DEC INTERNATIONAL TECHNICAL SPECIFICATIONS







GREENDEC® Sanitized® ACOUSTICALLY AND THERMAL INSULATED DUCTING

Features Inner duct:

This high Tech-inner core material is protected with the antimicrobial **Sanitized**® hygiene function to reduce microbial growth and unpleasant odors on the surface.

ANTI-MICROBE PROTECTION

Image Non-Sanitized® cloth:

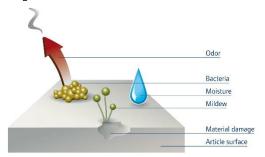
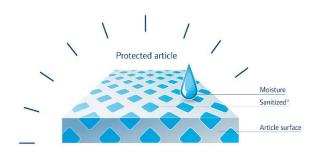


Image Sanitized® protection of Innerduct of Polypropylene cloth:



GREENDEC® Sanitized® consists of a **Polypropylene fabric cloth inner duct**, protected with the antimicrobial Sanitized® hygienic function to reduce bacteria growth, it reduces odor-causing bacteria, protecting the material permanently for peace of mind and more freshness.

Properties GREENDEC® self-stretching Inner duct:

- Sanitized® Polypropylene fabric cloth inner duct code: ZNW 70 FRABG-01
- The integrated antimicrobial Sanitized® hygiene function helps to keep everyday items, surfaces, and appliances clean and offers 24/7 protection against bacteria and odors. BPR PT9 compliant for more information see: www.sanitized.com
- Properties are not subject to aging and or temperature influences
- Vapor pressure Hydrophobic
- Odorless
- Tested and approved according to ISO 184 table 2 in method A of growth intensity 0 and in method C of growth intensity 0. (Test certificates: W-354476e-22-Ho und W-354477e-22-Ho dated 06.01.22)

This means that the inner material with code ZNW 70 FRABG-01: forms no nutrient basis for the development of microorganisms. The tested material therefore meets the requirements with respect to microbial metabolization based on VDI 6022, sheet 1 (01/2018) "Hygiene requirements and room technology systems and devices". Further material requirements according to VDI 6022, Sheet 1 must be checked separately.

Optional DEC®TECH-Barrier:

- Acoustical performances with DEC®TECH-Barrier
- M0 classified
- Avoid leakage
- Avoid pressure drop
- Avoid cold bridge
- Avoid odor
- Avoid emission of insulation particles into the airstream

APPLICATION

- Cleanrooms
- Hospitals
- Heat recovery units
- Air-conditioning systems
- Air supply systems
- Preventing condensation in air ventilation systems
- ALL HVAC systems



LIABILITY:

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PLEASE NOTICE:

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DEC INTERNATIONAL TECHNICAL SPECIFICATIONS







GREENDEC® Sanitized® ACOUSTICALLY AND THERMAL INSULATED DUCTING

SPECIFICATIONS

Article code: SBIGAB{Ø}/L

Temperature range:

-30 °C to 90 °C Inside: -30 °C to 140 °C Outside: Operating pressure: up to +2000 Pa Operating air velocity: max. 30 m/s Min. bending radius: 0.54 x Ø + 25mm Diameter range: 80 - 315 mm Standard length: 10 meters Aluminum Appearance:

CONSTRUCTION

Outer jacket:

Inner duct High-Tech

non-woven polypropylene

fabric cloth with

Sanitized® treatment

Glass wool blanket: 25mm,16kg/m³ R-value glass wool: 0.65m² K/W (ASTM C177-76)

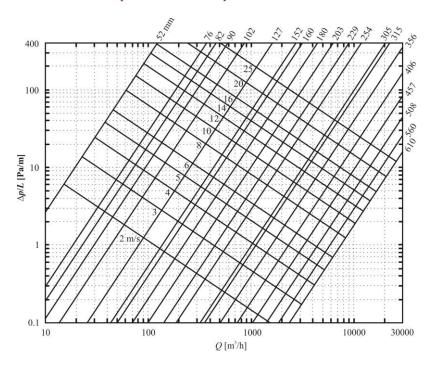
Aluminum/polyester

outerjacket

Classification: According

ISO 184 Method A: 0 ISO 184 Method C: 0 EU (EN 13501-1): B-s1d0

PRESSURE LOSS (STRAIGHT DUCT)



Regulation or protocol

French VOC Regulation



Conclusion

Version of regulation or protocol

Regulation of March and May 2011 (DEVL1101903D and DEVL1104875A)

A Sanitized sound attenuator with thermically and acoustically properties.

Optional: the insulation wool and the inner core to be separated by a DEC®TECH-Barrier surrounding the inner core. The DEC®TECH-Barrier has inorganic aluminum layers at both sides to prevent grow of microbes as well to prevent that the airstream can affect the Thermal conductivity of the insulation wool.

Note: The DEC®TECH-Barrier gives different acoustical properties:

The **Greendec®- type Connectdec®** fulfills all the requirements and are classified as specified within EN 13180: Ventilation for buildings – Ductwork - Dimensions and mechanical requirements for flexible ducts.



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GREENDEC® Sanitized® ACOUSTICALLY AND THERMAL INSULATED DUCTING

Acoustical performances without DEC®TECH-Barrier and with standard aluminum outer jacket:

SOUND **ATTENUATION**

According: ISO 7235 $\pm 2 dB$

SBIGA	B{Ø}/1.	.0									
Insulation glass wool 25mm (Test report nr. A1672-1 Peutz by - The Netherlands)											
Dn	L	Attenuation, dB - Mid-frequency, Hz									
(mm)	(m)	63	125	250	500	1000	2000	4000	8000	(dB)	
080	1.0	13.6	22.4	40.2	38.7	36.5	41.3	51.6	45.8	39	
100	1.0	15.9	22.9	31.1	38.6	36.4	40.6	50.1	35.9	39	
125	1.0	11.7	18.9	32.4	29.9	28.8	34.5	40.9	24.5	32	
150	1.0	12.2	10.9	29.7	30.1	29.0	38.3	34.6	20.4	32	
160	1.0	19.3	25.4	30.5	27.1	23.8	32.2	27.8	17.3	28	
200	1.0	10.7	12.1	28.7	22.8	22.8	30.6	19.4	11.9	26	
250	1.0	12.9	18.7	24.3	19.5	19.9	27.7	12.9	10.2	22	
315	1.0	16.6	23.2	18	15.2	16.5	19.6	10.1	8.5	17	
SBI50GAB{Ø}/1.0											
Insulation glass wool 50mm											
100	1.0	4.3	8.5	15.5	28.2	50.8	51	57.8	38.5	30	
125	1.0	17.7	26.3	35.4	29.2	33.3	45.4	40.5	26.5	35	
160	1.0	16.5	24.1	30.6	27.5	29.6	41.7	28.7	18.1	32	
200	1.0	6.5	6.3	21.1	27.1	30.5	35.8	19.4	12.3	29	
SBIGA	B{Ø}/3.	.0									
Insulation glass wool 25mm											
200	3.0	17.3	30.7	36.8	32.7	34.5	40.3	40.8	22.8	37	
250	3.0	22.4	30.7	33.5	31.0	32.0	38.9	26	16.2	35	
315	3.0	31.7	32.5	29.1	25.2	28.2	37.3	16.6	14.6	30	
Di = Average attenuation											

Properties insulation







Reach/RoHs Compliant





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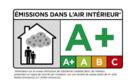
GREENDEC® Sanitized® ACOUSTICALLY AND THERMAL INSULATED DUCTING

Acoustical performances without DEC®TECH-Barrier and with standard aluminum outer jacket:

WALL **REDUCTION** According: ISO 7235 ± 2 dB

SBIGAB{Ø}/1.0											
Insulation glass wool 25mm (Test report nr. A1672-1 Peutz by - The Netherlands)											
Dn	L	Wall reduction, dB - Mid-frequency, Hz								Di	
(mm) (n	(m)	63	125	250	500	1000	2000	4000	8000	(dB)	
080	1.0	29.7	24.6	20.4	14.1	12.1	14.7	16.8	21.6	14	
100	1.0	28.9	24.0	19.4	14.8	13.7	15.2	18.6	22.9	15	
125	1.0	24.6	21.2	16.4	12	11.9	13.6	15.9	20.1	13	
150	1.0	25.4	21.6	17.1	13.3	11.3	13.2	15.0	17.3	13	
160	1.0	23.5	19.0	13.8	10.2	9.5	10.4	13.1	16.2	28	
200	1.0	22.4	19.1	14.0	9.8	9.0	9.1	11.8	15.1	26	
250	1.0	22.6	16.2	11.5	10.1	9.1	9.9	12.4	15.7	22	
315	1.0	19.6	13.4	9.3	8.1	7.8	8.7	11.6	14.7	17	
SBI50GAB{Ø}/1.0											
Insulation glass wool 50mm											
100	1.0	34.1	34.0	28.4	21.1	19.1	19.9	23.4	26.7	20	
125	1.0	25.3	21.8	17.9	15.0	15.7	19.1	21.3	24.7	17	
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200	1.0	26.1	21.5	15.2	11.7	11.8	13.5	17.5	19.8	13	
SBIGAB{Ø}/3.0											
Insulation glass wool 25mm											
200	3.0	21.4	18.7	13.6	10.4	9.7	9.7	12.1	15.0	37	
250	3.0	21.7	16.1	11.3	10.6	10.1	10.2	13.2	16.3	35	
315	3.0	19.3	12.4	9.4	8.3	8.6	9.6	12.1	14.6	30	
Di = Average attenuation											

Properties insulation







Reach/RoHs Compliant



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