Interior Acoustic Solutions

Gerriets

CONTENTS

[INTERIOR - OFFICE - PUBLIC SPACE] 5

BACKED BY SCIENCE 6

[SOUND CURTAIN OFFICE] 9

CURTAIN SYSTEM 10
REFERENCES 13

[TRUMPF 95 OFFICE] 41

TRACK SYSTEM 42
REFERENCES 44

[ABSORBER CS] 47

BLACK OUT ACOUSTIC FABRIC 48
REFERENCES 51

[ABSORBER LIGHT] 55

TRANSLUCENT ACOUSTIC FABRIC 56
REFERENCES 59

[THE COMPANY] 66

//Photo: Sikla

[INTERIOR - OFFICE - PUBLIC SPACE]

Acoustic control has become an increasingly important issue. Whether in the private, public or professional sector, the modern work environment can require the separation of different work spaces or the creation of enclosed meeting areas. Our Sound Curtain OFFICE combines the effectiveness, flexibility, aesthetics and design to meet the challenges and demands of modern work spaces.

For use in both small and large windows, we offer ABSORBER LIGHT – a uniquely developed translucent and highly absorbent semi-sheer fabric which utilises thousands of micro perforations. ABSORBER LIGHT has an exceptional absorption level that reduces reverberation times, ensuring optimal speech intelligibility and, at the same time, adds a degree of warmth to a room.

When both excellent sound absorption and room darkening are required, ABSORBER CS is the perfect choice.

Gerriets acoustic solutions have won a number of distinguished awards including the 'ARCHITECTURE + OFFICE 2016 Innovation Award'.

GERRIETS ACOUSTICS – We have the right solution for any space!

BACKED BY SCIENCE

Optimal support during the planning phase

Room acoustics are complex. Having reliable measurement data and technical support throughout construction are key. All measurement data provided by Gerriets Acoustics originates from well-known testing laboratories, and all fabrics have been measured and certified under neutral conditions. Professional consultation during construction and measurements on site can be carried out by Gerriets' in-house acousticians–so every project will be a success!

Perfect room acoustics: additional benefit for every room

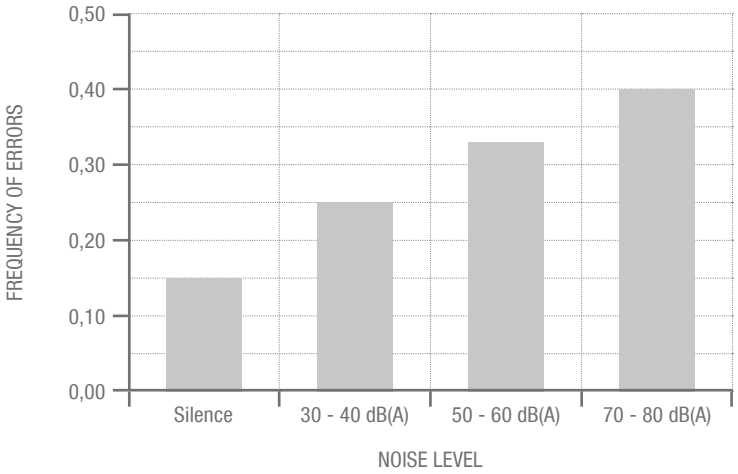
Noise pollution is a large disruptive factor, especially in daily office life. Technically, noise is defined as unwanted sound which affects health, decreases performance levels and impairs communication. Taking these factors into consideration, room acoustics should be part of every planning process to reduce stress levels and counteract long-term illnesses of employees. Well-suited acoustic design can improve speech intelligibility as well as lower noise levels, therefore reducing overall stress levels.

//Impedance tube for acoustical measurements

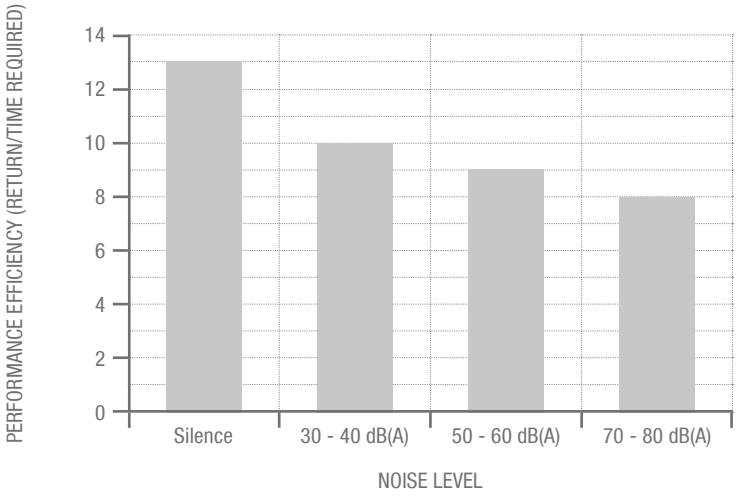
Reducing the noise level in offices

Unlike in machine shops or workshops, noise levels in offices normally aren't harmful to the human ear. However, permanent disruptive noise can adversely affect both body and mind. Stress hormone levels, blood pressure and heart rate clearly increase when exposed to noise. Therefore, a workplace ordinance was established in Germany which states that noise pollution should be minimised at office workstations to improve speech intelligibility and concentration. [1)]

Frequency of errors in the work of administrative staff depending on the noise level [2) 3)]



Performance efficiency (Return/time required) for processing of administrative tasks depending on the noise level [2) 3)]



1) German workplace ordinance from August 12th, 2004 (BGBl. I s. 2179), last amended by article 1 V from November 13th, 2016 I 2681.
2) Schönpflug & Schulz, 1979.
3) Noise assessment – office workplaces, Dortmund 1996, German federal institute for occupational safety and occupational medicine (BAuA).

[SOUND CURTAIN OFFICE]

"Touch and Divide." With the assistance of our Sound Curtain OFFICE, separate rooms and workspaces can be created at the push of a button. Numerous options are available ranging from 3 to 7 layer curtains with varying degrees of sound transmission as well as a number of fabrics and colour options ranging from solids to patterns, even custom printing. Choice of manual or fully automated operation is available. All Sound Curtain OFFICE systems are expertly tailored to your individual requirements.

[SOUND CURTAIN OFFICE]

CURTAIN SYSTEM

Our Sound Curtain OFFICE is available in three standard versions: 3, 5, and 7 layers (individual sound certificates available). To increase the sound absorption and reduce the sound transmission of the standard versions, additional layers of fabric can be added later.

For the outside layers of the curtain, we offer several fabric choices. Our stage velvet ALICANTE and WOOLSERGE OFFICE are two of the most popular fabrics. Stage velvet ALICANTE is made from Trevira CS which is inherently flame retardant, sound absorbent, odourless and washable. WOOLSERGE OFFICE, available in several colours, is a popular choice in office environments as it offers a modern clean appearance with the added benefit of excellent sound absorbency. For a more custom look or art inspired curtain, a variety of other Sound Curtain fabrics suitable for digital printing are available. The outer layers are typically made with an extra 5-10% of fullness to produce a visual undulation we call "wave optic." Not only does the wave optic add to its aesthetic appeal, it also enhances sound absorbency of the curtain.

The inner layers consist of inherently flame retardant, sound absorbent, odourless and washable materials.

Our Sound Curtain OFFICE is used in conjunction with our TRUMPF 95 OFFICE track system. It can be operated manually or automatically (see p. 41).

Advantages of the System

- Effective and flexible
- Separation of work areas
- Conference islands
- Think tanks
- Quiet zones
- Sound isolation up to 26 dB
- 3-7 layered design
- Number of layers can be increased
- Sound certificates available
- Flame retardant
- Custom designed outer layer according to client requirements
- Automated if required
- Remote control available

INNOVATION AWARD
ARCHITECTURE + OFFICE
Special Distinction

Sound reduction factor according to test certificate:

- 3 layer version up to ~11 dB.
- 5 layer version up to ~13 dB.
- 7 layer version up to ~16 dB.
- 12 layer version up to ~26 dB.*

Fabrication method:

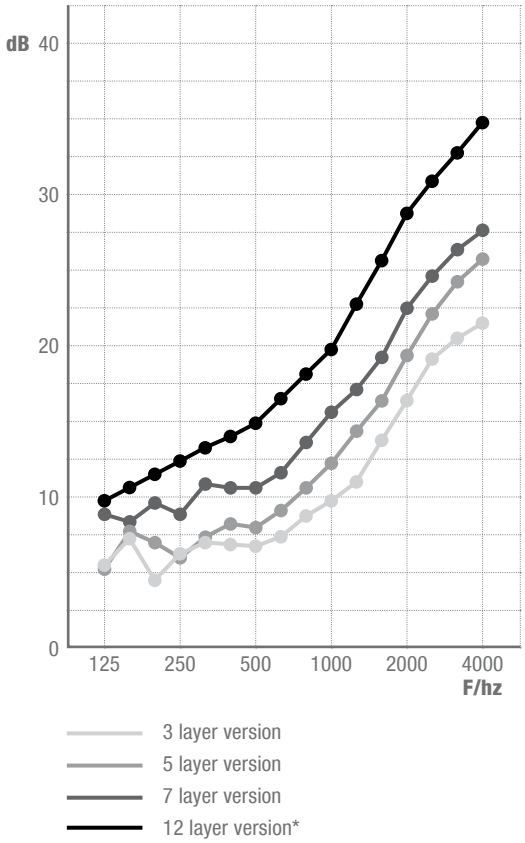
3 layer version:
Front side with wave optic.
Middle layer: 1 x sound reflecting.
Back side with wave optic.

5 layer version:
Front side with wave optic.
Middle layer:
2 x sound absorbing, 1 x sound reflecting.
Back side with wave optic.

7 layer version:
Front side with wave optic.
Middle layer:
3 x sound absorbing, 2 x sound reflecting.
Back side with wave optic.

Additional layers upon request:
To increase the sound absorbency, additional middle layers can be added. For example, a 12-layer Sound Curtain achieves an on-site measured sound reduction of 26 dB (see p. 32 for more details).

Sound reduction factor



Values tested at independent lab in accordance to DIN EN ISO 140
Sound reduction values tested in accordance to DIN ISO 717-1

*On-site measured

//Photo: Sikla

[SOUND CURTAIN OFFICE]

REFERENCES

With the help of the innovative Sound Curtain OFFICE, a versatile utilisation of rooms is possible. Conference islands, quiet zones, think tanks and separated work areas – the applications are limited only to your imagination!

Ottobock HealthCare

Description

- Visual and acoustic separation of conference rooms.
- Manufacture and installation of two 7-layer Sound Curtain OFFICE drapes with wave optic. Additionally, three single layer privacy curtains were made to match the outer layer of the Sound Curtains for other conference rooms.
- Outer layers of Sound Curtains OFFICE and privacy curtains were made from WOOLSERGE OFFICE custom dyed in brown-grey.
- Installed on a combination of TRUMPF and suspended TRUMPF 95 OFFICE walk along track systems.

Architect

Page Southerland Page, Inc.

Client

Ottobock HealthCare LP

Location

Austin, TX / USA

//Photo: Casey Dunn

Kabelwerke Brugg AG

Description

- Flexible separation and acoustic optimisation of training rooms.
- Manufacture and installation of two 3-layer Sound Curtain OFFICE drapes with wave optic; can be set at a variety of different positions.
- Outer layer custom designed to client requirements.
- Installed on TRUMPF 95 OFFICE track system with FRICTION DRIVE; mounted within the air conditioning system in the ceiling.

Planner

Witzig the Office Company

Client

Kabelwerke Brugg AG

Location

Brugg / Switzerland

//Photo: Photography Eduardo Perez

Leoni AG

Description

- Visual and acoustic separation of conference islands and think tanks.
- Manufacture and installation of two 5-layer and three 3-layer Sound Curtain OFFICE drapes with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in different colours.
- Installation of 5-layer curtains on TRUMPF 95 OFFICE track systems with FRICTION-DRIVE; installation of 3-layer curtains on TRUMPF 95 OFFICE walk along tracks.

Architect
Blum Diez GmbH

Client
Leoni AG

Location
Kitzingen / Germany

//Photo: Photography Eduardo Perez

Eissmann Automotive Deutschland GmbH

Description

- Visual and acoustic separation of conference rooms.
- Manufacture and installation of two 3-layer Sound Curtain OFFICE drapes with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in sand.
- Installed on STUDIO walk along track due to required span.

Planner

Raumplan Handels GmbH

Client

Eissmann Automotive Germany GmbH

Location

Bad Urach / Germany

//Photo: Eissmann Automotive Deutschland GmbH

Vitra Services GmbH

Description

- Creation of an acoustically separated, transparent and visible conference island.
- Manufacture and installation of a 3-layer Sound Curtain OFFICE drape with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in light blue.
- Installed on curved TRUMPF 95 OFFICE walk along track.

Client

Vitra Services GmbH

Location

Weil am Rhein / Germany

//Photo: Photography Eduardo Perez

Sikla GmbH

Description

- Visual and acoustic separation of conference islands and think tanks.
- Manufacture and installation of several 3-layer and 7-layer Sound Curtain OFFICE drapes with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in anthracite and blue.
- Installed on TRUMPF 95 OFFICE walk along track.

Planner
Streit Service & Solution GmbH & Co. KG

Architect
Schlenker-Architekten

Client
Sikla GmbH

Location
Villingen-Schwenningen / Germany

//Photo: Sikla

Fachhochschule Münster

Description

- Visual and acoustic separation of a seminar room in the academic library for architecture, arts and design.
- Manufacture and installation of a 5-layer Sound Curtain OFFICE drape with wave optic.
- Outer layer made from SATIN CS; printed and custom designed to client requirements.
- Installed on oval curved TRUMPF walk along track.

General contractor

W. Averbeck GmbH

Architect

Planungsgemeinschaft Zauberscho(e)n und Bühler & Bühler Architecten

Client

Fachhochschule Münster

Location

Münster / Germany

//Photo: Roland Borgmann

Miller Thomson LLP

Description
- Visual and acoustic separation of meeting room within an open plan office.
- Manufacture of a 3-layer Sound Curtain OFFICE drape with wave optic; made in four separate sections.
- Outer layers of Sound Curtains were made from ALICANTE CS in light grey.
- Installed on a TRUMPF 95 OFFICE walk along track system.

Installer
Stagefab Custom Manufacturing Inc.

Architect
BVN Architecture

Client
Miller Thomson LLP

Location
Vancouver, BC / Canada

//Photo: Eric Scott Photography

Sparkassenforum Tuttlingen

Description

- Temporary spatial separation of three workspaces.
- Manufacture and installation of three 7-layer Sound Curtain OFFICE drapes with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in beige.
- Installed on curved TRUMPF 95 OFFICE walk along tracks.

Client

Sparkassenforum Tuttlingen / Kreissparkasse Tuttlingen

Location

Tuttlingen / Germany

//Photo: Brigida González

Häfele GmbH & Co. KG

-26 dB

Description

- Visual and acoustic separation of conference and training rooms.
- Manufacture and installation of one 12-layer Sound Curtain OFFICE drape with wave optic; achieves an on-site measured sound reduction factor of 26 dB; additional volume of layers according to client requirements.
- Installation of the 12-layer curtain on TRUMPF 95 OFFICE track system with FRICTION-DRIVE.
- Manufacture and installation of four 5-layer Sound Curtains OFFICE drapes with wave optic.
- Installation of 5-layer curtains on TRUMPF 95 OFFICE walk along tracks.
- All outer layers are made from WOOLSERGE OFFICE sound absorbent wool fabric; in different colours.

Architect

w | architekten

Client

Häfele GmbH & Co. KG

Location

Nagold / Germany

[TOUCH AND DIVIDE]

Take a look and be inspired!

FSM AG

Description
- Temporary spatial separation of workspaces.
- Manufacture and installation of a 7-layer Sound Curtain OFFICE drape with wave optic; can be slit in the middle and has an incorporated magnet as well as a reinforced leading edge made from a microfibre fabric.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in anthracite and light grey.
- Installed on curved TRUMPF 95 OFFICE walk along track.

Planner
Becherer Möbelwerkstätten

Client
FSM AG

Location
Kirchzarten / Germany

Perez Art Museum (PAMM)

Description

- Visual and acoustic separation of auditoriums and the museum lobby.
- Manufacture and installation of a complex layout of nine acoustic curtains with up to nine layers of fabric with an acoustic reduction of 18 dB.
- Outer layers of acoustic curtains made from a custom printed sheer chiffon.
- Installed on a combination of automated TRUMPF 95 and JOKER 95 motorised track systems, configured to seven different preset positions.

Design Architect
Herzog & de Meuron, Stefan Hoerner

Executive Architect
Handel Architects, Ryan Cole

A/V consultant
HMBA, David Harvey

Client
Miami Art Museum Foundation

Location
Miami, FL / USA

//Photo: Nick Pagliante

//Photo: Photography Eduardo Perez

[TRUMPF 95 OFFICE]

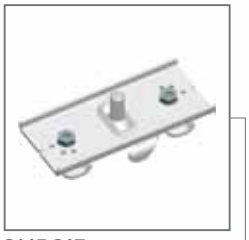
The TRUMPF 95 OFFICE track system is specifically created for use with Sound Curtain OFFICE drapes. Its small profile, elegant design, and smooth operation are the perfect complement to the curtain system.

[TRUMPF 95 OFFICE]

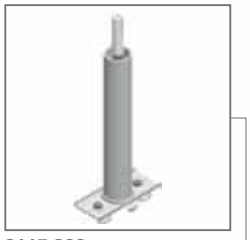
TRACK SYSTEM

The Sound Curtain OFFICE can be operated by hand or motorised with the virtually silent FRICTION-DRIVE motor.
Continuous loop systems, remote control and integration into third-party automation systems are possible.

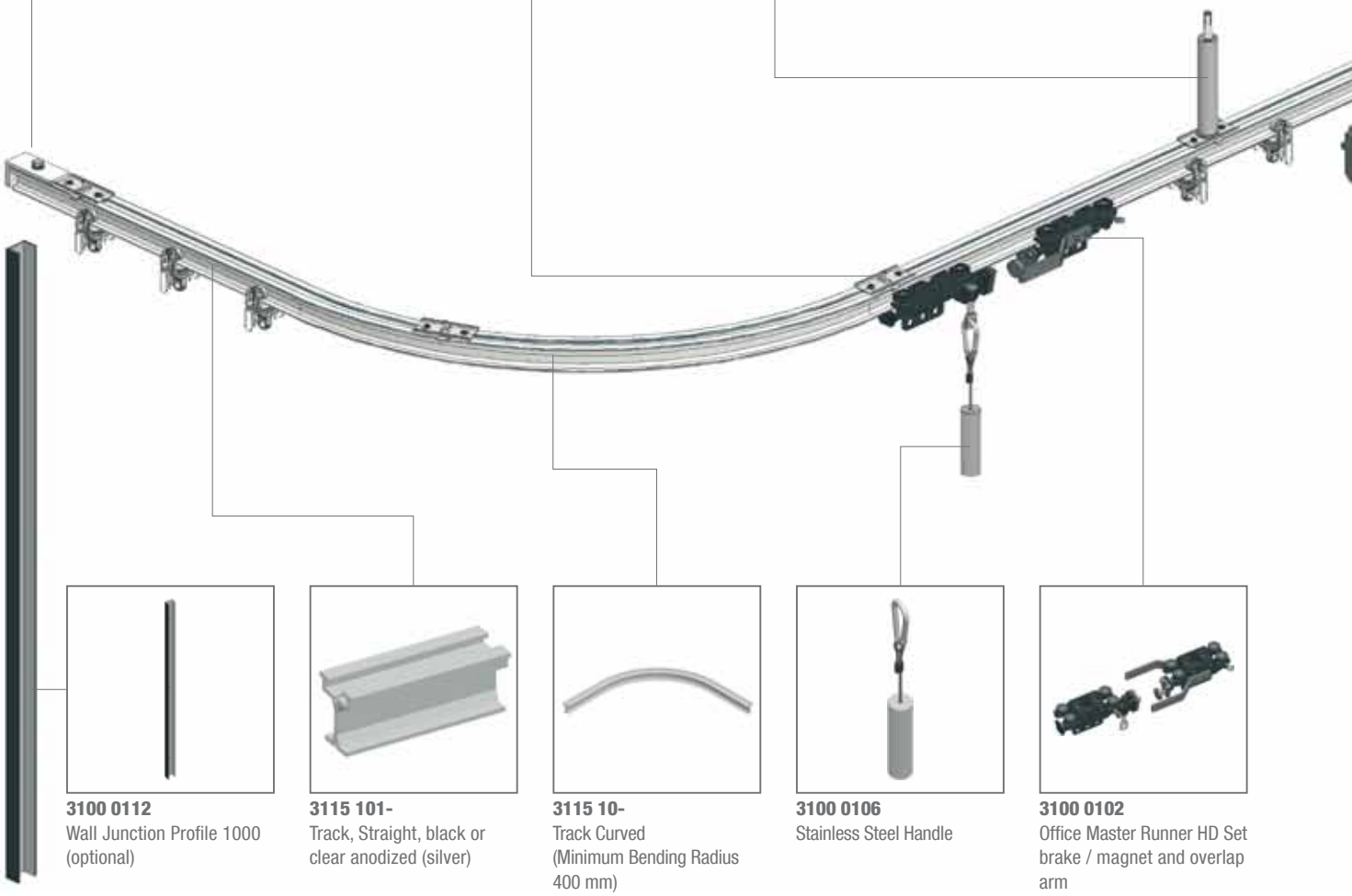
3100 011-
Office Track End Wall Bracket, black or silver



3115 817-
G-TWIST II Ceiling Mount Bracket for reinforced concrete and gypsum board



3115 809-
Office Suspension Bracket II black or silver



3100 0112
Wall Junction Profile 1000 (optional)

3115 101-
Track, Straight, black or clear anodized (silver)

3115 10-
Track Curved (Minimum Bending Radius 400 mm)

3100 0106
Stainless Steel Handle

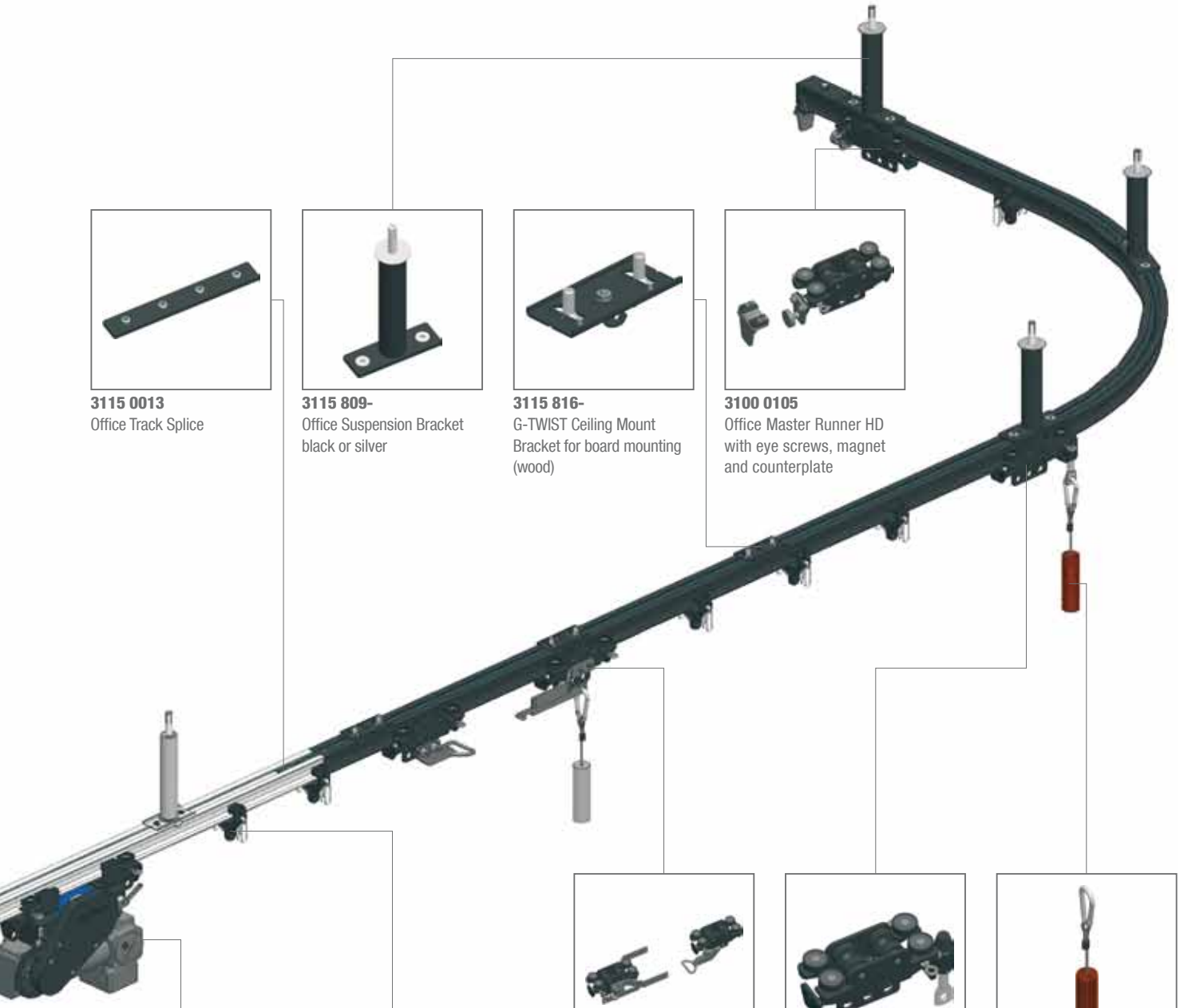
3100 0102
Office Master Runner HD Set brake / magnet and overlap arm

3115 0013
Office Track Splice

3115 809-
Office Suspension Bracket
black or silver

3115 816-
G-TWIST Ceiling Mount
Bracket for board mounting
(wood)

3100 0105
Office Master Runner HD
with eye screws, magnet
and counterplate



3100 0103
Office Master Runner HD Set
overlap arm and coupling

3100 0104
Office Master Runner HD
with eye screws and brake

3100 0107
Wooden Handle

3170 10-
OFFICE FRICTION-DRIVE

3100 0025
2-Wheel runner, black

Close up of the Sound Curtain OFFICE running along the track

Architekturbüro Schmelzle & Partner

Description

- Visual and acoustic separation of conference room.
- Manufacture and installation of two 3-layer Sound Curtain OFFICE drapes with wave optic.
- Outer layer made from WOOLSERGE OFFICE sound absorbent wool fabric in grey.
- Installed on curved TRUMPF 95 OFFICE track system with FRICTION-DRIVE; connected with the existing building control system.

Client

Architekturbüro Schmelzle & Partner mbB

Location

Hallwangen / Germany

//Photo: Schmelzle & Partner

P
Yale

[ABSORBER CS]

For a curtain which acoustically improves, darkens and optically enhances your room, the award winning and highly absorbent fabric ABSORBER CS is the right choice.
This material was developed in cooperation with musicians, theatre consultants, and an acoustic testing institute to efficiently absorb sound.

[ABSORBER CS]

BLACK OUT ACOUSTIC FABRIC

Its exceptionally high density and weight of approx. 560 g/m² (16.51 oz/yd²) earned ABSORBER CS a class C acoustic absorption rating, which distinguishes this fabric as highly sound absorbent. The heavy fabric is extremely robust and stable, yet hangs soft and drapes beautifully.

ABSORBER CS is an inherently flame retardant alternative to classic wool fabrics and is recommended for rooms that need to be acoustically optimised and darkened.

ABSORBER CS has been acoustically tested in four standard applications (see next page). Customised options are available upon request.

Material Description

- 100 % Trevira CS.
- Inherently flame retardant.
- Flame retardant standards: DIN 4102 B1, M1, DIN EN 13501-1, NFPA 701.
- Colour: black.
- Minimum quantity for custom dyed colours approx. 200 rm (220 yds).
- Width: 180 cm (71 in).
- Weight: 560 g/m² (16.51 oz/yd²).
- Piece lengths approx. 40 and 50 rm (43 and 54 yds).
- Acoustic absorption values per certificate according to DIN EN ISO 354: $\alpha w = 0{,}65\text{-}0{,}90$.
- Acoustic absorption class: A-C.
- Flow resistance according to DIN EN 29053: Rs = approx. 1.380 Pa s/m.

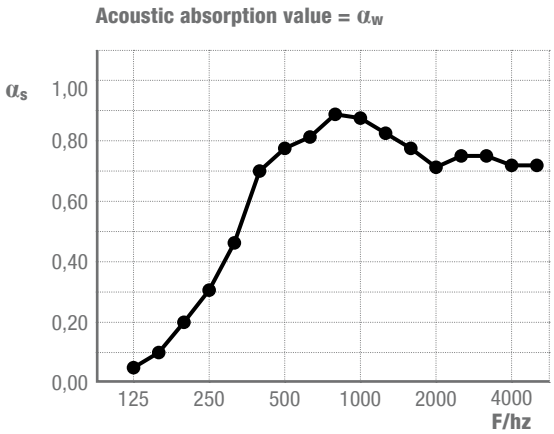
trevira® CS FABRIC CREATIVIY COMPETITION Gerriets GmbH: ABSORBER CS 2017

Acoustic absorption as measured in reverberation chamber

Application 1

- Evenly hung flat panel with no fullness.
- Mode of installation: G-100 according DIN EN ISO 354.
- Distance from wall: 100 mm (4 in).

Acoustic absorption value: $\alpha_W = 0{,}65$
Acoustic absorption class: C

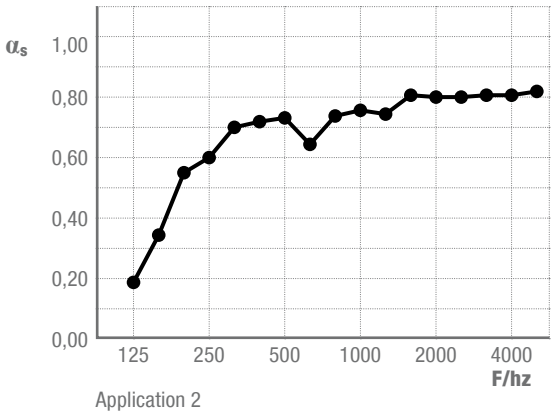


Application 1

Application 2

- Evenly hung flat panel with no fullness.
- Mode of installation G-290 according DIN EN ISO 354.
- Distance from wall: 290 mm (12 in).

Acoustic absorption value: $\alpha_W = 0{,}75$
Acoustic absorption class: C

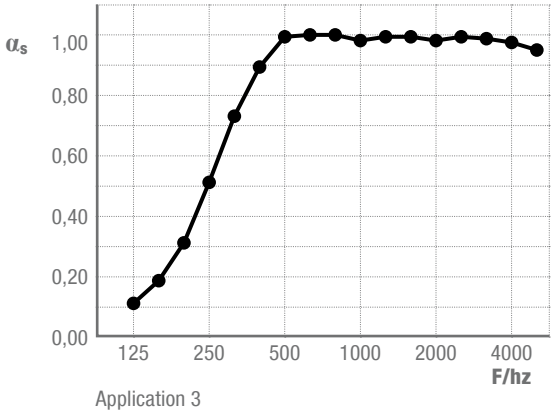


Application 2

Application 3

- Evenly hung panel with 100% fullness.
- Mode of installation: G-100 according DIN EN ISO 354.
- Distance from wall: 100 mm (4 in).

Acoustic absorption value: $\alpha_W = 0{,}85$
Acoustic absorption class: B

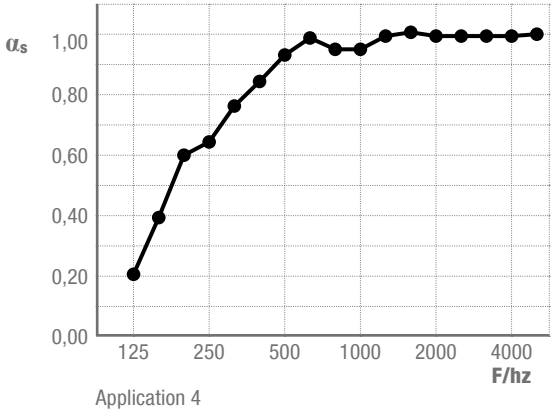


Application 3

Application 4

- Evenly hung double-sided flat panel, each with no fullness.
- Distance from wall: 100 mm (12 in).

Acoustic absorption value: $\alpha_W = 0{,}90$
Acoustic absorption class: A



Application 4

[ABSORBER CS]

REFERENCES

ABSORBER CS is ideal for any large multi-functional space or auditorium with variable acoustic requirements. Other applications for which it is well-suited include conference rooms, sound studios, exhibit halls, restaurants, large atriums and any other space requiring sound reduction.

Kulturzentrum für Europäische Weltraumtechnologien

Description

- The lower hall used to stage cultural events provided quite a challenge due to the varied heights of walls within the space. Curtains and tracks were used to improve both the visual and acoustic properties of the hall.
- Manufacture and installation of an ABSORBER CS curtain; in black; approx. 21.00 m (69 ft) wide x 3.30-6.60 m (11-22 ft) high.
- Installed on TRUMPF 95 track system.

Architect

Matija Bevk, Aljoša Dekleva, Tina Gregorič, Rok Oman, Vasa J. Perović, Jurij Sadar, Špela Videčnik, Boštjan Vuga

Client

Community of Vitanje

Location

Vitanje / Slovenia

//Photo: Maori

//Photo: Anette Douglas

[ABSORBER LIGHT]

Achieving high quality acoustics in a naturally lit environment has posed a challenge throughout the years – until now. This award winning, innovative, semi-sheer translucent fabric allows bright, naturally lit rooms to coexist with perfect acoustics.

[ABSORBER LIGHT]

TRANSLUCENT ACOUSTIC FABRIC

Most acoustically absorbent fabrics are thick, heavy and room-darkening. Our ABSORBER LIGHT is different. The translucent yet highly absorbent fabric uses thousands of micro perforations within the weave to absorb sound. On the market, it currently has the best absorption class in the field of translucent acoustic textiles. ABSORBER LIGHT combines three elements that no other fabric has achieved thus far: a visually appealing design, brightly lit rooms and perfect acoustics.

At a width of 3.0 m (118 in) this acoustic fabric can be used to manufacture seamless drapery for office environments at average ceiling height. Besides our standard colours – light beige, sand brown, anthracite, grey silver and white – custom dyed colours are available upon request.

Tested in two standard applications (see next page). Customised applications available upon request.

Material description

- 90 % Trevira CS, 10 % Polyester.
- Flame retardant standards: DIN 4102 B1, M1, DIN EN 13501-1, DIN EN 13773, NFPA 701.
- Colours: sandbrown, light beige, anthracite, grey silver & white.
- Minimum quantity for custom dyed colours approx. 120 rm (130 yds).
- Width: 300 cm (118 in).
- Weight: 149 g/m² (4.39 oz/yd²).
- Piece lengths approx. 30 rm (32 yds).
- Acoustic absorption values per certificate according to DIN EN ISO 354: α_W = 0,80 with 100 % fullness and 150 mm (6 in) distance to wall.
- Acoustic absorption class: B.

INNOVATION AWARD ARCHITECTURE + OFFICE Special Distinction

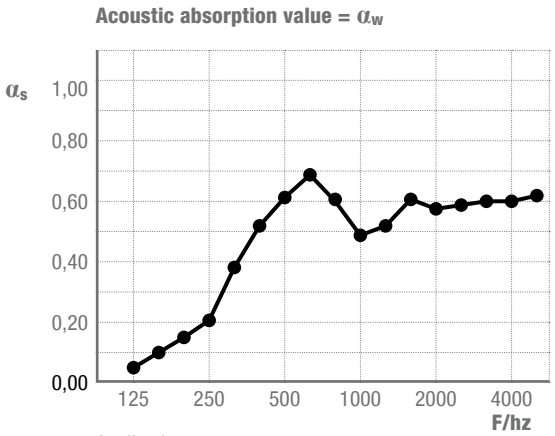
Acoustic absorption as measured in reverberation chamber

Application 1

- Evenly hung flat panel with no fullness.
- Mode of installation: G-150 according DIN EN ISO 354.
- Distance from wall: 150 mm (6 in).

Acoustic absorption value: $\alpha_W = 0,55$

Acoustic absorption class: D



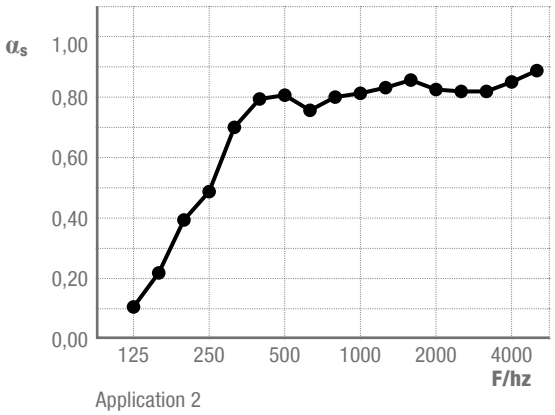
Application 1

Application 2

- Evenly hung panel with 100% fullness.
- Mode of installation: G-150 according DIN EN ISO 354.
- Distance from wall: 150 mm (6 in).

Acoustic absorption value: $\alpha_W = 0,80$

Acoustic absorption class: B



Application 2

[ABSORBER LIGHT]

REFERENCES

Our ABSORBER LIGHT fabric can be used in many ways. Whether in art galleries, museums, lobbies, offices or rehearsal rooms, with the help of our ABSORBER LIGHT you can create a modern, open and comfortable atmosphere.

Clark Music Center Lawrenceville School

Description

- Replacement of previous semi-sheer curtains in two recital halls to create an acoustically optimised space while maintaining the sunlit nature of the rooms.
- Manufacture and installation of 16 ABSORBER LIGHT curtains in light beige with 100% fullness to create maximum sound absorbency.
- Installed on eight TRUMPF manual bi-part track systems.

Client

The Lawrenceville School

Location

Lawrenceville, NJ / USA

//Photo: William M Brown Photography

Holzmarkt 1

Description

- Curtains for the foyer of a new office building, which serve as a design element and create an acoustically optimised and modern atmosphere.
- Manufacture and installation of two curtains made from ABSORBER LIGHT in anthracite.
- Installed on two ELEGANCE track systems with FRICTION-DRIVE.

Client

Mathes GmbH

Location

Cologne / Germany

//Photo: Mathes GmbH, Mendez

EBNER
STOLZ

Open Systems AG

Description

- Project study: Open space-in-space concept which is acoustically optimised and allows a panoramic view of the Alps.
- Manufacture and installation of 90 m² (970 ft²) of ABSORBER LIGHT in white as wall covering for the interior.
- Manufacture and installation of 100 m² (1075 ft²) of bleached muslin SHIRTING; in white; as ceiling of the test set-up.

Architect

Meury Architektur GmbH

Client

Open Systems AG

Location

Zurich / Switzerland

[COMPANY]

Gerriets is an expanding company with subsidiaries, distributors and sales partners in more than 20 countries. Since its founding in 1946, Gerriets has developed into a global leader in the fields of stage technology, large scale events and acoustic projects. Today, this third generation family business continues to respond to the demands of the market.

Due to our extensive experience in the theatre and event industries, we began receiving inquiries from the architectural field. As a result, Gerriets designs, develops and manufactures its own line of architectural products and is now available to you as a trusted partner to deliver professional quality acoustic solutions.

www.gerriets-acoustics.com

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