

S E F A R



Tenara®

Architecture Fabrics

*Enduring Aesthetics for
Long-Lasting Structures*

lights
brilliantly

folds
beautifully

lasts
ultimately



SEFAR® Architecture TENARA® Fabric For stunning designs that last

SEFAR® Architecture TENARA® Fabric offers an unprecedented combination of attractive design *and* durability that can extend the usefulness of any outdoor space.

Unlike architectural fabrics made from PVC or coated fiberglass, SEFAR® Architecture TENARA® Fabric is 100 percent fluoropolymer. This high-strength PTFE fabric is coated with a flexible fluoropolymer rendering the entire composite waterproof and weldable.

Our unique patented, double-coated technology produces a fabric with high light transmission, great flexibility and long life.

Because it stands up to repeated flexing and folding, SEFAR® Architecture TENARA® Fabric is perfect for both retractable and non-retractable permanent structures as a load-bearing architectural element.



S E F A R

Tenara®

Architecture Fabrics

Radiant beauty

SEFAR® Architecture TENARA® Fabric helps create breathtaking designs, capturing and filtering more natural light than other textile building materials, making it ideal for outdoor projects in any climate.

Available in varying ranges of light transmission

SEFAR® Architecture TENARA® Fabric expands the use of outdoor space during inclement weather, thus realizing the full potential and possibilities of architectural fabric as a protective design element.

At night, something dramatic happens.

SEFAR® Architecture TENARA® Fabric reacts brilliantly to artificial lighting, transforming structures into eye-catching landmarks bathed in bright, colorful light.

These fabrics are also available in long-lasting custom colors that allow for signature designs and unique lighting techniques, providing a limitless palette of color and style.



PROJECT: Castle Weitra, Retractable Stationary Umbrellas

LOCATION: Weitra, Austria

DESIGN: Claus Markisen

FABRICATOR: Koch Membranen

PRODUCT: Tenara 4T40HF



lights *brilliantly*

*SEFAR® Architecture TENARA® Fabric endures
extreme temperatures and shows highly
favorable fire test results.*



folds *beautifully*



Lasting flexibility

As a woven textile, SEFAR® Architecture TENARA® Fabric folds and drapes in smooth, flowing designs, making it particularly well-suited for permanent retractable structures.

Its flexibility and foldability also make SEFAR® Architecture TENARA® Fabric the ideal choice for designs that require low-profile storage. And unlike coated fiberglass or PVC fabrics, SEFAR® Architecture TENARA® Fabric can flex and fold repeatedly without losing strength or cracking with age, and it is mold- and mildew-resistant, so it lasts longer even when stored.



*Environmentally friendly
SEFAR® Architecture
TENARA® Fabric contains
no chlorine, plasticizers,
stabilizers or catalysts,
nor does it contribute to
ozone depletion. It is also
completely recyclable.*

PROJECT:
Festungsarena Kufstein,
Retractable Roof

LOCATION:
Kufstein, Austria

DESIGN:
Kugel + Rein Architects and
Engineers

FABRICATOR: Hightex

PRODUCT: Tenara 4T40HF





lasts
ultimately

Superior durability

Because SEFAR® Architecture TENARA® Fabric maintains its beauty and flexibility over time, designs created today will look just as beautiful years from now.

At the heart of SEFAR® Architecture TENARA® Fabric is Gore's proprietary, high-strength expanded polytetrafluoroethylene (ePTFE) technology*. As an architectural fabric made exclusively from fluoropolymers, SEFAR® Architecture TENARA® Fabric remains unaffected by damaging UV rays, acid rain, salt water and other environmental elements.

SEFAR® Architecture TENARA® Fabric is two to four times more tear-resistant than other architectural fabrics and can withstand repeated folding and flexing. What's more, it's naturally stain-resistant and cleans easily.

*PTFE, or polytetrafluoroethylene, is the most inert polymer known. Its bonds are exceptionally strong and offer exceptional resistance to outside forces and extreme temperatures that can harm ordinary architectural fabrics.



PROJECT: Hypo Bank, Retractable Atrium Canopy

LOCATION: Munich, Germany

DESIGN: Canali Botti

FABRICATOR: Clauss Markisen

Sefar AG stands behind the quality and durability of its architectural fabrics with a full 15-year warranty.

Please contact Sefar AG for complete warranty terms and conditions.

Environmental Impact

Material

SEFAR® Architecture TENARA® Fabric is 100 percent fluoropolymer with a backbone of high tenacity PTFE yarn. It has the following properties:

- free of chlorine
- no contribution to ozone depletion unlike chlorofluorocarbons (CFCs)
- no contribution to the formation of chloro/bromo-dioxins or furans (“dioxins”)
- free of plastisizers
- free of stabilizers
- free of catalysts

SEFAR® Architecture TENARA® Fabric is therefore harmless to the skin and completely odor-free.

Lifetime

Due to their extremely strong carbon/fluorine bonds, fluoropolymers have unique properties: excellent chemical resistance and high resistance against extreme temperatures and UV radiation.

These properties make fluoropolymer-based products extremely durable with long service lives, which has a direct positive influence on our environment.

When a product performs for an extended period of time, the ecological balance of that product is positive to the environment. For example, if a product provides a function for twice the time of an alternative product, the negative impact on the environment is significantly reduced.

Recycling and Disposal

The ability to recycle and reuse a material is beneficial to our environment and is normally preferred as compared to disposal in a landfill or incinerator. Since SEFAR® Architecture TENARA® Fabric is 100 percent fluoropolymer and does not degrade during its useful life, it can be reprocessed and used in other applications. Sefar accepts returned uncontaminated SEFAR® Architecture TENARA® Fabric resulting from fabrication scrap or from architectural applications.

PTFE is not classified as hazardous waste in Europe or in the USA.

In a landfill, SEFAR® Architecture TENARA® Fabric is completely inert and does not degrade biologically. Consequently, it cannot contribute to hazardous leachates or gases.

In an incineration plant, the materials contained within SEFAR® Architecture TENARA® Fabric are primarily converted to CO₂ and hydrofluoric acid (HF). The scrubbers in a state-of-the-art municipal incineration plant, that is capable of handling halogenated materials can capture the HF. The resulting HF emissions are far below levels that can harm people or the environment.

About Sefar

Sefar’s history can be traced back to a Swiss company which was founded as long ago as 1830 and has concentrated from the very beginning entirely on woven textiles for industrial use. Over the past 180 years, Sefar has grown into the world’s leading producer of precision-woven fabrics.

Sefar is a leading manufacturer of technical textiles with a global presence with subsidiaries in 21 countries and representations in another 75 countries.

Working alongside experienced architects, lighting engineers and polymer experts, Sefar has developed a new generation of fabrics and installation solutions. Particularly where light and sound are concerned, these textile solutions display qualities which other materials cannot match.

The background of the entire page is a close-up photograph of white fabric, possibly a tent or a large sheet, with soft folds and shadows. A large, semi-transparent blue abstract shape is overlaid on the left and top portions of the image, creating a modern, architectural feel.

To learn more about
SEFAR® Architecture TENARA® Fabric,
visit www.sefar.com or www.tenarafabrics.com

S E F A R



Tenara®

Architecture Fabrics

TENARA® is a registered trademark of W. L. Gore & Associates, Inc.
Copyrighted picture: W.L. Gore & Associates, Inc.

Sefar AG • Architecture Solutions • Hinterbissastrasse 12 • 9410 Heiden • Switzerland
Phone +41 (0)71 898 51 04 • Fax +41 (0)71 898 58 71 • info@sefararchitecture.com
www.sefar.com • www.tenarafabrics.com

visit: www.sefar.com or www.tenarafabrics.com