

#### INSTALLATION MANUAL OF DOORS TYPE DFM DS

DS60-1, DS60-2, DS60B-1, DS30-1, DS30-2, DS30B-1, DS30B-2, DS00-1, DS00-2, DS60-1A, DS60-2A

fire resistant range El<sub>1</sub>30, El<sub>2</sub>60, El<sub>2</sub>60 and non-resistant doors v. EN 3.5.2020

Our business model shall guarantee:

FACILITY - comfortable and customised solutions aimed at Customers' needs

TRANSPARENCY- clear business relations

BUSINESS EXPERTISE - a team of passionate professionals with "out of box" attitude





#### IDENTIFICATION, HANDOVER AND NOMENCLATURE

During installation, usage and repair works prescriptions of safety on site must be observed, specifically those referring to particular regulations for construction and joinery works.

Installation must be carried out by qualified installers, trained for installation of fire doors. Parts and components of doors shall not be modified or replaced.





DS = steel door. 30 = El.30. 2 = double leaf e.a: DFM DS 30B-2 DFM DS 30-2 DS = steel door. 30 = El<sub>2</sub>30. 2 = double leaf

DFM DS 60-1A DS = steel door,  $60 = EI_260$ , 1 = single leaf, A=Rw 42dB

During handover of goods from transport company check packaging and quantity of doors and cartons. In case of any claim a note CMR must be made and photos taken and sent to: it@dfm-europe.eu

ORDER

PROJECT NAME: "SOHO

X.199808"

PROJECT DOOR NUMBER:

.74"

**PACKING LIST** 

PROJECT NAME: "SOHO

X.199808"

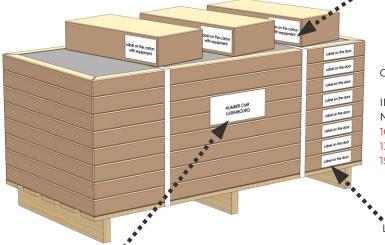
PROJECT DOOR NUMBER: "174" INDIVIDUAL PRODUCTION DOOR NUMBER: 1087/2020/026

LABEL ON THE CARTON WITH **EQUIPMENT** 

PROJECT NAME: "SOHO X.199808" INDIVIDUAL PRODUCTION DOOR

NUMBER:1087/2020/026

QUANTITY AND NUMBER OF CARTON:



CMR

INDIVIDUAL PRODUCTION DOOR NUMBER:

1087/2020 1345/2020 1589/2020

LABEL ON THE DOOR

PROJECT NAME: "SOHO X.199808" PROJECT DOOR NUMBER: "74" INDIVIDUAL PRODUCTION DOOR

NUMBER: 1660/2020/021

ADDITIONAL INFORMATION ON PALLET SIDE:

NUMBER OF CMR: "573"

**DELIVERY ADRES: "LUXEMBOURG"** 

Example of labels on the door and box with equipment:

DFM DS-30-1-OB. Nr zlecenia / Production Nr. 01087/2020/026

1000 x 2130

74 Project : SOHO X.199808

Oznaczenie projektowe / Project Name

Data Produkcji / Prod Date : 2020-07-16 8019 satyna DFM DS

01087-EU-2020

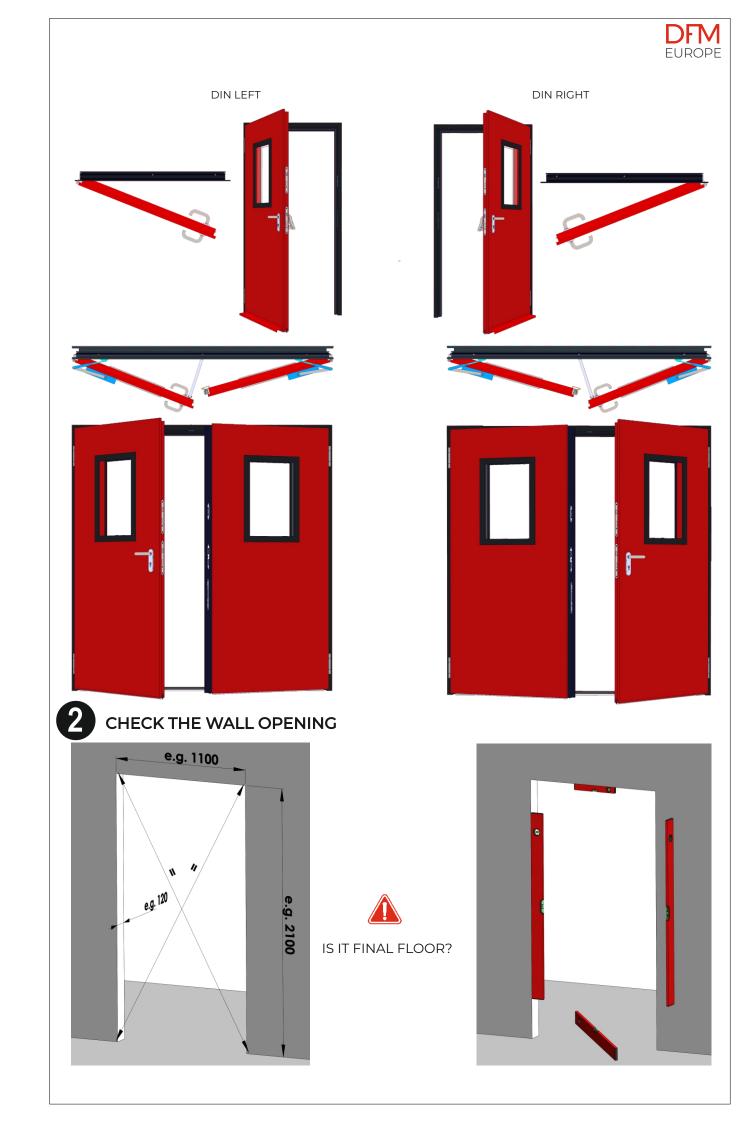
PACZKI / EQUIPMENT



Oznaczenie projektowe / Project Name

74 Project : SOHO X.199808

Data Produkcji / Prod Date : 2020-07-16





### 3

## INSTALLATION METHODS - MAKE SURE THAT PROPER INSTALLATION MATERIAL IS APPLIED

	CORNER FRAME	EMBRACING FRAME	RECTANGULAR FRAME			
TYPE OF DOOR FRAME / TYPE OF DOOR	0.300	0.300	*			
DS30-1 DS30B-1 DS30B-2 DS30B-2	Filling of gap between wall and door frame: - cement mortar, lime cement or plaster mortar - rockwoll of density min. 50kg/m3 + *fire retardant mass or cement mortar or glue - glue for plaster Perlfix T - fire resistant polyurethane foam SOUDAFOAM FR and silicate calcium band on places of anchor fixing + *fire retardant mass FIRE SILICON B1 FR for smokeproof doors.	Filling of gap between wall and door frame:  - cement mortar, lime cement or plaster mortar  - rockwoll of density min. 50kg/m3 + *fire retardant mass or cement mortar or glue  - glue for plaster Perlfix T  - fire resistant polyurethane foam SOUDAFOAM FR and silicate calcium band on places of anchor fixing + *fire retardant mass FIRE SILICON B1 FR for smokeproof doors.	Filling of gap between wall and door frame: - cement mortar, lime cement or plaster mortar - rockwoll of density min. 50kg/m3 + *fire retardant mass or cement mortar or glue - glue for plaster Perlfix T - fire resistant polyurethane foam SOUDAFOAM FR and silicate calcium band on places of anchor fixing + *fire retardant mass FIRE SILICON B1 FR for smokeproof doors.  Filling of door frame: - plaster boards type A or F 9.5÷12.5mm - cement mortar, lime cement or plaster mortar - glue for plaster Perlfix T - fire resistant polyurethane foam and silicate calcium band on places of anchor fixing (except smoke doors)			
DS60-1 DS60B-1 DS60-2 DS60-1A DS60-2A	Filling of gap between wall and door frame: - cement mortar, lime cement or plaster mortar - rockwoll (not allowed for DS60B-1) of density min. 50kg/m3 + *fire retardant mass or cement mortar or glue - glue for plaster Perlfix T	Filling of gap between wall and door frame: - cement mortar, lime cement or plaster mortar - rockwoll (not allowed for DS60B-1) of density min. 50kg/m3 + "fire retardant mass or cement mortar or glue - glue for plaster Per	Filling of gap between wall and door frame: - cement mortar, lime cement or plaster mortar - rockwoll (not allowed for DS60B-1) of density min. 50kg/m3 + *fire retardant mass or cement mortar or glue - glue for plaster Perlfix T  Filling of door frame: - plaster boards type A or F 9.5÷12.5mm - cement mortar, lime cement or plaster mortar - glue for plaster Perlfix T  In the case of doors classified according to smoke resistance, the gap between the frame and the wall, filled with rockwool, must be additionally insulated with gypsum mortar, cement mortar, cement and lime mortar, gypsum adhesive Perlfix (Knauf) or fire retardant silicone sealant FIRE SILICON BI FR			
DS00-1 DS00-2	Filling of gap between wall and door frame: cement mortar, lime cement or plaster mortar, glue for plaster Perlix T or olyurethane foam					
Wall requirements	Installation in walls of fire resistance according to EN 13501-2:2016, not less than EI 30 for DS30-1, DS30B-1, DS30B-2, and EI60 for DS60-1, DS60B-1, DS60B					
Requirements for the dimensions of the mounting gap	G ≤ 20 MM ( S <sub>a</sub> , S <sub>200</sub> , GAP ≤ 8 MM)	G ≤ 20 MM ( S <sub>a</sub> , S <sub>200</sub> GAP ≤ 8 MM)	G ≤ 20 мм ( S <sub>a</sub> , S <sub>200,</sub> GAP ≤ 15 мм)			
Standard mounting gap	Gst = 7mm	Gst = 7мм	Gst = 10mm			



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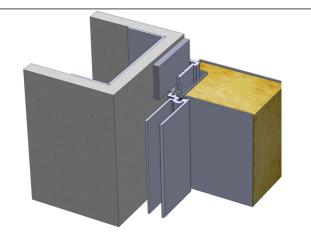
### EXAMPLES OF METHODS OF FIXING FRAMES. CHECK COMPLIANCE WITH APPROPRIATE CERTIFICATE

Installation to the frame studded wall on steel screws with silicate calcium slab (e.g. TECBOR, SILBOARD, PROMAT) on places of anchor fixing.

\*Or steel plate spacers for non-fire resistant doors. Spacers produced only for request.

Location of the spacers above the screw. The thickness of the spacer's plates set depends on the width of the installation gap. Ensure that the frame is vertical and not twisted.

Filling the installation gap acc. to the table on previous page.



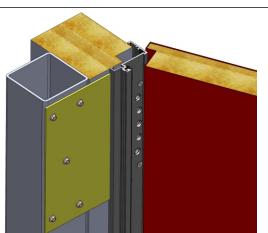
Installation of external non fire resistant doors in sandwich panel with galvanized steel plates min. 3 mm.

Installation plates are ordered individually acc. to the wall construction.

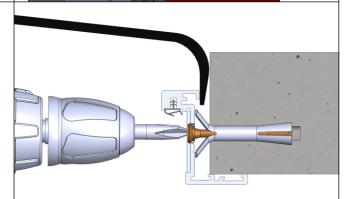
Additionally, door frame must be blocked with hardwood edges to preserve rigidity of the frame.

Special attention should be paid to bottom hinge while fixing the door frame.

Filling of gap between wall and door frame with polyurethane foam and, as an option, dedicated membranes.

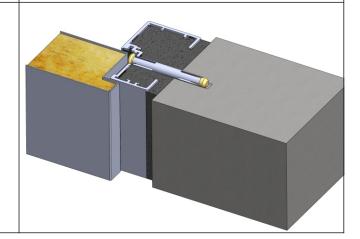


Method of tightening of anchors without usage of installation steel space plates or hardwood wedge for non-fire resistant doors.





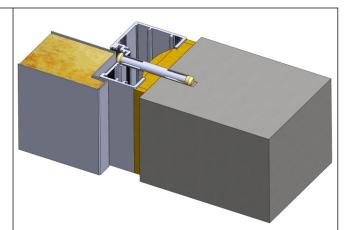
Cement mortar, lime cement or plaster mortar or glue for plaster Perlix T can be used as alternative to filling of door frame with plaster boards,.

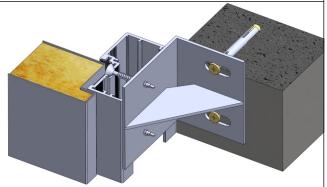




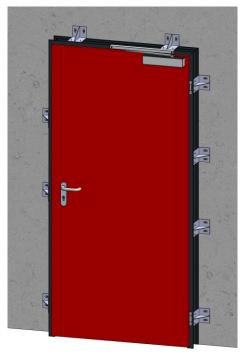
#### 3.2 CONTINUATION. EXAMPLES OF METHODS OF FIXING FRAMES. CHECK COMPLIANCE WITH APPROPRIATE CERTIFICATE

Filling of wall gap with polyurethane foam in internal applied non-fire resistant door in block frame





Mounting of non-fire resistant doors with steel brackets



FIXING AND FILLING MATERIALS ARE NOT INCLUDED IN DELIVERY.



IN CASE HARDWOOD WEDGES ARE USED TO PRESERVE THE FRAME RIGIDITY, THEY ARE NOT TO BE TAKEN OUT AFTER INSTALLATION AND FILLING OF THE INSTALLATION GAP. HARDWOOD WEDGES ARE ALLOWED ONLY FOR NON-FIRE RESISTANT DOORS.



### TYPES OF SCREWS:

type of frame /	ATTENTION! DON'T USE  ANY PLASTIC ELEMENTS FOR FIXING FIRE  DOORS!		NON RESISTANT DOORS		
type of wall	corner or embracing frame	rectangular frame	corner or embracing frame	rectangular frame	
Sandwich frame wall of total thickness not less than 100mm for DS30-1, DS30B-1, DS30-2, DS30B-2 and 125 mm for	steel self-drilling screws of size not less than Ø6,3x50mm	steel self-drilling screws of size not less than Ø6,3x85mm	steel self-drilling screws of size not less than Ø6,3x50mm	steel self-drilling screws of size not less than Ø6,3x85mm	
DS60-1, DS60B-1, DS60-2, DS60-1A, DS60-2A. constructed of 12,5 mm gypsum plaster boards type F or DF according to EN 520+A1:2012, filled in with rockwool of density not less than 30 kg/m3 laid in supporting construction of steel					
	steel anchors of size not less than Ø10x92mm	steel anchors of size not less than Ø10x132mm	steel anchors of size not less than Ø10x92mm	steel anchors of size not less than Ø10x132mm	
- Concrete or reinforced concrete - Masonry wall of full					
brick or concrete blocks - Wall of hole bricks or aerated concrete blocks			Dowel screw AST of size not less than Ø10x100mm	Dowel screw AST of size not less than Ø10x135mm	

THE SIZES GIVEN FOR ANCHORS AND SCREWS ARE MINIMUM SIZES, THE APPROPRIATE LENGTH MUST BE CHOSEN WITH REGARDS TO THE ACTUAL INSTALLATION CONDITIONS

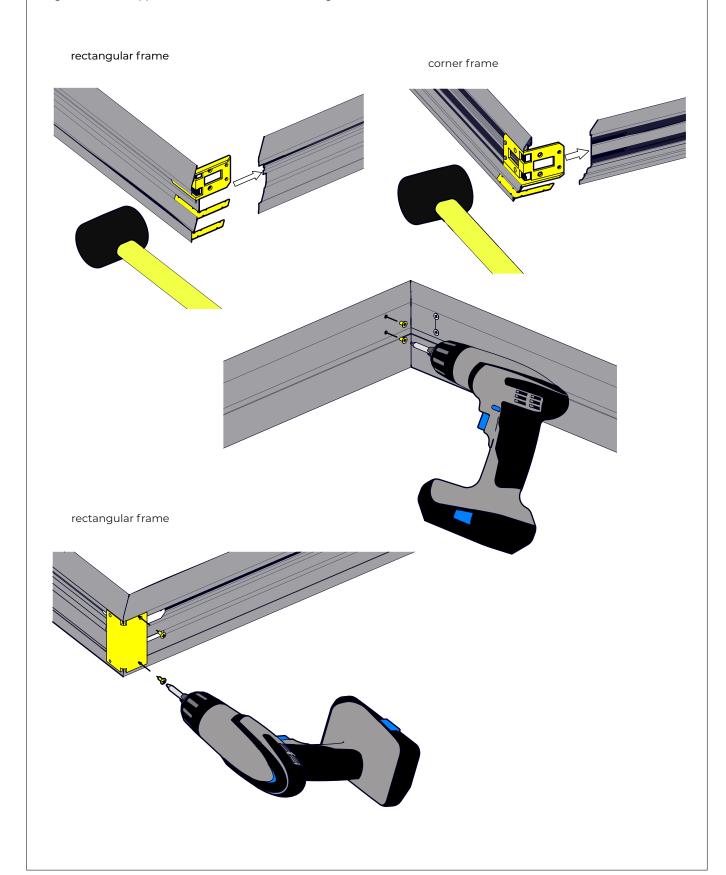




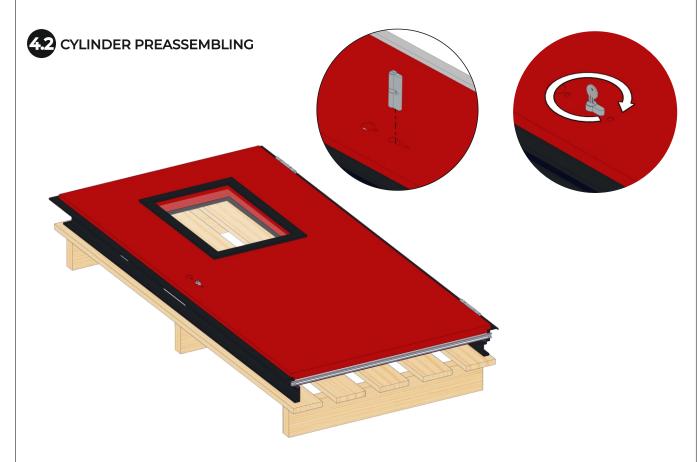
### 4.1 FRAME ASSEMBLING

Since the weight of the leaves or/and dimentions of doors are significant, double-leaf doors sometimes are supplied in parts, frame and leaves separately.

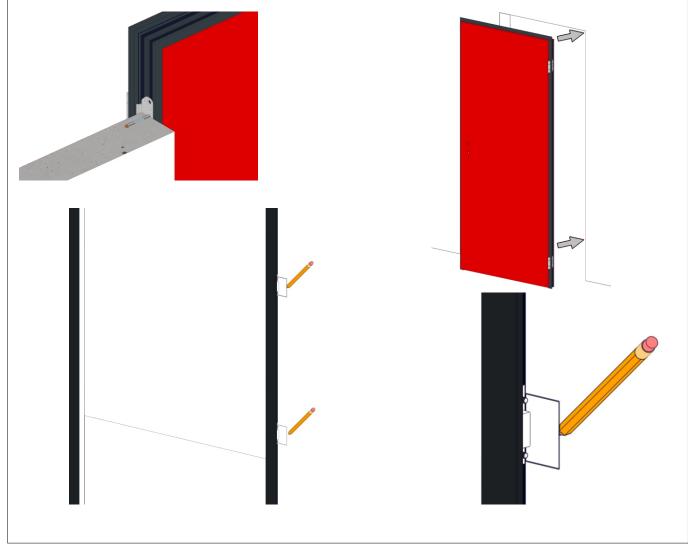
Single doors are supplied as a set, frame and leaves together.

















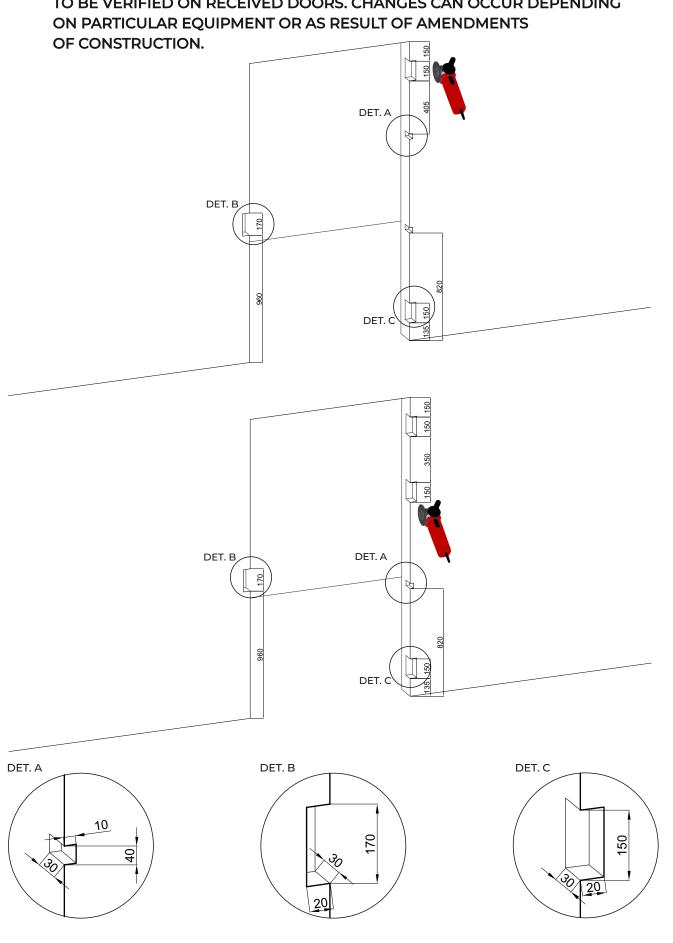


BELOW AS AN EXAMPLE OPENINGS FOR CORNER STEEL FRAME (WITH THE ASSUMTION THAT INSTALLATION GAP IS 7 MM ON HEIGHT AND 11 MM ON EACH SIDE FOR WIDTH).

PLEASE NOTE THAT SIZES, GIVEN ON DRAWINGS, ARE ILLUSTRATIVE ONLY,

TO BE VERIFIED ON RECEIVED DOORS. CHANGES CAN OCCUR DEPENDING

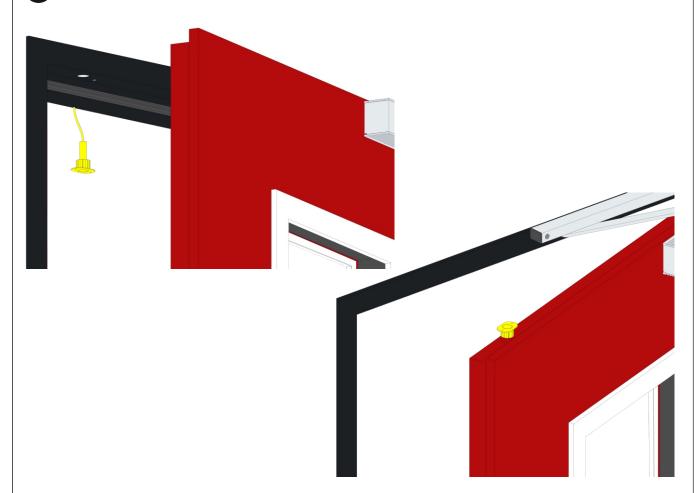
ON PARTICULAR EQUIPMENT OR AS RESULT OF AMENDMENTS



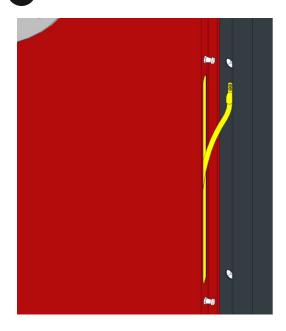


IF ACCESS CONTROL IS PIANNED, CHECK WHETHER THE CABLE HAS BEEN DISTRIBUTED AT AN APPROPRIATE PLACE.

5.3 FOR EXAMPLE FOR MAGNETIC CONTACT









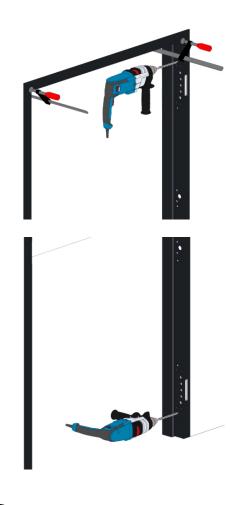


### 6 FIXING OF THE DOOR FRAME

THE QUANTITY OF ANCHORS DEPENDS ON NUMBER OF FRAME PREPARED HOLES. SCREW OPENINGS ARE PREPARED IN ACCORDANCE WITH RELEVANT CERTIFICATES. .

6.1 VERTICAL PARTS - START FROM HINGES SIDE







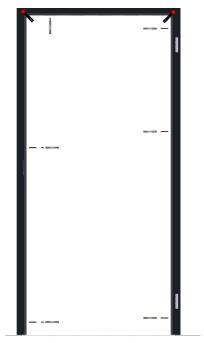




6.3 VERTICAL PART – LOCK SIDE







6.4 TIGHTENING ANCHORS WHILE CHECKING THE VERTICAL AND HORIZONTAL LEVEL

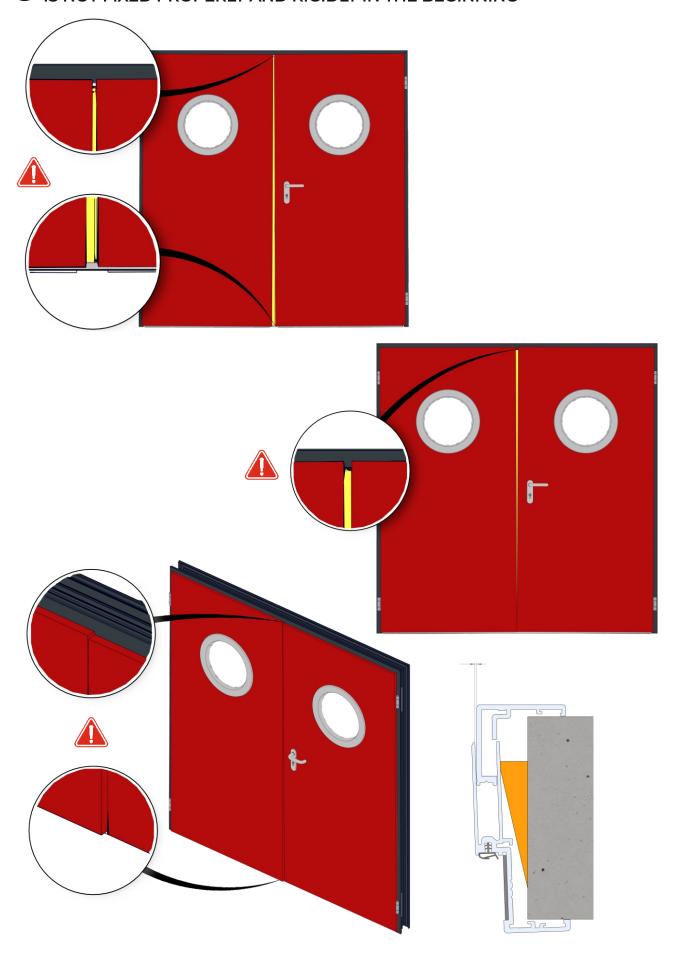




DRILL THE REMAINING HOLES FOR THE ANCHOR IN THE WALL THROUGH THE HOLES PREPARED IN THE BOX. SUPPLEMENT WITH ANCHORS, AT THE SAME TIME CHECK WHETHER THE FRAME IS NOT TWISTED AS "PROPELLER".



## SEE RESULTS OF INCORRECT INSTALLATION IF THE DOOR FRAME IS NOT FIXED PROPERLY AND RIGIDLY IN THE BEGINNING

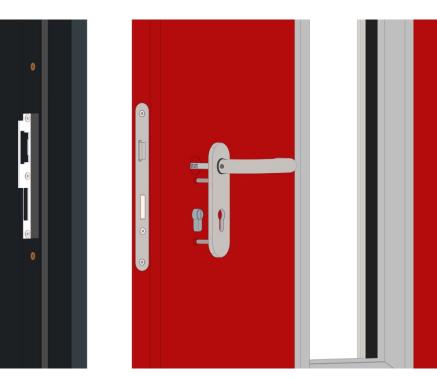




ASSEMBLING THE DOOR LEAF AND ITS ADJUSTMENT

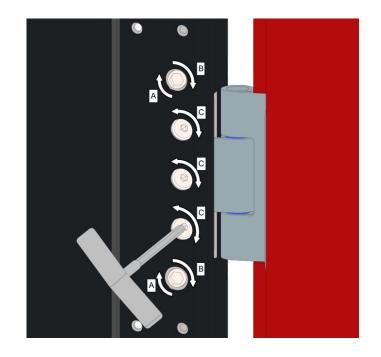
71 GET LEAF/LEAVES INSIDE TO THE FRAME. PREMILINARY TIGHT SCREWS

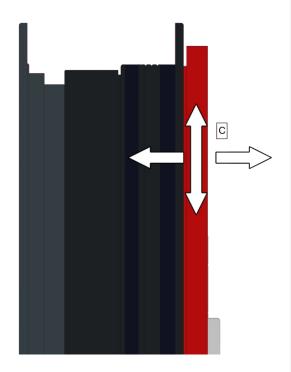




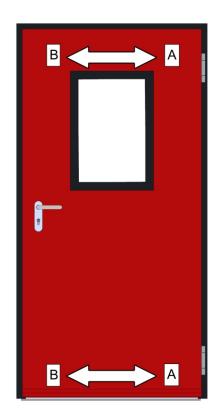


#### 7.3 METHOD OF ADJUSTMENT 3D HINGES



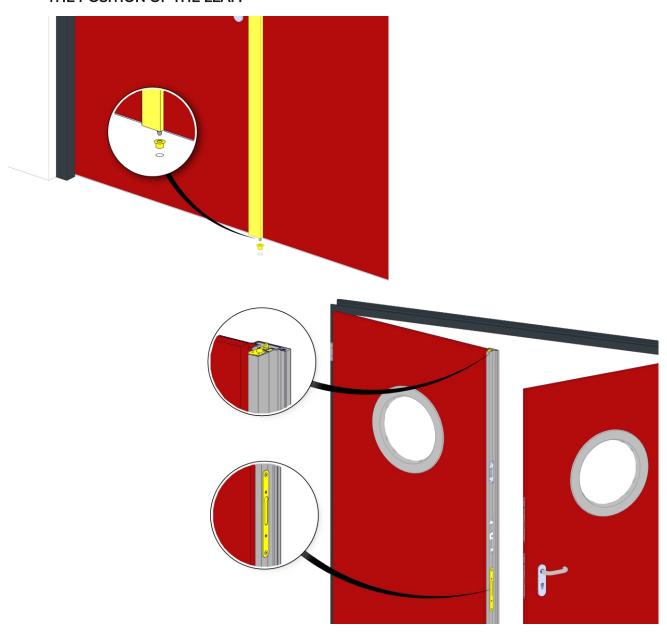








7.4 IN ORDER TO AVOID BENDING / BREAKING OF THE PASSIVE LEAF, FLOOR SLEEVE FOR FLUSH BOLT SHOULD BE INSTALLED IMMEDIATELY AFTER ADJUSTING THE POSITION OF THE LEAF.

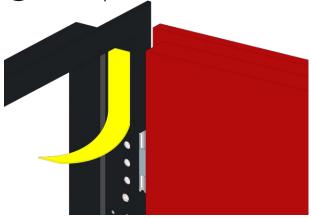




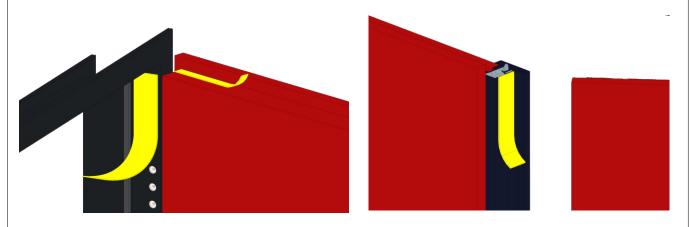


FIRE RESISTANT INTUMESCENT GASKET OR EPDM GASKET FOR NON FIRE RESISTANT DOORS

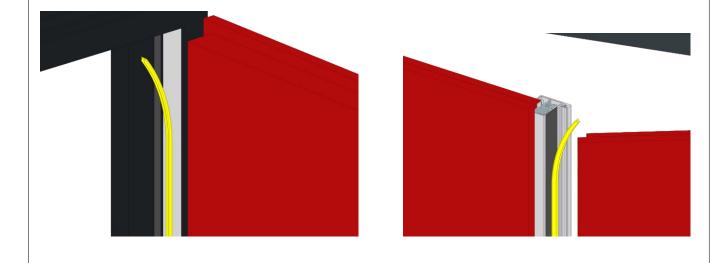
GLUEING IN PERIMETR OF FRAME FIRE RESISTANT INTUMESCENT GASKET FOR EI 30, EI60 OR EPDM GASKET FOR NON RESISTANT DOORS



DOUBLE LEAF DOORS EI30 AND EI60 - GLUEING NARROW GASKET AT TOP OF LEAF AND AT THE FRONT OF ASTRAGAL ON PASSIVE LEAF



GLUEING GASKET FOR SMOKE PROOF DOORS. ON PERIMETER OF FRAME AND ON THE ASTRAGAL FOR DOUBLE LEAF DOOR







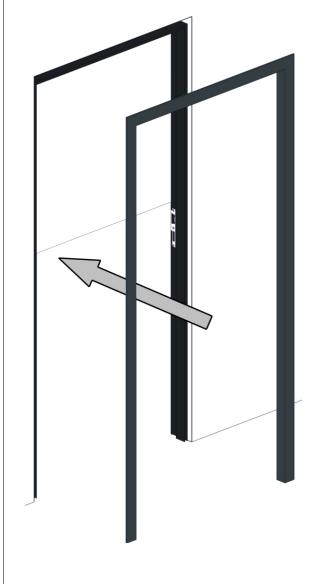




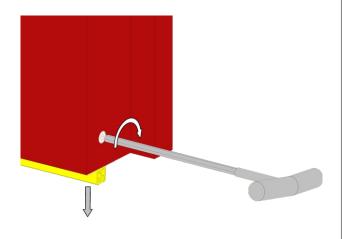






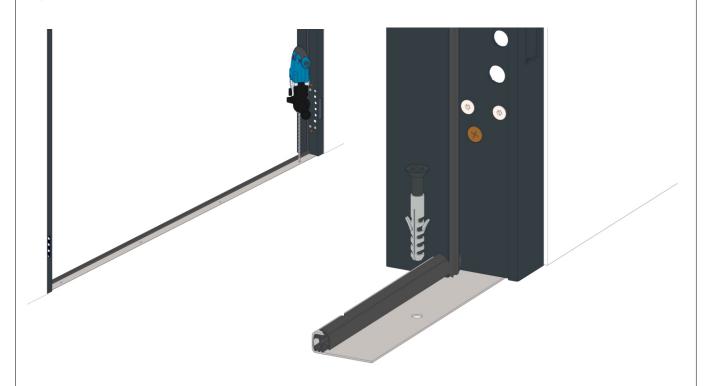


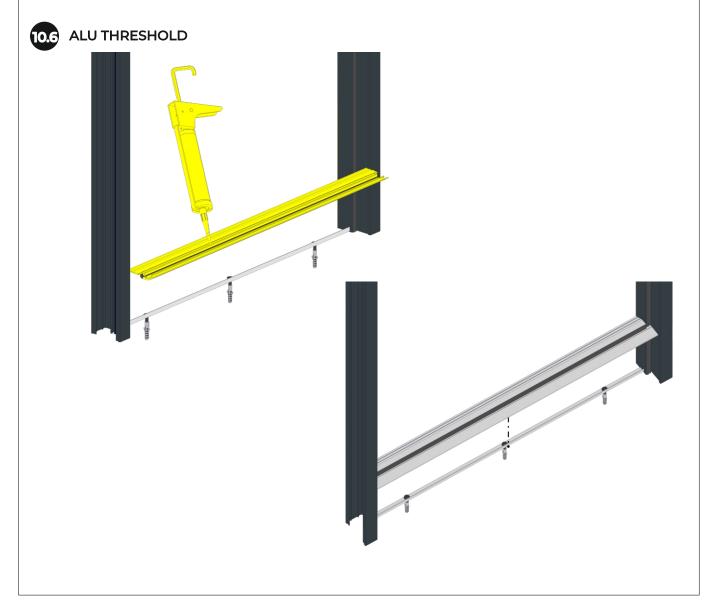








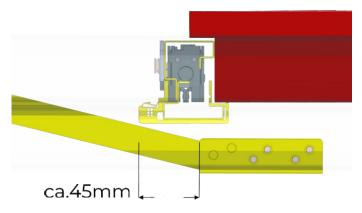


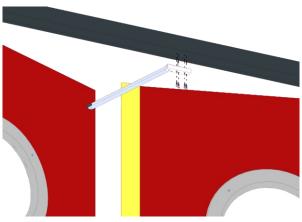






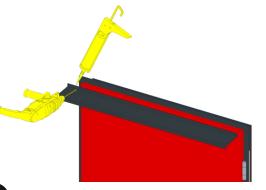
#### DOOR LEAF COORDINATOR FOR DOUBLE LEAF DOORS

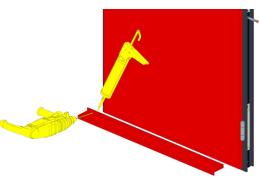




UPPER DRIP CAP (SILICON AND RIVIETS ARE NOT INCLUDED)







10,10 DOOR CLOSER ECO SCHULTE OR DORMA MOUNTING ACCORRDING TO PRODUCERS MANUAL





# THE FILM SHOULD BE REMOVED FROM THE LEAF IMMEDIATELY AFTER INSTALLATION WARRANTY AND HANDLING

Standard warranty term is 12 months counted from day of delivery agreed upon in Order Confirmation. Warranty for additional equipment, such as door closers, panic bars, electric strike plates and the like may be granted based on separate documents provided by the Producers of this equipment.

#### Please remember:

- -to stock the doors flat in a horizonal position and protect them against rain, sun and mechanical damages;
- -to remove protection foil from the door's surface immediately after installation;
- -to install the doors acc. to the proper certificate;
- -that DFM EUROPE is not responsible for errors and claims caused from incorrect installation;
- -to keep DFM warranty maintain the doors and fittings min. each six months;
- -each fault must be repaired immediately;
- -do not clean doors and equipment with agrresive fluids, it could cause corrosion even on stainless steel elements;

The guarantee of DFM Europe Sp. z o.o is defined in General Conditions of Sale published on dfm-europe.eu, or in Order Confirmation.