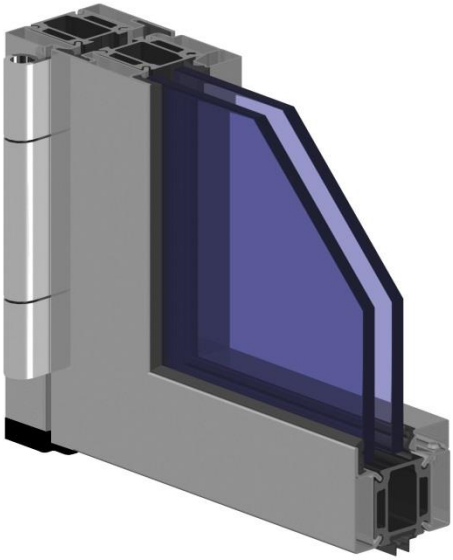
EXTERIOR STRUCTURES

Tenders



Outdoor applications

Tender documents

Tender text for heat-insulated door and wall structures

This text was produced to the best of our knowledge and its usability must be checked upon being adopted.
No liability of any kind can be taken therefrom.
It will serve as a guide for the user and will define the scope of supply as precisely as possible so that extreme differences in the offer are avoided in advance.

General preliminary remarks:

Unless otherwise stipulated in the service item, the following basic equipment shall apply. If there are a number of alternative designs, the claims of the service item are valid. The product must be manufactured in accordance with the relevant STANDARDS and the design recommendations of the system supplier.

Manufacturing, delivery and assembly of rotating doors with or without fixed / mobile top panel(s) and / or fixed side panel(s) made of galvanised, thermally-separated steel profiles from the vrame therm series. Both steel shells must have a continuous insulating bar made of glass fibre reinforced plastic. The distance between the steel profiles must be at least 32 mm. The pushing unit must be demonstrated in accordance with EN 14024.

Profile manufacturer voestalpine Krems GmbH

Overall depth 80 mm

Face widths 8050 (8025):

- Profile width 50 / 25 mm
- Wall connection profiles 45 / 70 / 90 mm
- Bars and transoms 65 / 90 mm
- Panel frame (wing and frame profile) 107 / 132 mm
- Panel frame transom windows (wing and frame profile) 82 / 107 / 132 mm
- Joint profiles 45 / 65 / 70 / 90 mm
- Extensions are to be established through profile combinations.

  The selected profiles must undergo a structural test before the offer is submitted.

Three-sided or four-sided overlapping profiles flush on the interior and exterior with a three-sided or four-sided all-round seal in the door frame and door leaf (double seal). A shadow joint of 5 mm is to be implemented between the frame and door wing / mobile transom window.
Corners and joints must be welded and professionally sanded in accordance with additional surface treatment. The plastic must not be sanded down.
A sill must be established in the floor area in accordance with the product documents of the system supplier. At least one floor seal must be implemented.
The indicated measurements are the benchmark and actual measurements must be taken before building starts.

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Heat throughput

The U-value is a measurement for heat throughput. The following heat throughput coefficients (U-values) must be adhered to:

Ug … U-value of the glass
Up … U-value of the panel
Uf … U-value of a frame profile / profile combination
UD … U-value of a door structure

The following Uf-values of the employed profiles must be demonstrated with test reports or a calculation in accordance with EN 10077-2.

Frame and wing profile combination: …… $\frac{W}{m^2K}$

Centre profiles combination (two-wing door): …… $\frac{W}{m^2K}$

Bar and transom profile: …… $\frac{W}{m^2K}$

Fixed section frame profile (wall connection) …… $\frac{W}{m^2K}$

Air permeability

Test procedure according to EN 1026, classified according to EN 12207, class .....

Resistance to wind load

Test procedure according to EN 12211, classified according to EN 12210, class .....

Watertightness

Test procedure according to EN 1027, classified according to EN 12208, class .....

Glass

The glazing must be produced with insulating glass / thermal insulation glass / dark glass as double / triple glazing with spacers made of aluminium / stainless steel / stainless steel plastic / silicone matrix. The glass type used must meet the relevant safety regulations. The glazing must be installed and blocked in accordance with the regulations of the glass supplier and/or the relevant standards. The glass must be installed between the profile stop and the glazing beads.
The glazing must be produced with system seals (dry glazing) / glazing tape in conjunction with silicone (wet glazing). The system glazing beads type GL are cut bluntly.
The glazing beads must be attached using a concealed drilling nipple BN 65.
If ventilation or drainage is required, it must be concealed.

The glazing meets the building physics requirements:

U_g-value: ……$\frac{W}{m^2K}$

Ψ-value: ……$\frac{W}{m^2K}$

Sound insulation value: ……$dB\ R_w$

g-value: ……%

Air permeability: ……%

Glass structure (3 panes) / (2 panes):

Interior ……. mm

SZR ……. mm

Centre ……. mm

SZR ……. mm

Exterior ……. mm

Total ……. mm

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Panel

The glazing must be installed and blocked in accordance with the glass designs. The panel must be installed between the profile stop and the glazing beads.
The panel must be installed using system seals / glazing tape in conjunction with silicone.
The system glazing beads type GL are cut bluntly.
The glazing beads must be attached using a concealed drilling nipple BN 65.

The panel structure must be established in accordance with the vrame therm product documents.
The panel must be selected based on the test certificates.

- Stadur panel FB-4-ZS
- Stadur panel Phon 36 dB-SSZ
- Stadur panel Phon 46 dB
- Stadur panel Protec

The panel can be produced in-house (without test certificate):

- EXTERIOR: …… mm of sheet steel / aluminium sheet
- PANEL CORE: …… mm of mineral wool / Styrodur
- INTERIOR: …… mm of galvanised sheet steel / aluminium sheet

The panel meets the building physics requirements:

- U_p-value: …… $\frac{W}{m^2K}$
- Sound insulation value: …… $dB\ R_w$

Surface treatment for sheet steel / aluminium sheet such as for door frames.

Seals

Only those seals of the system supplier tested in the system may be installed.
All seals must only be installed after the corrosion protection has been completed.

Hinges

The RB01 screw-on roller hinge, stainless steel 1.4401, 2D-adjustable / weld-on hinge, 3D-adjustable / VN5046 screw-on hinge, galvanized, 3D-adjustable / VN5046 screw-on hinge, stainless steel, 1.4301, 3D-adjustable must be employed. The number and position of the hinges must be stipulated in accordance with the product documents.

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Lock

A lock design from BKS or equivalent.
1 latch with bolt and stainless steel forend created for the profile cylinder

One-wing door structure

- 1 latch
- 1 latch with upper locking
- Multi-point locking
- Roller latch

- with panic function
- without panic function

Two-wing door structure

This tender only contains simplified lock designs.

- Fixed wing: Espagnolette lock with upper and lower locking, manual/automatic locking
  Active wing: 1 latch
- Fixed wing: Espagnolette lock with upper and lower locking, manual/automatic locking
  Active wing: 1 latch with upper locking
- Fixed wing: Cremone lock with upper and lower locking
  Active wing: 1 latch
- Fixed wing: Cremone lock with upper and lower locking
  Active wing: 1 latch with upper locking

- with panic function, in accordance with EN 179 / EN 1125
- without panic function

- Closing function Switching function B
- Closing function Transmission function E

- **Switching function B:**
  Unobstructed door ➔ can be opened from the inside at any time and from the outside at any time after the switch with the key
  Unobstructed door ➔ can be opened from the inside at any time and can only be opened with the key (also following a panic operation)

- **Transmission function E:**
  Unobstructed door ➔ can be opened from the inside at any time and can only be opened with the key
  Unobstructed door ➔ can be opened from the inside at any time and can only be opened with the key (also following a panic operation)

Door handle sets
Door handle set with covers as per the service item.

Make BKS, Type Rondo / Belcanto / Dirigent / Office / Legato / Tremolo

- Door handle set with long backplate handle/handle, accordingly for EN 179
- Knob handle set with long backplate handle/handle, accordingly for EN 179
- Door handle set with rosette handle/handle, accordingly for EN 179
- Knob handle set with rosette handle/knob, accordingly for EN 179
- Handle bar with handle/knob, accordingly for EN 1125
- Push bar with handle/knob, accordingly for EN 1125

If possible, the handle set may preferably be attached with through bolts.

Outdoor applications

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Profile cylinder

- without profile cylinder
- Design with single profile cylinder
- Design with profile cylinder according to lock plan

Door closer

One-wing door structure

- Top-mounted door closers with rods must be used.
- Top-mounted door closers with a runner must be used.
- Top-mounted door closers with a runner that has a electromechanical hold-open function must be used.
- Door closers that have been integrated into the profile must be used.
- Door closers that have been integrated into the floor must be used.

Two-wing door structure

- Top-mounted door closers with rods must be used.
- Top-mounted door closers with a runner must be used.
- Top-mounted door closers with a runner that has a electromechanic hold-open function in the fixed wing must be used.
- Top-mounted door closers with a runner that has a electromechanic hold-open function in the active wing must be used.
- Top-mounted door closers with a runner that has a electromechanic hold-open function in both wings must be used.
- Two-wing doors must also be equipped with an integrated door coordinator in conjunction with door closers.
- Door closers that have been integrated into the profile must be used.
- Door closers that have been integrated into the floor must be used.
- The door closer (active wing) must have a freewheel function.

Surface treatment

The thermally-separated profiles (steel and plastic) must be completely powder coatable. The profile series from voestalpine Krems GmbH meets all these requirements.
The galvanised structure must be delivered painted / coated to the construction site.
Proposed surface treatment:

- Air-drying paintwork
- Low-temperature powder coat from 140°C
- Powder coating up to 200°C Ambient oven temperature, max. 200°C

Colour shade: RAL.....

The processing instructions for vrame therm products must be given priority.

Assembly

- The structure must be mounted on the building using frame anchors or universal screws. The gap between the building and steel frame must be sealed with a permanently elastic filler.

  It must be designed in accordance with the RAL assembly guidelines.

Following assembly, all the necessary adjustments must be made and a functional test must be carried out.

Outdoor applications

Tender documents

Service item:

Manufacturing, delivery and assembly of a **one-wing door** made of thermally-separated steel profiles from the vrame therm series. Profile manufacturer voestalpine Krems GmbH

- inward / outward opening
- with fixed top panel
- with mobile top panel
- with 1 fixed side panel left / right
- with 1 fixed side panel left / right and top panel
- with fixed side panels on both sides
- with fixed side panels on both sides and top panel
- with bar / transom
- ... Glazing fields Type .....
- ... Panel filling fields

- Glass or panel installation with system seals
- Glass or panel installation with glazing tape and silicone

- RB01 screw-on roller hinge, stainless steel 1.4401 Type .....
- 3D weld-on hinge Type .....
- VN5046 galvanised screw-on hinge Type .....
- VN5046 screw-on hinge made from stainless steel Type .....

- 1 latch without panic function Type .....
- 1 latch with panic function Type .....
- 1 latch with upper locking and without panic function Type .....
- 1 latch with upper locking and with panic function Type .....
- Multi-point locking without panic function Type .....
- Multi-point locking with panic function Type .....

- Closing function Switching function B
- Closing function Transmission function E

- Handle with long backplate Type .....
- Handle with rosette Type .....
- Handle bar Type .....
- Push bar Type .....

- without / with profile cylinder Type .....

- Top-mounted door closer with rods
- Top-mounted door closer with runner
- Top-mounted door closer with runner and electromechanical hold-open function Type .....
- Door closer integrated in the wing profile Type .....
- Door closer integrated in the floor Type .....
- with freewheel function

- Wall connection as per RAL assembly guidelines

Outdoor applications

Tender documents

Surface treatment

- Air-drying paintwork
- Low-temperature powder coat from 140°C
- Powder coating up to 200°C Ambient oven temperature, max. 200°C

Colour shade: RAL.....

Design according to the drawing …….

External dimensions W x H .....x..... mm
Clearance DLW X DLH .....x..... mm

.... Item €/Item ..... € .....

Outdoor applications

Tender documents

Service item:

Manufacturing, delivery and assembly of a **two-wing rotating door** made of steel profiles from the vrame therm series.
Profile manufacturer voestalpine Krems GmbH

- inward / outward opening
- with fixed top panel
- with mobile top panel
- with 1 fixed side panel left / right
- with 1 fixed side panel left / right and upper panel
- with fixed side panels on both sides
- with fixed side panels on both sides and upper panel
- with bar / transom
- ... Glazing fields Type .....
- ... Panel filling fields

- Glass or panel installation with system seals
- Glass or panel installation with glazing tape and silicone

- RB01 screw-on roller hinge, stainless steel 1.4401 Type .....
- 3D weld-on hinge Type .....
- VN5046 galvanised screw-on hinge Type .....
- VN5046 screw-on hinge, stainless steel Type .....

Lock design

- Fixed wing: Espagnolette lock with upper and lower locking, manual/automatic locking Active wing locking: 1 latch with/without panic function

- Fixed wing: Espagnolette lock with upper and lower locking, manual/automatic locking
  Active wing: 1 latch with/without panic function

- Fixed wing: Cremone lock with upper and lower locking
  Active wing: 1 latch with upper locking and with/without panic function

- Fixed wing: Cremone lock with upper and lower locking
  Active wing: 1 latch with upper locking and with/without panic function

- Closing function Switching function B
- Closing function Transmission function E

  - Handle with long backplate Type .....
  - Handle with rosette Type .....
  - Handle bar Type .....
  - Push bar Type .....

  - without / with profile cylinder Type .....

  - Top-mounted door closer with rods
  - Top-mounted door closer with runner
  - Top-mounted door closer with runner and electromechanic hold-open function Type .....
  - Door closer integrated in the wing profile Type .....
  - Door closer integrated in the floor
  - with freewheel function Type .....

  - Wall connection as per RAL assembly guidelines

Outdoor applications

Tender documents

Surface treatment

- Air-drying paintwork
- Low-temperature powder coat from 140°C
- Powder coating up to 200°C Ambient oven temperature, max. 200°C

Colour shade: RAL.....

Design according to the drawing ……

External dimensions W x H .....x..... mm
Clearance DLW X DLH .....x..... mm

.... Item €/Item ..... € .....

Outdoor applications

Tender documents

Service item:

Manufacturing, delivery and assembly of a **partition (permanent wall)** made of thermally-separated steel profiles from the vrame therm series. Profile manufacturer voestalpine Krems GmbH

- ... Glazing fields Type .....
- ... Panel filling fields
- Subdivision according to the drawing

- Glass or panel installation with system seals
- Glass or panel installation with glazing tape and silicone

- Wall connection as per RAL assembly guidelines

Surface treatment

- Air-drying paintwork
- Low-temperature powder coat from 140°C
- Powder coating up to 200°C ambient oven temperature, max. 200°C

Colour shade: RAL.....

Design according to the drawing ……

External dimensions W x H .....x..... mm

.... Item €/Item ..... € .....