



LINMAT, UAB
Installation Instructions
for Smoke Control Duct Sections DS

These installation instructions are intended for "DS" single-compartment smoke control duct sections manufactured by LINMAT, UAB. The product complies with the LST EN 12101-7 standard and has been tested according to LST EN 1366-9. More detailed information is provided in the product description for each product type or by consulting the LINMAT team.

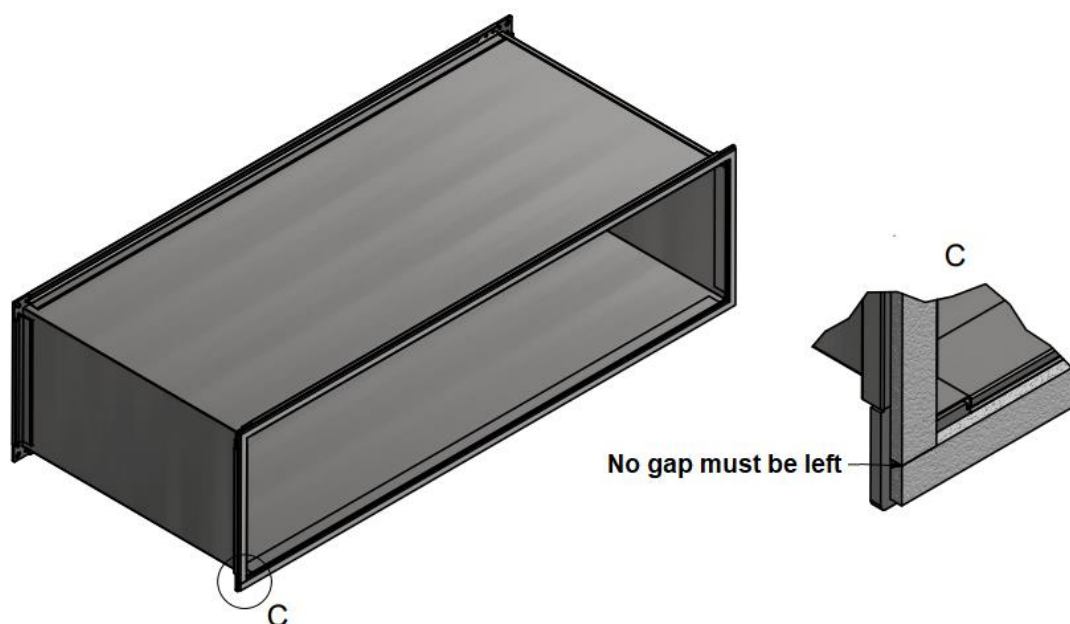
Installation work must be performed in compliance with occupational health and safety requirements, using the necessary protective equipment, and should be carried out by qualified specialists.



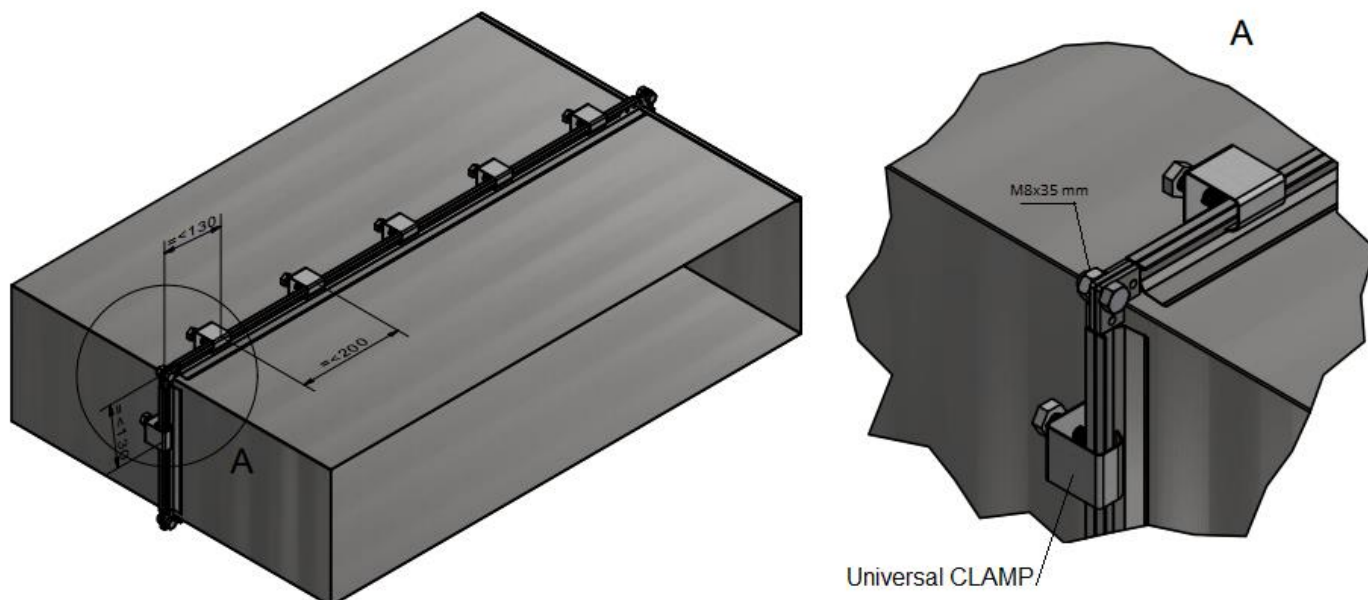
Before starting the installation of the smoke extraction system, ensure that the equipment and products are properly prepared, clean, free from defects, and meet the criteria specified in the project.

All fastening, suspension, and sealing elements specified in these instructions must be used during installation and must not be replaced with items of a different type or composition.

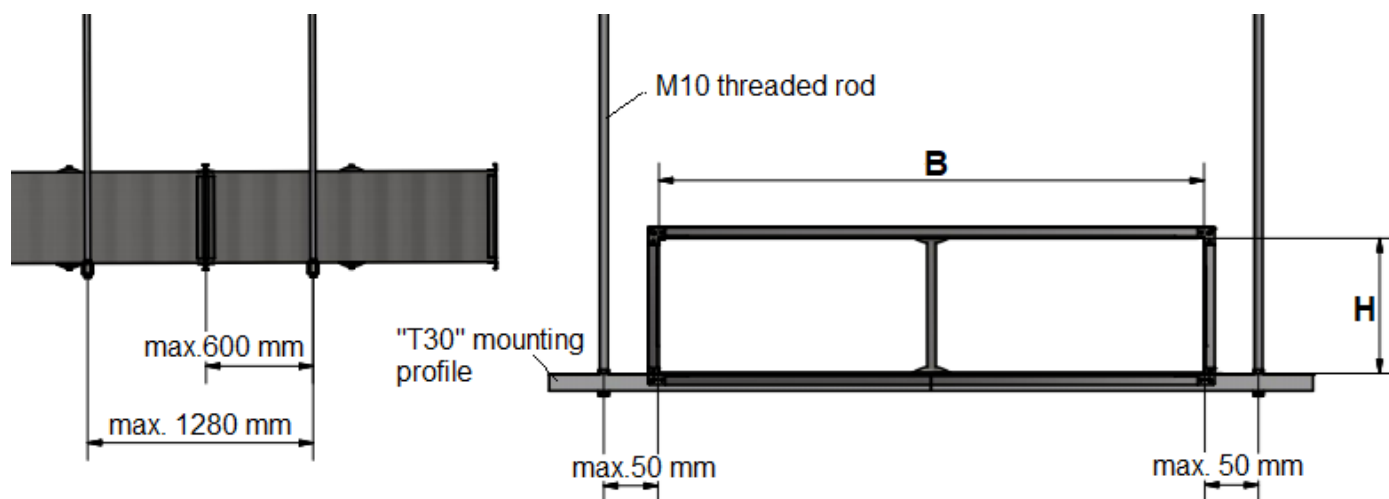
- For joining together, the smoke control duct sections have "K30" type profile flanges at the ends. To ensure tight sealing, a special "Kerafix 2000 Classic" 30x6 mm gasket must be used. Before applying the gasket, the flange surface must be cleaned and degreased with a suitable product (e.g., anti-silicone cleaner). The gasket is adhered along the entire flange perimeter on one of the two flanges being joined. When connecting the gasket ends together, no gap must be left.



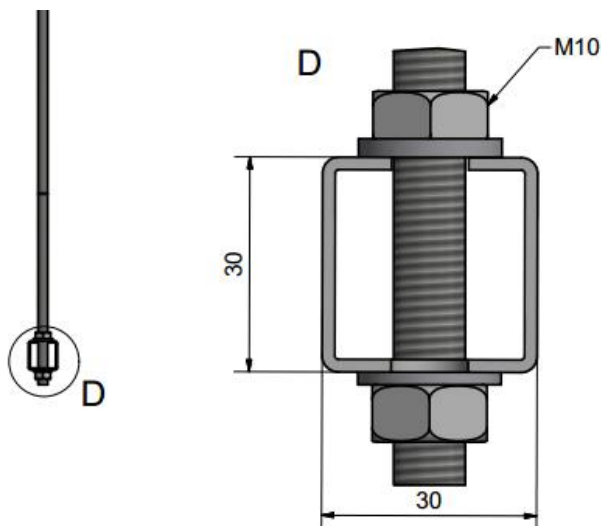
- The two joined flanges are tightened at all four corners using M8 bolts with nuts and washers. The flange edges are clamped together using universal connecting clamps. The clamps must be spaced evenly at intervals no greater than 200 mm, and the distance from the outer corner edge of the flange to the center of the clamp must not exceed 130 mm. For small duct dimensions ($A/B \leq 200$ mm), at least one clamp must be used.



- Smoke control duct sections may only be installed in a horizontal position, suspended on supports consisting of "T30" mounting profiles (30x30x1.75 mm), M10 threaded rods, and nuts with washers. The distance between supports must not exceed 1280 mm; each duct section must be suspended on at least one support, the maximum distance from a flanged connection to a support is 600 mm, and the distance from the duct wall to the threaded rod should not exceed 50 mm.

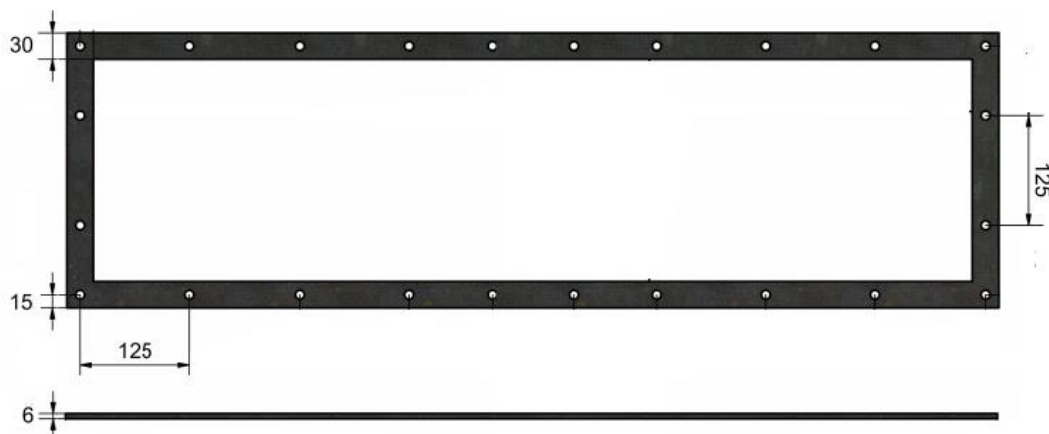


When securing the "T30" profile to the M10 threaded rod, it is recommended to use two nuts and washers to reliably lock the position.

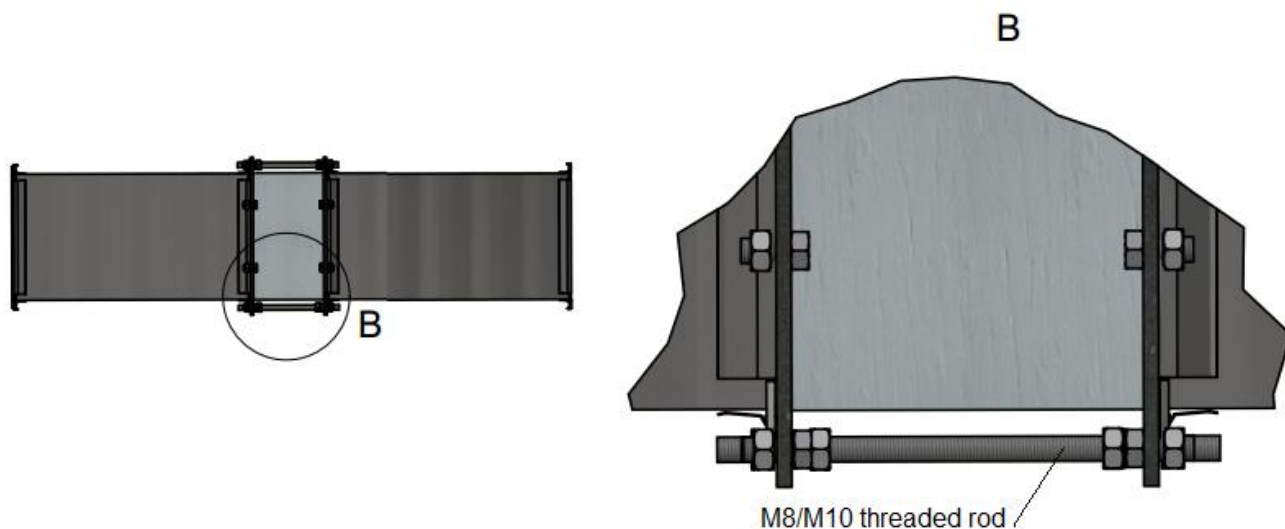


- Flexible connectors are used in smoke control duct systems to compensate for duct thermal expansion in the event of fire. It is recommended to install flexible connectors when the length of the duct between bounding walls/structures or bends in the smoke control duct itself is ≥ 10 m.

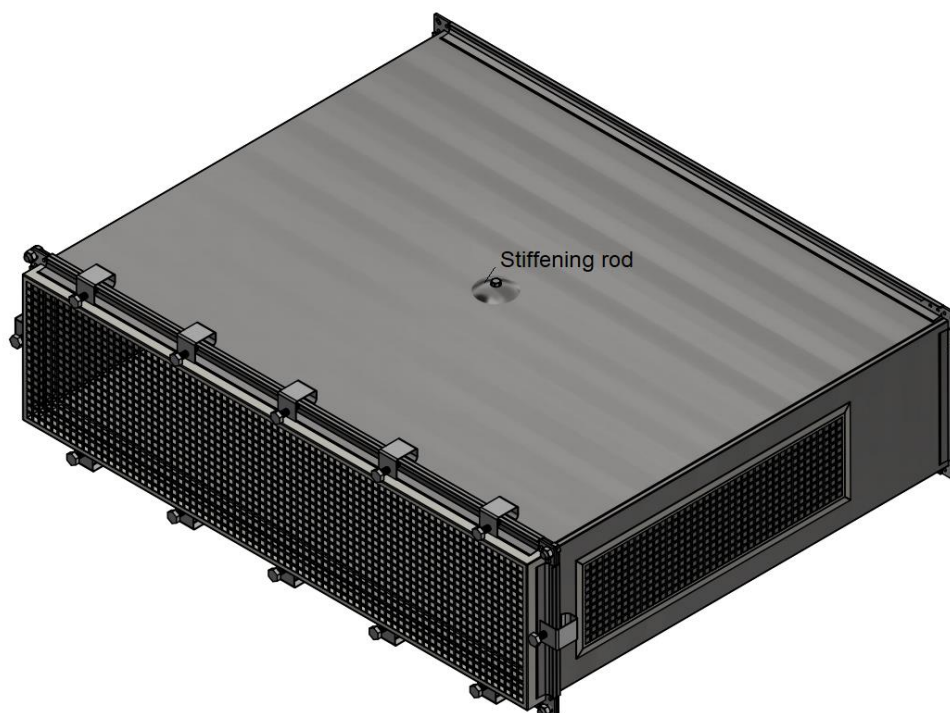
The flexible joint is attached to the smoke control duct section flange by clamping its folded edges with a 30 mm wide and 6 mm thick steel flange. Holes must be drilled in the duct section flange matching the flexible joint flange, and a "Kerafix 2000 Classic" 30x6 mm sealing gasket is applied. M8 bolts with nuts and washers are used for fastening.



The installed flexible joint should be in a fully extended position. For this purpose, M8/M10 threaded rods can be used with nuts to tension it at all four corners. The tensioning rods must only be removed once the smoke control duct system is fully installed.



- It is recommended to cover smoke extraction openings with perforated end caps, wire mesh, or grilles. When cutting an opening, the duct section stiffening elements must not be removed or relocated; the opening should be located where they are not attached.



- Maintenance must be carried out at least every 12 months. Any defects that occur must be rectified and recorded in a logbook or inspection sheet.

Inspection Record Example:

Checked by	Inspection date
Duct section reference	
Inspection for duct damage	
Inspection of connections between duct sections and additional components	
Inspection of opening seals in building walls	
Duct cleanliness inspection and cleaning where necessary	
Inspection of seal conditions, repair and reporting if necessary	
Confirmation that the duct performs its function as part of the smoke control system	
NOTE: The smoke control duct section is essentially a part of the smoke control system. In this case, the entire system should be inspected in accordance with the system operation and maintenance requirements.	