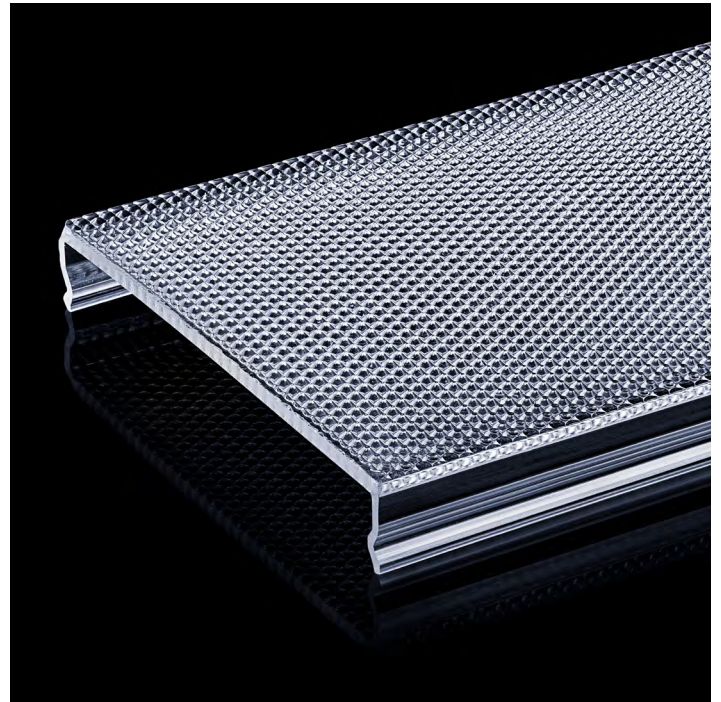


exPress Technology

Jungbecker microstructures
combined with Elkamet extrusion

JUNGBECKER

elkamet
tomorrow's plastics

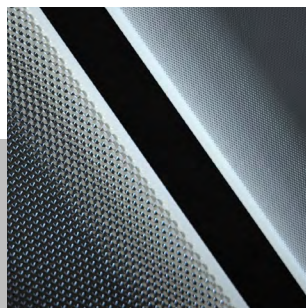
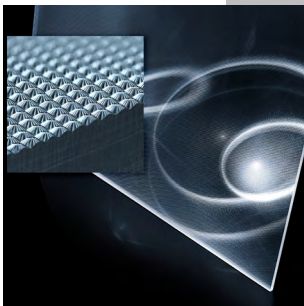


Jungbecker exPress technology is based on the well-known hot embossing production technology. exPress technology offers the combination of extruded profile geometries and unique precision microstructures for an outstanding de-glaring performance.

Elkamet as an expert for material composition and the manufacturing of extrusion profiles for highest quality demands in combination with Jungbecker's expertise for development and production

of high precision microstructures and optics, exPress technology offers completely new opportunities.

In fact, the expensive approach of sliding in foil or microstructures for light control can be substituted by one single product and there are many other new and unique possibilities where an extruded pre-material can be finished with microstructures.



ALL IN ONE SOLUTION

KEY FEATURES

High precision transparency microstructured profile

High glare control performance

Increases (luminaire) system efficiency

Low material usage

High cost efficiency

Smooth de-glaring for lighting applications aiming for UGR < 19

Borderless structure, (whole light output surface)

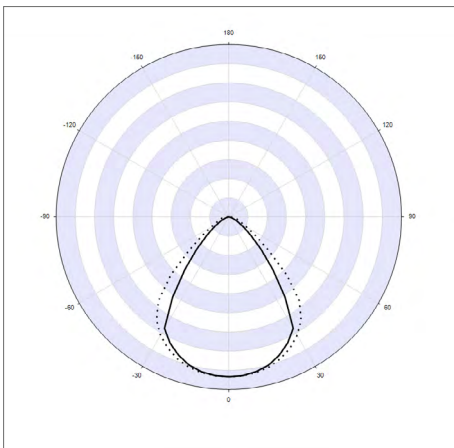
Customer specific profile length up to 4500mm, transition line every 1500mm

Available on extruded profile or sheet

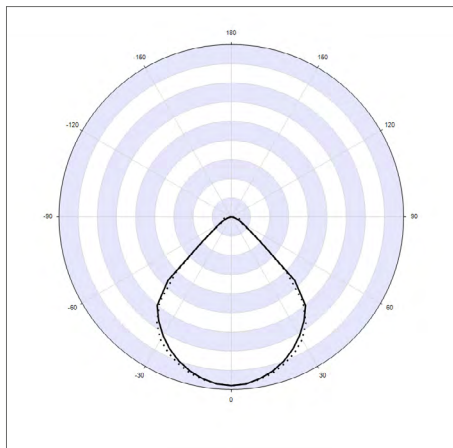
Easy to assemble, no foil inlay

Available in PMMA, PC and co-extruded profiles

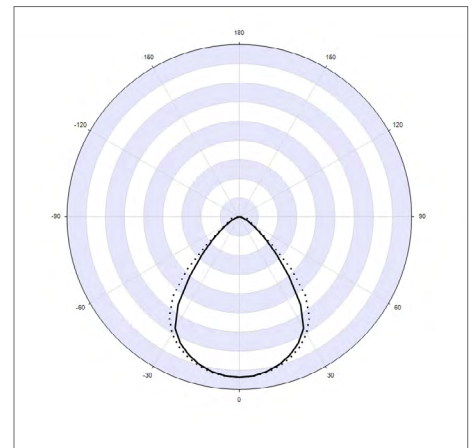
OPTICS DATA SHEET



Jungbecker CDP and microCDP microstructure



Jungbecker FBP microstructure



Jungbecker PDP microstructure

Reference Goniometer measurements of a linearprofile luminaire, 40mm x 1000mm with 1500lm output, LDT file available upon request

PRODUCT DATA

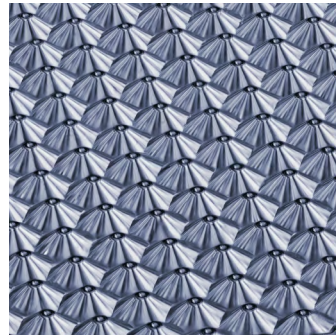
Standard Material	PMMA (acrylic)
	PC (polycarbonat)
Temperature range	40 °C up to +80 °C (acrylic)
	40 °C up to +120 °C (PC)
Transmittance (D65)	92% (acrylic clear) 88-90% PC

Thickness	1 - 2 mm
Dimension	max. length 4500 mm max. width 100 mm (others upon request)
Customization options	Specific cuts and further processing Available in elkaCIRCLE / GreenLine

EXPRESS MICROSTRUCTURES microCDP / CDP / PDP / FBP



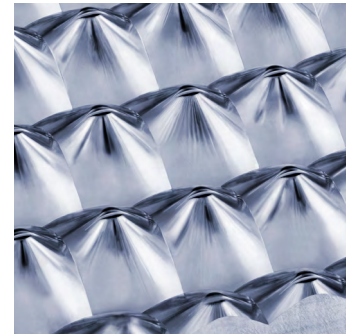
FBP



microCDP



CDP



PDP

Reference Goniometer measurements of a linearprofile luminaire, 40mm x 1000mm with 1500lm output

Luminous Flux = 1500lm	
Extruded structure	UGR23.1
Jungbecker CDP/microCDP	UGR20
Jungbecker PDP	UGR18.7
Jungbecker FBP	UGR18.3

UGR = 19	
Extruded structure	500lm
Jungbecker CDP/microCDP	1200lm
Jungbecker PDP	1700lm
Jungbecker FBP	1900lm

*UGR rating according to CIE190 with SHR 1:1

*All measured values are profile specific, changes of geometry or optical material properties of the profile interior may have an impact to UGR rating and efficiency.