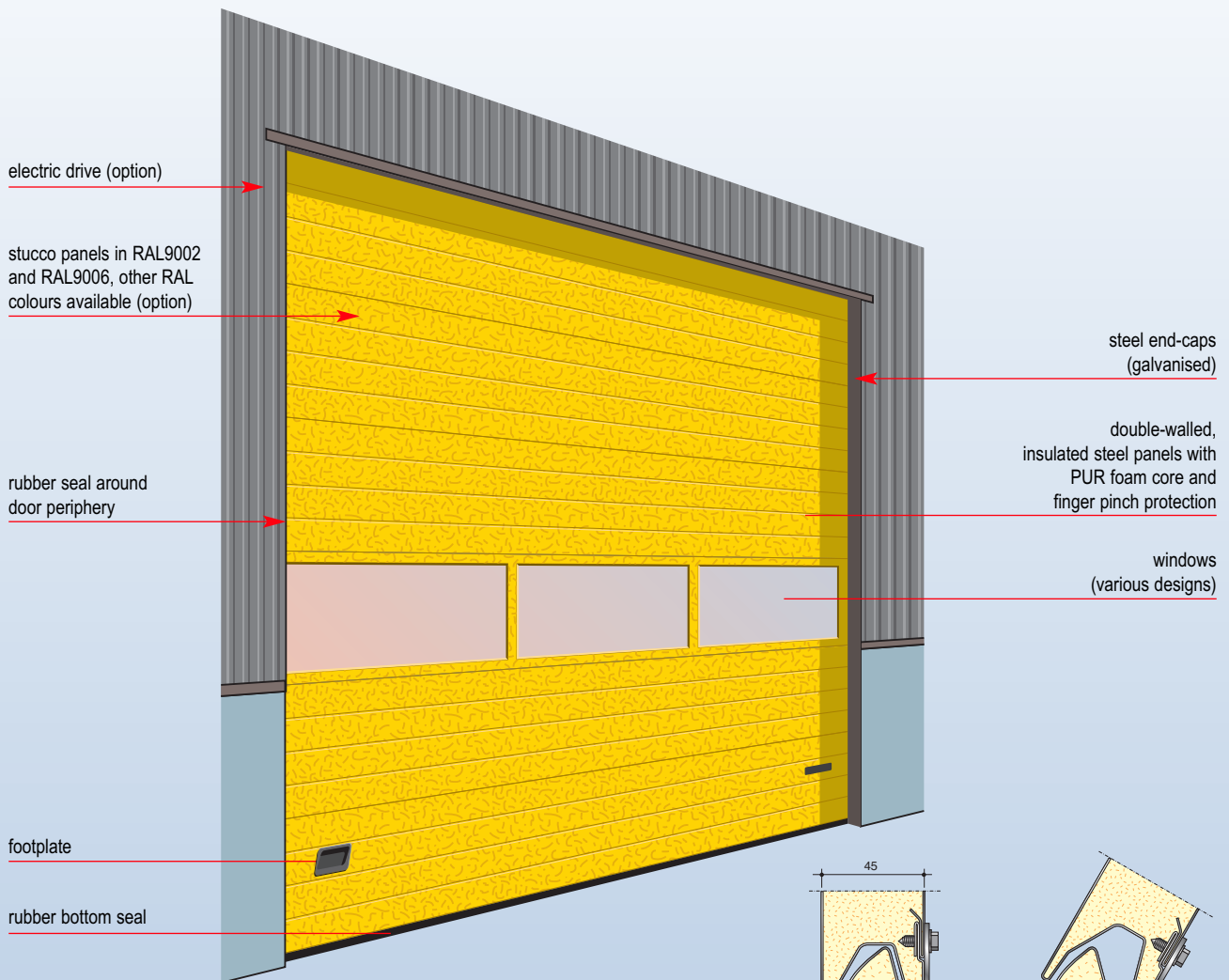


# Sectional overhead door

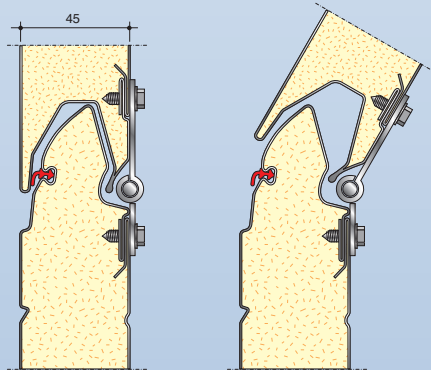
# Thermo 45

Insulated industrial door



## Features

- *stucco-embossed panels with horizontal profiling*
- *finger pinch protection*
- *good insulation performance (0.51 W/m<sup>2</sup>K)*
- *available in a wide choice of (RAL) colours*
- *also available with a wicket door*
- *superior quality door hardware*
- *manual or electric operation*
- *optimum safety*
- *draught-proof seals around the door periphery*
- *satisfies Norm EN12604.*



Finger pinch protection detail

**novoferm**<sup>®</sup>

*Novoferm's insulated sectional overhead door, type THERMO 45, available with either manual or electric operation. These doors are used in the private sector, industrial buildings and public utilities. There is a choice of specifications, finishes, operators and installation arrangements (track systems).*

## Components and construction

Novoferm's sectional overhead door, type THERMO 45, is made up of 625 mm and/or 500 mm high stucco-embossed panels with horizontal profiling. As the door opens, the sections slide back under the ceiling. Torsion springs balance the door's weight, making manual operation possible. In addition to the standard lift track system, high lift, vertical lift, roof angle and low headroom track systems are also available.

## Materials

- PUR foam insulated, galvanised steel sandwich panels with finger pinch protection (K value = 0.51 W/m<sup>2</sup>K)
- 625 and 500 mm panel heights
- 45 mm panel thickness
- the end-caps are made of galvanised steel
- the horizontal aluminium seal mounting profile on the top section is either anodised or powder-coated (RAL9002)
- 2 mm thick steel tracks, sendzimir-galvanised
- galvanised steel door hardware
- door hardware mounted using electrolytically galvanised, self-tapping screws with integral, knurled lock-washers
- rollers with nylon wheels and chromate-dipped, 11 mm steel shaft
- steel cables with a safety factor of 6
- plastic handle and footplate in the bottom section of manually operated doors
- EPDM top, side and floor seals
- EPDM seals between the panels.

## Finish

- outside face of the panels polyester-coated in RAL9002, (grey white) or RAL9006 (white aluminium) - minimum coating thickness 25 µ
- inner face of the panels polyester-coated in RAL9002, (minimum coating thickness 10 µ).

## Dimensions

- maximum door width.....8000 mm
- maximum door height .....7900 mm
- maximum door surface area .....48 m<sup>2</sup>
- minimum door width.....1000 mm

## Window and vision options

- insulated oval windows, acrylic glazing, 700 x 300 mm
- as above, but rectangular 650 x 350 mm
- one or more sections made of aluminium-frame glazed sections, with (single or double) acrylic glazing.

## Drive

Electric operation is offered in addition to manual operation by pullcord or hand chain drive. The control pcb is integral to the drive unit.

## Operators

- manual operation by pullcord or hand chain drive
- electric operation:
  - push-buttons (open-stop-close) in 'deadman' configuration' without a bottom safety edge
  - push-buttons (open-stop-close), including a self-testing bottom safety edge.

## Safety features

Safety features as required by EN 12604.

## Structural requirements and connections

- separate technical data sheets detailing dimensional and structural requirements are available for all designs and track systems.
- if an electric drive is specified, a CEE plug must be installed within 1 m of where the drive and/or control unit will be positioned (third party supply)

## Technical details (if an electric drive is fitted)

electrical supply .....230V/3~NPE/400V/50Hz/10A  
IP rating .....IP54

### Power requirement

(design with spring package) max).....max. 450 Watt  
(springless design .....max. 2,5 kW.

## Auxiliary components/ options/ accessories

- other tracksystems are possible
- heavy-duty shoot bolt with return spring
- integral wicket door, outward opening, with door closer and profile cylinder lock (max. sectional door width 6000 mm).

### For electrically operated doors

- other operation configurations are possible
- IP65 rating
- upgraded duty cycle for intensive use.
- springless design (standard for doors > 700 kg door panel weight). This is a special design without torsion springs. The shaft is directly driven by a heavy-duty electric drive, without the aid of balance springs.