



NORDdoor
Maintenance doors

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General

A healthy room climate is not a coincidence but the outcome of thoroughly considered choices and technical solutions.

All ducts and other parts of the air handling system must be clean to ensure the cleanliness of supply air. Pollutants that accumulate in the ventilation system can affect indoor air quality and decrease air volumes. Achieving a good indoor climate requires that the building and its technical systems are used correctly.

Ventilation ducts are equipped with maintenance doors, placed in well accessible areas for easy inspection and cleaning.

Special attention must be paid to the cleanability of extraction devices. Locations of inspection/cleaning hatches are chosen so that the cleaning can be carried out easily and safely.

Maintenance Doors Dimensions

EN 12097:2006 standard for minimum dimensions of maintenance door:

Duct diameter (mm)	Minimum opening (mm)		Duct side dimensions for opening (mm)	Minimum opening (mm)	
	a	b		a	b
100 ≤ d < 200	180	80	s ≤ 200	300	100
200 ≤ d ≤ 315	200	100	200 < s ≤ 500	400	200
315 < d ≤ 500	300	200	s > 500	500	400
d > 500	400	300			

Location in the Duct System

The distance between the maintenance doors depends on the construction of the duct system and the cleaning method. Location and distance of the maintenance doors must be determined so that the entire length of the channel can be cleaned.

Cleaning hatches must be installed above the fire damper, in the duct near corners over 45° and in horizontal ducts preferably at a distance of up to 8 m (permitted max. distance 10 m) and to the branching points of the canal.

Material

Maintenance doors are manufactured of galvanized steel according to standard EN 10346:2015, with zinc thickness at least 275 g/m² on both sides. Other materials are available on special orders.

H – acid-proof steel (standards EN 10088-2:2014, EN 1.4436 or AISI 316)

ZM – zinc-magnesium coated steel sheet (standard EN 10346:2015, ZM 310)

Insulation

S - thermal insulation, insulation thickness 50 mm, 100 mm ...

EI - fire insulation. Used fire insulation meets the testing methods requirements according to EN 1366-1.

Fire insulation strengths in accordance with EN 13501-1.

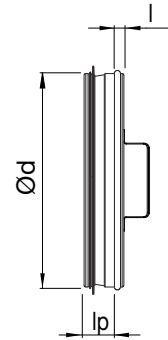
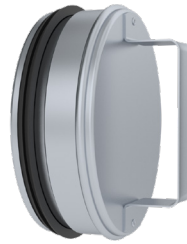
Fire class	Insulation thickness	
	Rectangular ducts	Round ducts
EI30	50 mm	80 mm
EI60	100 mm	80 mm
EI90	100 mm	100 mm
EI120	100 mm	100 mm

NALH End Cap Maintenance Door for Duct

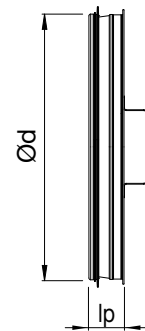
Maintenance door for duct ends.

Nominal size Ød (mm)	l _p (mm)	l (mm)	Weight (kg)
100	35	15	0,1
125	35	15	0,2
160	35	15	0,3
200	35	15	0,4
250	35	15	0,5
315	35	15	0,8
400	55	-	1,3
500	55	-	1,8
630	55	-	2,8
800	82	-	5,4
1000	96	-	9,2
1250	96	-	13,0

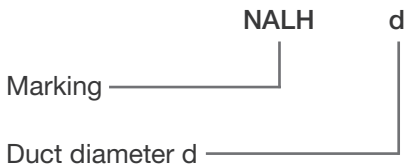
100-315



400-1250



Product Marking



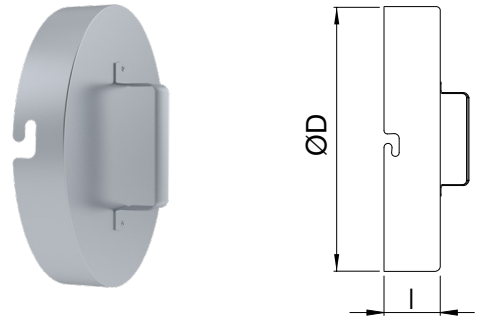
Example: NALH 315

NALMH End Cap Maintenance Door for Part

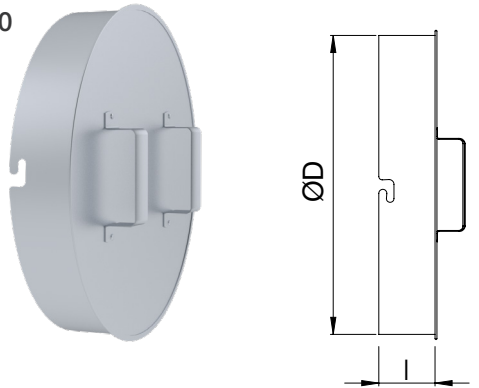
NALMH is a maintenance door for part.

Nominal size ØD (mm)	l _p (mm)	Weight (kg)
100	40	0,09
125	40	0,11
160	40	0,16
200	40	0,21
250	40	0,34
315	40	0,51
400	60	0,76
500	75	1,9
630	75	2,8
800	115	4,5
1000	115	8,5
1250	115	12,5

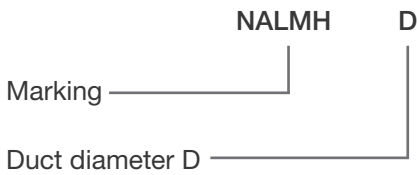
100-315



400-1250



Product Marking



Example: NALMH 315

NALHE End Cap, Insulated

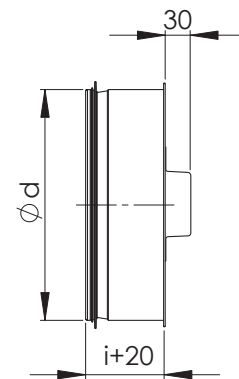
Insulated end cap maintenance door for duct.

Used fire insulation meets the testing methods requirements according to IMO FTP-Code part 1.

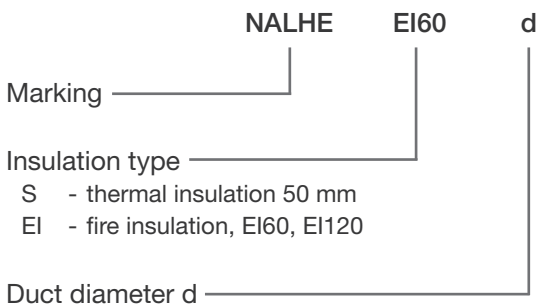
Fire insulation strengths in accordance with EN 13501-1.



Nominal size Ød (mm)	EI60		EI120	
	i (mm)	Weight (kg)	i (mm)	Weight (kg)
100	60	0,4	100	0,5
125	60	0,7	100	0,8
160	60	1,0	100	1,1
200	60	1,2	100	1,4
250	60	1,8	100	2
315	60	2,4	100	2,7
400	60	4,0	100	4,5
500	80	5,9	100	6,3
630	80	8,6	100	9,2
800	80	13,2	100	14
1000	80	22,6	100	24
1250	80	32,9	100	35



Product Marking



Example: NALHE EI60 315

NALMHE End Cap, Insulated

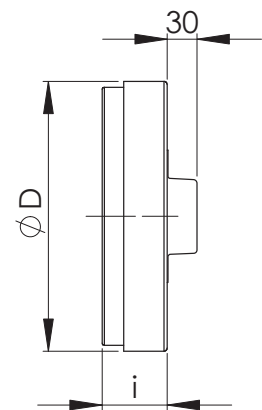
Insulated end cap maintenance door for part.

Used fire insulation meets the testing methods requirements according to IMO FTP-Code part 1.

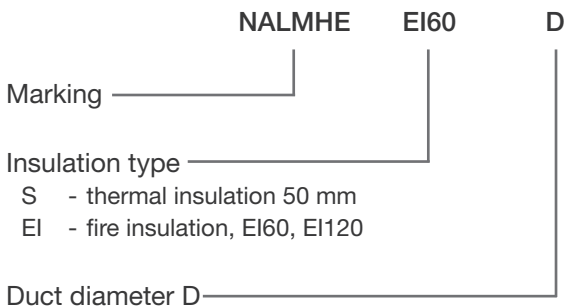
Fire insulation strengths in accordance with EN 13501-1.



Nominal size Ø D (mm)	EI60		EI120	
	i (mm)	Weight (kg)	i (mm)	Weight (kg)
100	60	0,4	100	0,4
125	60	0,7	100	0,7
160	60	0,8	100	1,0
200	60	1,1	100	1,3
250	60	2,1	100	2,3
315	60	2,6	100	3,0
400	60	5,6	100	6,2
500	80	7,8	100	8,2
630	80	9,8	100	10,4
800	80	15	100	15,8
1000	80	26	100	27,4
1250	80	38	100	40,1



Product Marking



Example: NALMHE EI60 315

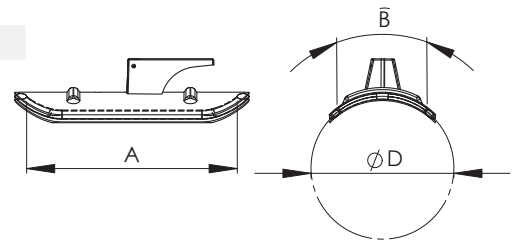
TL3 Maintenance Door for Round Duct

Maintenance door with quick release for round duct.
 The maximum operating temperature of the TL3 is 70°C.
 Maintenance doors meet requirements for tightness class C (EN 12237:2003).

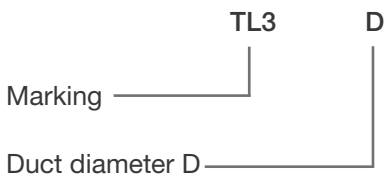


Measurements

Nominal size ØD (mm)	Opening size AxB (mm)	Material (mm)	
100-160	185x85	0,7	One handle
200-315	300x100	0,7	Two handles
400-500	400x200	1,0	Two handles
630-1250	500x400	1,2	Two handles



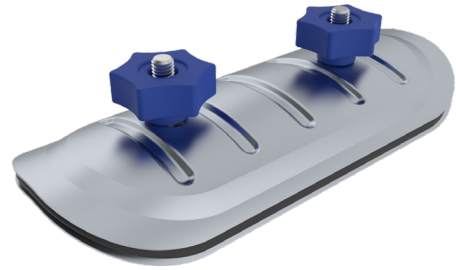
Product Marking



Example: TL3 315

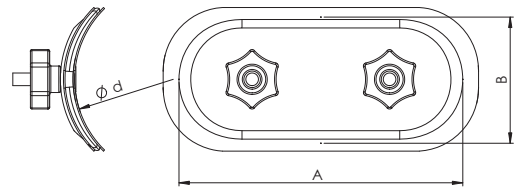
TLC Maintenance Door for Round Duct

Maintenance door with quick release for round duct.
 The maximum operating temperature of the TLF is 110°C.
 Maintenance doors meet requirements for tightness class C (EN 12237:2003).

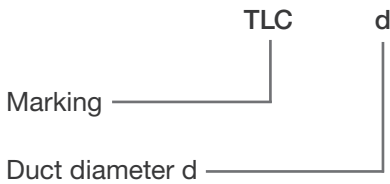


Measurements

Nominal size Ø d (mm)	Opening size AxB (mm)	Material (mm)
100-125	180x80	0,7
160	250x150	0,7
200	250x150	0,7
250	250x150	0,7
315	250x150	0,7
400	300x200	0,7
500	300x200	0,7
630	400x300	0,7
800	400x300	0,7
1000	500x400	1,2
1250	500x400	1,2



Product Marking

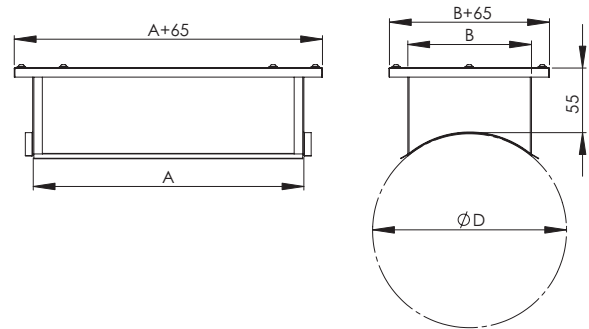
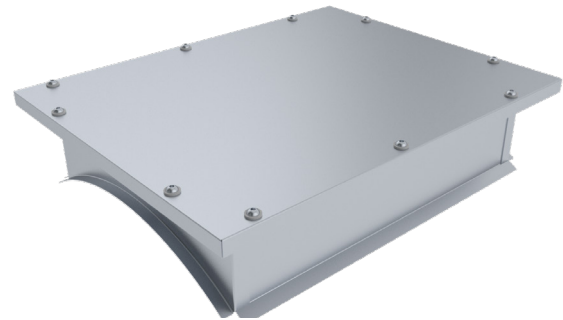


Example: TLC 315

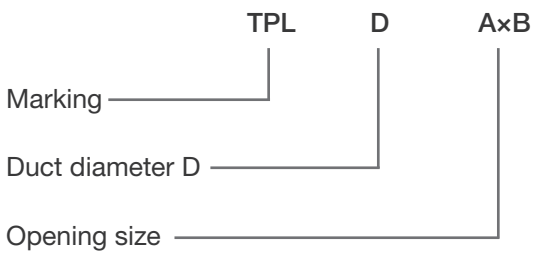
TPL Maintenance Door for Round Duct

Maintenance door for round duct (Ø 100-1250 mm).
 Maintenance doors meet requirements for tightness class C (EN 12237:2003).

Nominal size ØD (mm)	A (mm)	B (mm)
100	200	100
125	200	100
160	200	100
200	200	100
250	200	100
315	200	100
400	300	200
500	300	200
630	400	300
800	400	300
1000	400	300
1250	400	300



Product Marking



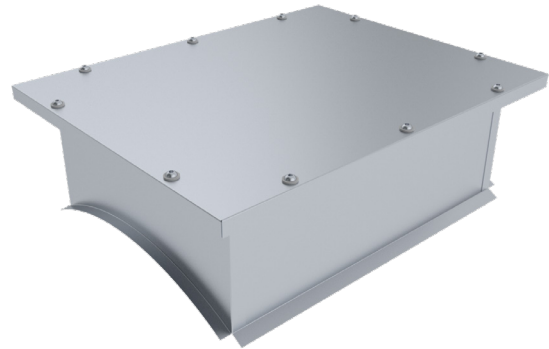
Example: TPL 315

TPLE Insulated Maintenance Door

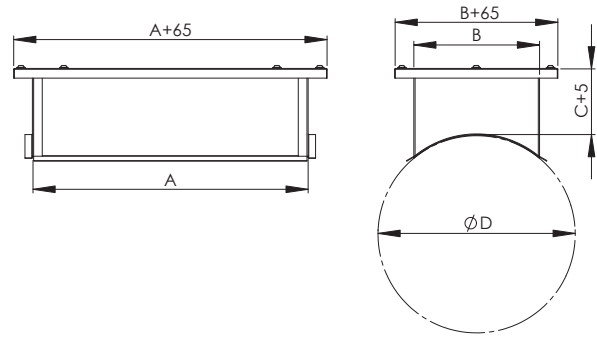
Insulated maintenance door for round duct of Ø 100-1250 mm.

Maintenance doors meet requirements for tightness class C (EN 12237:2003).

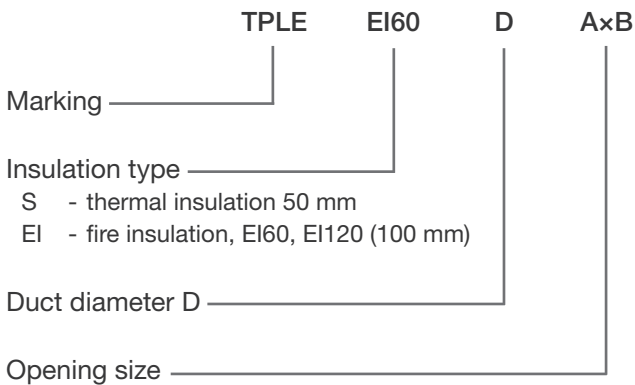
Used fire insulation meets the testing methods requirements according to EN 1366-1. Fire insulation strengths in accordance with EN 13501-1.



Nominal size ØD (mm)	A (mm)	B (mm)
100	200	100
125	200	100
160	200	100
200	200	100
250	200	100
315	200	100
400	300	200
500	300	200
630	400	300
800	400	300
1000	400	300
1250	400	300



Product Marking



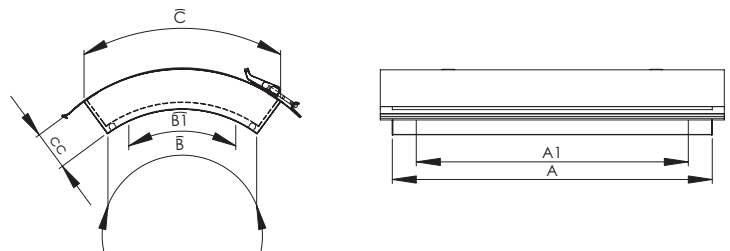
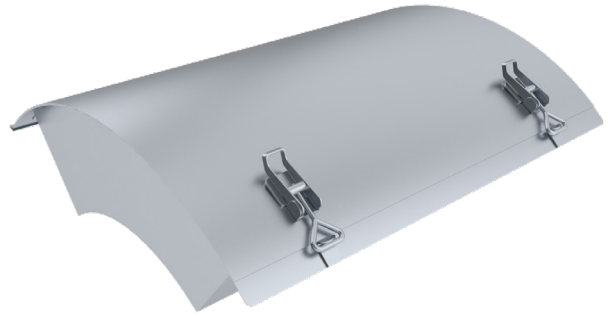
Example: TPLE EI60 315

TLPE Insulated Maintenance Door

TLPE insulated maintenance door for round ventilation duct.

Maintenance doors meet requirements for tightness class C (EN 12237:2003).

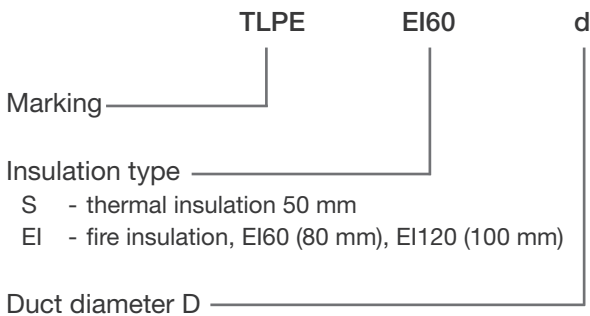
Used fire insulation meets the testing methods requirements according to EN 1366-1. Fire insulation strengths in accordance with EN 13501-1.



Measurements

Nominal size (mm)	C			Opening size A1xB1 (mm)
	A (mm)	B (mm)	cc=50 mm / cc=80 mm / cc=100 mm	
100	240	120	235 / 304 / 350	180x80
125	240	120	220 / 280 / 320	180x80
160	240	120	195 / 240 / 270	180x80
200	400	200	300 / 360 / 400	340x140
250	400	200	275 / 320 / 350	340x140
315	400	200	265 / 304 / 330	340x140
400	400	260	325 / 364 / 390	340x200
500	400	260	315 / 348 / 370	340x200
630	500	400	465 / 504 / 530	440x340
800	500	400	455 / 488 / 510	440x340
1000	500	400	445 / 472 / 490	440x340
1250	500	400	435 / 456 / 470	440x340

Product Marking



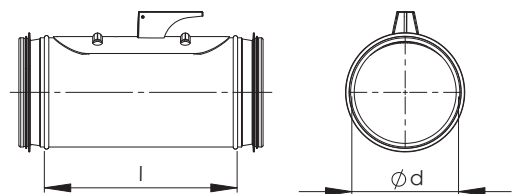
Example: TLPE EI60 315

TLN3 Coupling with Maintenance Door

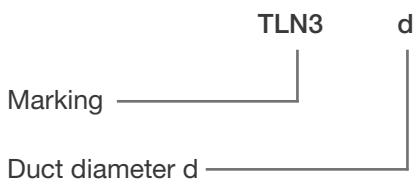
Coupling with maintenance door for round duct. TLN3 meets tightness class C requirements EN 12237:2003.

Measurements

Nominal size Ø d (mm)	Lenght l (mm)	Material (mm)
100	240	0,6
125	240	0,7
160	240	0,9
200	355	1,6
250	355	2,0
315	355	2,4
400	455	5,2
500	455	6,2
630	565	11,5
800	570	14,0
1000	582	22,0



Product Marking



Example: TLN3 315

N.B. See installation instructions in NORDduct installation manual.

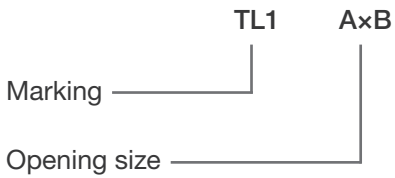
TL1 Maintenance Door for Flat Surface

Maintenance door for rectangular duct with quick release.
 The maximum operating temperature of the TL1 is 70°C.
 TL1 maintenance doors meet tightness class C requirements (EN 12237:2003).

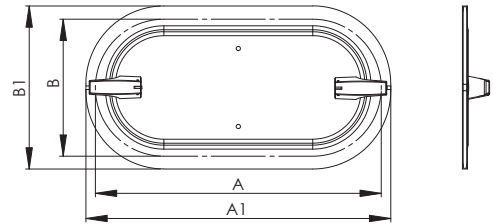
Nominal size (mm)	AxB (mm)	Material (mm)
TL1 300x200	300x200	1,0
TL1 400x200	400x200	1,0
TL1 500x400	500x400	1,0



Product Marking



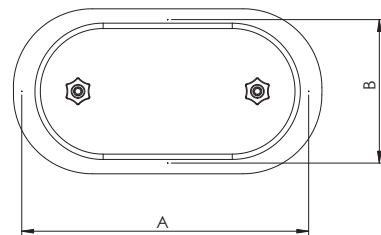
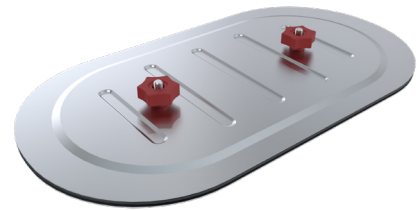
Example: TL1 300x200



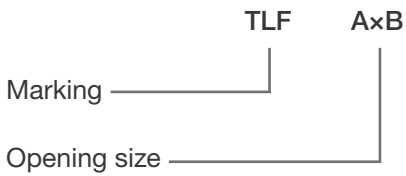
TLF Maintenance Door for Flat Surface

Maintenance door for rectangular duct with quick release.
 The maximum operating temperature of the TLF is 110°C.
 TLF maintenance doors meet tightness class C requirements (EN 12237:2003).

Nominal size (mm)	Opening size AxB (mm)	Material (mm)
TLF 200x100	200x100	0,7
TLF 300x200	300x200	0,7
TLF 400x300	400x300	0,7
TLF 500x400	500x400	1,2



Product Marking

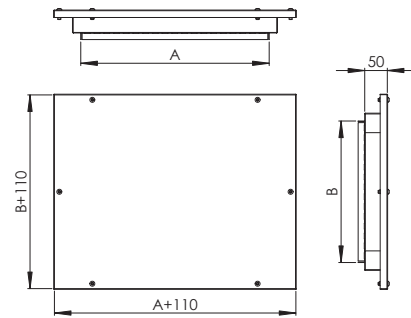
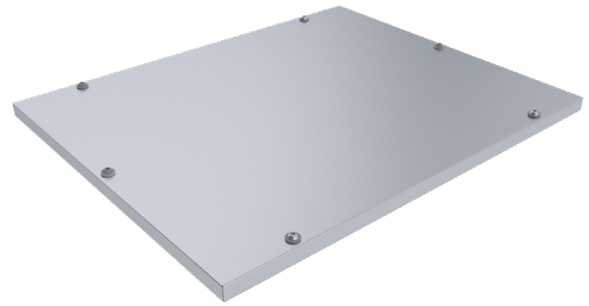


Example: TLF 300x200

TLT Maintenance Door for Flat Surface

Maintenance door for rectangular duct and flat surfaces.
 Maintenance doors meet tightness class B requirements (EN 12237:2003).

Opening size (mm)	
a	b
300	100
400	200
400	300
500	400
600	500



Product Marking



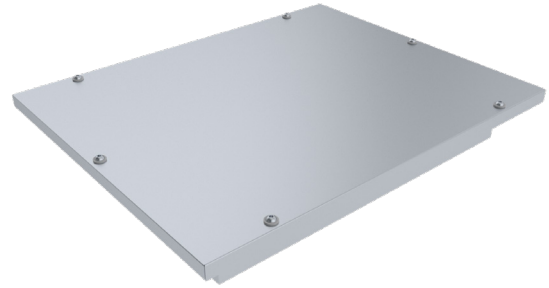
Example: TLT 400x200

TLTE Insulated Maintenance Door for Flat Surface

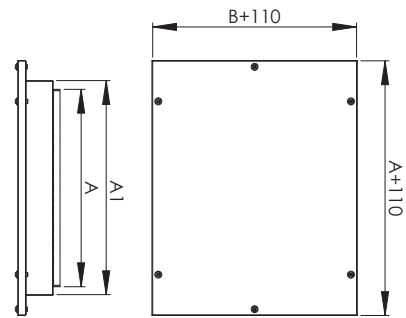
Insulated maintenance door for rectangular duct and flat surfaces.

Maintenance doors meet tightness class B requirements (EN 12237:2003).

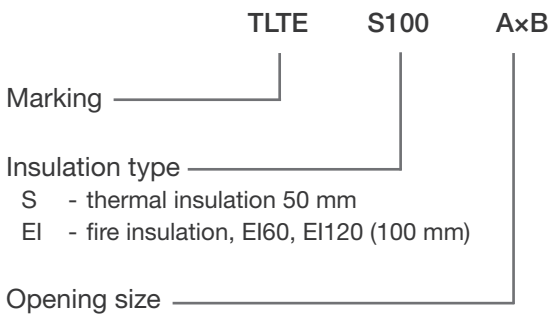
Used fire insulation meets the testing methods requirements according to EN 1366-1. Fire insulation strengths in accordance with EN 13501-1.



Cutting dimensions (mm)			
A	B	A1	B1
300	100	332	132
400	200	432	232
400	300	432	332
500	400	532	432
600	500	632	532



Product Marking



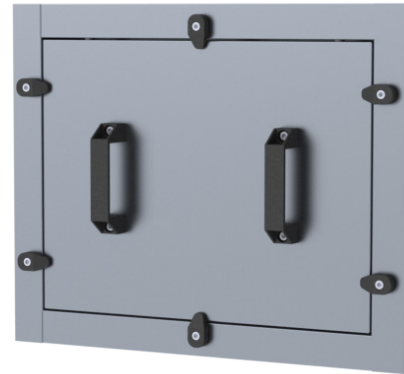
Example: TLTE S100 400x200

TLTK Maintenance Door

Maintenance door for duct and chamber.

Features:

- Suitable for insulated duct and chamber
- Meets tightness class C requirements
- Adjustable quick releases
- Also sound, heat and fire insulated
- Easy and fast installation
- Back-folded edges



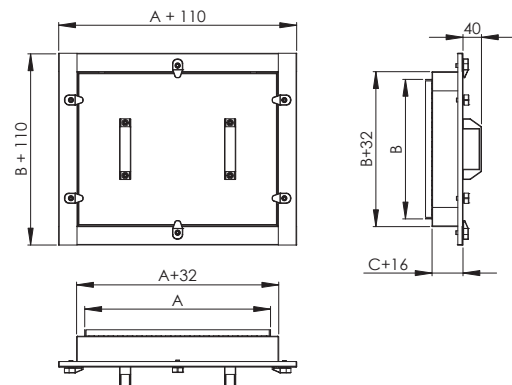
Application

For installation in duct system for inspecting and cleaning ducts. Maintenance door should be installed in a location with easy access to smoke and fire dampers.

Material and Dimensions

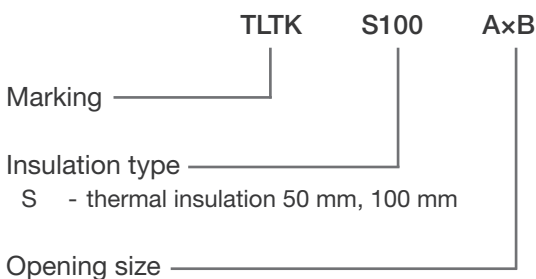
TLTK is manufactured of galvanized steel sheet. Also available in other materials. Frame equipped with inner and outer gasket. Used fire insulation meets the testing methods requirements according to EN 1366-1. Fire insulation strengths in accordance with EN 13501-1.

Nominal size AxB (mm)	A1 (mm)	B1 (mm)	Fixing points
TLTK 300x200	330	230	2
TLTK 400x200	430	230	4
TLTK 400x300	430	330	6
TLTK 400x400	430	430	6
TLTK 500x400	530	430	6
TLTK 500x500	530	530	6
TLTK 600x500	630	530	6
TLTK 600x600	630	630	6



Product Marking

TLTK maintenance door is manufactured according to nominal measurements of the door.



Example: TLTK S100 1000x1000

Installation instructions

1. Cut the hole into the insulated channel outer shell 30 mm larger hole than the door Nominal size and into the inner-shell hole with door nominal sizes.
2. Make sure that the hole is quadrilateral and the duct is rigid enough.
3. Place the door frame in the hole and tap the edges of the door to fix into the duct. Make sure that the edges are tightly bent back and that the seal is in good condition.
4. Place the door into the frame and close the quick fixes (NB: Do not tighten the fasteners too hard).

TLTU Maintenance Door

Maintenance door for duct and chamber.

Features:

- Suitable for insulated duct and chamber
- Meets tightness class C requirements
- Adjustable quick releases
- Also sound, heat and fire insulated
- Easy and fast installation
- Back-folded edges



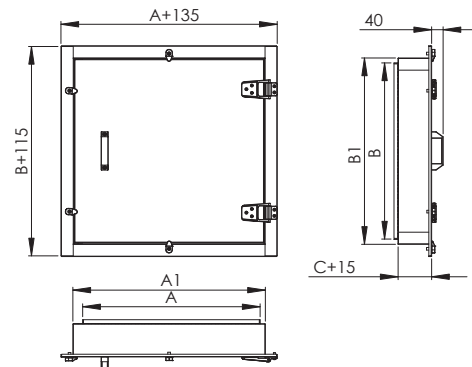
Application

Designed for facilitating inspection and cleaning of duct systems.

Material and Dimensions

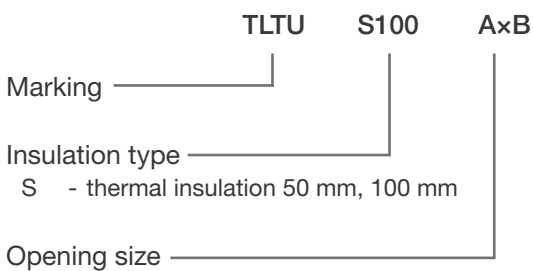
TLTU is manufactured of galvanized steel sheet. Also available in other materials. Frame equipped with inner and outer gasket. Used fire insulation meets the testing methods requirements according to EN 1366-1. Fire insulation strengths in accordance with EN 13501-1.

Nominal size AxB (mm)	A1 (mm)	B1 (mm)	Hinges
TLTU 300x200	353	233	2
TLTU 400x200	453	233	2
TLTU 400x300	453	333	2
TLTU 400x400	453	433	2
TLTU 500x400	553	433	2
TLTU 500x500	553	533	2
TLTU 600x500	653	533	2
TLTU 600x600	653	633	2



Product Marking

TLTU maintenance door is manufactured according to nominal measurements of the door.



Example: TLTU S100 1000x1000



ETS NORD AS

Address: Peterburi tee 53
11415 Tallinn
Estonia

Phone: +372 680 7360
info@etsnord.ee
www.etsnord.ee

ETS NORD Finland

Address: Pakkasraitti 4
04360 Tuusula
Finland

Phone: +358 40 184 2842
info@etsnord.fi
www.etsnord.fi

ETS NORD Sweden

Address: Järsjögatan 7
692 35 Kumla
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