RAUWORKS
INNOVATIVE SOLUTIONS FOR MODERN OFFICE ENVIRONMENTS
REHAU has established itself as a leading manufacturer and supplier of polymer-based solutions for the widest variety of application areas within the furniture industry.

Functional and sophisticated surfaces, as well as customised systems for all living and office environments are developed, produced and marketed using the motto “Design for furniture”.

As an innovator and a market leader in the overall edgeband production process, REHAU consistently pushes forward product, design and process developments. For example, REHAU offers a wide range of decorative designs and solid colours which are matched to the collections of international board manufacturers. The RAUKANTEX edgeband collection also includes numerous creations by REHAU which are used in contrast to work surfaces or framework of units.

With the product line RAUVOLET, REHAU develops and produces systems for roller shutters. Whether steel or wooden cabinets, transparent or solid coloured designs – the focus is always on the customer’s requirements. The development of the sound absorbing RAUVOLET acoustic-line tambour door supports REHAU’s claim of continuously driving innovation in the furniture sector and creating products with added value. The patented and multi-award-winning system contributes considerably to the improvement of room acoustics in open plan spaces.

In addition to this, REHAU has invested in extensive design match work. The product range coordination guide matches colour, décor and finish across all edgeband, tambour door and wall seal systems, plinth covers and jointing profiles. In this way, a coordinated selection of materials for all components guarantees a completely identical surface appearance and therefore visually perfect integration.

The ability to meet the most demanding design and quality requirements is due to REHAU’s extensive material, process and surface expertise – living up to the motto “Design for furniture”.

Be inspired!
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Concentrated Work

Beside lighting, temperature and air quality, the acoustics of a room contribute greatly to a feeling of well-being in the workplace.

Sound and the associated acoustics in a room have a significant influence on perception and concentration amongst employees. Noise leads to a reduction in language comprehension, an increase in auditory stress, exhaustion and errors. The transition from an acceptable sound level to an intrusive level of noise fluctuates, with every individual perceiving it differently. In order to work in a concentrated manner, individuals need quiet, but verbal communication among colleagues must still be ensured. Language comprehension can certainly disrupt concentrated work, while incomprehension can hamper teamwork dramatically.

It is therefore important to have a comfortable working environment; one which can, when required, be adjusted between the needs for concentration and communication tasks.

To achieve this, modern architecture incorporates the acoustic requirements for concentrated work in the workplace into a communicative environment.
Architectural Trends

Open-floor office concepts are becoming increasingly common in modern workplace environments. These “open offices” are divided into 4 zones* which reflect the need for the variety, multifunctionality and adaptation required by different workplace activities. This openness, combined with the employment of “hard” acoustic materials such as glass or exposed concrete, means that well thought-out acoustic designs form a principle requirement for modern workplaces – particularly in zones where confidentiality must be assured.

For optimal room acoustics in modern open plan workplaces, ceilings, floors, furniture and doors must form a coordinated unit. This includes flexible separating wall systems, dividing walls within rooms and special surfaces which provide an important sound absorbing element.

However, modern architectural trends are not based on sound regulating properties, but also rely on the high-quality design of the elements used. A comfortable atmosphere with regard to materials and colors therefore combines with functionality to support a workplace environment which is both communicative and promotes concentration.

*The 4 zone concept of modern office spaces can be subdivided into the following elements:

Concentration zone:
An acoustic and visually-screened quiet cell and employee workplace

Formal communication zone:
Closed room for the exchange of team and interdepartmental information

Informal communication zone:
Slightly screened area for open, informal communication

Relaxation zone:
An area to which workers can withdraw to refresh themselves, this area is equipped with very good visual and acoustic screening
RAUWORKS screen and RAUWORKS front, REHAU creates a balance in room acoustics

RAUWORKS screen —
Separating wall elements for twin workstations

RAUWORKS front —
Multifunctional flat front faces
Modern open-plan offices offer numerous sources for noise distraction — from ringing telephones via copiers, printers, through to employees themselves. Language, in particular, is viewed as being one of the greatest of these. For optimal concentration, an intelligent combination of sound absorption and screening to reduce sound propagation as soon as possible is indispensible. Increased near field screening and sound insulation surfaces ensure that language comprehension is no greater than 30% within 5 meters of the workstation.

The acoustically effective RAUWORKS screen separating wall element has been specifically developed for employment at twin workstations. With its combination of sound screening and absorption in the language-relevant area, it represents the latest design. Each employee can design their own work area, both acoustically as well as visually, to their specific requirements. To achieve an ideal combination of function and design, RAUWORKS screen was developed in close cooperation with young interior architects and product designers from the University of Coburg (UAS). At the conclusion of the ORGATEC 2010 Trade Fair, the project continued in cooperation with Struppler Interiordesign.
Based on the requirements of various workstations, RAUWORKS screen is available in three variants:

**RAUWORKS split screen**
- Segmented and variable
- Height adjustable

**RAUWORKS lift screen**
- One-piece, mounted on a lifting column
- Motorized height adjustment: optimal acoustic and visual adjustment as required

**RAUWORKS fixed screen**
- One-piece connected to the desk
- Option to position organizational elements (pen holders, storage trays, etc.)
RAUWORKS FRONT
MULTIFUNCTIONALITY FOR FLAT FRONT FACES

Aside from separating wall elements, office cabinets, shelving units or free-standing walls can also be used as sound absorbers.

The flat faces of the RAUWORKS front can be used as a display, whiteboard, presentation surface or pin board; for flexible sound absorption and acoustic screening; or simply as a design element. The vertically adjustable lift door module for carcass furniture offers multifunctional properties in an entirely new dimension. The echo time is kept to a minimum, while a high degree of language comprehension is ensured. Ideal for meetings, relaxation areas and individual or team workstations requiring modular and flexible solutions.
RAUWORKS front is available in the following variants:

Product characteristics
- Multifunctional front design
- System has a variety of uses (front + rear wall)
- Easy to deploy, thanks to ergonomically designed grips on the sides
- Acoustically effective front and rear panels

Acoustically efficient cloth covering

Presentations / whiteboard / pin board

Additional use as a screen or as a design element
FROM AN IDEA TO A PRODUCT LINE
RAUWORKS FRONT – SOUND DAMPENING ELEMENTS IN TODAY’S OFFICE SPACES (INTERVIEW)

Interview with Klaus Würschinger, architect and CEO of WEBERWÜRSCHINGER, Berlin-Mitte.

How important is direct, near field screening for a modern workplace environment?

Today, many fields desire open plan offices. With the decline in individual or group offices, and the removal of sound-absorbing walls, the area of near field sound shielding takes on an entirely new meaning. In work areas where several groups of 4 – 6 workstations occur in succession, sound absorbing and sound screening furniture elements represent an ideal solution to achieving sound deadening without impeding the room’s open effect.

In your opinion, what are the major changes to the work environment in recent years?

Today, much of the daily work is carried out in project groups. Direct communication within such teams helps to avoid errors during project tasks and offers a continuous information flow within the group. However, this takes place to the detriment of individual work. Therefore, aside from the design of the optimal acoustic environment, withdrawal areas which allow concentrated work must also be established outside the group area.

What gave you the idea of creating a lift-door module with sound dampening properties in the project rehauwork* Strontium? What is the guiding thought?

The idea of developing a lift door module came from the thought of providing OPEN OFFICE group workstations with some organizational walls, while simultaneously improving workplace acoustics. Despite increasing digitization in the workplace, actual visualization, that is, the ability to see design plans, time schedules, and similar items is indispensable for effective work. The lift door module provides surfaces for precisely this visualization. We latched onto this idea and created the first modules within the context of the rehauwork* project to offer a completely redesigned office concept for REHAU AG + Co. This is how an idea led to the RAUWORKS front product line.

How does a RAUWORKS front differ from a conventional cabinet front?

In group workstations, cabinet fronts generally go to a height of 1.20 m. This is insufficient to provide sound shielding between individual groups. Further, for fire protection or for esthetic reasons, cabinets which exceed 1.60 m in height are frequently not desired. This is where the RAUWORKS front lift door module offers the decisive advantage: when closed, it has a height of approx. 1.20 m; when open, its height can exceed 1.60 m. This provides a sound dampening effect. Simultaneously it allows the module itself to be used, for example, to mount plans at a comfortable height, thus promoting workplace ergonomics.
What are the advantages of RAUWORKS front?

One particular strength of the lift door module is in the interchangeable or modular front faces, which can be designed and replaced based on the workplace requirements. This aids in taking the particular needs of employees into account. Whether as a whiteboard, a presentation surface or a felt board – each front is tailor-made and can be employed for multiple functions.

*rehauwork stands for a workplace environment whose functional and esthetic features have been adjusted to the needs of REHAU AG + Co employees and their work habits. Here, architectural embedding in the local environment together with the users’ demands are central to every planning activity. Every planned construction not only contributes to the local site culture and dealing with existing structures responsibly, but also ensures that the employees are comfortable and are supported in their activities.

One of the largest rehauwork projects is the renovation of the Strontium building section at REHAU AG + Co – a functional and esthetic office environment in a former porcelain factory, which has produced an intelligent interplay between communications and concentrated work. The most recently completed project is the Prolin Training Center, which was dedicated in 2010. It is located in a renovated, 19th century color weaving facility, and offers trainees a new home, equipped with training workshops and training rooms. To date, REHAU rehauwork Office World has received the Best Office Award, 2006; the Office Application Award, 2007; and the 2010 Award for Marketing + Architecture from AIT architecture magazine.

Integration of the RAUWORKS front lift door module in a modern office environment: using the Strontium building at REHAU AG + Co as an example

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RAUVOLET acoustic-line consists of a special, fully perforated profile geometry combined with an insert of acoustic non-woven material. The inner non-woven acoustic material acts as an absorber, picking up sound energy upon its arrival and simultaneously preventing it from propagating further. This effectively absorbs the sound.

The product’s special feature is its linear absorption capability across the entire frequency range. Thus, the patented wide-band absorber is highly effective in absorbing both lower and higher tones, particularly in speech-relevant areas.

**RAUVOLET acoustic-line, 8 mm**
Proven sound absorption level of $a_w = 0.75$
When installed in cabinets, the profile absorbs, on average, 75% of the sound which occurs.
Sound absorption class C

**RAUVOLET acoustic-line, 12 mm**
Proven sound absorption level of $a_w = 0.8$
When installed in cabinets, the profile absorbs, on average, 80% of the sound which occurs.
Sound absorption class B
Flexible positioning of acoustic furnishings in the near field provides additional screening of disruptive noise, and prevents the propagation of the sound in the immediate area. The profile is used in cabinets, dividing walls, side and high boards, partition walls or as a decorative wall feature. The profile is capable of absorbing 80% of the sound which occurs, thus combining acoustic effectiveness and storage space with a high-quality design. The option of individually designing the sound absorbing surface offers new inspiration to furniture front. This allows esthetic and acoustic features to be acoustically optimized to create synergies between design and the acoustic room effects of furnishing.
Our verbal and written advice relating to technical applications is based on experience and is to the best of our knowledge correct but is given without obligation. The use of REHAU products in conditions that are beyond our control or for applications other than those specified releases us from any obligation in regard to claims made in respect of the products. We recommend that the suitability of any REHAU product for the intended application should be checked. Utilization and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you. Our warranty assumes consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale.