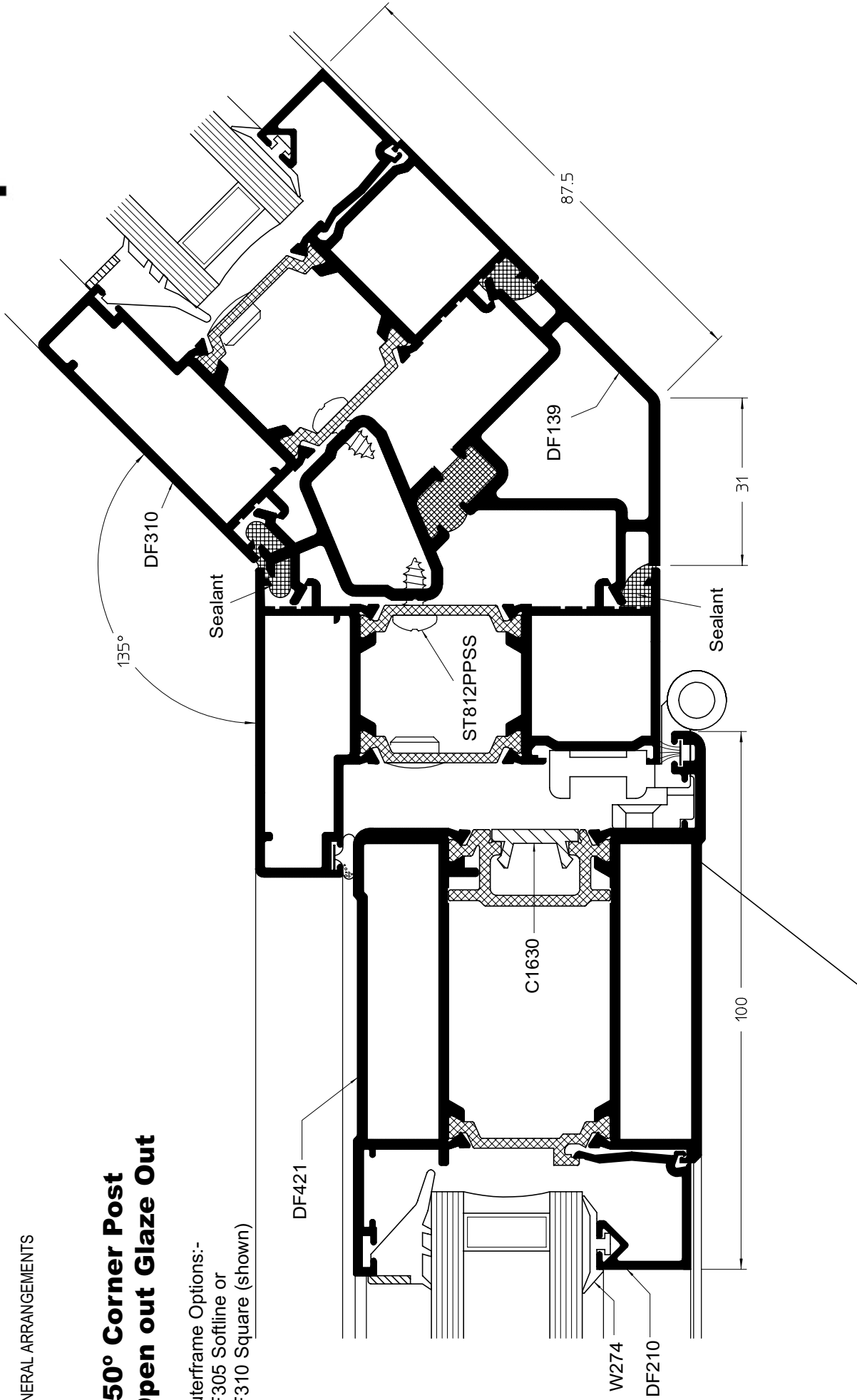
Outerframe Options:-
DF305 Sofline or
DF310 Square (shown)



150° Corner Post Open out Glaze Out

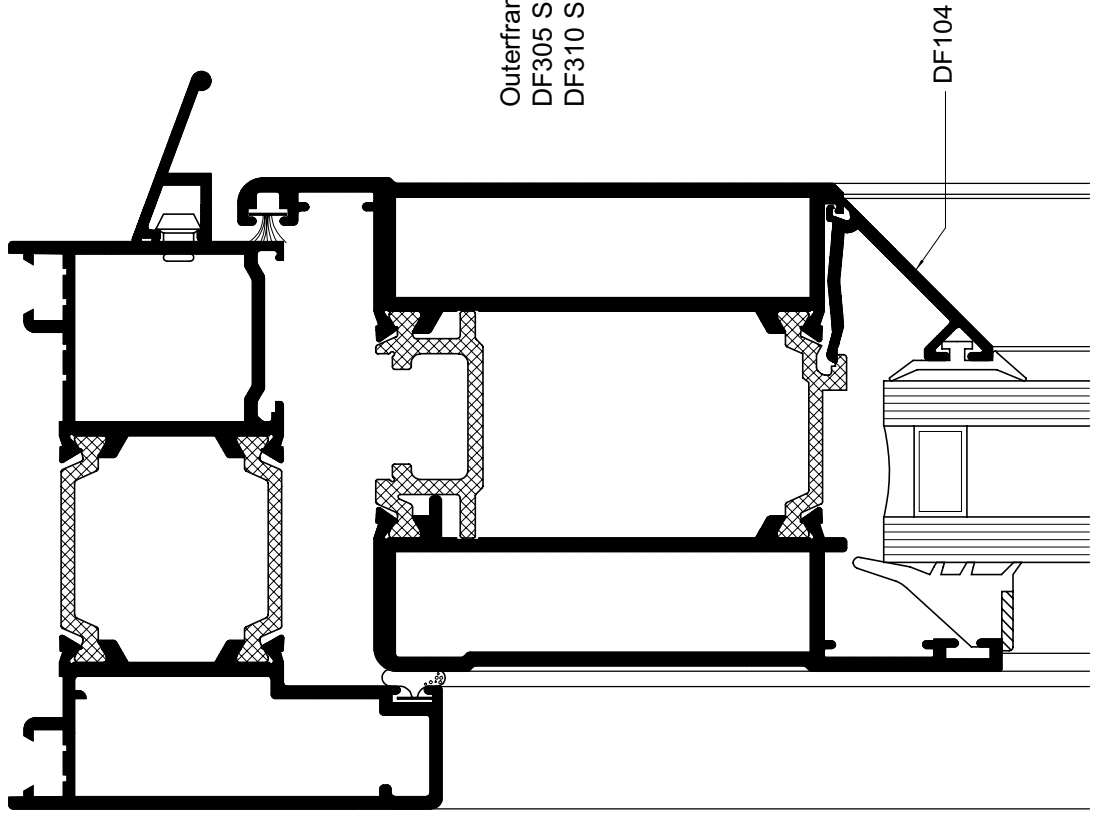
Outerframe Options:-
DF-305 Sofline or
DF-310 Square (shown)

sapa:



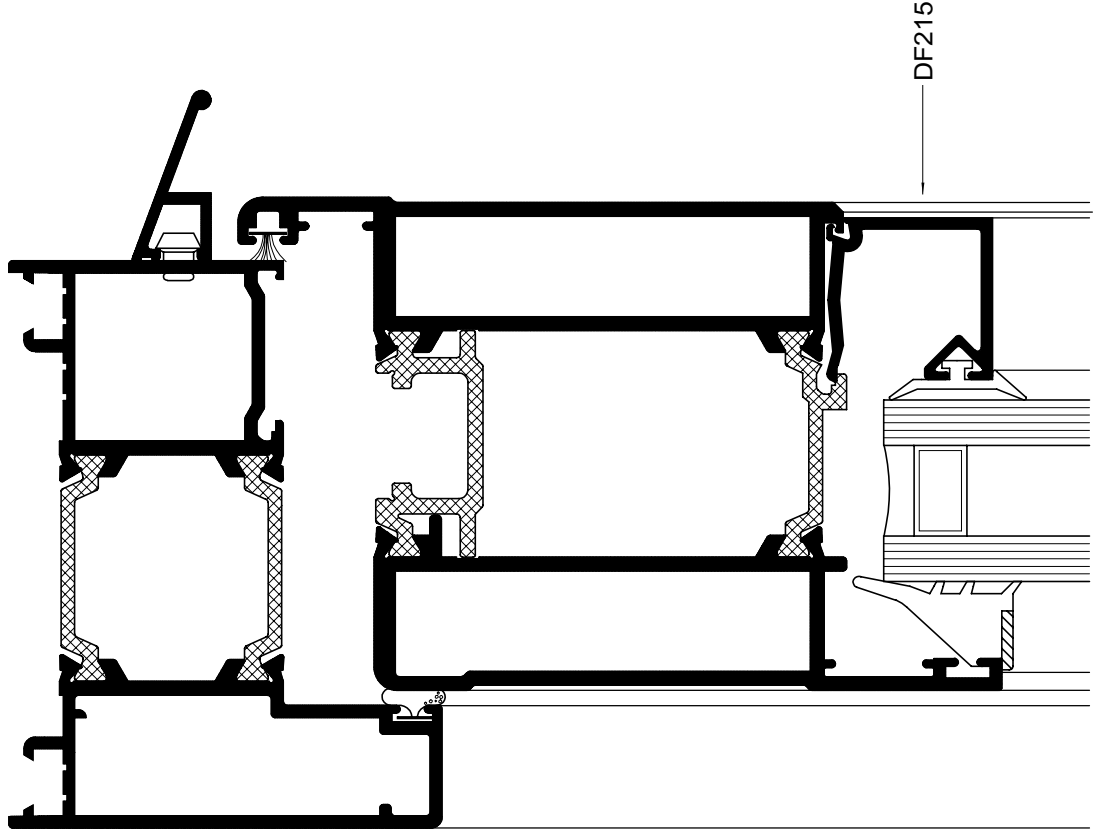
sapa:

24mm Glazing Bevelled Bead Option

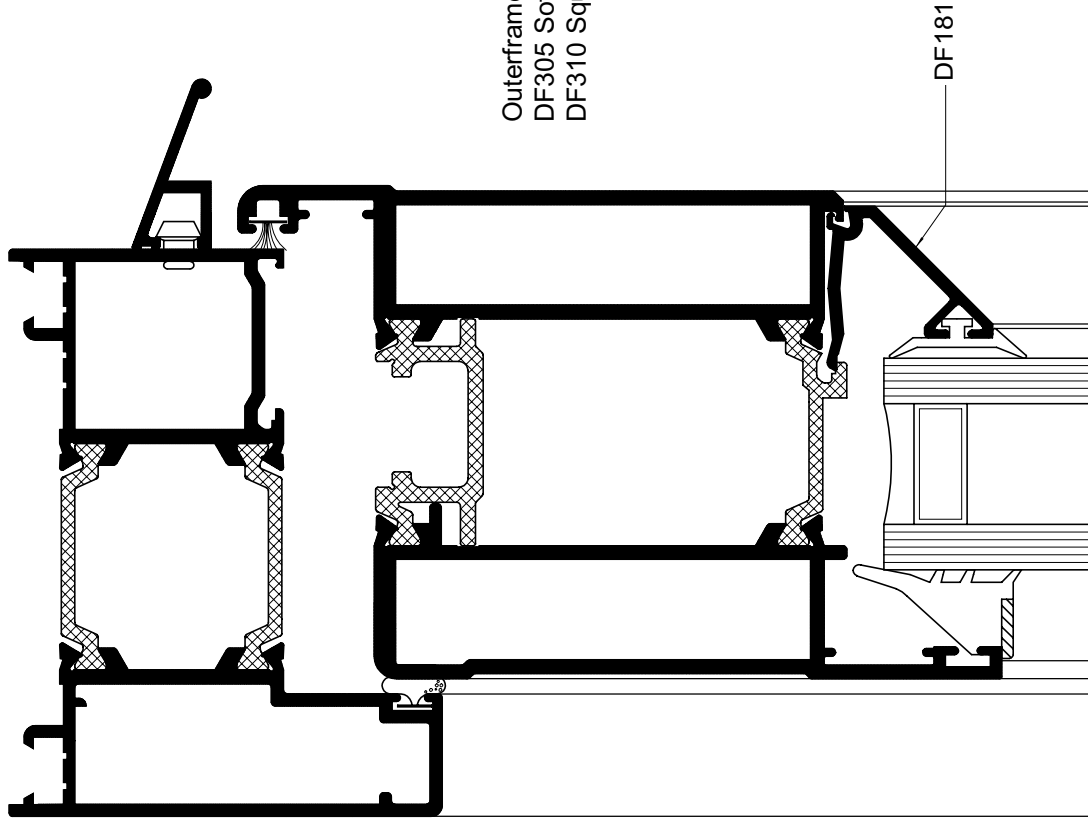


Outerframe Options:-
DF305 Softline or
DF310 Square (shown)

24mm Glazing Square Bead Option

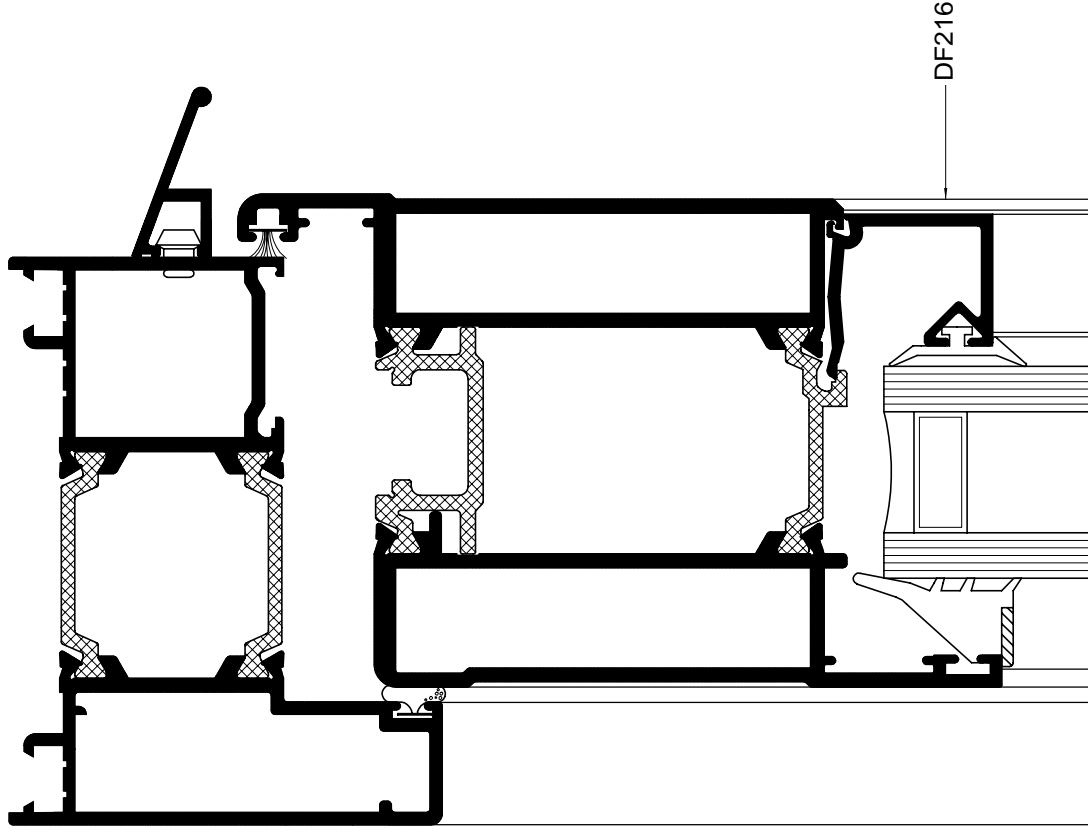


28mm Glazing Bevelled Bead Option



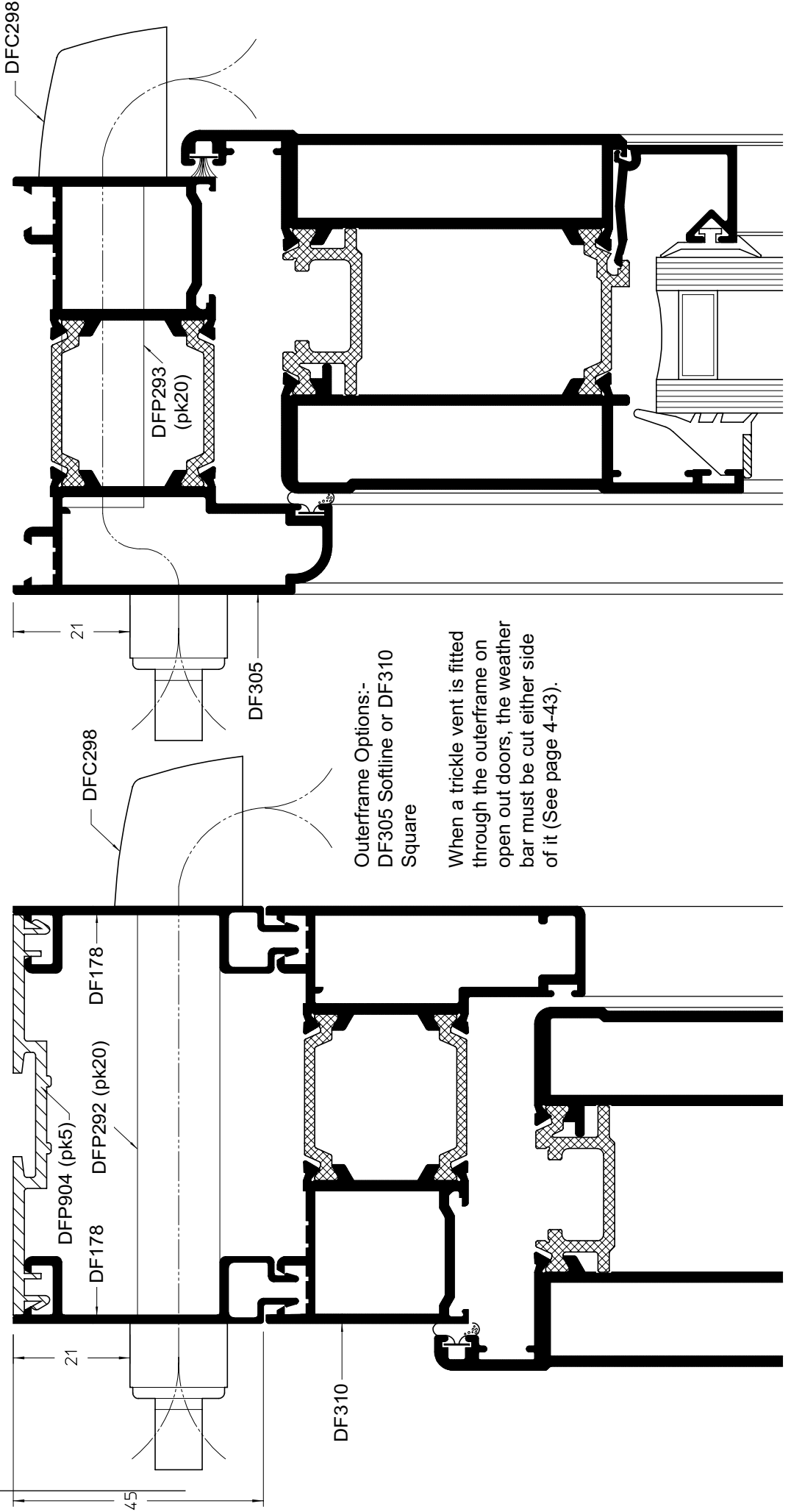
Outerframe Options:-
DF305 Softline or
DF310 Square(shown)

28mm Glazing Square Bead Option



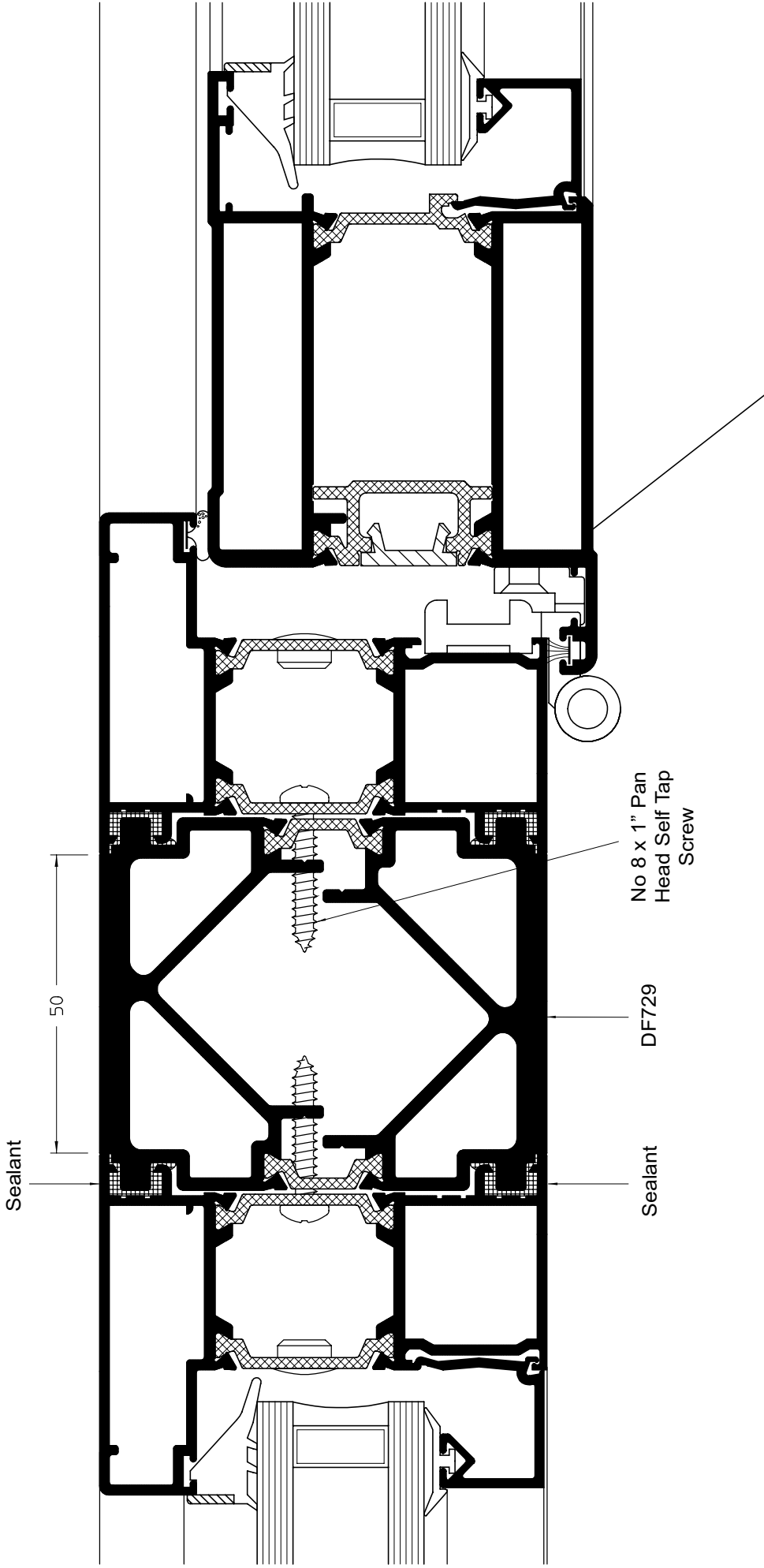
Trickle Vent Through 45mm Extender (Open In/Out)

Trickle Vent Through Head (Open Out Only)



GENERAL ARRANGEMENTS

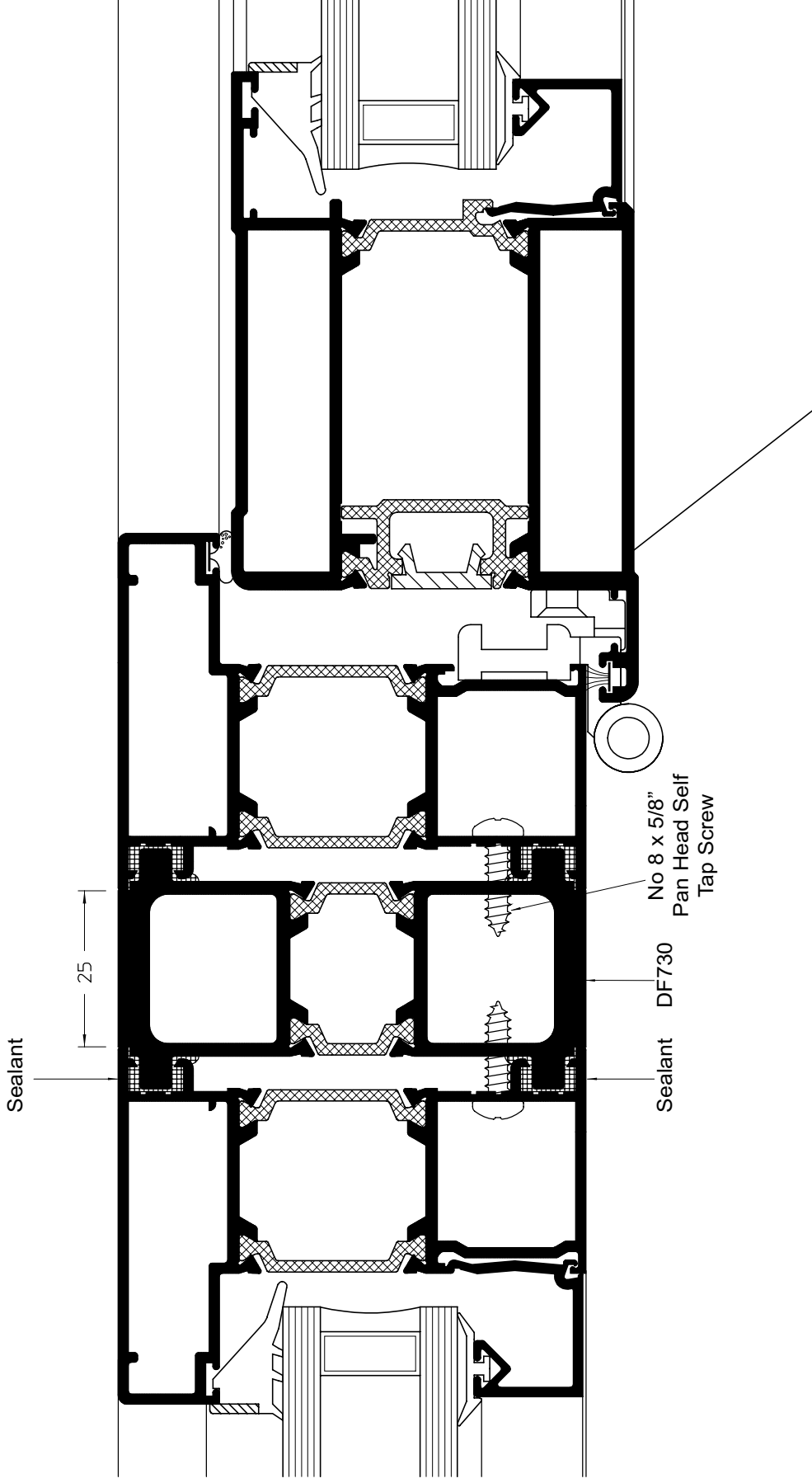
50mm In-Line Heavy Duty Post



DUALFRAME 75mm HP Entrance Door

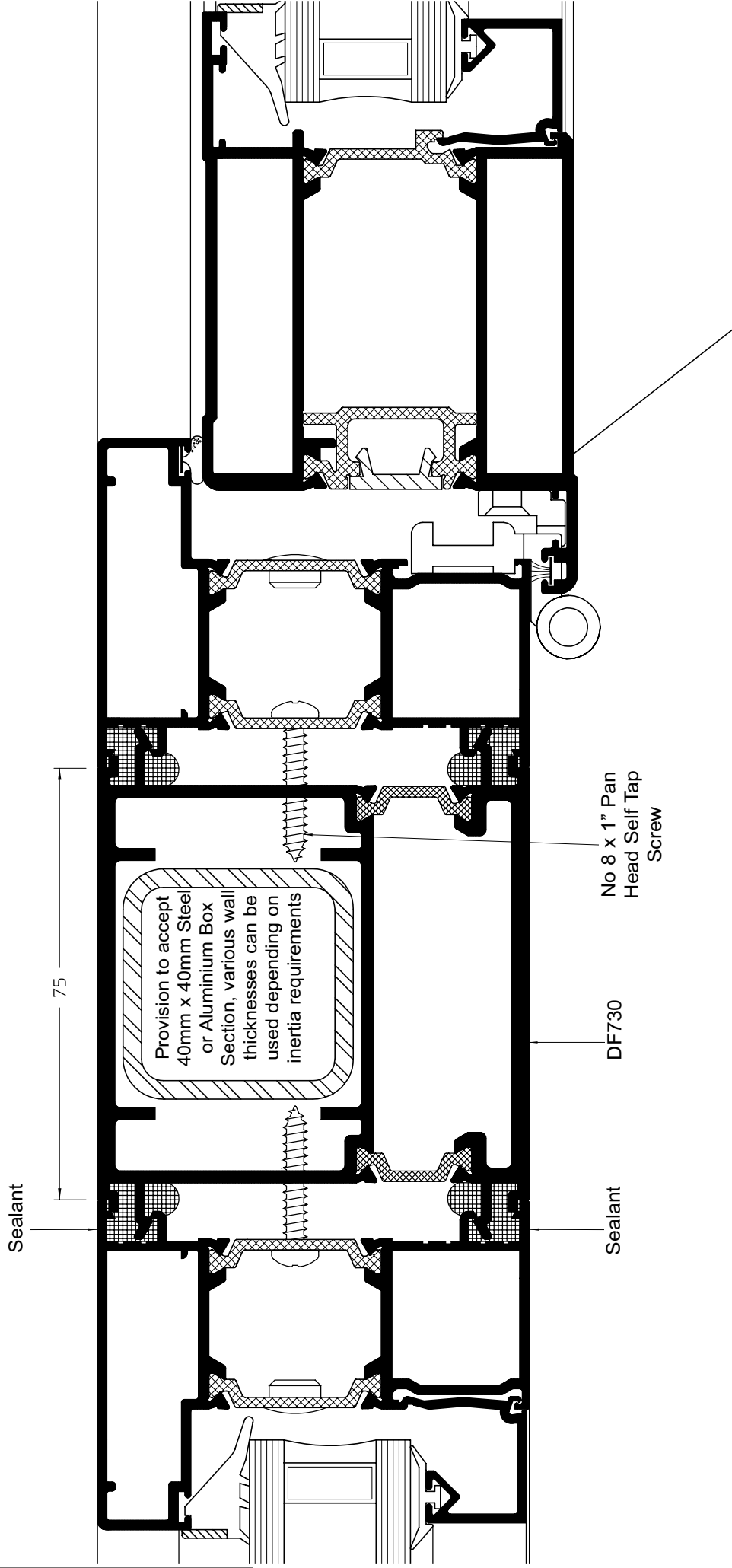
GENERAL ARRANGEMENTS

25mm Heavy Duty Coupler



GENERAL ARRANGEMENTS

75mm In-Line Post



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