



HIGH PRESSURE DUCTING SEALANT

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DESCRIPTION

GRAFT® HIGH PRESSURE DUCTING SEALANT is a premium quality non-flammable water based, high velocity duct sealant. Seals joints and openings in galvanized steel, aluminium, metal ductwork and most common ducting materials.

GRAFT® HIGH PRESSURE DUCTING SEALANT creates a permanent flexible seal and is suitable for high, medium or low pressure applications. Surplus uncured material can be easily removed using a damp cloth.

FEATURES

- Conforms to test standard EN 1751 and Class C of HVCA DW144
- Prevents air leakage in low, medium and high pressure ductwork
- None flammable - Fire rated up to 4 hours
- User and environmentally friendly, VOC FREE conforms to EC1^{PLUS})
- Primerless adhesion to most substrates
- Dynamic for low and high modulus applications, movement capability minimum 25%.
- Recommended for use in joints up to 20mm wide, larger joints widths can be accommodated.
- Excellent slump resistance
- Resistant to mould and mildew - 25 year mould free guarantee
- Low dirt pick up and non-staining
- Easy to apply and tool

APPLICATION INSTRUCTIONS

- All surfaces must be clean and sound, free from dirt, oil and grease. It is recommended that surfaces are degreased during assembly prior to sealant application to remove any grease or oil deposits.
- In all cases, cut nozzle to the desired angle and gun firmly into the joint to give a continuous solid bead along the joint face/seam.

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Flange joints: apply the self-adhesive foam tape around the inset perimeter of the joint to be sealed to control ducting sealant depth during application. Then apply a continuous bead of ducting sealant around the external perimeter of the joint. Assemble the joint ensuring good contact is made with the duct sealant and strike off any excess. Any residues can be wiped away with a damp cloth.

- Alternatively, assemble the joint, and then apply a continuous bead between the flanges around the perimeter and then firmly tool into the joint.

Seam joints: Apply the ducting sealant along the seam and tool into the joint.

Spigot joints: Apply the ducting sealant as a thick coat onto the male coupling end and then carefully slide on the female end (straight run). Mechanically fasten the joint and strike off any excess material.

Installations should be left to cure fully before pressure testing and commissioning.

PACKAGING

GRAFT® HIGH PRESSURE DUCTING SEALANT is available in 380ml rigid plastic cartridge and 200ml flexi tube.

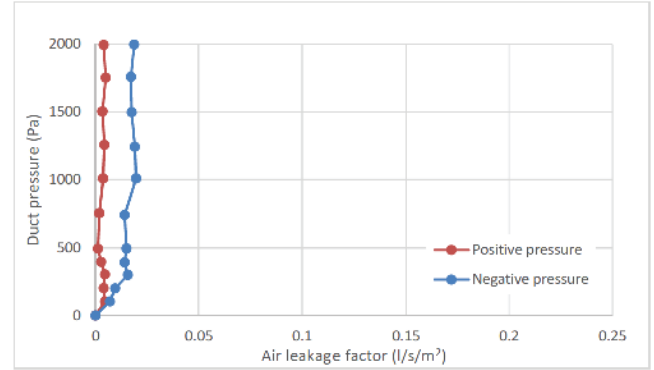


HIGH PRESSURE DUCTING SEALANT

LEAKAGE CLASSIFICATION

Causing leakage with joints sealed with GRAFT® HIGH PRESSURE DUCTING SEALANT - positive pressure

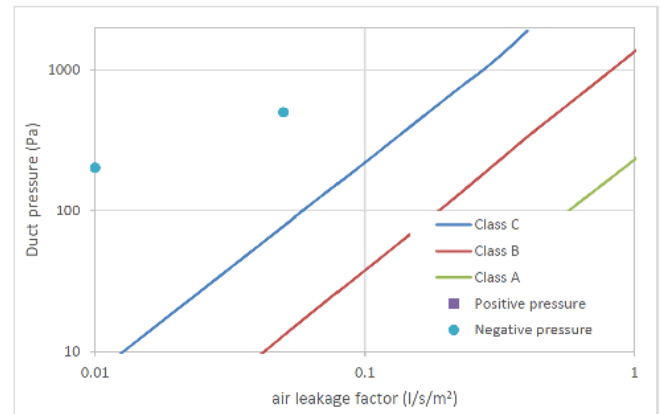
Pressure Applied (Pa)	Air flow rate (l/s)	Air leakage factor (l/s/m ²)
105	0.01	0.01
203	0.01	0.01
301	0.02	0.02
394	0.02	0.01
496	0.02	0.02
745	0.02	0.01
1009	0.02	0.02
1243	0.03	0.02
1497	0.02	0.02
1760	0.02	0.02
1988	0.02	0.02



Air leakage factor for damper installed with joints sealed with GRAFT® HIGH PRESSURE DUCTING SEALANT

Causing leakage with joints sealed with GRAFT® HIGH PRESSURE DUCTING SEALANT - negative pressure

Pressure Applied (Pa)	Air flow rate (l/s)	Air leakage factor (l/s/m ²)
105	0.01	0.01
202	0.01	0.01
301	0.02	0.02
394	0.02	0.01
496	0.02	0.02
745	0.02	0.01
1009	0.03	0.02
1243	0.02	0.02
1497	0.02	0.02
1760	0.02	0.02
1988	0.02	0.02



Air leakage factor and leakage classes.

Leakage Class - Better than Class C

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EMISSION DATA (INDOOR AIR QUALITY)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	7,7 µg/m ³	< 5 µg/m ³
TSVOC	n.d.	n.d. (< 5 µg/m ³)
VOC w/o NIK	n.d.	n.d. (< 5 µg/m ³)
R Value	< 1	< 1
Formaldehyde	< 3 µg/m ³	< 3 µg/m ³
Acetaldehyde	< 3 µg/m ³	< 3 µg/m ³
Sum for+ace	< 0,002 ppm	-
Carcinogenic	n.d. (< 1 µg/m ³)	n.d. (< 1 µg/m ³)
n.d. = not detected		

HEALTH AND SAFETY

Wash the material from the skin while still wet. Material in contact with eyes should be washed out immediately with water. Seek medical advice if discomfort persists. More detailed information can be found in the relevant GRAFT® HIGH PRESSURE DUCTING SEALANT Safety Data Sheet.

TECHNICAL DATA

FROM:	Ready to use thixotropic paste
Specific gravity:	1,54 g/cm ³
VOC:	0 g/l
Durability w/ageing:	Type X (UV / water) (pass)
Chemical resist.	Test passed (resistant)
Salt water immersion:	Test passed (resistant)
Microbiologic growth:	0 (no growth)
Hardness:	Shore A 47
Shrinkage:	15%
Tensile properties:	3.79 MPa (379 N/mm ²)
Tensile elongation:	270%
3D-tensile prop.:	0,24 MPa (24 N/cm ²)
3D-tensile elong.:	106%
Tear properties:	50%
Compression resist:	434 N / 1569 MPa
Radon resistance:	1.5mm thickness gives Z = 2.9 O 108 s/m
Flashpoint:	None
Reaction to fire:	Classification D-s2, d0
Fire resistance	Up to class EI 240
Tack free time:	60 minutes maximum
Skin time:	30 minutes maximum
Rate of cure	10% at 24 hours
Solids content	> 80%
Resistance to flow	< 0.5 mm
shelf life:	Up to 24 months when stored in unopened cartridges under cool dry conditions and 6 months in opened and resealed cartridges. Avoid temperatures above 35°C & below 5°C
Frost:	Uncured sealant should not be frozen.
Thermal Conductivity.	0,845 W/mK (+/- 3%) at 20mm depth (to EN 12667)
Compatibility.	Can be used in contact with most building and decorating materials

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