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ARTME TECHNICAL GUIDE

ARTME

Introduction

ArtMe is a unique, high-tech façade surface treatment that allows literally unlimited shapes, patterns and visual effects to be inscribed on the façade envelope.

ArtMe brings together individuality, difference, aesthetics and design. Through highly controlled, 3D-forming technology ArtMe enables you to complement the façade cladding of your building with aesthetic designs, which play with combinations of interesting shapes, shadows, reflection and patterns.

ArtMe achieves all this without the need for adhesives, additional elements or structural devices and can be used for a variety of application possibilities including:

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





ARTME BENEFITS

- Individual and unique character of the facade envelope according to your wishes.
- Countless design possibilities.
- Integration of the ArtMe design into the TRIMO façade systems enables the non-problematic combination of products, without the need for additional elements.
- The ability to deliver complete expression and the presentation of a comprehensive story.
- Inscriptions in a building as a message.
- Maximal visual effect at minimal cost.
- Surface embossment does not compromise the structural integrity of the facade element.



TECHNOLOGY FOR THE FUTURE

ArtMe uses a highly controlled, 3D-forming technology, which is being used for the first time on completed façade elements with pre-coated steel-sheet surfaces. Recognising the importance of product performance, the original integrity and characteristics of the façade elements are preserved without compromise.

Award winning product

ArtMe won the prestigious Red Dot Product Design Award, which makes it the only product from the fireproofed roofs and facades sector to receive this award.



reddot design award

TECHNICAL GUIDE

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 flat surface or figuratively "by drawing" on a façade element. In this way, a new visual effect, such as a pallet of shades, reflections, forms and patterns can be obtained on an individual element, complete façade or its part.

ArtMe can be applied to following facade products:

- Qbiss One facade elements with PVDF or PUR coating. Maximum dimension of the facade element with an ArtMe pattern is 6.5 m x 1.2 m.
- Trimoterm facade elements with all available protection coatings. Maximum dimension of the facade element with an ArtMe pattern is 8.0 m x 1.2 m.

ArtMe embossment can be produced on element flat face steel sheet (it cannot be used with Trimoterm standard profiles).



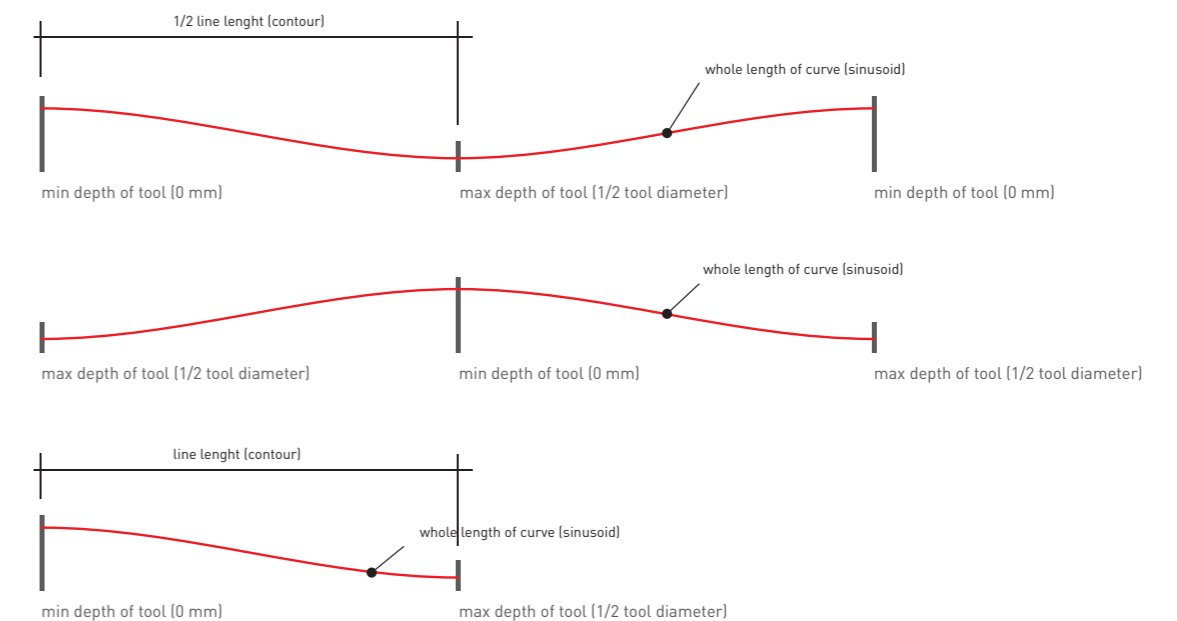
ARTME VERSATILE DESIGNS

Ready-made design

Modern technology of façade surface embossment enables you to choose your preferred design. You can select from 7 pre-designed patterns; Puzzle, Lines, Bubbles, Indent, Circles, Mesh and Stripes.

Pre-designed patterns provide the basic façade blocks (graphic elements) prepared in advance to enable efficient and low-cost use in specific projects. Individuality can be obtained by a composition of blocks, which results in a customised surface appearance. One element, part of a façade or the complete façade, may be used as a base canvas.

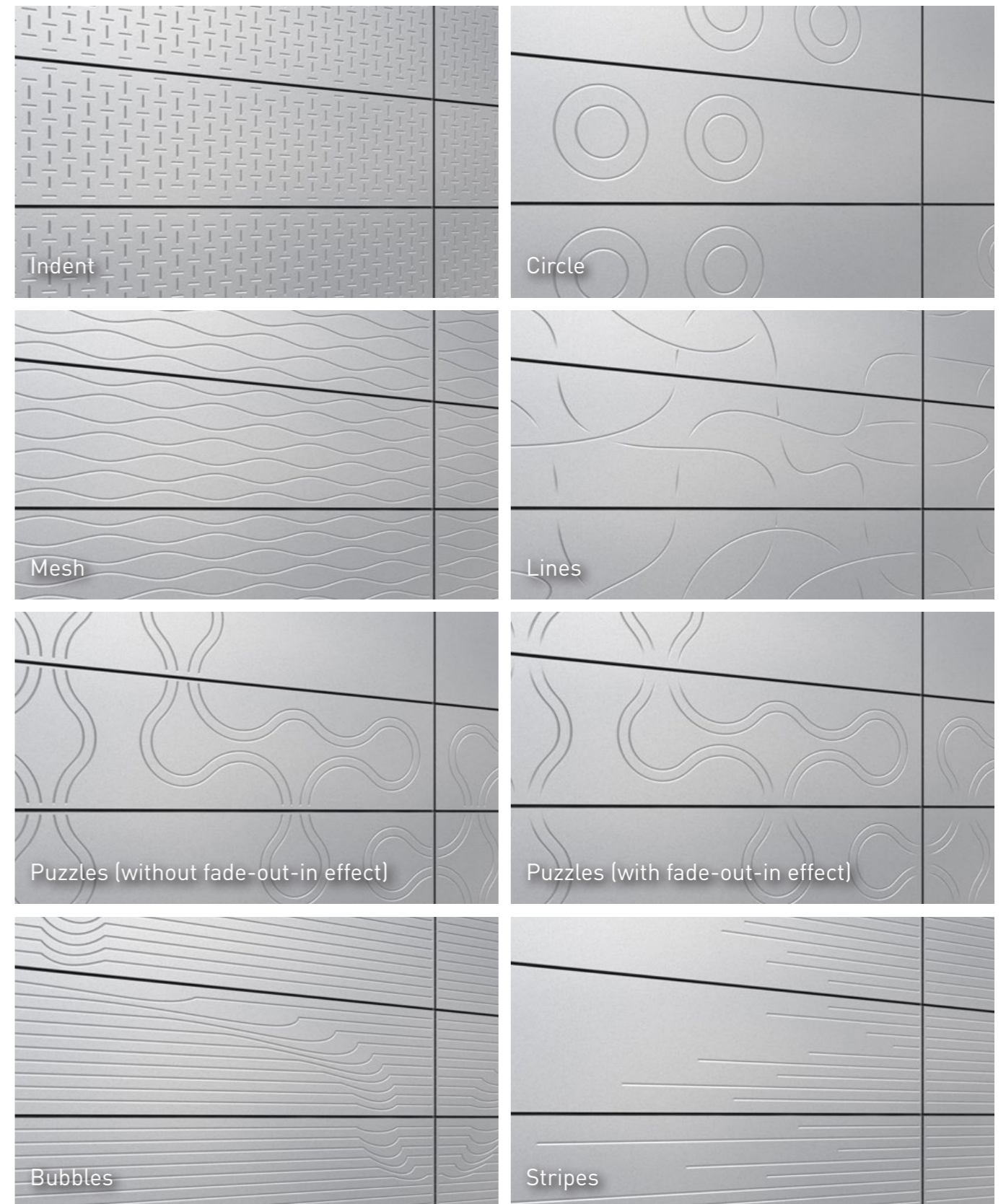
Additional attractive options are possible by two pre-designed patterns. With “Lines” and “Puzzles” design fade-out and fade-in feature as an option, enabling unprecedented line appearance (line depth varying from flat zero to - 2.5 mm).



An advantage of using a pre-designed pattern is that it has been already structurally tested and has optimized statics. For additional consultation and final production, a CAD or vectorised drawing document of pattern design is required. Basic digital blocks of all pre-prepared patterns including 3D lines for fade-out-in feature are available in .eps, .pdf, .dxf and .3dm file formats.

ArtMe predesigns and its variations

- Indent** (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 the Trimo technical consulting team: technical@trimo-group.com, T: +386 (0)7 34 60 121. Feasibility test with visualisations, static solutions and managing of changes can also be required.



Unique design

Unique patterns are the highest level of expressing individuality. The building is therefore recognised as part of the person who designed it.

It is necessary that any individual design pattern is checked and afterwards confirmed by the Trimo technical consulting team. For consultation a CAD or vectorised drawing document of the pattern is needed. Feasibility test with visualisations, static solutions and managing of changes can also be required.

For special, more complex patterns additional time and cost should be anticipated.

In some situations, individual designs can influence certain mechanical properties. Therefore, it is necessary to contact the Trimo technical consulting team to obtain a static calculation.

TECHNICAL INFORMATION

To maintain the structural composition and integrity of the facade element the edge clearance area (without ArtMe pattern) should be:

- 30 mm with Qbiss One façade elements
- 50 mm with Trimoterm façade elements

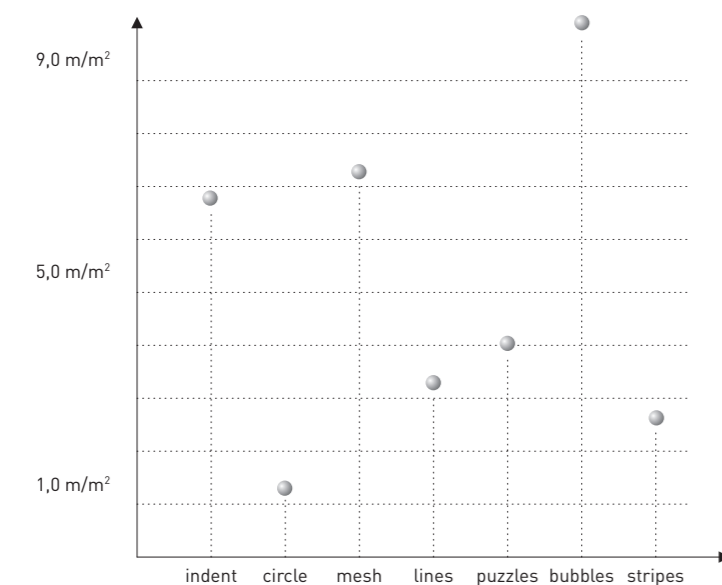
With Trimoterm Invisio solution it is necessary to point out a non-symmetrical characteristic of a joint.

When using ArtMe with this product, edge clearance of 70 + 50 mm must be respected.

For Trimoterm facade, an additional edge clearance offset from vertical elements (HF aluminium element or flashing) is needed. It is recommended that at least 2/3 of the facade 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.

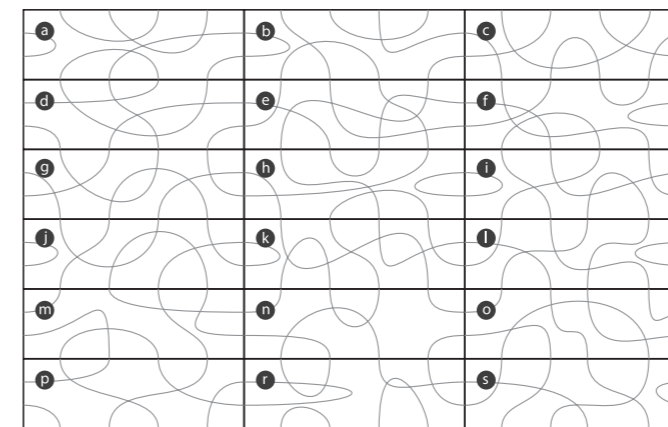
For optimal performance it is best to use ArtMe line densities ranging from 1.0 m/m² up to 9.5 m/m².

ArtMe pre-designs line density flow



Assembly considerations

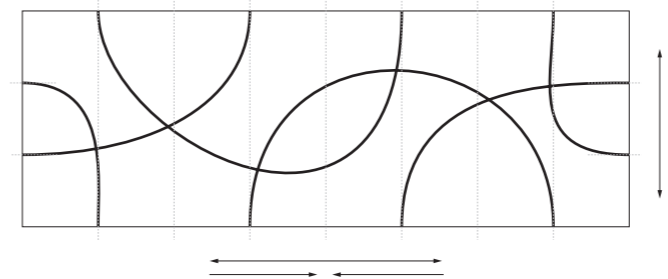
Assembly considerations, modifications principle



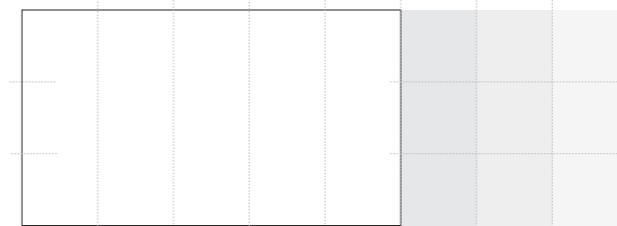
a. MOVING

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

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



d. CUTTING



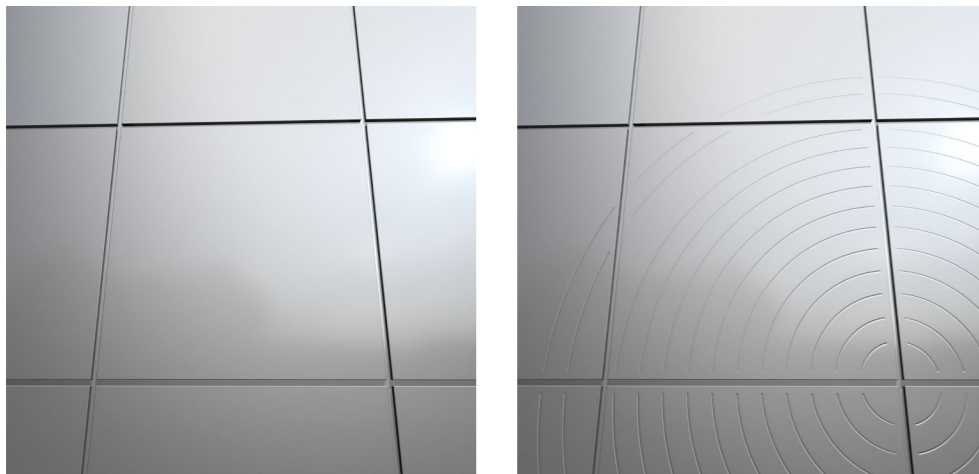
- Cut-outs or end details (e.g. windows, doors, openings, penetrations, facade mounted lights); a detail is considered individual where there is an unforeseen ending to the pattern (ready-made, unique designs).
- Modules, lengths of elements or raster of the façade; patterns can be scaled, but consider that a visual impression can change (ready-made designs).
- ArtMe 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 (ready-made designs).
- ArtMe façade elements can be used with horizontal and vertical types of installation with all element thicknesses available.
- When a random design is used (ready-made, unique designs) it is important to know and define specific locations of the facade elements in the execution drawings documentation and packing list.

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 for Qbiss One and Trimoterm products are applicable.

General directions not to compromise feasibility

- Only 30% of the facade element surface can be touched by an ArtMe embossment.
- Qbiss One element edge clearance offset of 30 mm must be untouched by ArtMe lines.
- Trimoterm element edge clearance offset of 50 mm must be untouched by ArtMe lines.
- Most common embossment depth is 2,0 mm and 2,5 mm alternatively.
- Minimum line-to-line distance must be respected.
- ArtMe embossment can be produced only on the facade element with flat steel sheet.

Embossment depths of 0mm; 2,5 mm



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%

GOOD TO KNOW

The ArtMe embossment can be applied to curved Qbiss One façade elements. Technical limitations and minimal radius must be checked individually for each project.

The ArtMe embossment can also be applied to Qbiss One and Trimoterm façade elements with flat stainless steel sheet.

ArtMe distinguishes with fade-out and fade-in feature, enabling unprecedented line appearance.

Best ArtMe reflection effects are visible on dark colours.

Minimal steel sheet thickness for ArtMe embossment is required to be 0,7 mm.

3D lines for fade-out-in feature and all pre-designs are available in .eps, .pdf, .dxf, and .3dm file formats.

Production speed for ArtMe facade is approximate 500 m² per week, depending highly on number of corners and facade element lengths.

ARTME REFERENCES

- Blackburn Central High School, United Kingdom
- Bristol Aero Collection Concorde Building, United Kingdom
- Waste Transfer Centre Greenwich Peninsula United Kingdom
- The University of Warwick Sports Hub, United Kingdom
- Jodrell Bank, United Kingdom

- Hallenbad Erlanger, Germany

- Vasas Sport Arena, Hungary
- Lego Factory, Hungary

- Holcim, Slovakia
- Office of Ministry of Labour Social Affairs and Family of the Slovak Republic in Nitra, Slovakia

- Florjančič Printing House, Slovenia
- Volleyball Court Modular Facilities Koper, Slovenia

- Business Incubator Biograd na Moru, Croatia
- Business Incubator Poličnik, Croatia

HEADQUARTERS

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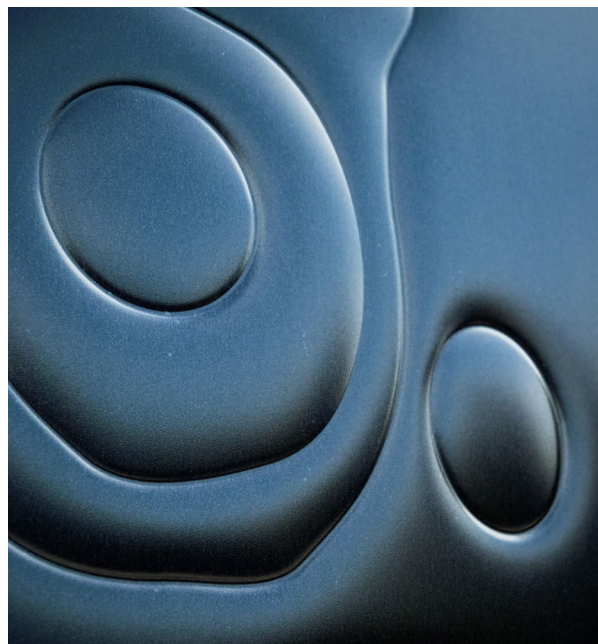
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