

Burning inspiration



decoflame®
Odor- and smokeless bio fireplaces

Information about Decoflame



Denver S

e-Ribbon Fire

Committed to exceptional design and quality, the Danish craftsman and designer Kjell Thomsen started to draw his first range of flueless bioethanol fireplaces in 2007.

Today, Decoflame is the registered trademark for eco-friendly, contemporary bioethanol fireplaces which add a style statement to any interior.

The exclusive range of decoflame® bioethanol fireplaces has been designed for the discerning customer who values the outstanding quality and functionality of Danish Design and Craftsmanship and the benefits of an environmentally friendly product.

Designed and produced in Denmark with focus on quality and safety, a decoflame® bioethanol fireplace can be positioned literally anywhere - without the need for a chimney, flue or bearing wall.

Since 2007, in addition to the standard range of fireplaces, Decoflame has realised a significant number of made to measure bioethanol fireplace installations. The majority of those projects were carried out in close cooperation with architects and interior designers on an international scale, where decoflame® made to measure fires can be found in restaurants, hotels, offices, homes and palaces.

We thrive for an optimum of customer service, which we provide by creating a quality product which aesthetically meets the requirements of architects and designers as well as being functional and safe in operation.



The Architects' Choice



Montreal
e-Ribbon Fire

Made to measure built-in bioethanol fireplaces from Decoflame

Cooperation

With this informative booklet we would like to invite you to explore the “decoflame” World of Possibilities”.

The information given herein is to be understood as an introduction to our made to measure fireplaces with standard or electrically controlled burners. With our experience and expertise we will help turning your ideas into functional, safe and stunning fire applications.

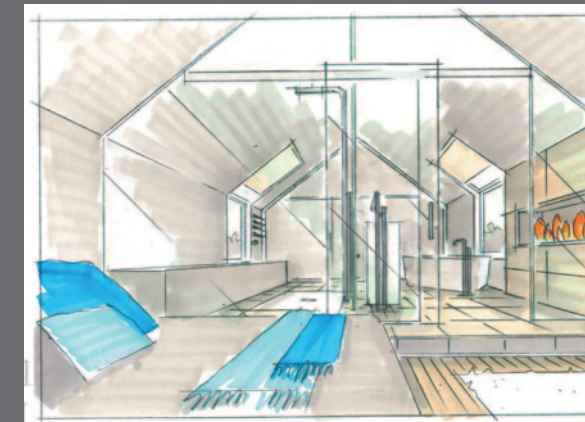
Use of bioethanol fireplaces in today's architecture

Without the need for a chimney, flue or bearing wall, application possibilities for bioethanol fires are countless. Architects and Interior Designers love to make use of the exciting design options available in creating a warm and stunning focal point in traditional and modern housing.

Using bioethanol fireplaces in “green” and sustainably built housing of today is an uncomplicated way to add a much loved fire in an environment which does not allow any heat to go to waste through a chimney.

Their versatile layout and relatively light weight makes decoflame® bioethanol fireplaces suitable for a variety of layouts and applications.

From sketch to reality:



decoflame® made to measure fires with

standard bioethanol burner/s



Montreal

standard burner

General design features

The unique design of a decoflame® fireplace lets you experience the magic and cosiness of a real fire – without the hassle, messiness and pollution of a wood-burning or gas fire.

The solid, technically proven and tested construction of a decoflame® fireplace with its safety chamber and standard decoflame® burner/s provide the best possible and economic combustion of the bioethanol as well as easy and safe operation.

The standard decoflame® built-in burner has a minimalist external look, however, its intelligently engineered design allows for economic fuel consumption with a lively flame display which can fill pretty much all of the opening of the fireplace. The flame intensity and thus the heat output of the standard decoflame® burner is steplessly adjustable.

The unique decoflame® burner system allows for a flame display that will appear to be a continuous “fire ribbon” filling out the fireplace almost entirely regardless of how many burners are used in an application.

Materials

Fireplace Construction:	aluminium (black, brushed or polished)
Alternatively:	brushed or polished stainless steel
Burner/s:	1.5 mm brushed stainless steel for sides and twice 5.0 mm brushed stainless steel for the top of the burner and slider lid

Layout possibilities

The layout of decoflame® made to measure fireplaces can be designed open to one, two or three sides. The minimum wall depth requirement is 220 mm (glass obligatory at this depth), the length of the fireplace can be chosen (minimum 800 mm) and the length of the flame display (i.e. the number and dimension of the standard burners) can be chosen but depends to a certain degree on the available room size or volume (in order to avoid overheating of the room).

A standard construction will consist of:

- the “roof” consisting of top, sides and back plate (if not bifocal)
- base plate with the safety chamber
- burner/s
- optional glass screen/s



Montreal

standard burners

Optional standard finishes

The finish can be chosen without frame (model Montreal) or with frame (model Orlando). The frame comes in 50 mm wide brushed or black stainless steel as standard, but can also be made in other dimensions or materials and finishes (e.g. polished stainless steel, brushed copper or brass, painted in RAL colours).

The standard finish of the fireplace chassis would be powder-coated black (with heat-resistant paint), which accentuates the flame display nicely. Alternatively, the inside of the fireplace chassis can be made in polished or brushed stainless steel, brass or copper.

Optional glass screens (hardened glass) are available in full or partial height for all openings of the fireplace (if open to one side, only partial glass screening is available).

Clearances for installation

In addition to a clearance of 20 mm to the back for models open to one side, all decoflame® made to measure fireplaces are installed with a shadow gap of 5 mm at the top, bottom and sides. The safety chamber requires a further recess inside the wall below the fireplace of at least 70 mm.

General installation requirements

The wall should be made of non-inflammable material or at least the wall cut-out should be lined with fibre plasterboard e.g. GypRock FireLine. The ventilation slots in the roof and the base of the fireplace must not be obstructed by or be in contact with any wall material.

The fireplace is positioned on sturdy, level supports to the left and right within the wall cut-out.

For a perfect finish, it is essential that the cut-out is created in accordance with our technical drawings with all corners being 90° and all axes perfectly in level. We recommend installation of the fireplace at a stage in which all construction and decoration work has been finished (in order to avoid scratching or unnecessary dirtying of the fireplace).

decoflame® made to measure fires



Orlando

e-Ribbon Fire

with e-Ribbon Fire

General design features

An alternative to the made to measure built-in bioethanol fireplaces with standard burner/s, DecoFlame offer the same style fireplaces with a base plate incorporating the patented decoflame® e-Ribbon Fire – an electronically controlled bioethanol burner.

This cutting-edge technology burner is also ideal for applications in public spaces like restaurants, hotels, spas and office buildings where operating personnel usually varies and continuity in ease of operation is essential.

A user-friendly operating panel/display and a remote control provide easily understandable settings and feed-back or error messages. The fuel tank volume can be specified in accordance with requirements and individual circumstances whereby the tank itself can be positioned underneath the fireplace or remotely in another room, on another floor or outside the building.





Denver

e-Ribbon Fire

Technical features

The decoflame® e-Ribbon Fire which can be used as drop down unit or in any of our made to measure built-in fireplaces offers the following features –

- 4-6-step flame regulation on operation panel and by remote control
- LED with information about operating status, fuel level and error codes
- CO or CO₂ detection with auto-cut-off
- tilt sensor with auto-cut-off
- fuel tank of several litres
- a maximum fuel consumption per hour can be pre-programmed
- temperature sensor on burner will cut-off if overheating
- system leakage sensor with auto-cut-off



Denver S e-Ribbon Fire black



Denver F e-Ribbon Fire brushed stainless steel

Materials

Fireplace Construction: aluminium (black, brushed or polished)

Alternatively: brushed or polished stainless steel

Burner: width in accordance with project requirements (and as room volume permits)

Layout possibilities

In addition to the layout options mentioned previously (for made to measure fireplaces with standard bioethanol burners), the design of applications incorporating our e-Ribbon Fire can be more adventurous like making use of e.g. the drop-down base plate without glass screens, crescent, wave or round burner shapes.

For a classic base plate layout incorporating model Denver S a depth of 250 mm is required whereby the minimum height for the recess needed for the fuel tank is 200 mm (if situated below the base plate).

If you opt for a complete fire the standard chassis will consist of:

- the “roof” consisting of top, sides and back plate (if not bifocal)
- base plate with an e-Ribbon Fire and fuel tank
- optional glass screens



Orlando
standard burner

Optional standard finishes

The finish can be chosen without frame (model Montreal) or with frame (model Orlando). The frame comes in 50 mm wide brushed or black stainless steel as standard, but can also be made in other dimensions or materials and finishes (e.g. polished stainless steel, brushed copper or brass, painted in RAL colours).

The standard finish of the fireplace construction would be powder-coated black (with heat-resistant paint), which accentuates the flame display nicely. Alternatively, the inside of the fireplace can be made in polished or brushed stainless steel, brass or copper.

Optional glass screens (hardened glass) are available in full or partial height for all openings of the fireplace (if open to one side, only partial glass screening is available).

Clearances for installation

In addition to a clearance of 20 mm to the back for models open to one side, all decoflame® made to measure fireplaces are installed with a shadow gap of 5 mm at the top, bottom and sides. Should the designed layout foresee that the fuel tank is positioned underneath the burner, a minimum recess height of 200 mm is required.

General installation requirements

The wall should be made of non-inflammable material or at least the wall cut-out should be lined with fibre plasterboard e.g. GypRock FireLine. The ventilation slots in the roof and the base of the fireplace must not be obstructed by or be in contact with wall material.

The fireplace is positioned on sturdy, level supports to the left and right within the wall cut-out.

The e-Ribbon Fire requires a connection to a power socket.

For a perfect finish, it is essential that the cut-out is created in accordance with our technical drawings with all corners being 90° and all axes perfectly in level. We recommend installation of the fireplace at a stage in which all construction and decoration work has been finished (in order to avoid scratching or unnecessary dirtying of the fireplace)

Ventilation and room requirements

Consumption / Thermal output / Room size Recommendation

Any flame consumes oxygen. This is also true for bioethanol fires. Most houses or rooms have a natural supply of “fresh air” (i.e. air with a higher contents of oxygen than the air indoors) due to draughty windows, doors which open when someone enters or leaves the room or an “open plan living” layout - combining several rooms and maybe even floors - providing sufficient supply of good quality air.

Nonetheless, the room size and volume should be considered when planning for a bioethanol fireplace. Often, it is forgotten, that indeed 100% of the heat generated by a bioethanol fire (i.e. 7.2 kW/h per litre burnt) remain indoors as it does not escape through a chimney or flue like it does in case of a wood-burning or gas fireplace. In the end, an “oversized” fireplace might be an impressive focal point indeed, but might be perceived as too hot.

The following indications can serve as a guideline –

One standard decoflame® built-in burner of 800 mm has a heat output of around 7kW/h and is therefore suited for a minimum room size of 40m² or a room volume of 90m³. One 600 mm burner with a heat output of 3.5kW/h is suited for a room size of 23m² or a room volume of 53m³.

Burner width	800	1000	1200
Consumption/hour step 1	0.3 litre	0.5 litre	0.7 litre
kW/h step 1	2.15	3.6	4.9
Consumption/hour step 6	1.3 litre	1.5 litre	1.7 litre
kW/h step 6	9.4	10.8	12.2
Recommended room size in m ² at 2.30m ceiling height	45	55	65

General information about bioethanol

All decoflame® fireplaces are fuelled with denatured bioethanol which is a green, non-fossil fuel derived from sugar cane, beets, cereals or even hey. Bioethanol creates only a small amount of CO₂ and water vapour when burning, which means it has a clean combustion without smoke, smell and soot emission.



As with all alcohol-based liquids, bioethanol changes its form from liquid to gas at around 17 degrees C. The gas is heavier than air and will therefore be situated in a layer on top of the liquid surface.

Unlike wood or gas burning fireplaces, the flame behaviour seen in bioethanol fireplaces is very much influenced by air flow around the burner and draft conditions which prevail in the individual setting. Both can have an undesired effect on the combustion temperature and the fuel consumption. Supporting our customers with our expertise and technical knowledge enables them to create not only a stunning focal point but also a perfectly functioning and safe to operate bioethanol fireplace.

decoflame® made to measure bioethanol fireplaces with standard burner/s or the electronically controlled e-Ribbon Fire are designed and crafted in order to ensure a maximum of safety and economy in fuel consumption.

Specifications and Data

decoflame® Montreal and Orlando with e-Ribbon Fire

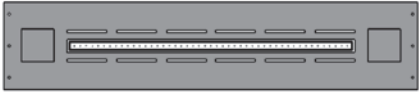

		
Model	Montreal	Orlando
Finishes	powder coated aluminium	powder coated aluminium 50 mm stainless steel frame
Minimum dimensions mm width x height x depth	1200x400x250	1200x400x250
Flame tray width mm	800	800
Flame regulation	4 - 6 steps*	4 - 6 steps*
Tank capacity	10 litres	10 litres
Consumption step 1	0.3 litre/h	0.3 litre/h

The above mentioned minimum dimensions refer to the decoflame® Montreal and Orlando incorporating the e-Ribbon Fire.

Other dimensions (a part from the minimum depth) are possible, as well as an installation featuring the decoflame® standard burner/s.

* the number of steps depends on the width of the flame tray

decoflame® Denver e-Ribbon Fire

		
Model	Denver S	Denver F
Finishes	powder coated aluminium brushed stainless steel	powder coated aluminium brushed stainless steel
Minimum dimensions mm width x depth	1200x250	982x269
Flame tray width mm	800	883
Flame regulation	4 - 6 steps*	4 - 6 steps*
Tank capacity	10 litres	10 litres
Consumption step 1	0.3 litre/h	0.3 litre/h

Other dimensions (a part from the minimum depth) are possible

* the number of steps depends on the width of the flame tray



decoflame®

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