



# Front Doors

## RD40



“Ryterna Entry” is a part of the “Ryterna Group” who have been manufacturing doors since 1993. With authorised dealers all over Europe and our own transport fleet we can provide the shortest possible lead times. “Ryterna” entrance doors are manufactured in a new efficient factory located in Kaunas, Lithuania. Sustainability in manufacture combined with the thermal performance of our products is central to our growth philosophy. We constantly seek for morally responsible and environmentally cleaner ways to improve in all areas of business.

[www.ryternaentry.com](http://www.ryternaentry.com)  
[www.ryternaentry.doorconfigurator.com](http://www.ryternaentry.doorconfigurator.com)



- Doors are made to measure:

**STD:** 890 x 1990  
 890 x 2090  
 990 x 1990  
 990 x 2090

**On request:** Width 700 ÷ 1150  
 Height 1700 ÷ 2250

- Double galvanized steel skin filled with PU foam door leaf
- Double sealing
- Tested at 200 000 open-close cycles

Thermal transmittance  
 U value



**1.3 W/m²K\***

Air permeability



**2**

Water tightness



**4A**

Resistance to wind load,  
 test pressure



**3**

Resistance to wind load,  
 frame deflection



**C**

**INSTITUTE OF ARCHITECTURE AND CONSTRUCTION  
 OF KAUNAS UNIVERSITY OF TECHNOLOGY**  
 BUILDING PHYSICS LABORATORY  
 Notified Body number: 2018

**CALCULATION REPORT No. 095 SE/20 U (S)**      page (pages)  
 Date: **01 of July 2020**      1 (12)

**Determination of thermal transmittance of door**

Calculation methods: (ISO 10077-1)  
 LST EN ISO 10077-1:2017 Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 1: General (ISO 10077-1:2017) and LST EN ISO 10077-2:2017 Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 2: Numerical method for frames (ISO 10077-2:2017).  
(number of normative document or calculation method, description of calculation procedure)

Specimen description: **External steel door. System: RD 40 Ryterna Entry.** Measurements: height 2000 mm; width 900 mm.  
**Frame:** 1,5 mm steel sheet. Frame is insulated with PU "Elastopor H1241/43-B". Threshold is insulated with spray mounting foam "Makroflex" ( $\lambda = 0,036$  W/(m·K)). 14 Frame fixing plates made of 3 mm thick 75 mm wide galvanized steel are used around the entire perimeter of the frame.  
**Door leaf.** Inside and outside door leaf is made of 1,0 mm steel sheet. Door leaf is filled with 46 mm PU "Elastopor H1241/43-B".  
**Gaskets:** 2 contours with D-profile EPDM gaskets.  
 Opening: outwards.  
 PVC lock box.

(name, description and identification details of a specimen)

Customer: **UAB „RYTERNA ENTRY”, Ryternos g. 4, Biruliškių km., LT-54469 Kauuno raj.**  
(name and address)  
 Manufacturer: **UAB „RYTERNA ENTRY”, Ryternos g. 4, Biruliškių km., LT-54469 Kauuno raj.**  
(name and address)

Name of the indicator and unit	Calculation method reference no.	Calculation result
Thermal transmittance of door, $U_f$ W/(m²·K)	LST EN ISO 10077-1 LST EN ISO 10077-2	1,3

Calculated at: **Building Physics Laboratory, Institute of Architecture and Construction of Kaunas University of Technology**  
(name of the test laboratory)

Specimen delivery date: **2022-06-19**      Date of calculating: **2022-07-01**

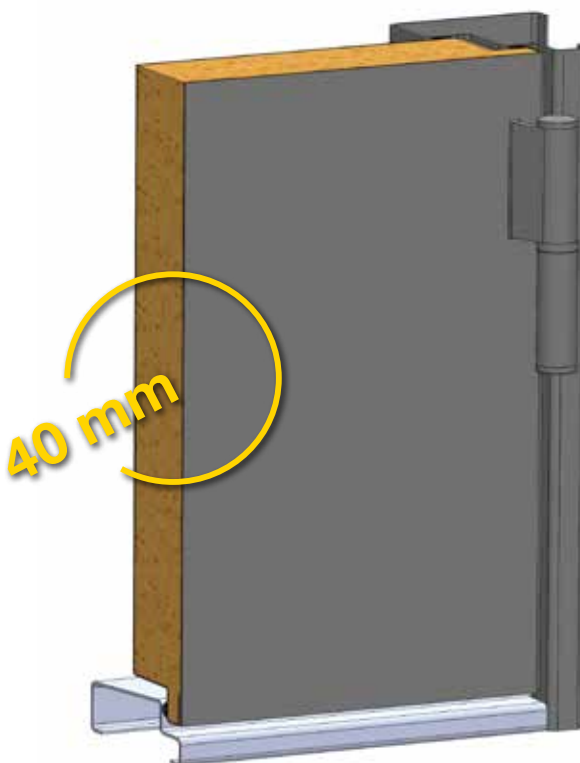
Additional information: **Application, drawing.**  
(any deviations, exceptions and any information related with particular calculation)

Annexes: **Annex 1. Specimen data.  
 Annex 2. Calculation data according to LST EN ISO 10077-2.  
 Annex 3. Calculation data according to LST EN ISO 10077-1.**

Head of laboratory: **S. Rytėnas**  
(signature)  
 Calculated by: **S. Rytėnas**  
(technically responsible for calculation) (s. surname)

Validity – if examined data and results refer to the inspected specimens.  
 Notes on publication – no part of this document may be photocopied, reproduced or translated into another language without the prior written consent of the Institute of Architecture and Construction of Kaunas University of Technology.

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 Web site: www.kita.lt/en | E-mail: statybms@kita.lt



All doors are factory framed.  
 Prices are for full door-sets.  
 All dimensions are specified for overall frame sizes.  
 Depicted images are for illustration only. Actual product may vary due to constant enhancement.  
 Ryterna reserves right to change specifications at any time and without prior warning.



Structure painting (**STR**)



RAL 5010 STR



RAL 7016 STR



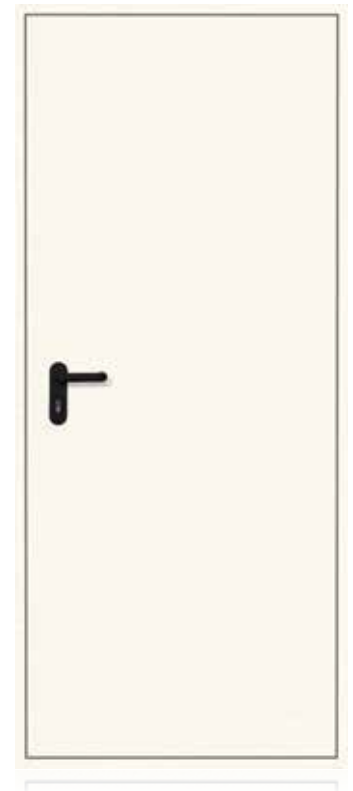
RAL 8017 STR



RAL 9002 STR



RAL 9006 STR



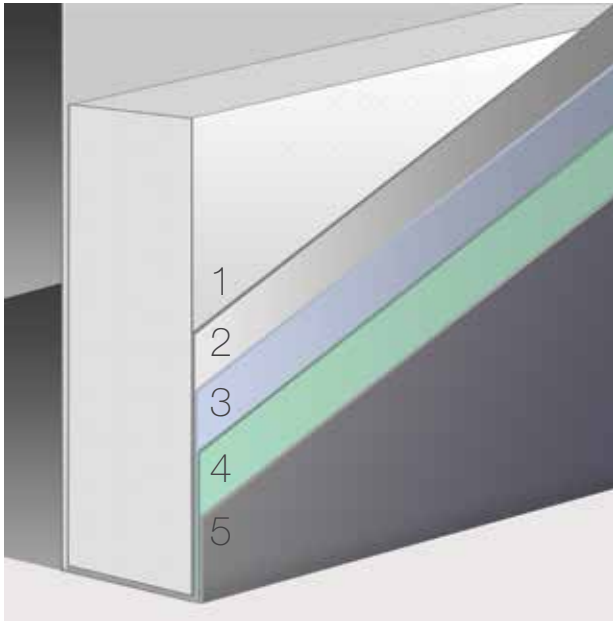
RAL 9016 STR





Model **RD40**  
Outside colour **RAL 9006 STR**  
Handle **Black (BL)**  
Lock **STD**

- Entrance doors are made of 1 mm galvanized steel skin filled with PU that forms firm and durable construction.



### Door Leaf Structure

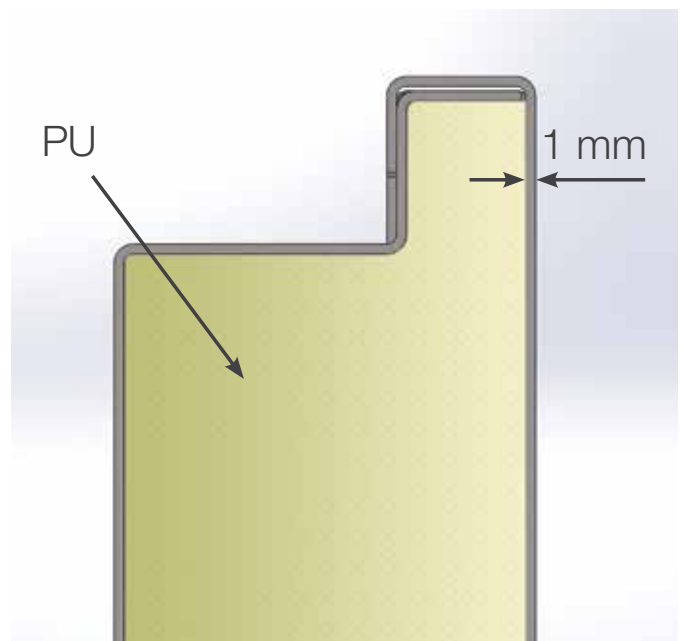
- 1** Polyurethane foam
- 2** Cold rolled steel
- 3** Hot dip galvanisation
- 4** Chemical treatment
- 5** Powder paint

U-value up to  
**1,3 W/M<sup>2</sup>K**

- 6 **STD** RAL STRUCTURE colours.  
Painting available upon request.  
Only structure painting.

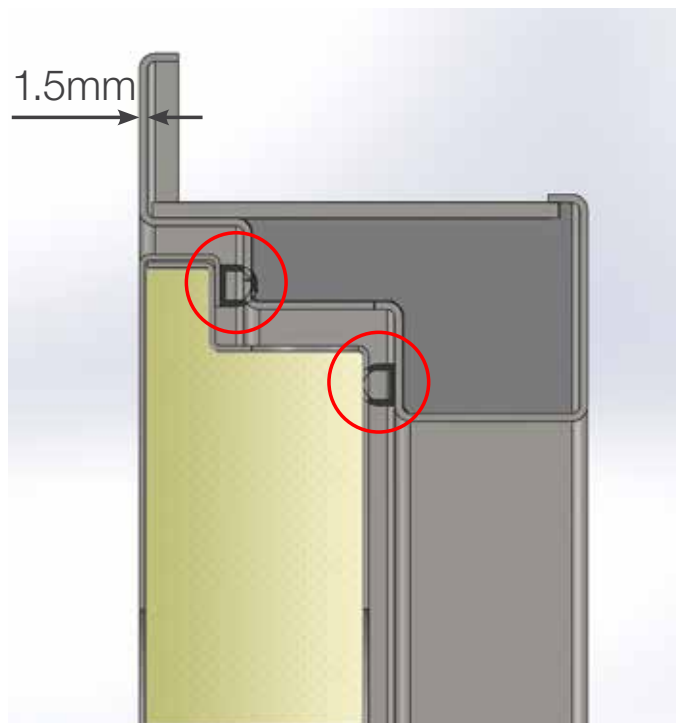


- Corrosion protected 1 mm skins linked together, with 40mm PU insulation and forms solid "sandwich panel".

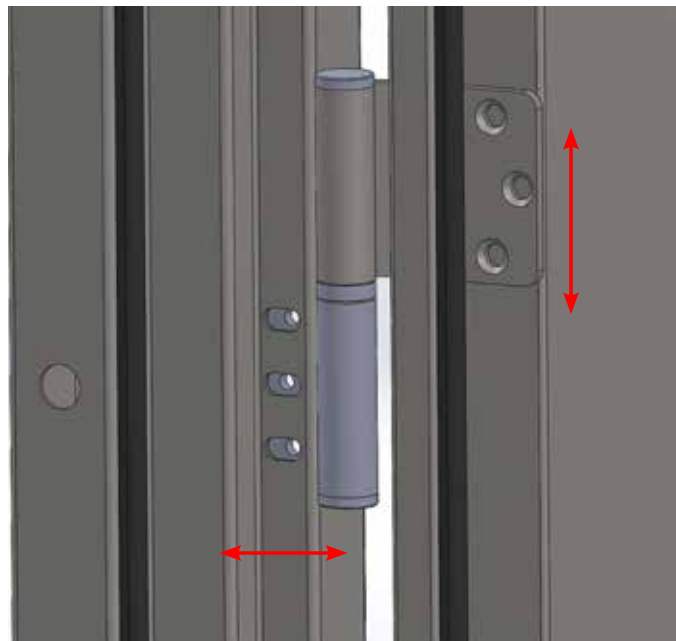


- Double sealing around all the perimeter provides excellent thermal insulation and water resistance.

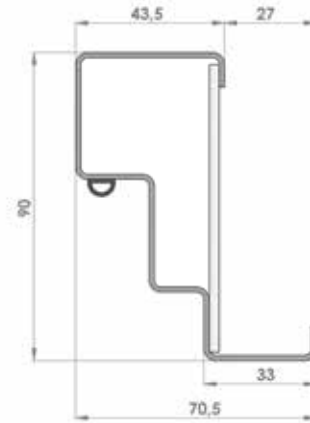
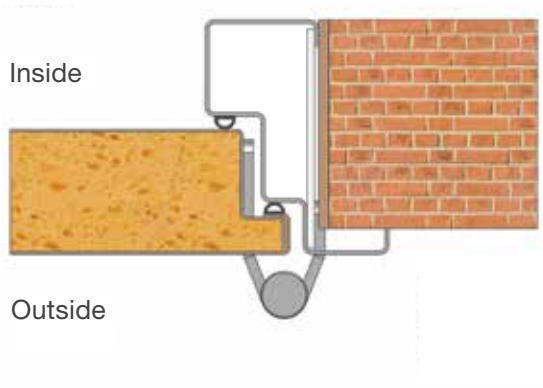
Door frame made of 1.5 mm thickness galvanized steel



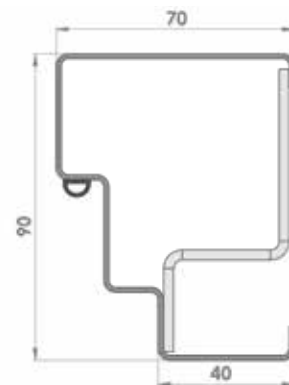
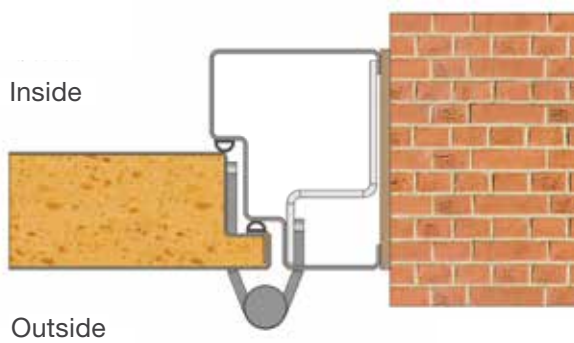
- 3 pcs, adjustable hinges with bearing ensure long – life, smooth and quiet operation.



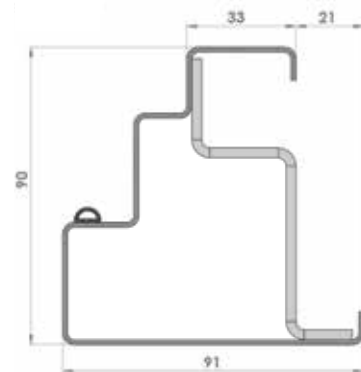
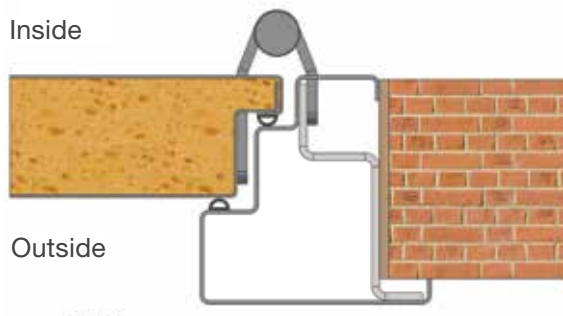
## MITRED FRAME WITH MOULDINGS, OPEN TO OUTSIDE (MO)



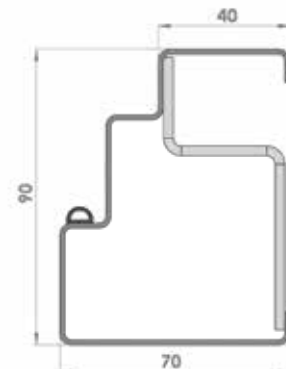
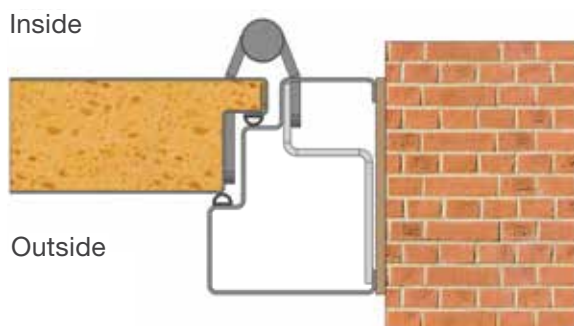
## MITRED FRAME, OPEN TO OUTSIDE (LO)



## MITRED FRAME WITH MOULDINGS, OPEN TO INSIDE (MI)

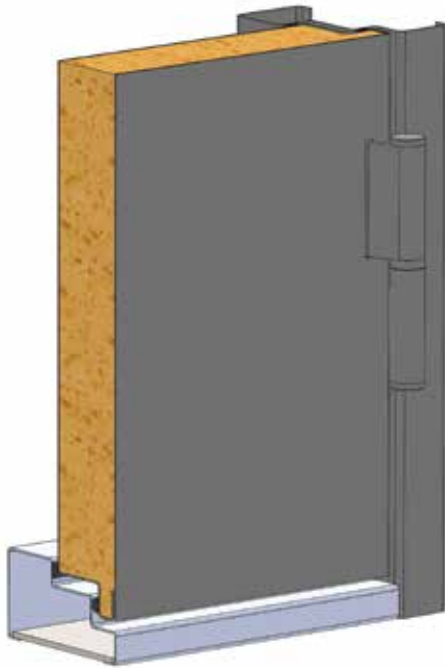


## MITRED FRAME, OPEN TO INSIDE (LI)

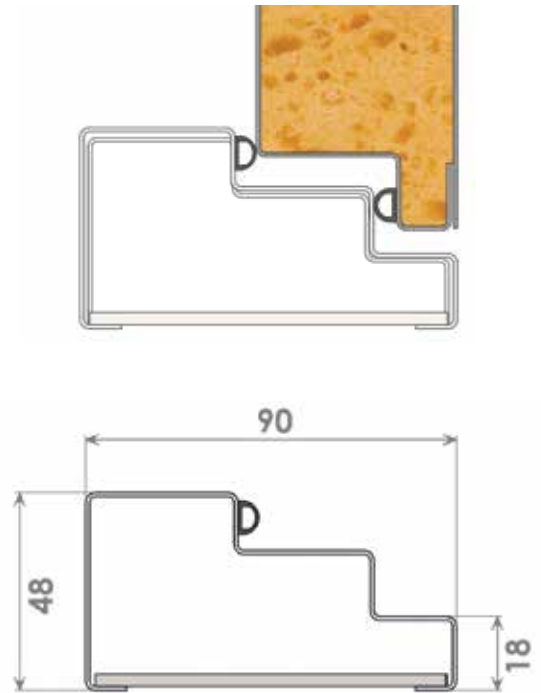




**DOUBLE SEALING THRESHOLD, OPEN TO OUTSIDE (OD)**



**MO-OD**



Inside

Outside

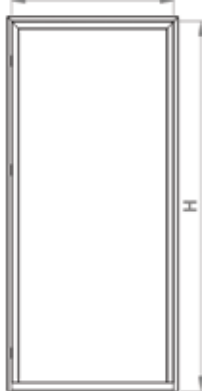
**OFS & DAYLIGHT OPENING**

**MO frame**

Outside



Inside W

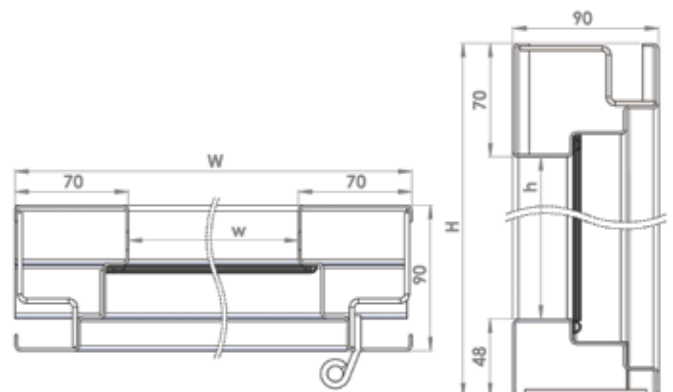
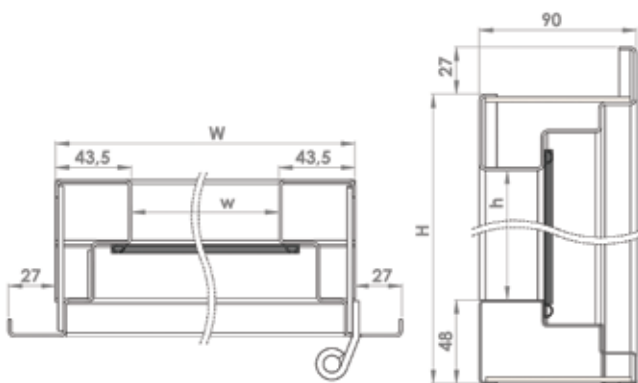


**LO frame**

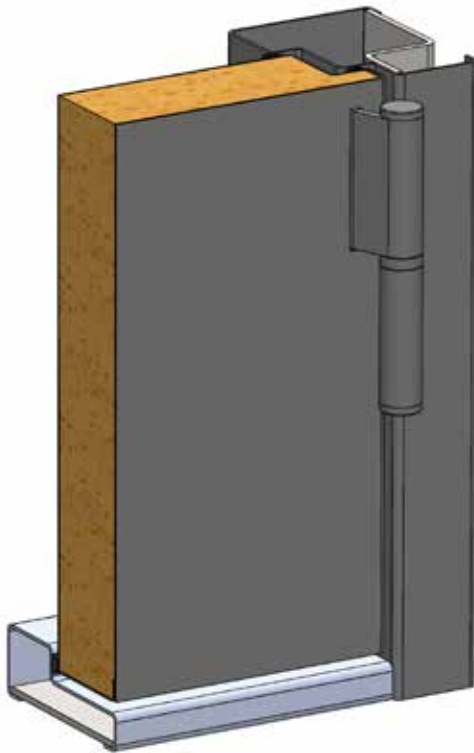
Outside W



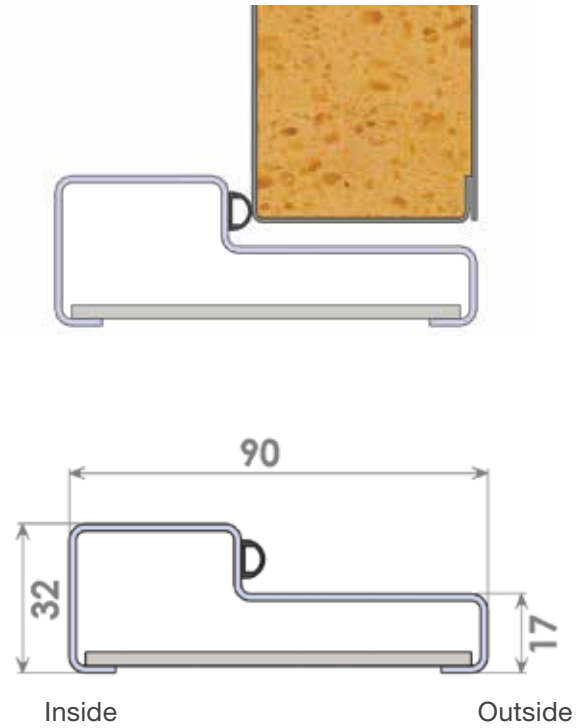
Inside W



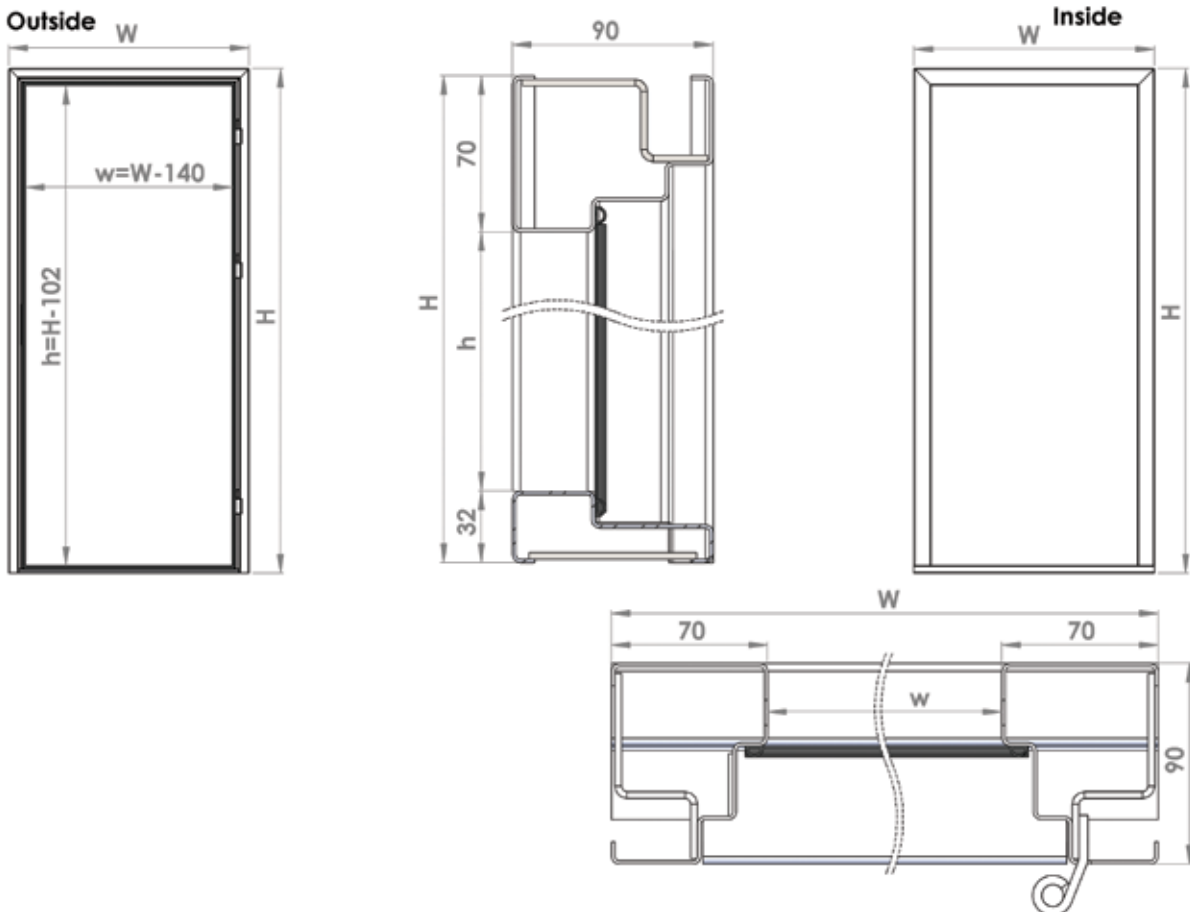
## SINGLE SEALING THRESHOLD, OPEN TO OUTSIDE (OS)



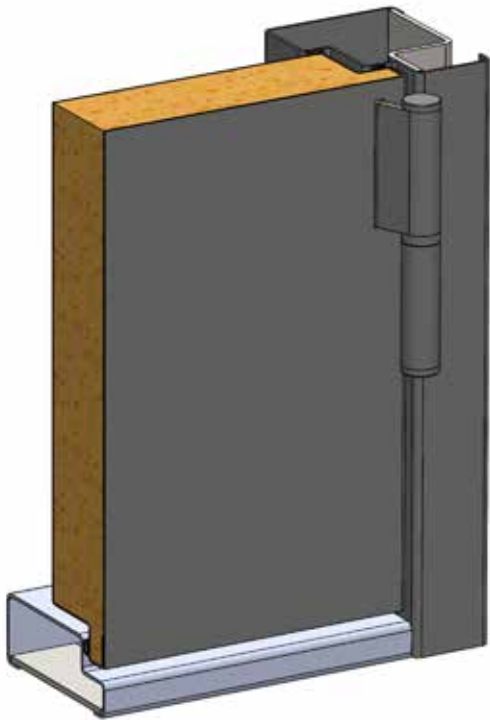
**LO-OS**



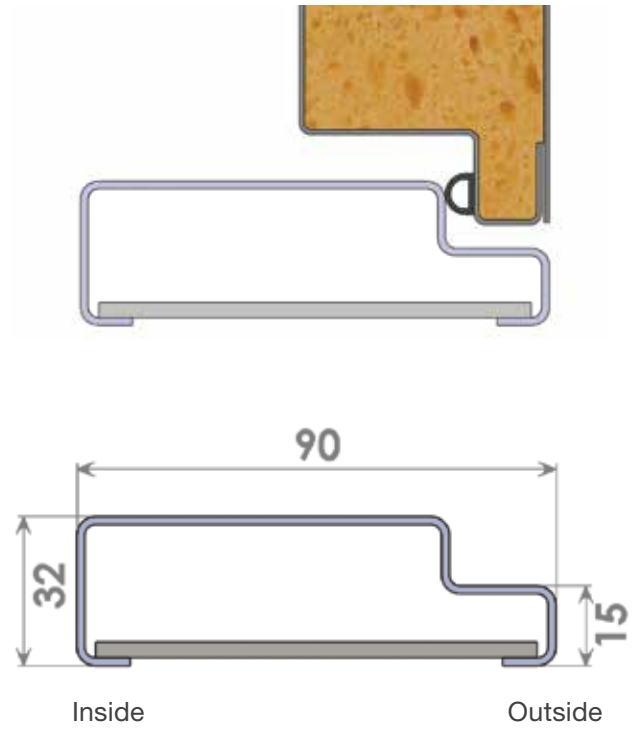
## OFS & DAYLIGHT OPENING



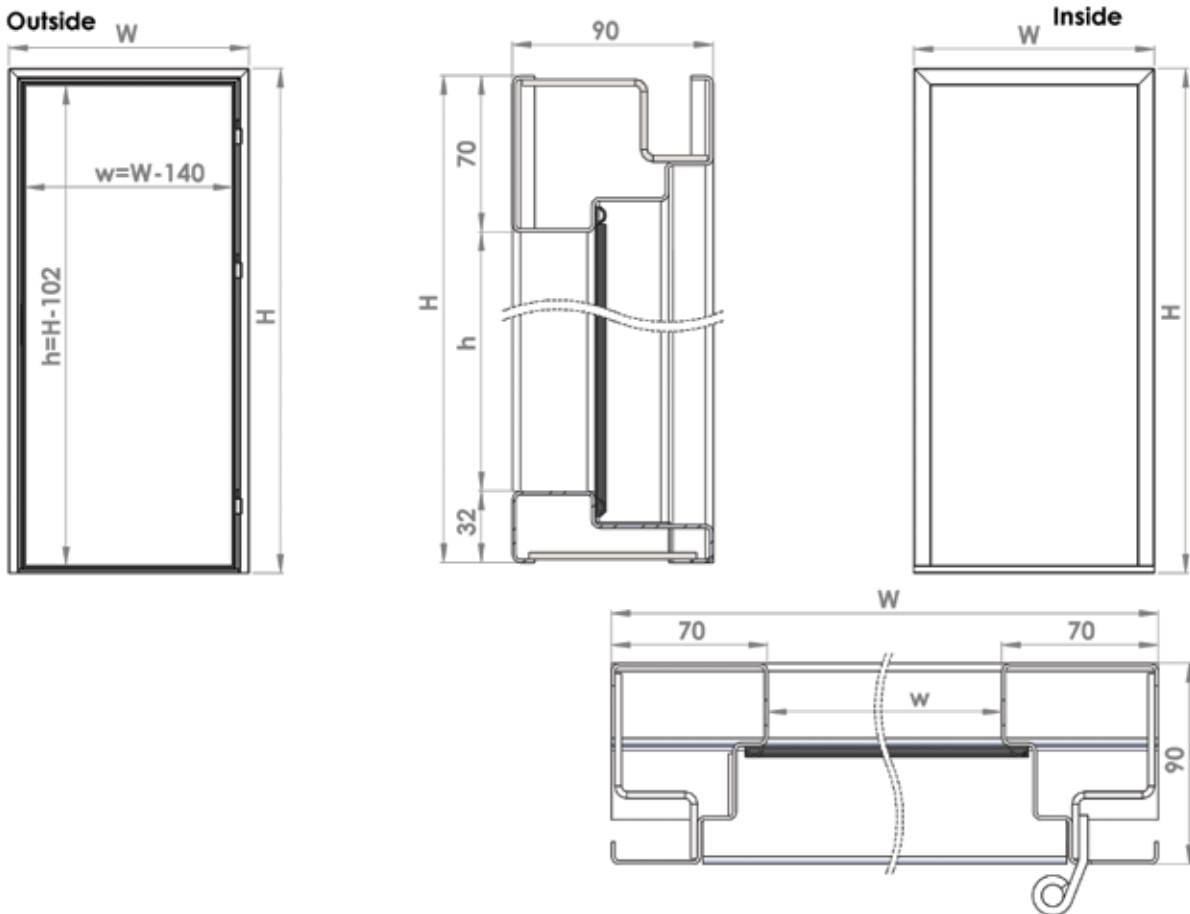
SINGLE SEALING THRESHOLD, OPEN TO OUTSIDE (OS2)



LO-OS2

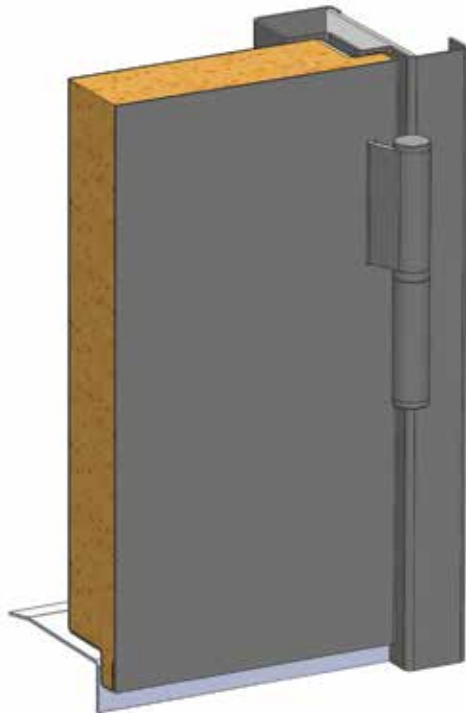


OFS & DAYLIGHT OPENING

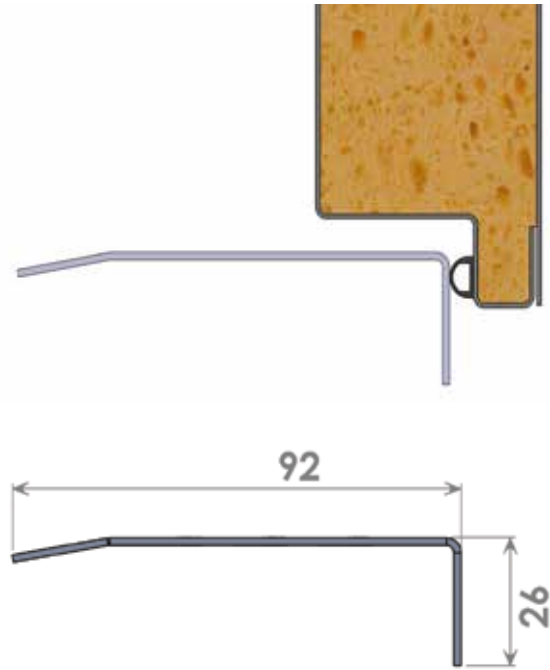


# Threshold types and specifications

## MITRED FRAME WITH MOULDINGS, OPEN TO OUTSIDE (OM)



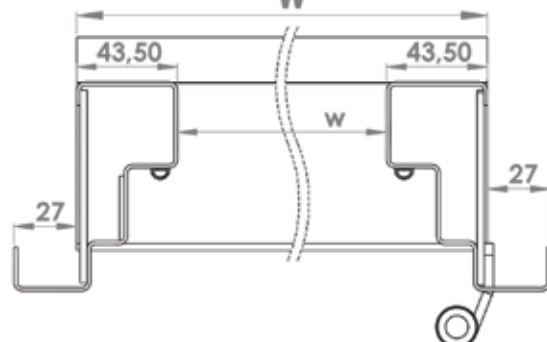
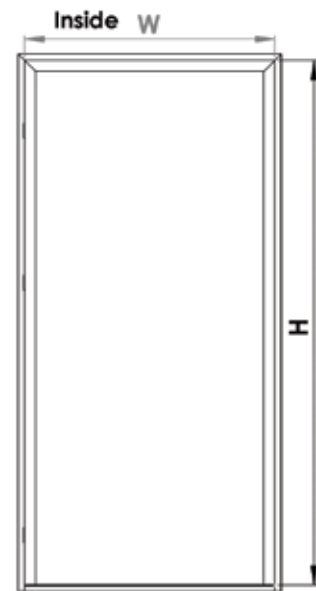
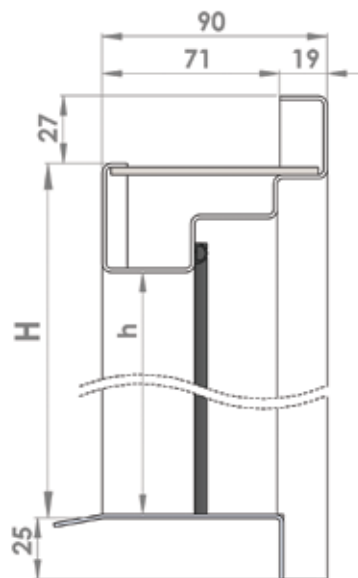
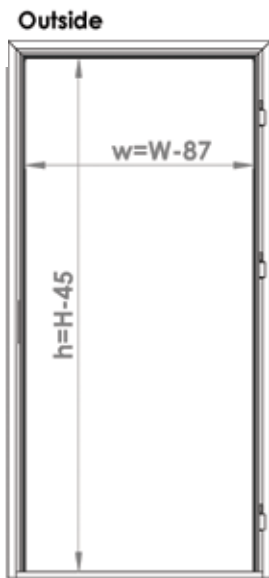
MO-OM



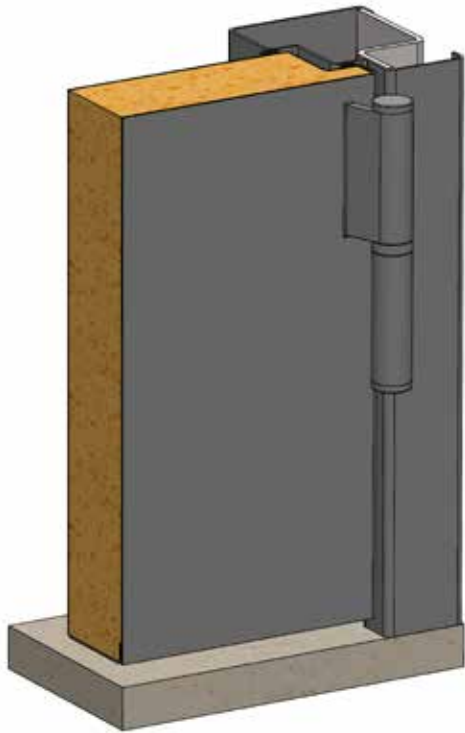
Inside

Outside

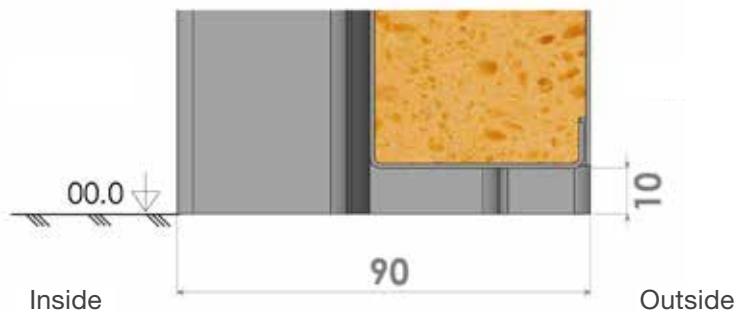
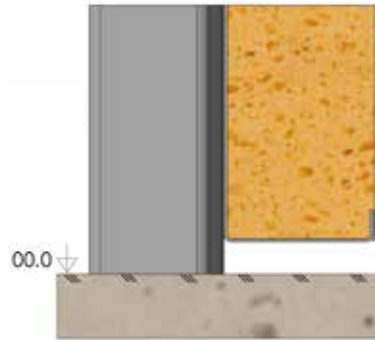
## OFS & DAYLIGHT OPENING



WITHOUT THRESHOLD, OPEN TO OUTSIDE (OW)



**LO-OW**



OFS & DAYLIGHT OPENING

**MO frame**

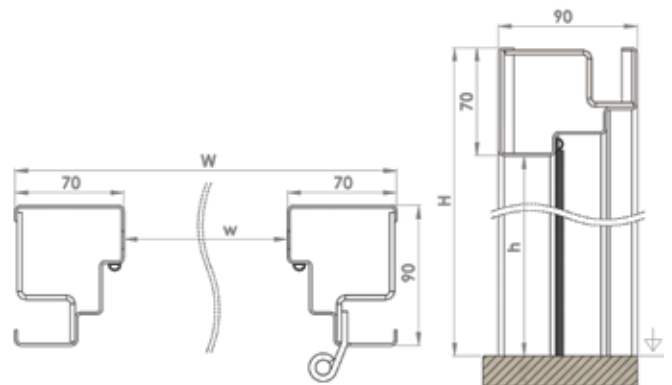
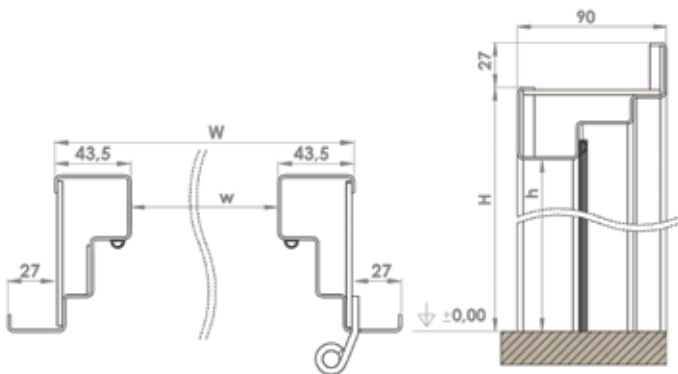
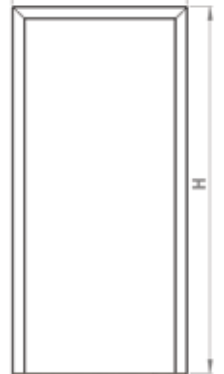
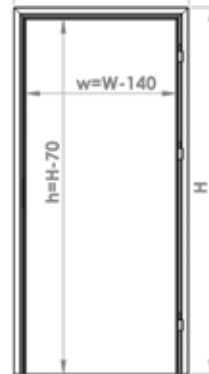
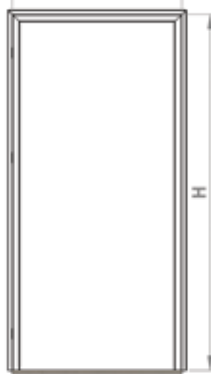
**LO frame**

Outside

Inside W

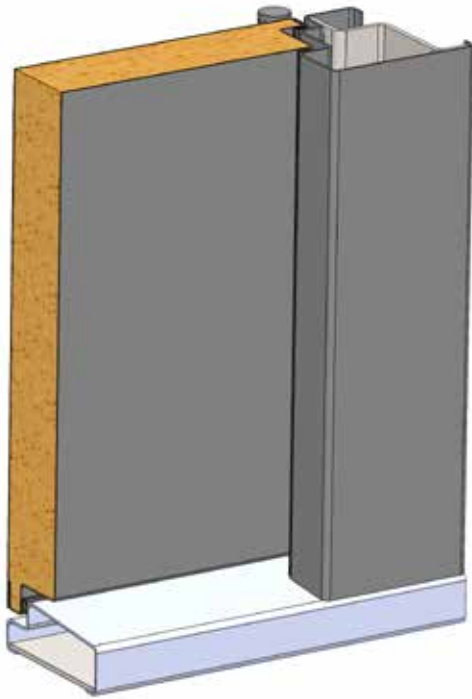
Outside W

Inside W

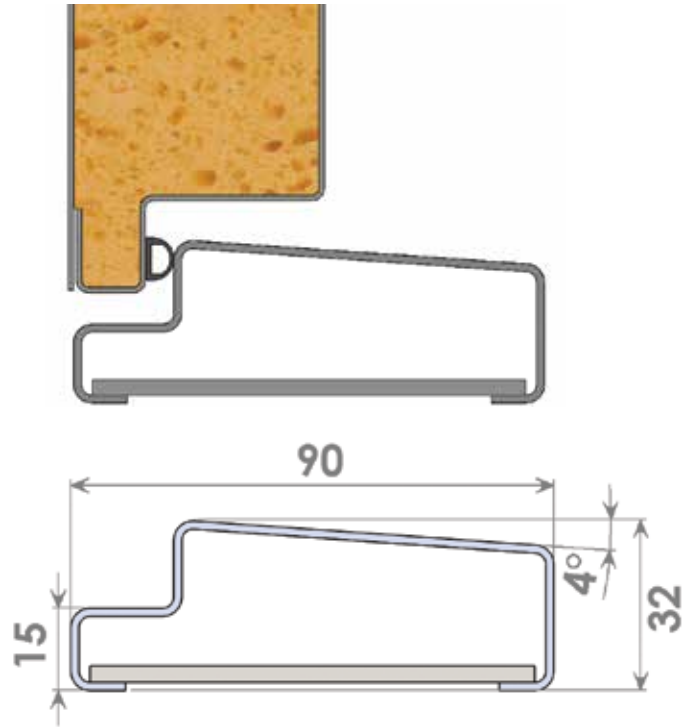




## SINGLE SEALING ANGLED THRESHOLD, OPEN TO INSIDE (IS)



LI-IS

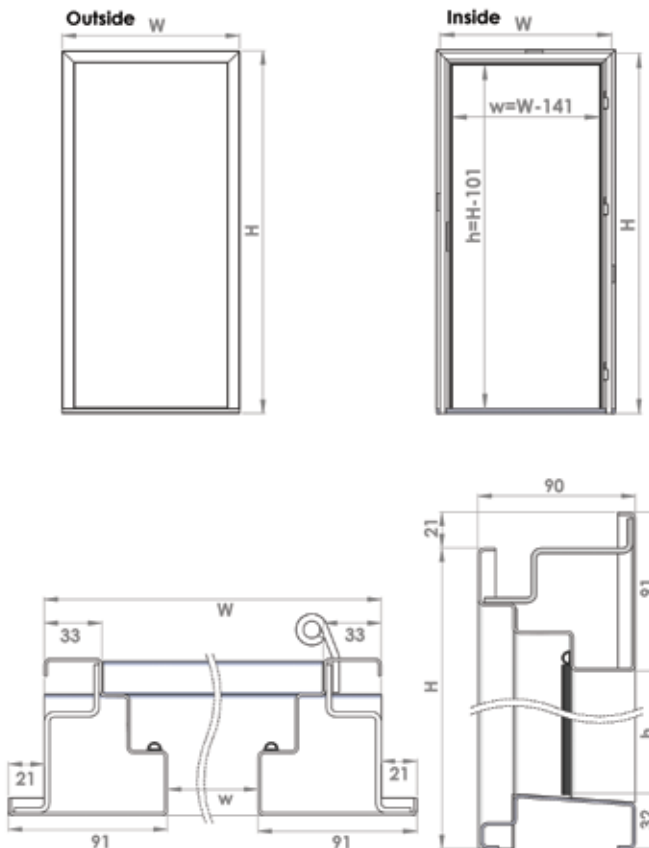


Inside

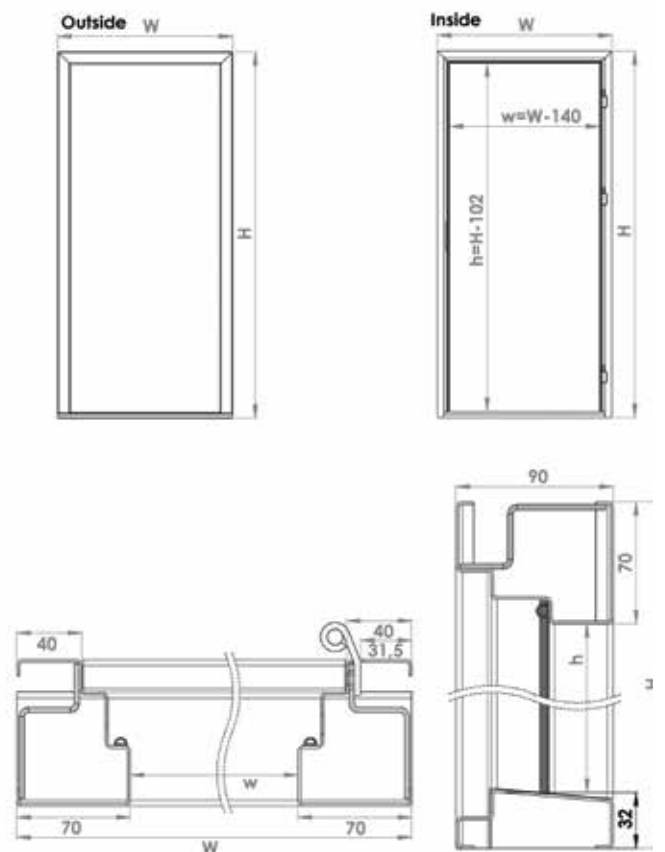
Outside

## OFS & DAYLIGHT OPENING

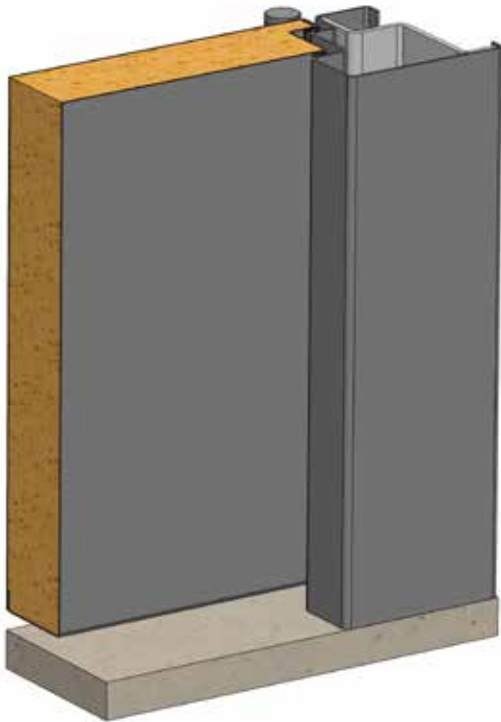
### MI frame



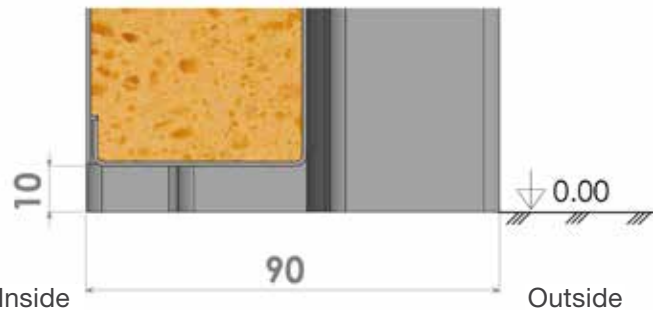
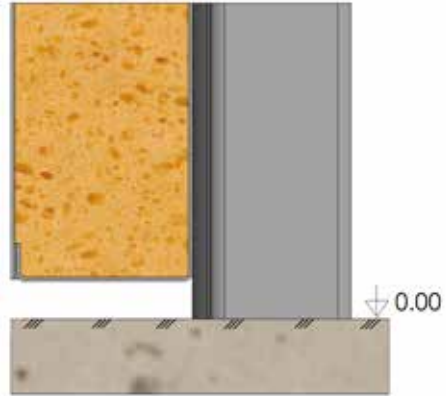
### LI frame



WITHOUT THRESHOLD, OPEN TO INSIDE (IW)

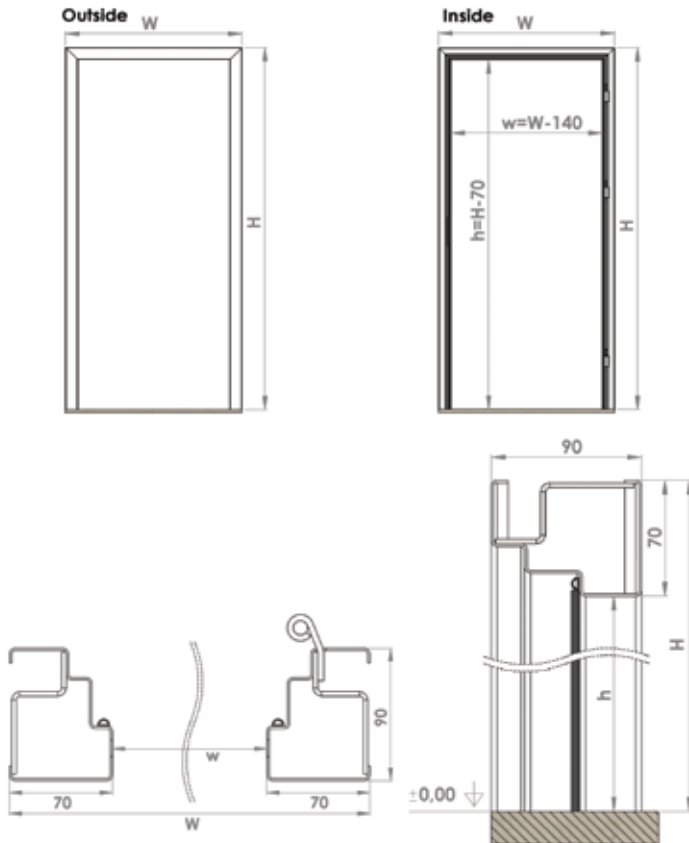


LI-IW

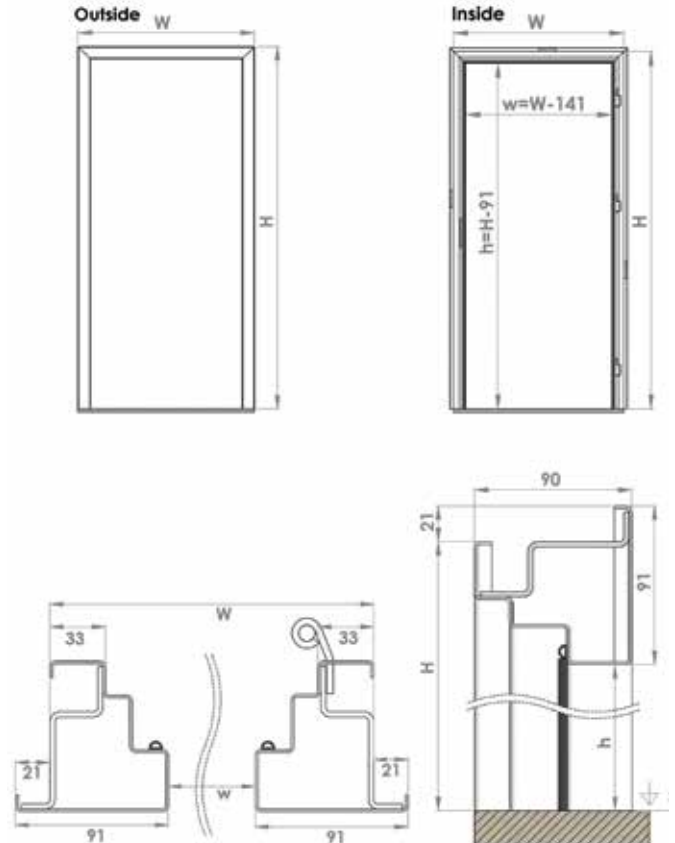


OFS & DAYLIGHT OPENING

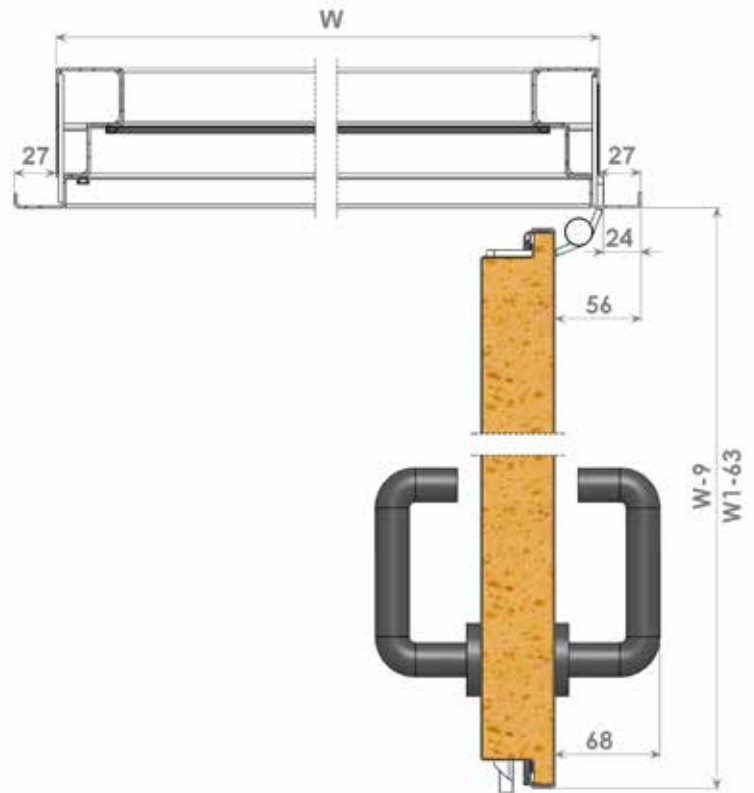
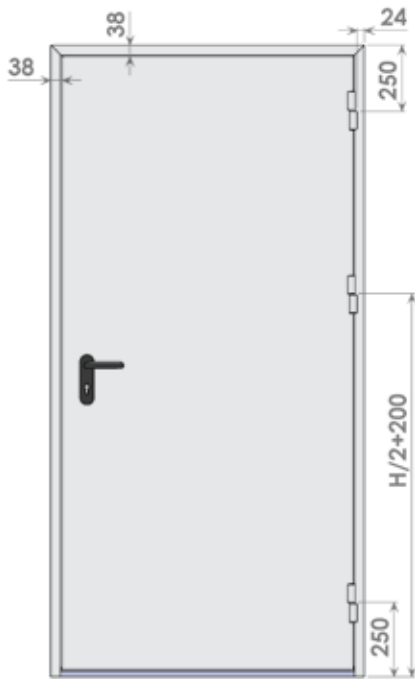
MI frame



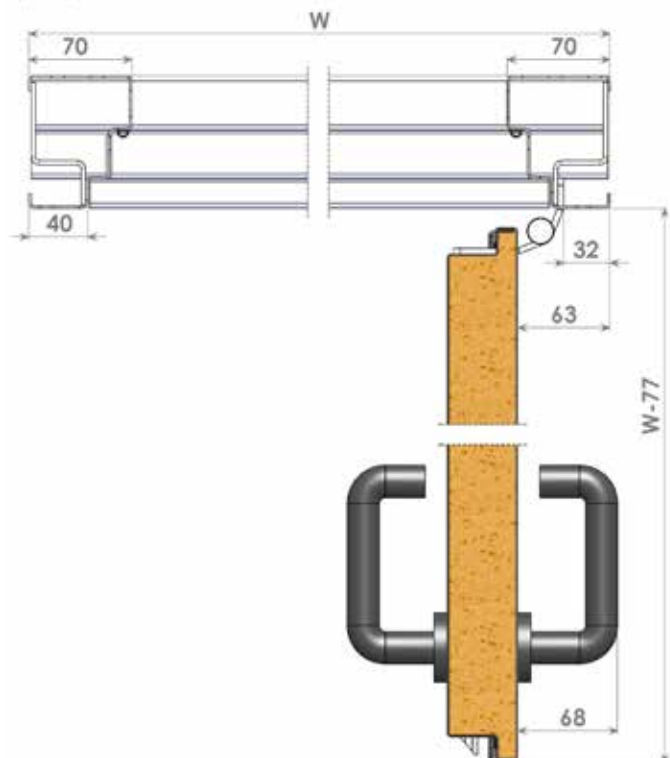
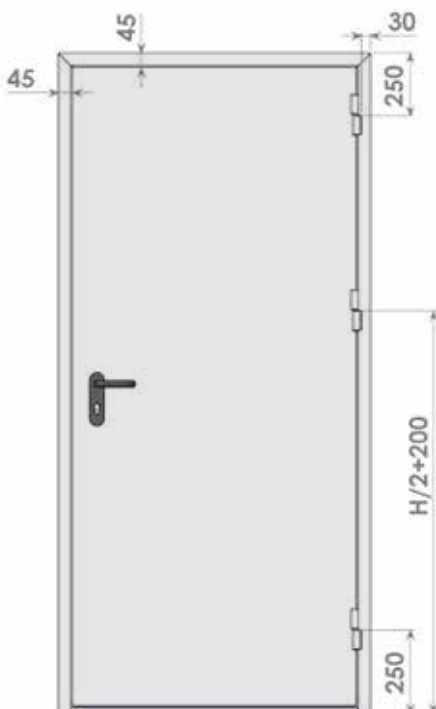
LI frame



## MO OPEN LEAF 90°



## LO OPEN LEAF 90°



LOCKS AND HANDLES



**L1P**  
Lock  
STD



**BL**  
Black lever handle  
STD



**GR**  
Grey lever handle  
STD



**ST**  
Stainless steel  
lever handle



**SSK**  
Stainless steel  
knob handle



**CWD**  
Lock cylinder  
STD



**LC 100**  
Lock



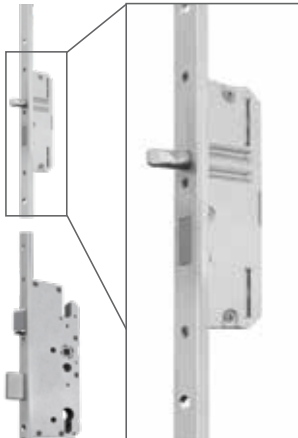
**565**  
Lock



**AS**  
Lever handle



**CWE**  
Lock cylinder



**C3P**  
Multi-point lock

**D&N+EM**



**HL**  
White  
lever handle



**HK**  
White  
knob handle



**HLA**  
Aluminium  
lever handle



**CWF**  
Lock cylinder



**APL**  
Lock



**SSK**  
Stainless steel  
knob handle



**APLH**  
Anti-panic  
handle



**CWAP**  
Lock cylinder

## GLAZING



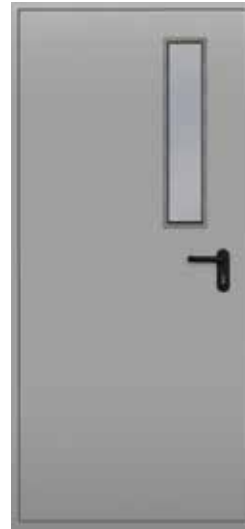
**S200**

Square glazing  
200x200 mm



**S350**

Square glazing  
350x350 mm



**S100**

Rectangular glazing  
100x700 mm



**S500**

Rectangular glazing  
500x700 mm

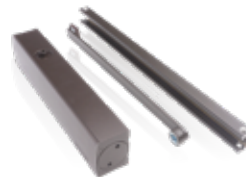
## ACCESSORIES



Ventilation grille



Spyhole



Door closer



**PL201**  
Padlock staple



**KP1**  
Keypad





