

Rectangular smoke control duct system installation

NORDsmoke smoke control system ducts are designed for exhausting smoke and hot gasses from buildings. NORDsmoke ducts are in accordance with EN 12101-7 standard.

The steel duct is constructed in sections of galvanised steel sheet minimum 0.9 mm thick. Segments of rectangular ducts connected by flanges height 30 mm. Use a heat proof mastic sealant between the flanges to seal the duct joints. Flanges of the rectangular duct have to be fastened together with M8 bolt steel clamps and with M10 bolts in the duct corners.

Installation shall meet or exceed all applicable federal and local requirements, referenced standards and conform to codes and ordinances of authorities having jurisdiction.

1. Preparation

- Before you start installation, check and make sure that the ducts can be installed according to the drawings.
- Ensure that all ducts and parts are not damaged decreasing the ducts density.
- Use undamaged parts only.
- Follow the installation instructions.

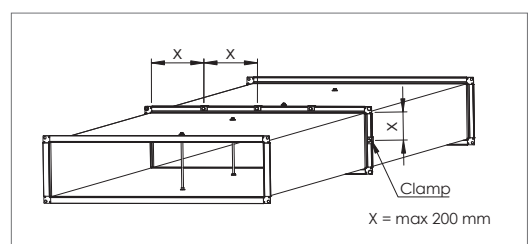
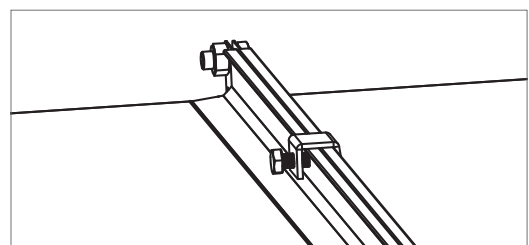
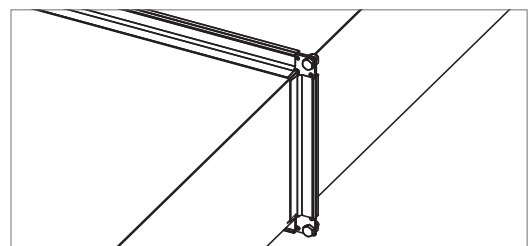
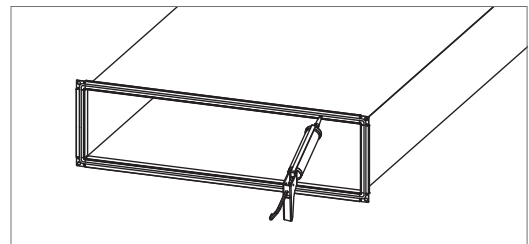
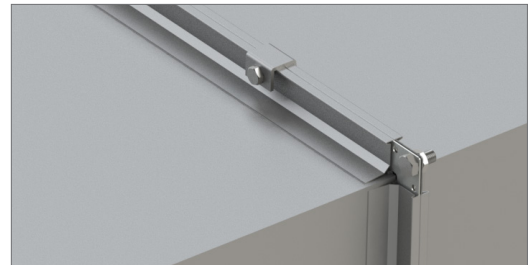
2. Assembly of ducts and parts

4-bolt connection system with an external bead for the easy installation of clamps.

2.1 Heat proof mastic sealant have to be applied along the entire length of the inner edge of the connection profile. Special caution is necessary in the corner piece areas.

2.2 Press the ends together and fix the corners with the bolt and nut.

2.3 Assemble the rectangular joint clamp over the profile bead and tighten the bolt. Avoid over-tightening the bolt, since this could deform either the profile or the clamp. To reach air tightness a maximum distance 200 mm between the clamps is allowed but at least one clamp per duct side.



3. Duct hangers and supports

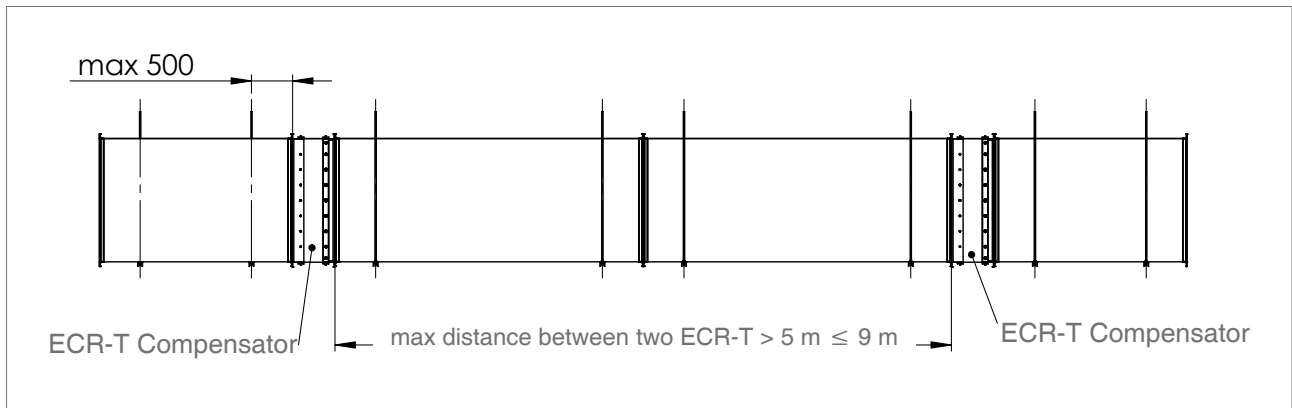
The duct supports shall be able to carry ducts as well as additional external loads, especially those that arise at the time of the maintenance, repair and construction work.

For the support and fastening of rectangular horizontal duct you have to use steel hangers, threaded drop rods M8, a hanger U-profile 30x30x2 mm and hexagonal nuts and washers.

- Install supports as close to the duct connections as possible, but no further than 500 mm from connection flange. Between the two supports can be only one duct connection.
- Place the ducts on the hangers and adjust mounting height correctly.

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NORDsmoke



Vertical installation

The vertical ventilation ductsystem shall be suspended with recommended hinge material according to construction conditions, corrosion and fire resistance requirements and a particular system weight.

In the vertical installation used supporting materials:

1. wall bracket KOLI
2. mounting rail, L-profile
3. fixing bracket
4. bolts, nuts, washers, M8 min

Before the installation of ECR-T compensator remove for the transport pre-installed threaded rods.

During installation of smoke extraction ducts you have to ensure that the compensator is installed correctly based of the direction of smoke extraction (see fig.).

