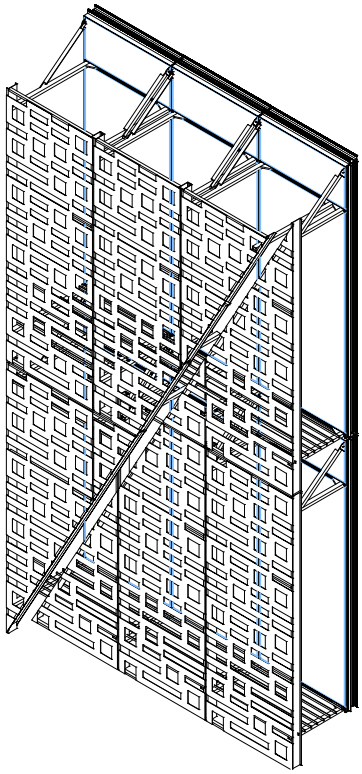
G.JAMES

SHADING SYSTEMS - ARCHITECTURAL BRIEF



An ideal solution to any external feature will protect against the weather while attached to the outside of the facade, mitigating penetrations through the facade. G.James use light weight, corrosion resistant panelized systems that are pre assembled in the factory. They are designed to easily attach to framing on site prior to facade panel install. Consideration is given to safe handling, transportation and quick fixing methods that include removal for replacement or reglazing purposes of the panel it attaches to.

There are 3 types of solar control systems:

1) Horizontal Projecting Sun Shades provide the best shading for high sun (eg on the North elevation of a building).

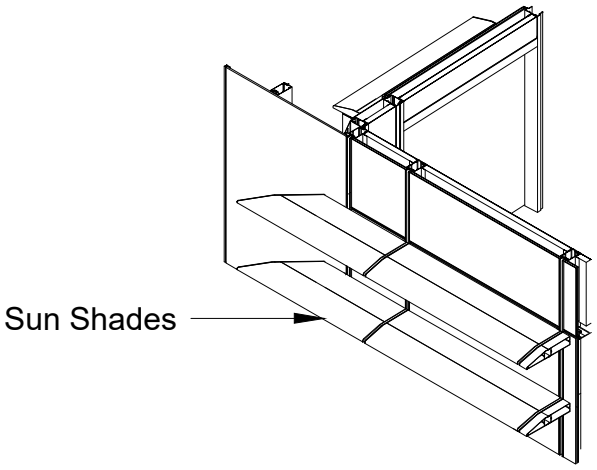
2) Vertical Projecting Sun Blades provide best shading for low sun (eg on the East or West elevation of a building).

3) Vertical Screens oriented parallel to the building facade are used for intensive shading or as an architectural feature.

Design Considerations

Horizontal Projecting Sun Shades

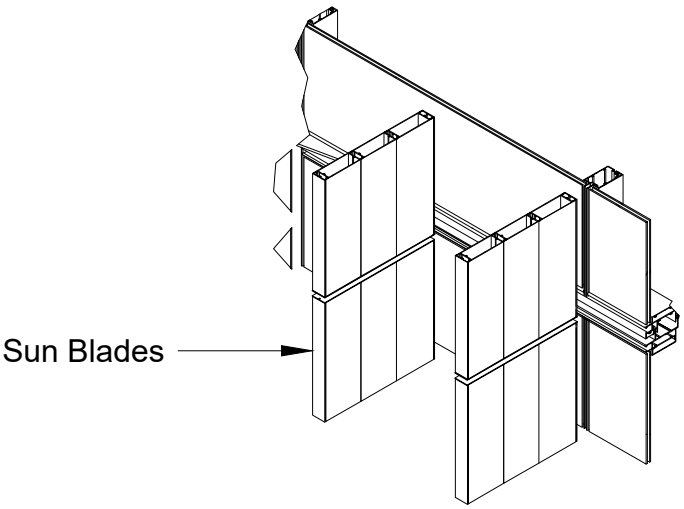
These Run Horizontally Across the Facade of a Building, as Shown Below.



See table for limitations.

Vertical Projecting Sun Blades

These Run Vertically Up a Building Facade at Specified Intervals, as per Below



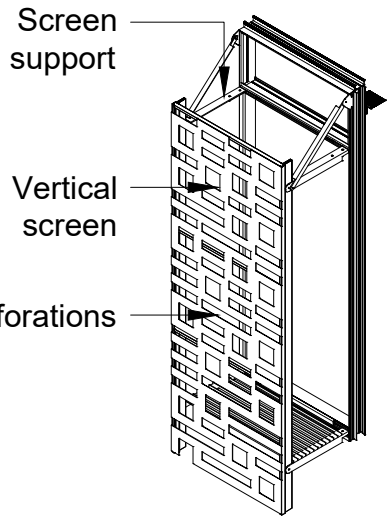
See table for limitations.

Vertical Parallel Screens

Typically constructed with a perforated aluminium screen, this type of shading system can provide significant privacy or shading from sunlight in all directions. Used intelligently, they take advantage of daylight to provide heavy visual massing to the building exterior, appearing almost solid, yet can have surprisingly minimal disruption to views from the building interior. Innovative use of these screens can create striking architectural features to buildings.

Typically these vertical parallel screens incorporate a maintenance walkway, generally 600mm wide between the façade and screen. This dictates the critical consideration for the design of its minimalist supporting structure.

The designs of these screens are generally bespoke to suit individual projects.



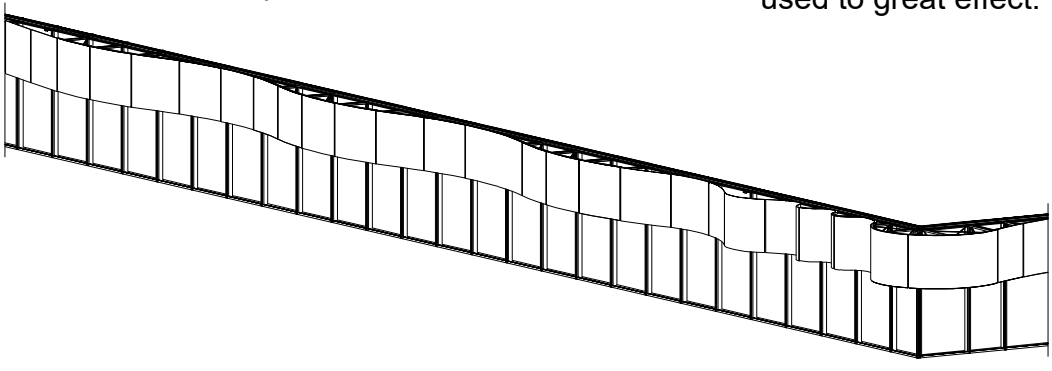
Shading Systems' Indicative Projection Limitations

	Wind loading regions of Australia		
	A. non-cyclonic (eg. Sydney/Melbourne)	B. weakened-cyclonic (eg. Brisbane)	C. & D. cyclonic (eg. Townsville/Cairns)
Horizontal Projecting Sunshades			
Free cantilevering	1200 max.	900 max.	600 max.
Diagonally braced/trussed	1800 max.	1500 max.	900 max.
Vertical Projecting Sunblades			
Vertical fixing plates into std sized mullions	600 max.	450 max.	300 max.
Vertical fixing plates into wider mullions	750 max.	600. max	400 max.
Horizontal profiled fixing brackets into transoms	1200 max.	900 max.	600 max.
Vertical Parallel Screens	* Typically these vertical screens require a 600 wide maintenance walkway and the subsequent structural as well as aesthetic considerations require bespoke design.		

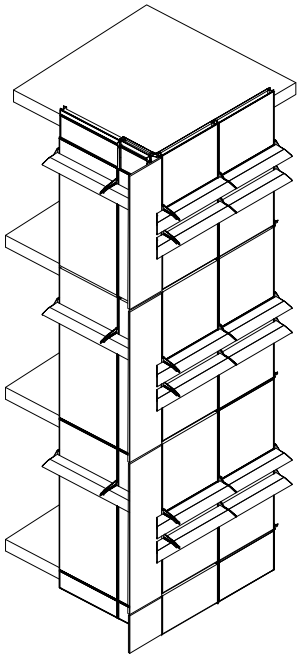
Note: These are indicative values for general guidance. Project specific wind loads and geometry may vary from these values.

Please contact G.James Commercial Contracting division to take benefit of G.James extensive experience and custom design expertise for a successful outcome with your building's specific shading system.

Vertical screens can be adapted to produce some visually stunning results as in this project, where a ribbon effect was incorporated:

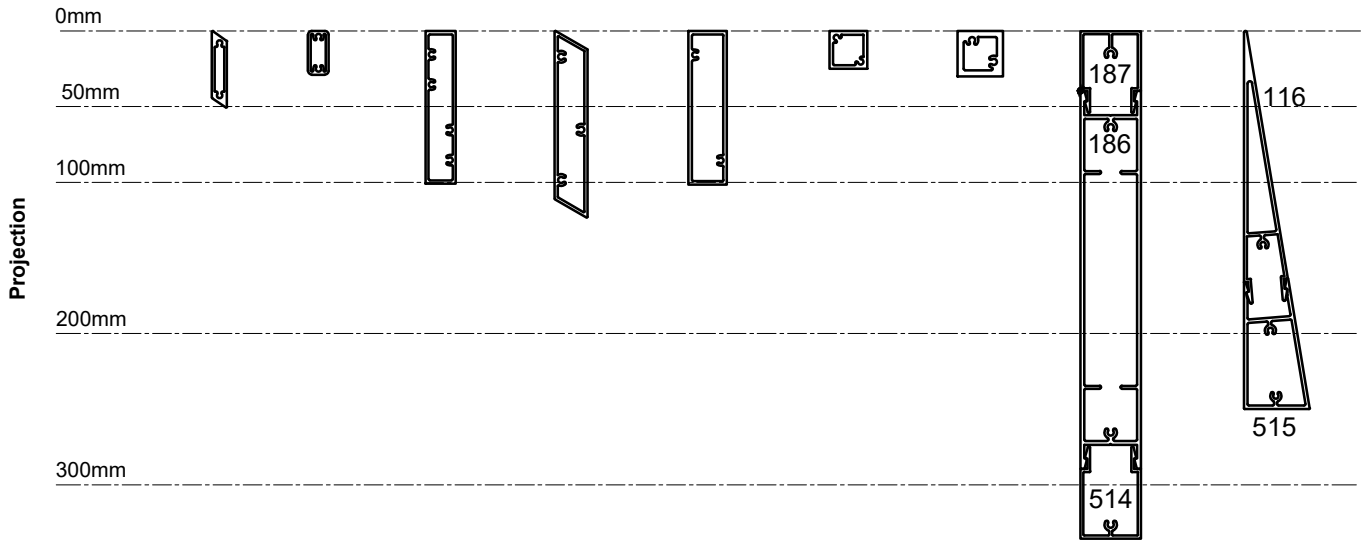


Sun shades (horizontal) > and sun blades (vertical) on the same facade can be used to great effect.

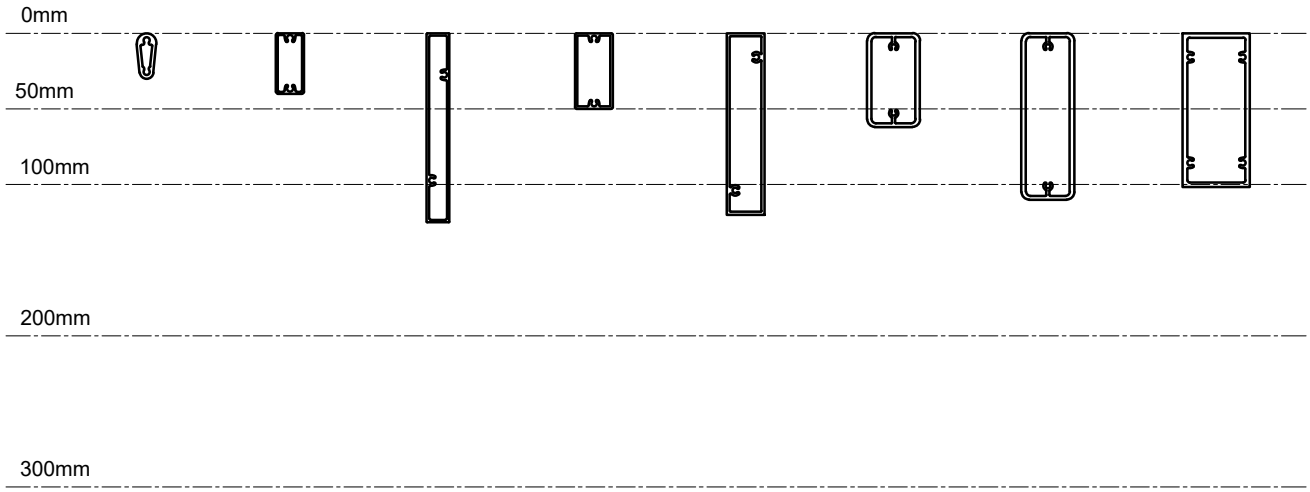


UP to 50mm WIDE SOLUTIONS

Width:	10mm	14mm	20mm	22mm	25mm	25mm	30mm	40mm	43.5mm
	415-152	415-980	415-140	415-153	425-026	775-171	512-018	775-186 775-187 775-514	775-116 775-515

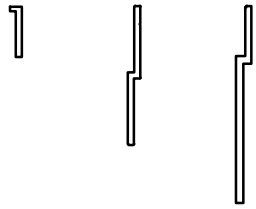


Width:	13mm	18.6mm	15mm	25mm	25mm	35mm	35mm	44.5mm
	546-303	550-596	775-028	983-143	775-114	996-085	996-087	475-617



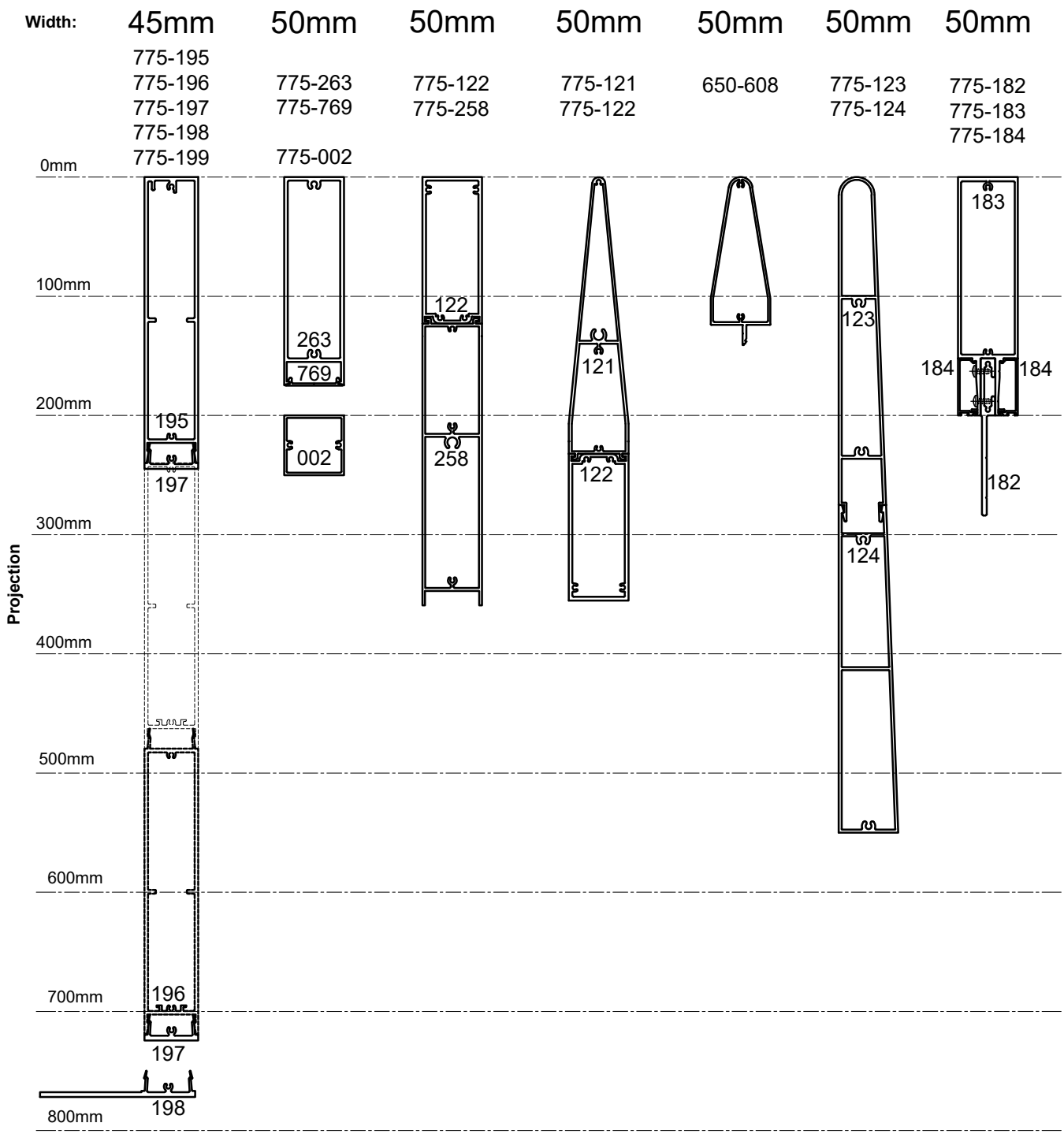
SUNSHADE BRACKETS

546-074 546-171 775-368



Note: Check stock levels and availability prior to use

UP to 50mm WIDE SOLUTIONS



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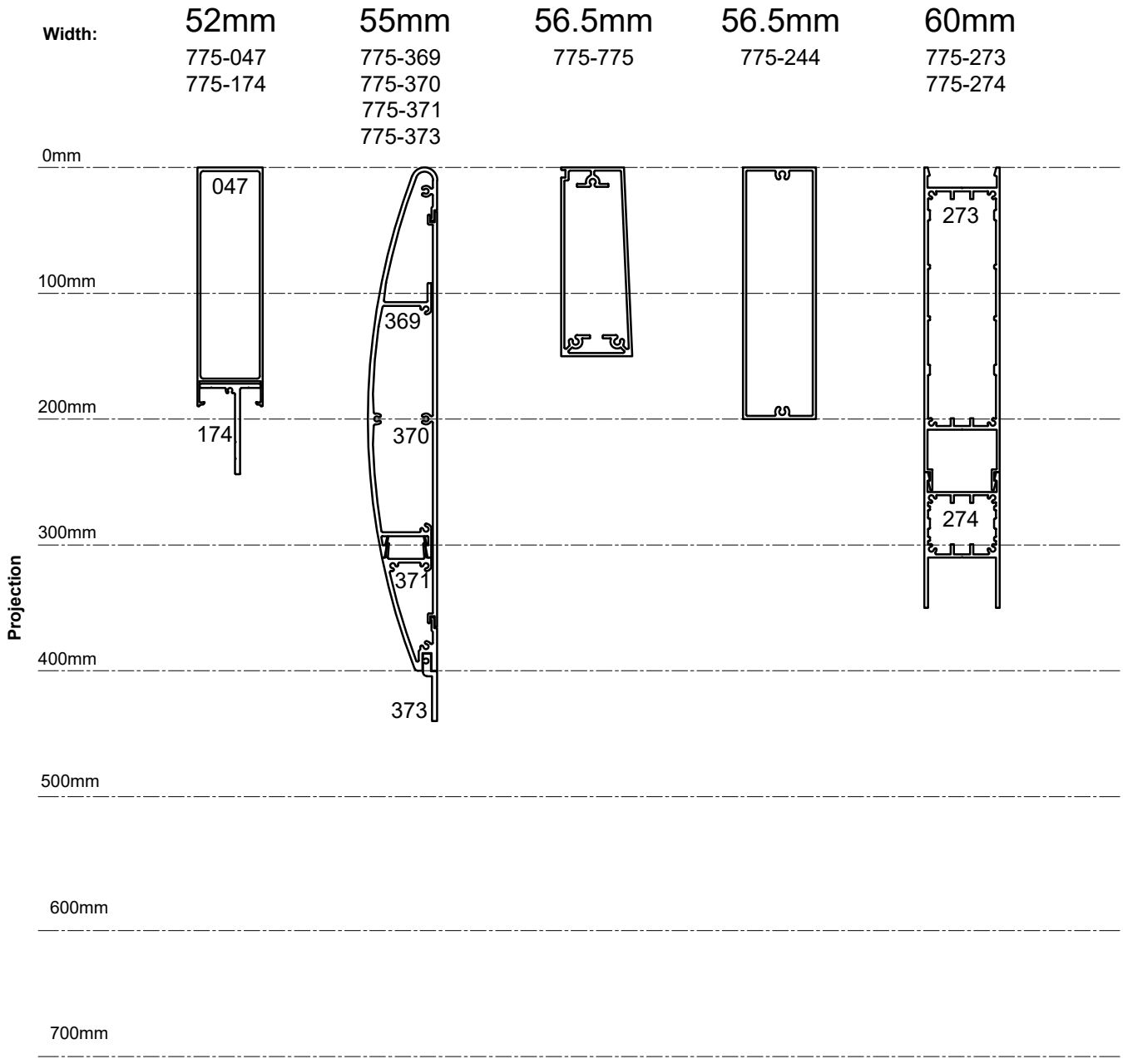
SCALE: 1:5 AT A4

51 to 60mm WIDE SOLUTIONS



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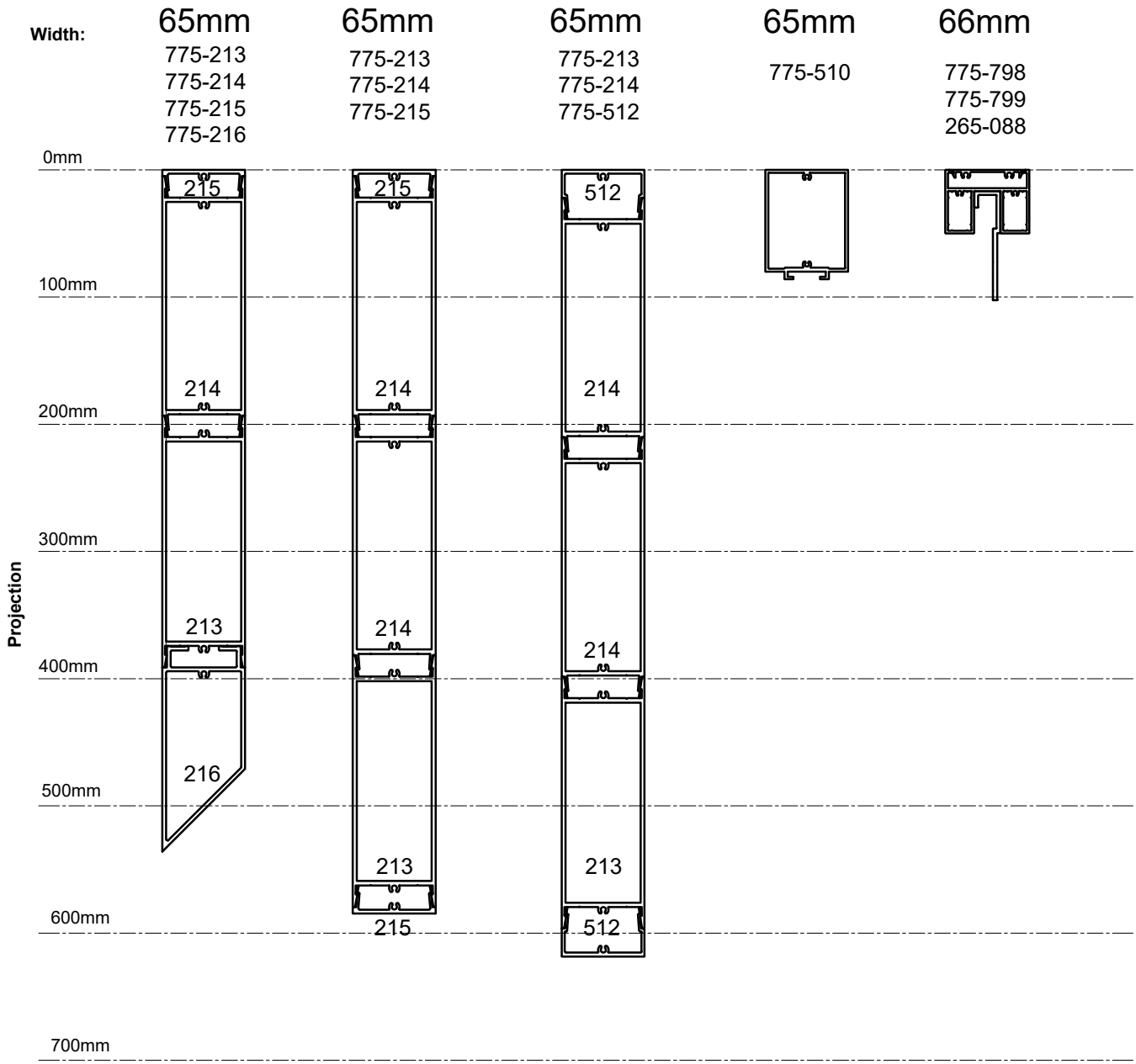
SCALE: 1:5 AT A4

61 to 70mm WIDE SOLUTIONS



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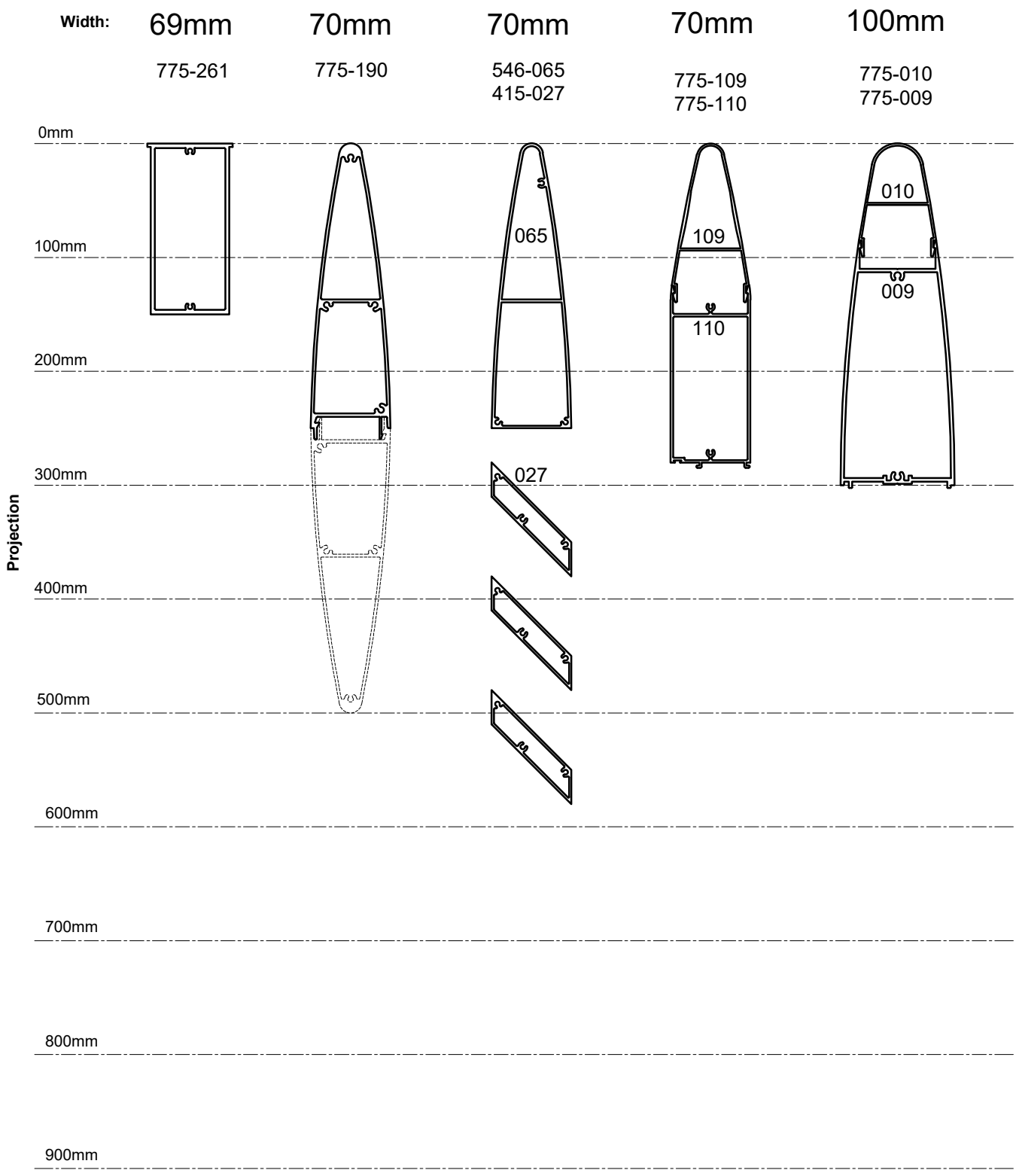
SCALE: 1:5 AT A4

61 to 70mm WIDE SOLUTIONS



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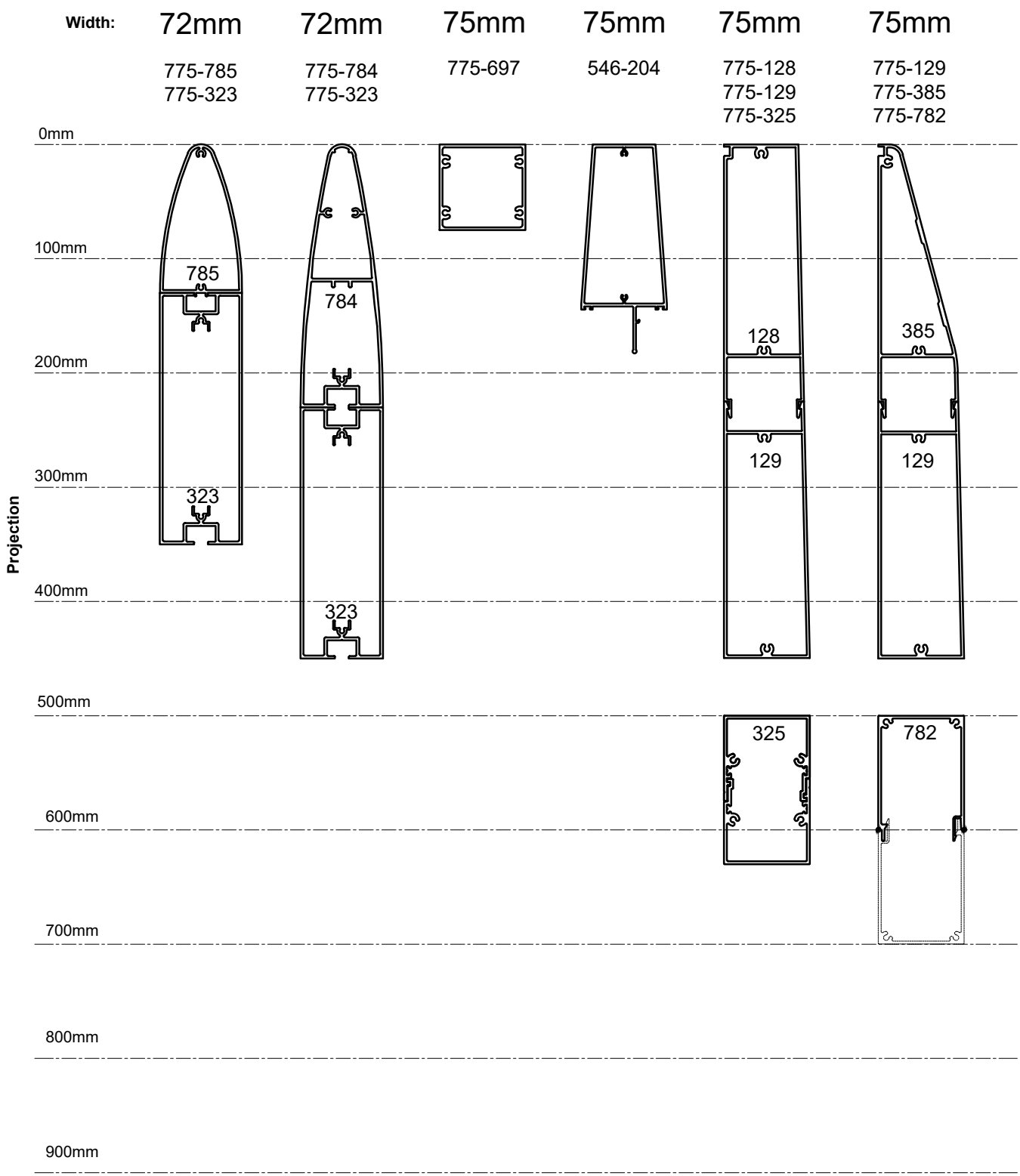
SCALE: 1:5 AT A4

71 to 80mm WIDE SOLUTIONS



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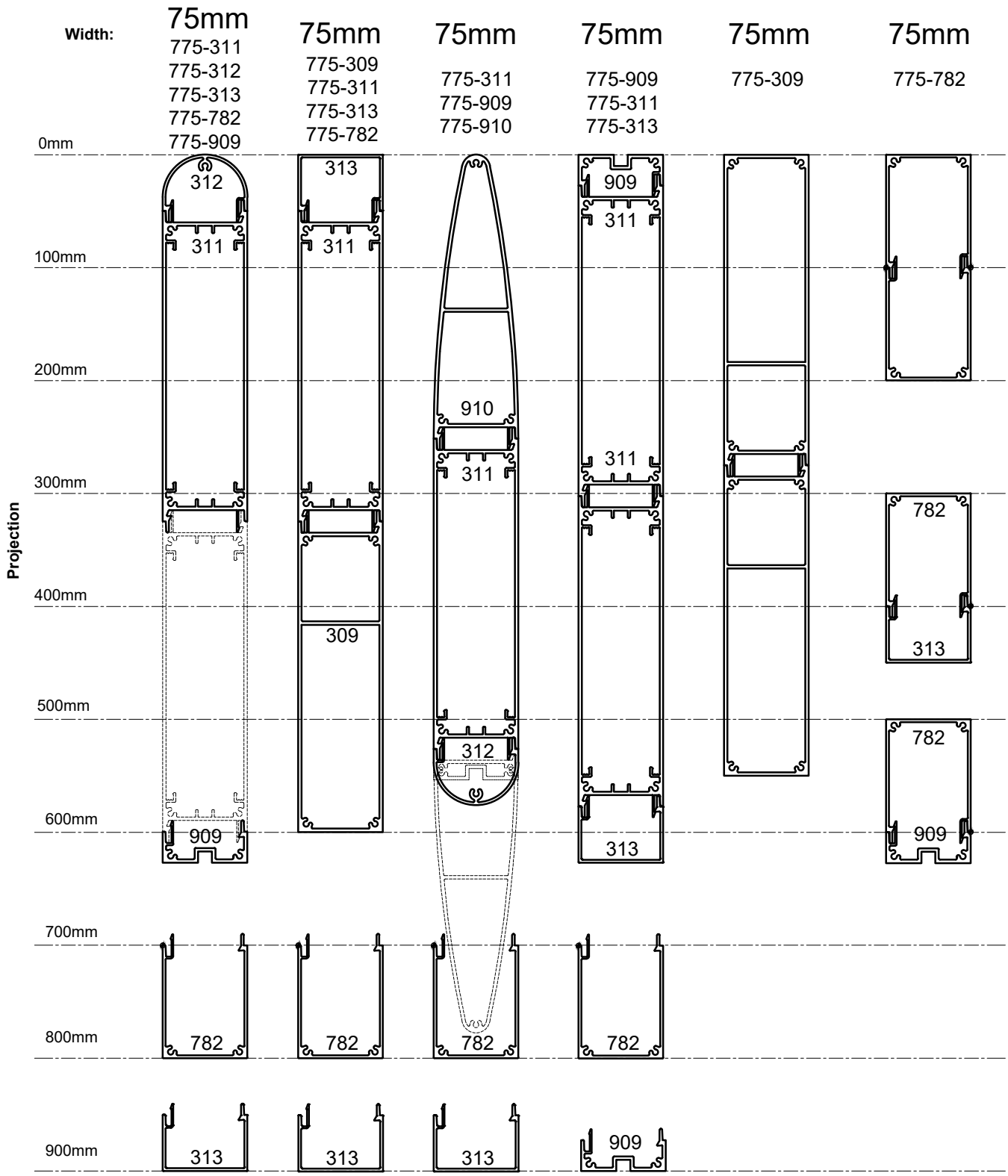
SCALE: 1:5 AT A4

75mm MODULAR

#NOTE: The following sections are interchangeable

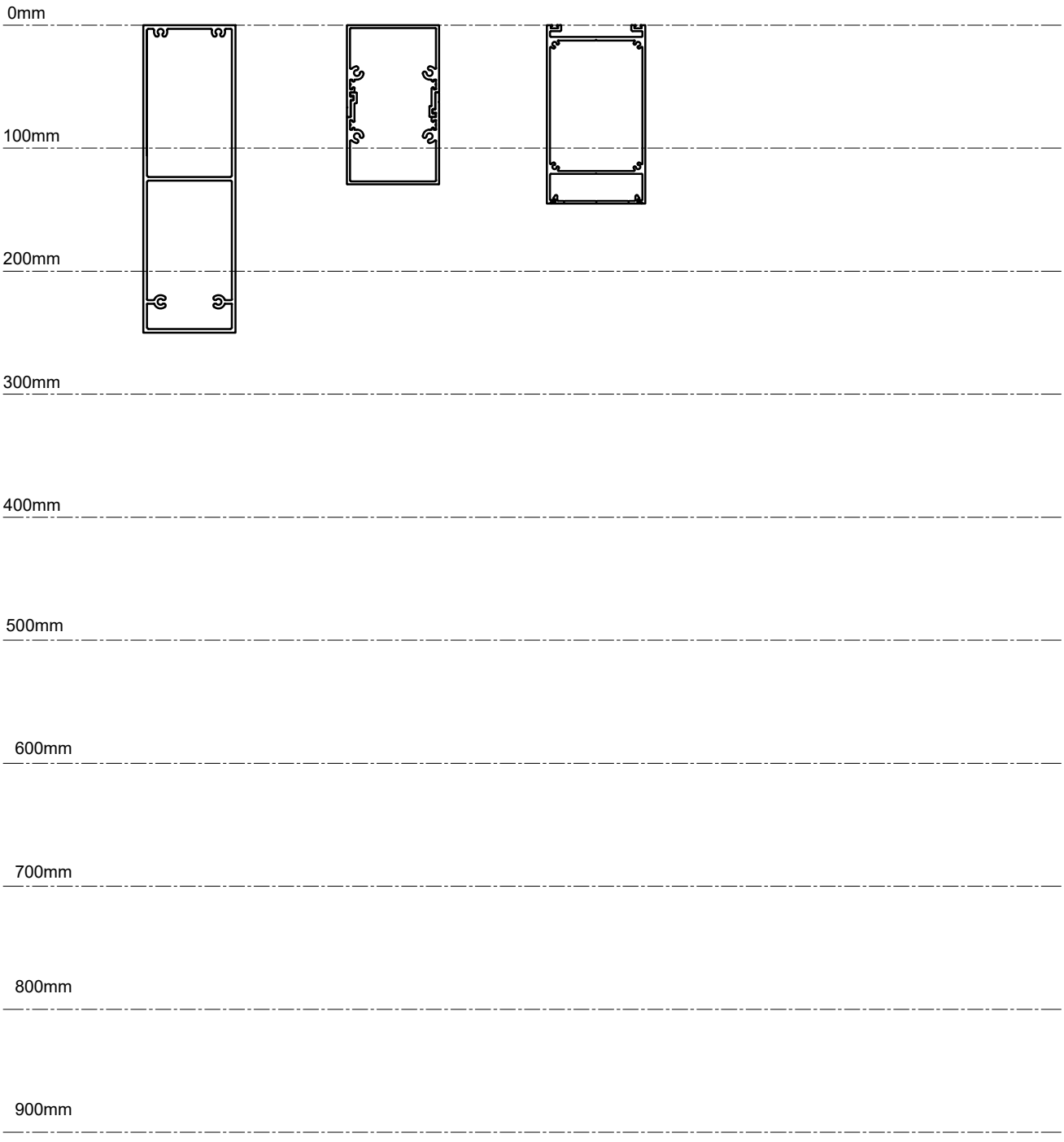


Note: Check stock levels and availability prior to use

SCALE: 1:5 AT A4

71 to 80mm WIDE SOLUTIONS

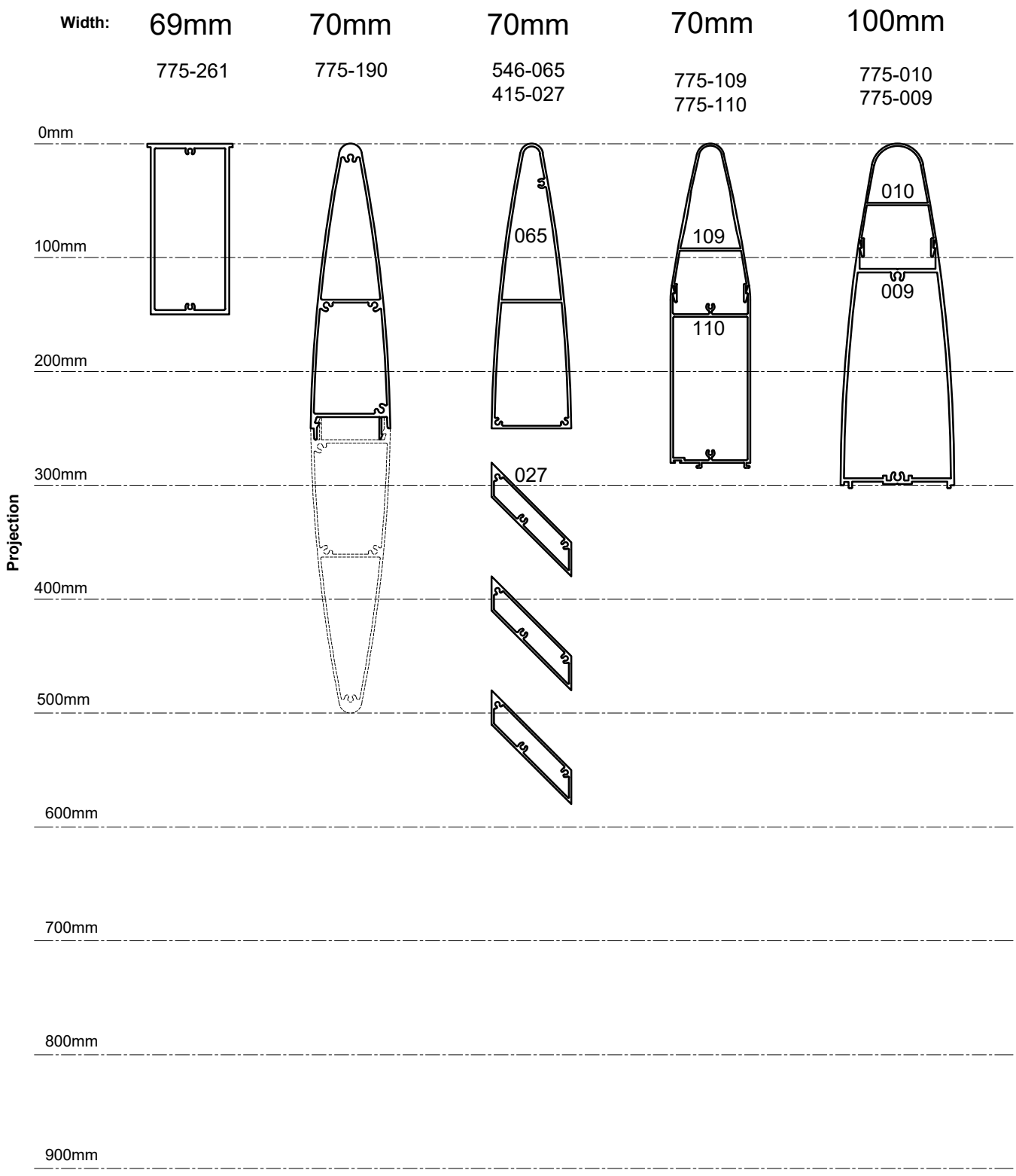
Width:	75mm	75mm	80mm
	775-262	775-325	775-384 775-152



Note: Check stock levels and availability prior to use

SCALE: 1:5 AT A4

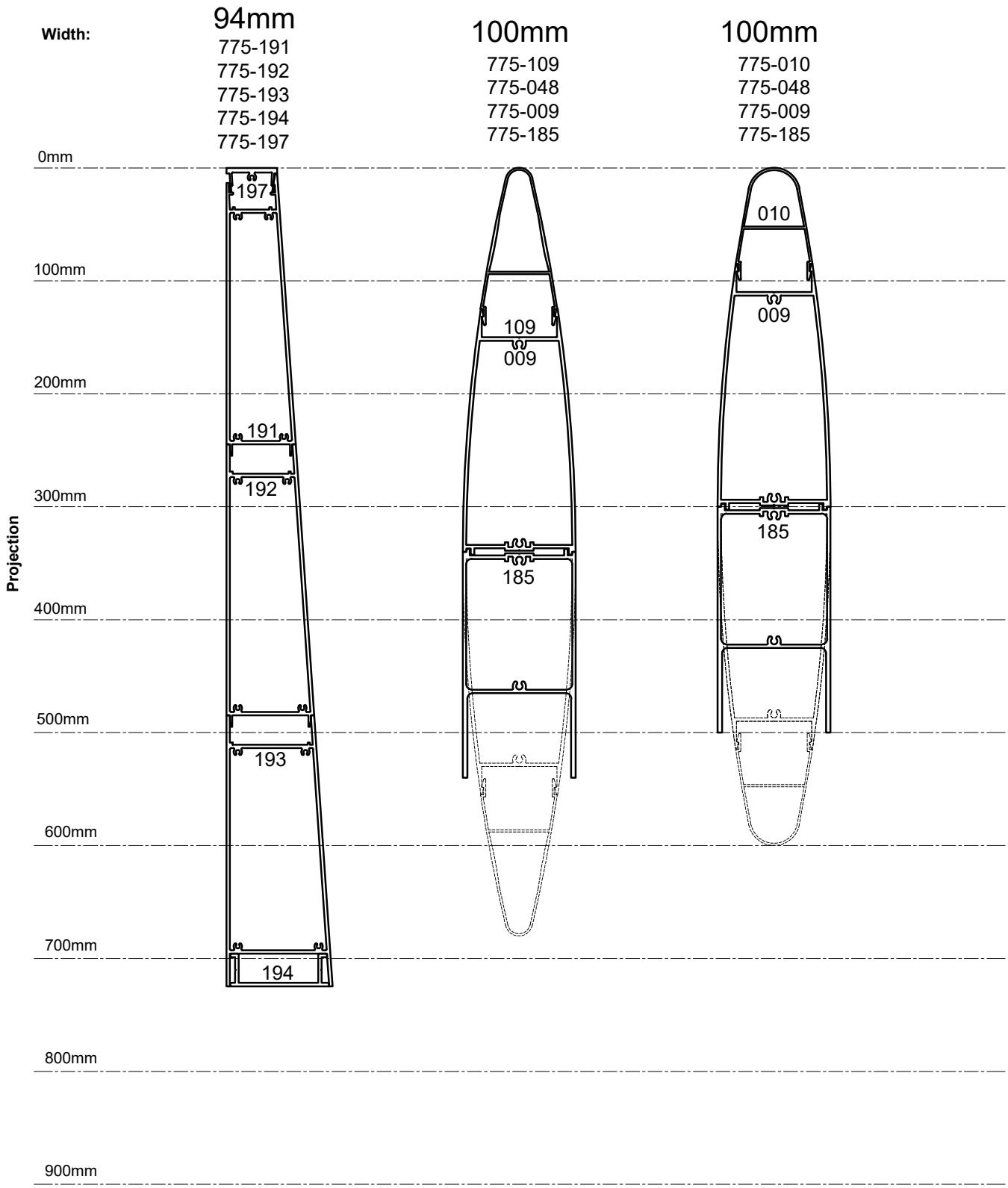
61 to 70mm WIDE SOLUTIONS



Note: Check stock levels and availability prior to use

SCALE: 1:5 AT A4

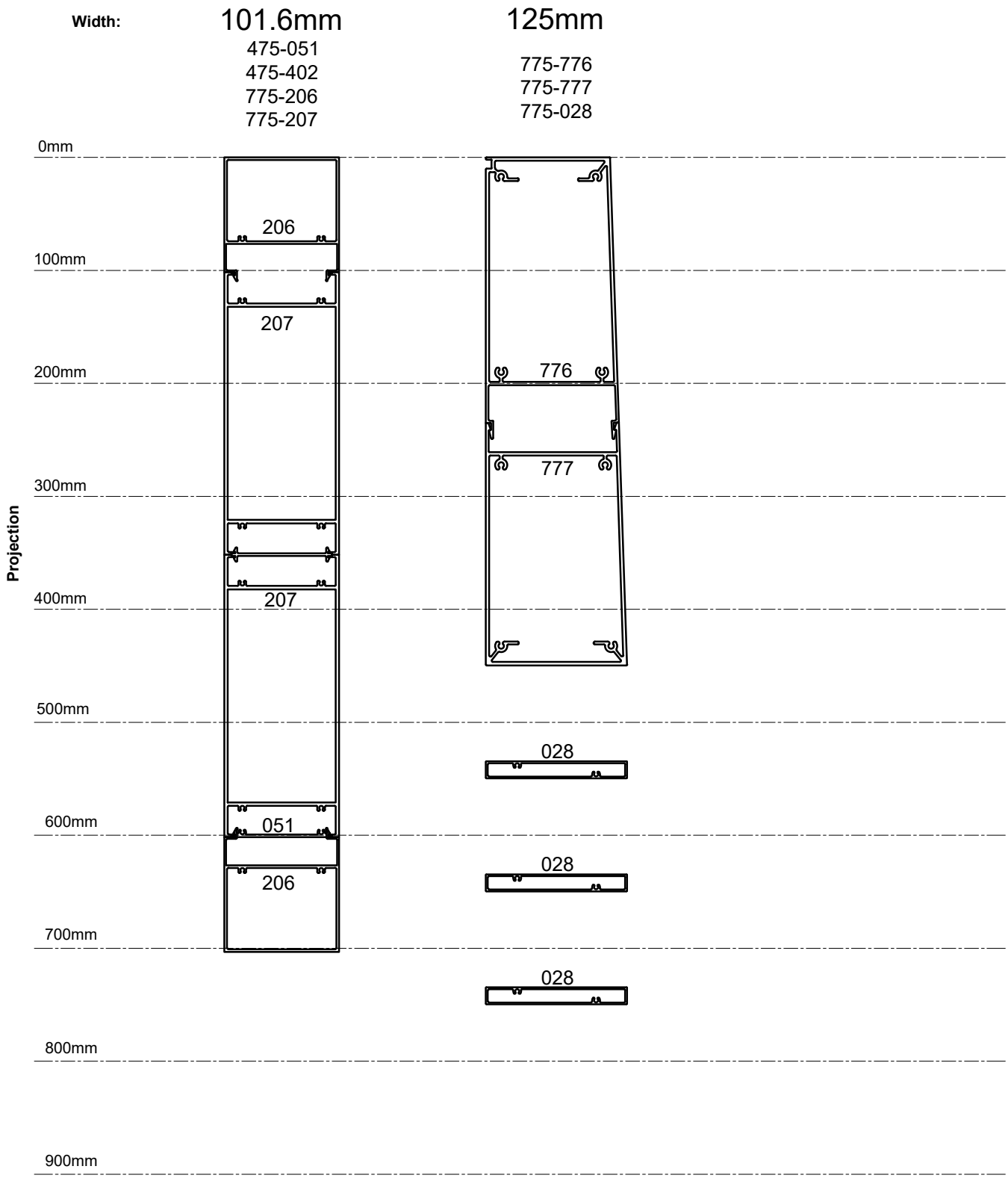
91 to 150mm WIDE SOLUTIONS



Note: Check stock levels and availability prior to use

SCALE: 1:5 AT A4

100 to 150mm WIDE SOLUTIONS



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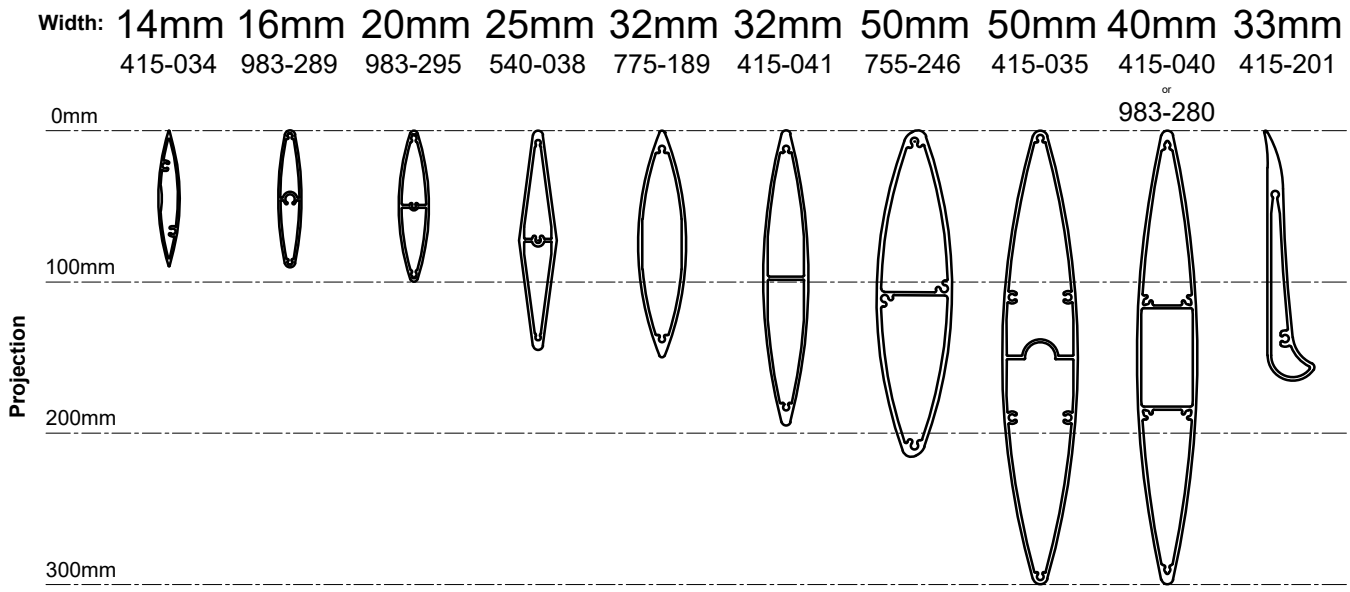
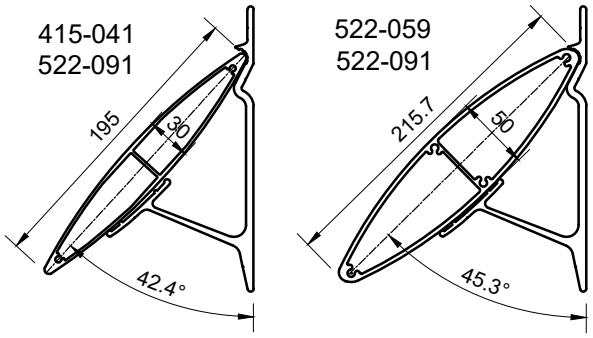
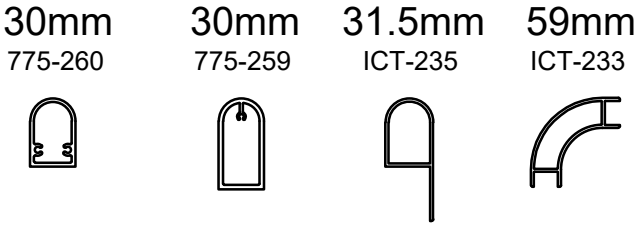
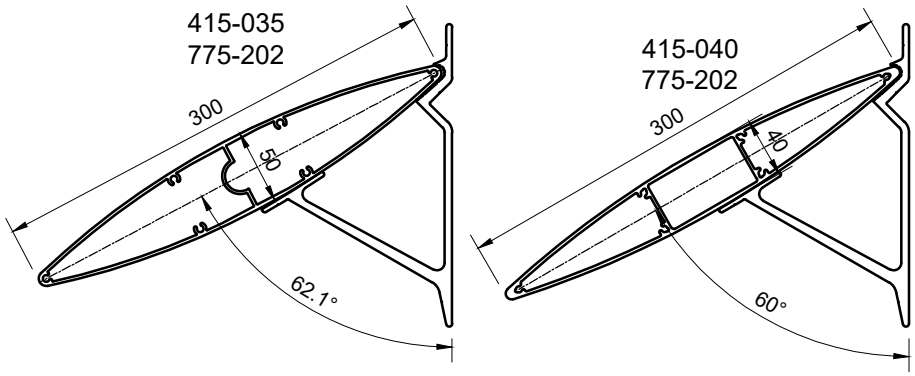
UP TO 70mm WIDE ELLIPTICAL SOLUTIONS









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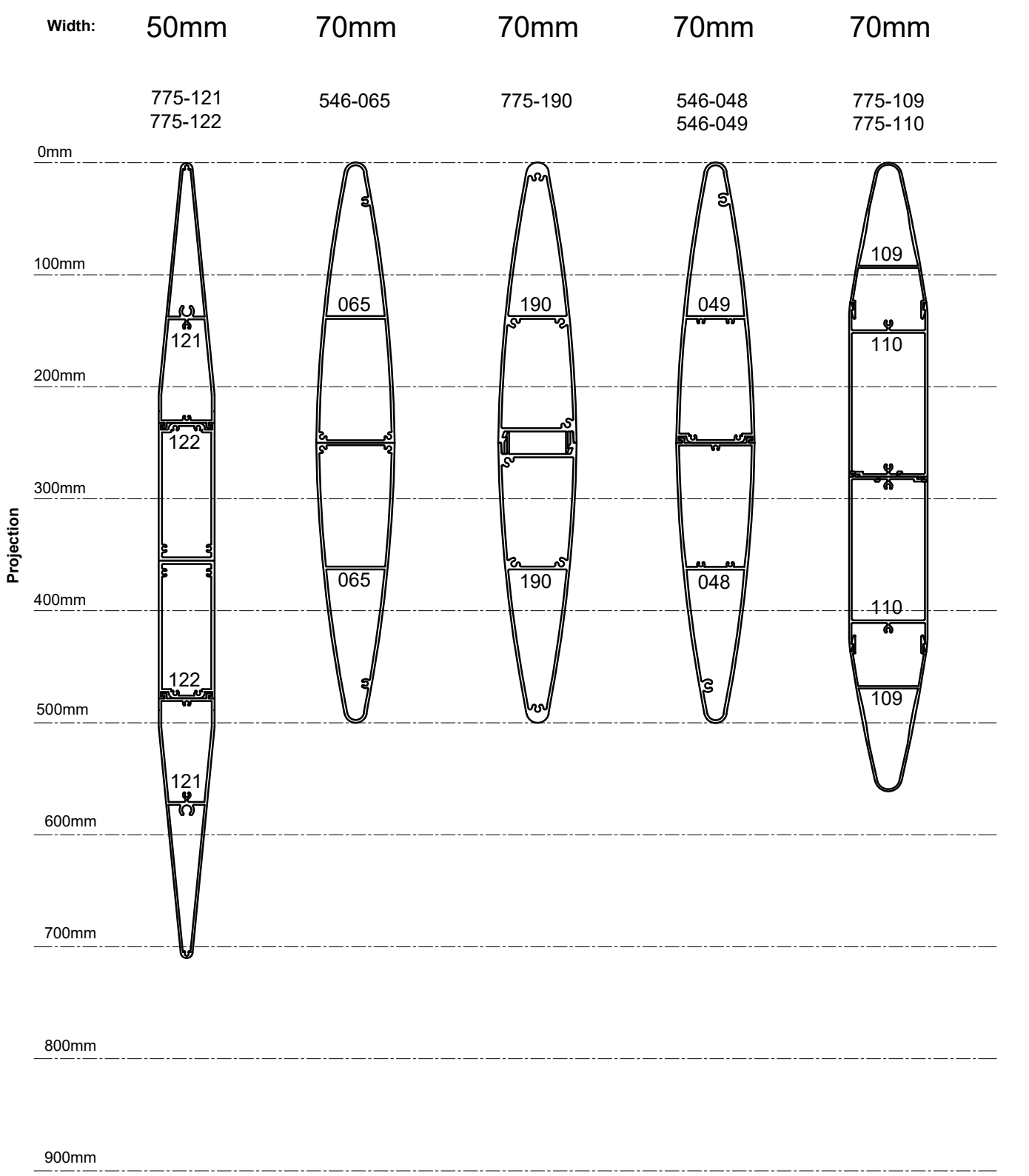
UP to 70mm WIDE ELLIPTICAL SOLUTIONS



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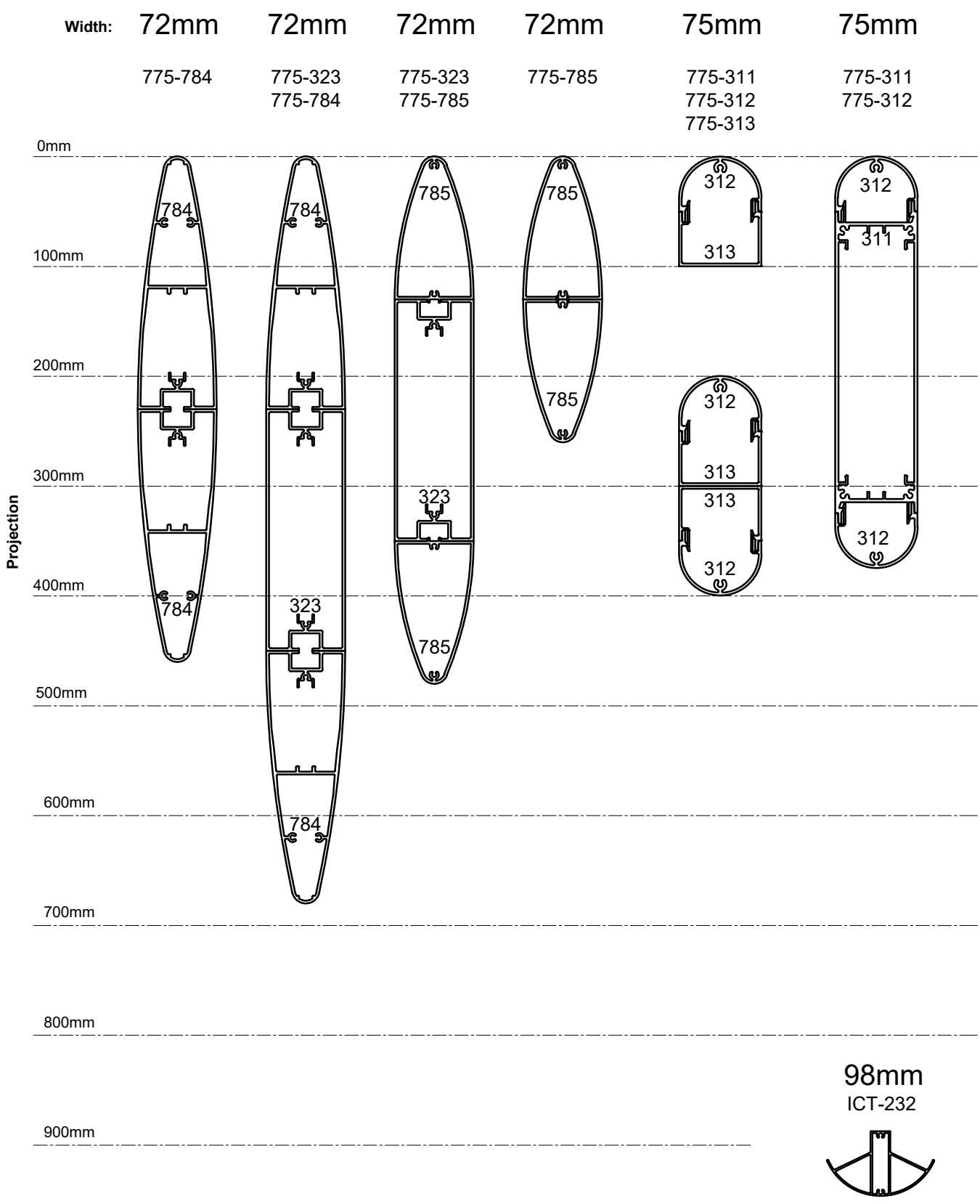
SCALE: 1:5 AT A4

71mm+ WIDE ELLIPTICAL SOLUTIONS



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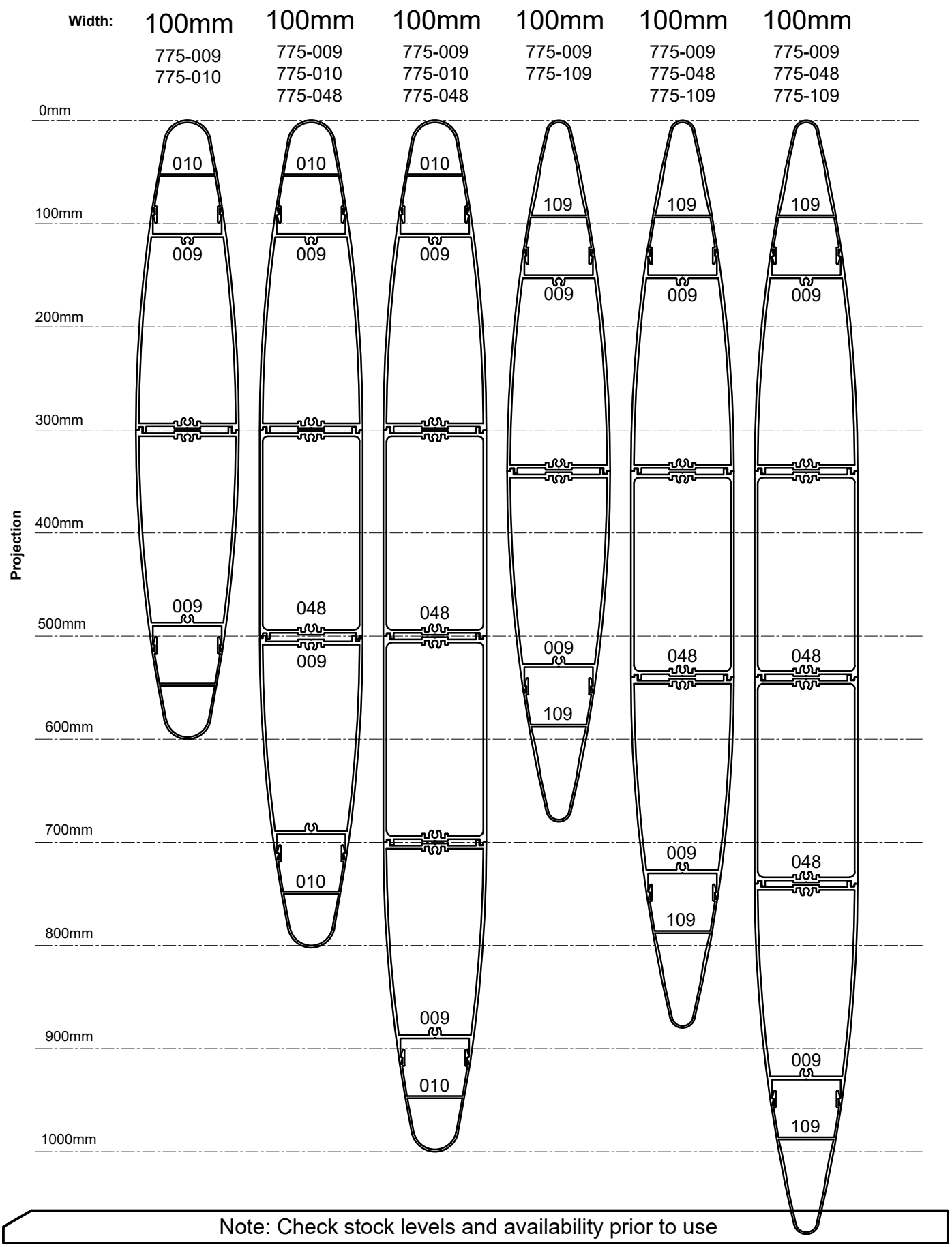
SCALE: 1:5 AT A4

100mm WIDE ELLIPTICAL SOLUTIONS



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SCALE: 1:5 AT A4