# record THERMCORD

keeps everything out - energy saving, weather resistant, sound proofing, intrusion deterring



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The record THERMCORD's sandwich design provides structural properties which allow very versatile use:

### THERMCORD is energy saving

It is not just the UD-value of up to 1.1 W/m<sup>2</sup>K that counts. Energy can only be provably saved if the door is extremely tight. THERMCORD is



extremely dimensionally stable and therefore has minimum gap dimensions. A stainless steel floor rail should be used additionally which keeps the floor level, and thus the gap dimension, constant. The stainless steel material also has a low specific heat conductivity and therefore ensures a clear separation between the outside and inside floor area.

The installation depth of THERMCORD is only 38 mm and the section width of 46 mm hardly reveals a difference: record THERMCORD retains the visual quality of the conventional doors and thus stays in harmony with the design of the existing collection.

### THERMCORD is weather resistant

The longitudinal sections installed in the door wings exhibit enormous rigidity with their structure-reinforced double-V shape. Therefore, the movement of the door stays largely



unimpressed by suction and pressure during high wind loads This rigidity also results in a reduction in the gap dimension so that the THERMCORD layout is already superior in the avoidance of draughts to the conventional construction.

Seals which lock magnetically with each other in the closed position are used on the end closing edges. This principle, familiar from all refrigerator doors, was developed up to series maturity for automatic sliding doors for the first time for the record THERMCORD and therefore guarantees optimum sealing values in the long term.

On the floor side, the reduced gap dimensions of the door wings are fitted with double brushes, for a floor rail with a continuous sliding blade and for the THERMCORD+ with an active seal which presses down on the floor every time the door is closed. An upper seal is also used additionally on THERMCORD+ in the locked state which closes the last remaining gap along the whole width.

A door system with this equipment is not just windtight. Heavy rain with an intensity far beyond the maximum tested category E 300 is also effectively resisted and protects your entrance area from water stains and other weathering damage.

### THERMCORD is an intrusion deterrent

What resists the meteorological elements also withstands earthly forces. Fitted with safety glass and reinforced in several places, the record THERM-CORD resists break-in attempts in accordance with RC 2 / RC 3 classification.

### THERMCORD is sound proofing

A thermal separation can also be used as an acoustic separation and therefore have sound proofing properties.



With the record THERMCORD+,

we offer you noise protection which, with up to  $-31 \, dB$  makes a big contribution to a pleasant room climate. It differs only in the glass types and therefore fits perfectly into our conventional range of automatic sliding doors in appearance.

### Benefits

- ightarrow Effective thermal barrier
- $\rightarrow$  Highly stable door wing structure by double V-sections in sandwich design
- → Wide range of application with different features and identical appearance
- → Unchanged series drives therefore inexpensive in maintenance and running costs
- Digitally networked, self-monitoring electronic components for maximum operating reliability
- $\rightarrow$  Also usable in escape routes as a redundant version

### Features

- $\rightarrow$  For one or two-sided linear sliding door systems
- → 150 mm or 200 mm drive height (RC 2 150 or 200 mm, RC 3 200 mm)
- → 38 mm installation depth of the door wing at 46 mm visible width
- $\rightarrow\,$  With continuous CNS floor rail or inconspicuous door leaf guide

### Optional

- $\rightarrow$  also available as THERMCORD telescope TSA
- $\rightarrow\,$  Intrusion deterrent in accordance with protection class RC 2 / RC 3
- $\rightarrow$  Multi-point locking MPV for protection against unauthorised intrusion
- ightarrow Sound proofing up to –31 dB
- $\rightarrow\,$  Protective wing made of single-pane safety glass for protection of the end closing edge
- → Triple glazing possible to improve thermal insulation





# THERMOORD



### record THERMCORD+- active seals for even greater tightness

Magnetic seals at the end closing edges and low gap dimension are the basic ingredients for great tightness. The active seals available from us as record THERMCORD<sup>+</sup> are unique and seal the top and bottom of the door additionally against draughts.

### THERMCORD always stays tight!

Pressure differences between indoors and outdoors are found in almost every larger building and lead inevitably to a consideration suction. Cold, heat and dust



penetrate whilst on the other hand, cooled or heated air escapes uncontrolled to the outside.

The active sealing system patented by record suppresses all suction effects when the door is closed and achieves air permeability values which, for sliding doors, are only surpassed by special products for use in operating theatres or clean rooms.

Whilst the main closing edge is equipped with conventional sealing systems and magnetic seals are used on the side sealing edges, completely newly developed, so-called active seals are used on the top and bottom. The active seals allow doors to be opened without resistance affecting their smooth running. A sophisticated mechanism presses the sealing profile embedded in the lower edge of the door wing against the floor every time it is closed. In addition, a one-part sealing lip on the top of the door drops down along the whole width in the locked state and seals the remaining gap between the door wing and the drive housing.

### Areas of application:

- $\rightarrow\,$  Separation of different climate zones with high temperature drops
- ightarrow Prevents suction effects by an innovative, active sealing system
- → Significantly reduced energy losses with the door closed
- → Can be used both as inside and outside door

# Retrofittable for THERMCORD systems

Active seals can be retrofitted with THERM-CORD profile systems for most of the already installed automatic door systems.











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### Technical specifications

Basic data	D-STA (both sides)	E-STA (one side)
Opening width (A) 1)	800 - 3,000 mm	800 - 2,500 mm
Headroom (G) 1)	maximum 3,000mm	maximum 3,000mm
Total height <sup>2)</sup>	G + 150mm or 200mm	G + 150 mm or 200 mm
Beam length (F)	at least 2A+250mm	at least 2A+125 mm
Drive dimensions		
without side parts (D x H) $^{\scriptscriptstyle 2)}$	157 x 150 mm / 167 x 200 mm	157 x 150mm/167 x 200mm
with side parts (D x H) $^{2)}$	210 x 150mm/200mm	210 x 150 mm / 200 mm
Maximum door wing weights		
record STA 20 [DUO/RED]	2 x 120kg [2 x 150kg]	1 x 150kg [1 x 150kg]
record STA 20-200 DUO/RED [record STA 22 DUO/RED31]	2 x 150 kg [2 x 200 kg]	1 x 200 kg [1 x 250 kg]

<sup>1)</sup> Maximum values depending on glass type and resistance class; <sup>2]</sup> record THERMCORD RC 2 150 or 200mm height possible, RC 3 200 mm; <sup>3]</sup> In the THERMCORD<sup>+</sup> with active seals, the maximum door wing weight is reduced to 2 x 170 or 1 x 210kg

Tightness		
Thermal transmittance value (U $_{\rm D}$ )	$1.1 W/m^2 K^{*}$	$1.3 W/m^2 K^{*}$
Heavy rain resistance	E 300*)	
Air permeability class	PPD 6/5/450*)	
Wind load classes	PPD 600, A, PPD 500, B and PPD 2, $C^{\ast_{j}}$	
Noise damping $R_{\rm W}$ (C, C,,	31 dB (-1, 2)*)	

<sup>1</sup> The effective values depend on the door size and equipment and the type of glass used. The pertinent certificates with detailed data as well as a method of calculation for determining the U-value based on the standard EN ISO 10077-2 can be downloaded from the record homepage.

### Electrical connection data

### Connection data STA 20

Mains voltage	100 – 240VAC, 50/60Hz
Rated power	90 W
Consumption at rest	approx. 25 W

### Ambient conditions

### Basic data

Temperature range		
Moisture content range		

- 15° to + 50°C up to 85% rel. humidity, non-condensing

### General technical features

Standard conformity with

EN 16005, DIN 18650, EN 16361





# **THERMOORD**

### Notes on standards and achieved classes

# Thermal transmittance value: UD = 1.1 W / m<sup>2</sup>K in accordance with EN ISO 10077-1:2006-09

Thermal transmittance value refers to the property of a door system to prevent the temperature of an environment being influenced by the temperature of an adjacent environment.

The lower the  $\mathrm{U}_{\mathrm{D}}\text{-value}$  is, the better the thermal insulation.

### Heavy rain resistance: E300 in accordance with EN 16361:2013 + A1:2016

The heavy rain resistance is the property of a closed door system to reduce the penetration of water into the environment in which the door is installed.

The higher the test pressure value is, the better the heavy rain resistance is.

E 300 = test pressure 300 Pa (= 50% higher than best class 5A in accordance with EN 16361)

## Air permeability: PPD 6/5/450 in accordance with EN 16361:2013 + A1:2016

The air permeability is the property of a door system to reduce an undesirable air exchange between the two environments with different temperatures.

The higher the test pressure value at low air permeability, the better.

450 = test pressure 450 Pa (= 50% higher than the best class PPD2 in accordance with EN 16361) and reference air permeability at 100Pa related to the total area (6 m³/hm²) and joint length (5 m³/hm).

### Resistance to wind load: PPD 600, A/PPD 500, B/PPD 2, C in accordance with EN 16361:2013 + A1:2016

The resistance to wind load is the property of a closed door system to withstand the wind load in the environment in which the door is installed.

The higher the test pressure value is, the better the wind load resistance is.

- Class PPD 600, A: Frame bend
  = 1/150 at test pressure 600Pa
- Class PPD 500, B: Frame bend
- <= 1/200 at test pressure 500 Pa
- Class PPD 2, C: Frame bend
  <= 1/300 at test pressure 300Pa</li>

### Direct airborne noise damping value: $R_w$ (C; C<sub>tr</sub>)= 31 (-1; 2) dB in accordance with EN ISO 10140-2:2010

The direct airborne noise damping value is the property of a door system to protect an environment against noise from another environment.

The higher the RVV-value, the better the noise damping is.

Weighted noise damping value  $R_{_{\rm W}}$  with spectrum adaptation values C and  $C_{_{\rm fr}}$  for standard noise sources

## Intrusion deterrent: RC2/RC3 in accordance with EN 1627:2011

Intrusion deterrent is the property of the door system to resist the attempt to gain forceful access with the help of certain tools.

The higher the RC class is, the better the intrusion deterrent is.

RC 2: An amateur will not succeed in breaking open the locked door with certain tools, e.g. screwdriver, pliers, wedge, etc. within 3 minutes.

RC 3: An accomplished criminal will not succeed in breaking open the locked door with a screwdriver or crow bar within 5 minutes.



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**Headquartered** in Switzerland, the record group sells its products and services across the globe and is directly present with subsidiaries in many countries.

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