

OWAcoustic® premium

CEILINGS FOR OFFICES

OWA



COMMUNICATIVE SPACES





Efficient and motivated, flexible and happy - is just how we want our employees to be. People in modern businesses must fulfil a lot of expectations. Changing tasks and work places, more team and project work, as well as coping with the growing importance of electronic communication.

How can we create offices, in which employees are happy and more efficient? One clear way is to provide flexible area design concepts.

OWAcoustic® Ceilings for better acoustics

An essential factor for employee contentment in busy offices is good area acoustics. In some areas there is also a requirement to stop unwanted sound being audible in adjacent rooms. The second requirement for ceilings in addition to sound absorption is also to protect against sound from other areas outside the room. Here we need ceilings that offer good decibel reduction capability. OWAcoustic® premium Ceiling Systems offer excellent performance not just in sound absorption but also sound insulation.

You can find out more about good acoustic planning particularly depends, on page 3 of this brochure.

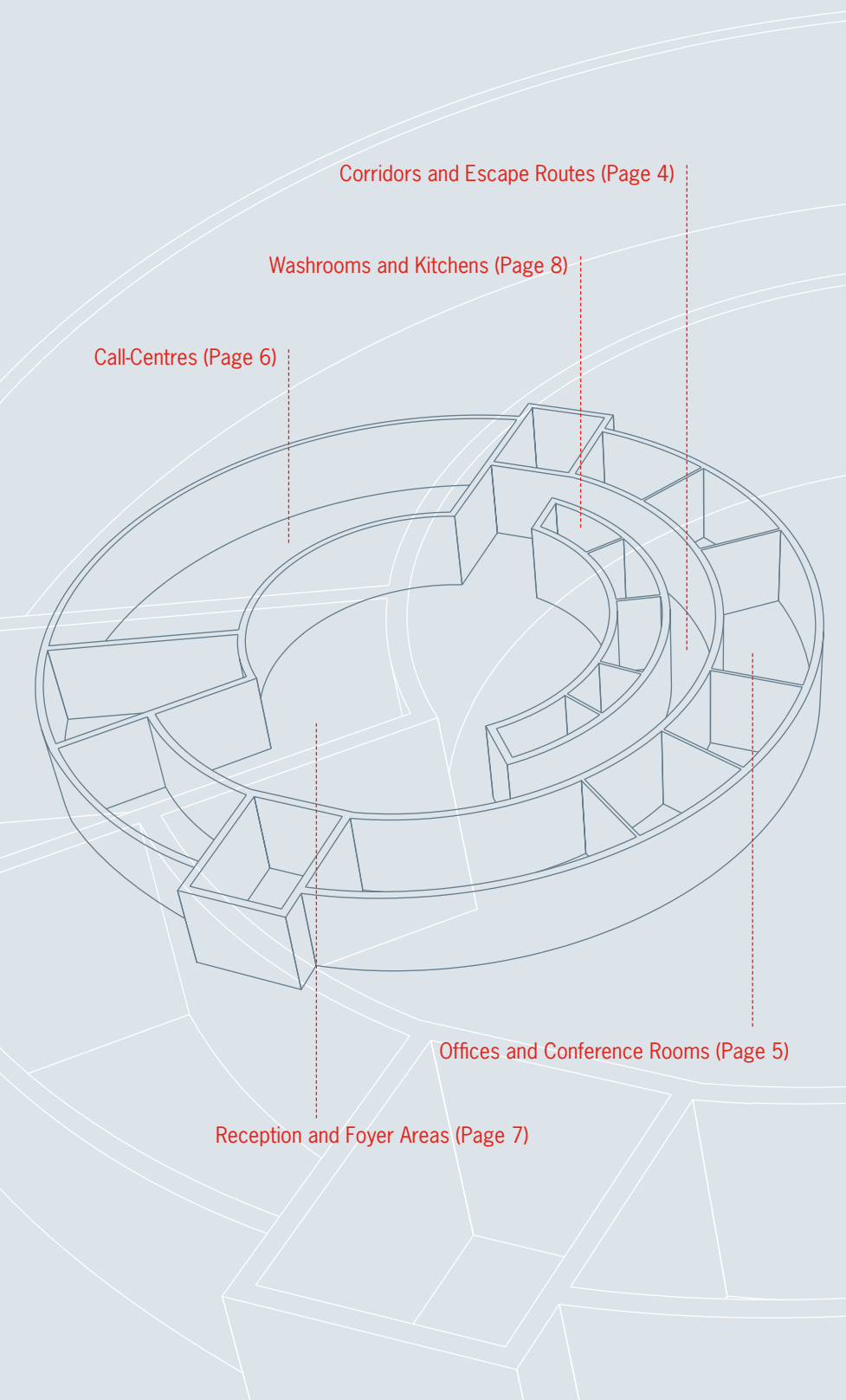
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WHAT DOES GOOD ACOUSTICS MEAN?

Studies prove it: Loud noise interferences generate stress and decrease work efficiency. Concentration and capability rise if acoustic conditions are clear and comprehensible. A good acoustical environment is therefore, very important in office buildings.

Silence and intelligibility

Good acoustics is more than just sound absorption. A balanced area acoustical climate is based on a balance between noise lowering and optimal language intelligibility, i. e. the degree of absorption of the materials used must be adjusted individually to the planned utilization of an area.

Reverberation time and sound-absorption

Most office areas fall within the areas of group B, in accordance with standard DIN 18041. Meaning that, the relevant sound absorbing surfaces should make adjusted language communication possible in the immediate area. For these types of areas, there are only recommendations. Alternatively, the VDI-Line direction 2569 can also be closely complied with when planning office areas.

In conference areas, DIN 18041 requires the observance of a so-called debit reverberation time T_{Soll} [s].

The frequently used symbols α_w (measured degree of sound absorption) and NRC (Noise Reduction Coefficient) are theoretical average values and provide only one part of the equation:

A high α_w / NRC doesn't automatically mean higher speech intelligibility!

As a ceiling specialist, OWA offers efficient and economic acoustical solutions. OWAacoustic® premium Ceilings provide comfortable quiet and optimize speech intelligibility.

Area acoustics calculator

At the start of every acoustics concept, it is necessary to calculate the reverberation time.

We can make this task easier for you. You can access an interactive area acoustics calculator on our website at www.owa.de/en/menu/190/index.html. Input your planning data and you can obtain the reverberation times on screen or print them out.

Acoustics advice

If you require particular advice on the subject of building acoustics, our 'in house' experts can provide you with all the relevant information:

Tel: +49 9373 2 01 - 3 61





„Damen & van Sluis“, Rotterdam

Design Cosmos/N / System S 6a

Futher recommendations:

Self contained fire protection F30 barriere from above and below ceiling (clear spanning)

Patterns: Constellation, Cosmos/N, Universal,

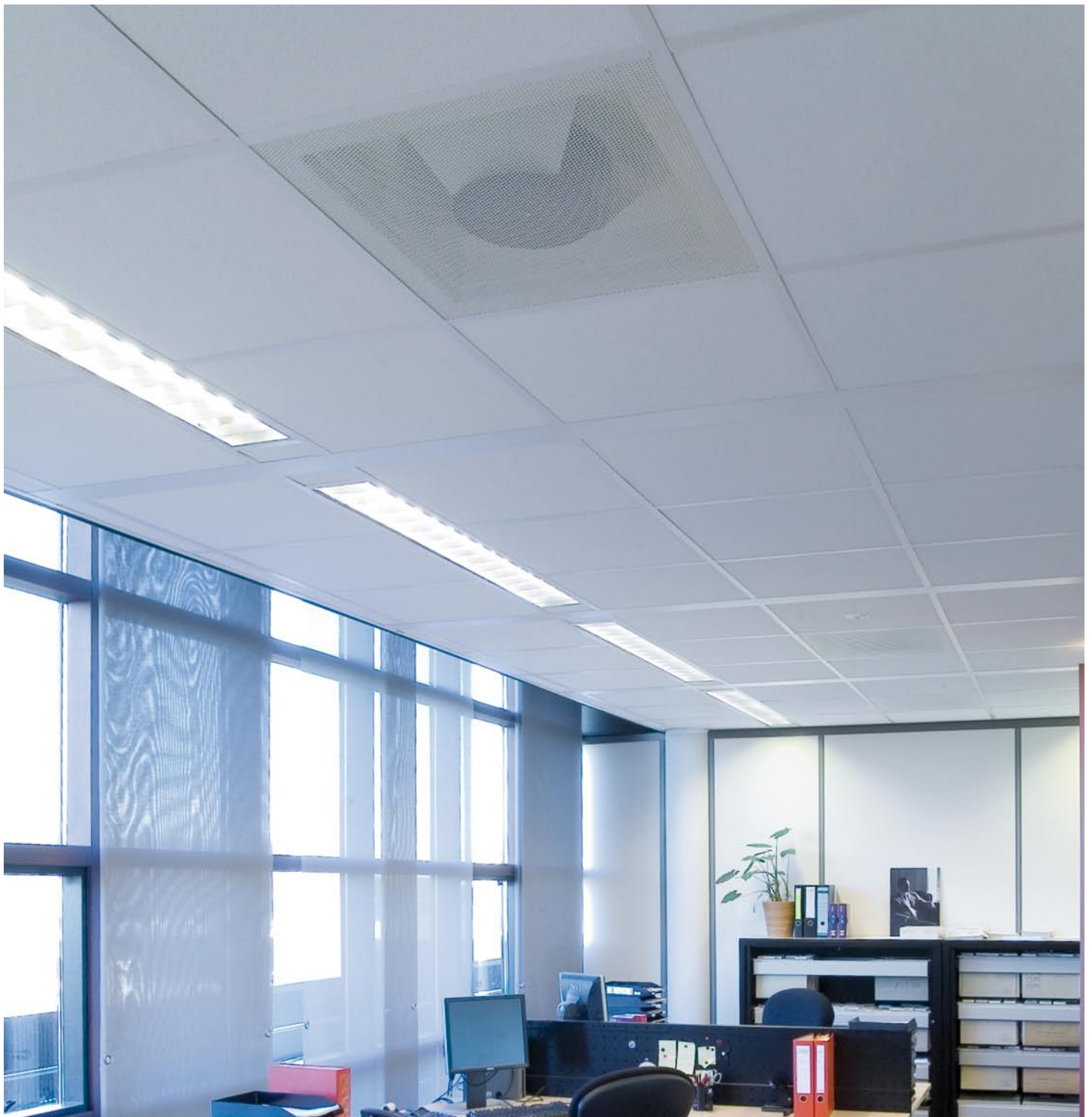
OWAtecta® tecral metal ceiling panels

CORRIDORS AND ESCAPE ROUTES

In addition to just looking good, ceilings must also perform some very important technical functions. Since corridors also function as escape routes, the statutory fire protection regulations must be complied with. OWA-Ceilings effectively protect against fires:

In the event of fire, our fire protecting ceilings can resist the spread pathway of fire for up to a very valuable 90 minutes – according to specification, also as self contained fire protection units.

To ensure that sound generating from corridors does not penetrate into adjoining office areas as noise annoyance, a sound absorption and sound insulation ceiling solution is required.



OFFICES AND CONFERENCE ROOMS

Commercial conversations need privacy and a stimulating atmosphere. In business the time spent at meetings is ever increasing. Discussions dominate the creative team working, with the advantage of an OWA ceiling with good acoustical properties, more productivity will result. The ceiling will insulate sound in and between adjacent areas. Additional services such as lighting and air conditioning are easily integrated. Novel installation systems and accessories create interesting geometrical design options.

„van Gils“, Breda

Design Sandila / System S 3

Further recommendations:

System S 3a (Contura), System S 18p (Bandraster)
Surface designs: Constellation, Futura, Cosmos plus,
Regular perforated
OWAcoustic® Wall absorbers



„ING-DiBa AG“, Frankfurt am Main
Design Sternbild / System S 12d (Baffles)
OWAcoustic® Wall absorbers

Further recommendations:

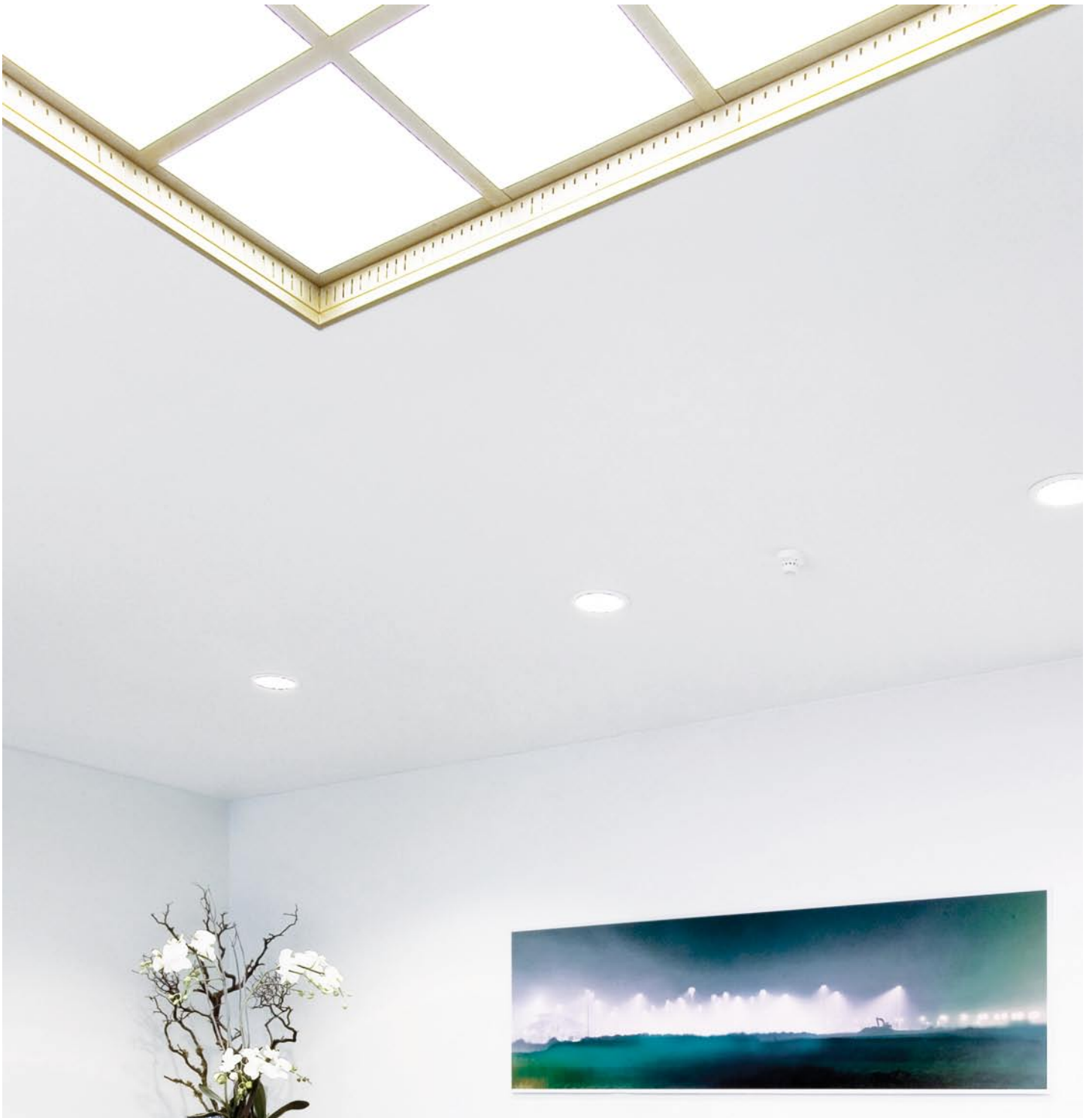
System S 3 (exposed grid)
Surface designs: Constellation, Futura, Cosmos plus
OWAcoustic® Wall absorbers

CALL-CENTRES

A typical situation in open-plan offices: Dozens of co-workers have simultaneous telephonic contact with customers.

Establishing and maintaining good two-way understanding on the telephone is often difficult. We have developed acoustic solutions specifically for Call-Centres, which essentially ease working in customer care.

Where it is not possible to have a normal suspended ceiling, we are able to introduce good levels of sound absorption with our baffle systems and wall absorbers.



RECEPTION AND FOYER AREAS

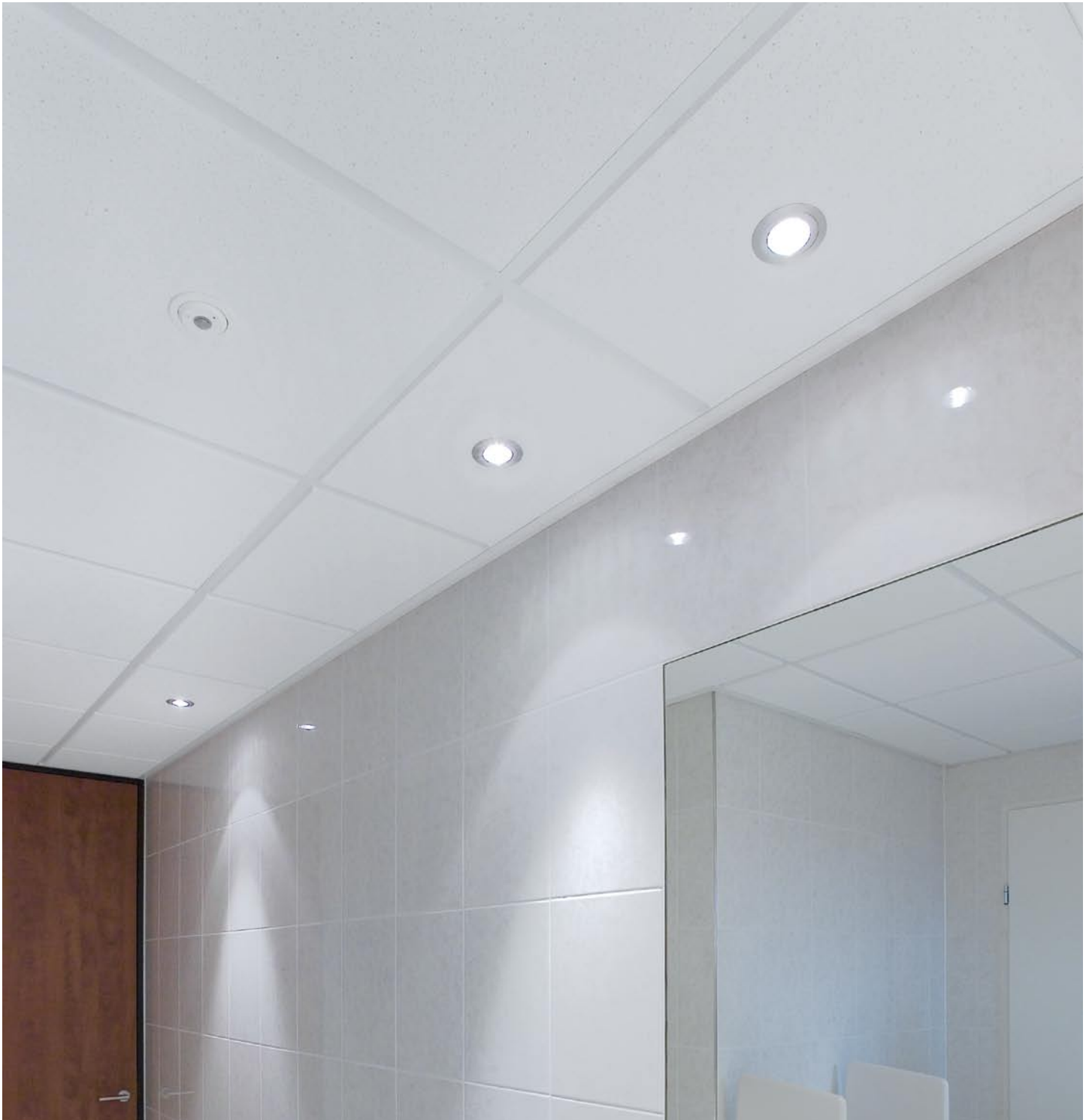
First impressions count: Successful businesses portray their corporate philosophy in their reception areas. Standing in the foyer, the visitor should immediately sense the style and image of the organization. It is essential therefore that the ceilings simultaneously provide the correct optical and acoustical accents.

PWC, Rotterdam

OWAplan® System S 7 (Plaster Ceiling)
OWAcoustic® Wall absorber creaprint

Further recommendations:

OWAspectra® STAR



„Damen & van Sluis“, Rotterdam

Design Cosmos / System S 3a

Further recommendations:

Systems S 3e (exposed grid) –

for Class 'C' to DIN EN 13946

Surface designs: Harmony (MAVROC®), Constellation

(MAVROC®), AquaCosmos®

WASHROOMS AND KITCHENS

In washrooms and toilets, high humidity can prevail. Installed building materials must be adequate for the task. OWA Ceiling tiles can remain stable in relative humid conditions up to 100%. The enhanced corrosion protection of the suspension systems provides additional long-term durability.



**OWAcoustic®
premium**

OWAcoustic® premium

The ceiling tile that builds on our traditional brand OWAcoustic® range in details – while simultaneously continuing important features: with an unsurpassed variety of dimensions, edge details, surfaces and patterns. 15 mm thick and stronger.

OWAcoustic® premium characterises a ceiling quality that fulfils high requirements in terms of design and variety – for example in office buildings, hotels, restaurants, reception halls or conference rooms.

Premium ceilings are also used in hygienically sensitive areas of hospitals and in the food industry as well as in operating areas with clean room requirements.

The tiles comply with fire protection standards F 30 to F 120 (DIN 4102) or REI 30 to REI 120 (EN 13501-2). Our ceiling tiles have first class values for sound absorption and sound protection and are also available for acoustically demanding rooms.

OWA SERVICE



We can assist you with the planning of ceilings for office buildings and administration facilities.

With all the individual advice that you need.

If you require technical advice

The staff in our technical information department, as well as consultants in the field, are always available to help.

Acoustics

Acoustic qualities, calculation of reverberation times, measurements and certification.

Fire protection

Fire protection standards, fire resistance classes, certificates, fire protection units.

Hygiene & Moisture resistance

Ceiling concepts for high humidity and increased hygiene-requirements.

Cooling & Air-Conditioning

Measures for the chilling, ventilation and climate control of integrated ceiling elements.

Individual requirements

Ceiling tiles in many surfaces, measurements and colours, individual design concepts.

Courses

Training as OWA-Installers, theoretical and practical basics.

Delivery

Complete delivery on time of all ceiling systems and accessories.

SYSTEMS AND PATTERNS

OWAcoustic® premium ceiling systems consist of ceiling tiles of different surface designs together with OWAconstruct® suspension construction elements.

Systems

The type of metal suspension construction used has a decisive effect on the appearance of the ceiling. The aim or shape of the area can be influenced by the selection of the suspension construction elements.

Exposed Grid System

A basic ceiling system with a flat board. All main carrier and cross connection sections which support the ceiling tiles are visible with these systems.

Bandraster System

Bandraster sections can be used in both linear and cross directions or to architectural specification. According to specification, linear planks or large format tiles can be used as the ceiling infill.

Concealed System

With these systems, the supporting suspension sections are not visible. Some systems also maintain accessibility.

Honeycomb and Baffle Systems

Open systems in the form of honeycombs or hanging baffle panels are particularly suitable for acoustic improvements without closure of the ceiling cavity.

Clear Spanning Systems

With these systems, linear ceiling panels span from wall to wall without suspension hangers. The metal sections supporting the ceiling panels can be either exposed or concealed. Clear spanning systems are particularly suitable for corridors.

Smooth Ceilings (Spray plaster system – OWAplan)

Smooth ceilings are a variation of the concealed system, with a fine plaster surface coating. The smooth monolithic surface is achieved by successive applications of sprayed plaster.

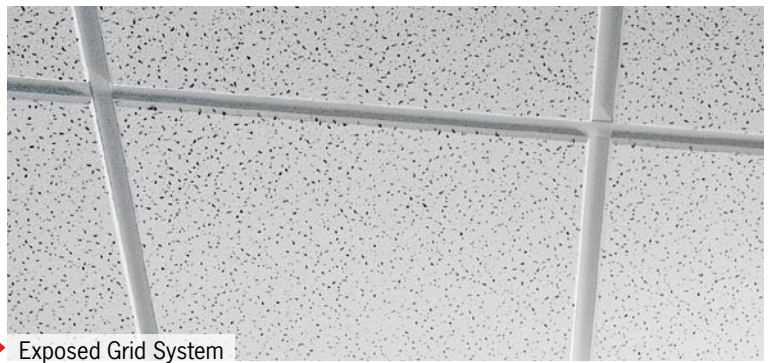
Patterns

For almost any design requirement we offer over 50 patterns. These are prefabricated ceiling tiles, with colour coated surfaces or enhanced with various patterns. OWAcoustic® premium ceiling tiles are obtainable in sizes 15 and 20 mm.

On the next page you will find a selection of patterns especially suited for office buildings. For the coating of the tiles we use only natural pigments and solvent-free dispersion type paint. We would also be happy to produce ceiling tiles according to your individual colour requirements.

Materials

OWAcoustic® tiles consist of biologically degradable rock wool, are no risk to health and free from hazardous materials. For special applications we offer tiles made of aluminium (OWAspectra®) and of metal (OWAtecta®).



> Exposed Grid System



> Bandraster System



> Concealed System



> Honeycomb and Baffle Systems



> Clear Spanning Systems



> Smooth Ceilings

	Corridors and Escape routes	Offices/Con- ference rooms	Call-Centres	Reception and Foyer areas	Washrooms and kitchens	
						OWAcoustic®-premium Ceiling Tiles Recommendations Regular perforated Sound absorption $\alpha_w=0.70$ Moisture resistance 90 % RH Fire protection on request Sound reduction 31-49 dB
						Constellation Sound absorption $\alpha_w=0.70$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 31-49 dB
						Cosmos Plus Sound absorption $\alpha_w=0.80$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 29-49 dB
						Futura Sound absorption $\alpha_w=0.70$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 31-49 dB
						AquaCosmos® Sound absorption $\alpha_w=0.10/0$ Moisture resistance 100 % RH Fire protection F 120 Sound reduction 31-49 dB
						Cosmos/N Sound absorption $\alpha_w=0.65$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 31-49 dB
						Harmony (MAVROC®) Sound absorption $\alpha_w=0.75$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 31-49 dB
						OWAplan Sound absorption $\alpha_w=0.65$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 35-49 dB
						Sandila/N Sound absorption $\alpha_w=0.45$ Moisture resistance 95 % RH Fire protection F 120 Sound reduction 31-49 dB



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