

STEEL FIRE RESISTANT DOORS AND HATCHES DFM

PRODUCT DESCRIPTION

The DFM DS Steel Fire Resistant Doors and hatches are constructed from two zinc plated steel skins 0.75mm thick, with rockwool infill with a density of 120 kg/m 3 in El $_2$ 30 fire resistance class and 140 kg/m 3 in El $_2$ 60 class.

Door leaves and frames are factory powder coated in a selected colour from our standard colour range.

DFM DS Fire resistant doors are made in single or double leaf variants. They are suitable for both internal and external application.

Standard equipment:

- Mortise latch and bolt lock,
- Stainless steel U-form handle set on long shield,
- Cylinder and 3 keys,
- 2 pieces of customised stainless steel hinges,
- 2 security pins,
- Perimeter rubber gasket and intumescent gasket.

Optional equipment:

- Additional hinge or alteration of hinges to 3D adjustable model,
- Anti-panic locks and hardware concordant with EN 1125 and EN 179.
- Door closers concordant with EN1154
- Electric and electromotor locks,
- Electric strike plates and magnet contacts,
- Rectangular or round glass vision panels
- Fire resistant ventilation grills,
- Kick-plates of stainless steel,
- Magnet holders,
- Automatic dropping gaskets.

DOOR FRAMES

DFM DS door frames are made of moulded aluminium in thickness 3mm, corner (Z) design as standard, with choice of rectangular and wrap-round frame profiles. An upgrade to include a thermal break is also available.

Not only is 3mm aluminium frame more rigid than standad but it also provides an effective clear passage, wider than is the case with traditional steel frames.

Invisible angle connectors are used at the mitred joints on the frames. These weld-free joints achieve a quality, aesthetic finish.

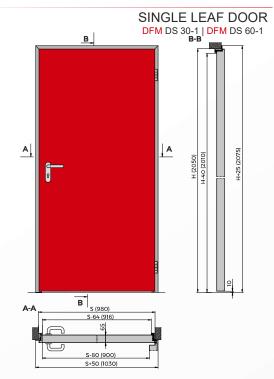
Moreover, aluminium door frame do not carry the risk of corrosion in external or other potentially wet environments.

TECHNICAL DETAILS

Fire resistance: EI_230 / EI_260 Smoke resistance: S_a/S_{200}

Mechanical resistance: S_a/S_{200} Class 3 or 4 EN-1192 Class 5/200.000 cykli Acoustic insulation: $R_w = 34 \div 42 \text{ dB}/R_{A1} = 32 \div 41 \text{ dB}$

Heat transfer coefficient: 1,1 \div 1,6 W/($m^2 \cdot K$) Corrosion resistance: class: C3 / C4 / C5(M)



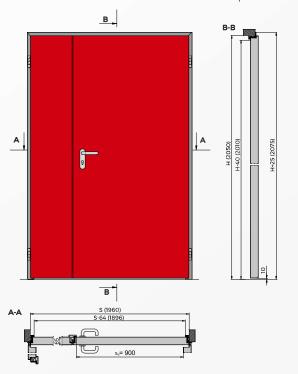
Sizes of doors DFM DS 30-1 and DFM DS 60-1 inside frames:

■ width: 533 mm ÷ 1250 mm

■ height: 1550 mm ÷ 2500 mm

DOUBLE LEAF DOORS

DFM DS 30-2 | **DFM** DS 60-2



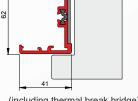
Sizes of doors DFM DS 30-2 inside frames:

- width: 776 mm ÷ 2550 mm
- height: 1550 mm ÷ 2500 mm

Sizes of doors DFM DS 60-2 inside frames:

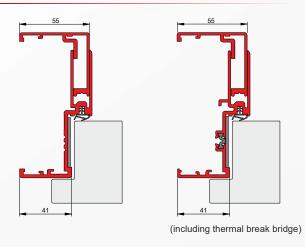
- width: 776 mm ÷ 2506 mm
- height: 1616 mm ÷ 2508 mm

ALUMINIUM CORNER FRAME

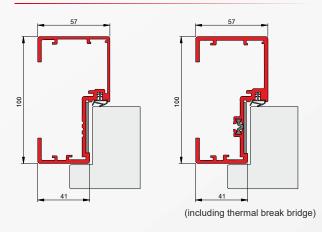


(including thermal break bridge)

ALUMINIUM WRAP-AROUND FRAME



ALUMINIUM RECTANGULAR FRAME





INSTALLATION OF STEEL DOORS DFM DS

DFM DS Steel doors have innovative features to aid installatoin. Frame fitted elements, such as hinges and protective casings for lock bolt and security pins contain holes for threading steel screws or expanding anchors.

Screws / anchors threaded through plates of DFM customised hinges warrant solid door leaf fixing directly to the wall, thus preventing it from sagging.

CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

DOORS FOR INTERNAL APPLICATION:

National Technical Assessment National Certificate of Constancy of Performance **Declaration of Performance**

DOORS FOR EXTERNAL APPLICATION:

Certificate of Constancy of Performance **Declaration of Performance**

DOORS AS A MEANS OF ESCAPE:

National Certificate of Constancy of Performance defines DFM DS as suitable for use in evacuation routes according to EN 1125

STANDARD OF MAKING

Stainless steel hinge



Aluminium glazing frame



Mortise latch and bolt lock



Stainless steel handle



Thick door leaf rebate



Stainless steel striking plate



PRODUCT DESCRIPTION

The DFM DS HP Steel Fire Resistant Flush Doors are constructed from two zinc plated steel skins 0.75mm thick, with rockwool infill with a density of 120 kg/m 3 in El $_2$ 30 fire resistance class, and a density of 140 kg/m 3 in El $_2$ 60 class. The total thickness of door leaf is 65mm.

The effective light weight of the door leaf minimises mechanical stress on the hinges, lock and door closer. This provides improving durability and service life.

Door leaves and frames are factory powder coated in a selected colour from our standard colour range.

DFM DS Fire Resistant Flush Doors are made in single and double leaf variants. They are suitable for both internal and external application.

Standard equipment:

- Mortise latch and bolt lock,
- Stainless steel U-from handle set on long shield,
- Cylinder and 3 keys,
- 2 pieces of customised stainless steel hinges,
- 2 security pins,
- Perimeter rubber gasket and intumescent gasket.

Optional equipment:

- Additional hinge or alteration of hinges to 3D adjustable model.
- Anti-panic locks and hardware concordant with EN 1125 and EN 179.
- Door closers concordant with EN 1154,
- Electric and electromotor locks,
- Electric strike plates and magnet contact,
- Rectangular or round glass vision panels,
- Fire resistant ventilation grills,
- Kick-plates of stainless steel,
- Magnet holders,
- Automatic dropping gasket.

CHARACTERISTICS OF DOOR FRAMES HP

DFM DS model with hidden door rebate (door leaf and frame flush) are an innovative alternative for traditional flush doors. Here the aluminium double rebated frame plays a role, hiding the rebate of door leaf, which allows the construction of door leaf remain unchanged, minimising the cost of non-standard model.

Frames of DFM DS.. are made of moulded aluminium in thickness 3mm, corner (Z) in standard with option of exchange to rectangular and wall embracing models, and including variants with thermal break bridges.

TECHNICAL DETAILS

Corrosion resistance:

Fire resistance:
Smoke resistance:
Mechanical resistance:
Mechanical durability / closing:
Acoustic insulation:
Heat transfer coefficient:

 S_a/S_{200} class 3 or 4 EN-1192 class 5 / 200.000 cycless R_w =34+42 dB/ R_{A1} =32+41 dB 1,1 ÷ 1,6 W/(m^2 •K) class: C3 / C4 / C5(M)

El₂30 / El₂60

SINGLE LEAF DOOR

DFM DS 30-1 HP | DFM DS 60-1 HP | B-B | (66002) 05 H | 00002 05 H | 00

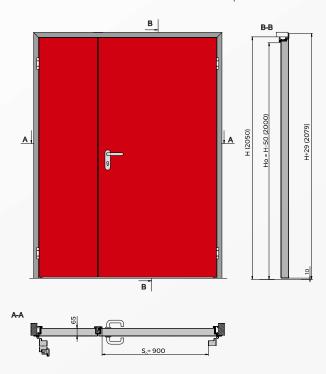
Door sizes DFM DS 30-1 HP i DFM DS 60-1 HP inside frames:

■ width: 776 mm ÷ 2550 mm

height: 1550 mm ÷ 2500 mm

DOUBLE LEAF DOOR

DFM DS 30-2 HP | **DFM** DS 60-2 HP



Sizes of doors DFM DS 30-2 HP inside frames:

• width: 776 mm ÷ 2550 mm

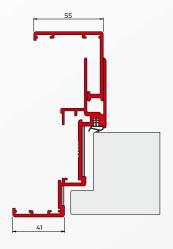
■ height: 1550 mm ÷ 2500 mm

Sizes of doors DFM DS 60-2 HP inside frames:

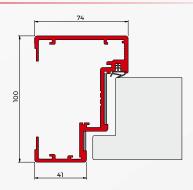
width: 776 mm ÷ 2506 mm
 height: 1616 mm ÷ 2508 mm

ALUMINIUM CORNER FRAME HP

ALUMINIUM WRAP-AROUND FRAME HP



ALUMINIUM RECTANGULAR FRAME HP





INSTALLATION OF DFM STEEL DOORS DS

DFM DS Steel Doors have innovative features to aid installation. Frame fitted elements, such as hinges and protective casings for lock bolt and security pins contain holes for threading steel screws or expanding anchors.

Screws / anchors threaded through plates of DFM customised hinges warrant solid door leaf fixing directly to the wall, thus preventing it from sagging.

CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

DOOR FOR INTERNAL APPLICATION:

National Technical Assessment National Certificate of Constancy Performance Declaration of Performance

DOORS FOR EXTERNAL APPLICATION:

Certificate of Constancy of Performance Declaration of Performance

DOORS AS A MEAN OF ESCAPE:

National Certificate of Constancy of Performance defines DFM DS EN-1125 as suitable for use in evacuation routes according to EN 1125

STANDARD OF MAKING

Stainless steel hingej



Stainless steel handle



Aluminium glazing frame



Thick door leaf rebate



Mortise latch and bolt lock



Stainless steel striking plate



DOOR LEAVES

The general use DFM DS Steel Doors are constructed from two zinc plated steel skins 0.75mm thick, with rockwool infill with a density of 120kg/m³. The total thickness of door leaf is 65mm. The effective light weight of the door leaf minimises mechanical stress on the hinges, lock and door closer. This provides improving durability and service life.

Door leaves and frames are factory powder coated in a selected colour from our standard colour range.

DFM DS general use Doors are made in single and double leaf variants. They are suitable for both internal and external application.

Standard equipment:

- Mortise latch and bolt lock,
- · Stainless steel U-form handle set on long shiled,
- Cylinder and 3 keys,
- 2 pieces of customised stainless steel hinges,
- Perimeter rubber gasket.

Optional equipment:

- Additional hinge or alteration of hinges to 3D adjustable model,
- Anti-panic locks and hardware concordant with EN 1125 and EN 179.
- Door closers concordant with EN 1154,
- Electric and electromotor locks,
- Electric strike plates and magnet contacts,
- Rectangular or round glass vision panels,
- Fire resistant ventilation grills,
- Kick-plates of stainless steel,
- Magnet holders,
- Automatic dropping gasket.

DOOR FRAMES

DFM DS. Door Frames are made of moulded aluminium in thickness 3mm, corner (Z) design as standard, with choice of rectangular and wrap-around frame profiles. An upgrade to include a thermal break is also available.

Not only is the 3mm aluminium frame more rigid than standard steel frames but it also provides an effective clear passage, wider than is the case with traditional steel frames.

Invisible angle connectors are used at the mitred joints on the frames. These weld-free joints achieve a quality aesthetic finish.

Moreover, aluminium door frames do not carry the risk of corrosion in external or other potentially wen environments.

TECHNICAL DETAILS

Smoke resistance:

Mechanical resistance: Mechanical durability / closing:

Acoustic insulation:

Heat transfer coefficient: Corrosion resistance: S,/S,0

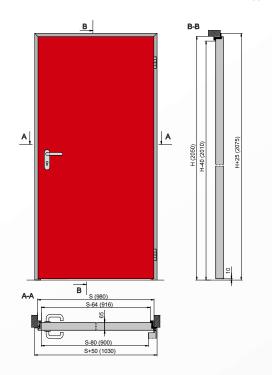
class 3 lub 4 wg EN-1192 class 6 / 200.000 cycles

 $R_w = 34 \div 42 dB/R_{A1} = 32 \div 41 dB$ 1,1 ÷ 1,6 W/($m^2 \cdot K$)

class: C3 / C4 / C5(M)

SINGLE DOOR LEAF

DFM DS 00-1

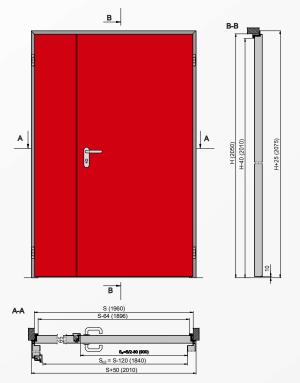


Sizes of doors DFM DS 00-1 inside frames:

- width: up to 1186 mm
- height: up to 2468 mm

DOUBLE LEAF DOOR

DFM DS 00-2



Sizes of doors DFM DS 00-2 inside frames:

- width: up to 2491 mm
- height: up to 2468 mm

PRODUCT DESCRIPTION

Door leaves

The DFM DS 120 Steel Fire Resistant Doors are constructed from two zinc plated steel skns 0.75mm thick, with infill of mineral boards Tecbor and rockwool with a density of 140kg/m³. The total thickness of door leaf is 65mm.

The effective light weight of the door leaf minimises mechanical stress on the hinges, lock and door closer. This provides improving durability and service life.

Door leaves and frames are factory powder coated in a selected colour from our standard colour range.

DFM DS Fire Resistant Doors are made in single and double leaf variants. They are suitable for both internal and external application.

Standard equipment:

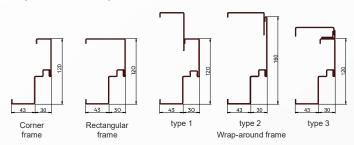
- Mortise latch and bolt lock,
- Stainless steel U-form handle set on long shield,
- Cylinder and 3 keys,
- 2 pieces of customised stainless steel hinges 3D adjustable,
- 2 security pins,
- Perimeter rubber gasket and intumescent gasket.

Optional equipment:

- Additional hinges (up to 3 or 4 per door leaf)
- Anti-panic locks and hardware concordant with EN 1125 and EN 179
- Door closers concordant with EN 1154
- Electric strike plates and magnet contacts,
- Rectangular glass vision panels,
- Fire resistant ventilation grills.
- · Kick-plates of stainless steel,
- Magnet holders,
- Automatic dropping gaskets.

DOOR FRAMES

DFM DS Door Frames are made of steel in thickness 1.5mm, corner (Z) design as standard, with choice of rectangular and wrap-around frame profiles.



TECHNICAL DETAILS

Fire resistance: EI_2120 Smoke resistance: S_a/S_{200}

 $\begin{array}{ll} \mbox{Mechanical resistance:} & \mbox{class 3 or 4 EN-1192} \\ \mbox{Mechanical durability / closing:} & \mbox{class 5 / 200.000 cykli} \\ \mbox{Acoustic insulation:} & \mbox{R}_{\mbox{\tiny W}} = 42 \, \mbox{dB/R}_{\mbox{\tiny At}} = 41 \, \mbox{dB} \end{array}$

CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

Doors for internal application:

National Technical Assessment

National Certificate of Constancy of Performance

Declaration of Performance

Doors for external application:

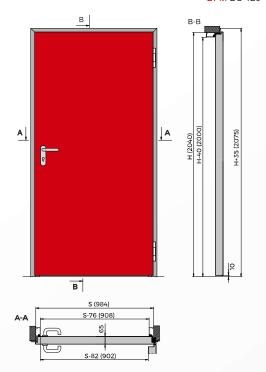
Certificate of Constancy of Performance (CPR - CE)
Declaration of Performance

Doors as a means of escape:

National Certificate of Constanc of Performance defines DFM DS as suitable for use in evacuation routes according to EN 1125.

SINGLE LEAF DOOR

DFM DS 120-1

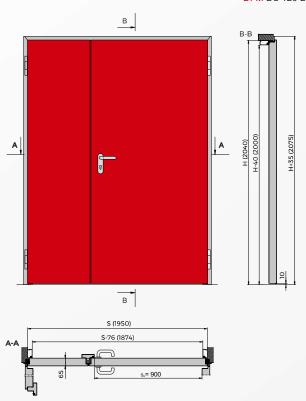


Size of doors DFM DS 120-1 inside frames:

- width: 517 mm ÷ 1034 mm
- height: 1730 mm ÷ 2307 mm

DOUBLE LEAF DOOR

DFM DS 120-2



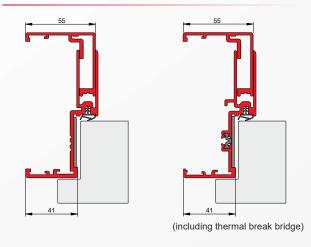
Size of doors DFM DS 120-2 inside frames:

- width: 1077 mm ÷ 2154 mm
- height: 1730 mm ÷ 2307 mm

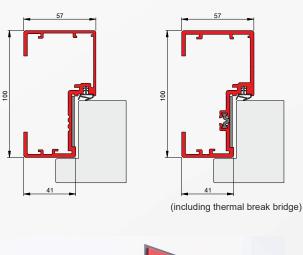
ALUMINIUM CORNER FRAME

25 25 (including thermal break bridge)

ALUMINIUM WRAP-AROUND FRAME



ALUMINIUM RECTANGULAR FRAME





INSTALATION OF DFM DS STEEL DOORS

DFM DS Steel Doors have innovative features to aid installation. Frame fitted elements, such as hinges and protective casings for lock bolt and security pins contain holes for rthreading steel screws or expanding anchors.

Screws / anchors threaded through plates of DFM customised hinges warrant solid door leaf fixing directly to the wall, thus preventing it from sagging.

CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

DOORS FOR INTERNAL APPLICATION:

National Technical Assessment National Certificate of Constancy of Performance National Certificate of Constancy of Performance Declaration of Performance

DOORS FOR EXTERNAL APPLICATION:

Declaration of Performance

DOORS AS A MEANS OF ESCAPE:

National Certificate of Constancy of Performance defines DFM DS as suitable for use in evacuation routes according to EN 1125.

STANDARD OF MAKING

Stainless steel hinge



Aluminium Glazing frame



Mortise latch and bolt lock



Stainless steel handle



Thick door leaf rebate



Stainless steel striking plate



Standard equipment:

- Mortise latch and bolt lock,
- Stainless steel U-form handle set on long shields,
- Cylinder and 3 keys,
- 3 or 4 pieces of customised stainless steel hinges 3D adjustable,
- 4 security pins (2pcs per each leaf)
- Intumescent gasket (DFM OS 60-2) and perimeter rubber gasket (DFM OS 60-2 and DFM OS 00-2)

Optional equipment:

- Anti-panic locks and hardware concordant with EN 1125 and EN 179,
- Door closers concordant with EN 1154,
- Rectangular vision panels,
- Fire resistant / non fire resistant ventilation grills,
- Kick-plates of stainless steel,
- Magnet holders,
- Automatic dropping gaskets or threshold.

Door frames:

The frames of DFM OS Gates are made of steel in thickness 1.5mm, rectangular design as standard, with choice of corner and wrap-around frame profiles. An upgrade to include a thermal break is also available.

PRODUCT DESCRIPTION

Gate leaves

The leaves of DFM DS Steel Fire Resistant Hinged Gates and general use Hinged Gates are constructed from two zinc plated steel skins 0.75mm thick, with infill of rockwool with a density of 140kg/m³. The total thickness of door leaf is 65mm.

The effective light weight of the door leaf minimises mechanical stress on the hinges, lock and door closer. This provides improving durability and service life.

Door leaves and frames are factory powder coated in a selected color from our standard colour range.

DFM OS Fire Resistant and general use Gates are made in Double leaf variant. They are suitable for both internal and external application.

TECHNICAL DETAILS

Fire resistance: El₂60

Mechanical durability / closing: class 2/20.000 cycles

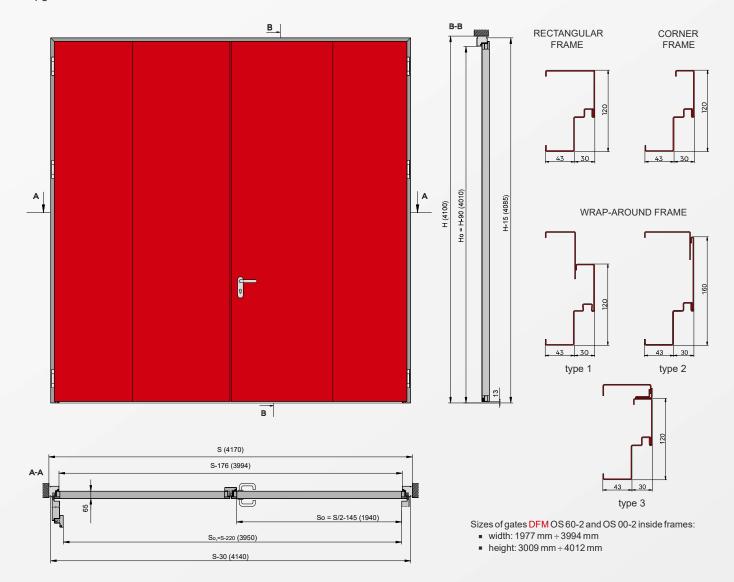
CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

Doors for internal application:

Certificate of Constancy of Performance Declaration of Performance

Doors for external application:

Declaration of Performance



PRODUCT DESCRIPTION

The door leaves of DFM DS EW 180 Steel Fire Resistant Doors are constructed from two zinc plated steel skins 0.75mm thick, with infill of mineral boards Tecbor and rockwool with a density of 140 kg/m3. The door leaf holds additional surface panel fixed on perimeter to form a total thickness 112mm. The edge of door leaf is double rebated, laid with sets of intumescent gaskets on its parimeter.

Door leaves and frames are facotry powder coated in a selected colour from our standard colour range.

DFM DS Fire Resistant Doors are made in Single leaf variant only. They are suitable for both internal and external application.

Standard equipment:

- Mortise latch and bolt lock,
- Stainless steel U-form hanlde set on long shield,
- Cylinder and 3 keys,
- 4 pcs of customised stainless steel hinges 3D adjustable,
- 2 security pins,
- Perimeter rubber gasket and intumescent gasket.

Optional equipment:

- Anti-panic locks and hardware concordant with EN 179,
- Door closers concordant with EN 1154,
- Electric strike plates and magnet contacts,
- Kick-plates of stainless steel,
- Automatic dropping gasket.

TECHNICAL DETAILS

Fire resistance:

EW 180 | EI , 90

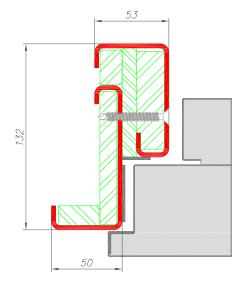
CERTIFICATES AND SUPPLIMENTARY DOCUMENTS

Classification for Fire Resistance NZP-07346R:06/DI/18 Classification report 03510/18/Z00NZP

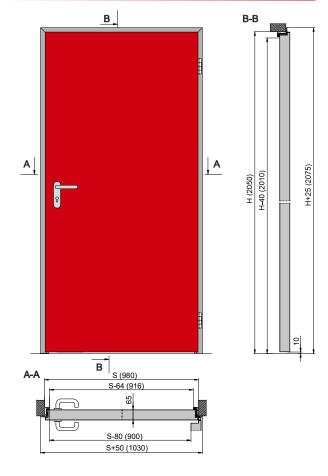
DOOR FRAMES

DFM DS Door Frames are made of steel in thickness 1,5mm, double rebated to hold the relevant double rebated door leaf. Rectangular design as standard, with choice of corner frame profile.

CORNER FRAME



SINGLE LEAF DOOR



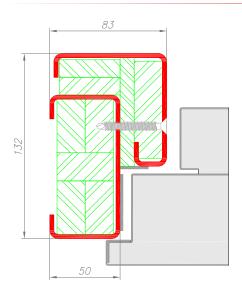
Size of doors DFM EW 180 inside frames:

width: up to 1183 mmheight: up to 2652 mm

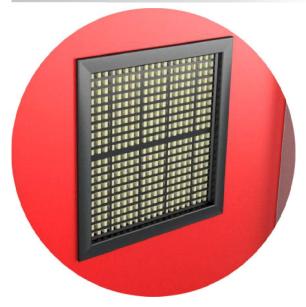
Size of doors DFM EI, 90-1 inside frames:

width: up to 1183 mmheight: up to 2652 mm

RECTANGULAR FRAME



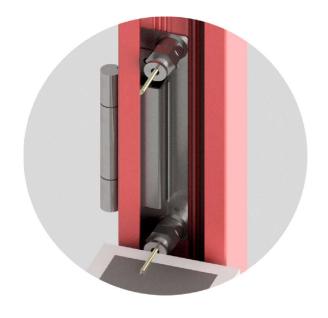
VENTILATION GRILL FOR FIRE DOORS



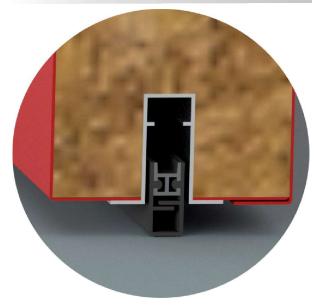
STANDARD THRESHOLD



ADJUFIX ASSEMBLY SOLUTION



AUTOMATIC DROP DOWN SEAL



PANIC BAR



UPPER DRIP CAP FOR EXTERNAL DOORS



DF/M EUROPE



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