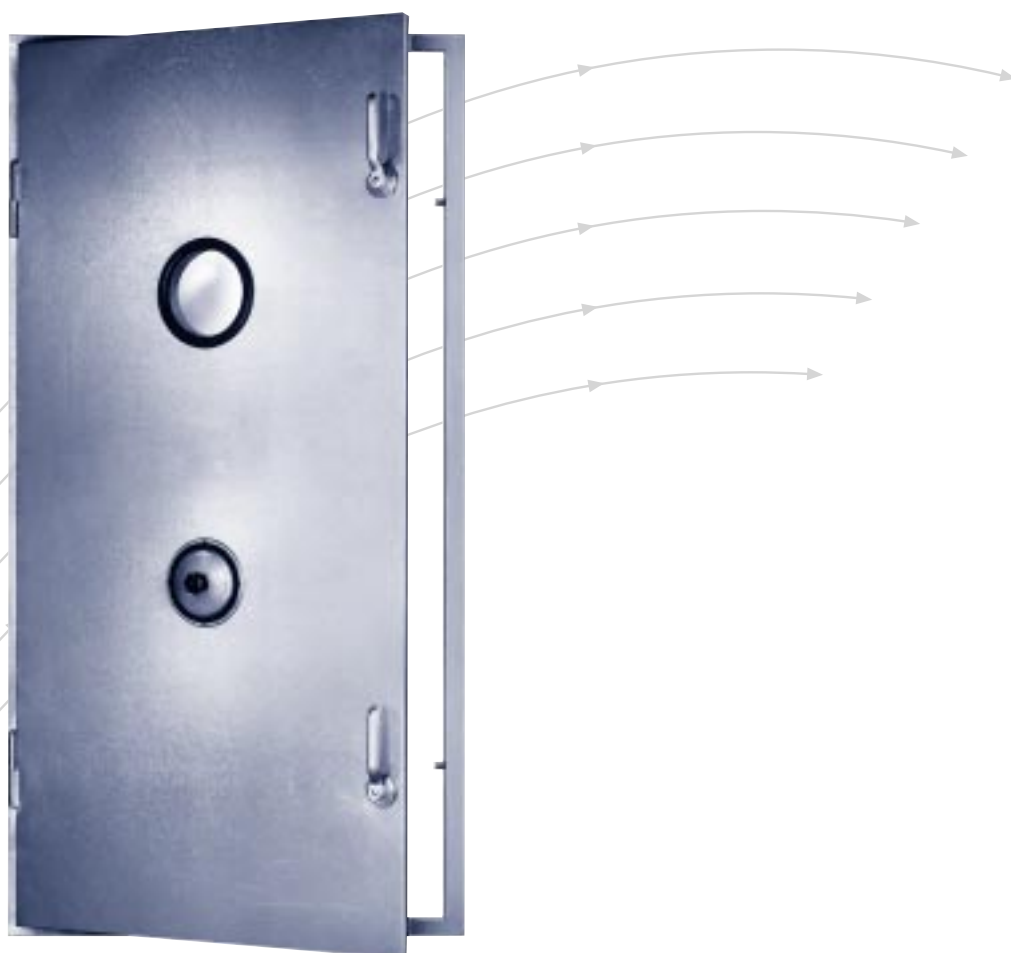


# Low Leakage Steel Doors

Type ST · XT



**TROX<sup>®</sup> TECHNIK**

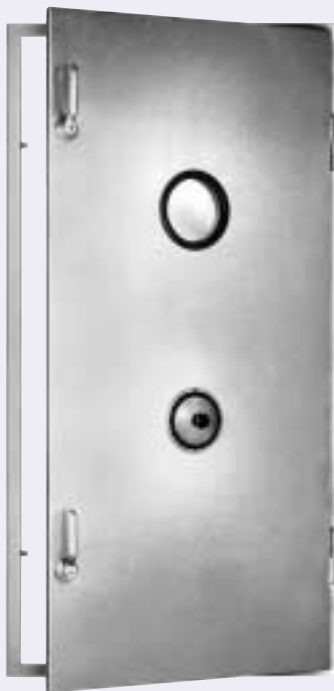
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# Contents · Description

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**ST · STV  
XT · XTV**



**ST-D · STV-D  
XT-D · XTV-D**



Low leakage steel doors are designed for use in air conditioning systems, plant rooms, filter plenums, air handling units etc.. If exposed to the weather the steel doors should be protected with anti-corrosion paint. The stable construction guarantees a very low leakage even with high pressure differentials.

Good sound insulation is also achieved in the construction with additional acoustic treatment (X versions).

## Type ST · STV · XT · XTV

### ST

- Double skinned door in galvanised sheet steel with rockwool insulation: door thickness  $d$  approx. 44 mm
- Installation frame (angled section or U-channel) with or without galvanised builders cleats welded in position
- Double lever locking devices (2 pieces) diecast aluminium, enables operation from both sides
- APT rubber seal, temperature resistant up to 90 °C
- Maximum pressure differential 1000 Pa (pressure should push the door against the frame); leakage  $\approx 2 \text{ m}^3/\text{h}$

### STV

As for type ST, but:

- Reinforced door construction
- Maximum pressure differential 2000 Pa (pressure should push the door against the frame); leakage  $\approx 4 \text{ m}^3/\text{h}$

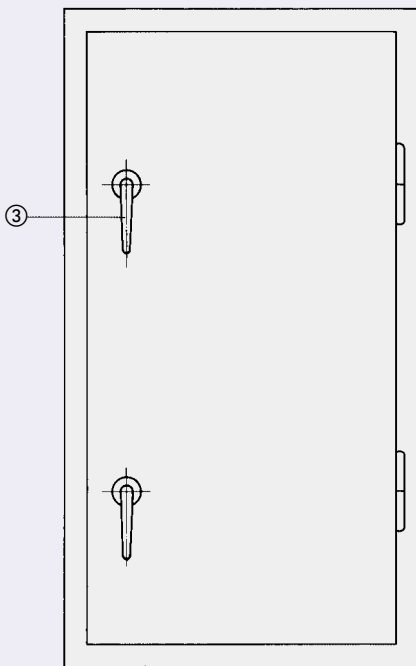
### XT

As for type ST, but also with additional acoustic treatment

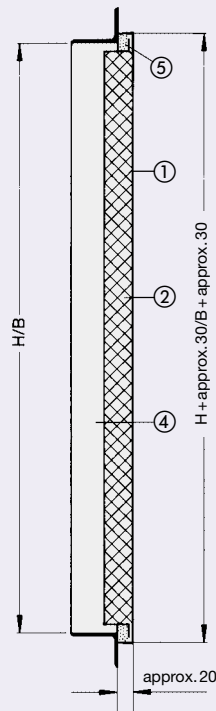
### XTV

As for type STV, but also with additional acoustic treatment

## Type ST · STV XT · XTV

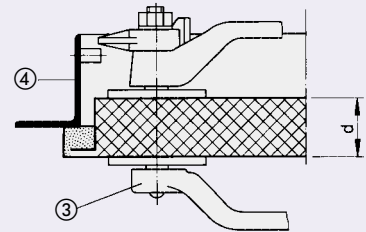


right hand opening shown

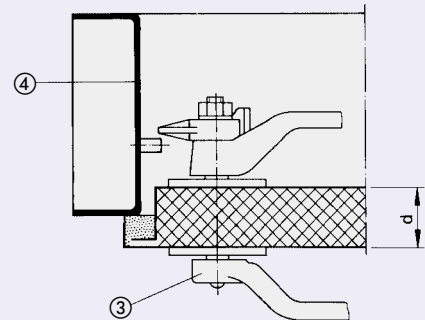


### Detail of double lever locking device

With angled section installation frame



With U-channel installation frame



- ① Door
- ② Rockwool insulation
- ③ Double lever locking device
- ④ Installation frame, angle section or U-channel
- ⑤ Seal

# Construction

## Type ST-D · STV-D · XT-D · XTV-D

### ST-D

- Double skinned door of galvanised sheet steel with rockwool insulation; door thickness  $d$  approx. 44 mm
- Installation frame (angle section or U-channel) with screw-fixed centre mullion and with or without galvanised builders cleats welded in position
- Double lever locking devices (2 pieces per door) in diecast aluminium, enabling operation from both sides
- APT rubber seal, temperature resistant up to 90 °C
- Maximum pressure differential 1000 Pa (pressure should push the door against the frame); leakage  $\approx 4 \text{ m}^3/\text{h}$

### STV-D

As for type ST-D, but:

- Reinforced door construction
- Maximum pressure differential 2000 Pa (pressure should push the door against the frame); leakage  $\approx 8 \text{ m}^3/\text{h}$

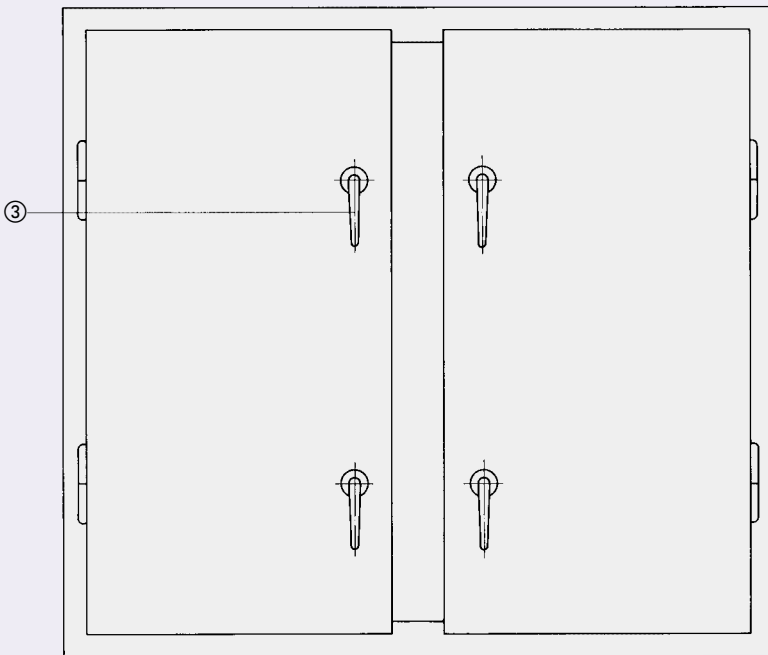
### XT-D

As for type ST-D, but also with additional acoustic treatment

### XTV-D

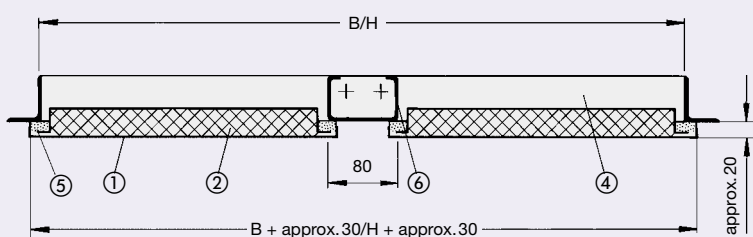
As for type STV-D, but also with additional acoustic treatment

## Type ST-D · STV-D XT-D · XTV-D



- ① Door
- ② Rockwool insulation
- ③ Double lever locking device
- ④ Installation frame, angle section or U-channel
- ⑤ Seal
- ⑥ Centre mullion

Detail of double lever locking device see page 3

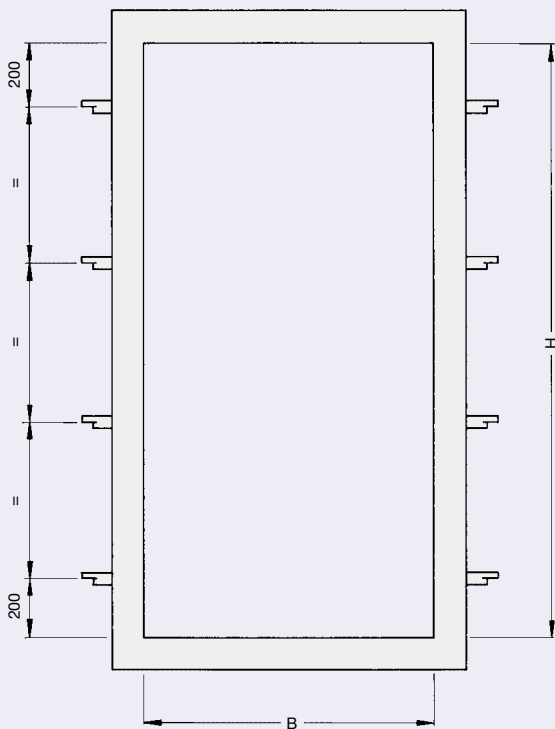


# Standard Sizes · Installation Details

Standard sizes				
Type	B in mm	No. of builders cleats per B dimension	H in mm	No. of builders cleats per H dimension
ST	500	–	1500	3
STV	600	–	1600	3
XT	800	–	1800	4
XTV	940	–	1940	4
ST-D	1080	1	1500	4
STV-D	1280	1	1600	4
XT-D	1680	1	1800	5
XTV-D	1960	1	1940	5

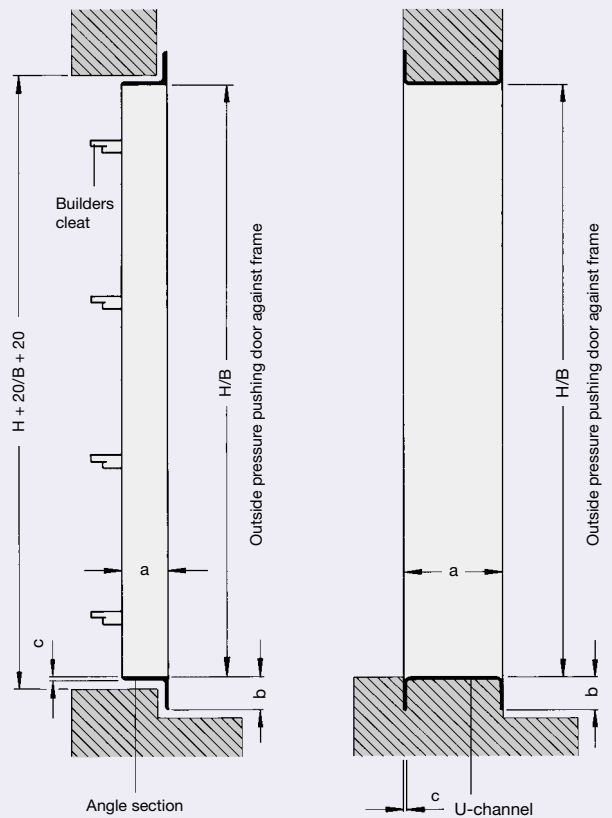
All B and H dimensions can be combined.  
Intermediate dimensions (B and/or H dimension) can be supplied.

## Installation details



Single door construction shown

For double door construction, 1 additional builders cleat on the B dimension



Installation frame Dimensions in mm		Type ST · STV · ST-D · STV-D XT · XTV · XT-D · XTV-D
Angle section	a	50
	b	40
	c	4
U-channel	a	115 or 240
	b	40
	c	4

# Product Range

Product range		
Construction	Complete with	Code
Basic construction	Rim cylinder dead lock	Z 01
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 02
	Glass inspection port	Z 03
	Pressure relief valve	Z 04
	Removable front locking levers (of the double lever locking device)	Z 05
Basic construction with glass inspection port	Rim cylinder dead lock	Z 06
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 07
	Pressure relief valve	Z 08
	Removable front locking levers	Z 09
Basic construction with pressure relief valve	Rim cylinder dead lock	Z 10
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 11
	Removable front locking levers	Z 12
Basic construction with removable front locking levers	Rim cylinder dead lock	Z 13
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 14
Basic construction with glass inspection port and pressure relief valve	Rim cylinder dead lock	Z 15
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 16
	Removable front locking levers	Z 17
Basic construction with glass inspection port and removable front locking levers	Rim cylinder dead lock	Z 18
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 19
Basic construction with pressure relief valve and removable front locking levers	Rim cylinder dead lock	Z 20
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 21
Basic construction with glass inspection port, pressure relief and removable front locking levers	Rim cylinder dead lock	Z 22
	Mortise dead lock, designed to accept a profiled cylinder (profile cylinder by others)	Z 23
Angle section installation frame 50/40/4	With welded builders cleats in galvanised steel	11
	Without builders cleats	21
U-channel installation frame 115/40/4	With welded builders cleats in galvanised steel	13
U-channel installation frame 240/40/4	With welded builders cleats in galvanised steel	15

Prices for painted construction available on request

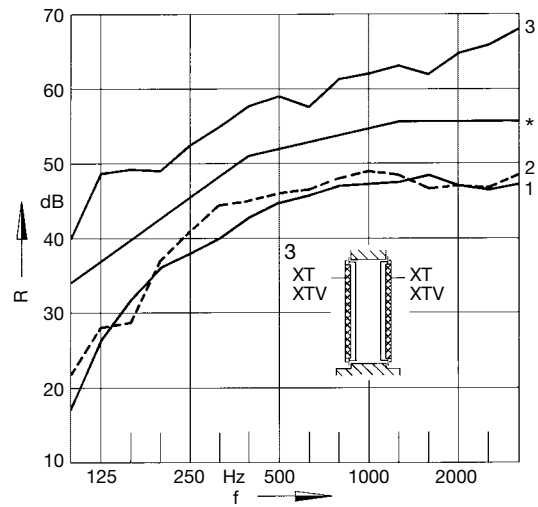
## Nomenclature

- R in dB: Sound reduction index
- $R_w$  in dB: Sound reduction index rating
- f in Hz: Frequency

Type	Graph	$R_w$ in dB
XT · XTV	1	43...46
XTD · XTV-D	2	44...47
XT · XTV (doors on both sides of wall opening)	3	58...61

Note:  
Before mortaring in place, align door carefully;  
when the door is closed, the seal must be in contact with the door frame all the way around.

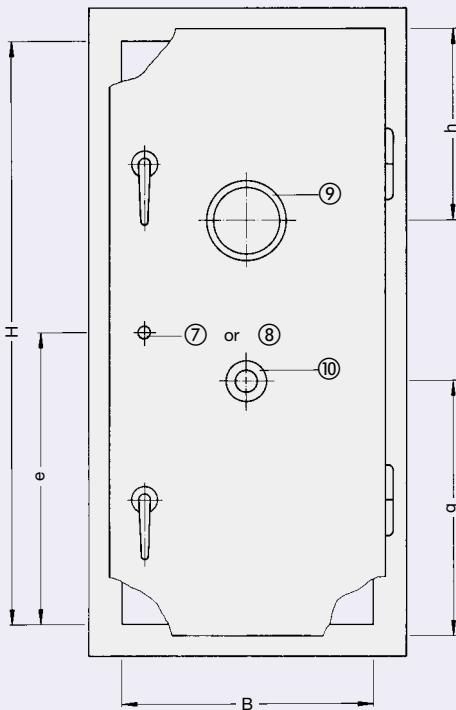
## Type XT · XTV · XT-D · XTV-D



\* Reference curve from DIN EN ISO 717

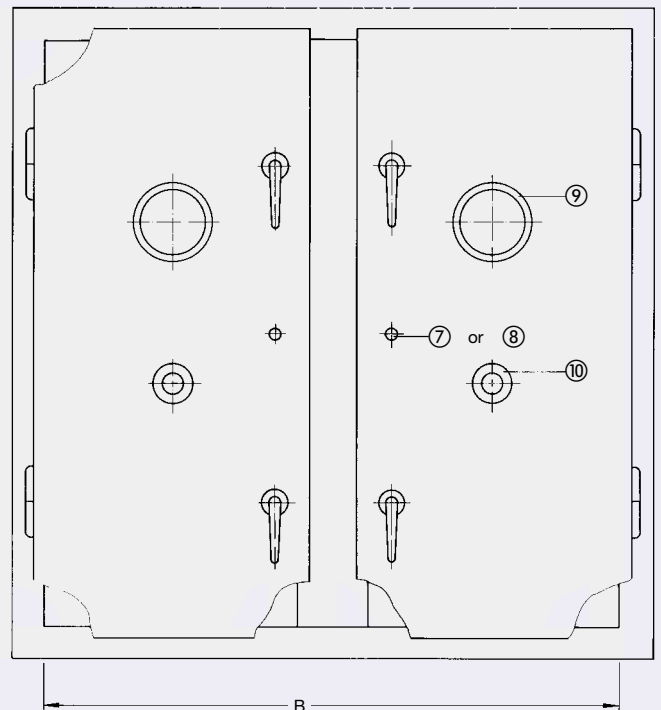
## Arrangement of accessories

### Type ST · STV XT · XTV



right hand construction shown

### Type ST-D · STV-D XT-D · XTV-D



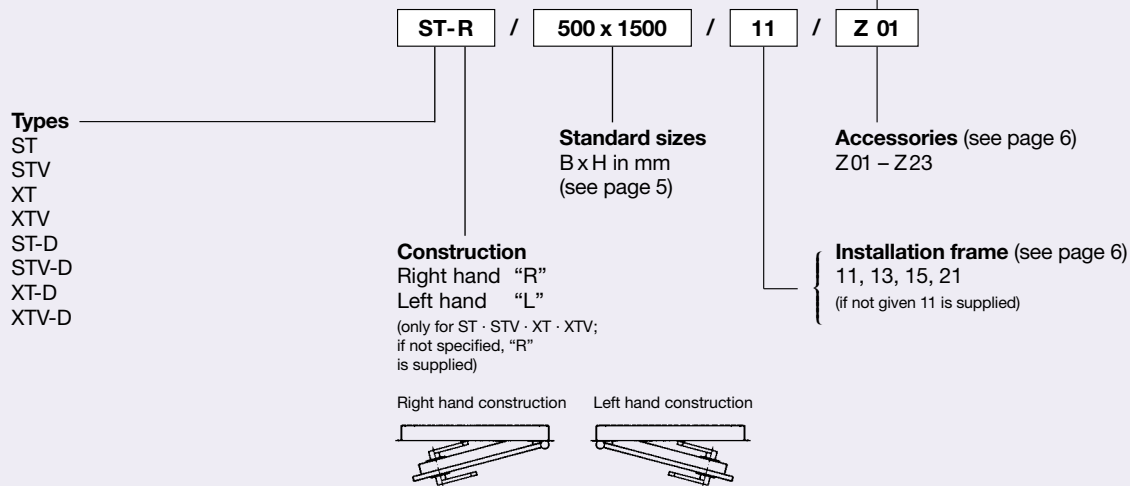
Dimension in mm	Type ST · STV XT · XTV ST-D · STV-D XT-D · XTV-D
e	H/2
g	H/2 - 190
h	570

- ⑦ Cylinder lock
- ⑧ Mortise lock, designed for mounting a profiled cylinder
- ⑨ Glass inspection port
- ⑩ Pressure relief valve

# Order Details

## Order code

These codes do not need to be completed for standard products



## Specification text

- Low leakage steel doors comprising:
- Double skinned door in formed galvanised sheet steel to DIN EN 10142, without spot welds visible on outside of door; with insulation of non-flammable rockwool to DIN 4102
  - Installation frame with welded hinges and galvanised steel builders cleats
  - Double lever locking devices enables operation from both sides, in diecast aluminium
  - Peripheral profiled rubber seal of APT, temperature resistant up to 90 °C

Installation frame: see data on pages 5 and 6

Accessories: see data on pages 6 and 7

Make: TROX

Type: see data on pages 3 and 4

## Order example

Make: TROX  
 Type: ST-R / 500 x 1500 / 11 / Z 01  
 Qty.: 4