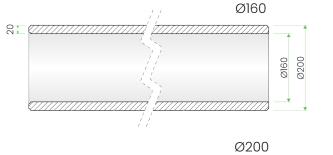
TECHNICAL CARD

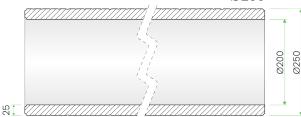
Insulated PEFLEX EPS 2.0 Air Distribution System

Elements of the PEFLEX EPS 2.0 system:

PEFLEX EPS ducts

Dimensions







Ø160 Ø200



PEFLEX

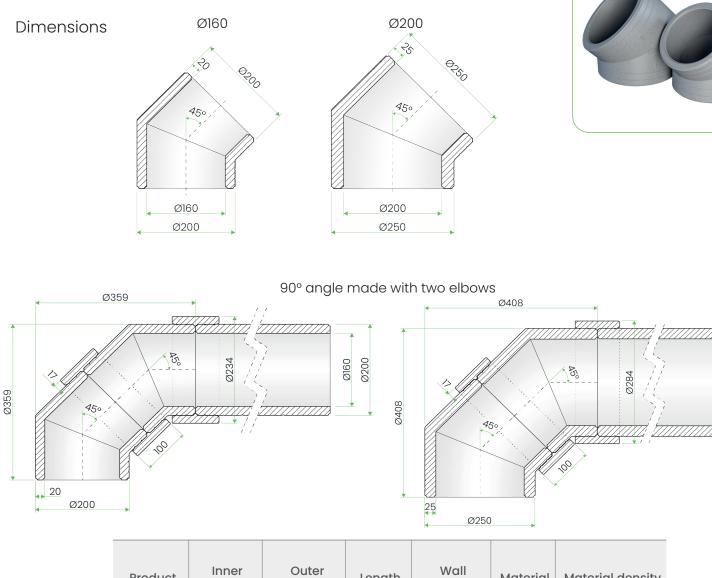
Product	Inner diameter	Outer diameter	Length	Wall thickness	Material	Material density
PEFLEX EPS 160 duct	160 mm	200 mm	1000 mm	20 mm	EPS	40 kg/m³
PEFLEX EPS 200 duct	200 mm	250 mm	1000 mm	25 mm	EPS	40 kg/m³

Description

The PEFLEX EPS 2.0 rigid ventilation ducts are made of expanded polystyrene (EPS), a high-density technical styrofoam. They are designed for air distribution in mechanical ventilation systems with heat recovery, particularly for connecting the recuperator to the air intake, exhaust, and distribution boxes. The walls, with a thickness of 20 mm (Ø160) and 25 mm (Ø200), ensure excellent thermal insulation. Thanks to the monolithic injection-molded construction, the ducts are not glued, which eliminates the risk of leaks and enhances durability and resistance to mechanical damage.

The ducts, like other components of the PEFLEX EPS 2.0 system, are connected using flexible EPP couplings, which ensure a tight press-fit connection—without the need for adhesives, silicone, or other sealing agents. The internal diameters of the ducts are compatible with standard metal ducts (both rigid and flexible), and coupling fittings are used for their connection.

• PEFLEX EPS 45° elbows



Product	Inner diameter	Outer diameter	Length	Wall thickness	Material	Material density
PEFLEX EPS 160 elbow	160 mm	200 mm	238 mm	20 mm	EPS	40 kg/m³
PEFLEX EPS 200 elbow	200 mm	250 mm	273 mm	25 mm	EPS	40 kg/m³

Description

EPS elbows allow the creation of 45° bends or 90° turns (when using two pieces) in the PEFLEX EPS 2.0 ventilation system. Their compact design enables very short bends in the installation with minimal airflow resistance. Available in internal diameters of Ø160 mm and Ø200 mm, they provide flexibility to suit various system configurations. The elbows are made as a single, injection-molded component from expanded polystyrene (EPS), a high-density technical styrofoam, without the use of adhesives.

Similar to other components of the PEFLEX EPS 2.0 system, the elbows are connected using flexible EPP couplings, ensuring a tight press-fit connection—without the need for adhesives, silicone, or other sealing agents.



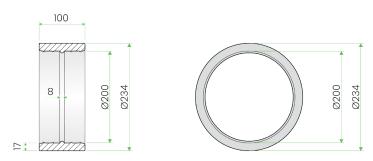
Ø250

PEFLEX EPP sockets •

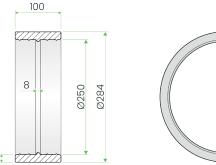
Dimensions

Ø200









Product	Inner diameter	Outer diameter	Length	Wall thickness	Material	Material density
PEFLEX EPP 160 socket	200 mm	234 mm	100 mm	17 mm	EPP	40 kg/m³

100 mm

284 mm

Description

PEFLEX EPP

200 socket

EPP sockets enable quick and durable connections of ducts, elbows, and tees in the PEFLEX EPS 2.0 system. Thanks to their flexible construction, the fittings adapt to the connected components, ensuring a tight seal without the need for adhesives, silicone, or other sealing agents. The installation is a press-fit process, allowing for easy assembly and disassembly of the system.

250 mm

Available variants:

17 mm

Ø250 Ø284

• Ø200 – for components with diameters of Ø160/200 mm,

40 kg/m³

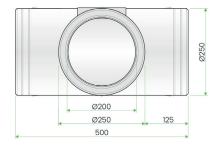
EPP

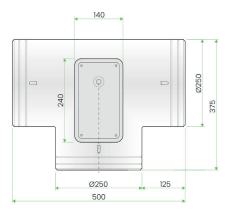
• Ø250 – for components with diameters of Ø200/250 mm.

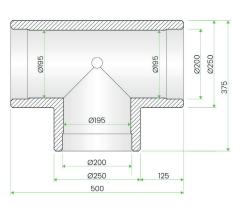


• PEFLEX EPS tee fitting and damper

Dimensions

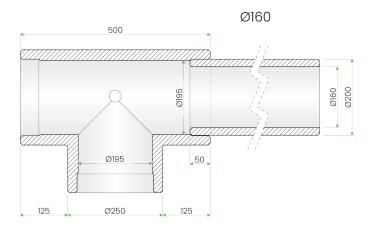


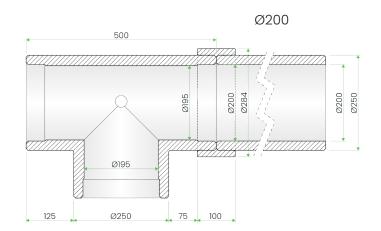






Connection options





Description

The PEFLEX EPS tee allows for universal connection of PEFLEX EPS ducts with two internal diameters – Ø160 mm (where a Ø160 duct is inserted into the tee) and Ø200 mm (connection via the system's EPP socket). Each of the three branches of the tee enables the connection of Ø160 or Ø200 ducts, providing full configuration flexibility. This makes it possible to simultaneously split the airflow

and reduce the diameter, for example, from Ø200 mm to two Ø160 mm ducts, facilitating adaptation to various ventilation layouts.

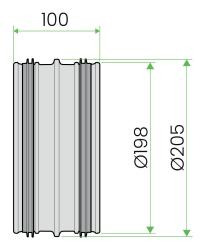
In the version with a damper, it allows for the installation of an actuator and airflow regulation, such as in GHE systems.

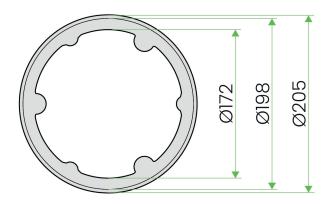


• PEFLEX EPP Ø198 mm nipple

Dimensions







Product	Outer diameter	Length	Wall thickness	Material
PEFLEX EPP 198 nipple	198 mm	100 mm	12 mm	EPP

Description

The PEFLEX Ø198 mm EPP nipple is a component of the PEFLEX EPS 2.0 system, allowing to connect it with standard Ø200 mm ventilation ducts, such as steel spiral ducts and flexible flex ducts (e.g., SONODEC), which can also serve as silencers when connecting to a recuperator. Made from expanded polypropylene (EPP), it features high thermal insulation, water resistance, low weight, and ensures a connection without thermal bridges. The nipple is press-fit into the end of the duct or EPP fitting, and the built-in seals ensure a tight connection. It is not intended for connecting individual components of the PEFLEX EPS 2.0 system, which should be joined using the system's EPP coupling.

