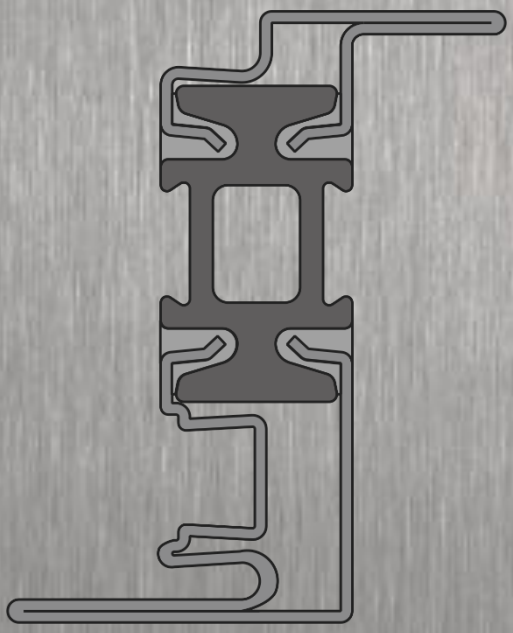
Profiles Design Aspirer

PDA



70SD STEEL DOOR/WINDOW SYSTEM

PDA 70SD is a steel fire insulated profile system that PDA company holds proprietary intellectual property rights for. The 70SD employs a wall thickness of 1.5mm cold-formed steel profile combined with a glass fiber polyurethane fireproof heat breaker strip to form a three-cavity main structure.

The 70SD profile system has a thickness of 70mm, with cavities available in 3 widths: 55mm, 40mm, and 25mm. Each sub-series includes 10 types of profiles, totaling 30 profiles overall. These steel profiles can be used for manufacturing various types of doors, windows, and glass partitions.

There are 5 types of glazing beads for the 70SD system, which are 15mm, 20mm, 25mm, 30mm, and 35mm in width. These are suitable for glass thicknesses of 10~45mm. The cavities reserved within the profile are well-suited for mainstream brand hardware and can accommodate various types of locks, door closers, actuators, etc., meeting bolt installation space requirements.

Profile Applications:

70SD-55 steel fire series - fire doors

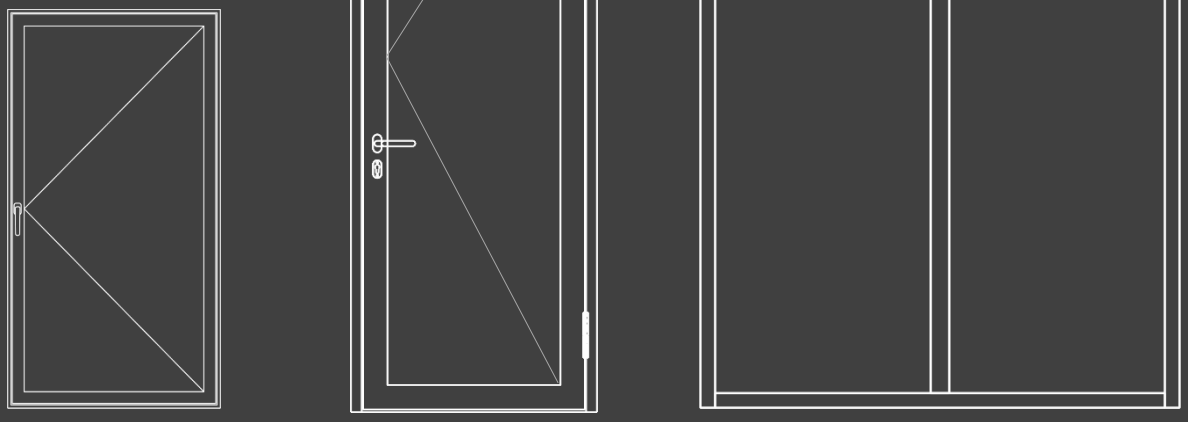
70SD-55 steel thermally broken energy-saving profiles – super large doors /spring doors /sliding doors

70SD-40 steel fire insulation series - fire doors/ fire windows

70SD-40 steel thermally broken energy-saving profiles -unit doors/ oversized windows/ folding doors/ sliding doors

70SD-25 steel fire insulation series - fire windows.

70SD-25 steel thermally broken energy-saving profiles -narrow frame doors/ large windows/ narrow frame windows/ hopper windows.



70SD series Explanation of fire resistance performance

70SD system, while meeting EI90 and EI60 fire protection requirements, also have excellent energy-saving, air-tightness, and water-tightness properties. It can be used for large format opening and fixed window/partioton designs.

The thermal conductivity of 0.3W/m²k of the glass fiber polyurethane composite material, the 33mm long heat conduction bridge, and the structure of three independent thermal convection cavities, the 70SD profile has excellent thermal insulation performance. It can be applied to the parts of exterior doors and windows in regions with high requirements for insulation.

At the same time, because of the natural high temperature and fire resistance of glass fiber and steel profiles, the 70SD system realizes steel fire doors, steel fire windows, steel frame fire partitions, and its performance can reach EI120min.

70SD system

70SD SERIES PROFILES	FIRE-PROTECTION RATING			
	EI30	EI60	EI90	EI120
7055	●	●	●	●
7040	●	●	●	×
7025	●	●	×	×

Steel cold-formed profile frame, high-strength steel can achieve narrower door frames and larger glass surfaces.

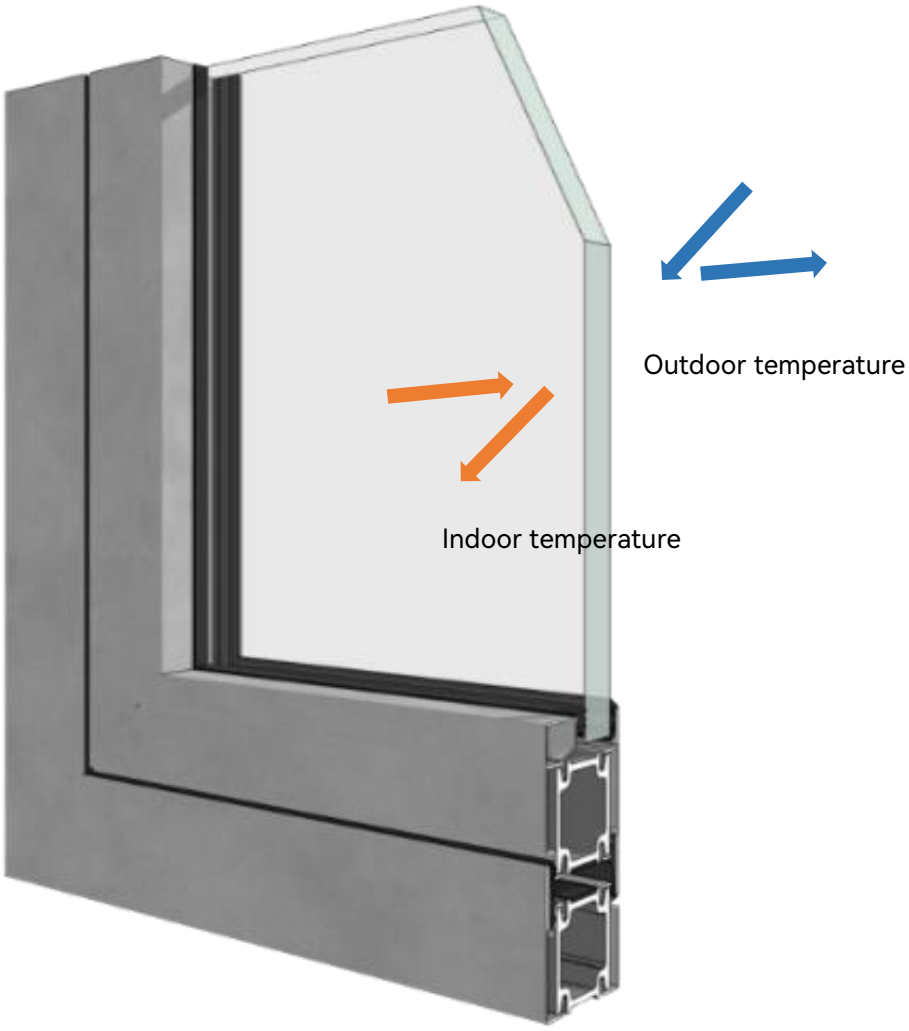
The 70SD series is a thermally broken steel profile, having an extremely low thermal conductivity, when paired with fire core material it makes the fire-retardant side more secure and stable.

Good structural shape design ensures better sealing, wind pressure resistance, and sound insulation performance of the system.

The steel profile has good static performance, and we strive for perfection in the processing process.

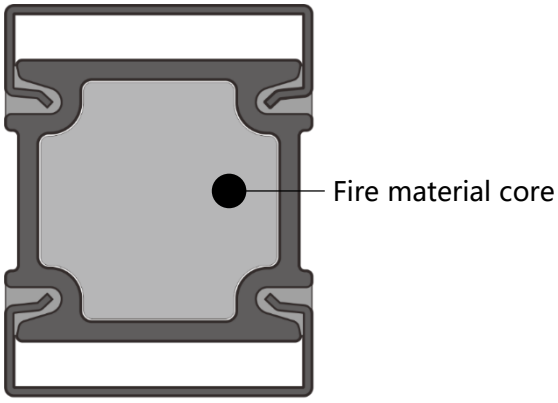
Strict control over the selection of hardware ensures the durability and safety of the door system.

Professional hardware configuration (fireproof lock, fireproof door closer, fireproof hinge).

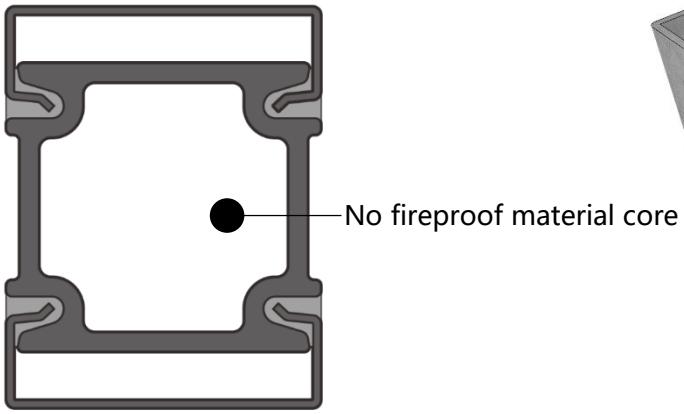


70SD Series

steel fire profile vs steel non-fire profile



Fire profile



Non-fireproof profile

7055 System

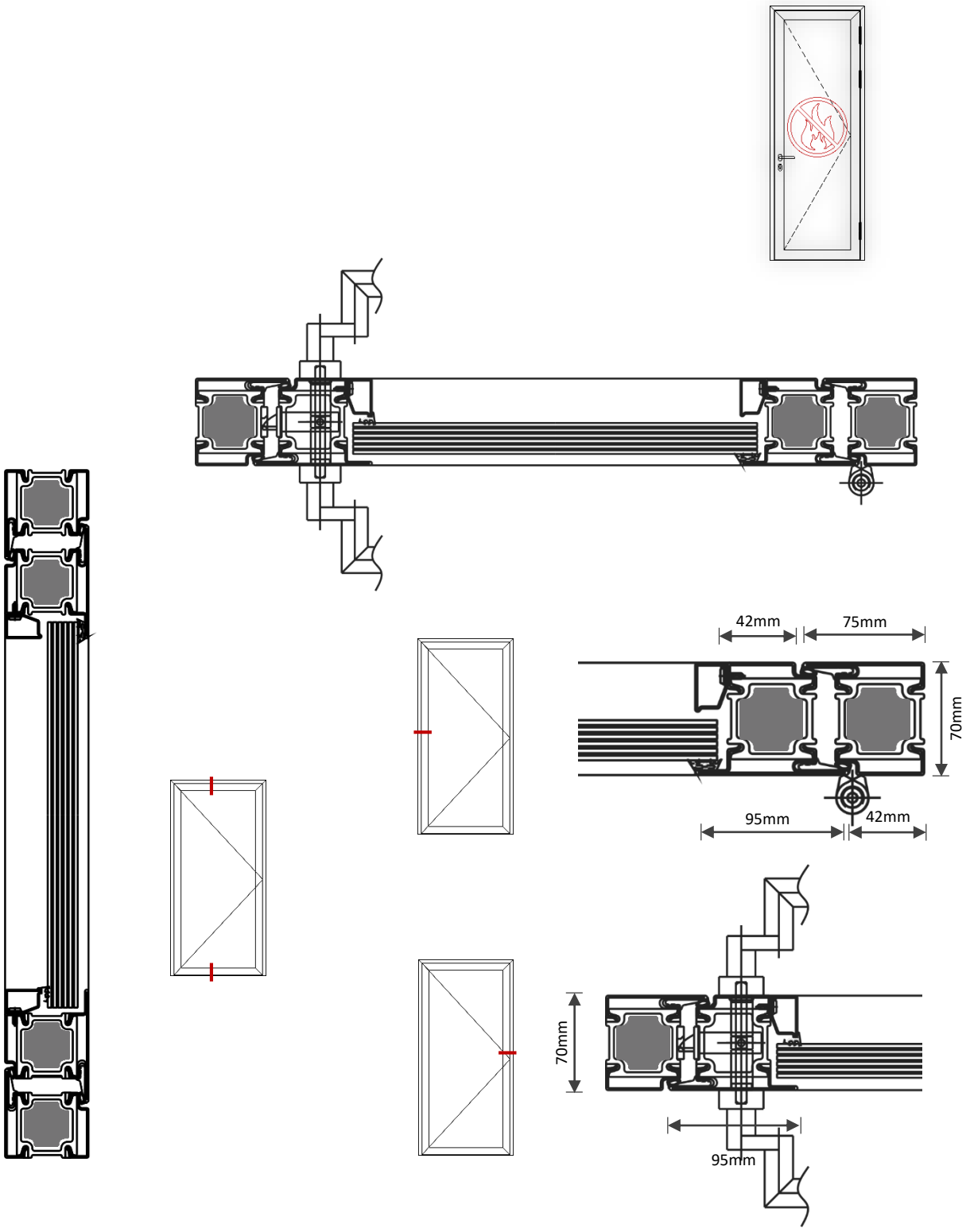
Product application: extra large steel fire door/ steel non-fire door

steel fire partition/ steel non-fire partition

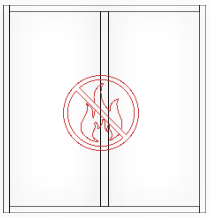
7055 system door

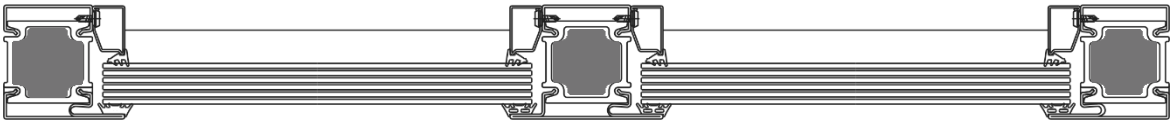
used for extra-large and extra-high size

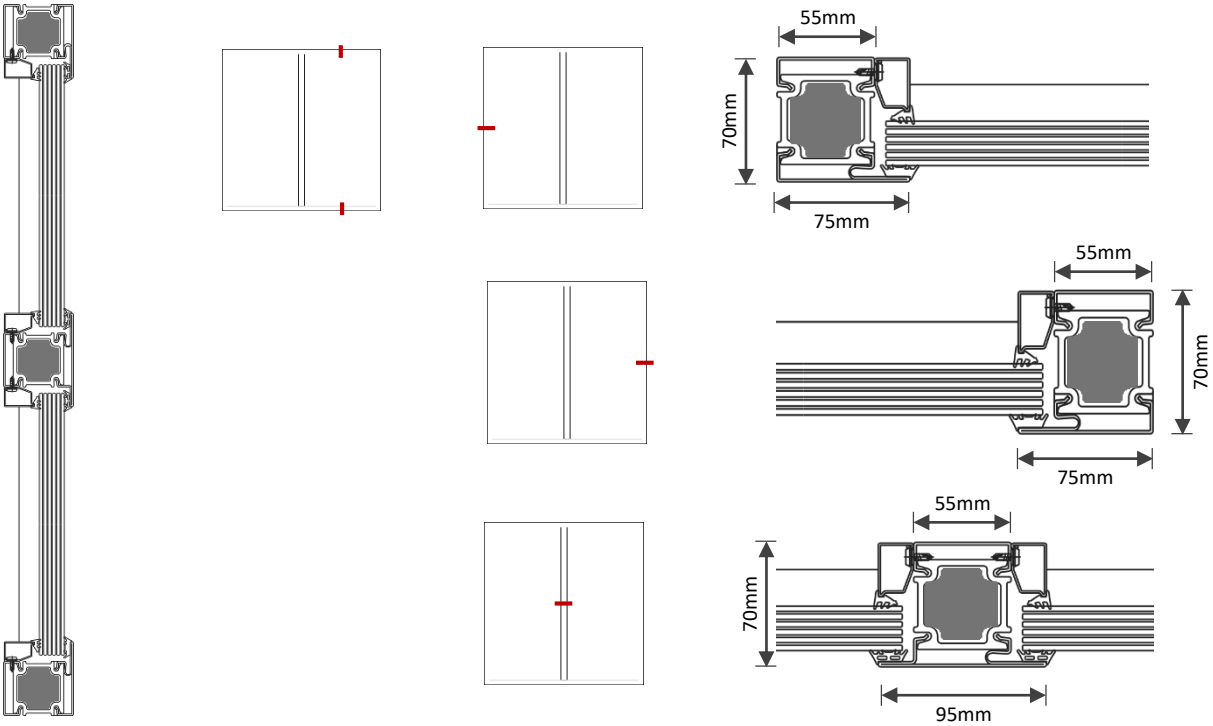
7055 steel fire door system node



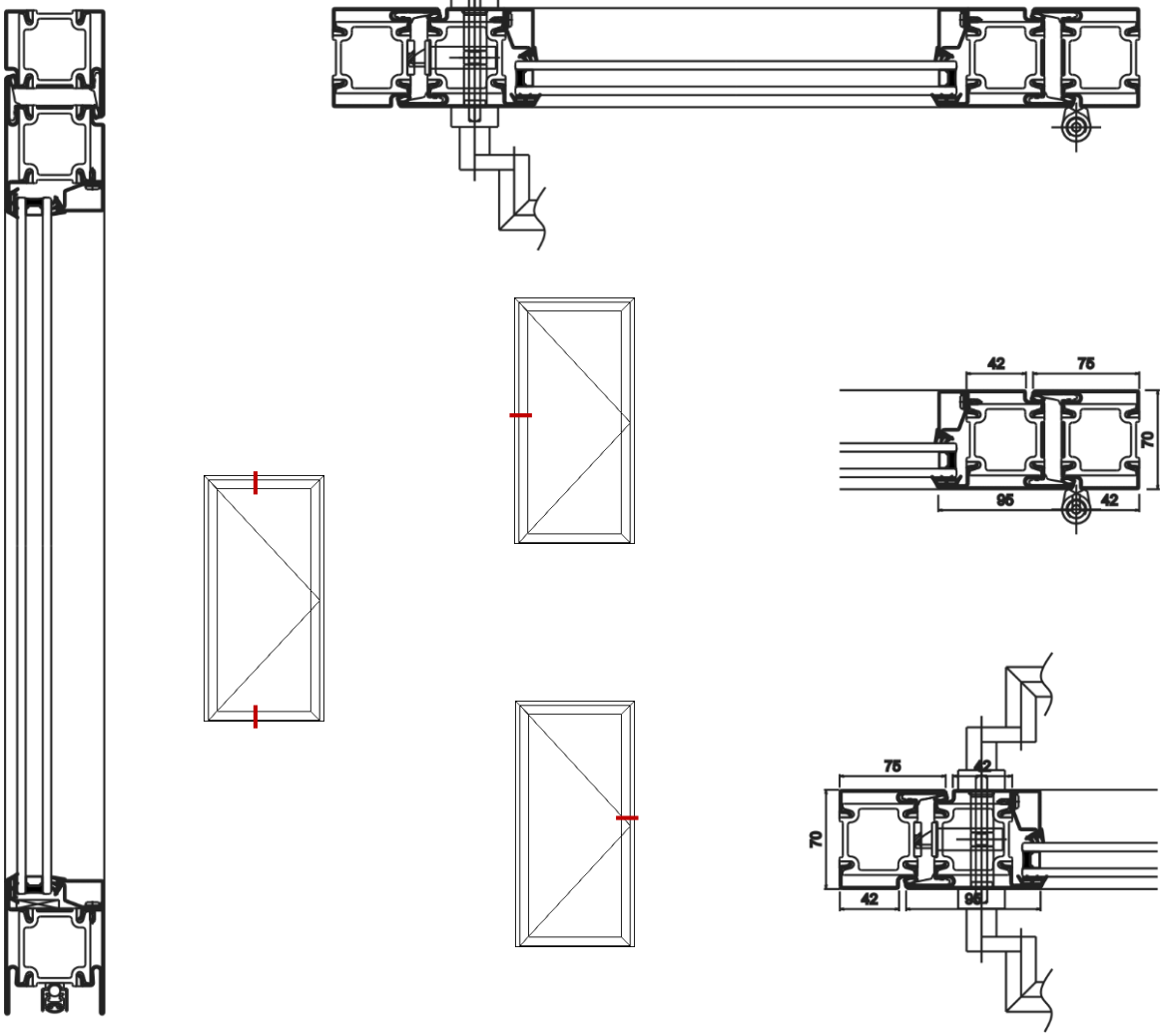
7055 steel fire partition system node



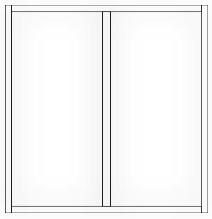


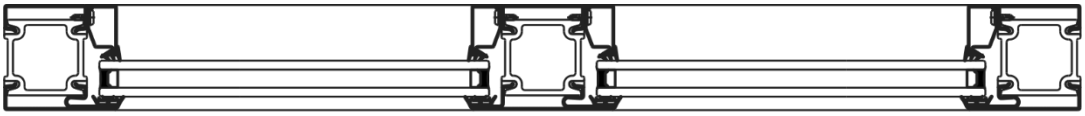


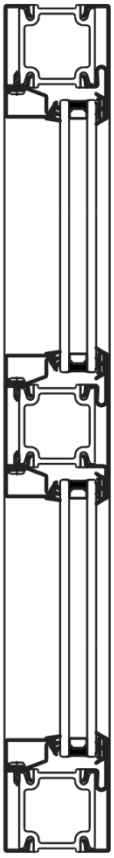
7055 steel non-fire door system node

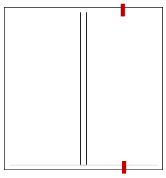


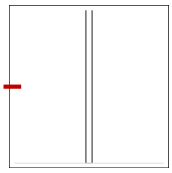
7055 steel partition node (non-fireproof)

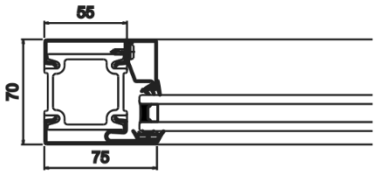


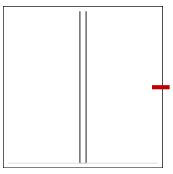


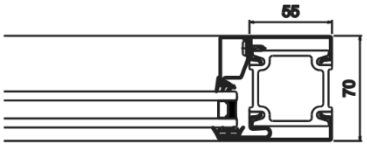


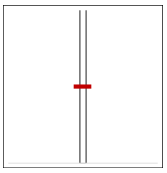


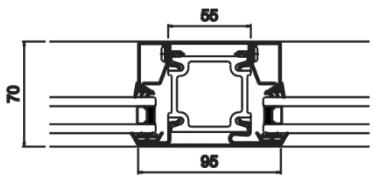








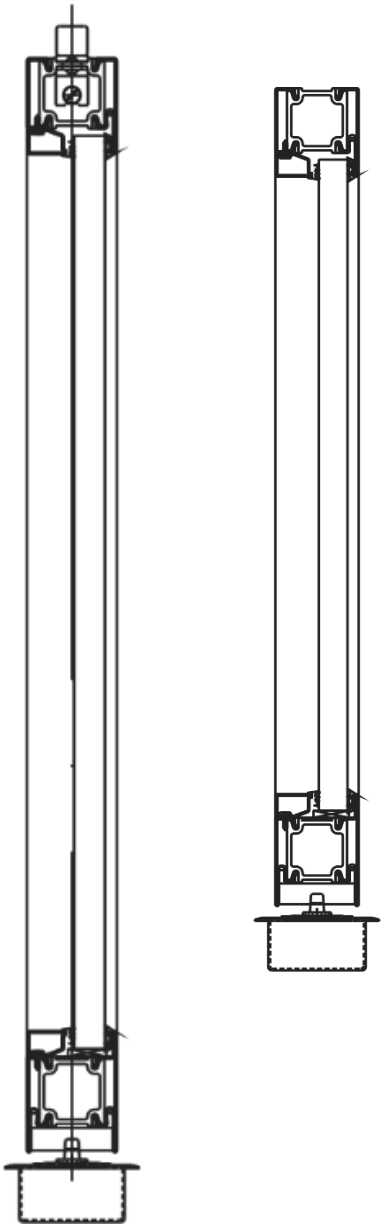


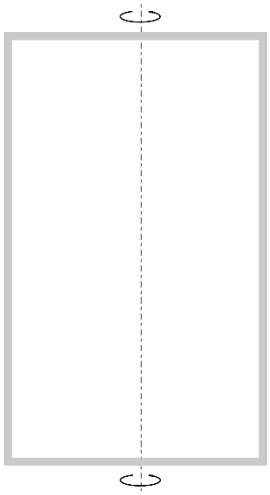


70SD Spring door / Off-center pivot door

The 70SD floor spring door and offset pivot door can achieve 90° opening in one direction or 180° opening in both directions.

And it can work with electromechanical systems to achieve automatic door opening and closing.



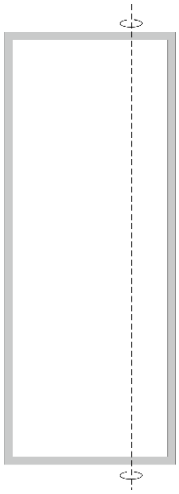


offset pivot door：

Maximum size of a single door

width≤2500mm

height≤3500mm

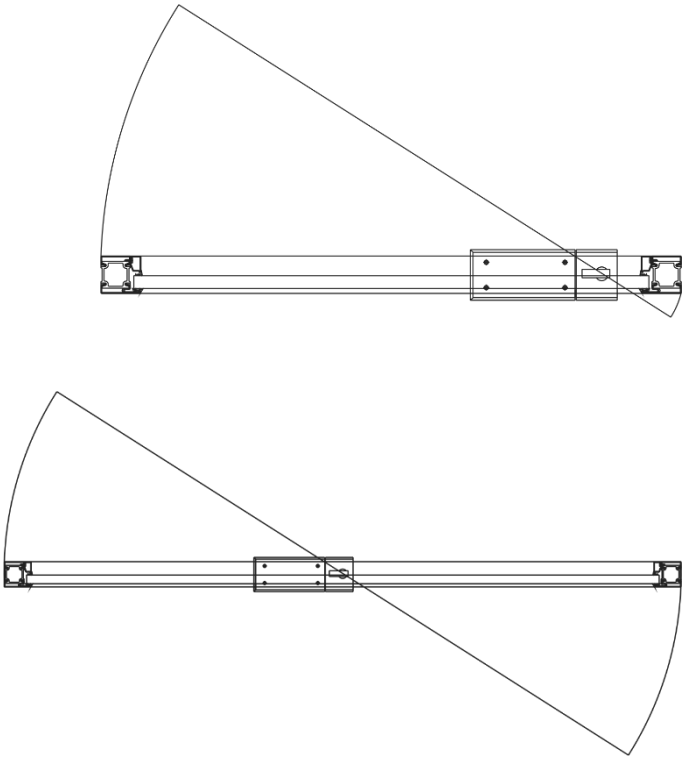


Spring door:

Maximum size of a single door

width≤1500mm

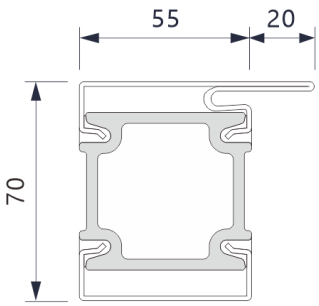
height≤4000mm



7055 Steel profiles

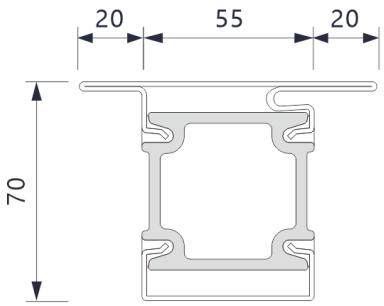
Product application: extra large steel fire door/ steel non-fire door

steel fire partition/ steel non-fire partition



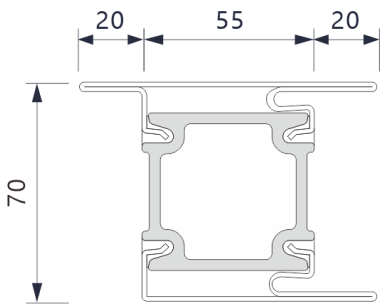
L:6000mm

NO.:70551	G:5.07kg/m O:0.23 m²/m



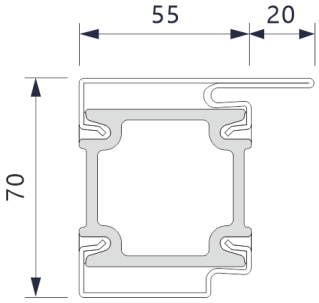
L:6000mm

NO.:70552	G:5.53kg/m O:0.27 m²/m



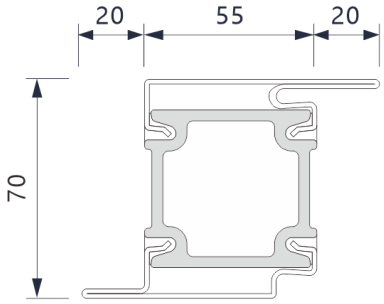
L:6000mm

NO.:70556	G:6.73kg/m O:0.27 m²/m



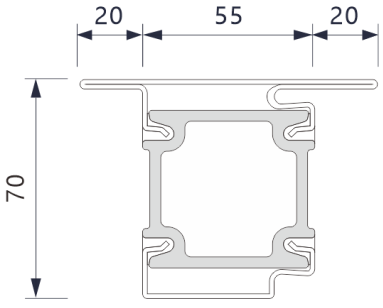
L:6000mm

NO.:70553	G:5.05kg/m O:0.23 m²/m



L:6000mm

NO.:70554	G:5.51kg/m O:0.27 m²/m



L:6000mm

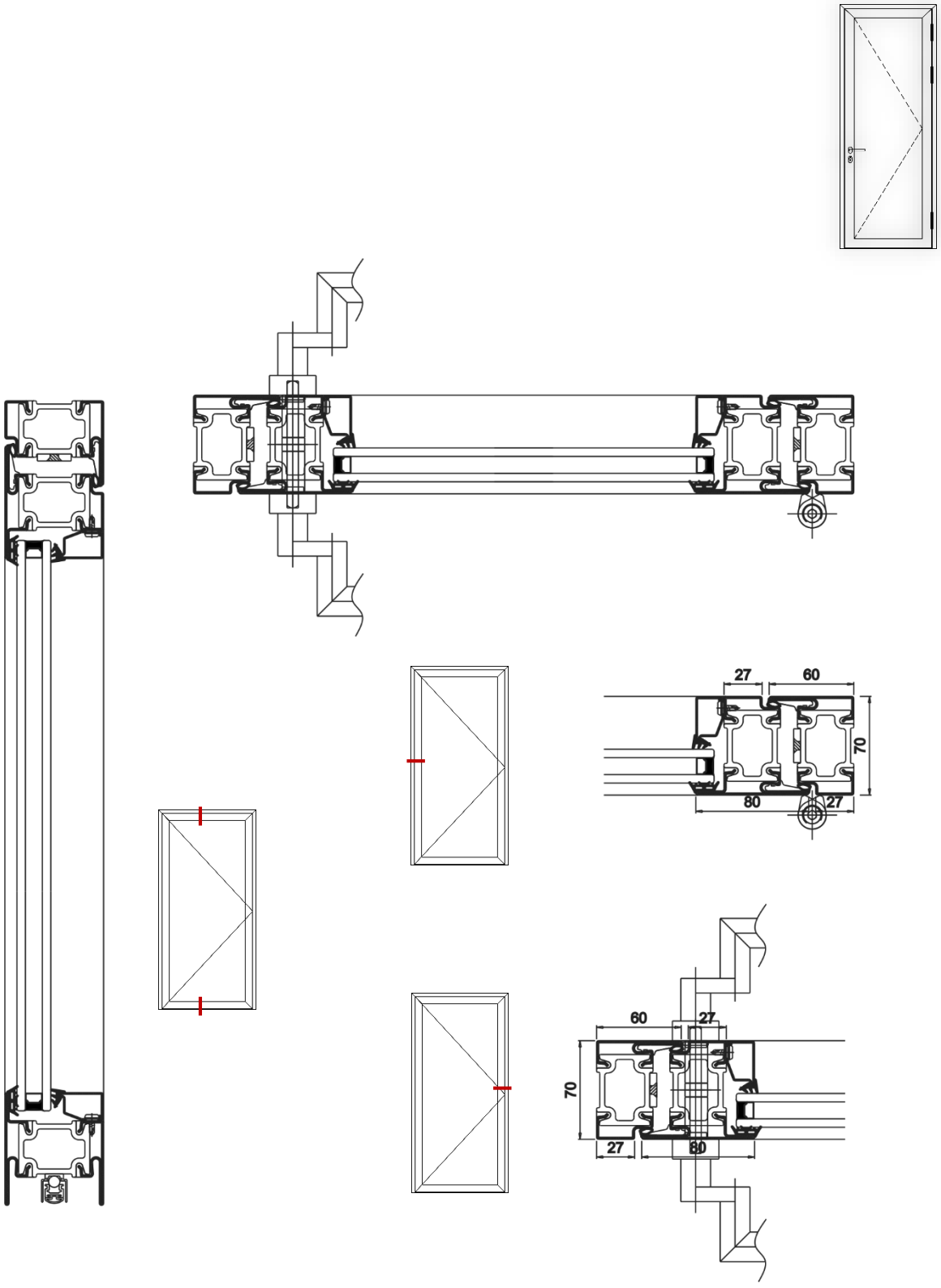
NO.:70555	G:5.51kg/m O:0.27 m²/m

7040 system

Product application: narrower steel non-fire door/ steel non-fire partition

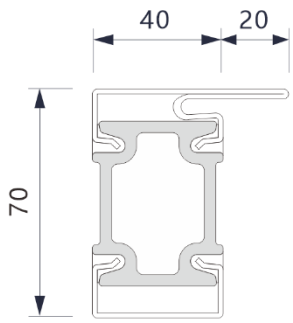
The visible surface of 7040 system is narrower, and the profile is more slender

7040 Node of steel non-fire door



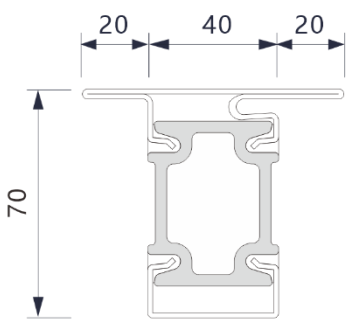
7040 steel profiles

Product application: narrower steel non-fire door/ steel non-fire partition



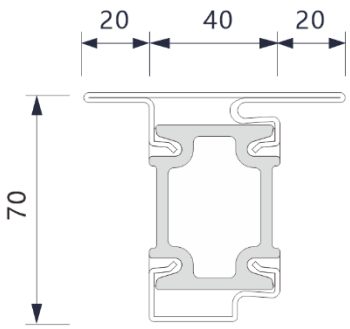
L:6000mm

NO.:70401	G:4.50kg/m O:0.20㎡/m



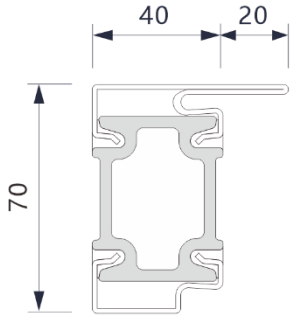
L:6000mm

NO.:70402	G:4.96kg/m O:0.24㎡/m



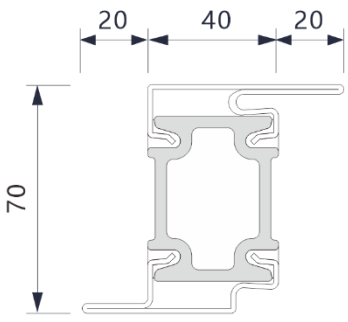
L:6000mm

NO.:70405	G:4.94kg/m O:0.24㎡/m



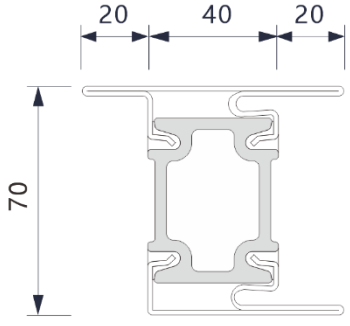
L:6000mm

NO.:70403	G:4.48kg/m O:0.20㎡/m



L:6000mm

NO.:70404	G:4.96kg/m O:0.24㎡/m



L:6000mm

NO.:70406	G:6.16kg/m O:0.24㎡/m

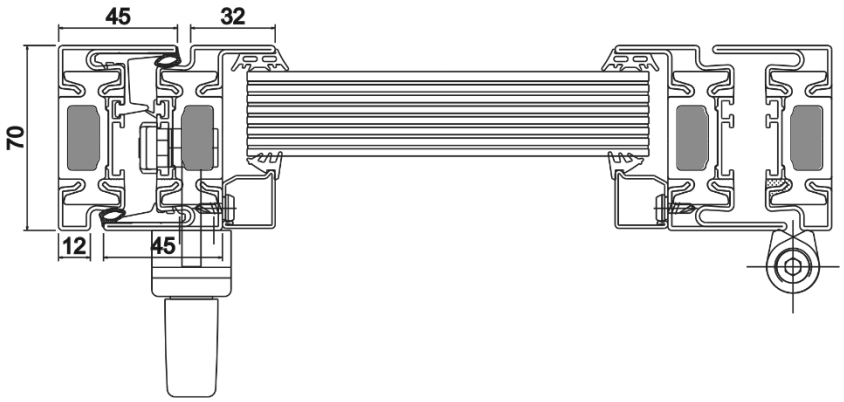
7025 system

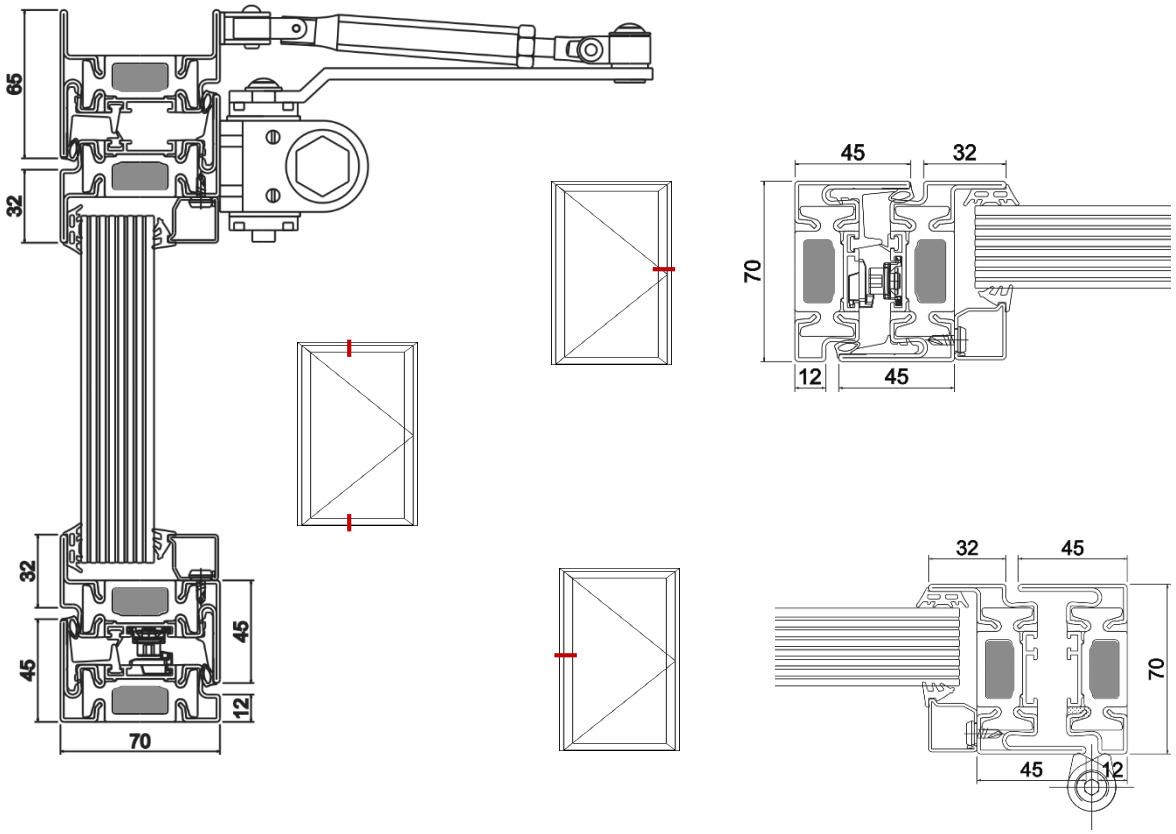
Product application: steel extremely narrow door(non fire)/ steel extremely narrow fire window

steel extremely narrow non-fire window

7025 node of non-fire door and window system

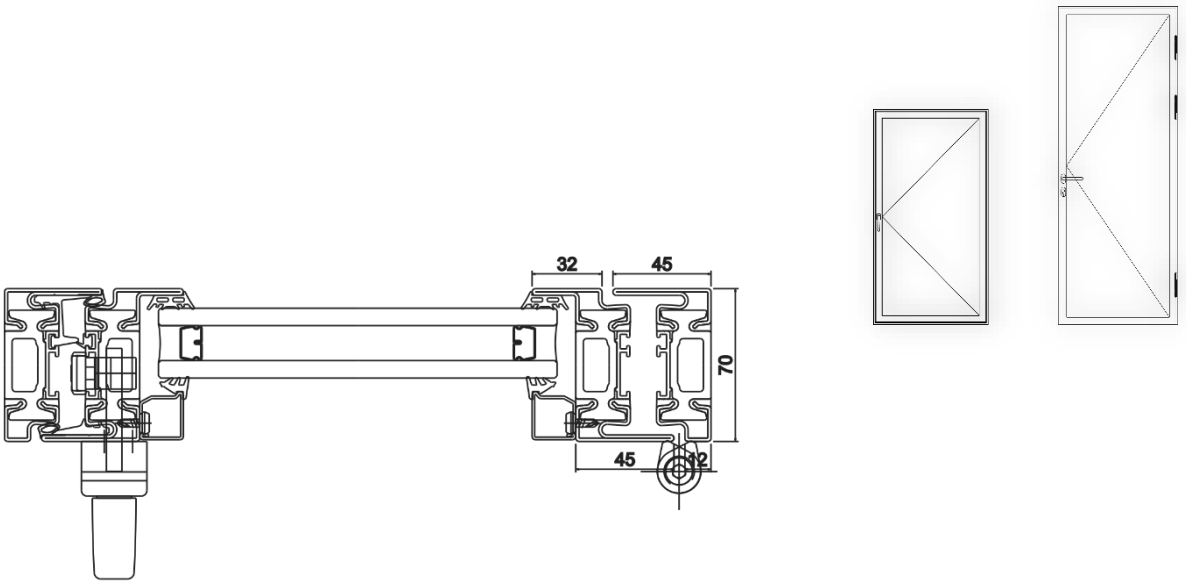
The visible surface of steel profile is narrower, and the profile is more slender

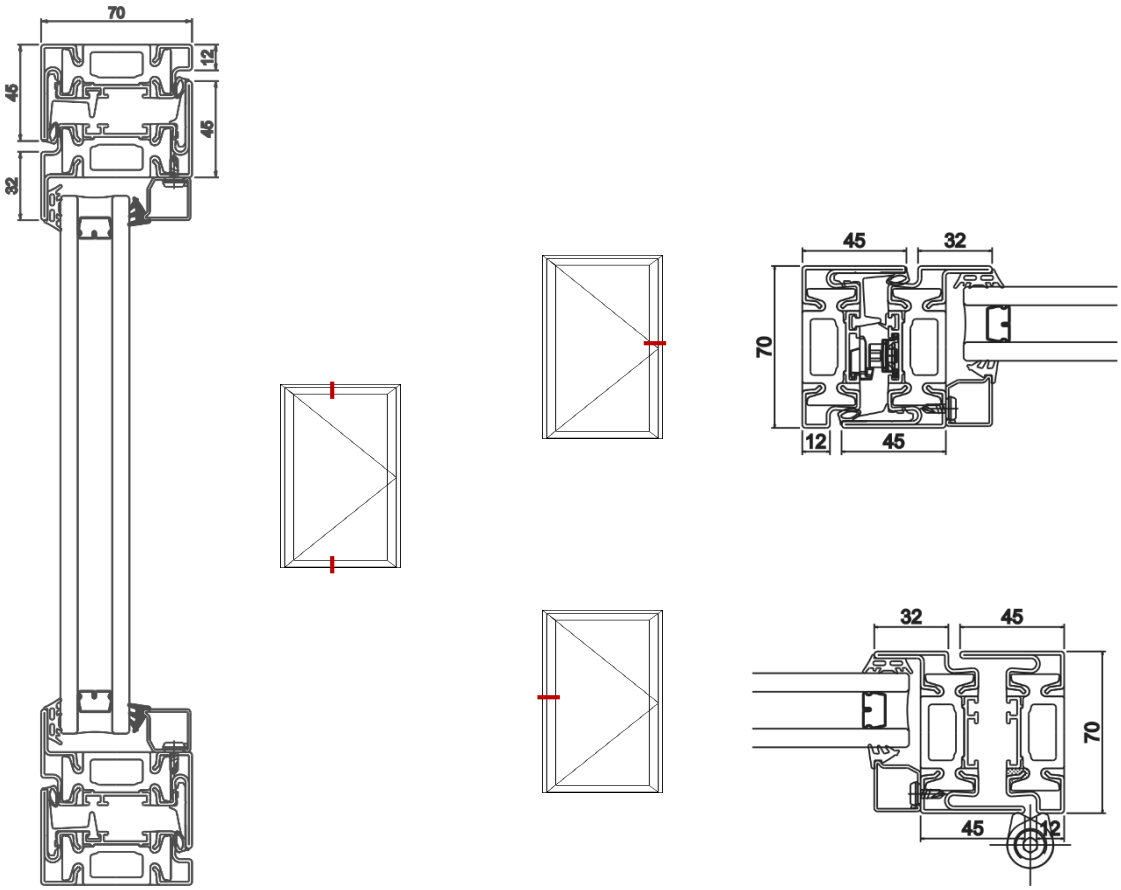




7025 node of non-fire door and window system

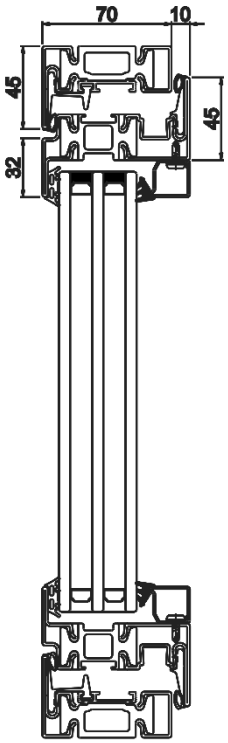
The visible surface of steel profile is narrower, and the profile is more slender

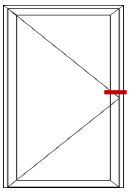


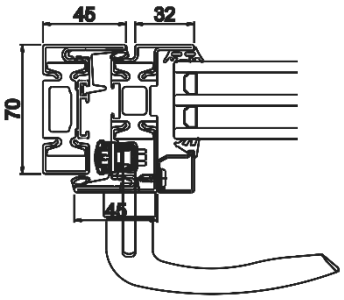


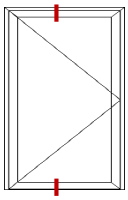
7025 node of non-fire window system

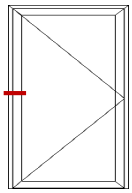
The visible surface of steel profile is narrower, and the profile is more slender

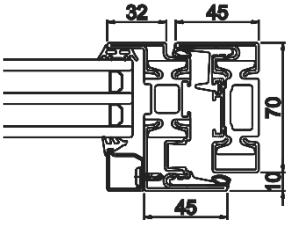








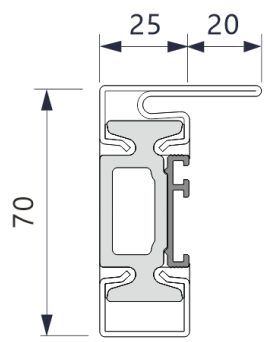




7025 steel profiles

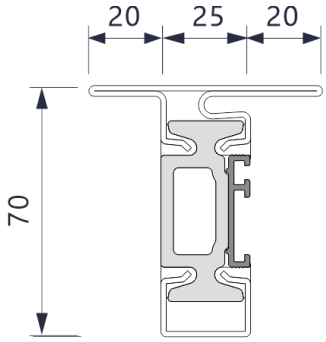
Product application: steel extremely narrow door(non fire)/ steel extremely narrow fire window

steel extremely narrow non-fire window



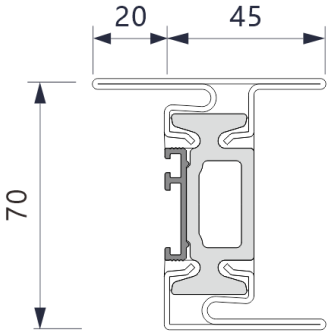
L:6000mm

NO.:70251	G:3.93kg/m O:0.17㎡/m



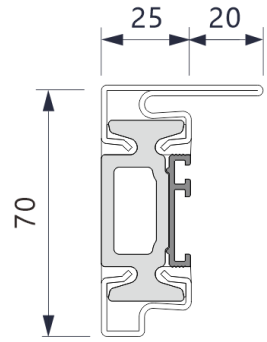
L:6000mm

NO.:70252	G:4.39kg/m O:0.21㎡/m



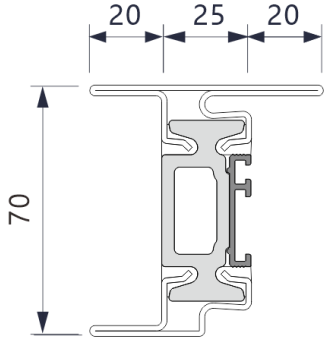
L:6000mm

NO.:70256	G:5.59kg/m O:0.21㎡/m



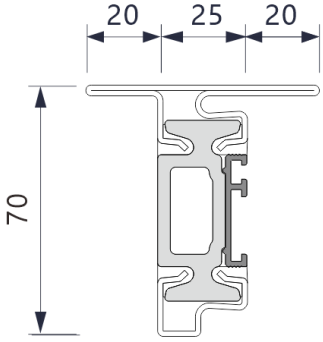
L:6000mm

NO.:70253	G:3.91kg/m O:0.17㎡/m



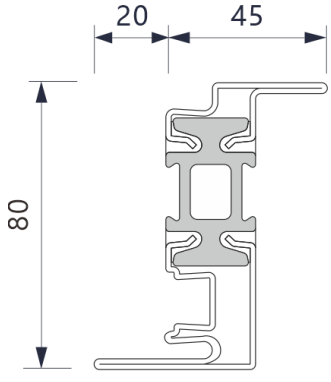
L:6000mm

NO.:70254	G:4.39kg/m O:0.21㎡/m



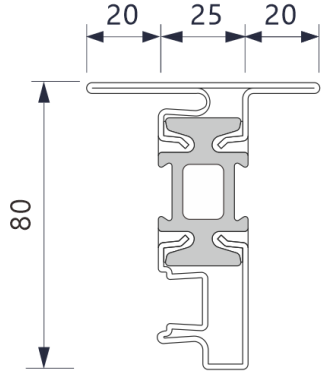
L:6000mm

NO.:70255	G:4.37kg/m O:0.21㎡/m



L:6000mm

NO.:702521	G:4.57kg/m O:0.27㎡/m

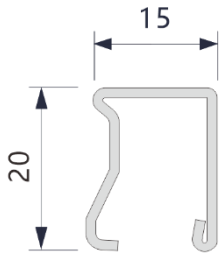


L:6000mm

NO.:702522	G:4.59kg/m O:0.27㎡/m

Steel glazing bead for 70SD

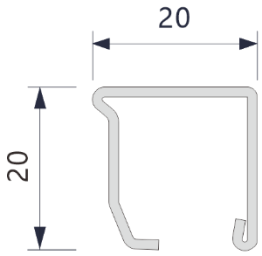
The glass thickness:
38mm-45mm



L:6000mm

NO.:0015	G:0.55kg/m O:0.04 m²/m

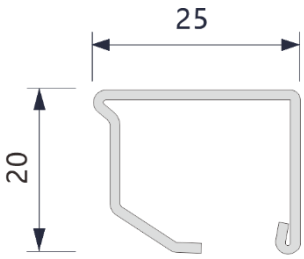
The glass thickness:
28mm-32mm



L:6000mm

NO.:0020	G:0.60kg/m O:0.05 m²/m

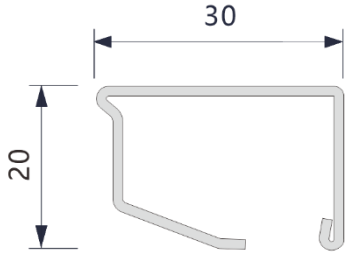
The glass thickness:
33mm-37mm



L:6000mm

NO.:0025	G:0.68kg/m O:0.06 m²/m

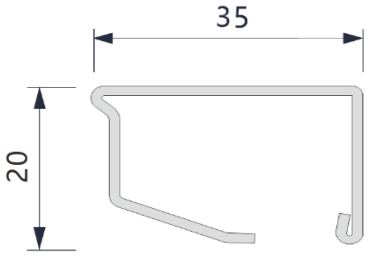
The glass thickness:
20mm-27mm



L:6000mm

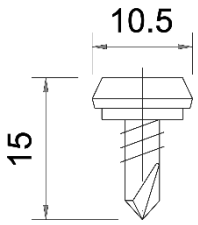
NO.:0030	G:0.77kg/m O:0.07 m²/m

The glass thickness:
15mm-22mm



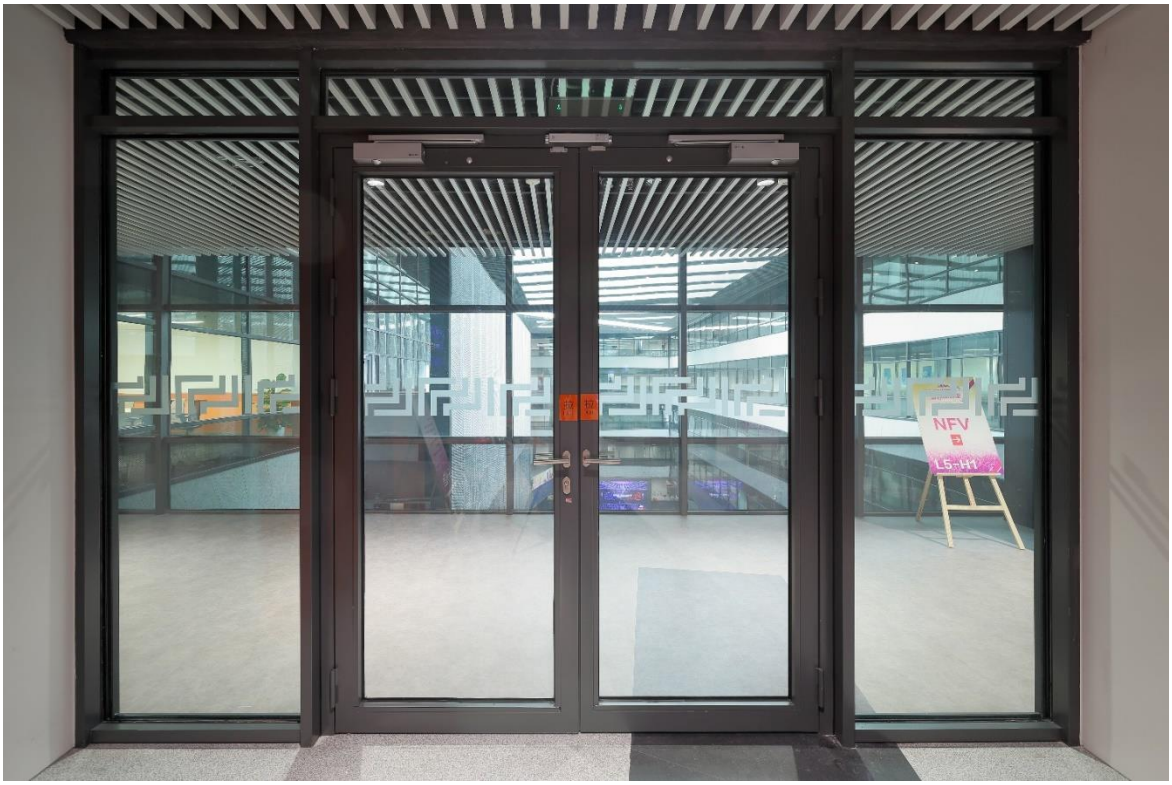
L:6000mm

NO:00035	Gfe:0.86kg/m O:0.08 m²/m



Project name

Lenovo



Project Name

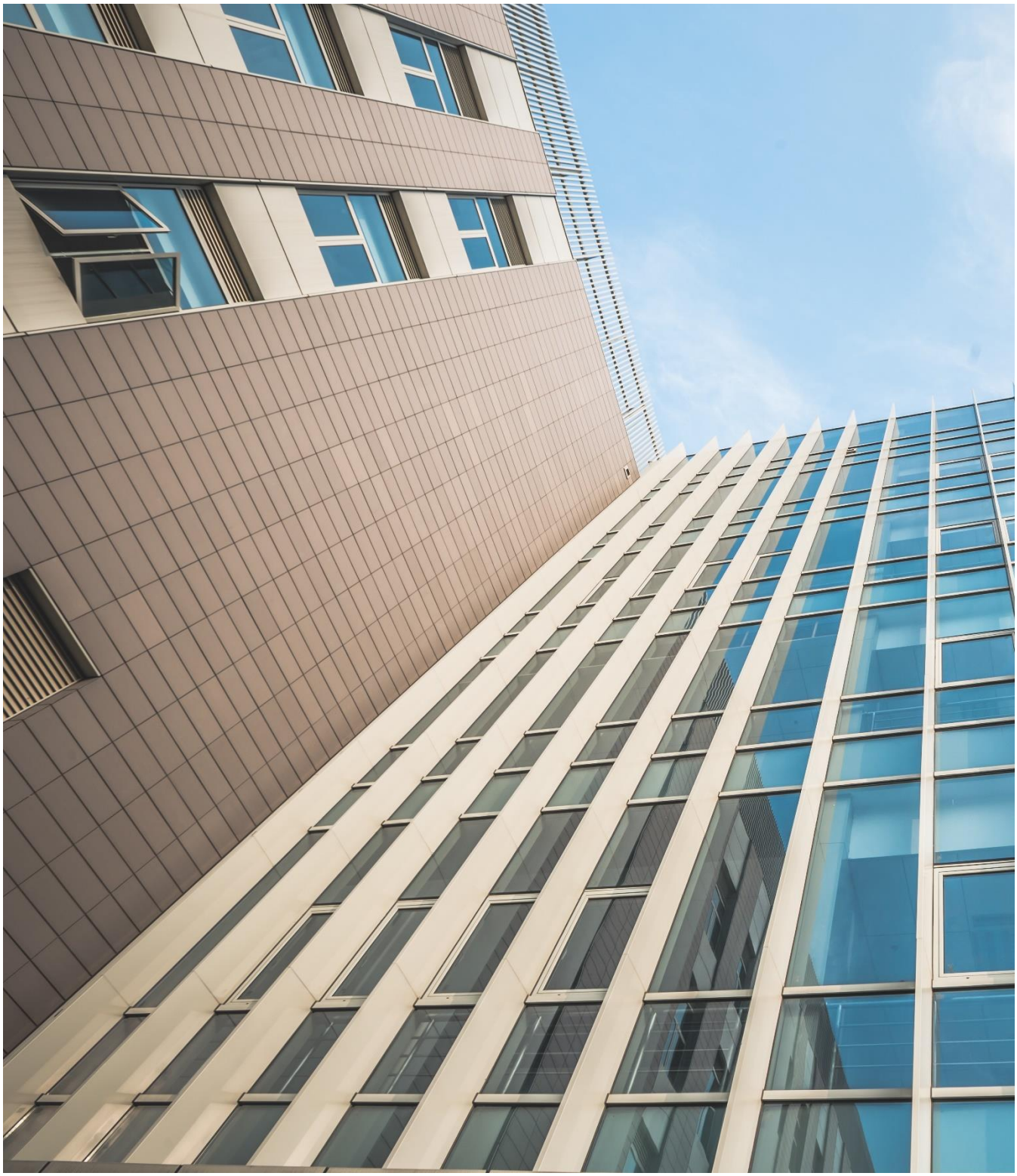
Qingdao Jiaodong International Airport

Project Name

Youth Olympic Games

Project Name

Hong Kong-Zhuhai-Macao Bridge



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