Technical data



Rolf Benz YOKO

nothing but wunderbar.



- I The new outdoor range comprises a sofa, armchair, chairs and tables.
- I "Yoko" (Japanese for sun) epitomises the beneficial effects of the sun and looks equally good in urban and rural settings.
- I Designer Toan Nguyen creates a connection between excellent design and meaningful use.
- I All frames are based on an aluminium framework that rests on elegantly curved legs and has an anthracite-coloured powder coating. The brilliant, subtly shimmering finish that was developed for exteriors makes the furniture robust and weatherproof whilst looking extremely elegant at the same time.
- I The fabrics in the cover collection are equally weather-resistant and their colour coordinates with the anthracite-coloured aluminium frame. Optionally, you can choose bouclé fabrics made from 3D yarn or fabric combinations for the cushions and body. All covers are removable and washable at 30°.
- I The straps of the sofa frame and the cord of the weaving in the chair and armchair serve as both a spring system and as decorative stylish elements that are coordinated with the colour of the pedestal.
- I With the shelving for the sofa and the table tops for the coffee and dining tables, Rolf Benz YOKO elegantly and naturally blends in with its surroundings. These are available in four versions.
- I Rolf Benz offers the statutory warranty on the entire Rolf Benz outdoor collection.



Rolf Benz YOKO Sofa

Toan Nguyen has developed a principle for the Rolf Benz YOKO sofa range that is formally impressive and ensures ultimate flexibility. On a seat frame with straps, back and seat cushions, shelving and peripheral insertion brackets made of highgrade steel, you can easily design sofas, corner sofas, recamières, sunbathing areas or face-to-face arrangements with and without shelving - and redesign them again in the blink of an eye.

Depending on the sofa size or the required arrangement, the seat cushions are available in various lengths; the backrest cushions are attached and optionally enhanced with side section cushions or a side section bolster cushion.



PRODUCT FEATURES OF THE ROLF BENZ YOKO SOFA:

1. Selection of sofa frame (with straps) made of matt powder-coated aluminium:

- I Dimensions: 80, 160, 240 cm x 90 cm
- I Colour:
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt

The frames have insertion points for the brackets. All elements of the frame can be linked to each other.

2. Selection of seat cushions or shelving:

I Dimensions: 80, 160, 240 cm x 93 cm

(These can be individually selected; the size of the frame does not determine the size of the seat cushion.)

I Colour: Rolf Benz outdoor cover collection

Shelving made of matt powder-coated aluminium:

- I Dimensions: 80 cm x 90 cm
- I Colour:
 - Teak
 - Ceramic Calacatta smooth
 - Ceramic Emperador Extra
 - Ceramic Naturali, Pietre

If shelving is selected in conjunction with cushions, the arrangement can subsequently be changed in any order.

3. Selection of the backrest/side section elements:

Choose insertable brackets to suit the back/side section element.

The brackets can be inserted anywhere in the frame at any insertion point.

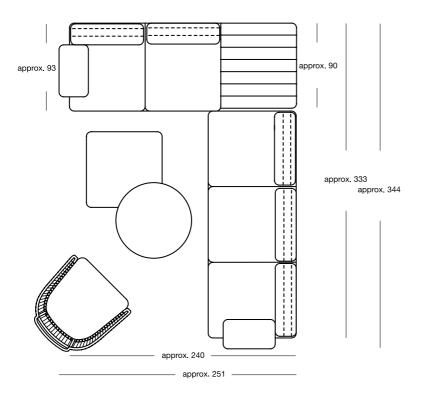
- I Insertable brackets made of matt powder-coated high-grade steel:
 - Backrest brackets for backrest cushions: 44 x 45 cm
 - Side section bracket for cushions: 44 x 24 cm
 - Side section bracket for bolster cushion: 44 x 31 cm
- I Colour (corresponds to the sofa frame):
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt

4. Selection of the backrest and side section cushions/bolster cushion:

The appropriate cushions are selected based on the bracket:

- I Backrest/side section element:
 - High backrest cushion 77 cm x 22 cm
 - Side section cushion 31 cm x 55 cm
 - Side section bolster cushion 18 cm x 60 cm
 - Accessory cushions 40, 50, 60 cm x 40, 50 cm
- I Colour: Rolf Benz outdoor cover collection
- I Selection of accessories:
 - Cover: An appropriate cover for the selected frame is recommended for the sofa.

Example combinations:

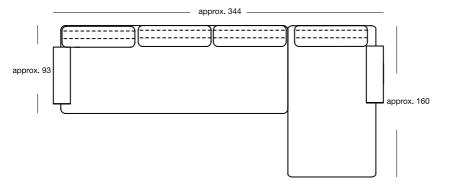


Frame 219/240 2 x ST-KI-Elem 219 MET 2 x RU-Elem 219 MET 5 x

SIK 219-80 5 x RUK 219/77 5 x ST-KI 219 2 x ABL 219/80 Teak

CT 260 80 x 80 CT 260 Ø 80

SE 271, SIK-SE, RUK-SE

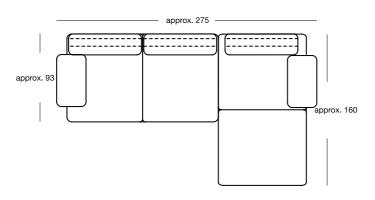


Frame 219/240 1 x Frame 219/160 1 x

ST-RO-Elem 219 MET 2 x

RU-Elem 219 MET 4 x SIK 219-240 1 x SIK 219-160 1 x RUK 219/77 3 x H-RUK 219/77 1 x

ST-RO 219 2



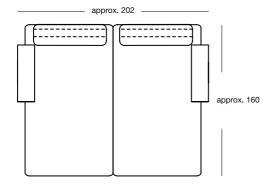
Frame 219/160 2 x

ST-KI-Elem 219 MET 2 x

RU-Elem 219 MET 3 x

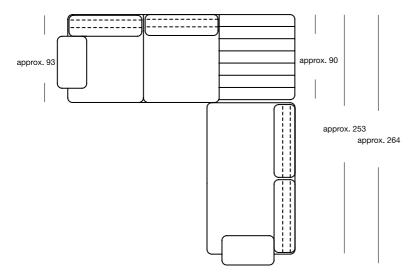
SIK 219-80 4 x RUK 219/77 3 x

Example combinations:



Frame 219/160 2 x ST-RO-Elem 219 MET 2 x RU-Elem 219 MET 2 x

SIK 219-160 2 x H-RUK 219/77 2 x ST-RO 219 2 x

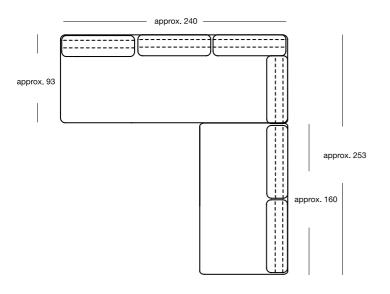


Frame 219/240 1 x Frame 219/160 1 x

ST-KI-Elem 219 MET 2 x RU-Elem 219 MET 4 x

SIK 219-80 2 x SIK 219-160 1 x

RUK 219/77 4 x ST-KI 219 2 x ABL 219/80 Teak



Frame 219/240 1 x Frame 219/160 1 x

RU-Elem 219 MET 6 x SIK 219-240 1 x SIK 219-160 1 x

RUK 219/77 5 x H-RUK 219/77 1 x

Rolf Benz YOKO Armchair

See, love, sit down. As an armchair, Rolf Benz YOKO has a wonderful emotional appeal. With its generous seat depth and backrest that is tilted ergonomically backwards, it's a real feel-good, cosy armchair.

The frame has weaving made of thin cord that exudes an air of warmth. You are free to choose the covers for the seat, backrest and side section cushions, if required with an additional footstool. The seating area of the armchair and stool are made of a high-quality Batyline fabric.



PRODUCT FEATURES OF THE ROLF BENZ YOKO ARMCHAIR:

- 1. Selection of the armchair frame (weaving is coordinated with the frame) made of matt powder-coated aluminium:
- I Dimensions: Height 77 cm, width 86 cm, depth 88 cm
- I Colour:
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt
- 2. Selection of seat cushions (74 x 74 cm) and backrest cushions (68 x 53 cm)
- I Colour: Rolf Benz outdoor cover collection
- 3. Optional: Stool (73 x 50 cm, height 29 cm) available with seat cushions (73 x 50 cm)
- I Colour: Rolf Benz outdoor cover collection
- 4. Optional: Side section cushions for armchair (55 x 45 cm)
- I Colour: Rolf Benz outdoor cover collection
- 5. Optional: Accessory cushions (40, 50, 60 cm x 40, 50 cm)
- I Colour: Rolf Benz outdoor cover collection
- 6. Selection of accessories:
- I Cover: An appropriate cover for the armchair is recommended.

Rolf Benz YOKO coffee table and side table

The Rolf Benz YOKO coffee tables are an homage to geometry: resting on cylinders of different heights and diameters, the table tops can be circular or square as you prefer. Choose between a side table or coffee table in different sizes, the pedestals are made of aluminium in anthracite and supporting steel plates.



ROLF BENZ YOKO COFFEE TABLE AND SIDE TABLE:

1. Selection of frame:

- I Dimensions of side table (round): Height 47 cm, table top diameter 45.5 cm
- I Dimensions of coffee table (round): Height 29 cm, diameter of table top 80 cm or height 35 cm, diameter of table top 80 cm
- I Dimensions of coffee table (square): Height 29 cm, 80 x 80 cm or height 35 cm, 80 x 80 cm
- I Frame made of matt powder-coated aluminium:
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt

2. Table top colours:

- Ceramic Calacatta smooth
- Ceramic Emperador Extra
- Ceramic Naturali, Pietre

3. Selection of accessories:

I An appropriate cover for the coffee table is recommended.

Rolf Benz YOKO Chair

As a chair, Rolf Benz YOKO also adds a cosy ambience even in minimalistic settings. It combines the lightness of aluminium with the emotional aspect of weaving: The backrest and side sections are designed with elaborately handcrafted weaving to provide perfect comfort even without backrest cushions. The ergonomically shaped chair is optionally upholstered with a loose cushion. You can also order an additional backrest cushion if required.

The seating area of the chair is made of a high-quality Batyline fabric.

The Rolf Benz YOKO fabric collection is available for the covers.



PRODUCT FEATURES OF THE ROLF BENZ YOKO CHAIR:

- 1. Selection of the chair frame (the weaving is coordinated with the frame):
- I Dimensions: Height 78 cm, width 59 cm, depth 61 cm
- I Colours:
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt
- 2. Optional: Seat cushions (46 x 49 cm) and/or backrest cushions (43 x 40 cm)
- I Colours: Rolf Benz outdoor cover collection
- 3. Optional: Accessory cushions (40, 50, 60 cm x 40, 50 cm)
- I Colours: Rolf Benz outdoor cover collection
- 4. Selection of accessories:
- I An appropriate cover for the chair is recommended.







Rolf Benz YOKO Table

With the YOKO dining table, Toan Nguyen has created a light-footed base for convivial gatherings. The design vocabulary is clear and the combination of materials is sensual. The table is available in several sizes for snacks, dinner, or as an improvised outdoor office.



PRODUCT FEATURES OF THE ROLF BENZ YOKO TABLE:

1. Selection of frame:

- I Dimensions: 100, 220, 260 x 100 cm, height: 75 cm
- I Frame made of matt powder-coated aluminium:
 - Marrone fine-grain matt (available from 2022)
 - Bianco fine-grain matt (available from 2022)
 - Anthracite matt
- I Colour of table leaf:
 - Teak
 - Ceramic Calacatta smooth
 - Ceramic Emperador Extra
 - Ceramic Naturali, Pietre

2. Selection of accessories:

I An appropriate cover for the table is recommended.

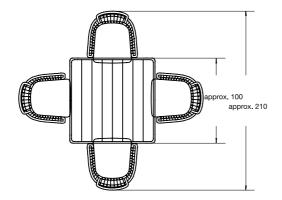


Table 250_100 x 100, 1 x Chairs 232, 4 x

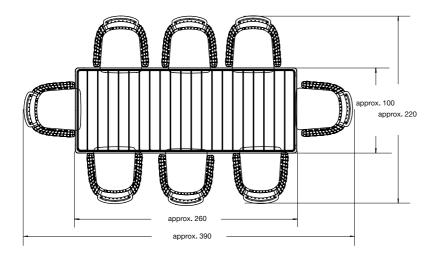


Table 250_260 x 100, 1 x Chairs 232, 8 x

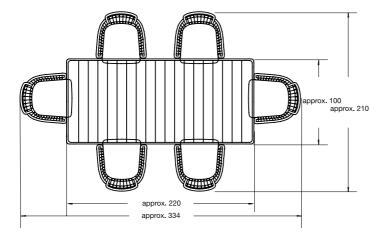


Table 250_220 x 100, 1 x Chairs 232, 6 x

The covers in the Rolf Benz outdoor collection are made from a fabric that has a breathable polyurethane coating. This is water repellent yet releases any moisture that occurs back through the weave.



Cover for the sofa



Cover for the coffee table and side table

Cover for the chair



Cover for the table





Cover for the armchair and stool

Packaged cover

The fabrics in the Rolf Benz outdoor collection have been tested according to the strict specifications of our quality requirements. This ensures that the outdoor product segment meets our usual high Rolf Benz quality standards.

The Rolf Benz outdoor fabric collection guarantees the following features:



UV light-resistant



Mould-resistant



Breathable comfort



Suitable for bleaching*



Sun protection*



Water and dirt-repellent*

^{*}Does not apply to fabrics with the following composition:

^{88 %} polypropylene, 12 % polyester

^{86 %} polypropylene, 14 % polyester

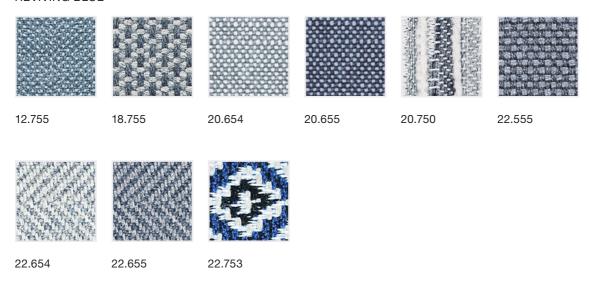
CALM WHITE



MELLOW GREY



REVIVING BLUE



RELAXING GREEN



SHELVING MATERIALS









Teak

Emperador Extra

Calacatta Smooth

Naturali Pietre

FRAME COLOUR







Bianco fine-grain matt*



Anthracite matt

COLOUR OF WEAVING AND STRAPS



Cord for Anthracite and Bianco



Cord for Marrone



Strap

INFORMATION ABOUT OUTDOOR USE

Do not play, climb or stand on the product. Please do not leave children unattended with the item due to the risk of it toppling over and causing injury.

Only move the item if you are certain that no objects will tip over or fall off it. Do not place any hot drinks or objects (such as candles) on the item when you want to move it.

The Rolf Benz outdoor furniture was essentially designed for use outdoors, which is why its resistance to various environmental influences plays a key role in its production. Nevertheless, it is important to protect the furniture from severe weather conditions to ensure that you can enjoy it for many years to come.

Protect the furniture from dirt and various weather conditions such as rain and UV radiation. To do this, we recommend using a suitable cover, which we also offer for each item of furniture. Also use the cover if you are not intending to use the furniture for a longer period of time. When using the cover, always ensure that the cushions are dry. This prevents mould stains forming on them. Protect the frame with the cover when the cushions are not on the sofa frame.

Extreme weather conditions such as hail, strong UV radiation, snow and ice can damage the furniture despite the high-quality materials used in its production. This is why the furniture should be stored away dry or a cover must be used. If the furniture needs to be moved so that it can be stored in a dry location, lift it up carefully to avoid causing any scratches.

If the cushions should become damp, you can simply leave them to air dry. When doing so, position the cushions upright so that they can dry off as much as possible. If you are not intending to use the furniture for a longer period of time, we recommend storing the cushions in a dry location and protecting the frame with the cover or keeping it in a dry location.

INFORMATION ABOUT THE FRAMES

We only use high-quality aluminium and high-grade steel for the frames in the Rolf Benz outdoor range. Following thorough surface treatment, the metal frames have been powder-coated in your selected colour. We only use top-quality products for our metal frames and our coatings. However, careful use is a prerequisite for ensuring the furniture's longevity.

INFORMATION ABOUT THE BELT SPRING SYSTEM

The spring system in the sofa frame consists of a high-quality woven strap. The spring system was designed to provide you with optimum comfort with the corresponding seat cushion. The straps are elastic in nature. In principle the strap is weather-resistant but you should avoid exposing it to direct UV radiation and protect the spring system with a suitable cover.

INFORMATION ABOUT THE WEAVING

We use elaborate weaving on the backrest of the chair and armchair. You can easily use the chair without the appropriate backrest cushion since the weaving on the backrest alone provides optimal comfort.

INFORMATION ABOUT BATYLINE

Batyline is a polyester fibre that is PVC-coated and woven. It is extremely resistant in the outdoor area and has a high degree of transparency. Our Batyline is phthalate-free and fire retardant.

LOAD AND SAFETY PRECAUTIONS FOR DINING TABLE, **COFFEE TABLE AND SIDE TABLE**

Load placed on the dining table should not exceed 40 kg. Load placed on the coffee table should not exceed 15 kg. Never stand or sit on the table. Please do not leave children alone with the item due to the risk of it causing injury. When relocating the table, between 2 and 4 people are required to lift it at the ends. We do not accept any liability for damage caused by improper use.

Coffee table:

If you wish to relocate the item, always lift it carefully. Wherever possible, enlist the help of another person to carry it. Lift up the item evenly and do not tip it over the edge to avoid damage.

PROPERTIES OF TEAK WOOD

Rolf Benz obtains its teak wood from FSC-certified suppliers. The teak wood is supplied untreated and has therefore not been oiled or varnished.

Please note: The colour of teak wood naturally changes over time. A refined silver-grey patina will form in due course. If you do not desire this effect, you can retain approximately the same shade as when it was delivered with regular oiling. Please note that the colour is initially intensified as a result of oiling. We recommend using the relevant product from LCK. You can find this at: www.lck-rolfbenz.outdoor.com

Teak wood naturally has a high proportion of oil and is therefore well-protected against weather conditions.

Fine tears occur over time which are also completely natural. If you want to retain the original look of the teak, protect the table top with a cover and/or keep it away from direct sunlight. This will cause the wood to change colour more slowly, but this cannot be avoided completely. Rolf Benz deliberately selected teak because it is a vibrant material; any differences in colour and structure in the wood are desirable and entirely natural. Each solid wood table top is unique since its colour, structure and appearance may differ slightly from the others.

Exposure to light will turn the colour of wood surfaces grey, especially within the first few weeks and months. For this reason, you should initially leave decorative objects or similar items on the surface for a short time only. The colour of the wood will remain more intensive under the areas that are covered for a long time, resulting in clearly visible differences in colour. Hot vessels and containers of water (such as jugs, vases and plant pots) should not be placed directly on the wooden surface without the use of special mats. Mats should always be used with objects that have sharp corners to protect the surface of the shelving. Radiators that emit heat directed at the shelving can result in a hollow curvature of the tablet top and should therefore be avoided.

The item's wood humidity is intended for outdoor use. If the item is going to be stored inside over winter, for example, intense drying cracks may occur as a result of the indoor air being too dry for the item. You should therefore use and store the item exclusively outdoors.

PROPERTIES OF CERAMIC

Ceramic is an inorganic, non-metallic material with lots of positive features. Items made of ceramic are natural and recyclable. During production, the individual raw material components are prepared first of all with the aim of achieving a working mass that is as homogeneous, fluid and bubble-free as possible. The porcelain ceramic is pressed under very high pressure, dried and fired. The ceramic table top is then cut to shape. The surface is sintered by the heat treatment, creating a hard, closed-pore surface. This makes the unglazed fine stoneware waterproof and easy to clean.

Ceramic is resistant to scratches and abrasion. Its properties are not affected by intensive use nor by frequent cleaning.

Since they do not contain any organic substances, ceramic surfaces can withstand high temperatures. Ceramic products remain stable even in changing climatic conditions. They do not release smoke nor any toxic substances in the event of a fire.

The surface is hygienic and suitable for contact with foodstuffs. The table top is also resistant to fungus and mould.

The ceramic table top is resistant to UV light. This means that it retains its original colour, even in changing climate conditions.

INFORMATION ABOUT LEGS AND GLIDERS

The legs of the sofa, dining table and coffee table are fitted with gliders whose height is adjustable. These can be used to offset floor unevenness and height differences between the units easily. This can be up to a maximum of 5 mm.

INFORMATION ABOUT THE CUSHIONS

The cushion cover consists of water-repellent polyester fabric. This ensures that the furniture will not be damaged by short rain showers. The cover is made to be deliberately casual. The cover material lies over the cushion without any tension, thereby allowing the casual seating comfort to be appreciated fully with its soft seating. Waves that form during daily use will not go away and therefore remain clearly visible. With some fabric covers, these can sometimes be smoothed away or reduced during maintenance. However, this leads only temporarily to a slightly firmer, that is, wave-free seating surface. It is important that the cushion filling is always loose, which is why we recommend shaking the cushions at regular intervals. The covers in the Rolf Benz outdoor collection are handmade in southern Germany. Please do not expose the anti-slip mat on the seat cushion to the sun.

GENERAL CARE INFORMATION

Your furniture requires regular, preventative care to maintain its long-term beauty. Do not use high pressure systems to clean the furniture. You can find suitable care products for your Rolf Benz outdoor furniture at: www.lck-rolfbenz.outdoor.com

CLEANING AND MAINTAINING CERAMIC SURFACES

The ceramic table tops we use from Laminam are easy to clean. Please note the following cleaning information to avoid streaks and stains. A mild soap solution is generally sufficient for maintaining ceramic surfaces. The material is resistant to organic and inorganic solvents, disinfectants and cleaning agents. Only hydrofluoric acids can damage its surface. A stain is easiest to remove if you act quickly. This can be done by using a sponge and a sufficient amount of clean water. To prevent a dull veil from forming, avoid using waxy products.

CLEANING AND MAINTAINING WOODEN SURFACES

Remove dust regularly with a soft, dry cloth. We recommend oiling the teak wood regularly with the appropriate LCK care product. You can find this at: www.lck-rolfbenz.outdoor.com

Wipe down the surface with a slightly dampened cloth occasionally (if necessary, add a very small amount of a mild detergent or household cleaner). We recommend using the relevant care product from LCK.

Do not use any harsh or abrasive cleaning agents! Avoid contact between wood care products and the cover fabric!

Since wood is a natural raw material, it will always have naturally-occurring differences in its colour and structure. Each individual piece of wood is unique. This vibrancy is desirable and is a typical character of this item.

Despite regular maintenance, colour changes will occur over time due to exposure to light. This is a typical property of natural wood surfaces. Knots and other natural characteristics indicate the quality of real wood.

INFORMATION ABOUT MAINTAINING POWDER-COATED SURFACES

Depending on their influencing factors, dirt and soiling can result in irreparable surface defects (such as corrosion, chalk formation etc.). This can seriously compromise their appearance. We recommend using the relevant care product from LCK. You can find this at: www.lck-rolfbenz.outdoor.com

The longevity of the surface can only be guaranteed with regular cleaning. To ensure you can enjoy your furniture for a long time, use a touch-up stick to improve any exposed places that were knocked during transport or daily use. Apply the lacquer thinly and test the touch-up stick on an invisible spot. You can find it at: service@rolf-benz.com

CLEANING POWDER-COATED SURFACES

Only use pure water and, where necessary, a very small amount of neutral soap solution (pH 7). You can also use soft, non-abrasive cloths or rags. Do not vigorously rub the stain under any circumstances. You can find suitable care products at: www.lck-rolfbenz.outdoor.com. Greasy, oily or sooty substances can be removed with white spirit or isopropyl alcohol. Stickers, silicone rubber or adhesive tapes can be removed in the same way. Do not use solvents containing esters, ketones, polyvalent alcohols, aromatic compounds, glycol ethers, halogenated hydrocarbons or similar ingredients. Do not use any abrasive agents. Do not use any strongly acidic or alkaline cleaning and wetting agents. Do not use any cleaning agents with an unknown composition. Cleaning agents must not be stored above 25 C.

Please observe the reaction time of cleaning agents. We generally recommend only a short application. Sun protection such as milks, oils and creams can damage the finish. Such ingredients can diffuse into the coated surface and impair the powder-coated surface. Aggressive sun protection can cause patches to develop even after a short time. To ensure the painted surface remains protected, it is important to clean it following exposure to cosmetic products.

CARE INFORMATION FOR FABRICS, STRAPS AND CORDS

We recommend using the relevant care product from LCK. The covers are washable, please refer to the textile label on the cover for precise cleaning instructions. To prevent soiling, dab spilt liquids with a clean, dry cloth (do not rub). Then apply a mild cleaning solution made of soap and water (for more information, see www.lck-rolfbenz.outdoor.com). Then leave the fabric to air dry.

Removing mould stains: Mould and mildew do not usually form on the Rolf Benz outdoor covers. However, they can form on dirt or other foreign matter if these are not removed from the fabric. The mould can be removed as follows:

Clean the entire surface with mild soap and a sponge, a clean cloth, or a brush with very soft bristles. Then rinse the fabric carefully to remove all traces of cleaning agent. Leave the fabric to air dry.

If the ticking comes apart, we do not advise simply sewing it by hand.

CARE INFORMATION FOR BATYLINE ON THE CHAIR AND ARMCHAIR

It is recommended that the Batyline is cleaned on a regular basis. To do this, please use a cleaning agent that is as pH neutral as possible. Clean the whole surface with a sponge, a clean cloth, or a brush with very soft bristles. Then rinse the fabric carefully to remove all traces of cleaning agent. Allow the Batyline to air dry.

INFORMATION ABOUT COVERS

The covers are custom made to the furniture's measurements to ensure the best possible protection. When it is not in use, protect the furniture with the cover.

Using the sofa cover: The cover can be used with and without seat and backrest cushions. If the cushions are damp, or if the furniture will not be used for a longer period of time, we recommend storing the cushions in a dry location.

Using the cover with the chair and armchair with stool: The cover can also be used with and without seat and backrest cushions. If you use the cover with cushions on the chair and armchair, please place the backrest and side section cushions in the seating area. Ensure that the cushions are dry before protecting the furniture with the cover.

If you are not intending to use the furniture for a longer period of time such as over the winter months, we recommend storing it in a dry, covered location.

The cover is made from a woven fabric with a breathable PU coating. Although this is waterrepellent, it can release any moisture that occurs back through the weave. During longer damp periods, you should ensure sufficient ventilation to prevent any mould or mildew from forming. Remove the cover from time to time to provide sufficient ventilation.

If the cover should become soiled, it can be cleaned by taking the following information into account:

- I Hand wash at 30 °C
- I Do not use any scouring agents or aggressive cleaning agents
- I Do not spin
- I Do not tumble dry the cover

MORE INFORMATION ABOUT CARING FOR FURNITURE:

For more information about caring for your furniture and suitable care products, see www.lckrolfbenz.outdoor.com

If you have any queries about the cleaning and maintenance of furniture, please contact:

LCK Vertriebs GmbH Im Unterfeld 3 76698 Ubstadt-Weiher **GERMANY**

Tel: + 49 7251 9625-0

E-mail: info@lck-rolfbenz.com

Go to www.lck-rolfbenz.com to find products for preventative cleaning and maintenance as well as selected specialist cleaners for all textile upholstered furniture, high-grade steel surfaces, wood, stone and other materials.

