

CARAC s.r.o. is the holder of world patent No. WO2017 / 122182 A1 WIPO Geneva for the recycling of filter materials and patent no. EP 18158861.7 EPO Munich to optimize the production of filter media. CARAC has also gained experience in optimizing production at the world's top manufacturer of medical products.

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Protective filter sleeve for HVAC exhausts in office spaces and production halls against COVID - 19

Product benefits

- Expected energy savings for heating and cooling up to 15% due to reduced need for above-standard air exchange under "Covid-19" measures
- Patented filter sleeve add-on element eliminates the risk of Covid-19 spreading through the inner and outer HVAC circuits at the level of HEPA filters
- Increasing the sensory comfort of employees sensitive to the flow of air from HVAC system and also reducing the need for non-systemic interventions of employees into the HVAC system because of uncomfortable sensory temperature vs. average room temperature in the hall
- Material Certified by the French Ministry of Defense with the result of the evaluation of the level of "high protection standard against Covid-19 in terms of extensive public use"



- Reduction of dust in production areas equipped with HVAC systems
- Protects against viruses, bacteria, pollen, dust and allergies
- Machine washable at 40 °C, contains protective case (net) for washing

Main features of the product

- patented filter sleeve against Covid-19
- provides excellent air permeability (more than 96%)
- initial filtration efficiency was measured at 93%
- does not absorb moisture, thus maintaining stable filtration properties
- The main material is 100% environmentally friendly and recyclable
- German material certified for health safety





Technical specification:



Main material: 100% endless polypropylene microfilaments



Certification in France took place with a filter material in the form of a face mask



Počiatková filtračná účinnosť bola nameraná na **93%** a priepustnosť vzduchu nad **96%**



The initial filtration efficiency was measured to be 93% and the air permeability above 96%. As certified by the French Ministry of Defense, this level corresponds to a high standard of protection against Covid-19 in terms of extensive public use. Patented additional elements of the filter sleeves increase filtration efficiency to the level of HEPA filters

Vúтч Slovakia and DGA France

Field of application

The filter can be used for HVAC exhausts in office spaces as well as production halls and multifunctional buildings as protection against viruses and dust. With proper disinfection (washing), the filter sleeve can be used repeatedly.

The filter sleeve is washable at least 100 times with a protective cage (net) and a maximum temperature of 40°C.

Storage is recommended from -20 to + 50 C and not in direct sunlight. Shelf life under storage conditions up to 100 years.

The product warranty is 2 years, subject to product maintenance instructions. Recommended washing frequency is min. once per year, in very dusty environments more often.

Assembly instructions



For easier handling during the first assembly, loosen the fixing rubber with the filter sleeve brake to the maximum length



Mount on the HVAC exhaust so that the filter sleeve covers the entire effective part of the exhaust
When the filter sleeve is fully extended to the exhaust, adjust the length of the mounting rubber with the brake so that it tightly surrounds the exhaust



Make sure that the additional element of the filter sleeve is placed loosely inside of the filter sleeve



In the case of the flat type of exhaust, the filter sleeve is mounted on the supplied grate with Velcro, which is manufactured according to the required dimensions

Washing instructions

1. Insert the filter sleeve into the provided protective case and close the case
2. Use standard washing powders without fabric softener and standard washing programs with a water temperature of up to 40°C
3. After washing, remove the filter sleeve from the protective case
4. You can refit the filter sleeve on the HVAC exhaust