OKA*TECH*

Insulating Glass with Functional Metal Insert

OKALUX

Wir denken Architekturglas weiter.

OKALUX and sustainability:

Optimal energy efficiency with the highest possible convenience for the user with OKALUX functional glazing – our contribution for the buildings of tomorrow.

We create everything with lasting value in mind. Every step, from the idea through the processing to the finished project, is carried out with conviction and a dedication to sustainability.

Trend-Setting Façade Design

The overall effect of a building is, for the most part, determined by the façade. This is where OKALUX comes in with its endless possibilities for striking, glowing building exteriors using insulating glass with metal insert which satisfy high requirements of sun and glare protection. Adapted to individual demands, OKA*TECH* makes a multitude of façade ideas beautiful reality.

OKALUX

Wir denken Architekturglas weiter.

OKA*TECH* – for technical functionality and brilliant design.

Exclusive Daylight System

©Kuba & Pilar Architects

Office and civi centre
Biskupska, Ostrava | CZ
Kuba & Pilar Architects
Megamont S.R.O.

OKA*TECH* with expanded aluminium

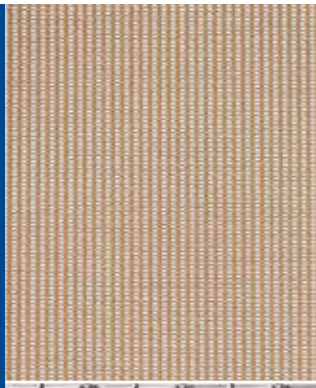
University of Kent | UK
Hawkins/Brown Architects
r h partnership architects
MagHansen Ltd.

OKA*TECH* with expanded aluminium

Insulating glass with metal insert offers several advantages: a special glow to the building's exterior, giving it a metallic shimmer in the sunlight. The metal insert softly disperses the light into the interior while simultaneously offering protection against the sun and glare leaving a good view to the outside.

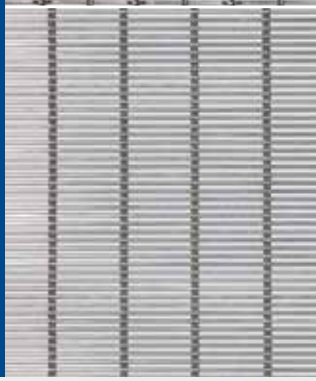
©Daniel Clements Photography

Wire mesh
type Mandarin



Wire mesh
type Omega

Wire mesh
type Sambesi

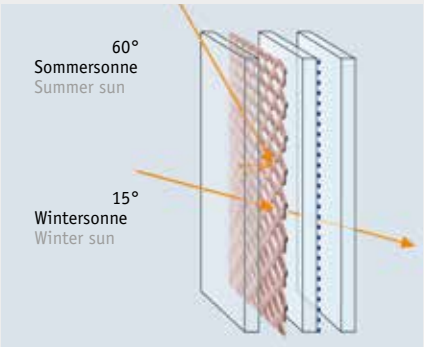


OKA*TECH* is available with various types of expanded metal or attractive wire mesh in the cavity between the panes. As soon as artificial light is turned on in the building, the perforated, curved metal or filigree designs of stainless steel rods and wires allow deep glimpses into the interior.

Soft Dispersion of Light with Expanded Metal

Public Library
Des Moines | USA
David Chipperfield

OKA*TECH* with
expanded copper



OKA*TECH*: richtungsselektives Tageslichtsystem
OKA*TECH*: directionally selective daylight system

The asymmetrically arranged metal perforations also function as a directionally selective daylight system while providing effective thermal solar control.

Central Library,
Seattle | USA
Rem Koolhaas

OKA*TECH* with
expanded alumi-
nium

OKALUX developed OKA*TECH* with expanded aluminium for the Central Library in Seattle designed by Rem Koolhaas. The glass allows for extensive utilisation of daylight, and its direction selectivity characteristics give it a total solar energy transmittance of 23 % for light with a vertical angle of incidence. The fineness of the structure allows an excellent view towards the outside.

Unique Optical Effect

©Tim Meier Photography

Kulturhus Kungsängen | SE
Werket Arkitekter

OKA*TECH* with expanded copper

The unmistakable colour nuances of copper have long been a source of fascination. Whether patinated, bronced or in its natural state, a façade containing expanded copper always makes a visual impact. Yet OKA*TECH* does more than affect the appearance – the three-dimensional profile of the insert (slots, holes,mesh aperture) enables an adjustment matching the requirements of thr building shell.

OKA*TECH*: Benefits at a Glance

Variety of Design and Attractive Aesthetics

- Different properties of the building shell by daylight and artificial light
- Combination of various metals and coatings
- Variable geometry and dimension
- Sophisticated design solutions

Functionality

- Angle-selective sun and glare protection
- Reduced solar entry into the building
- Visibility as bird protection function
- Fire protection according to requirements

Sustainability

- Fully recyclable
- Long-lasting, maintenance-free and easy to clean

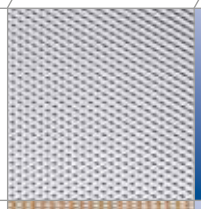
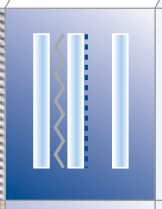
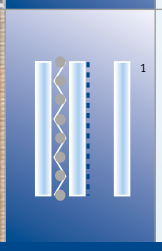
User Comfort

- Successful combination of privacy and partial view
- Comforable interior atmosphere through evenly diffused daylight

©Tim Meier Photography

OKA*TECH* unites high aesthetic standards with optimal functionality and comfortable interior atmosphere.

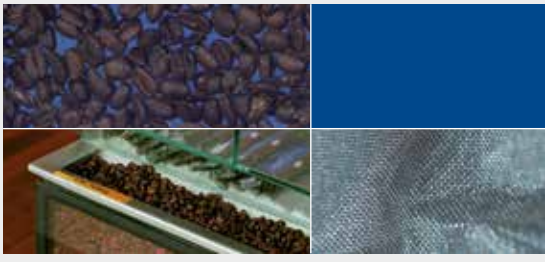
Technical Data

Products	Vieww	Structure	Dimenstion max. [mm] 2	Material
OKA*TECH*® Expanded Metal			1250 x 4000; larger sizes available upon request	Al natural, anodized, powder-coated or RAL colours; Cu natural or patinated.
OKA*TECH*® Wire Mesh			Depends upon the type of wire mesh: 2000 x 3500 mm; larger sizes available upon request max. area 7 m²	Variety of wire meshes in different material thicknesses and types.

Ideal in combinaton with OKALUX HPI
High Performance Insulation Glazing!

OKA *X* Design Variety in the Cavity

Would you like to integrate a different material? If so, bring your ideas to us. We will be glad to help you with all your planning requirements for glazing. Together we will develop a customised OKA *X* insulating glass for you which is perfectly in tune with your specific requirements.



U-value [W/(m²K) [Btu/(hr·ft²·°F)]	TSET, SHGC % [4]	Light transmission % [4]
U_g-value depends on the glass panel structure and gas filling ≥ 0.9 [0.16]	9-31 with thermal control coating 8-22 with solar control coating	5-39 with thermal control coating 3-34 with solar control coating
U_g-value depends on the glass panel structure and gas filling ≥ 0.9 [0.16]	14-33 with thermal control coating 11-24 with solar control coating	8-39 with thermal control coating 6-33 with solar control coating

The listed values are estimates. They were determined on the basis of measurements conducted by certified test institutes and the calculations derived from them in compliance with the relevant valid standards. Values determined on a project-specific basis may vary from the above values. The values continue to vary if other coatings are used. You will find more detailed, glass-specific information on soundproofing, fire protection, building and personal protection etc. in the internet www.okalux.com, along with specified texts which we will provide on request.

Available with double or triple glazing

[2] Suitable for installation in any type of structure

[3] DIN EN 673

[4] DIN EN 410

Subject to technical changes

All OKA*TECH* systems can be fitted as well with fire resistant glass matching E60 as per DIN EN 1363.

12/16 Proesler Kommunikation GmbH

OKA*LUX* + KAPI*LUX*

OKA*SOLAR*

OKA*SOLAR* 3D

OKALUX HPI

OKA*TECH*

OKA*WOOD*

OKA*COLOR*

OKA*STONE*

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DGNB
Deutsche Gesellschaft für Nachhaltiges Bauen
German Sustainable Building Council

OKALUX is member of the German Sustainable Building Council.

OKALUX

We take architectural glass a step ahead.