

General

Some products might differ slightly from country to country. Please contact your local Lindab store for correct information.

Rectangular consists of rectangular ducts, fittings and silencers with dimensions in accordance with SS-EN 1505 when not otherwise specified. The duct system fulfils tightness class C and pressure class 2 according to EN 1507:2006. All fittings and ducts are made of hot-dip galvanized steel sheet Z 275. If higher corrosion protection is needed, alu-zinc or stainless steel can be used.

A joining profile is mounted at the end of every fitting and duct. A common slide profile LS-3 or bolt clamps and a seal moulding, RJSM is needed to join components. So pre-cut mouldings and an adequate length of seal moulding are supplied in each delivery. Seals are made from temperature resistant polythene. Recommended temperature range is -70 to +80°C.

Support distances of ducts and components must never exceed 2400 mm for any dimension. Nor may there be more than one joint between two supports. The support must be located max. 500 mm from a joint.

Non-standard ducts and duct components can be tendered on request. Please enclose a dimensioned sketch if possible.

Tightness

Ducts and fittings fulfil tightness class C. This only applies on condition that the products are installed in accordance with the installation instruction.

Please refer to page 38–39 for more information about sealing classes and official requirements.

Strength

Standard ducts and duct components can withstand positive of 1000 Pa and negative pressures of -750 Pa.

The ducts are manufactured to fulfil the requirements of EN 1507:2006. This means that when the duct is submitted to the maximum pressure of relevant pressure class than

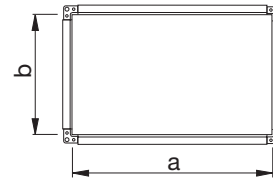
- the duct slide doesn't bulge or cave more than the smallest value of 3% of its width or 30 mm
- the joint between two products doesn't bulge or cave more than 1/250-part of the longest side width.

Larger ducts and fittings are reinforced by hat-shaped profiles and rods.

Dimensions and weights

The "I"-measures given in the tables are the overall installation dimensions of products. The following tolerances apply, depending on duct or fitting dimensions.

a and b are the internal duct or fitting dimensions.



Tolerances for dimensions a and b

when $a + b \leq 1200$: +0 mm

when $a + b > 1200$: -4 mm

Tolerances for "I"-measures ± 5 mm

Hydraulic diameter d_h

The diameter of a circular duct which gives the same pressure drop at the same air velocity as in the rectangular duct.

$$d_h = \frac{4 \cdot A_c}{O} = \frac{2 \cdot a \cdot b}{a + b}$$

Equivalent diameter d_e

The diameter of a circular duct which gives the same pressure drop at the same air flow as in the rectangular duct.

Insulated ducts

Insulated ducts can be made in the following designs:

- Internally condensation and heat insulated with **a surface of woven glasfiber** Lindtec®
- Internally insulated, clad with solid sheet metal
- Internally insulated, clad with perforated sheet metal
- Internal fire protection insulation 50 and 100 mm