



MEP[®].COL FLEX

Flexible high performance tile adhesive

- Deformable properties to absorb limited substrate movement
- Suitable for extra large format tiles
- Tiles on tiles

PRODUCT DESCRIPTION

MEP[®]. COL FLEX is a flexible, two component high performance cement-based tile adhesive
MEP[®]. COL FLEX is classified as a C2S2 under EN 12004
Adhesive tensile strength (C2), Flexible properties (S2)

USES

MEP[®]. COL FLEX is designed for fixing porcelain, ceramic, marble, granite, natural stone... to all types of rigid cement based surfaces as well as substrate where movement, deflection or limited shrinkage is likely

- Interior/exterior floor
- Interior /exterior wall
- Swimming pool (public / private) or pond

FEATURES AND BENEFITS

MEP[®]. COL FLEX is highly recommended for:

- Fixing tiles subjected to medium/heavy traffic: malls, hotels, showrooms...
- Fixing tiles subjected to constant water immersion (swimming pool, pond...)
- Fixing extra-large tiles ($S \leq 10\,000\text{ cm}^2$)
- Fixing tiles onto low porosity substrate (i.e power floated screeds)
- Fixing tiles onto existing tiles

TECHNICAL CHARACTERISTICS

REFERENCE MATERIAL

Product norm:	EN 12004
Test norms :	EN 1348 / EN 12002
Flammability:	EN 13501-1
Good practices:	DTU 52.2

CHEMICAL CONTENT

<u>Component A (powder):</u>	Powder composed of Portland cement (Grey or White), fillers and admixtures
<u>Component B (liquid):</u>	White milky liquid containing resins in aqueous dispersion

TECHNICAL DATA

TYPICAL PHYSICAL PROPERTIES

Comply to norms EN 12004 / DTU 52.2

POWDER CARATERISTICS

Color:	Grey or White
Density (kg/m ³):	± 1350
Particle size:	≤ 0.6 mm
Reaction to fire:	Euroclass A1

LIQUID CARATERISTICS

Color:	Milky White
Density (kg/m ³):	± 1000

PASTE CARATERISTICS

Mixing ratio:	± 25%
Paste density:	± 1.7
pH:	≥ 12
Pot life:	≤ 2 hours
Open time:	≤ 30 min
Application temperature:	+5 °C to +35 °C

HARDEN PRODUCT CARATERISTICS

Hardened adhesive thickness:	2 to 10mm
Jointing filling	≥ 24 hours
Light foot traffic	≥ 24 hours
Full load traffic	≥ 48 hours

FLEXIBLE CEMENT-BASED TILE ADHESIVE C2S2

Initial tensile adhesion strength, UNE-EN 1348	≥ 1 MPa
Tensile adhesion strength after water immersion, UNE-EN 1348	≥ 1 MPa
Tensile adhesion strength after heat ageing, UNE-EN 1348	≥ 1 MPa
Tensile adhesion strength after freeze-thaw cycles, UNE-EN 1348	≥ 1 MPa
Transversal deformability, UNE-EN 12002	S2 / ≥ 5mm

Note: setting times are quoted at 20°C and are temperature and humidity dependent

APPLICATION

COVERAGE

TILES	NOTCHED TROWEL	AVERAGE CONSUMPTION
≤ 500 cm ²	6 x 6 x 6 mm	standard bedding 3 Kg / m ²
		with back buttering 4.5 Kg / m ²
> 500 cm ²	10 x 10 x 10 mm	standard bedding 4.5 Kg / m ²
		with back buttering 6 Kg / m ²
	20 x 8 mm	standard bedding 5.5 Kg / m ²
		with back buttering 7 Kg / m ²

The coverage figure given is theoretical due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced

APPLICATION

Surface preparation

- Ensure that surfaces to be tiled are clean and free of dust, release agent, fungi
- Surface should be pre-wetted prior to application
- Very porous surfaces should be primed with **MEP®. PRIM GP** and allowed to dry (“touch dry”)
- All unsound areas, flaky or peeling layers must be removed and repair with **MEP®. REP SOL** prior tiling

Notes: New walls and floors must be allowed to cure for minimum periods to ensure that movement due to shrinkage does not affect the tiling

Mixing

Mixing ratio: two component

- Proceed as follows to obtain a homogeneous and free of lumps paste
 - pour $\frac{3}{4}$ of the component B (liquid) into a suitable container
 - add the component A (powder) gradually in order to obtain a plastic consistency
 - mix thoroughly using a low speed mechanical mixer to a creamy consistency
 - add the rest of the liquid and mix for a further 3 minutes
- Allow mix to gel for 5 min and then remix before use

Notes: Should the mortar stiffen up due to delays in application then discard the product and mix a fresh batch.

Application

- Spread the adhesive onto the substrate covering 1 to 2 m² at a time
- Use a suitable notched trowel to achieved recommended bed thickness (*table. Coverages*)
- Large format tiles (or uneven tiles) will require back buttering with a thin coat of adhesive prior to bedding into the wet adhesive bed
- Bed tiles firmly into wet adhesive by using a rubber mallet to ensure full transfer and optimum contact
- Carefully remove excess adhesive from the tiles and joints with a damp sponge, before it hardens

Grouting

- Leave for at least 24 hours before grouting
- For swimming pools, leave at least 3 days before grouting
- Use **MEP®. JOINT COLOR / LARGE / FLEX / RUSTIC / EPOXY** according to the project requirements

Allowance for movement

Flexible joints should be incorporated to allow for slight movements due to changes in temperature, humidity etc. as indicated by *DTU 52.2 / BS 5385*:

- Where the tiling meets other materials (e.g. floor perimeters)
- Along all internal corners – vertically and horizontally
- Over existing movement joints or changes in background material
- Dividing large tiled areas into bays

LIMITATION

Do not use for:

- Gypsum: use **MEP®. COL PATE (D2E)**
- Other substrate (steel, aluminum ...): use **MEP®. COL EPOXY**

RECOMMANDATIONS

- Do not apply in wet weather, or in temperatures below 5°C or over 35°C
- Wind reduces the tile cement open time and leads to reduced adherence
- When fixing, it is important to press the tiles to make sure that they all form a solid surface, and to avoid any gaps between tile and support
- Back buttering systematically in outdoor application
- Do not apply more than 15 mm or less than 5 mm thick

PRACTICAL INFORMATION

- Packaging: 20kg triple-ply paper bags / 5lts plastic Jerry-can
- Handling and storage: 6 months if kept in a dry cool place in the original packaging
In more extreme conditions this period might be shortened
- Tools : Low speed mechanical mixer, rubber mallet, notched trowel

IMPORTANT NOTE

SAFETY AND HYGIENE:

All the information about conditions of use, storage, transport and removing chemical waste is available on the product Safety Sheet. The product and its packaging must be disposed of according to current legislation and it is the responsibility of the product end user

LEGAL NOTICE:

Our products are fully covered by a public liability insurance

The data contained in this document is based on our experience and technical knowledge, gained during laboratory assays, and our bibliography.

We will not be responsible for any product applications not indicated in this datasheet. The dosing and usage amount data are only guidelines, based on our experience, and may alter due to atmospheric or on-site conditions. For correct dosing and usage amounts, it is necessary to conduct a trial or assay "in situ", for which the client is responsible. If you have any query or require addition information or clarification, please consult our technical department or website www.mep.co.mu