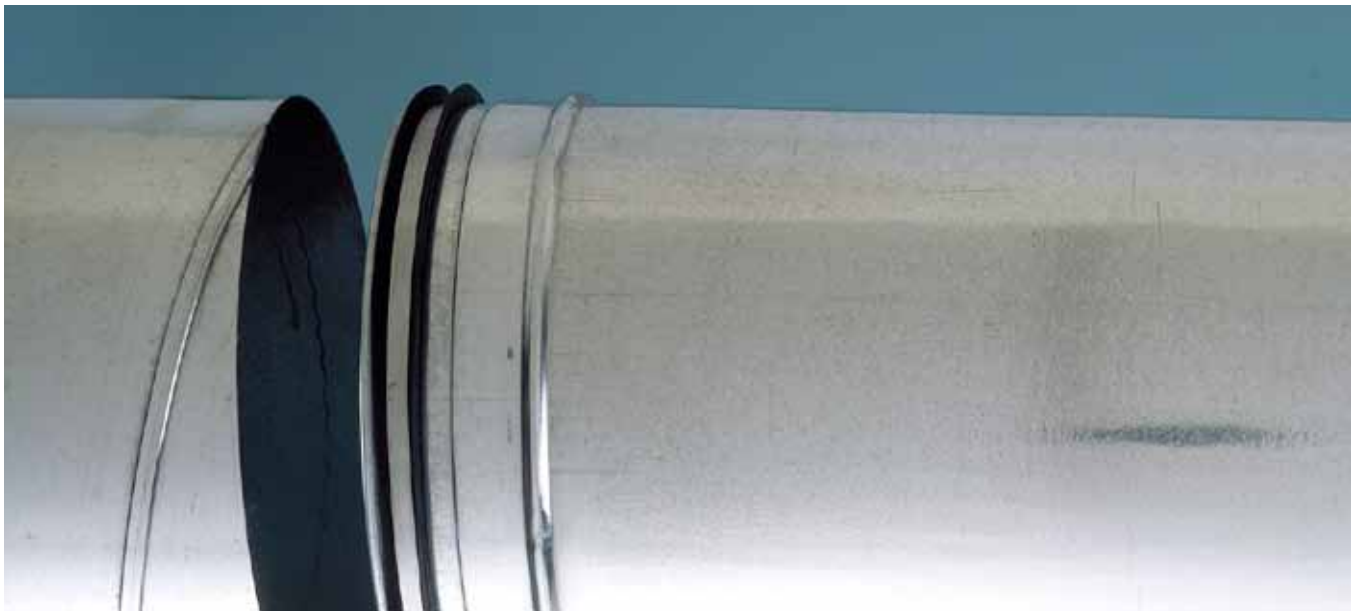
Mounting instruction

# Lindab Safe



# Lindab Safe

The Lindab Safe duct system is type-approved, as per certificate no. 1358/88 and is subject to continuous production checks.

This means that the requirements for air tightness class D are met if Lindab Safe ducts and fittings are used and if assembly is performed as per these instructions. It also means that air tightness testing does not need to be performed.

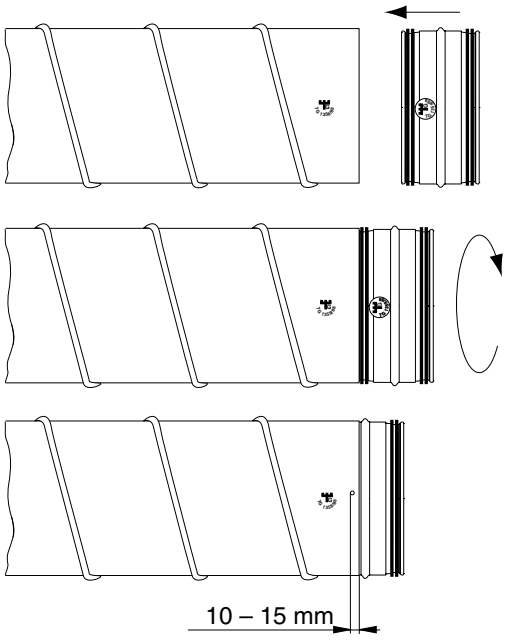
The products covered by the type approval are either specified on the delivery note or are supplied with the following labelling. Labelling can comprise a sticker or an embossing on the sheet metal, see example.



NOTE! If the system still shall be tested for air tightness, this shall be done **before integration and insulation** so that there is an opportunity for inspection and any action. Any complaints regarding air tightness will **only** be dealt with provided the system is fully accessible for inspection.

## Preparations for assembly

- Check that ducts and fittings to be used in the system are labelled as per above.
- Store ducts and fittings in a well-ordered and weatherproof storage area to minimize the risk of damage. Do not use ducts or fittings that have been damaged in such a way that they jeopardise the air tightness or structural strength of the system.
- Cut ducts at right angles. Carefully remove any burrs from cut edges. Installation is easier and the risk of damaging the gasket is reduced if there are no burrs.




## Assembly

1. Start by inserting the turned-over edge of the fitting into the duct.
2. Check that the first lip of the gasket is in contact with the edde of the duct all the way around and sticks straight out so that the lip is not twisted in one direction or the other.
3. Then push the end of the fitting into the duct. Turning the fitting slightly aids insertion. (Removal, if necessary, is also aided by turning.)
4. Then secure the fitting in the duct using self-tapping screws or airtight blind rivets. NOTE! Local authorities may specify which fastener should be used.
5. Fasteners should be positioned 10–15 mm from the end of the duct to prevent damage to the gasket.
6. Always position fasteners at the present largest radial gap between fitting and duct. Be sure to achieve even distribution around the circumference.

Carefully seal any holes left by measurements, removed screws, blind rivets, etc.

| Dimension Ø [mm] | Minimum number of fasteners required to achieve sufficient air tightness [pcs] |
|---|---|
| 63 – 125 | 2 |
| 160 – 250 | 3 |
| 315 – 630 | 4 |
| 800 – 1250 | 6 |
| 1600 | 10 |

**NOTE!**

Depending on the means of suspension, a larger number of fasteners than this may be required to achieve sufficient structural strength in a duct system.

## Hints!

In certain instances, installation can be simplified by preassembling parts of the system on the floor before lifting them into place.

Turning the fitting slightly as you insert it into the duct aids assembly and removal, as the gasket's lips align themselves in the right direction.

If ducts and fittings are round, assembly is much easier. Lindab has placed high demands on roundness during the design and production stages, but large heavy fittings in particular have a tendency to be slightly oval because of their weight. These often become round when suspended, which is why you should use the brackets to make the components round and in this way simplify assembly.

Carefully tapping the surface of the duct with your hand normally makes assembly a lot easier, as it reduces the friction between duct and fitting, and the fitting tries to move to the right side if there are burrs and irregularities.

When cutting, be sure to remove burrs properly.

For larger dimensions, Lindab has moved the gasket back from the edge, which makes assembly much easier.

If you have to reinstall a product, take care to seal old screw/pop rivet holes which can cause leaks and noise.

## Products with special seals

Some fittings, such as the collar saddle PSU, T-pieces TSTCU, TSTU and take-offs ILRU, ILU, ILF, have one more connection than Lindab Safe. This connection must be sealed in the same way as non-Lindab Safe products in the next section.

## Use of products other than Lindab Safe

Products that do not formally fulfil the requirements for air tightness class D may only be used to a small extent. If such items are used, they must be carefully checked with regard to seal design and strength. They must be sealed so that they definitely meet the requirements for air-tightness class D. Sealing material used must be durable and permanently elastic.

1001 EN 2011-03-18

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