ECO DUAL

Self-levelling, fine flow screed

CT-C40-F7	≥ 40 N/mm²	5–70 mm	4 hrs
STRENGTH CLASS · EN 13813	COMPRESSIVE STRENGTH	LAYER THICKNESS	WALKABLE / READY FOR COVERING

PROPERTIES AND BENEFITS

- Eco-Binder technology
- Mineral
- Fast curing and tension-relieved
- Easy application
- Environmentally friendly
- Very low emission EMICODE EC1 PLUS
- Flowable
- Also processible by machine

DESCRIPTION

Self-levelling, fine flow screed. Hardens tension-relieved with a layer thickness of 5–70 mm.

COLOUR

The original colour of Eco Dual is grey.

LOADABILITY

Walkable / ready for covering	after 4 hours
Light load	1 day
Fully loadable	4 days

Curing at 20ºC.

RANGE OF USAGE

For indoor and outdoor use, to smoothen rough and uneven concrete and screed surfaces. For installation of heated and unheated screed constructions, floating screeds, screeds on separating layers, and bonded screeds. Walkable and ready for covering at an early stage.

SUITABLE SUBSTRATES

Concrete; cement and calcium sulfate-based screed (heated and non-heated); asphalt screed; magnesia screed; dry screed.

ECO DUAL

Technical information

STRENGTH AND CLASSIFICATION

Strength class, DIN EN 13813	CT-C40-F7
Compressive strength	≥ 40 N/mm²
Flexural strength	≥ 7 N/mm²
Grain size	0–2 mm

APPLICATION THICKNESS

Bonded screed	5–70 mm
On insulation layer	25–70 mm
On separating layer	20–70 mm

DENSITY

Bulk density	approx. 1.3 kg/dm³
Fresh mortar density	approx. 2.0 kg/dm³

MIXING AND PROCESSING

Mixing ratio	4.4–4.5 L water / 25 kg powder
Processing temperature	min. +2 °C, max. +35 °C
Processing time at 20ºC	approx. 35 min
Consumption	approx. 1.7 kg/m² per mm layer

PACKAGING AND STORAGE

Packaging	25 kg bag, or big bags from ~24 t
Storage	9 months

Store in original packaging, in a dry, moisture-free environment. The information above is given based on our experience. Adjustment may be required in case of object-specific fluctuations.

PREPARATION OF SUBSTRATE

Edge joints must be prepared with a suitable expansion strip, taking care over clean adhesion to avoid material flowing beneath it; after finishing all coating works, joints must be filled with a permanently elastic compound and transitions protected by end rails.

Bonded screed: the surface must be stable, with sufficient surface tensile strength, dry or matt damp, clean and free from debris — mechanical preparation such as shot-blasting is recommended. Existing cracks up to 5 mm depth/width can be covered with Eco Crack Repair; wider or deeper cracks must be filled with Eco Repair, and only crack patterns no longer subject to movement can be filled this way. New concrete or screed should be at least 28 days old with adhesive strength of at least 1.5 N/mm². The substrate must be dried for 2 hours after priming with Eco Primer, with a 1 m² test area recommended on critical undergrounds; coating work on the primer must be finished within 6 hours.

Screed on insulation / separating layers: insulation boards must be laid professionally, with offset joints and no cavities, suitable for the selected floor structure, and covered with a suitable separating PE foil laid with a 10 cm overlap without folds, glued to the edge insulation strip.

Heated screed: the underfloor heating system must be installed professionally and suitable for the intended use, with a leakage test of the entire system carried out before starting the screed work.

ECO DUAL

Mixing and application

MIXING AND APPLICATION

Do not use special screed additives or other binders for mixing. The coating must be protected from too quick drying (solar radiation, draft), frost and rain for the first 24 hours; do not cover the finished surface with foils or other materials.

MANUAL MIXING

Suitable for small areas or thin-layer applications. Add 4.4–4.5 L water per 25 kg powder into the mixing container, then pour Eco Dual in while stirring, using a hand-held mixer with the appropriate paddle. Mix intensely for 2 minutes, let set for 2 minutes, then mix again for 1 minute. Maintain an aeration time of up to 5 minutes between mixing and application to minimise air bubbles. Distribute with a suitable rake to the intended thickness, finishing with a dapple bar or surface scraper as appropriate. Avoid pin levellers or toothed scrapers on separating layers or underfloor heating systems.

MACHINE PROCESSING — MEDIUM-SIZED AREAS

Mix using a commercial compulsory mixer. Add the water first, then the powder stepwise to avoid lumps, mixing intensively for at least 3 minutes; additional water, if needed, should only be added at the end, followed by a further minute of mixing. Distribute with a suitable trowel or rake. For larger areas, a mortar pump is recommended; the selection and preparation of accessories should be coordinated with the manufacturer.

MACHINE PROCESSING — LARGE AREAS

For areas over 300 m², a continuous mixing pump with a dual mixing system is recommended; for continuous mixing, a separate mixing and conveying system gives an even better result.

COVERING WITH SUBSEQUENT COATINGS

When used as a levelling layer without further surface treatment, a final topcoat must always be applied afterwards, once the dried mortar is ready for covering. For ceramic coverings, residual moisture must reach ≤ 2.0 CM-% (unheated) or ≤ 1.8 CM-% (heated); for vapour-proof or moisture-sensitive coverings (parquet, PVC, etc.), ≤ 3.0 CM-%, determined by the CM method. For coating with Silicate Systems products, the mortar must cure at least 24 hours before priming with Eco Primer. Low temperatures, especially below 10°C, can extend all stated waiting times.

HEATED FLOOR CONSTRUCTIONS

Downregulate underfloor heating to approx. 20°C at least 3 days before application. 48 hours after application, flow temperature can be increased stepwise (5°C per day). This applies to Eco Dual only — refer to the relevant manufacturer's instructions for subsequently laid coverings.

TOOLS AND CLEANING

Mixing device (drill mixer or pump), trowel, spiked shoes, spiked roller, and screed rake or pin leveller. All equipment should be washed clean and dried before and after application.

ECO DUAL

Notes, safety and declaration of performance

USE AS FINAL COATING

For use as a basic final coat for light to medium loads, a suitable surface protection system must be applied 24 hours after application:

Outdoor / permanent water & higher mechanical load — Eco Hydro Sil + Eco Hydro Glass	50–80 + 15–30 g/m²
Stain protection, chemical resistance, light load — Eco Topcoat 2K Mat, two layers	up to 300 g/m²

NOTES

Ensure constant water addition during application to maintain uniform product quality.

SAFETY, ECOLOGY AND ELIMINATION

There is no mandatory hazard labelling for Eco Dual. Avoid inhaling dust when opening packaging. Protect skin and eyes during mixing. Refer to the Material Safety Data Sheet (MSDS), available on request, for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

DECLARATION OF PERFORMANCE

CE

25

ETS Europe BVBA
Herentalsebaan 406 D1
BE – 2160 Wommelgem

NO. ECO DUAL · EN 13813

EN 13813 CT-C40-F7

Self-levelling fine flow screed. Hardens fast and tension-relieved, at a declared layer thickness of 5–70 mm.

Fire behaviour	A1
Compressive strength	C40
Flexural strength	F7
Release of corrosive substances	CT

Also covered by Environmental Product Declaration MD-26094-EN, verified by EPD Danmark (ISO 14025, EN 15804+A2), issued 10-09-2026, valid to 10-09-2031.

AVAILABLE ON REQUEST

Material Safety Data Sheet (MSDS).

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper and promising evaluation by ETS Europe. Any further details regarding the application of our products have to be confirmed in writing by ETS Europe. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product.