

# System 10-35 Hi / Hi+

**Commercial Door & Framing** 



# THERMAL System 10-35 Hi/Hi+

A high-performance, commercial door and framing system, the Thermally Broken System 10-35 Hi/Hi+ has been developed to offer exceptionally low U-values while providing a robust solution to any commercial development. These doors have been designed to operate in high traffic locations.

Metal Technology's **THERMAL** range, in conjunction with the correct glass specification, is designed to aid compliance with the latest thermal requirements of current building regulations.

#### Scope

Available as single or double doors in dual or single swing options. Locking can be achieved with single or multi-point locks. Anti-finger trap and panic gear features are also optional.

### **Materials**

The aluminium profiles are extruded from aluminium alloy 6060T6, T5 or T4 complying with the recommendations of BS EN 12020-2 / BS EN 755-Parts 1 to 9.

#### **Finishes**

The range of sections can be provided in either of the following ranges of finishes:

- 1. Anodised to BS EN 12373-1 or BS 3987
- 2. Powder organic coated to BS 6496 or BS EN 12206-1

### Construction

Door sash members are square cut at 90°, with stiles end milled to suit ironmongery. Sash corners are reinforced with extruded aluminium cleats, and screw fixed with the option of additional tie bar reinforcement. Frame members are square cut at 90°, with corners constructed using either screwported or cleated assembly.

#### Features

Door U-values as low as 1.49 W/m<sup>2</sup>K with double glazing and 1.15 W/m<sup>2</sup>K with triple glazing

Available in single or dual colour standard RAL finishes

Tested to BS 6375 Part 2.- 50,000 cycles

PAS 24 Security tested options to comply with Secure by Design criteria

Glass units 28mm - 44mm

Sash weights up to 130kgs

Sash heights up to 3000mm

LogiKal estimating and production software for manufacturing, glass and U-value calculations

Bespoke punch tooling / jigs to assist with rapid manufacture





### Security

Metal Technology has carried out Pas24 testing on a full range of their 10-35 door products and framing system. With double and single doors including fan lights and side lights all being tested, utilizing many different ironmongery options from 3 point locking to panic gear, designers can specify security doors with confidence.

# Handles

A full range of stainless-steel handles are now available from stock. These include various offset bar lengths and D handles and now complement our existing standard pad handle options.



#### 10-35 Hi Frame Profile



10-35 Hi Outer Frame and Sash





10-35 Hi+ Outer Frame and Sash



# **U-values**

The polyamide thermal break profiles have been specifically designed to minimise heat transfer across the door profiles, as shown in Table A. This innovative and advanced thermal break technology provides the basis of the 10-35 Hi/Hi+ System. Table B, based on standard fully glazed single/double door configurations and warm edge spacers, illustrates the overall thermal performance of a complete door.

Metal Technology can provide tailored U-value calculations using their dedicated estimating software to calculate overall project average U-values for their full range of systems.

# Table A

U-frame values	Outer frame and sash	Framing profile
10-35 Hi	2.13W / m <sup>2</sup> K	2.29W / m <sup>2</sup> K
10-35 Hi+	W / m²K	W / m²K

# Table B

Achievable whole door U-values	Centre pane U-value	
	1.0W/m <sup>2</sup> K	0.5W/m²K
10-35 Hi single door	1.55W / m²K	1.23W / m <sup>2</sup> K
10-35 Hi double door	1.49W / m²K	1.15W / m <sup>2</sup> K
10-35 Hi+ single door	1.26W / m²K	0.93 W / m <sup>2</sup> K
10-35 Hi+ double door	1.25W / m <sup>2</sup> K	0.91W / m <sup>2</sup> K

Metal Technology

Steeple Rd Industrial Estate Steeple Road Antrim BT41 1AB Northern Ireland metaltechnology.com To place an order please call T+44 (0)28 9448 7777 or email orders@metaltechnology.com

