

ARTMe

Be Different ... Be You

Technical Guide

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Introduction

Individuality in the design of modern buildings is far more than the presentation of materials limited by dimensions. It communicates, arouses feelings, has a personal expressive power, which distinguishes it from a range of similar products.

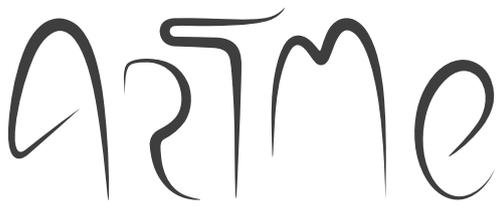
Individuality is devoted to freedom. Through the unique expression on the facade envelope of a building an individual or a company can express its own identity.

Technology for the future

ArtMe, developed by Trimo, is a novel high-tech solution that provides an answer to modern trends of individuality and creative design.

Using the latest technology a special surface treatment of Trimo facade elements is enabled to deliver the highest quality standards of mass production combined with individual design possibilities.





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Product in general

ArtMe represents new challenges in the design of façade systems by the integration of individuality into each project. Individuality can be achieved by means of the mechanical transformation of a metal surface or figuratively “by drawing” on a façade element. In this way a new visual effect, such as a pallet of shades, forms and patterns can be obtained on an individual element, complete façade or its part.

ArtMe can be applied to Qbiss One facade elements with Corus Colorcoat Prisma, PVDF or PUR coating. Maximum dimension of the facade element with an ArtMe pattern is 6.5m x 1.2m.

ArtMe embossment concepts

Concept 1

ArtMe offers 7, attractive pre-prepared designs or the optional combination of components. They provide the basic building blocks (graphic elements) prepared in advance that enable efficient and low-cost use in specific projects. Individuality can be obtained by a composition of building blocks, which results in a customized surface appearance. One element, part of a façade or the complete façade may be used as a base canvas.

In two cases additional attraction is possible. With “Lines” and “Puzzles” design fade-out-in feature as an option, enabling unprecedented line appearance (depth varying from flat zero to - 4.5 mm).

An advantage of the **pre-designs** concept is that it has been already structurally tested and has optimized statics. For consultation and production a CAD document is required. The basic building blocks of all pre-prepared patterns are available in file formats of .eps, .pdf and .dxf files.

ArtMe pre-designs and its variations:

- **Indent** (1 design variation)
- **Circle** (6 design variations)
- **Mesh** (1 design variation)
- **Lines** (18 design variations)
- **Puzzles** (6 design variations)
- **Bubbles** (7 design variations)
- **Stripes** (11 design variations)

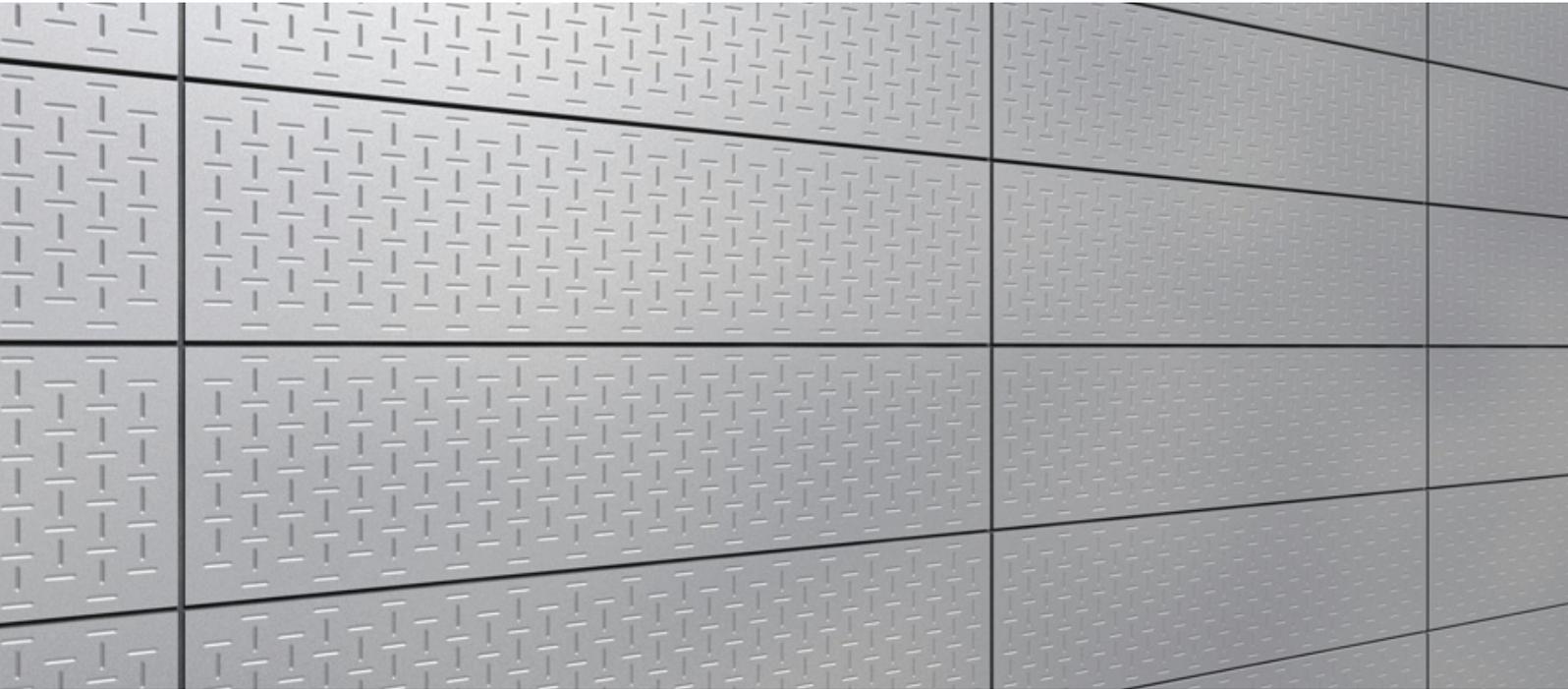
For more information and documentation about pre-designs and its variations contact Trimo Expert Team, artme@trimo.si, t: +386 (0)7 34 60 121

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Indent



Circle

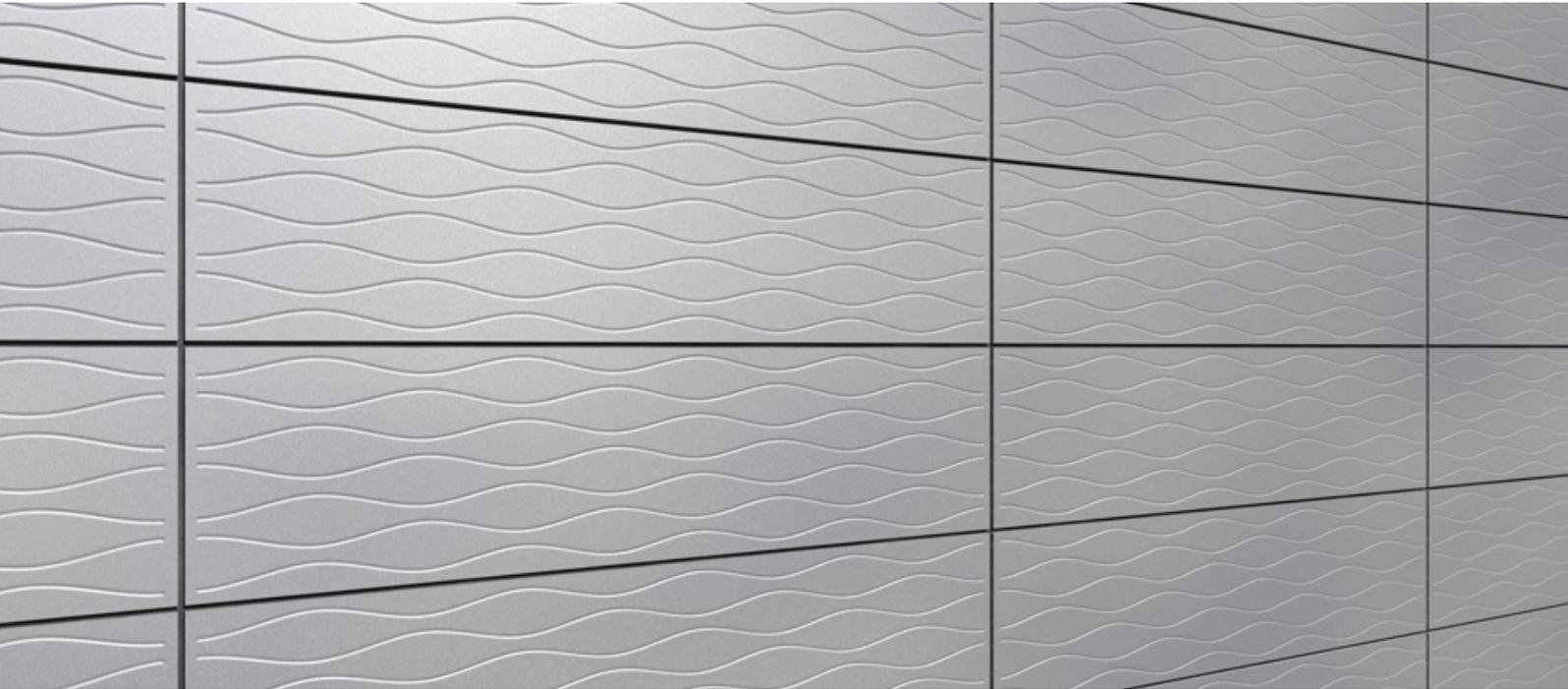


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Mesh



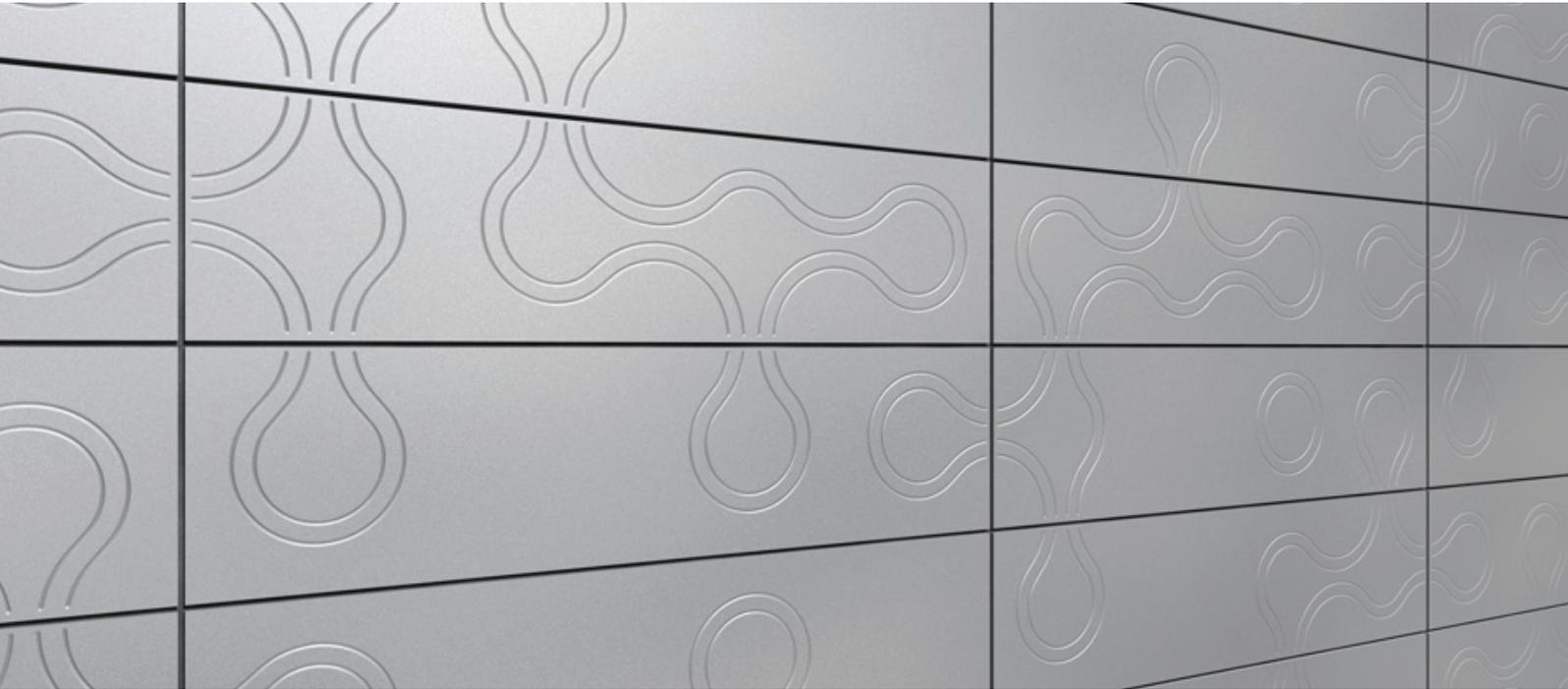
Lines (with fade-out-in effect)



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Puzzles (without fade-out-in effect)



Puzzles (with fade-out-in effect)



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Bubbles



Stripes



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Jodrell Bank Centre for Astrophysics, Great Britain, 2011

ArtMe embossment concepts

Concept 2

Unique patterns are the highest level of expressing individuality. The building is therefore recognised as part of the person who designed it. Concept 2 requires that the pattern is confirmed with the Trimo technical support. For special, more complex, patterns additional time and cost should be anticipated. For design consultation and production a CAD document is required.

In some cases the individual design can influence (+ or -) certain mechanical properties, therefore consultation with Trimo technical support is necessary.



Technical guidance, limitations

Main considerations

30 mm of the element edge area shall have no pattern. It is recommended that at least 2/3 of an element width cross-section is untouched. Straight lines in one direction may cause the element to lose its rigidity and therefore it is best to use random line orientations with at least 100 mm line-to-line offset. Sharp ArtMe line crossing is not permitted.

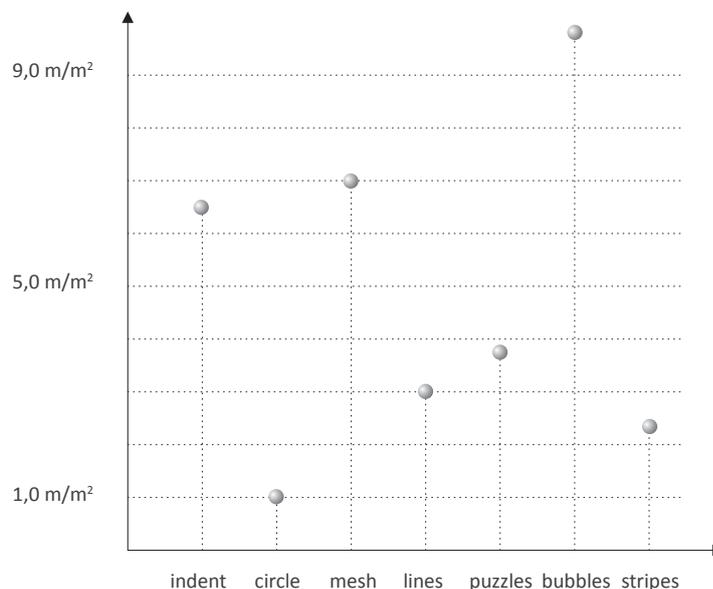
It is preferred to use ArtMe line densities ranging from 1.0 m/m² up to 9.5 m/m².

Assembly considerations

- Cut-outs or end details (e.g. windows and doors, openings); a detail is considered individual in cases of unforeseen ending of the pattern (concept 1 and 2).
- Modules, lengths of elements or raster of the façade; patterns can be scaled, but consider a visual impression can change (concept 1).
- Façade pattern composition; the majority of elements can be rotated optionally (90 degree angle) and thereby an appropriate continuation of the pattern lines can be maintained (concept 1).

Recognising the importance of product performance, the original integrity and characteristics (anticorrosion, fire resistance, thermal and sound insulation, air and water tightness) of the ArtMe facade are all preserved without compromise. Protection has been confirmed by tests in humidity (1000h) and salt chamber (500h), as defined by standards. Existing certificates of Qbiss One products are applicable.

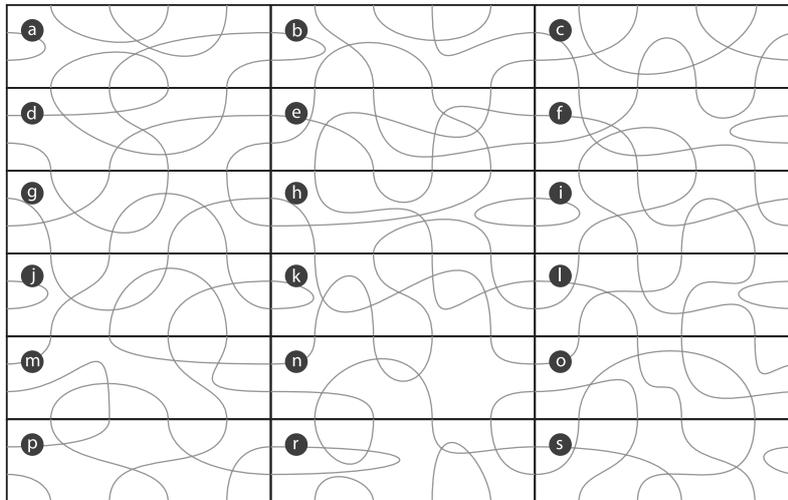
ArtMe pre-designs line density flow:



Technical guidance, limitations

Assembly considerations, modifications principle

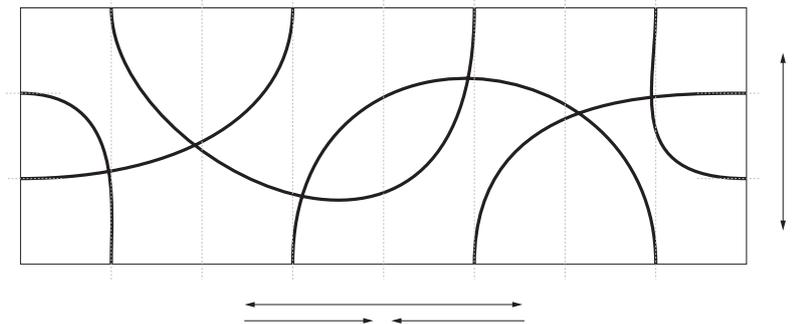
Lines:



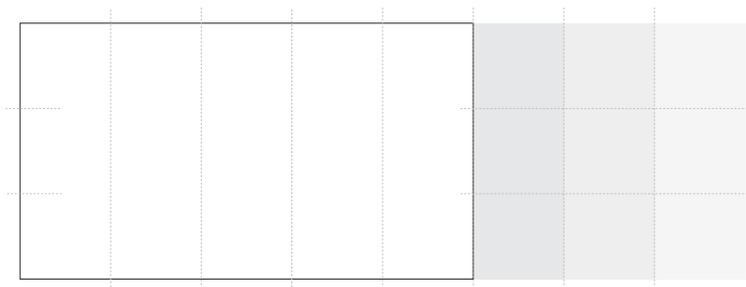
a. MOVING

b. ROTATING and MIRRORING: 90,180,270 degrees

c. SCALING: preserve ratios of lines end points on the panel border



d. CUTTING



Technical guidance, limitations

General rules not to compromise feasibility

- Only 30% of element the surface can be touched by ArtMe embossment
- Edge offset of 30 mm from element border must be untouched by ArtMe lines
- No sharp ArtMe embossment line crossing is allowed
- Most common reshaped depth is 3,0 mm and 4,5 mm (8,0 mm is feasible but in some cases questionable)
- Minimum line-to-line distance must be respected

In some cases the statics of a facade element can change. In general it can have either a positive or negative influence on the load-bearing capacity of the panel. The estimated values are given in the following table:

ArtMe pre-designs	Estimate of load-bearing capacity		
Indent	-15%	...	0%
Circle			0%
Mesh	-15%	...	0%
Lines	-15%	...	0%
Puzzles			0%
Bubbles	-15%	...	+5%
Stripes	-15%	...	+5%

ArtMe on curved facade element

ArtMe collection can be also applied on curved Qbiss One façade elements. Technical limitations need to be checked and verified project-by-project with Trimo Expert Team.

ArtMe benefits

The main competitive advantage of the ArtMe product is the possibility of complete individualisation of a building façade for a customer. Simultaneously, the integration of the system into the existing façade systems enables a hardly noticeable and non-problematic combination of various products, without any additional elements needed.

The following benefits can be emphasised:

- Individual and unique character of the facade depending on the customer's wishes
- The ability for architects to deliver complete expression and the presentation of a comprehensive story
- Inscriptions in a building as a message
- Countless designs
- Maximal visual effect at minimal cost
- Latest technology solution
- Surface embossment does not compromise structural integrity of facade element

ArtMe application possibilities

- Decorative elements of the facade
- Signs and logotypes
- Emphasis of specific architectural elements
- Patterns, lines, textures
- Marking of transport routes, locations, buildings, entrances
- Inscriptions, signs
- Logos and brand symbols
- Photo adaptations

