SUSTAINABLE FLOOR SOLUTIONS.

Eco Silicate Systems

ECO

Eco Silicate Systems is a pioneer in Sustainable Building Services, dedicated to providing high-performance building materials. Our mission is to revolutionize construction practices, prioritizing ecoconsciousness and durability.



A replacement for cement based products

CONCRETE IS THE WORLD'S MOST USED MATERIAL FOR CONSTRUCTION

Eco Silicate Systems distinguishes itself by offering a range of green products, that are cost-effective and and high quality.

THE ENVIRONMENTAL IMPACT OF THE CONTRUCTION SECTOR

By using silicate flooring products as alternatives to cement-based products, a reduction in CO_2 emission of up to 90% can be achieved. The product range contains no dangerous components, is environmentally safe and posses no health risks.

CIRCULAR RAW MATERIALS

Eco Silicate Systems utilezes raw materials based on silicates. The main components, GGBS and Fly Ash, are recycled waste from chemical processes. These raw materials are highly resistant to corrosion from chemical exposure.



Product differentials for the industrial area

DIFFERENTIALS

UV-resistant, no shrinkage or swelling, acid-resistant, temperature resistant, High-abrasion resistance, salt-water resistant, water vapor permeable (allows vapor diffusion), VOC- and APEO-free and machine-processable.

PROPERTIES

Compressive strenght, scratch resistant, acid resistant, salt resistant, antistatic, fast finishing speed, thin application (from 2mm), temperature resitant, diffusible and waterproof.

APPLICATIONS

Suitable for both indoor and outdoor use, ideal as a coating in areas with high chemical loads (e.g., garages, warehouses, production areas) and effective for critical substrates. Also suitable for design applications.

Competitive

Advantage



ENVIRONMENTALLY FRIENDLY

ETS-EUROPE offers a range of eco-friendly flooring products with zero volatile compounds (VOCs).

ADVANCED TECHNOLOGY



Utilizing industry-leading technology, this product range ensure no cracks, no shrinkage, high impact strength, and excellent abrasion resistance.



USER-FRIENDLY APPLICATION

Easy to apply with a pump or roller, providing versatile solutions for various floor types across all market sectors.

CO3

Eco Primer

- Enhancing Substrate Performance

PRIMER PROPERTIES

- Suitable for both internal & external applications
- Enhances adhesion to the substrate
- Increases surface strength
- Water vapor permeable
- Applicable on concrete and screed
- Can be diluted with water
- Dust-binding
- Low emissions
- Transparent
- No hazard labeling required

ECO PRIMER

- Apply leveling mortar after 120 minutes.
- Ideal for regular, sensitive applications.
- Lightly scatter fine quartz sand on the freshly applied primer to improve adhesion between the substrate and the leveling mortar.

€CO3

ESS Mortar

- Self levelling

Safe, environmentally friendly flooring can replace all harmful and two-component industrial flooring.

Our unique chemical and physical properties, along with the availability of various colours, gives our self leveling mortars a great advantage over traditional technologies.

OUTSTANDING PROPORTIES

- One component
- Solvent free
- Odourless
- Eco friendly
- Quick drying, usable after 24 hours
- No Hazard warning labels
- Crack free curing
- Pumpable
- UV resistant
- Efflorescence barrier
- Water vapour permeability

ECO

Product Line

Product PropertiesSummary

- ECO Screed
- ECO Mortar
- ECO Rapid
- ECO Rapid Deco
- ECO Rapid Indu
- ECO Resist

| Properties | Screed | Mortar | Rapid | Rapid Deco | Rapid Indu | Eco Resist |
|----------------------------------|---------------------------|------------|-----------------|------------|-----------------|-----------------|
| Application thickness | 5 - 70mm | 2 - 40mm | 2 - 40mm | 2 - 30mm | 2 - 40mm | 2 - 50mm |
| Scope of application | In - & outdoors | Indoors | In - & outdoors | Indoors | In - & outdoors | In - & outdoors |
| Walkable after | 4h | 4h | 4h | 4h | 4h | 4h |
| Fully loadable after | 4d | 4d | 4d | 4d | 4d | 4d |
| Adhesion on wet substrates | 0 | 0 | 0 | 0 | 0 | 0 |
| Mixable for higher layer thickne | ^{ess} up to 70mm | up to 50mm | up to 50mm | - | up to 50mm | - |
| Improved acid resistance | - | - | 0 | - | 0 | 0 |
| Salt water resistant | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy loads | - | - | 0 | - | 0 | - |
| Compressive strength N/mm2 | 40 | 35 | 50 | 40 | 40 | 50 |
| Flexural strength N/mm2 | 7,5 | 7 | 10 | 10 | 10 | 10 |
| *Freeze thaw resistance | - | - | 0 | - | 0 | 0 |
| Different colours | - | - | - | 0 | 0 | 0 |
| Suitable for wet areas | - | - | 0 | - | 0 | - |

CO3

ESS Sealer & Binder

Industrial floors can be finished with our sealer or binder which increase the properties such as acid resistance, abrasion resistance, cleaning and water or oil repellent effect. In addition, the sealer can be delivered in different colours.

ECO HYDRO SIL and HYDRO GLASS are binders which penetrate deep into the substrate and react with its constituents.

- Improves chemical resistance of the substrate
- Prevents contaminants from entering the substrate
- Closes the pores of the substrate
- Seals the substrate against water and liquids

- Protects mineral-based substrates
- Prevents efflorescence and algae growth
- Salt water resistant
- Water vapour permeable
- Eco-friendly
- Solvent free
- One-component
- Freeze and thaw resistant
- Works on absorbent surfaces
- Quick drying process
- Indoors & outdoors
- Easy application



Product Line Sealer & Binders

Product Properties Summary

- ECO Hydro Glass Strengthening of the substrate & water repellent
- ECO Hydro Sil Strengthening of the substrate
- ECO Topcoat Mat 2 component
- ECO Topcoat Mono 1 component

| Properties | Hydro Glass | Hydro Sil | Topcoat Mat | Topcoat Mono |
|-----------------------------|-------------|------------|-------------|--------------|
| Hydrophobicity | 0 | - | 0 | 0 |
| Water-repellent | 0 | - | 0 | 0 |
| Application temperature | 5°C - 50°C | 5°C - 50°C | 5°C - 50°C | 5°C - 50°C |
| Suitable for natural stones | - | - | - | - |
| Concentrate | - | - | - | - |
| Oil repellent | 0 | - | 0 | - |
| Abrasion resistant | partly | partly | partly | partly |
| Increases surface strength | partly | partly | partly | partly |
| Increases acid resistance | 0 | 0 | 0 | partly |



Overview Product Line

ECO RAPID

Innovative, environmentally friendly and self-leveling industrial floor. Hardens fast and tension-relieved with a layer tickness of 1-50mm.

ECO RESIST

Self-levelling industrial floor for high chemical and abrasive load. Hardens fast and tension-relieved with a layer-thickness of 3-50mm. **ECO RAPID INDU**

Self-levelling mortar. Hardens fast and tension-relieved with a layer thickness of 2-40mm. Suitable for indoor and outdoor use.

ECO RAPIP DECO

Self-levelling mortar. Hardens fast and tension-relieved with a layer thickness of 1-30mm. Suitable for indoor use.

ECO HYDRO SIL

Innovative silicate sealant and subsoil consolidation. Protects against penetrating moisture and chemical stress.

ECO HYDRO GLASS

Innovative silicate sealant and subsoil consolidation. Protects against penetrating moisture in mansonry and concrete.



Design options

Possible Colour Choices for Eco Flooring

| light blue | brown | olive green | red |
|------------|------------|-------------|------------|
| white | anthracite | flakes | light grey |

Eco Flooring is available in the colors listed above. It is also possible to customize the surface by adding pigments, coloured quartz sand, flakes and other particles. For more information, please get in touch.

*colour samples can vary slightly.



GET IN TOUCH

Eco Silicate Systems, a branch of ETS-EUROPE, is an innovative company specializing in sustainable building materials and systems. We have a strong focus on environment-friendly solutions for the construction industry.

JEAN-LUC DE POTTER

+32 475 44 70 70

ECOSILICATESYSTEMS.COM

IG: @ESSEUROPE

BELGIUM, ANTWERP