Thermally Enhanced Window
and Door Systems

Metal Technology

System 5-20TS
Tilt and Slide Door

The Metal Technology Thermally Broken Tilt and Slide Door has been designed to offer the specifier the advantages of polyamide thermal break technology in meeting the latest thermal requirements of the current building regulations.

Introduction
The 5-20TS Door System makes use of the standard System 5-20 outer frames together with the standard mullion and transom options. Included in the basic suite of profiles are drip rails to divert driving rain. Various other profiles can be designed and incorporated allowing architects to achieve flexible designs. The system is glazed internally and accommodates a range of glazing options.

As with all Metal Technology systems, the 5-20TS Door System is manufactured to exacting standards enabling economy to be combined with strength to give many years of aesthetic, trouble-free operation.

Thermal Performance
The Metal Technology 5-20TS Door System, in conjunction with the correct glass specification, is designed to aid compliance with the latest thermal requirements of the current building regulations. (See separate document on compliance with thermal regulations).

Scope
This specification defines materials, construction, finishes and size limits for the System 5-20TS Doors.

Materials
Aluminum profiles are extruded from aluminium alloy 6060T6, T5 or T4 complying with the recommendations of BS EN 12020-2:2001/BS EN 755-9:2001. Polyamide thermal breaks are produced from glass reinforced nylon sections designed to withstand temperatures in excess of 200°C, allowing the sections to be powder coated after thermal breaking.

Finishes
The range of sections can be provided in either of the following range of finishes:
1. Anodised to BS EN 12373-1 or BS 3987
2. Powder organic coated to BS 6496 or BS EN 12206-1

The System 5-20TS Door can accommodate a different colour/finish internally to that used externally.

Construction
Frame and door sash members are mitre cut at 45°. Corners are reinforced with extruded aluminium crimping cleats and corner braces. A secure joint is formed by pneumatically crimping into the extruded crimping cleat.

Mullion and transom bars are square cut, shaped and fixed securely to the frame by means of stainless steel screws and fixing cleats. All frame joints are sealed during construction against entry of water using a suitable sealant.

Extruded weatherstrips and glazing gaskets are provided to resist the ingress of water.

Metal Technology recommend that A2 or A4 Austenitic (300 series/class 70) stainless steel fixing screws are used in the assembly of their products.

Glazing
Glass is set against co-extruded gaskets externally which are fitted into gasket grooves in the frame upstand. Clip in beads are then fitted to the inside of the frame and held secure by means of colour coded wedge gaskets internally. For glass support purpose made setting/location blocks are provided to locate into the sections.

Installation
Detailed installation instructions are provided within the System 5-20TS and the System 5-20 Tilt and Turn Window Manual which should be strictly followed.

Tilt and Slide Door Fittings
The sections are designed to suit Tilt and Slide fittings, and a variety of handle options.
Metal Technology are able to supply a full range of fittings and accessories. See the relevant section of the fabrication manual for details of gearing options for specific window sizes.

Metal Technology should be contacted for any special operating requirements.

Maximum Size Limits

Vent Section	Vent Width	Vent Height	Vent Weight
133-233F	1650mm*	2400mm	150 Kg

* Width is based on the individual leaf width.

Minimum Size Limits
Minimum size limits will be deternimed by the limitations of the fabricators crimper, and the ironmongery requirements.

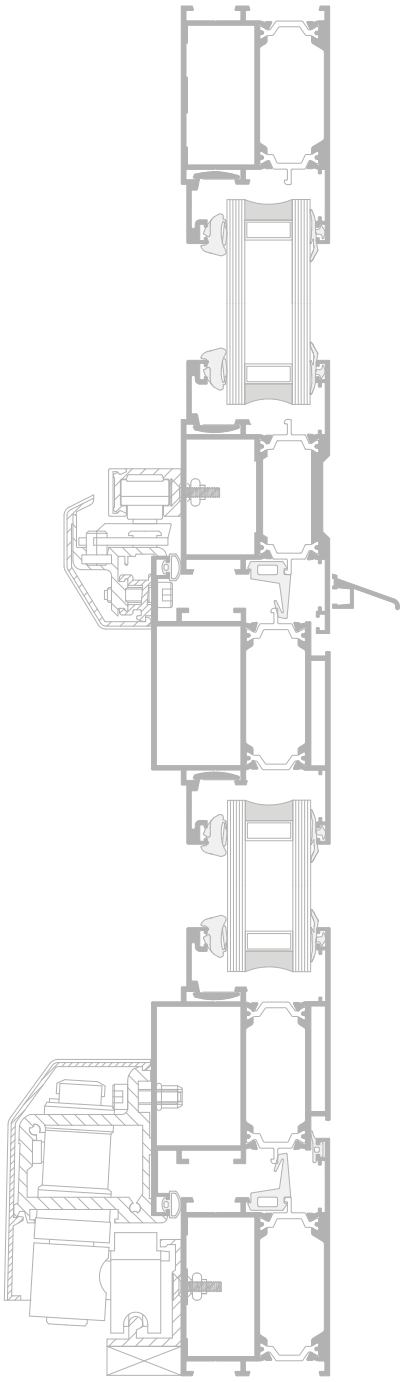
Vent Width	Vent Height
700mm	850mm

For complete details of maximum/ minimum sizes and weight restrictions see the limitation charts in Section 3 of the fabrication manual.

Performance
Air permeability - BS 6375: Pt 1: test pressure 600 Pa class 4.
Water tightness - BS 6375: Pt 1: test pressure 600 Pa.
Wind Resistance - BS 6375: Pt 1: test pressure 2400 Pa.

These levels of performance should be sufficient for most locations within the UK and Ireland. Should higher levels of performance be required, Metal Technology's advice should be sought.

Development
Our policy is to continually research the market for new and improved products. We must therefore retain the right to amend specifications without prior notice. It is recognised at Metal Technology that in some instances special sections may be required for particular projects. When this occurs it may be possible to produce bespoke profiles subject to there being sufficient quantity and adequate time.



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