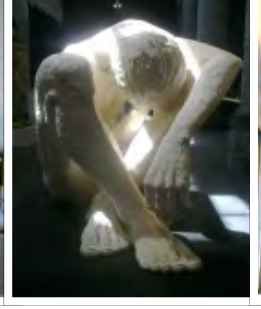
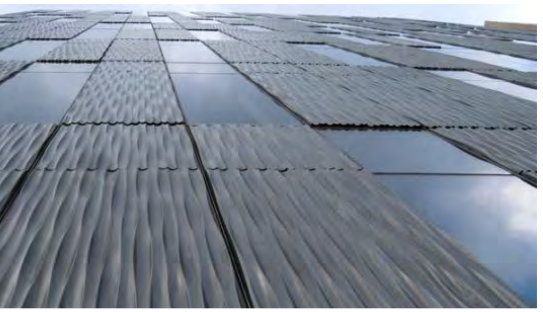


AUSTRALIA COMPOSITE SOLUTIONS



Freedom of form

September 2018

AUSTRALIA COMPOSITE SOLUTIONS

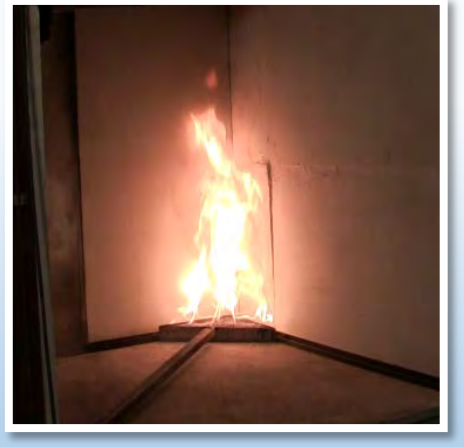
- Environmentally friendly
- Water based
- Free of solvents

AUSTRALIA COMPOSITE SOLUTIONS

Excellent fire properties

Reaction to **European** Fire Classification: **B s1 d0**
In accordance with EN 13501 – 1: 2002

0 s



15 s

2 min.

15 min.

22 min.

AUSTRALIA COMPOSITE SOLUTIONS

Excellent fire properties

After 25% sand to the mass of A1 is added:

Reaction to **European** Fire Classification: **A2 s1 d0**

In accordance with EN 13501 – 1: 2007+A1:2009

AUSTRALIA COMPOSITE SOLUTIONS

Excellent fire properties

- Flame Spread Index (FSI): **20** | - Smoke Developed Index (SDI): **15**

Reaction to **US** Fire Classification: **A**

In accordance with ASTM E84:

Standard test method for surface burning characteristics of building materials

AUSTRALIA COMPOSITE SOLUTIONS

Good physical & mechanical properties

"E" glass fibre 12-15 wt% test conditions 20°C, 65% RH

Property	Unit of Measure
Density	1500 - 1800 kg/m³
Compressive strength	25 - 30 MPa
Tensile strength (UTS)	25 - 35 MPa
Bending elastic limit (LOP)	15 - 20 MPa
Bending strength (MOR)	50 - 65 MPa
Youngs modulus	5 - 6 GPa
Strain to Failure	2%
Impact Strength (Charpy)	20 KJ/m²

AUSTRALIA COMPOSITE SOLUTIONS

- Low exotherm

Maximum 45°C

- Zero shrinkage

Maximum expansion on set : 0.3 %

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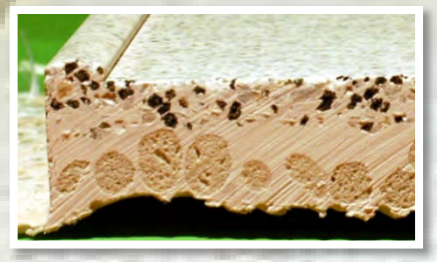
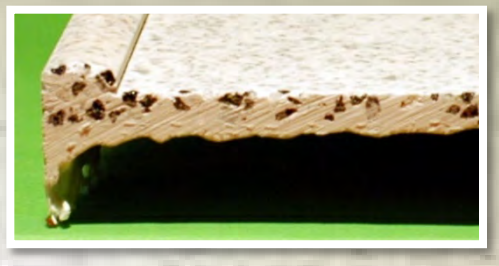
Excellent adhesion



Poraver

Wood

EPS



Triaxial fibre

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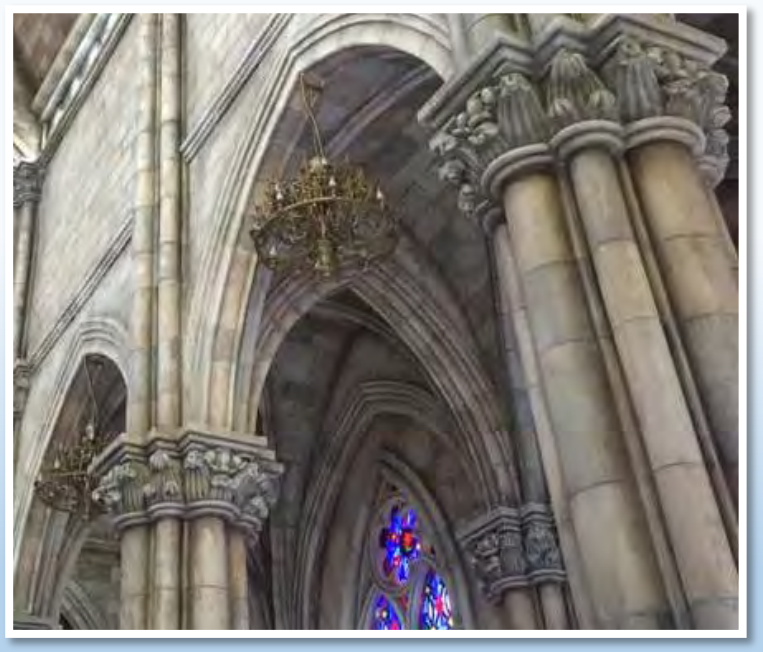
Better & Safe working place

ACS
AUSTRALIA COMPOSITE SOLUTIONS

Excellent surface finishes



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Processing methods

Casting

Laminating

Spraying

Roto Moulding

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Spraying machine & Putzmeister

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Standard delivery program - LP01

7,5 kg

15 kg

30 kg

60 kg

3150 kg

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A1 Control additives

- **Thix A;** to thicken (gelcoat) the A1
- **Thix B;** to thicken (paste) the A1
- **Retarder;** to slow down the processing time
- **Accelerator;** to speed up the processing time
- **Diluent;** reduces the viscosity

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Fabrics

A1 triaxial glass fibre
with an open structure

A1 triaxial basalt fibre
with an open structure

C-veil
for a smooth surface

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Mixing blades

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Fillers - Pigments

Standard colour pigments

Black

White

Red

Blue

Yellow

Magenta

Terracotta

Ochre

Orange

Green

RAL colours on request

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Fillers - Sand & Stone

Advantages of using sand:

- increases fire safety
- increases impact resistance
- natural appearance
- price reduction

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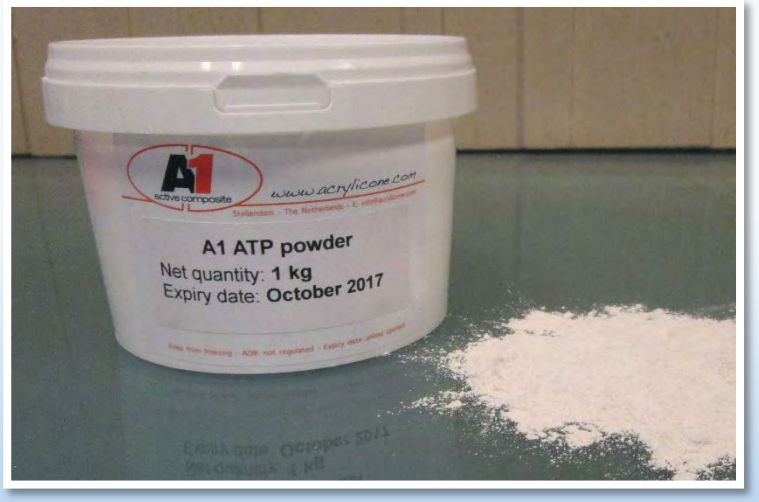
Fillers - ATP powder & Poraver



ATP powder;
is a volume thickener

Poraver;
is a light weight filler

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Fillers - Metal powders

Bronze powder

Copper powder

Iron powder

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Manuals

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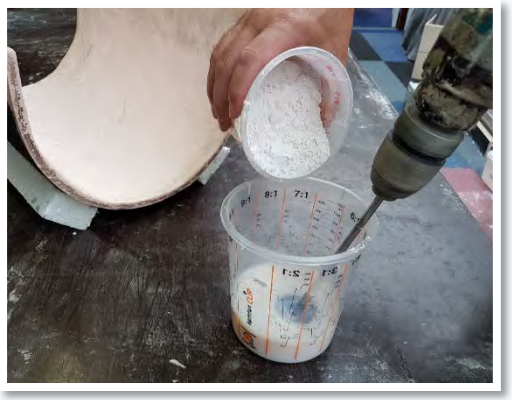
How to make

825 g - A1 liquid
1650 g - A1 powder
750 g - A1 sand
Thix A
scales
mixing cups
brushes
mixing machine
triaxial fibre
mould
water

How to make an A1 column with sand structure

1. Calibrate the scale and weigh 250 g liquid, 500 g powder and 500 g yellow sand.



2. Add the powder slowly to the liquid and stir with the mixer until you have a smooth surface.

3. Add sand to the A1 and stir well. Also add 5 g Thix A to the mixture of A1 and sand.
By using Thix A the A1 becomes thicker.

4. The surface must reach a thickness of 3 mm. Let the panel dry for ±20 min.
Clean the brush with water.

How to make an A1 column with sand structure

5. For the 2nd layer of A1 we weigh 125 g liquid, 250 g powder and 250 g yellow sand, and mix them.

6. Apply this little amount of A1 on the surface and divide it equally. Unevenness are filled.

7. For the 4 layers of triaxial fibre we weigh 450 g liquid and 900 g powder, and mix them. Apply a thin layer of A1 on the surface and divide it equally with a brush.

8. Apply a piece of triaxial fibre with the same size as the object on the surface and smoothen it with a brush.

How to make an A1 column with sand structure

9. Again apply a thin layer of A1 and smoothen the A1 over the surface. Repeat step 8 and 9 four times.

10. Let it rest for one hour.

11. Take the silicone mould carefully from the support mould.

12. The final result is an exact copy of the mould.

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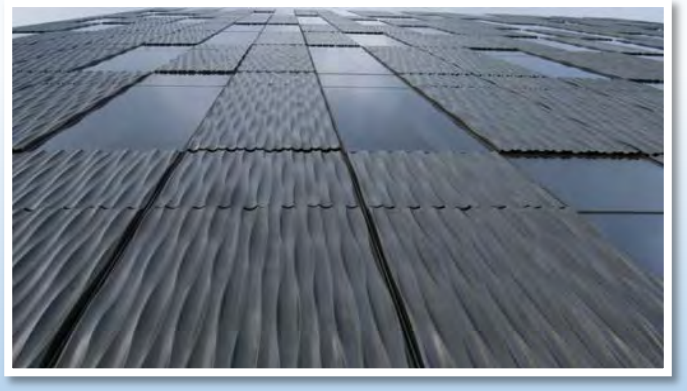
Main markets

Architect & Façade



Art, Sculpture & Foundry

Theming & Interior Design

AUSTRALIA COMPOSITE SOLUTIONS

Tiles in hotel - Suberta
Turkey

Architect & Façade

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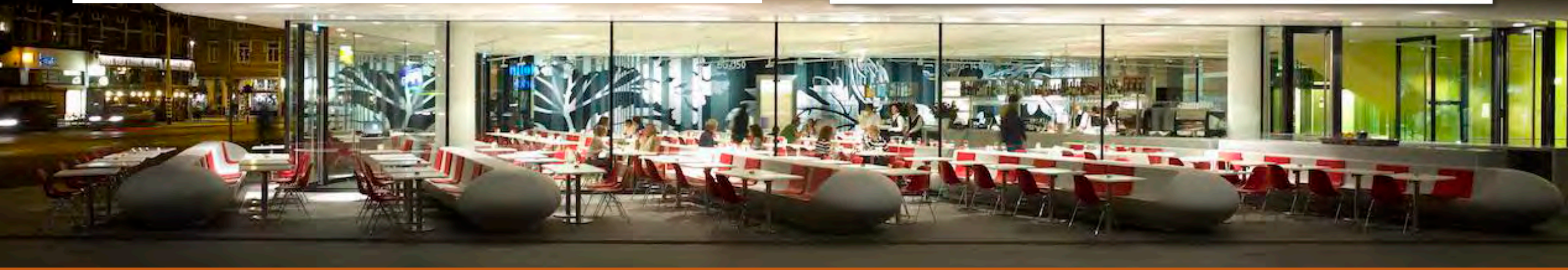
Nijmegen - Be Concrete
The Netherlands

AUSTRALIA COMPOSITE SOLUTIONS

Architect & Façade

Benches Amsterdam Museum Square - Be Concrete Netherlands



Architect & Façade

Mahler - Nedcam, Poly Products
The Netherlands

Architect & Façade

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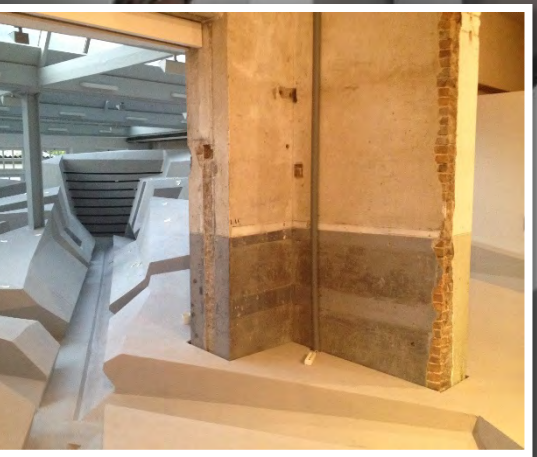
Coffee Corner
IBP Interior, Nedcam, GSO Development
The Netherlands

Architect & Façade

RAAAF [Rietveld Architecture-Art-Affordances]
The Netherlands

AUSTRALIA COMPOSITE SOLUTIONS



Architect & Façade

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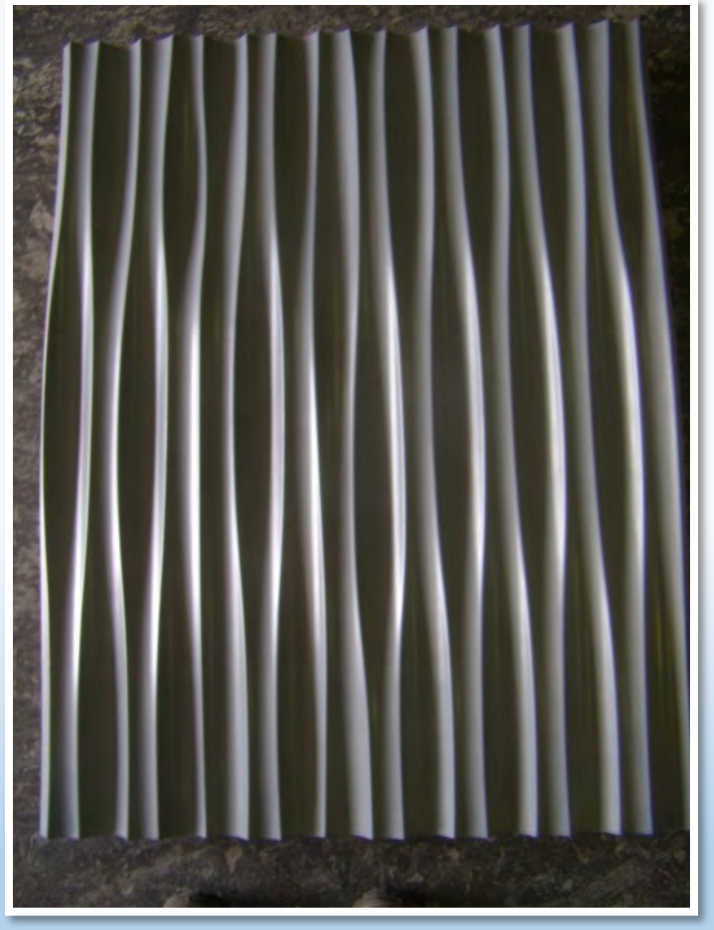
Panels - Paragon Architects South Africa

Panels - Paragon Architects South Africa

AUSTRALIA COMPOSITE SOLUTIONS



Architect & Façade

Panels - Theme park IMG City of Arabia - Dubai

Architect & Façade

Columns - Vazupol
The Netherlands

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Architect & Façade

Panels - OSV Ukraine

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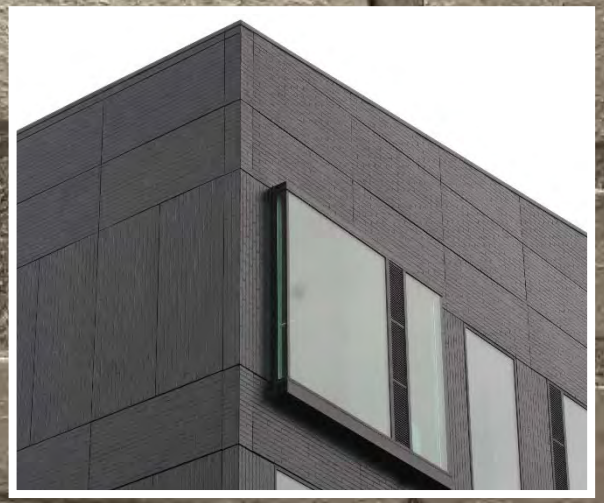
Architect & Façade

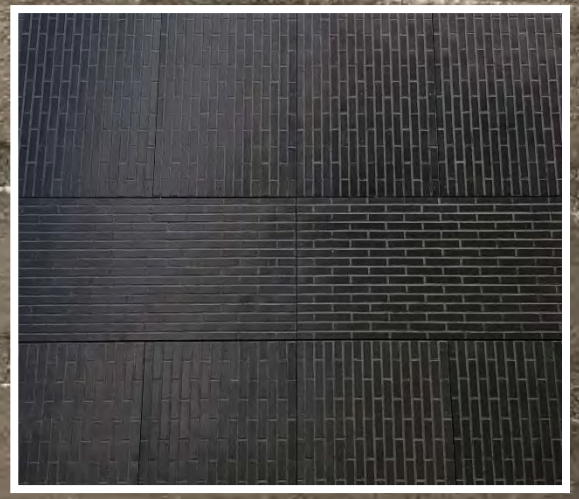
Church with travertin design
Poland

Architect & Façade

AUSTRALIA COMPOSITE SOLUTIONS

Ekosiet
The Netherlands





Architect & Façade

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Art, Sculpture & Foundry

(k)uieren: Silke De Bolle - Belgium

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Lut Van Dievel
Belgium

Art, Sculpture & Foundry

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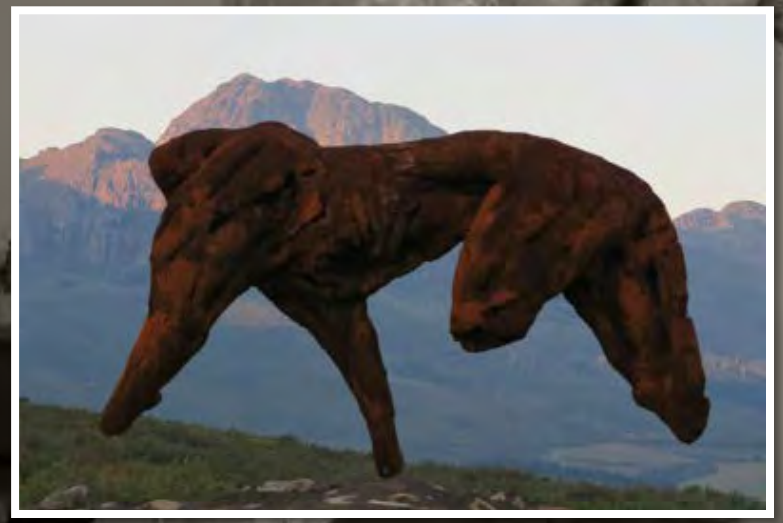
Kramer Kunstwerken
The Netherlands

Art, Sculpture & Foundry

Art, Sculpture & Foundry

‘Bath Bunny’ - Studio MAKY
The Netherlands



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Fragments - Dylan Lewis
South Africa

Art, Sculpture & Foundry

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Gerry van der Velden - Beeldengieterij Tenax
The Netherlands

Art Studio Sijen
The Netherlands

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Art, Sculpture & Foundry

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Armando - Bronsgieterij Kemner
The Netherlands

Art, Sculpture & Foundry

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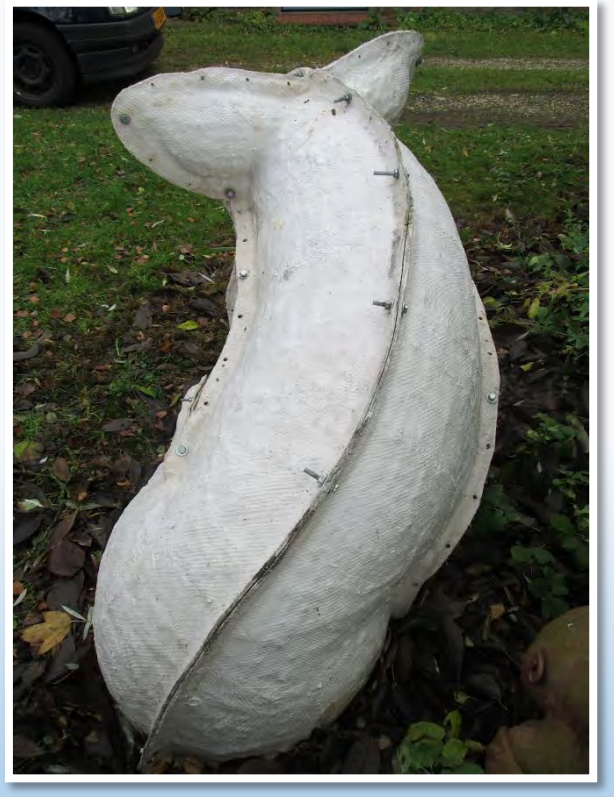
Richard van der Koppel
The Netherlands



Art, Sculpture & Foundry

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Moulds - Art Fabrication Denmark

Art, Sculpture & Foundry

AUSTRALIA COMPOSITE SOLUTIONS

Altar in a chapel - Poland

Theming & Interior Design

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Asia Park - Vietnam

Theming, Decoration & Interior Design

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Asia Park - Vietnam

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Ha Long Park - Vietnam

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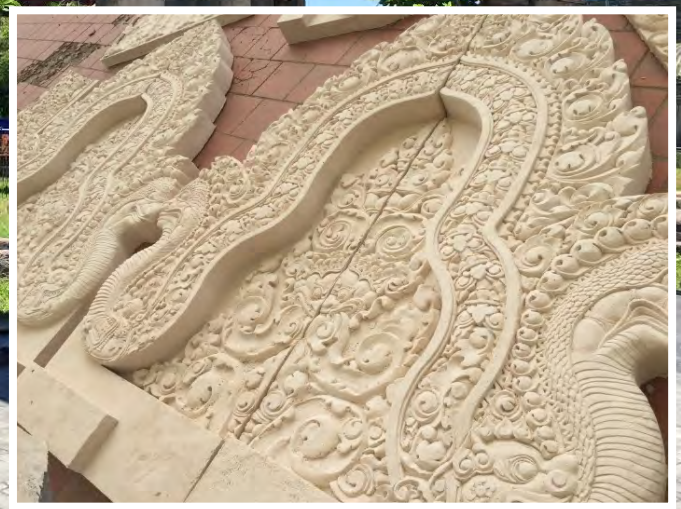
Ha Long Park - Vietnam



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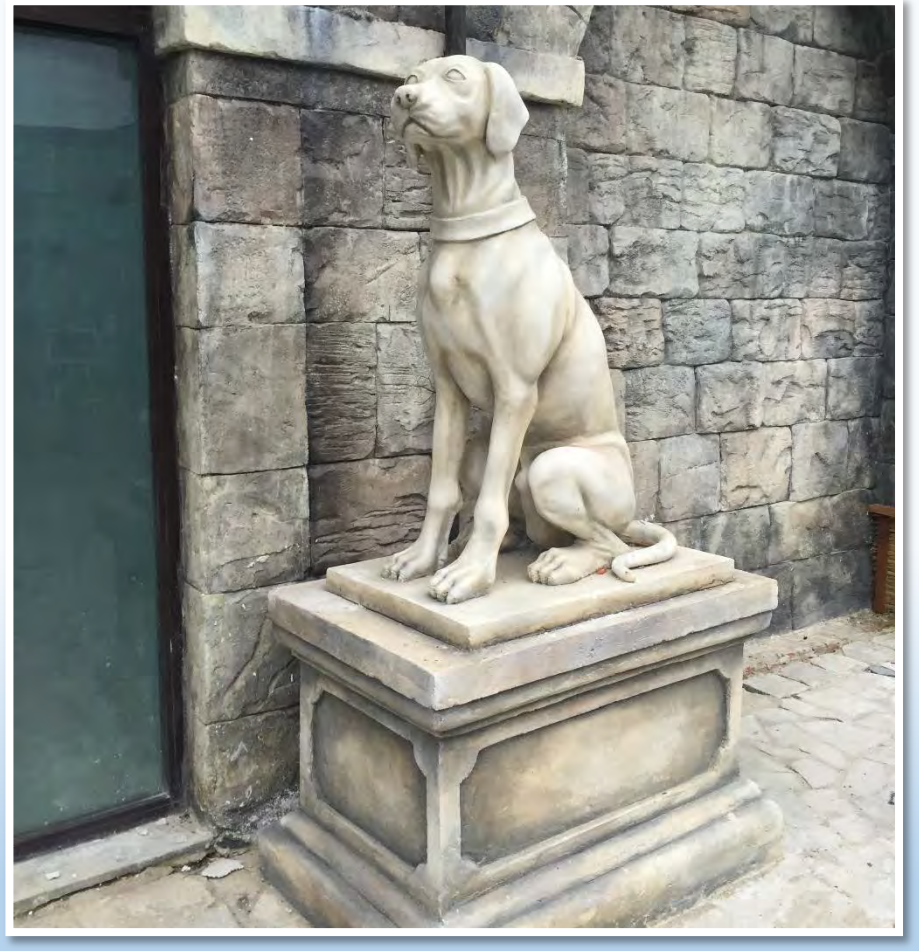
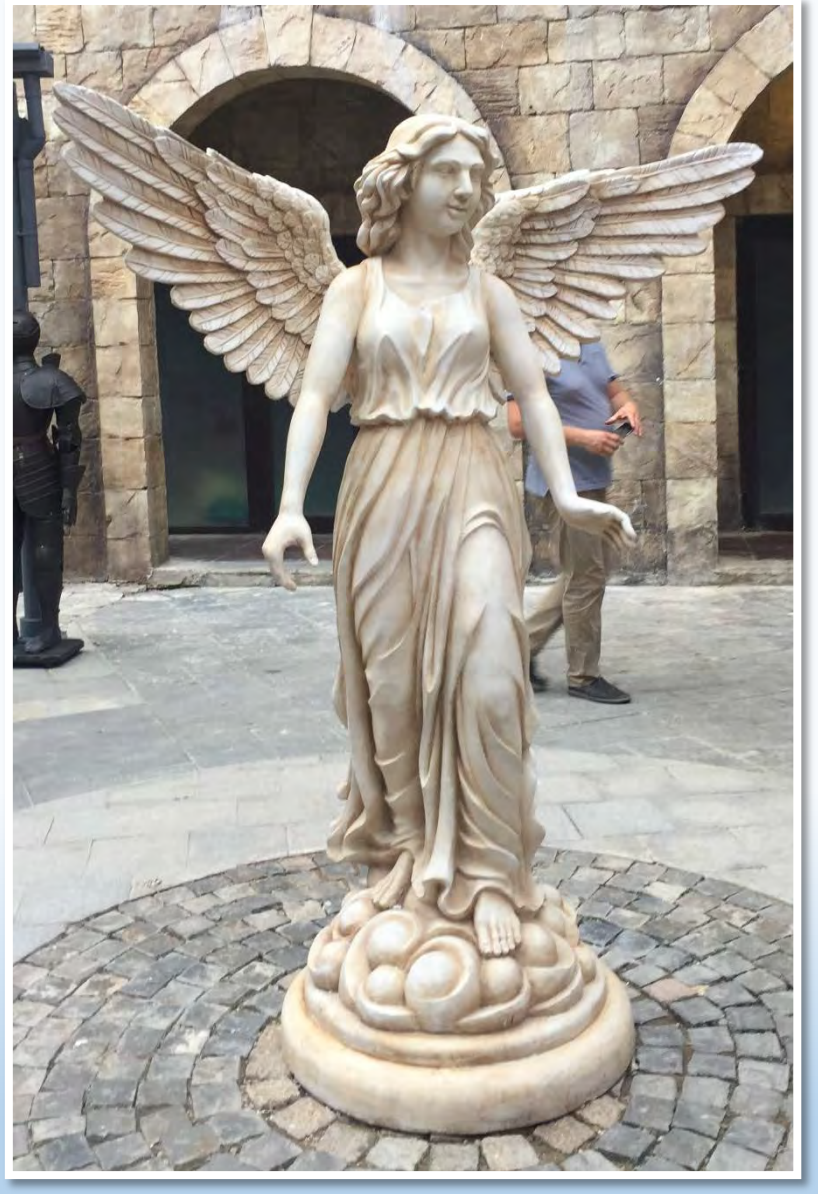
Bà Nà Hills
French Village - Vietnam





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Bà Nà Hills - French Village
Vietnam

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Theming, Decoration & Interior Design

Bà Nà Hills - French Village Vietnam

Theming, Decoration & Interior Design

Bà Nà Hills – French Village
Vietnam

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Xenom - Israel

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Theming, Decoration & Interior Design

Decoration swimming pool
The Netherlands

Theming, Decoration & Interior Design

Exposition ‘1-1, elf idolen en Jan Mulder

Kim De Ruysscher - Belgium

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AUSTRALIA COMPOSITE SOLUTIONS

Heineken Music Hall - Decoratelier Vorm en Decor
The Netherlands

Theming, Decoration & Interior Design

Movie set ‘Los Amantes Pasajeros’- Spain

Theming, Decoration & Interior Design

AUSTRALIA COMPOSITE SOLUTIONS

Reception desk - Nedcam, Be Concrete
The Netherlands

Rudi Respeel - Belgium

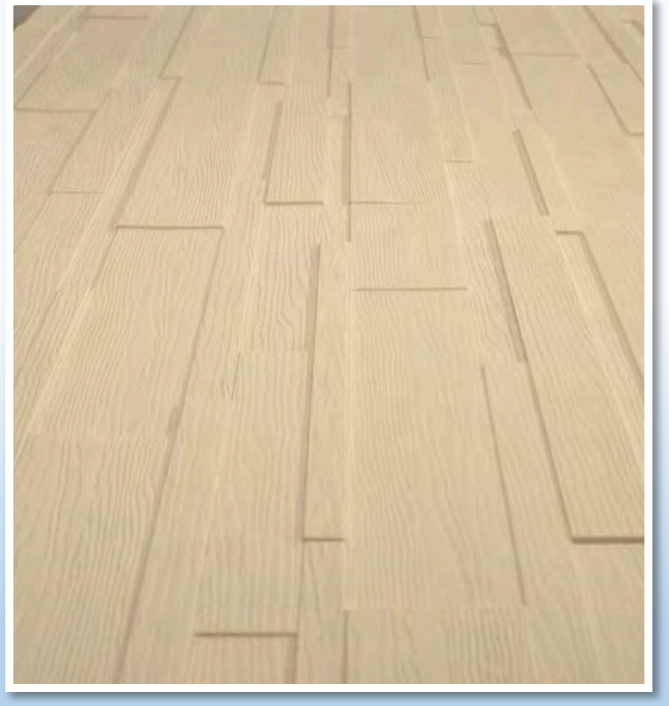
Theming, Decoration & Interior Design

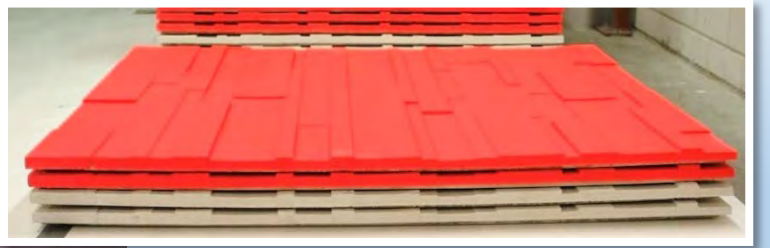
AUSTRALIA COMPOSITE SOLUTIONS

Panels - Poly Products
The Netherlands

Theming, Decoration & Interior Design

Panels Ahoy - Kool
The Netherlands





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Benches - Suberta Turkey

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Pastry Shop - Hlios Epigrafes Greece

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Wall Decoration - Decoloft24 France

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Specials

- A1 Plaster
- A1 Extra white
- A1 Rotation

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A1 Plaster

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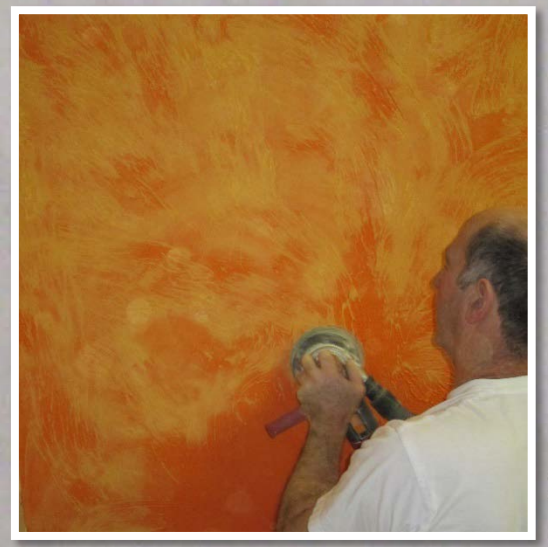

A1 Plaster

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A1 Plaster

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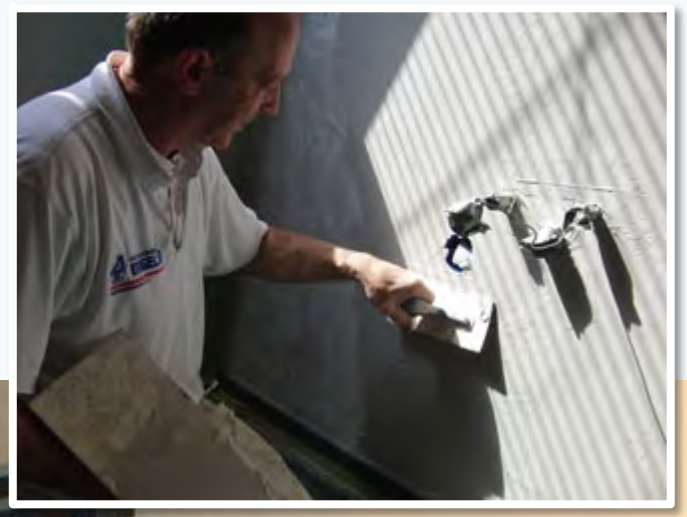

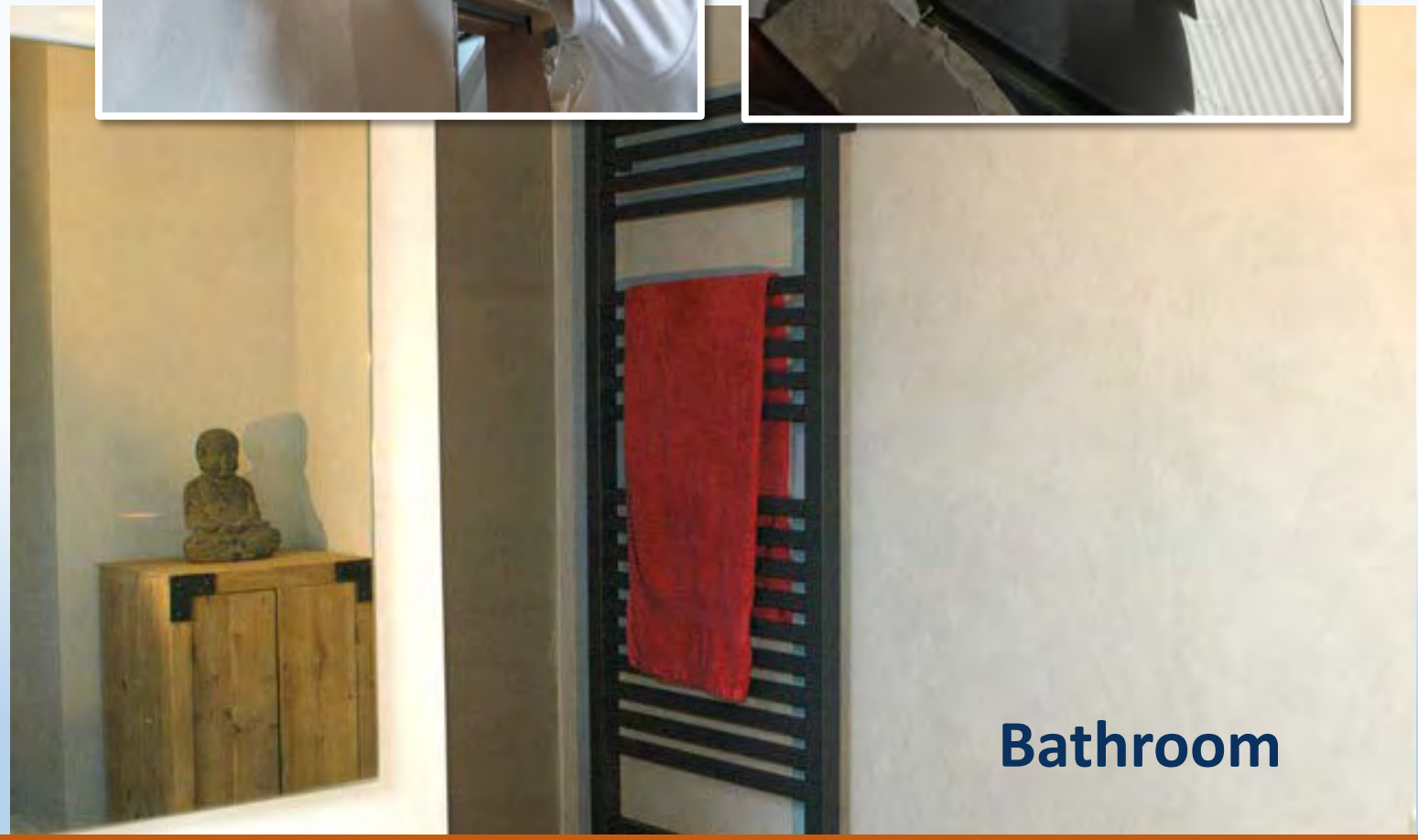

Bathroom

A1 Plaster

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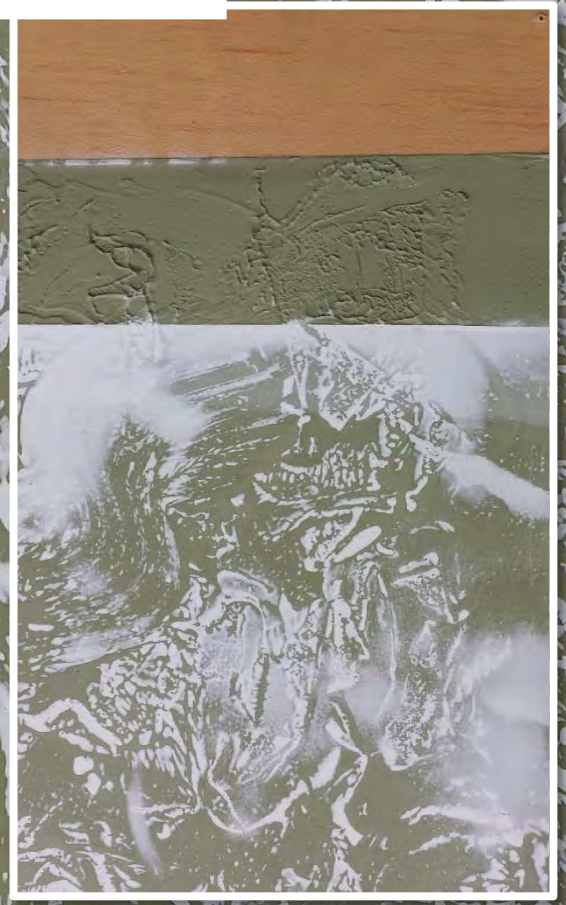

A1 Plaster

AUSTRALIA COMPOSITE SOLUTIONS

A1 Extra white

A1 Extra white

A1 Base material

ACS
AUSTRALIA COMPOSITE SOLUTIONS

A1 Rotation

AUSTRALIA COMPOSITE SOLUTIONS

Where to buy

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mani.amtau@gmail.com