

# MultiSkin Fittings

Life Cycle Assessment



hydronic flow control

# Contributing to a sustainable world.

Aalberts hydronic flow control

# Ambitions (sustainability)

# **Pushing boundaries**

Aalberts develops innovative technologies and pioneering industries for daily use. The Aalberts hydronic flow control business segment, with the main brands Flamco and Comap, focuses on technologies for current and future climate systems. We make our dreams and those of our customers come true - in a no-nonsense and professional manner. We do this by constantly pushing boundaries and challenging ourselves. By learning and sharing our knowledge, we become better every day. We are very proud of this.

# Sustainable business

Approximately 50% of the world's energy consumption comes from buildings, and climate systems account for half of this consumption. It is therefore very important that these systems operate correctly and as energy-efficiently as possible. We make this possible by continuously improving our products and systems.

Sustainable business is also in our DNA: we make responsible choices and strive to exceed our sustainable ambitions. It is not without reason that our office in Almere scores as 'outstanding' (BREEAM) in the area of sustainability. We also want to continue to improve in the years to come by:

- Providing insight into all our energy-using and energyinfluencing installations in order to concretely show from 2023 how they contribute to sustainability performances of buildings.
- Making our carbon footprint fully measurable from 2022.
- Ensuring an annual CO<sub>2</sub> reduction of 5% between 2020 and 2025.
  > 20% of plastic packaging is made from biodegradable or
- recycled material from 2025. - Design sustainable products and technologies from 2025 onwards.

## Integral approach

Buildings consume a lot of materials and energy, and building systems offer opportunities for substantial savings. In our ambition to make HVAC installations and buildings more sustainable, we look at the entire life cycle of our products. Each phase has different sustainability aspects. A life cycle assessment (LCA) provides insight into the environmental impact at all stages – from raw material extraction to end-of-life.

### Life cycle assessment

Our LCA's are carried out according to a standardised and internationally recognised method (NEN-EN-ISO 14040 and 14044) and with the aid of Ecodesign Studio software and Ecoinvent database. The LCA's provide valuable, reliable data on the environmental impact of our products. We use this data to innovate and achieve further (environmental) savings. We also make this data accessible to our customers so that they can use it to support their product choices.

This fact sheet contains a brief environmental impact assessment. Would you like to receive the extensive LCA report? Then contact your local branch of Aalberts hydronic flow control.

# Results (LCA)

### Scope

Comap MultiSkin synthetic fittings are a very good alternative to brass fittings for piping systems as their environmental footprint is lower compared with standard metallic fittings available on the market.

# **Environmental indicators**

The LCA focuses on the most important factors that determine the environmental impact of the product. Several environmental indicators were used, the results of which are summarised in four final indicators that together express the environmental burden: impact on humans, impact on ecosystems, impact on available resources and CO2 emissions.

### Conclusions

Compared with standard metallic fittings, the  $CO_2$  footprint of MultiSkin synthetic fittings is around 8 times lower. This is due to a manufacturing process less energy-consuming for plastic injection compared to metal-working. Also the weigth of synthetic fittings is in average almost 2 times lighter compared with metallic fittings.



COMAP MultiSkin synthetic Press Fitting



COMAP MultiSkin synthetic Push Fitting

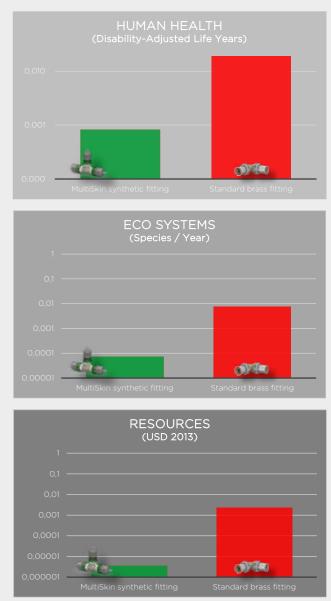


Fig. 1 - 3 ) COMAP MultiSkin synthetic fittings have a reduced mass, a slim design and are made of recyclable materials. All factors combined, COMAP MultiSkin synthetic fittings have much less environmental impact than metallic fittings from other brands.



Fig. 4 ) COMAP MultiSkin synthetic fittings generate 8 times less  $CO_2$  than brass fittings from other brands.

\* Analysis made with Ecodesign Studio software and Ecoinvent database for MultiSkin press synthetic FF elbow 16mm and standard press FF elbow 16mm in brass.

# COMAP

# Want to know more?

For advice and support from our experts by telephone, contact us at:

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For a complete and up-to-date overview of our product range and our additional services, or to make a personal appointment with an account manager in your region, please visit our website:

www.comap.aalberts-hfc.com

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