

## Technical Memo No. 108

### New Sash for 424 and 748 Systems

#### Machining Simplifications and Seal Improvements

Lidco's product development team have been busy with the design of new products and looking at ways to simplify as much as possible the manufacture of our existing range of windows and doors as well as improve overall performance.

We are pleased to announce that the machining of the corners of the sash for the 424 and 748 Systems has been greatly simplified. In addition, the air infiltration performance has been significantly improved.

The machining simplification has been achieved by substituting the existing rail and stile with a new extrusion that functions both as rail and stile with a simple 45 degree mitre cut at each screwed corner, thereby eliminating a number of complex machining operations associated with the existing rail and stile connection. Two corner stakes (05-555) at each corner firmly secure the sash to keep it perfectly aligned.

The new single glazing extrusion is 400-252M and the new double glazing extrusion is 400-253M. The integrated hand grip is replaced with an easy to fit set of modern sash handles (00-057SC).

The interlock adaptor (400-533) now incorporates a full length woolpile to improve the seal between the interlocks. A new bottom rail adaptor (400-200) also incorporates a full length woolpile to significantly reduce air infiltration between the rail and sill.

Attached are the new sash details together with cutting formula and machine bar drawings A1161, A1162 and A1163.

**These new sections for both single and double glazed sashes and associated sash handles are in stock and ready to ship now.**

Please be advised that we will be now be shipping the new 400-252M in lieu of 400-252 and that it can still be used with the current rail (400-246) should you prefer to continue manufacturing the more complex corner connection. However, please be advised that this rail will be no longer be available once the current stock is finished (expected September 2012) and that single glazed sashes manufactured after this date will require the associated sash lift handles as well.

In relation to double glazed sash, for those who wish to continue with the current manufacturing corner detail, we still have considerable quantities of the current stile (400-253) and rail (400-247).

As the cutting formula and part numbers will change we are in the process of updating our technical information as well as Windowmaker and V6. The revised databases and technical manuals will be available shortly.

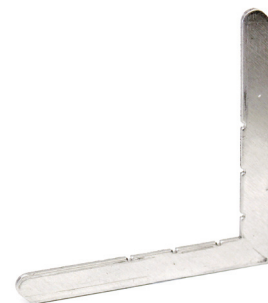
Should you have any queries please don't hesitate to contact our technical office on 1300 663 848 or [techsupport@lidco.com.au](mailto:techsupport@lidco.com.au).



New double hung window sash



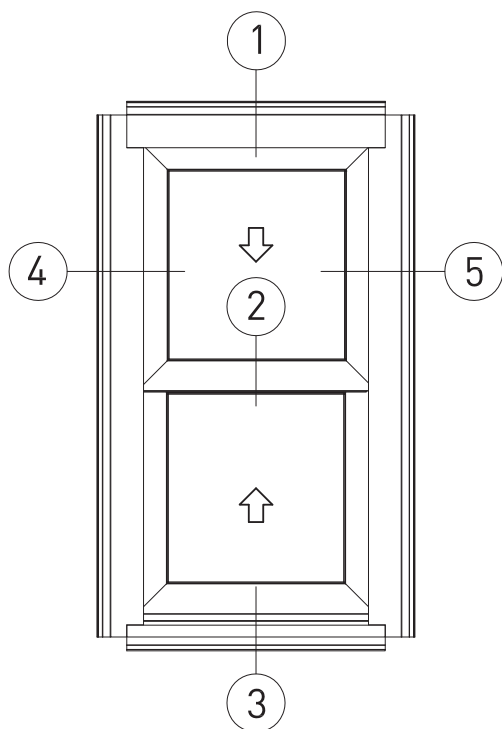
00-057SC Sash Lift Handle (incl screws)  
Pack of 2 per window sash



05-555 Corner Stake  
8 quantity per sash required

## 424 System – Typical Configuration

Not to scale



1

2

3

### CUTTING FORMULA

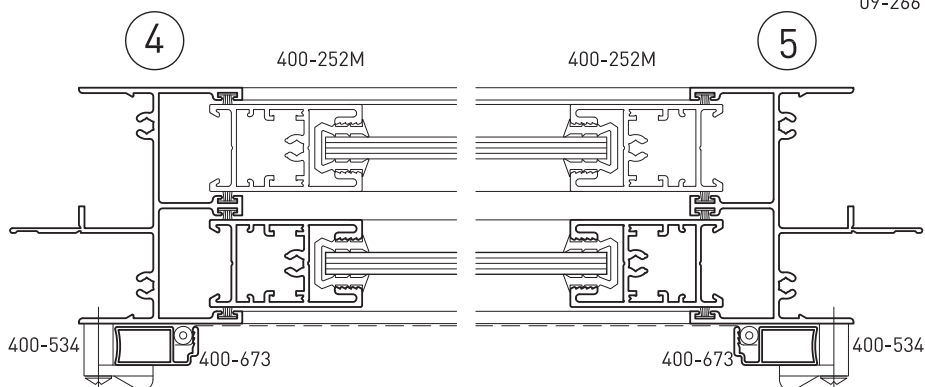
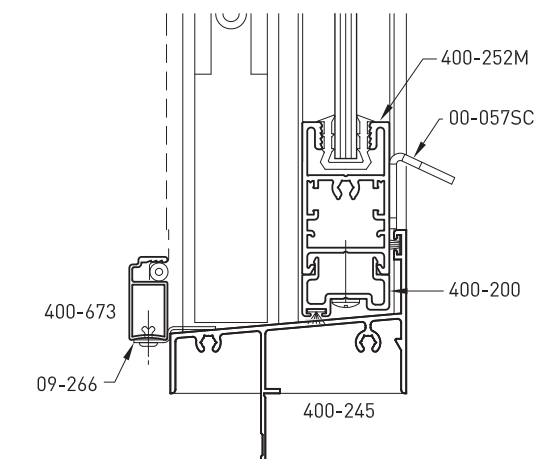
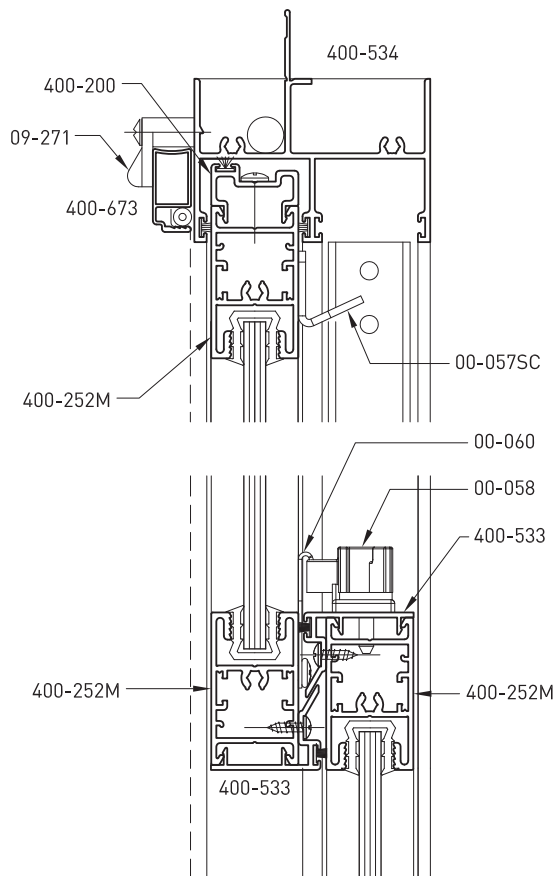
Mitred Cut Sash Vertical Stiles (400-252M or 400-253M) = FH/2 - 14  
 Mitred Cut Sash Horizontal Rails (400-252M or 400-253M) = FW - 72  
 Sash Adaptor (400-200) = FW - 78  
 Interlock Adaptor (400-533) = FW - 78

### SINGLE GLAZED

Glass Height = FH/2 - 78  
 Glass Width = FW - 136

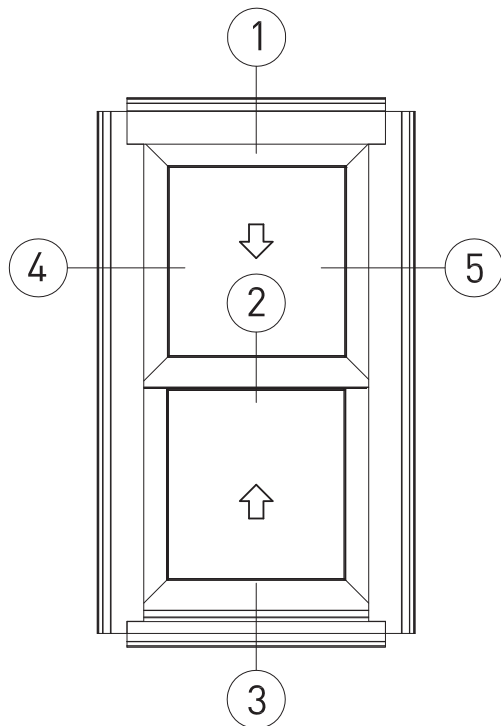
### DOUBLE GLAZED

Glass Height = FH/2 - 74  
 Glass Width = FW - 132



## 748 System – Typical Configuration

Not to scale



### CUTTING FORMULA

Mitred Cut Sash Vertical Stiles (400-252M or 400-253M) = FH/2 - 15

Mitred Cut Sash Horizontal Rails (400-252M or 400-253M) = FW - 82

Sash Adaptor (400-200) = FW - 88

Interlock Adaptor (400-533) = FW - 88

### SINGLE GLAZED

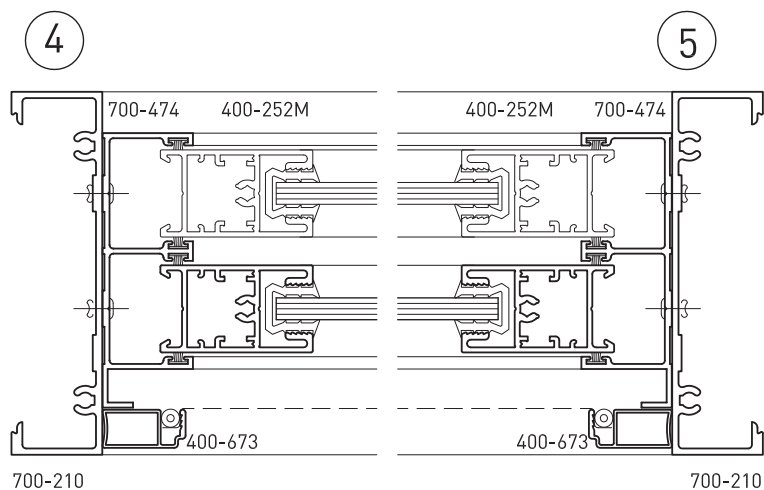
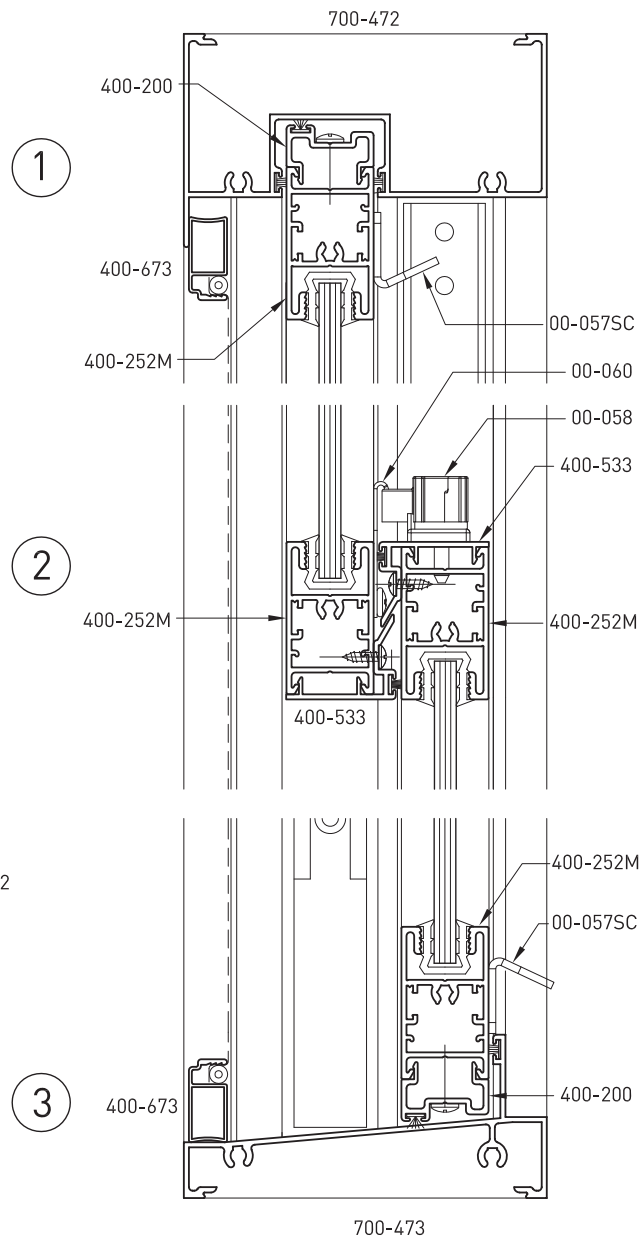
Glass Height = FH/2 - 79

Glass Width = FW - 146

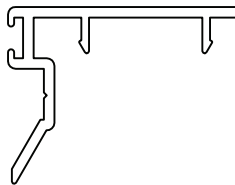
### DOUBLE GLAZED

Glass Height = FH/2 - 75

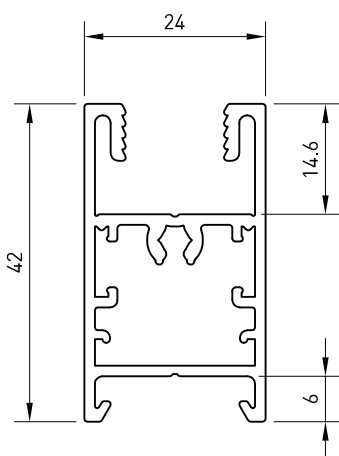
Glass Width = FW - 142



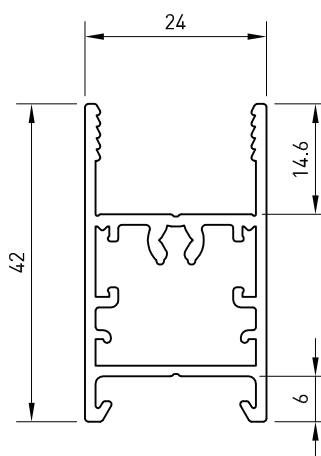
## 424/748 System – Extrusion Profiles



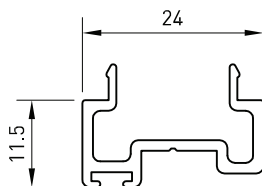
400-533  
Adaptor - Interlock  
 $I_{xx} = 7.37 \times 10^3 \text{ mm}^4$



400-252M  
Sash - Double Hung  
Window  
 $I_{xx} = 22.15 \times 10^3 \text{ mm}^4$



400-253M  
Sash - Double Hung  
Window IGU  
 $I_{xx} = 20.62 \times 10^3 \text{ mm}^4$



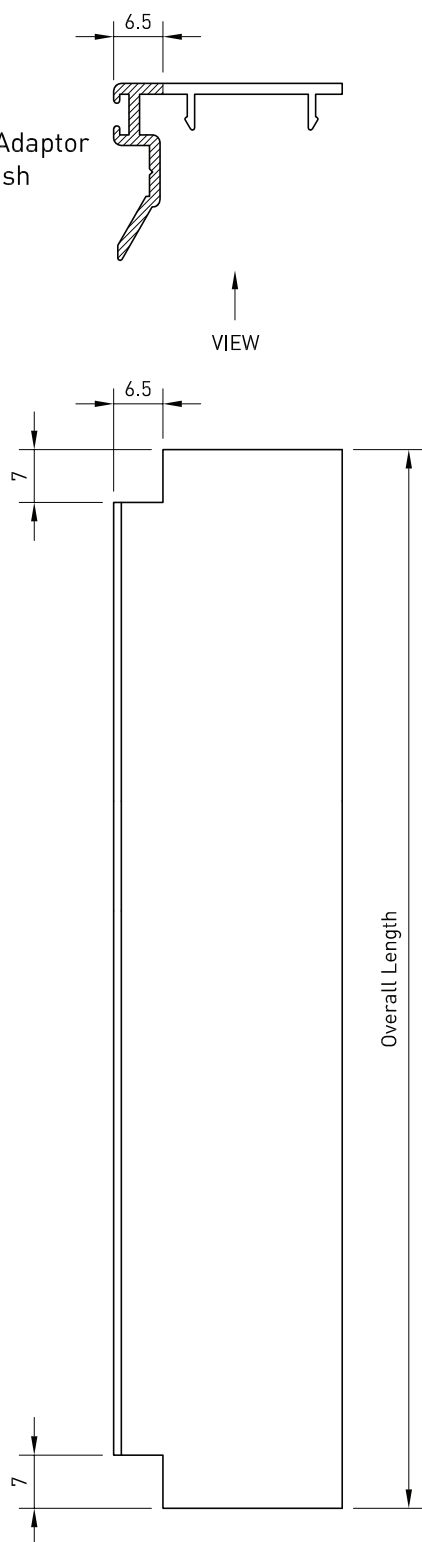
400-200  
Adaptor - Double  
Hung Rail  
 $I_{xx} = 6.62 \times 10^3 \text{ mm}^4$

## Bar Drawing A1161

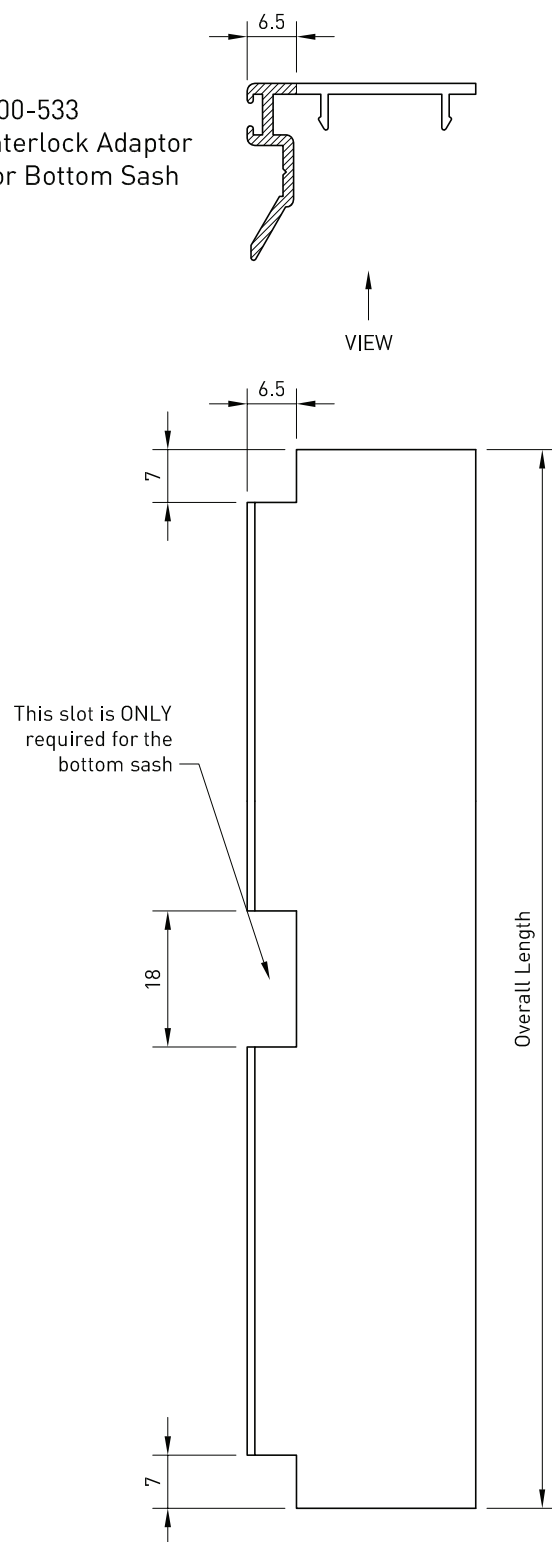
424/748 System – ADW Interlock Adaptor 400-533

Not to scale

400-533  
Interlock Adaptor  
for Top Sash



400-533  
Interlock Adaptor  
for Bottom Sash

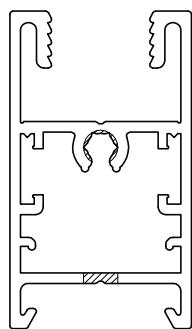


## Bar Drawing A1162

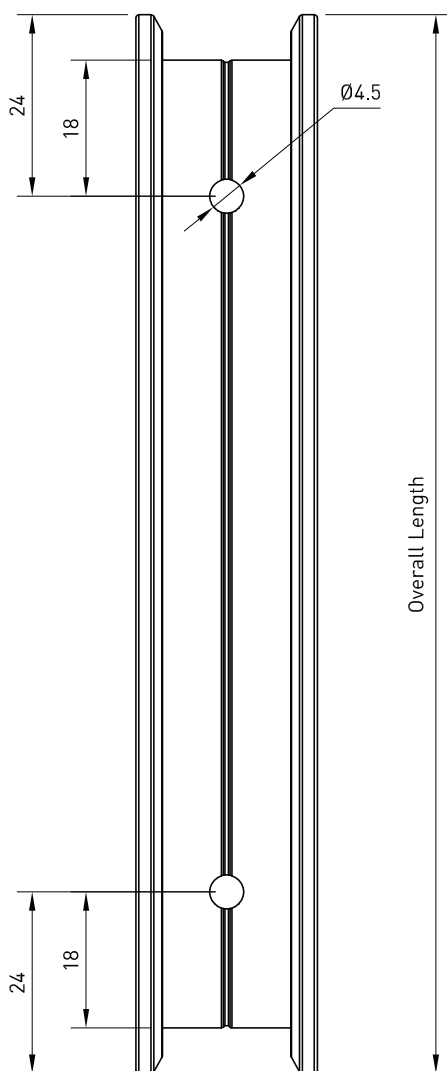
424/748 System – ADW Vertical Stile 400-252M

Not to scale

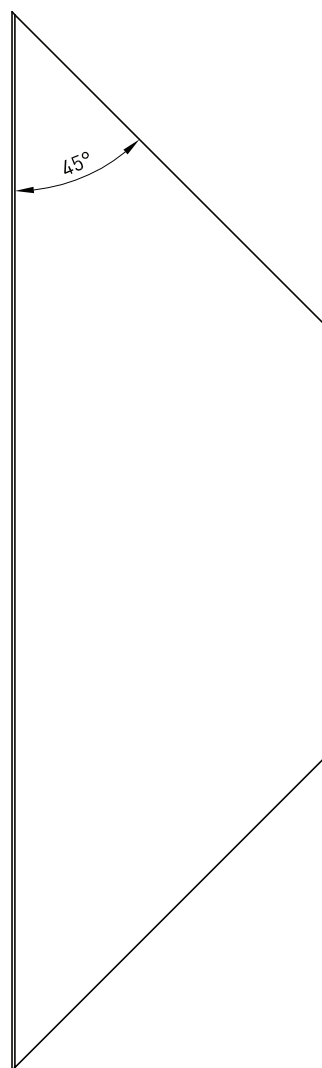
400-252M  
Vertical Stile



↑  
VIEW



← VIEW

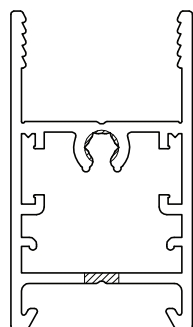


## Bar Drawing A1163

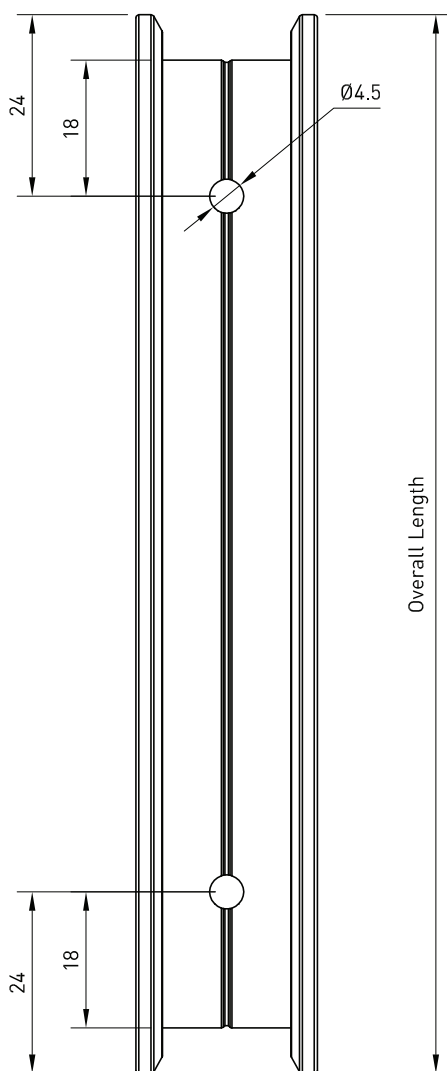
424/748 System – ADW Vertical Stile 400-253M

Not to scale

400-253M  
Vertical Stile



↑  
VIEW



← VIEW

