

Louverlux[®]

Glare-free means care-free: *Louverlux*[®]

The goal of **Louverlux** in the past and in the future is to enhance design requirements and to solve light problems in new as well as in existing lighting fixtures.

Only finest materials like high impact polysterene and pure aluminum will be used for the manufacturing of **Louverlux**-products:

Metalized parabolic louvers and Full specular aluminum parabolic louvers

They make the basic of glare-free and uniform illumination.

Beside this, the vast line **Louverlux** includes products for usual illumination purposes like lighting strips or complete luminous ceilings to meet the requirements of glare-free illumination according to DIN 5035:

Plastic louvers, also in different colours Plastic sheets, transparent or white Aluminum louvers, powdercoated or anodized

In addition, we offer

Large cell louver ceiling and Laminated aluminum mirrors

Louverlux is wellknown for highest quality of their products for:

Lighting manufacturers Shopfitting Interior finishing Exhibition stand construction

We guarantee a perfect and very fast customer service: every single order about so-called standard panels will be delivered within 24 hours time. We prefabricate panels in a wide variety of designs like circular cuts, notchings, special trimmings and supply also custom-cut sections for specific applications. Larger surfaces can be glued or ultrasonically welded together.

***Louverlux*[®]: and you'll enjoy your lighting fixtures!**

Plastic Louvers

Louverlux OPAL allows complete design flexibility whether installed as lay-in panels in suspended ceilings, or specified for use in fluorescent lighting fixtures.

Louverlux OPAL is offered in different cell configurations and available in UV-stabilized **polystyrene (PS)** for economy, or **acrylic (PMMA)** for its low smoke density and non-yellowing qualities.

This simple but functional lighting control device which is made for an economical and attractive lighting diffusion does not only provide lamp concealment and glare reduction. It offers further lower brightness levels, improves visual comfort, high foot-candle in the viewing zone and better ventilation for longer life and higher performance.

Technical Data

Weight	1.94-2.85 kg/m ²
Light shielding angle	35-45°
Thermal expansion factor	0.00007
Adm. cont. thermal stress	60-70°C
Percentage of open area on grid	approx. 75%
Light transmission of material	approx. 50%
Self-supporting to a max. of	approx. 625 mm

Type	Cell (mm)	Panel-size (mm)	suitable for modular T-bar system (mm)
Louverlux OPAL 10	13 x 13 x 9	1240 x 618	1250 x 625
Louverlux OPAL 10	13 x 13 x 9	618 x 618	625 x 625
Louverlux OPAL 2	13 x 13 x 13	1210 x 602	1200 x 600 2 x 4 ft
Louverlux OPAL 3	13 x 13 x 8	1210 x 602	1200 x 600 2 x 4 ft
Louverlux Black	13 x 13 x 9	1210 x 602	1200 x 600 2 x 4 ft



Mineral fibre ceiling with louver OPAL 10

These and many other factors have contributed to **Louverlux OPAL** continued success, despite the advent of many other forms of lighting diffusers.

To realize special sizes, the standard panels are easy to cut on usual saws.

Because of its shape this louver is suitable for seamless suspension (more details see under chapter **suspension and installation**).

Metalized Parabolic Louvers

Beauty and performance: the **Louverlux** specular parabolic type louvers provide both in abundance.

Each cell is highly polished and parabolically curved to efficiently direct the light downward to the working area. Beyond 45° viewing angle, the light source is completely hidden, but more important, not even

reflected light escapes the **Louverlux** parabolic louver. Today's ergonomic office environment requires lighting control to eliminate glare, veiling reflection, brightness and stray light. With the use of **Louverlux** parabolic louvers all these problems are solved.

Handling with special care: Installation only after the area has been cleaned and prepared for occupancy. The installer should wear clean, lint-free gloves.



Glare free lighting created by parabolic louver P 13

Technical Data

Weight	3.10-4.80 kg/m ²
Light shielding angle	28-46°
Thermal expansion factor	0.00007
Adm. cont. thermal stress	60-70 °C
Percentage of open area on grid	approx. 50-82%
Self-supporting to a max. of	approx. 625 mm

Type	Cell (mm)	Panel-size (mm)	suitable for modular T-bar system (mm)		
Louverlux P 13	13 x 13 x 11	1240 x 618	1250 x 625	1200 x 600	2 x 4 ft
Louverlux EP 13	13 x 13 x 10	1210 x 602		1200 x 600	2 x 4 ft
Louverlux P 15	15 x 15 x 10	1210 x 602		1200 x 600	2 x 4 ft
Louverlux P 20	20 x 20 x 19	1240 x 620	1250 x 625	1200 x 600	2 x 4 ft
Louverlux EP 20	20 x 20 x 13	1245 x 620	1250 x 625	1200 x 600	2 x 4 ft
Louverlux P 37	37 x 37 x 22	1210 x 602		1200 x 600	2 x 4 ft
Louverlux P 75	75 x 75 x 38	1210 x 602		1200 x 600	2 x 4 ft
Louverlux PD 33	33 x 33 x 19	1200 x 600		1200 x 600	2 x 4 ft
Louverlux PD 50	50 x 50 x 30	1200 x 600		1200 x 600	2 x 4 ft
Louverlux PX 16	16 x 16 x 12	1210 x 602		1200 x 600	2 x 4 ft
Louverlux PA 20 (45° angular blades)	20 x 20 x 18	1200 x 620		1200 x 600	2 x 4 ft



Display cabinet with parabolic louver EP 13

Another important application are show cases and display areas. The attention of passers-by will be drawn not upward to rows of lights but downward to the items for sale or exhibition.

The decorative **Louverlux** parabolic louvers extend the line of these louvers by an unusually attractive design and the unique configuration of cones and cubes to provide a symmetrical pattern of light control. It is the perfect louver for display of jewelry, art objects, china, gifts, apparel, or wherever elegant lighting can enhance or compliment the detail of fine design.



Intensive but glare free lighting with parabolic louvers in factories



Louverlux parabolic louvers are available in full specular metalized silver or gold finish.



Airport Frankfurt Rhein-Main, Aluminium, cell 30x30x30 mm, seamless ceiling



Underground station in Vienna, Austria, Aluminium with cell 50x50x50 mm

Wherever **non-combustible or non-inflammable** materials are required in the designing of luminous ceilings or luminous rows of lights.

Aluminum louvers are suitable for all general commercial interior lighting applications, giving an attractive low brightness diffused appearance and effectively concealing the light source for visual comfort.

The standard colours are white or aluminium natural anodized. Upon request they can be **powdercoated** in many colours according **RAL**.

The installation of aluminum ceilings can be made seamless and in strip- or coffer-type installation (more details see under chapter **suspension and installation**).

Technical Data

Light shielding angle	25-45°
Thermal expansion factor	0.000023
Percentage of open area on grid	approx. 85%
Self-supporting to a max. of	approx. 700 mm (small cell) approx. 1200 mm (large cell)

Cell (mm)	Strip thickn. (mm)	Weight (kg/m ²)	Standard Panel (mm)	suitable for modular T-bar system (mm)		
13 x 13 x 13	0.4	2.50	1246 x 622	1250 x 625	1200 x 600	2 x 4 ft
13 x 13 x 13	0.4	2.50	622 x 622	625 x 625	600 x 600	2 x 2 ft
20 x 20 x 20	0.6	3.20	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
25 x 25 x 25	0.6	3.40	1250 x 625	1250 x 625	1200 x 600	2 x 4 ft
30 x 30 x 30	0.6	3.40	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
30 x 30 x 25	0.6	2.90	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
40 x 40 x 40	0.6	3.40	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
50 x 50 x 50	0.6	3.40	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
50 x 50 x 30	0.6	2.20	1200 x 600	1250 x 625	1200 x 600	2 x 4 ft
52 x 52 x 25	0,6	1,80	618 x 618	625 x 625	600 x 600	2 x 2 ft

Other cell sizes and panel formats upon request!

Aluminum Louvers for Fair Booth

Especially for individual constructions of fair booths a small cell-sized **Louperlux** aluminum louver is available with a lot of advantages like highest glare restriction, low volume on warehouse and in case of transportation.

This louver can be delivered as a standard in white- or black-powdercoated shape in a wide range of different panel-sizes.

Technical Data

Light shielding angle	45°
Thermal expansion	0.000023
Percentage of open area on grid	approx. 85%
Self-supporting to a max. of	approx. 1000 mm

Cell-size mm	Wall thickness mm	Weight kg/piece	Panel-size mm
13 x 13 x 13	0.4	2.4	955 x 955
13 x 13 x 13	0.4	2.5	965 x 965
13 x 13 x 13	0.4	2.6	985 x 985

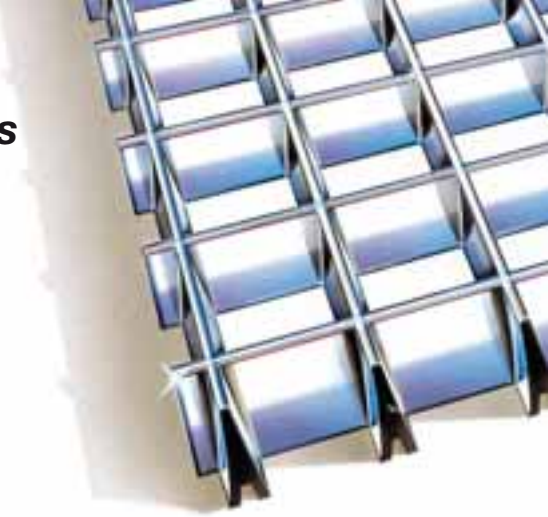
These sizes are suitable for most of the standard booth systems like OCTANORM, SYMA etc. Upon request special panel-sizes as well as special colours are available.

For an extraordinary appearance a c-channel can be delivered which will be mounted all around the panel.



Parabolic Aluminum Louvers

As a **non-combustible** alternative to the metalized plastic parabolic louvers, a wide range of **Louverlux** parabolic aluminum louvers is available to solve lighting problems in modern and computerized offices. The standard surface is full specular silver finish, upon request also matt finish.



Control room of a refinery

Whether they are used in individual lighting-fixtures or in luminous ceilings, the light-source is always completely shielded off whilst the light is directed to the working area.

Due to a very flexible manufacturing process these **Louverlux** louvers are especially for the retrofit of existing lighting fixtures which do not anymore comply with the requirements of computerized offices.

Technical Data

Light shielding angle	approx. 31 - 41°
Thermal expansion	0.000023
Percentage of open area on grid	approx. 60 - 82%
Self-supporting to a max. of	approx. 600 mm

Type	Cell-size mm	Weight kg/m ²	Panel-size mm
Louverlux AP 25	25 x 25 x 19	5.1	1240 x 620
Louverlux AP 37	37 x 37 x 19	3.4	1240 x 620
Louverlux AP 50	50 x 50 x 38	5.4	1240 x 620
Louverlux AP 75	75 x 75 x 38	3.7	1240 x 620

Large Cell Louver Ceiling

To supplement the aluminum louver line there is a complete **Louperlux** large cell ceiling-system available with a 12 mm cellwall. The individual blades are u-formed of the finest 0.5 mm thick enamelled aluminum which ensures high stability at low weight.

The modular elements make a very easy suspension operation possible – more details see under chapter **suspension and installation**.

Lighting fixtures such as downlights, spots, light tracks and luminous areas can be easily integrated.



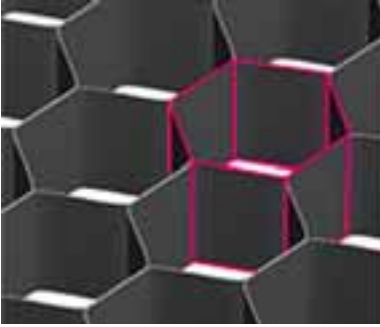
Technical Data

Material	Aluminum 0.5 mm thickness
Wall thickness	12 mm
Panel height	40, 50 and 80 mm
Panel size	600 x 600 mm altern. 625 x 625 mm
Standard colour	white RAL 9010

Availability of cell configurations/mm

62.5 x 62.5 x 40	86 x 86 x 40	120 x 120 x 40	200 x 200 x 40
75 x 75 x 40	100 x 100 x 40	150 x 150 x 40	

Large Cell Louver Ceiling with cell wall thickness of 15 mm can be supplied with a perimeter rim suitable for **lay-in installation in modular T-bar system** with module 600 x 600 mm or 625 x 625 mm



Louverlux Honeycomb Louvers create, even under the strongest light sources, a glare-free and (for the human eye) a very pleasant light for the maximum in visual comfort.

This effect is achieved by the efficient light shielding and the excellent light distribution of the “honeycomb” form of the cells. By these factors they comply with the German standardisation according DIN 5035 for glare-free lighting.

The extremely thin aluminium material (AlMg3) and the filigree make of the honeycomb cells allows for a high rate of air flow (approx. 98%), which

results in an excellent ventilation of the luminaries and thus a longer life span of the light source.

Louverlux Honeycomb Louvers can as well be combined with acoustical materials or ceiling systems and HVAC devices.

Technical Data

Cell Width approx. (mm)	Height (mm)	Wall Thickness (mm)	Light Shielding Angle	Weight (kg/m ²)
3.4	3.0	0.085	41.0°	0.50
6.4	6.0	0.085	43.5°	0.80
6.4	9.0	0.085	55.0°	1.10
6.4	11.0	0.085	59.0°	1.30
9.5	9.0	0.135	43.5°	1.10
9.5	11.0	0.135	49.0°	1.30

Coating:

All Honeycomb Louvers can be produced in natural aluminium (mill-finish) or spray painted or powder-coated according RAL standard.

Formats:

The max. format of the panels is approx. 600 x 2000 mm. Within this size all kinds of shapes, like round or square can be produced, with or without frame.

Plastic Sheets and Plastic Mirrors



Besides the application of **Louverlux** louvers for the design of luminous areas we offer additionally a wide range of plastic sheets in various thicknesses, colours and light-transmission ratios.

A very interesting application is for example the combination of both materials – louvers with an overlay of plastic sheet.

Further to the installation of acrylic sheets in luminous areas they may be used for the individual production of acrylic furniture.

Last but not least not to forget the popular **Louverlux** prismatic lenses, in polystyrene designed to redirect and refract light downward to the working plane providing higher footcandels to working surfaces.

Technical Data

Material	Polystyrene UV-stabil, Acryl (PMMA)
Thermal expansion factor	0.00007
Adm. cont. thermal stress	60-70°C
Light transmission	approx. 50-90%

Type	Design	Thickness (mm)	Standard-Size (mm)
Louverlux PRISMA 2	prismatic sheet	2.80	1245 x 620
Louverlux PRISMA 3	prismatic sheet	4.80	1245 x 620
Louverlux OPAL 51	Acrylic, flat sheet	3.00	1245 x 620
Louverlux OPAL 51	Acrylic, flat sheet	3.00	620 x 620
Louverlux MIRROR	Acrylic Mirror, silver	3.00	2440 x 1220

Other colours and thicknesses upon request!

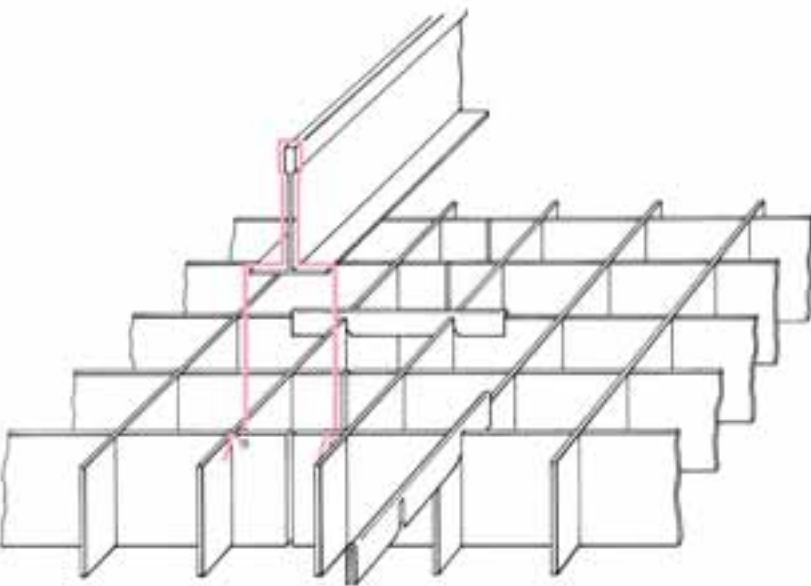
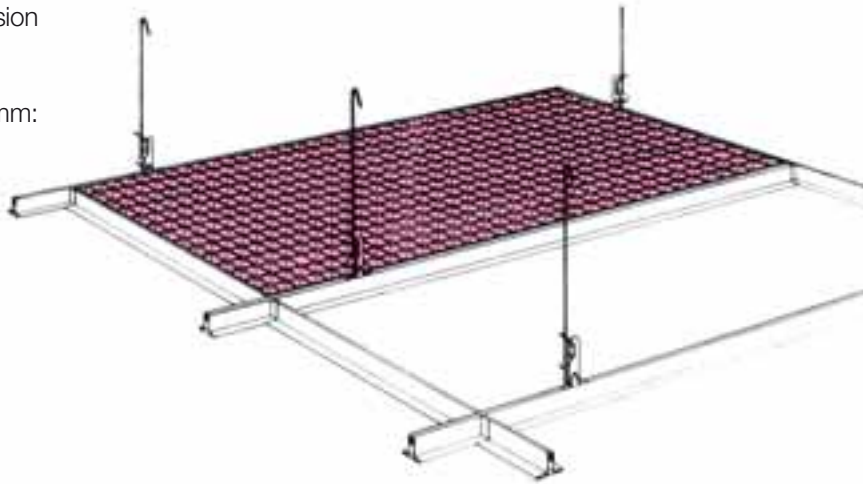
Suspension and Installation

Each **Louverlux** luminous ceiling consists of an underlying suspension system and the louver panels. The components are adjustable hangers, wall brackets and T-bars as well as cross-bars for coffer-type suspension.

The advantage of a visible suspension structure is easy access to lighting fixtures as the individual panels can be easily lifted out of the T-bars.

For coffer-type suspension (ceiling system 2 x 4 ft or 1200 x 600 mm) the following quantities of suspension materials are required:

Louverlux panel	1210 x 602 mm or 1195 x 595 mm:	
T-bar main runner	3600 mm	0.8 m.r./sq.m.
Long cross-bar	1200 mm	1.6 m.r./sq.m.
Short cross-bar	600 mm	0.8 m.r./sq.m.
Hanger		0.7 pcs/sq.m.



Most **Louverlux** aluminum louvers can be seamlessly suspended. This means that no T-bars or cross-bars are visible. In this case the panels have all around half ends and are fixed to each other with connection clips.

Specially shaped T-bars are installed with quick-lock hangers directly from the main ceiling and nivelled. The louver panels receive holes at all four edges in which the special springs hanging on the T-bar are pushed.

The following suspension materials are required:

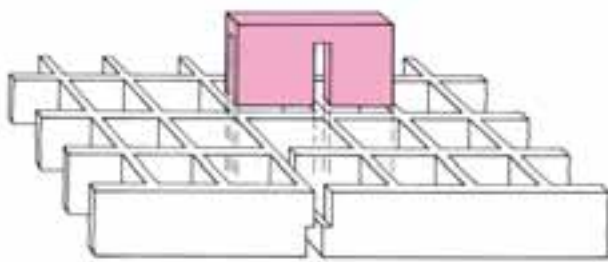
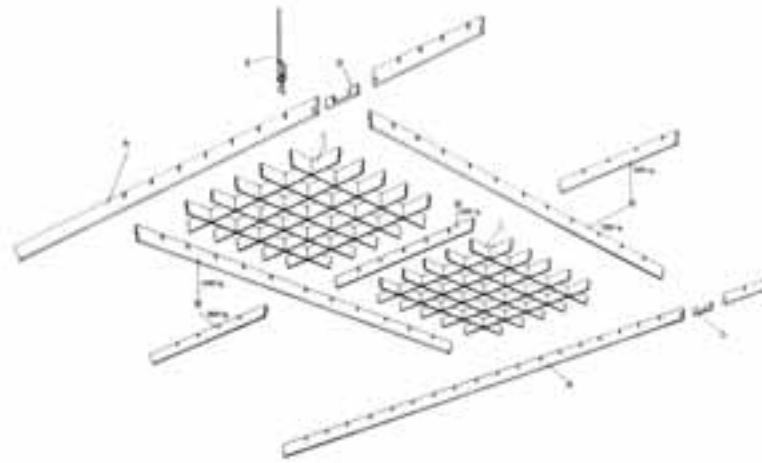
Louverlux panel	1200 x 600 mm
T-shaped bar	approx. 0.8 r.m./sq.m.
spring	approx. 3 pcs./sq.m.
clips	approx. 3 pcs./panel
hanger	approx. 1.2 pcs./sq.m.

Suspension and Installation

The Installation of **Louperlux** large cell louver ceiling will be made as a strip/coffer-type suspension. U-shaped carrier bars are placed to each other with a distance of 600 or 625 mm and suspended from the main ceiling with adjustable quick-lock hangers.

For connection of the carrier bars crossbars in the same distance have to be clipped forming fields of 600 x 600 mm or 625 x 625 mm in which the louver panels are laid into.

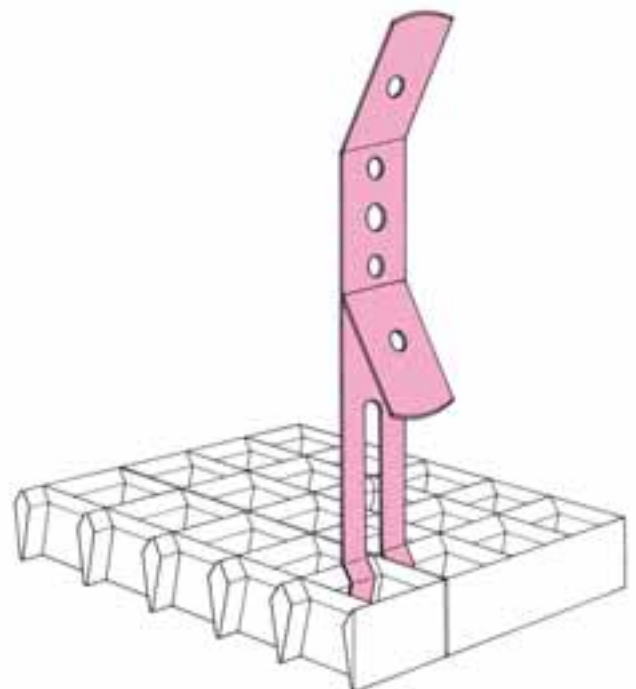
The carrier bars can be endless extended and the connection between each other is invisibly executed. Also the quick-lock hanger is placed in the carrier bars and therefore not visible.



But not only **Louperlux** aluminum louvers can be suspended seamlessly. Some of the plastic louvers are also suited for seamless installation.

First of all the **Louperlux** OPAL. Because of its special forming of the edges on the outside (all around semi-high) the panels can be connected invisibly together and have to be fixed with clips.

Secondly a very similar seamless suspension is partly possible with the **Louperlux** metalized parabolic louvers. They don't have semi-high outside edges and in this case the panels must have a so-called level-cut to realize satisfactory connection between the panels resp. suspension with special quick-lock hanger.



Louverlux[®]

Louverlux GmbH

*Mainzer Landstrasse 625-629
65933 Frankfurt am Main/Germany
Phone: +49 (0) 69 - 38 49 49
Fax: +49 (0) 69 - 38 81 22
<http://www.louverlux.com>*

