

TECU®



\_punch

\_mesh

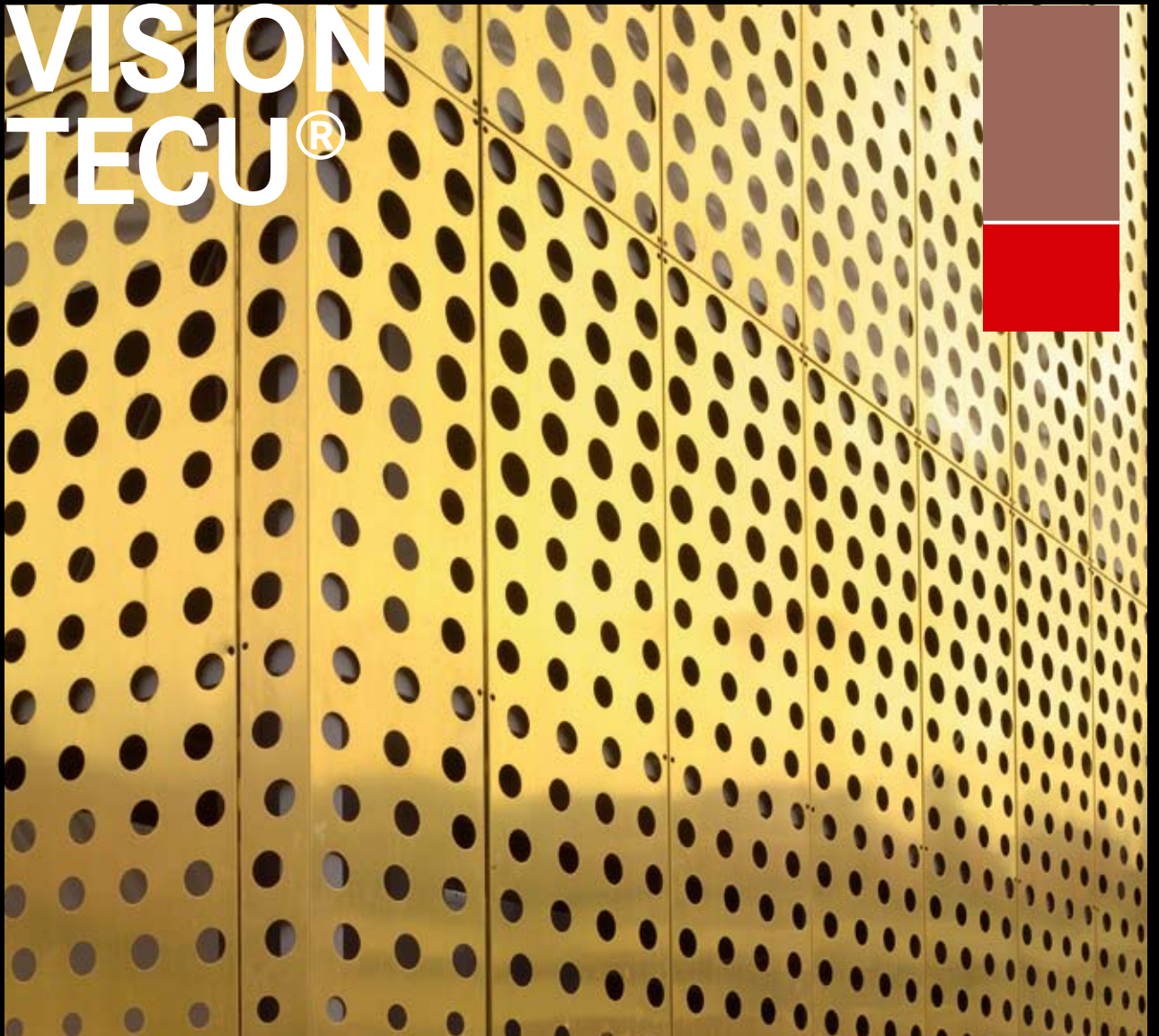
\_flatmesh

\_weave

\_shape

KME Germany AG & Co. KG  
VISION TECU®  
[GB]

VISION  
TECU®

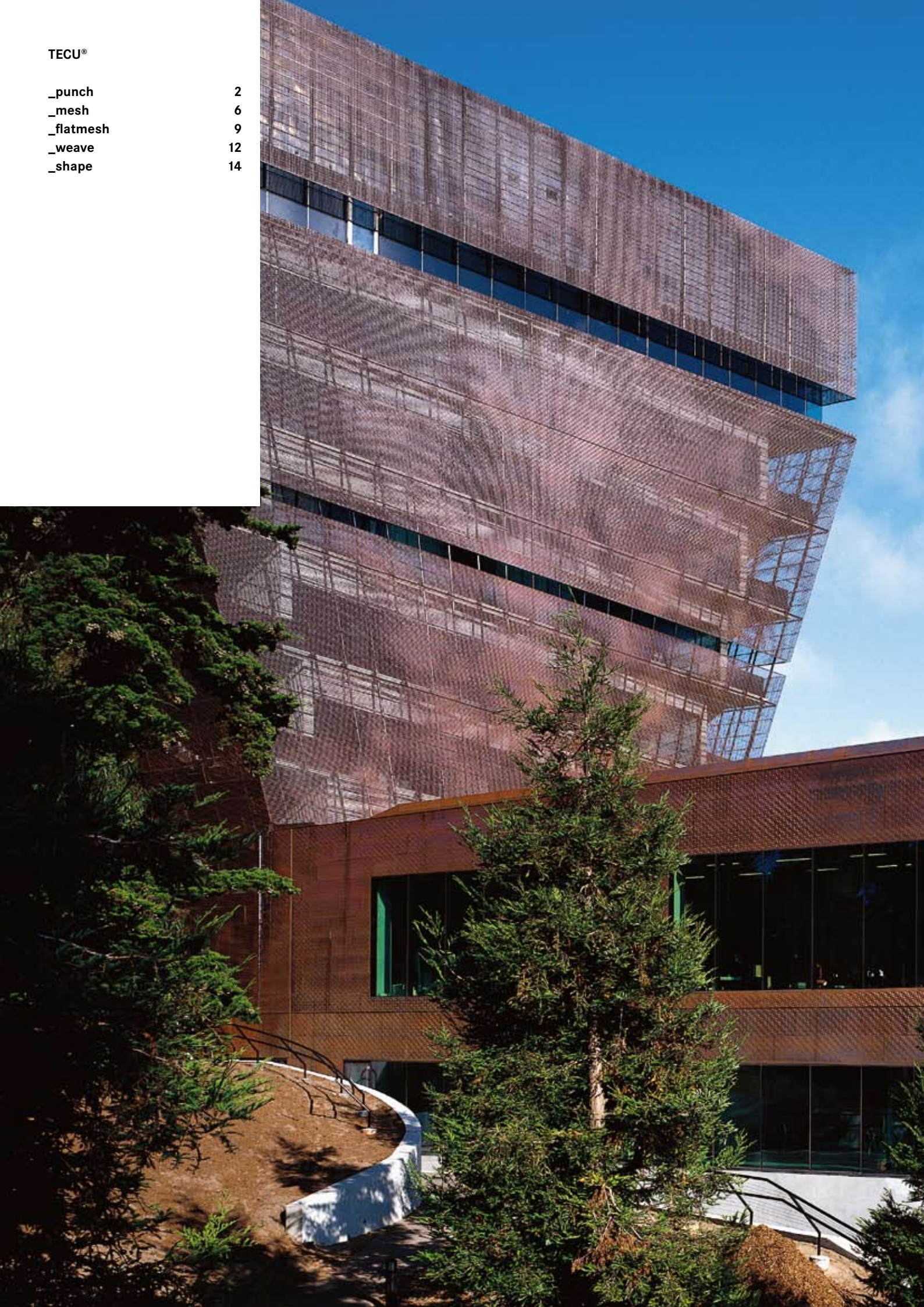


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TECU®

_punch	2
_mesh	6
_flatmesh	9
_weave	12
_shape	14





*Copper in architectural applications –  
now livelier, more characteristic, and more individual.  
New innovative processing methods for TECU® products open up even more  
perspectives for creativity and new ideas.*

*The applications shown here are just some examples of the many new  
possibilities of product design based on the individual ideas of designers and  
architects.*

# VISION TECU®





# TECU® Gold\_punch

*New vista:  
The impressive TECU® surfaces with  
individual perforation*





Perforations offer many new possibilities for individual design with TECU® surfaces. Many different levels of transparency can be created - from almost complete transparency to a subdued translucence. The effect of back-lit facades can be designed very individually by using different TECU® surfaces and a large number of different perforation patterns. There are also virtually no limits to the use of perforated TECU® products as decorative elements indoors.



# \_punch

The perforations of the TECU® surfaces are made by punching the copper and copper alloy strips after production. The punched parts are fed immediately to the recycling process where they are further processed. Punching processes have no effect on the positive properties of the TECU® products you are familiar with, such as durability, economy and the fact that they are so easy to work with.

Perforations in copper encourage the creativity of architects and designers for new visions in surface design and innovative applications for the versatile TECU® products. The examples shown here are just a selection from the sheer endless individual possibilities.

## TECU® Classic\_punch

Square perforation  
Diagonal rows offset

## TECU® Classic\_punch

Square perforation  
Straight rows

## TECU® Patina\_punch

Rectangular perforation  
Straight rows

## TECU® Classic\_punch

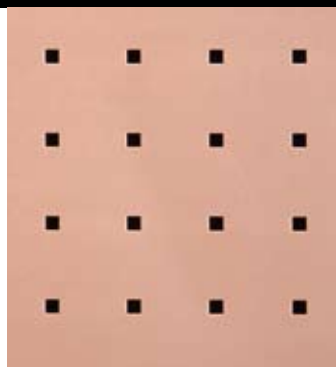
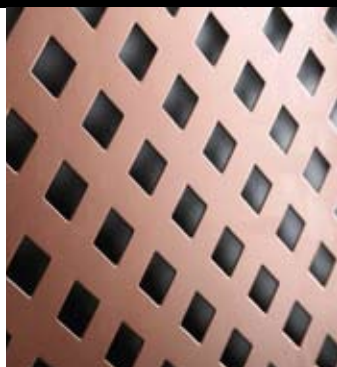
Round perforation  
Diagonal rows

## TECU® Classic\_punch

Round perforation  
Scattered








## TECU® Brass\_punch

Fishbone perforation



## \_punch

(all perforation types)

	Dimensions	670 x 2000	1000 x 2000
	Thickness	1.0/1.2/1.5/2.0	1.0/1.2/1.5/2.0
	TECU® Classic	+	+
	TECU® Oxid	+	+
	TECU® Patina	+	+
	TECU® Zinn	+	+
	TECU® Brass	+	+
	TECU® Bronze	+	+
	TECU® Gold	+	+

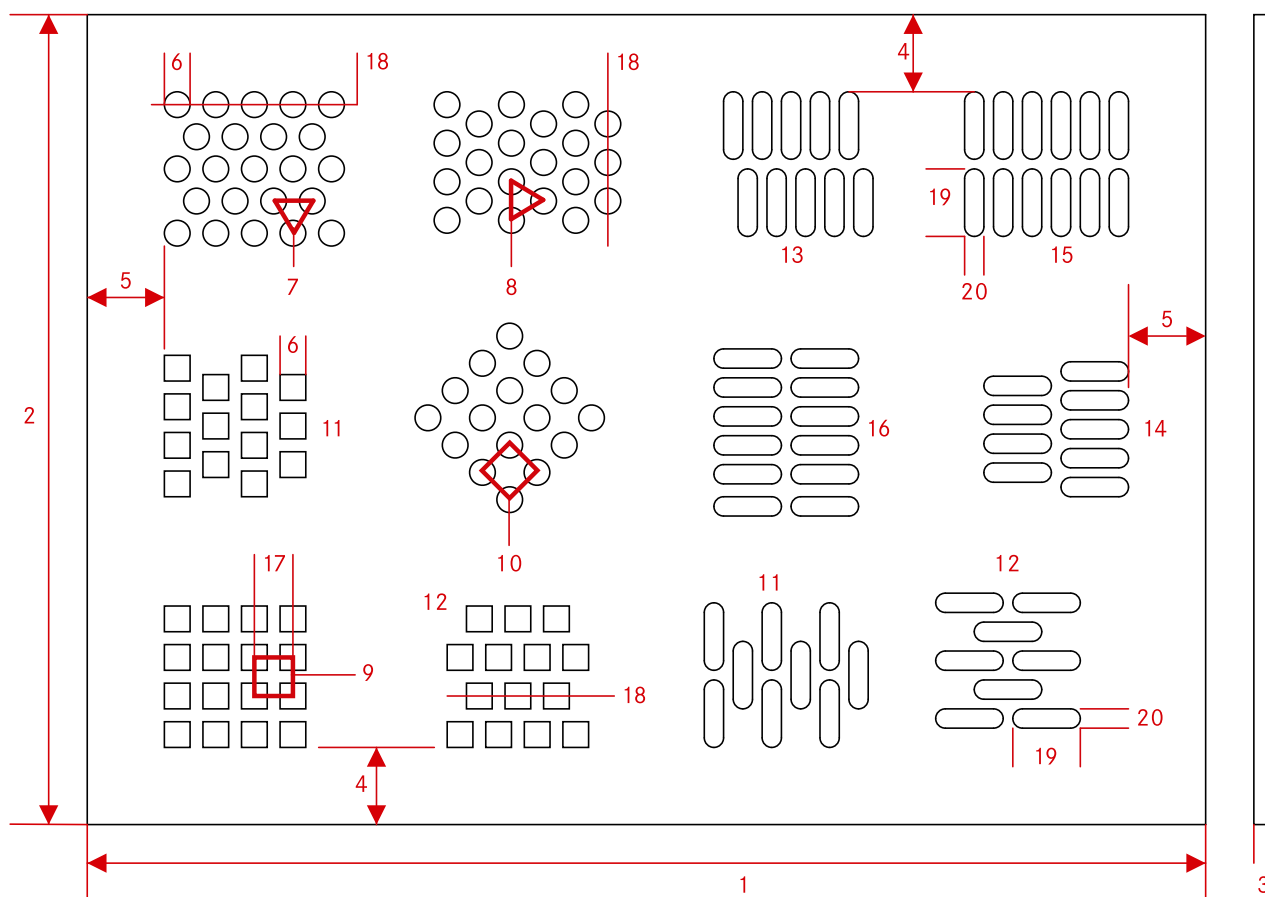
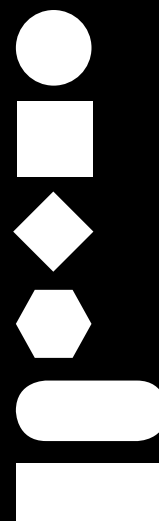
• available + on request



- 1 Length of metal
- 2 Width of metal
- 3 Thickness of metal
- 4 Edges (long side)
- 5 Edges (short side)
- 6 Hole width
- 7 Triangular arrangement, vertical
- 8 Triangular arrangement, horizontal
- 9 Rectangular arrangement
- 10 Diagonal arrangement
- 11 Parallel to width
- 12 Parallel to length
- 13 End offset parallel to width
- 14 End offset parallel to length
- 15 Straight line parallel to width
- 16 Straight line parallel to length
- 17 Distribution
- 18 Row of holes
- 19 Oblong hole length
- 20 Oblong hole width

**Hole shapes:**

Round hole  
 Square hole  
 Square hole, diagonal  
 Hexagonal hole  
 Oblong hole, round  
 Oblong hole, rectangular





*New structure:  
Copper curtains  
for protective transparency*





The material is first perforated and then stretched to create a copper rib mesh – a metal curtain with functional aesthetic qualities. The many different textile-like structures of the TECU®\_mesh surfaces provide openness and create a solid barrier, offering both transparency and mechanical protection. ECU®\_mesh surfaces in rib mesh design – for individual and characteristic impressions of light and space.





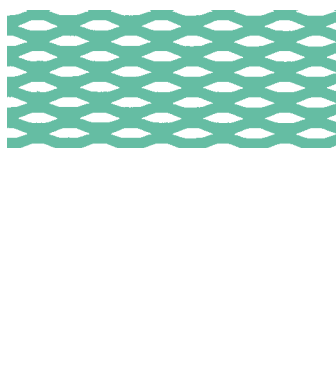
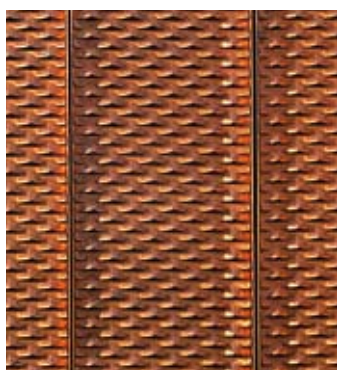
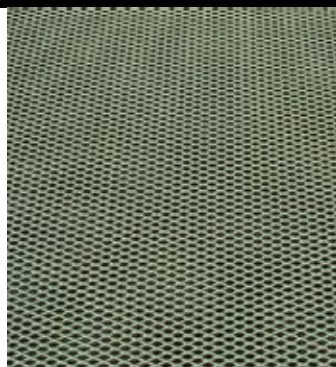
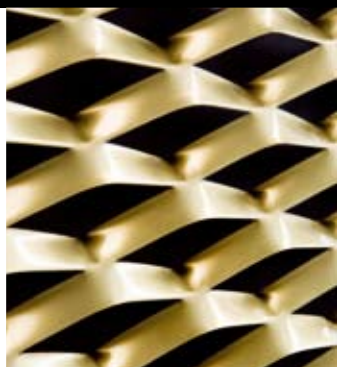
# mesh

After the copper and copper alloys strips have been produced the TECU®\_mesh structures are created by perforating and then stretching the material. The rib mesh created in this way is also expanded in the direction of the material thickness due to the effect of the tensile force.

TECU®\_mesh is available in various TECU® surfaces and some individually modifiable parameters.

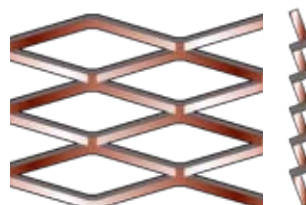
TECU® Gold\_mesh  
TECU® Classic\_mesh

TECU® Patina\_mesh



## Mesh shapes

The mesh is an element of the expanded metal sheet. The shapes are determined by the strands and the openings enclosed by these strands. The size of the mesh depends on the mesh length and the mesh width.



not flattened

## Mesh length (ML)

Distance from centre nodal point to centre nodal point toward the long diagonal.

## Mesh width (MB)

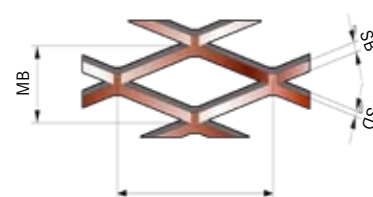
Distance from upper edge nodal point to upper edge nodal point toward the short diagonal.

## Strand width (SB)

Width of the material remaining between the openings.

## Strand thickness (SD)








Thickness of the used material.



## Mesh opening

Four strands form the sides of the expanded metal openings.



_mesh (rib mesh)			
Dimensions		on request	on request
Thickness		1.0	1.2
	TECU® Classic	+	+
	TECU® Oxid	+	+
	TECU® Patina	+	+
	TECU® Zinn	+	+
	TECU® Brass	+	+
	TECU® Bronze	+	+
	TECU® Gold	+	+

• available + on request



# \_flatmesh

Like the TECU®\_mesh structures the TECU®\_flatmesh designs are also made by perforating the copper and copper alloy strips and then stretching the material. The stretched metal is then rolled to produce the almost flat TECU®\_flatmesh surface.

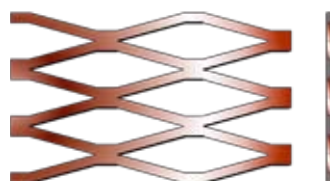
The rib mesh variants are available in the surfaces TECU® Classic\_flatmesh and TECU® Patina\_flatmesh.

TECU® Classic\_flatmesh

TECU® Classic\_flatmesh





Diamond-shaped mesh, long strand mesh, round mesh, square mesh, decorative mesh: flattened if required



flattened



_flatmesh (expanded metal)			
	Dimensions	1000 x 2000	1000 x 3000
	Thickness	0.7	1.0
	TECU® Classic	+	+
	TECU® Patina	+	+

• available + on request



# \_flatmesh

The even structures of the flat rolled rib mesh of TECU®\_flatmesh offer openness and solidity, the mechanical protection of an open metal skin and the porosity of a semi-transparent curtain. On the building the use of TECU®\_flatmesh brings a pleasant lightness to the façade with the mesh structure seeming to float in front of the background. When installed in front of glass areas TECU®\_flatmesh products offer security in an aesthetic form as well as fascinating impressions from inside and outside.



TECU® Classic\_flatmesh

*New perspective:  
Flat rib mesh  
for interesting insights*







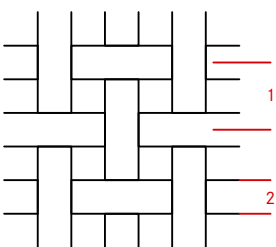
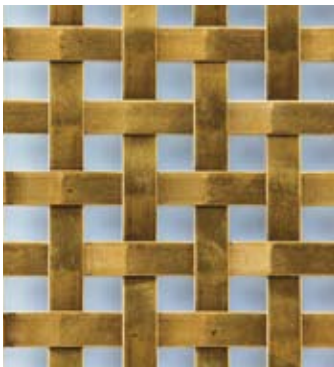
# weave

Textile woven structures in metal: the woven copper of TECU®\_weave products combine functionality with aesthetic finesse in a very unusual way. With this additional structure in the surface exteriors walls in particular are given a completely new, unique character. Depending on the weave pattern the woven copper takes on completely new mesh patterns with an individual design and light effects. Depending on the metal bond, the incidence of light and the perspective the material has a transparent, semi-transparent or fully enclosed effect.

The solid TECU®\_weave copper material can add value to buildings in more ways than one: facades, multi-storey car park cladding, sound and sunlight protection installations profit from the impressive surfaces in the same way as various interior applications.

TECU® Gold/Stainless\_weave  
TECU® Gold\_weave

TECU® Gold/Stainless\_weave



1 Sections  
2 Web width

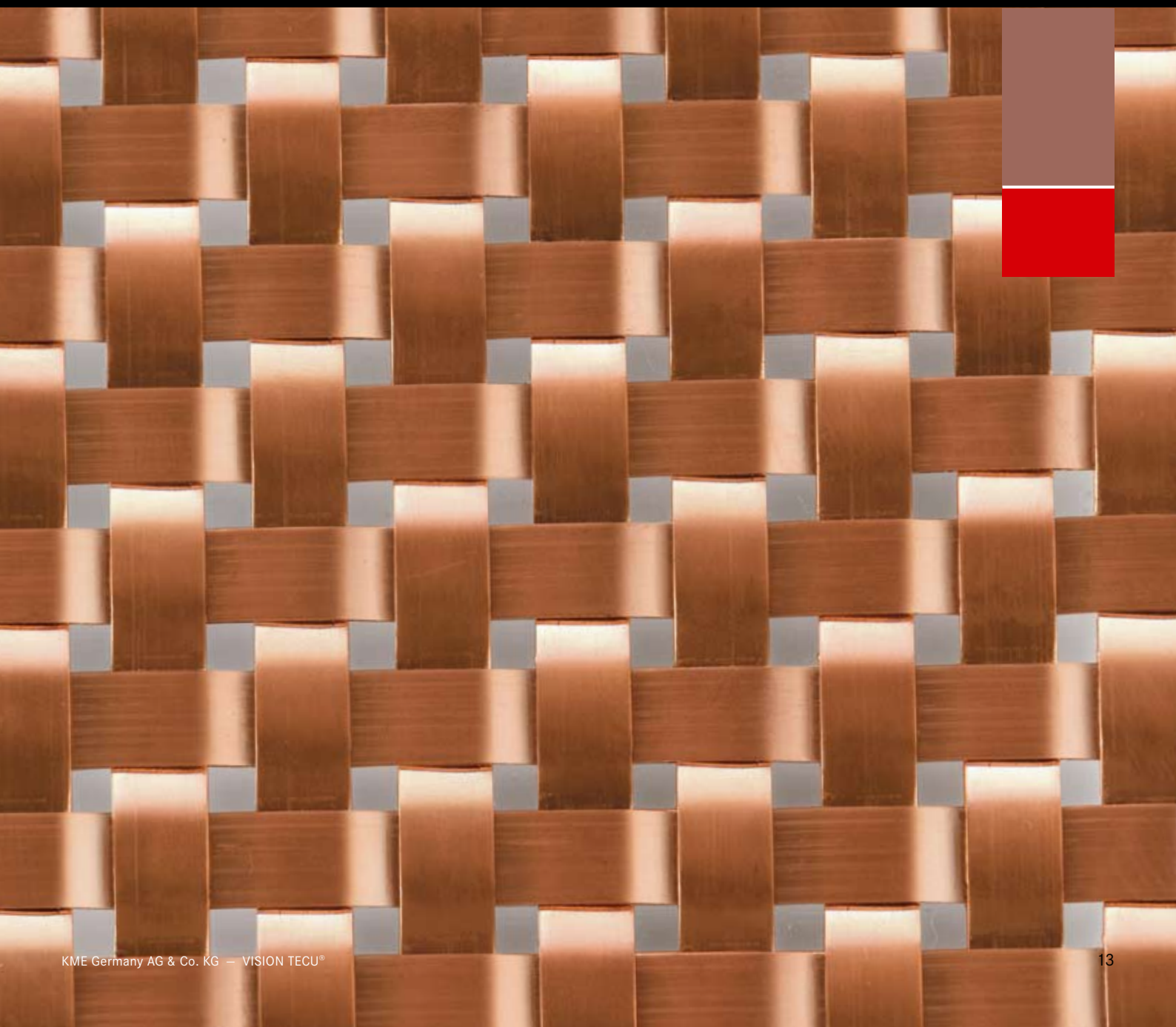
_weave (all strip sizes)			
Dimensions	670 x 2000	1000 x 2000	
Thickness	1.0	1.0	
TECU® Classic	+	+	
TECU® Oxid	+	+	
TECU® Patina	+	+	
TECU® Zinn	+	+	
TECU® Brass	+	+	
TECU® Bronze	+	+	
TECU® Gold	+	+	

• available + on request



*New effect:  
Woven copper surfaces –  
metallic materials for architectural applications*

TECU® Classic\_weave

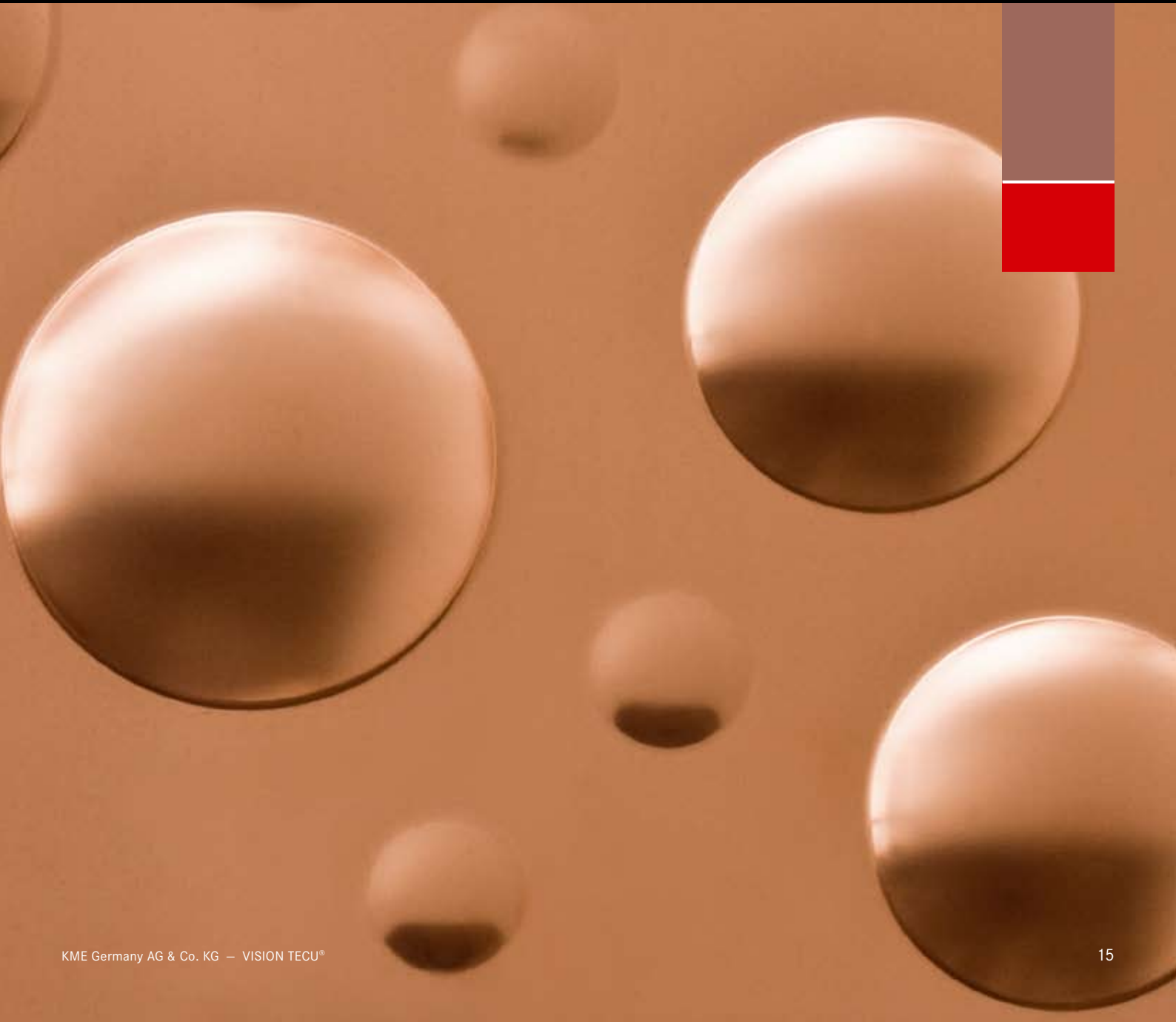




*New dimension:  
Time and time again new, unexpected,  
fascinating solutions in copper*



Amorphous structures, wave shapes, organic three-dimensional patterns, spherical impressions in copper: TECU® surfaces are now complemented by a third dimension. For building applications this means livelier, more individual facades with a very expressive presence. The natural copper surfaces now seem to take on a different appearance at different times of the day and with every change in light and shadow. The long-term change in appearance also seems to occur in a different manner from what we are used to: since the natural oxidation process on copper depends on the angle of the surface, the colour changes on three-dimensional surfaces differ considerably.





# \_shape

After the copper and copper alloy strips are produced the three-dimensional shapes of the TECU® surfaces are made by hammering, stamping and hydroforming. These processes have no effect on the familiar positive TECU® properties. The easy processing, durability and economy of the products remain fully intact.

The three-dimensional TECU®\_shape structures are available in many designs and in all TECU® surfaces.

**TECU® Brass\_shape**  
Wave, diagonal










**TECU® Classic\_shape**  
Bubbles, scattered



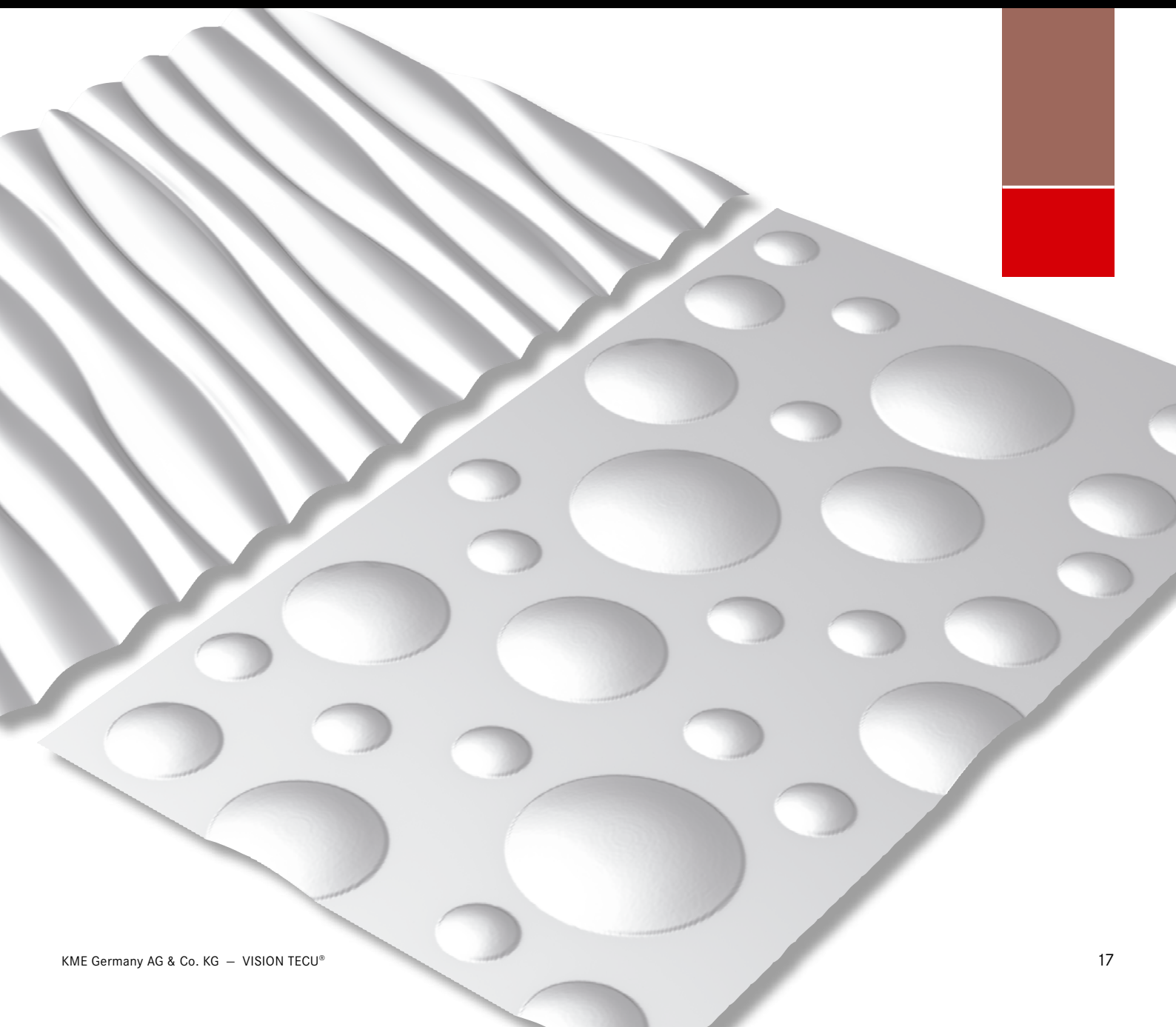
**TECU® Classic\_shape**  
Small bubbles  
scattered



<b>_shape</b> (all types)			
Dimensions		670 x 2000	1000 x 2000
Thickness		1.0	1.0
	TECU® Classic	+	+
	TECU® Oxid	+	+
	TECU® Patina	+	+
	TECU® Zinn	+	+
	TECU® Brass	+	+
	TECU® Bronze	+	+
	TECU® Gold	+	+

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**KME Group S.p.A.**

Via dei Barucci 2  
50127 FIRENZE  
ITALY  
www.kmegroup.it

**KME Germany AG & Co. KG**

Postfach 33 20  
49023 OSNABRÜCK  
Klosterstraße 29  
49074 OSNABRÜCK  
GERMANY  
Fon +49 (0)541 321-2000  
Fax +49 (0)541 321-2111  
www.kme.com  
info-tecu@kme.com

**KME Italy S.p.A.**

Via Corradino d'Ascanio, 4  
20142 MILANO  
ITALY  
Fon +39 02 89388-206/-244/-452  
Fax +39 02 89388-478  
www.kme-italy.com  
info-tecu-italy@kme.com

**KME France S.A.S.**

11 bis, rue de l'Hôtel de Ville  
92411 COURBEVOIE CEDEX  
FRANCE  
Fon +33 (0)1 47896-849  
Fax +33 (0)1 47896-932  
www.kme-france.com

**KME Spain S.A.**

Ctra Sabadell Mollet, km5  
Sta. Perpètua de Mogoda  
08130 BARCELONA  
SPAIN  
Fon +34 93 5747090  
Fax +34 93 5747091  
www.kme-iberica.com  
info-iberica@kme.com

**KME Yorkshire Limited**

Severn House, Prescott Drive  
Warndon Business Park  
WORCESTER  
WR4 9NE  
UNITED KINGDOM  
Fon +44 (0)1905 751800  
Fax +44 (0)1905 751801  
www.yct.com  
info@yct.com

**KME America Inc.**

1000 Jorie Boulevard, Suite 111  
OAK BROOK, Illinois 60523  
USA  
Fon +1 (0)630 990-2025  
Fax +1 (0)630 990-0258  
www.kme.com  
info-america@kme.com

**KME Asia Pte. Ltd.**

51 Geylang Lorong 17  
#06-01  
Superior Industrial Building  
SINGAPORE 388571  
SINGAPORE  
Fon +65 6337-8671  
Fax +65 6337-8571  
www.kme.com  
info-asia@kme.com

**KME Austria**

**Vertriebsgesellschaft m.b.H.**  
Slamastraße 48  
Postfach 128  
1232 WIEN  
AUSTRIA  
Fon +43 (0)1 6167986-0  
Fax +43 (0)1 6167986-36  
www.kme.com  
info-at@kme.com

**NV KME Benelux SA**

Leuvenbaan 3  
1820 STEENOKKERZEEL  
BELGIUM  
Fon +32 (0)2 720-1889  
Fax +32 (0)2 720-8780  
www.kme.com  
info-benelux@kme.com

*Netherlands:*

J.E. van Nieuwkoop  
P/a Postbus 146  
3300 AC DORDRECHT  
NETHERLANDS  
Fon +31 (0)78 6212991  
Fax +31 (0)78 6212048  
www.kme.com  
info-nl@kme.com

**KME Czech Republic s.r.o.**

nám. Sitná 31 05  
27201 KLADNO  
CZECH REPUBLIC  
Fon +42 (0)312 608250  
Fax +42 (0)312 608251  
www.kme.com  
info-cz@kme.com

**KME Danmark A/S**

Landbrugsvej 8  
5260 ODENSE S  
DENMARK  
Fon +45 65 916410  
Fax +45 65 916411  
www.kme.com  
info-dk@kme.com

*Sweden:*

KME Danmark A/S, Sweden  
Box 118  
64723 MARIEFRED  
SWEDEN  
Fon +46 15 910612  
Fax +46 15 910613  
www.kme.com  
info-s@kme.com

**KME Hungaria Színesfém Kft.**

Andor u. 47-49  
VI. em. 616-618  
1119 BUDAPEST  
HUNGARY  
Fon +36 (0)1 2059775  
Fax +36 (0)1 2059776  
www.kme.com  
info-hu@kme.com

**KME Polska Sp. z o.o.**

ul. Potocka 14  
01-652 WARSZAWA  
POLAND  
Fon +48 (0)12 4116370  
Fax +48 (0)12 4116370  
www.kme.com  
info-polska@kme.com

**KME (Suisse) SA**

Moosstrasse 2  
Postfach  
8803 RÜSCHLIKON  
SWITZERLAND  
Fon +41 (0)43 3882000  
Fax +41 (0)43 3882001  
www.kme.com  
info-ch@kme.com

Case postale 111  
Av. de Châteleine 91a  
1219 CHÂTELEINE-GENÈVE  
SWITZERLAND  
Fon +41 (0)22 9790660  
Fax +41 (0)22 7966610  
www.kme.com  
info-ch@kme.com

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1007.050.0809