

Doors and facades

M series

Doors that combine
features



A safe and reliable
door for every situation


MERFORD

M series

Keeping sensitive information in and bothersome sound out, and insulating hazardous substances. This can be crucial. For example, in data centres that store the government's digital information. Or in industry, where workers are exposed to harmful noise every day. For more than 60 years, we have been contributing to the best possible environment to live, work and spend your life. This is because we innovative, test our products, and put the findings into practice. Our M door is the result, which combines a multitude of features with a huge range of customised options.



A door for every context

You can't go wrong with a Merford M door. Whether opting for steel revolving doors or single or double wing, they are suitable for any setting. From cinemas to chemical companies and from airports to pharmacies. Unique situations call for unique approaches, and that's when an M series door is the perfect match. An M door can be designed as a company door, without any special features, in virtually any size and design. Some circumstances have special requirements, like muffling noise, slowing down fires or being secured against burglaries. In such cases, we can provide M doors with extra features. Even if the doors have special features, they can still have the same aesthetic appeal, and the same uniform appearance.

An M door offers you a wide range of options. And security to boot. Independent research and testing authorities put our doors through rigorous testing for their effectiveness. Which is a comforting thought.

No limit to the combinations

Combine any of the features below, without compromising on quality or aesthetic balance:



Soundproof



Bulletproof



Fireproof



ATEX compliant



Burglar resistant



Transformer version



Anti-panic



Air-tight and gas-tight



Technical information

Merford makes it possible to take one basic model and create doors with a wide range of features, while giving your project an aesthetically uniform appearance. The pages that follow give you an overview of the technical features and options, so that you can create your ideal M door.

Door panel

M doors have a double-walled door panel made from electro-galvanised steel plate, and come with a frame made of 2 mm sheet metal. The doors are fitted with insulation between the panels. The type of insulation depends on the features required.

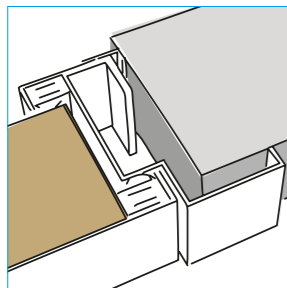
Hinges

M-series doors have hinges made of galvanised steel with stainless steel pins and a lubrication nipple.

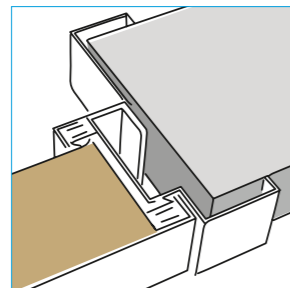
Frames

The M series gives you various frames to choose from. The door can be installed in all kinds of settings. The overview below lists all the options. Corner frames, frames that fit around the wall and block frames.

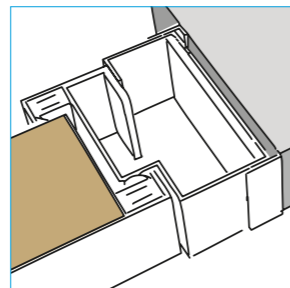
Corner frames



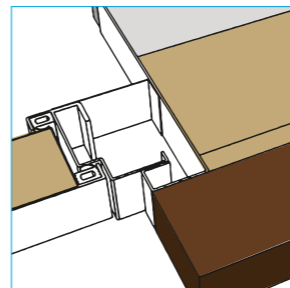
Frames that fit around the wall



Block frames



Door frames mounted behind the doorstep

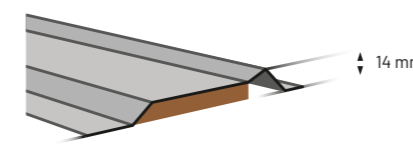


Hinges, coated in the same colour as the door and frame, with a lubrication nipple.

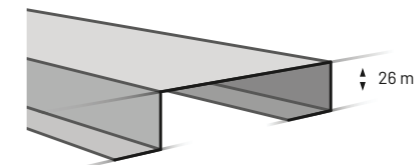
Thresholds

M doors come with a threshold of your choice. This depends on whether it is an interior or exterior door, what it will be used for (transport route) and the required classifications, for instance whether you require sound insulation or waterproofing.

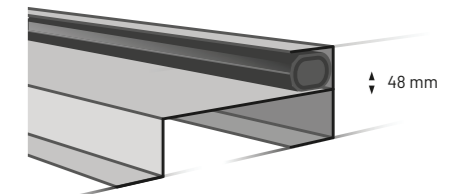
Finishes



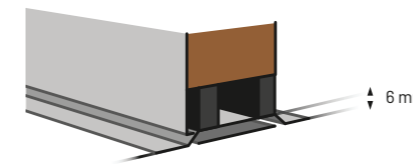
Threshold 7 (low threshold)



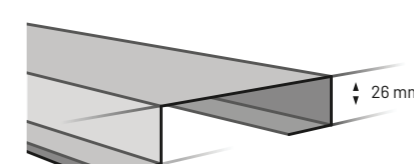
Threshold 2 (single seal)



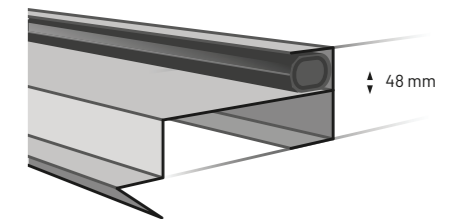
Threshold 2 (double seal)



Threshold 3 (drop-down threshold seal)



Threshold 1 (overhanging, single seal)



Threshold 1 (overhanging, double seal)

Doors come standard with a two-component primer finish and can be painted using an RAL colour of your choice. The doors are pre-treated with chemicals and a wet paint system that is applied electrostatically, which guarantees a finish with excellent adhesion, an even coating and a long service life.

ISO 9223-compliant corrosion classification

Climate classifications	Risk of corrosion	Exterior applications	Interior applications	Coating thickness
C3 (two-layer system)	average	Urban and industrial area with high humidity and moderate SO ₂ pollution. Coastal areas with low salinity.	Business premises with high humidity and low air pollution: food industry, laundries, breweries, and dairies.	90 µm
C4 (three-layer system)	high	Industrial and coastal area with moderate salinity. High humidity and corrosive atmosphere. Structures housing chemicals with persistent high levels of dirt and humidity.	High humidity, moderate pollution: chemical companies, swimming pools, harbours, shipping docks.	150 µm

Technical information

Locks, fittings and access control

Locks and fittings

No door without fittings. Merford has a range of various kinds of locks and fittings to match all combinations of features. If it's an anti-burglary door you're after, go for a star cylinder with a BKS day/night lock.

Access control

To guarantee security, doors can be fitted with extra components for access control. Install an electromechanical lock that comes with a cable latch in the rebate.

Security fittings in a grill door



Are your requirements demanding in terms of burglar resistance? Then go for a BKS day/night lock or an electromechanical lock.

Locks and fittings



Rondo

- Suitable for heavy doors and intensive use
- Lever handle, fixed knob, or panic bar
- Aluminium or stainless steel



Security fittings

- Available in SKG***
- Suitable for anti-burglary doors
- Lever handle, fixed knob, or panic bar
- Aluminium



BKS day/night lock

- Suitable for intensive use in burglar- and fire-resistant doors
- Optionally available with an anti-panic feature and/or self-locking
- For profile or barrel cylinder

Access control



Cable latch

- Connect a door component to the mains
- Long (180°) or short version (110°)
- Chrome-plated steel



Electric locking plate

- Suitable for frequent use, in harsh environments
- Low in maintenance
- Working current or quiescent current
- 12 or 24 volts



Electromechanical locks

- Suitable if high anti-burglary standards are required

Technical information

Fittings

Finish the door with practical fittings

Tired of doors slamming shut in the wind? Need a double door that has to be closed in the right sequence for fire-prevention reasons? These issues can be solved with relatively simple fittings, like door limiters and closing sequence controllers. The pages that follow give you an overview of the most popular fittings.

There is more to our product range than what is shown on these pages. If you have problems or special requirements and the solutions are not listed on these pages, then get in touch with your Merford consultant, who will work with you to find a solution.



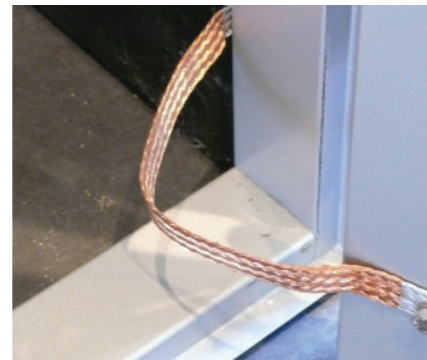
Anti-panic bar

- Complies with NEN-EN 1125 emergency exit features
- Open the door with one move



Detent pin

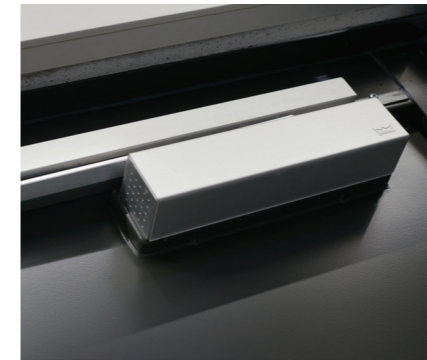
- Holds the door in the open position
- Made of stainless steel



Earthing braid

- Provides earthing between the door and the frame

With the right accessories for the type of setting, you can opt for ease of use, security, or damage prevention.



Door closer

- Closes the door automatically
- Controls movement when opening and closing the door
- Sliding and articulated versions available



Closing sequence controller

- Makes sure that double-wing doors close in the right sequence.
- Ensures that fire-resistant doors close correctly



Door limiter

- Solid chain in plastic sleeve
- Limits the opening angles (90°-110°)
- Reduces the chances of damaging the door or wall



Inserts or coverings

- Grilles available with 28% or 50% air throughput (optional intruder-resistant version available)
- Windows in various dimensions
- Door panels can also be upholstered.



Magnetic door contact

- Indicates whether the door is open or closed
- Concealed in the top of the door panel
- Operates on 12 volts



Semi-automatic slider

- Simple, concealed locking mechanism for the passive panel of a double door
- Can only operate when the active door panel is open

Keep noise on the right side of the door

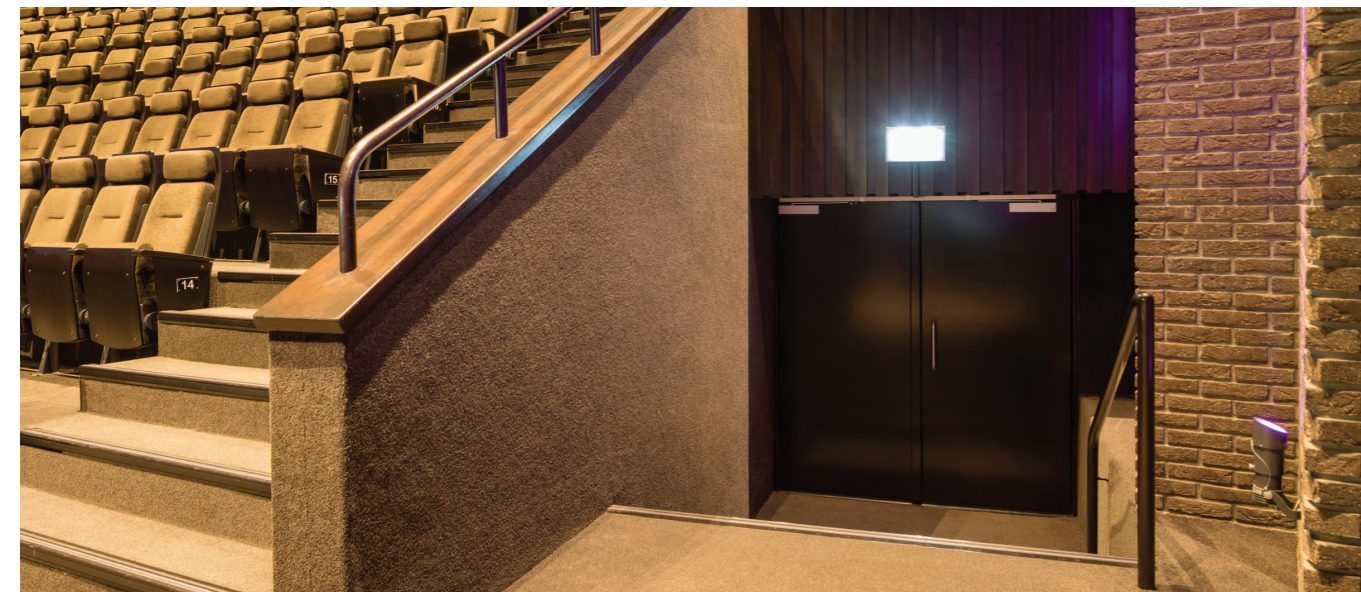
Our M series can be fitted with a range of acoustic features. Nightclubs are subject to different noise emission standards and requirements than a waste processing plant on an industrial site. That is why we have a specific approach for each noise emission standard.

Acoustic packages

The acoustic packages for the M series come with a single or double seal. If required, very high sound insulation values can be achieved in a range of sound spectra, even for low-frequency noise.

Tandem construction

To achieve even higher sound insulation, two doors can be installed, one behind the other, in a tandem door arrangement. This system is only used as an escape door.



On the page to the right: Overview of sound insulation values. The fact sheet for sound insulation values per third octave and per octave band is on the merford.com website.

Under: Double-wing, sound-insulating door at Parkstad Theatre in Kerkrade



Use M doors to reduce noise by up to 56 dB in low and high-frequency sounds

Type	Sound insulation R_w lab value (dB)	C (dB)	Ctr (dB)	STC	Gap sealing	Thickness door panel (mm)	Weight of door panel (kg/m ²)	Fire resistance*
M41	41 dB	-1 dB	-5 dB	43	Single	75	25	
M42	42 dB	0 dB	-5 dB	43	Single	75	28	
M43	43 dB	-1 dB	-6 dB	44	Double	75	34	
M47	47 dB	-2 dB	-8 dB	47	Double	75	35	
MFT	49 dB	-1 dB	-4 dB	49	Double	75	68	
M51	51 dB	-2 dB	-6 dB	51	Double	75	49	
M52	52 dB	-2 dB	-7 dB	53	Double	75	52	
M53	53 dB	-2 dB	-6 dB	53	Double	75	45	
M55L	55 dB	-1 dB	3 dB	54	Double	100	49	
M56	56 dB	0	-4	54	Double	75	62	
M56L	56 dB	-1 dB	-2 dB	54	Double	100	68	

* Depending on the fire class.



= fire resistant



= not fire resistant



= fire resistance possible

Fire resistant for up to 120 minutes. A safe feeling.

M series Merford doors come in a range of fire-resistance classes.

To measure is to know

TNO/Efectis tests all doors in accordance with the current European standard: EN 1634-1. As an expert in the field of fire resistant doors, Merford Special Doors is responsible choosing the right door for the project. A comforting thought. When we deliver your fire-resistant door, we give you the relevant safety documentation that describes the fire-resistant properties of the door.

Options

Our fire-resistant doors can be fitted with grilles, windows, and transparent panels without compromising on fire safety. Of course, fire protection can be combined with other properties like sound- and burglar proofing.



*On the page to the right:
Overview of fire resistant options. For
other details, see Efectis statements on
merford.com*

*Under:
Fireproof doors at
BiogasTec in Menen (Belgium)*



Merford regularly tests the fire safety aspects of new solutions and innovations

Classification	Height in mm	Width by panel in mm	Surface area in m ²	Version
EW 30	3914	1766	5.75	▽ ▽
EW 60	3941	1766	5.75	▽ ▽
EW 90	2818	1549	3.43	▽ ▽
EW 120	2818	1549	3.43	▽ ▽
240	2795	1069	2.46	▽
EI2 30)	3914	1766	5.75	▽ ▽
EI2 60)	2795	1549	3.43	▽ ▽
EI2 90)	2750	1549	3.43	▽ ▽
EI2 120)	2563	1549	3.43	▽
EI1 30)	3914	1766	5.75	▽ ▽
EI1 60)	2795	1549	3.43	▽ ▽
EI1 90)	2750	1549	3.43	▽ ▽
EI1 120)	2563	1549	3.43	▽

Extra features

Each situation sets different requirements for a door. That is why anti-burglary features can sometimes be more important than fire resistance. We are very well aware of this, and so we often combine features in our doors. Looking for a tandem door with fire-resistant, sound-insulating, bulletproof and anti-burglary features? Which also comes with an anti-panic lock? No problem! Here are a few of the options.

Burglar proofing

M doors can also be made burglar resistant. In line with the standards laid down in the Netherlands for outer walls and facades, the doors are tested for EN 1627:2011 Class RC2 or RC3 compliance, and are available in single- and double-wing versions. They can also include anti-panic features.

Bulletproofing

Tested at TNO according to EN 1522-1, Class FB4 NS. The entire door and frame are hermetically bulletproof. During the bulletproofing test, extra tests were carried out on critical areas, such as the lock and the outer edges where the frame and the door panel seal.

Escape door feature

Comply with the applicable safety requirements by having an M door with an emergency exit feature. We can supply doors that comply with EN 179 as well as EN 1125 standards.

ATEX

ATEX-compliant M doors do not have any inherent ignition sources and are therefore ideal for environments that are potentially explosive due to gas and dust. Assessed at TNO according to 17 EM/0442.

Air- and gas-tight

The maximum permitted pressure on M doors designed to be air and gas tight is 5 kPa in the opening direction. M doors with this feature are Class 4 compliant according to NEN-EN 12207 and Class A1/12 according to NEN-EN 12152.

Contact Merford for details about these features.

The advantages of Merford

If you opt for Merford, you're opting for ease of use, flexibility, and the assurance that the solution will meet all your requirements. If you wish, we can create your systems from start to finish. This includes providing advice, developing, producing, and installing the systems, and then maintaining them for you.

Seeing is believing? Then visit our showroom!

Come to our showroom to see the options available to you for improving your building with our doors and facade systems. Check out our product range with your own eyes, and get personal guidance from our staff. Then have a peak behind the scenes at our production line, so that you can see for yourself the craftsmanship of our staff.

Opt for security by taking out a service contract

Need to be certain that your doors and other facade elements stay in peak condition? We can help you by periodically inspecting them. We also do maintenance and repair minor defects, like damaged rubber strips and mechanical parts that need tweaking. This not only keeps your facade system in good condition, it keeps it secure too.

Our specification service makes it simple

You can use the specification service to generate a specification text for the door you're looking for. Choose the right product for your project according to your preferences. Copy the text and use it in your construction contract documents. And get a good idea of what the product looks like in 3D or in 2D drawings while you're at it.

Go to merford.com/bestekservice (website in Dutch).



Looking for more information?
Or the right advice? Then feel
free to contact us!

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