

# Cane-line specification guide

Introduction to the unique parameters  
of Cane-line products



**Cane-line®**



# Cane-line Academy - Manual

In this document we will briefly introduce you to some of the essential differences between Cane-line's range of outdoor furniture versus most of our competitors.

There are several important differences to consider and highlights when specifying Cane-line - especially in regards to materials, functionality and the manufacturing process.

We do believe that these key differences/ parameters will help clarify several advantages of investing in Cane-line furniture over non-Cane-line alternatives.

## **"Knowledge and insight creates results and satisfied customers"**

The basis of this overview will be the materials and components that our products are made of. Hopefully, as a reader, you will be left with valuable insight, and more importantly, the best arguments for answering the question "why specify, buy and use Cane-line furniture over alternatives?"

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# 1. Life made comfortable

## 1.1 All year all weather use

In all Cane-line specifications it should be clearly stated that all products specified must be able to be used outdoor all year without having to take products, cushions, accessories inside after use or because of rain. Every product can be left outdoor including most of our cushions.

## 1.2 Reduction of maintenance and facility management cost

It is a requirement in all Cane-line specifications – that it is clearly highlighted that the products specified must reduce maintenance and facility management cost to a minimum – avoiding cost for moving products, cushions etc in and out, during night or during changing weather. All products must be easy cleanable with plain water and high pressure jet cleaning.



## 2. Fibers

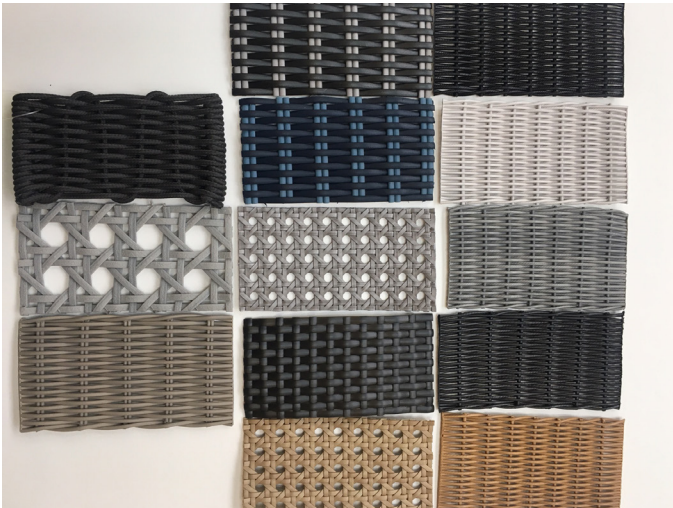
### 2.1 Intelligent memory fiber

- Dyed polyethylene fibers.
- Cane-line fiber materials were originally developed for use in ski soles and can therefore withstand friction, heat, frost and shock.
- The fibers have UV protection added and can withstand 7-8 in UV resistance on a scale from 1-8.
- Tested in temperatures from -40 grader/+60 grader without changes occurring in the fibers.
- Memory function – after applied pressure, the fiber will straighten back up to its regular shape, and thus maintain its tight form.
- The fibers can be “welded” together in the event of rupture.
- Closed surface makes the fiber dirt repellent and easy to clean.
- Cleaning with regular water and soap.

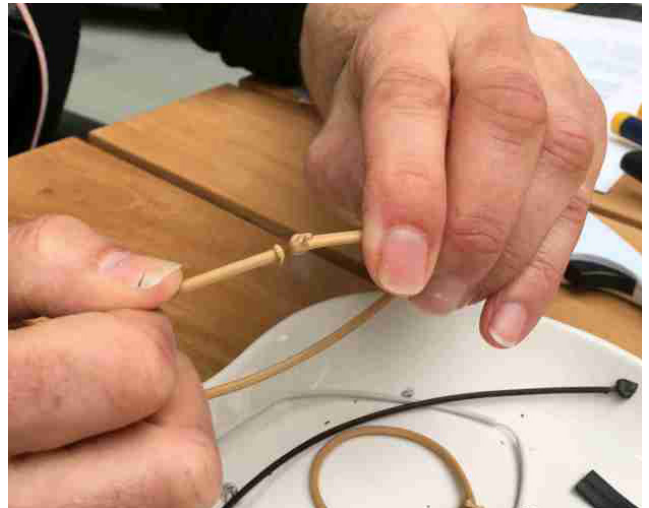
Cane-line tests its fibers continuously under extreme conditions. All fibers are tested as follows:

1. 11 hours of constant pull of 2,5 Newton, amounting to 250 kg, without deformation or loss of strength.
2. 90.000 vertical (seat)pressures with an impact of 95 kg and 90.000 horizontal (back)pressures with an impact of 25 kg.
3. 3UV and lightfastness of 7-8 (on a scale from 1-8).

The above criteria correspond to what is usually demanded by contractors, typically hotels, resorts and cruise ships.



All Cane-line fibers are 100% dyed  
All Cane-line fibers are extremely durable



Heat the 2 ends, i.e w/lighter, and “weld” the ends together by applying pressure.



Approx. 1,2 km weave is used in a Hampsted chair.  
Production time is approx. 1½ day



Demonstrative test – shows the potential buyer the strength and flexibility of the fibers.

A typical competing fiber used in cheaper products deforms, loses strength and typically does not withstand more than 25.000 impacts before it ruptures. The fibers are also not always dyed entirely through on the cheaper alternatives, and therefore fades slowly as soon as the outer “coating” is broken, and the sun starts to affect the cheaper fiber.

25.000 impacts during stress test corresponds to light camping level durability.



## 2. Fibers

### 2.2 Cane-line Soft Rope (Selected PP)

- Cane-line Rope is produced by woven polypropylene (PP).
- The material has a soft surface that provides good support and excellent sitting comfort.
- Cane-line Rope is ideal for outdoor use, UV-resistant and dries quickly.
- Solution dyed.
- Non absorbent.
- Easy to maintain with brush, water and soap.
- Extreme rubresistance.





### 3. Comfort and cushions

- Design "sandwich construction" – unique composition consisting of 4 layers of material. Intelligent foam composition of 2 types of memory. Soft and comfortable top layer, solid "carrying" bottom layer.
- Unique intelligent comfort.
- Memory foam and memory padding – keeps it in shape and always spring back in original shape.
- Possible to re-order and supply, even after several years.

#### Cane-line comfort:

- Instant comfort – provided by most suppliers.
- Longterm comfort has only Cane-line.

#### 3.1 Cane-line Airflow system

- Cane-line cushions are produced with the special Cane-line Airflow system, allowing cushions to ventilate and drain.
- The Airflow system allows for constant and continuous air circulation preventing mould or humidity to build up inside the cushions.
- The Airflow system allows the cushions to dry quickly even after heavy rain or cleaning with water.
- The Airflow system offers a superior comfort, as the cushions are ventilating and "drying" while being used – preventing any uncomfortable or sticky feeling when sitting.

#### Cane-line Airflow system

1. Cane-line fabric

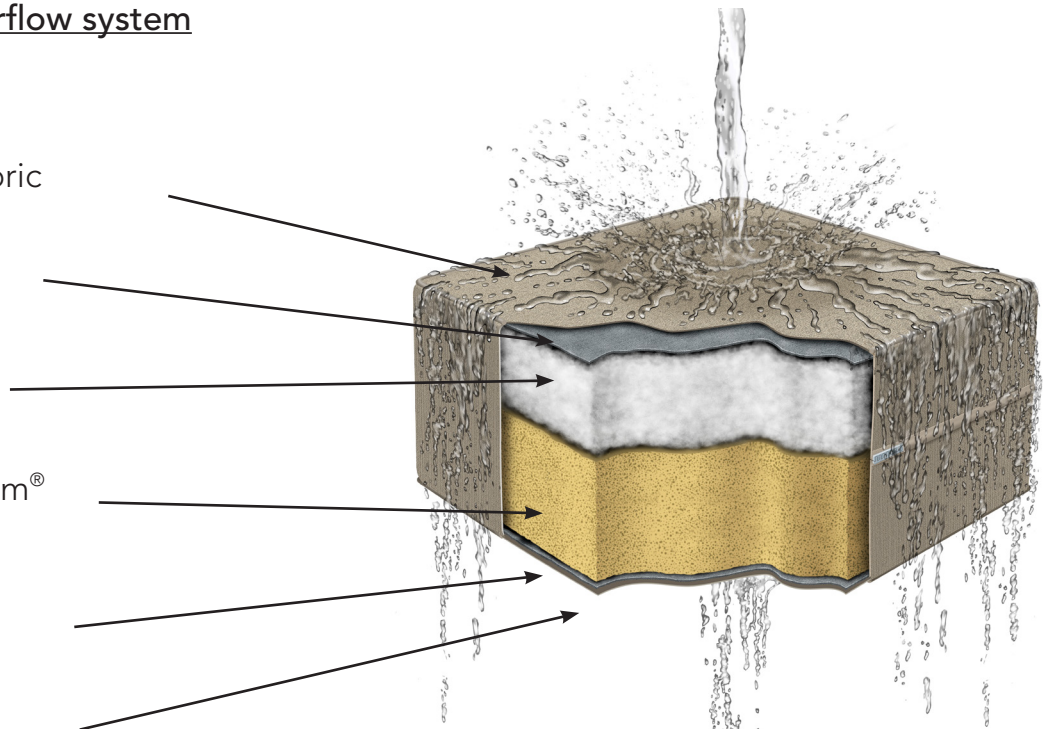
2. Inner cover

3. Padding

4. QuickDryFoam®

5. Drainage

6. Ventilation



Construction of Cane-line Airflow cushion



## 4. Fabrics

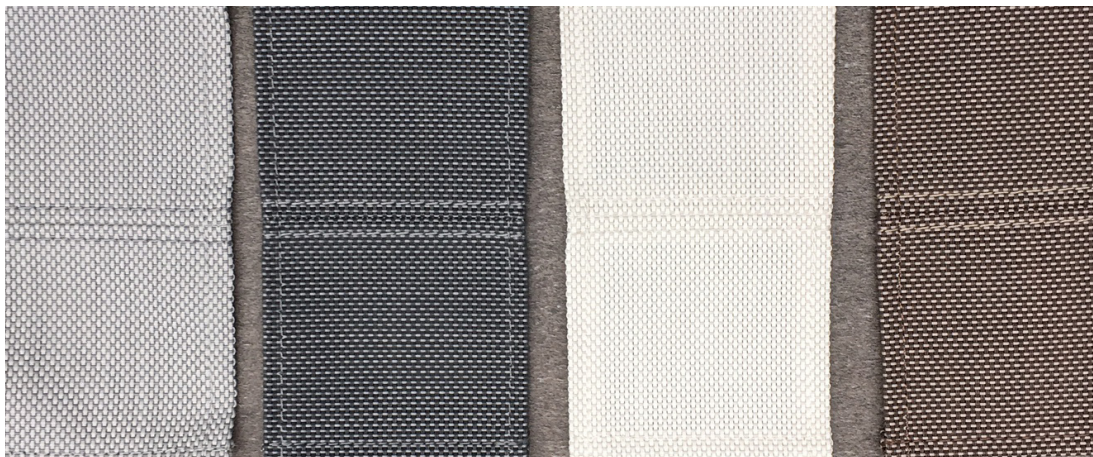
### 4.1 Cane-line Natté

- Developed for Cane-line in cooperation with Sunbrella.
- The manufacturer of Sunbrella fabric is one of the leading manufacturers of outdoor textiles and fabrics for the auto, marine and furniture industries.
- Dyed acrylic fibers in the colours: brown, white, grey and black.
- Lightfastness level 7-8 (Scale: 1-8).
- The fabric is nano-treated during production, which means that it has an impregnation against moisture and dirt throughout.
- In the event of spots we suggest that you try out spot cleaning to begin with. More information regarding this can be found at [www.cane-line.com/pages/maintenance-guides](http://www.cane-line.com/pages/maintenance-guides).
- Washable at 40 degrees Celcius. New impregnation recommended (i.e textile impregnation from Guardian).
- Ironing is recommended only with settings that are suitable for synthetic fabrics.



### 4.2 Cane-line Tex®

- Coated polyester material in the colours: brown, white and grey. Most often used as a frame cover for several of our outdoor products, but also used as a cushion cover.
- Closed material.
- Water resistant.
- Lightfastness level 7-8 (Scale: 1-8).
- Easy to clean.
- Durable.
- Elastic.
- Memory function – keeps the shape without losing strength. (for demonstrative purposes: try to curl the fabric in your hands and let it straighten back in to shape).





## 4. Fabrics

### 4.3 Cane-line AirTouch

- Developed for Cane-line in cooperation with Sunbrella.
- Solution dyed.
- Memory function.
- Non absorbent surface structure.
- UV resistant 7-8 (scale 1-8).
- A mix between dyed acrylic fibers and Tex material, which gives the fabric the best of two worlds – the strength of Tex combined with the softness of the acrylic fibers. Comes in the colour light grey. Airtouch has the softness of a normal indoor fabric – does however withstand all weather and UV exposure.
- Machine washable at 40 degrees Celsius.
- No impregnation needed after cleaning due to the nano-technology where the protection is incorporated in the fiber during the ejection process.
- Suppleness, softness and strength make the fabric suitable for all year all weather outdoor upholstery.
- Memory function – keeps the shape without losing strength. (for demonstrative purposes: try to curl the fabric in your hands and let it straighten back into shape).
- 100% solution dyed acrylic fabric and is produced exclusively for Cane-line.
- Airtouch is always supplied in combination with QuickDryFoam and Airflow system – Maximum drainage and air circulation.
- Withstand jet pressure cleaning.





## 4. Fabrics

### 4.4 Cane-line SoftTouch®

- Developed for Cane-line in cooperation with Sunbrella.
- Solution dyed.
- UV resistant 7-8 (scale 1-8).
- A mix between dyed acrylic fibers and Tex material, which gives the fabric the best of two worlds – the strength of Tex combined with the softness of the acrylic fibers. Comes in the colours: brown and grey.
- Non absorbent surface structure.
- Machine washable at 40 degrees Celsius.
- No impregnation needed after cleaning due to the nano-technology where the protection is incorporated in the fiber during the ejection process.
- Suppleness, softness and strength makes the fabric suitable for all year all weather outdoor upholstery.
- Memory function – keeps the shape without losing strength. (for demonstrative purposes: try to curl the fabric in your hands and let it straighten back into shape).
- Withstand jet pressure cleaning.



### 4.5 Selected PP (Divine)

- 100% Polypropylene.
- UV-resistant 7-8 (scale 1-8).
- Solution dyed.
- Easy to clean, as well as detachable cover.
- All throws are machine washable at 30°C.
- Handcrafted material.
- Perfect for outdoor and indoor use.
- Withstand jet pressure cleaning.



## 5. Foam

### 1. 35 kg cold foam with memory

- High density – high level of sitting comfort.
- Dense foam slowly absorbs water.
- Drains and dries slowly.
- Remains dimensionally stable and regains its shape, even after hard pressure.

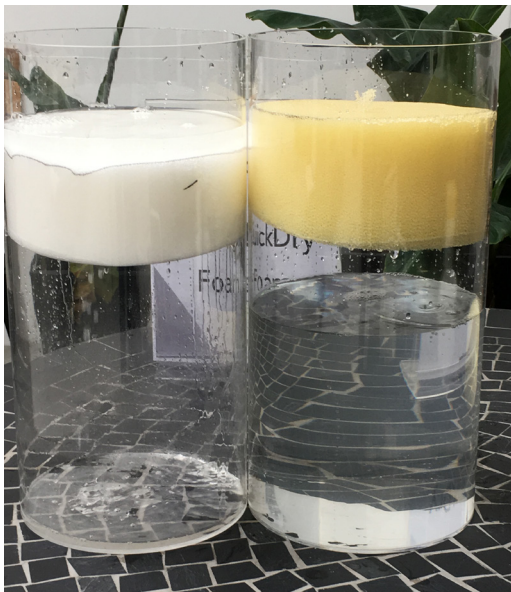
#### 5.1 QuickDryFoam®

- Open structure.
- Drains and dries quickly.
- Strong membranes, that ensure the same strength and comfort as 35 kg cold foam.
- Anti-bacterial material is cast and integrated into the foam, which protects the cushions against mold and fungus growth, and also ensures that the foam is able to withstand continuous moisture.

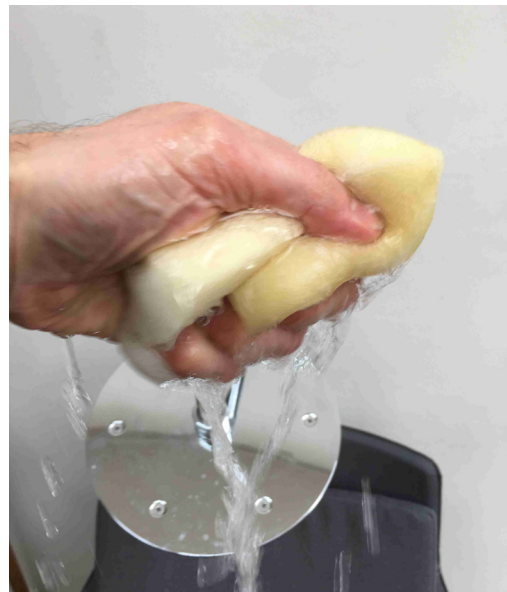
Typical competing foam from cheaper alternative products are typically characterized by:

#### 1. Poor carrying capacity – often no more than 10 kg regular foam without memory. The foam core is characterized by:

- Deforms and collapses.
- No shape adaption of foam and foam core.
- Poor drainage and high water intake levels.
- No "sandwich" construction, that ensures maximum levels of comfort and carrying capacity.
- The comfort level drastically vanishes after usage in relatively short time of period.



QuickDryFoam® (to the right) drains the water very fast. Cold foam contains the water longer and drains slowly.



A cheap foam sucks in a lot of water drains very slowly and maximize the risk of fungus attacks.



## 6. Frame & Strength

Here is some information about the differences between a Cane-line frame and the frame of a typical alternative product in a cheaper price segment.

### Frame thickness

Cane-line chairs that are made of steel frames are constructed with a thickness of 2 mm. A similar alternative product is constructed with a frame thickness of 1 mm steel.

### MY alloy thickness

Cane-line works with an alloy thickness of 100-125 MY, which corresponds to the coating and galvanizing that protects the steel.

A similar alternative product is constructed with 8-15 MY.

Cane-line thus works with an alloy thickness that is up to 8-10 times stronger than similar alternatives in a cheaper price range.

During a typical year between 3-4 MY decomposes in areas with regular salt levels. In coastal areas, between 6-8 MY decomposes.

In other words, the wrong chair in the wrong environment can decompose within 1 ½ - 2 years.

## 7. Galvanizing

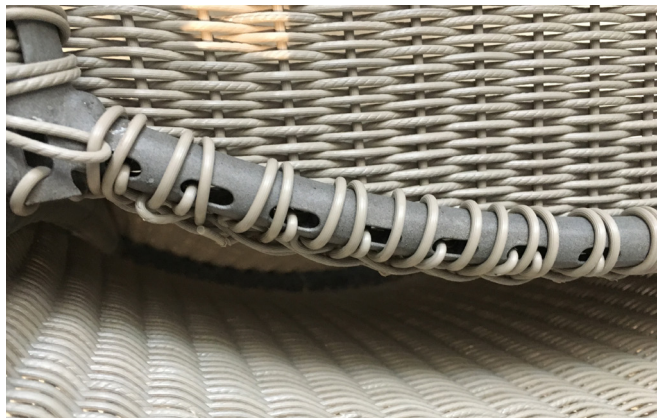
There is a big difference in how the frame is protected.

### 7.1 Hot-dip galvanizing

Cane-line hot-dip galvanizes all steel frames. In addition to this a lot of our steel frames are perforated with the purpose of optimizing the galvanization.

“Hot dip” galvanization involves the steel frame being immersed in liquid zinc. This creates a layer of protection on the steel frame that is known as galvanization. The perforated frames have the added benefit of the galvanization working on both the outer surface and inner parts of the steel frame. This protects the whole frame. The exact same technique is used on outdoor lampposts.

Hot-dip galvanization also has one more added benefit of automatically healing or “closing up” minor scratches, so that rust is avoided.



Hot-dip galvanized perforated steel frame that controls the weave so that beautiful details can be expressed in the surface of the frame.



## 7. Galvanizing

### 7.2 Electro galvanization

The usual way that outdoor furniture is galvanized by, is by using the technique of electro galvanization. This method involves the steel frame being immersed into a "tub" with a zinc block mounted on. The tub gets an infusion of electricity that releases the zinc ions, which bind on the outer surface of the steel.

This particular galvanization method often results in the development of rust. Sometimes even before the product hits the stores, while it is still in the (often humid) shipping containers on its way from Asia to Europe.

#### Strength

Besides the above mentioned, all Cane-line frames also undergo a "360 degree welding" or full welding of steel and profiles everywhere it makes sense, and where there is a particular need for strength.

Cheaper alternative products often have undergone much simpler spot welding, that does not ensure the same level of strength and durability, and also to a higher extent allows moisture to enter the frame, which in the end can cause rust and decomposition.

A great way to visualize the strength differences between a Cane-line chair and a competing chair is by bringing up the stability and strength of the steel frame, when sitting in the chair and flipping it backwards. The Cane-line chair, or the steel frame, is 100% directionally stable.



Electro galvanized steel risks rusting from within before it decomposes from the outer surface.

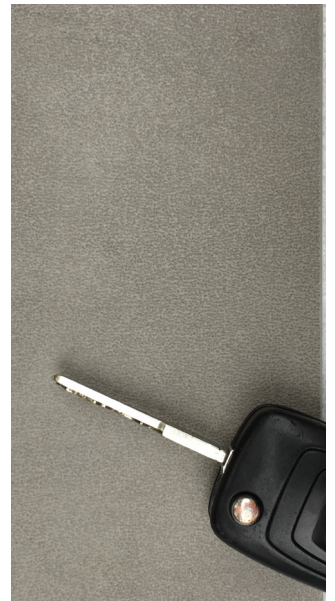


Simple spot welding.

## 8. Table tops

### 8.1 Ceramic tops

- Burnt at 1000 degrees Celcius.
- Layer construction gives strength.
- Scratch proof – demonstrate using the key test.
- Can stand outside all year round.
- Maintain with water and soap and rinse with regular water.
- Available in concrete, graphite and basalt.
- Withstands jet pressure cleaning.



Ceramic table tops



Ceramic tiles

**IMPORTANT:** Only move around table tops vertically, as they can easily crack. Also be careful not to shock the edges unnecessarily.



## 8. Table tops

### 8.2 Compact laminate

- The core construction is made of pressurized paper and resin before the laminate is applied on the undersurface.
- The tops are compressed individually.
- Laminated tops come in grey and white, and always come with a black edge.
- Can stand out all year round.
- Maintain with water and soap. Black edges are maintained and treated with linseed oil.
- Withstands jet pressure cleaning.



### 8.3 Travertin

- Natural material with concrete joints.
- Travertine is coated at delivery. Can be treated with linseed oil when needed.
- Joints do not withstand hard frost, which is why we recommend storing in a dry and freezeproof location.
- Maintain with water and soap and rinse with regular water.
- Coating is recommended once a year.



Travertin

## 8. Table tops

### 8.4 Cane-line HI-Core

- Cane-line HI-Core is a special developed strong weather resistant surface material, which is composed by solution dyed acrylic material – produced under extreme pressure.
- The solution dyed acrylic material offers extreme strenght and durability.
- The surface is polished and offers a silk, smooth and soft sealed surface, which prevents dust and dirt from entering into the material.
- Can be polished to remove scratches – like teak wood.





## 9. Maintenance & storage

### 9.1 Maintenance

#### Generally

Wash with water and soap 3 times during the season (spring – summer - fall) – or when needed.

The use of covers are recommended, with regards to the maintenance, cleaning and ultimately the overall durability of the product. Be aware that air circulation within the cover is important in order to avoid moisture and eventually mold occurrences. This is easiest achieved by making sure that there is space between the edges of the cover and the ground, so that air can enter and circulate from below.



#### Stainless parts

Wiped in acid-free oil, that can be bought in regular DIY shops. The oil prevents and cleanses any possible minor occurrences of rust, which is a natural phenomenon that can occur everywhere.

### 9.2 Storage

Cushions are always stored indoor during winter season, whether in a basement, garage or a closed shed. It eases the maintenance and improves the durability of the cushions, which would otherwise be exposed to the winter dirt elements.

### 9.3 Cover

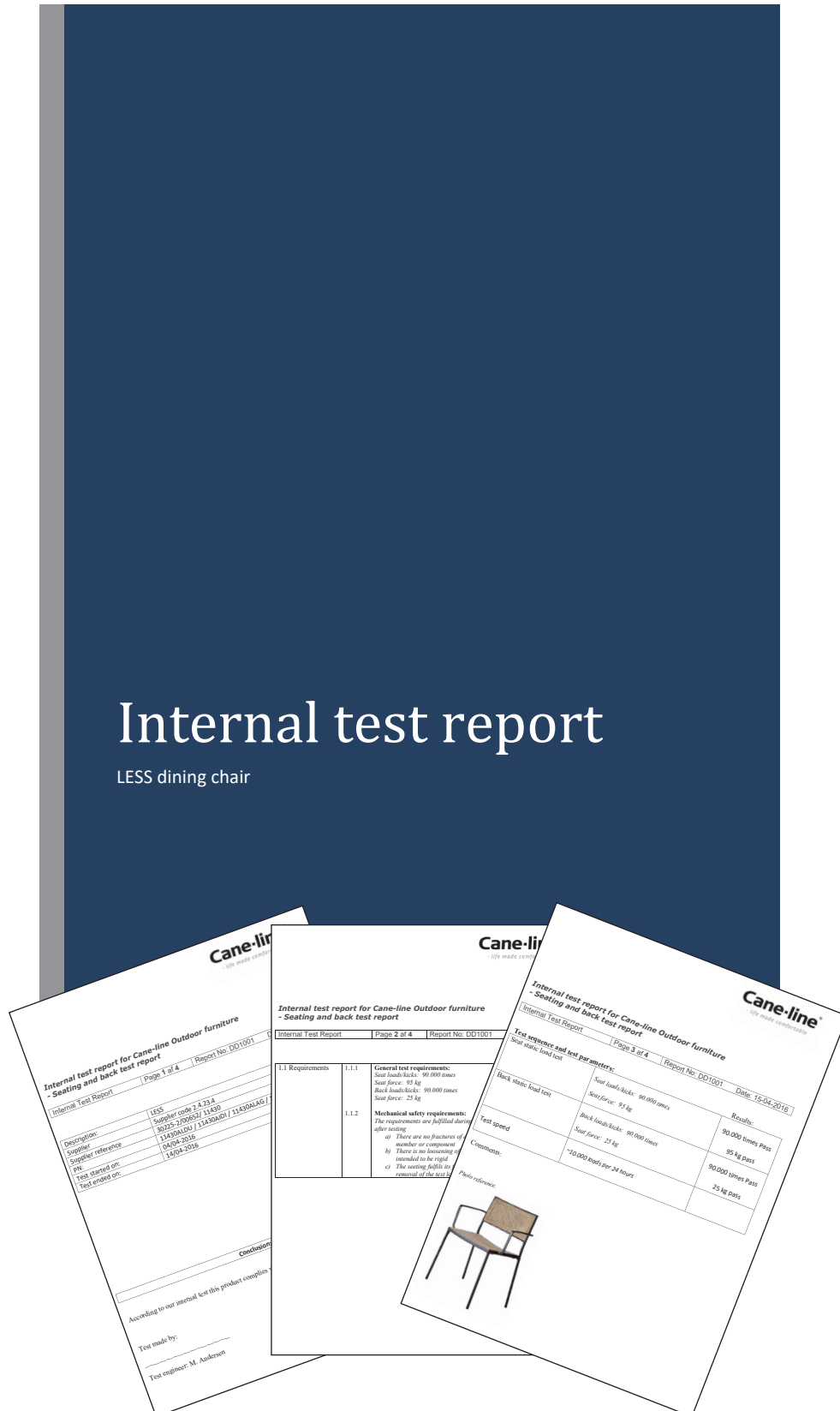
It is recommended that all furniture is kept with covers during periods of no usage. During winter, the cushions should be taken indoor and the furniture covered in order to ease the maintenance and improve the durability of the furniture.



If you would like to ensure minimal maintenance and prolonged durability of your furniture, we do recommend you to invest in one of our water repellent furniture covers.

## 10. Cane-line product test certificates

All products are tested according to server contacts standards on all parameters. Tests can be requested at any time.





# Cane-line Portal

Universe of inspiration, design focus, high resolution images, 2D files, 3D files, technical sheets, electronic catalogues, press releases, marketing and manuals.  
Go to "For professionals" at Cane-line.com.

## Images & drawings

You find images of all products in high and low resolution. In addition to inspiring lifestyle images, you will also find clippings of all products so you can easily integrate all products in your projects. 3D files in DWG and MAX format so you can import the data directly into your 3D program.



## Manuals

Find information about maintenance, storing and cleaning of the different materials and products. Also find technical sheets covering every product serie. All manuals can be downloaded and printed.



## Press releases

Our press kits are available on our portal and include press releases in DK, DE and UK including related photos. In this way we can support you in your contact with the press as well as inspire you with descriptions and photos of our design news.



## Marketing materials

To support your marketing and presentations, you will find Cane-line logos, flyers, catalogues and films etc. Our catalogues are electronic and can be browsed online. They are also available as PDF for easy download or for sending as an e-mail attachment.







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**Cane-line®**  
- life made comfortable