



MONOCRETE MONOMIX XP TH

Prefabricated mix (fine-grained concrete) is intended for substitution of structural concrete in quality class on the level C30/37 with XYPEX ADMIX C 1000 admixture.

1. Product Characteristics

One-component thixotropic non-slump fine-grained concrete mix containing sealing admixtures XYPEX ADMIX C 1000.

- Applied by two methods - classical rendering or dry spraying,
- strength corresponds to quality class of concrete C30/37 according to EN 206-1,
- minimum fallout in case of dry spraying,
- contains latently hydraulic silicon dioxide (silica fume, microsilica) enhancing concrete compactness and life,
- permanently water-resistant,
- due to secondary crystallisation in porous system of liquefied concrete permanently seals the concrete base,
- high chemical resistance,
- seals concrete base against oil products,
- freeze-thaw resistant,
- good adhesion to concrete base,
- partially reduced changes in volume,
- fast growth of strength,
- fit for thickness from 15 to 300 mm.

2. Use

MONOCRETE MONOMIX XP TH is intended especially for fabrication of the vertical water proofing membrane on the concrete base. It is practical for repairs of leaking concrete and reinforced concrete constructions. It creates the sealing membrane resistant against water, oils, organic solvents, oil products, etc. on the surface of the concrete construction.

3. Physical and mechanical parameters

Colour	non-standard grey	
Bulk density (kg/m ³)	1,600 ± 40	
Tensile bending strength (MPa)	7 days 28 days	> 5.5 > 7.5
Compression strength (MPa)	7 days 28 days	> 28,0 > 42,0
Static E-module (GPa)	>28	
Thermal expansion coefficient (K ⁻¹)	11.0 ± 0.5x10 ⁻⁶	
Frost resistance	>T100	
Coefficient of filtration (ms ⁻¹)	<2,5.10 ⁻¹²	
Adhesion to base (Mpa)	>1,5	

Meets requirements of norm EN 1504 - 3:2005

4. Test certificates

The product is certified according to Act no. 22/1997 Coll. and Governmental Decree no. 163/2002 Coll. Continuous independent quality control is provided by accredited testing laboratory no. 095/2002, Horský s.r.o.. The authorised entity no. 204 provides quality system supervision.

5. Instruction for preparation and application

Base: Dirt and incoherent, loose or otherwise visibly damaged concrete shall be completely removed from the base before application. Corroded reinforcement, if any, shall be cleaned of any incoherent corrosive products. Tensile strength of surface layers of the concrete base should be optimally on the level of 1,5 MPa. Before application, humidification of the surface of the base shall be properly and continually performed for at least 120 minutes. Before casting, the surface shall be dully dump, and not covered with dump shining water film.

Preparation of mix: The mix is one-component and is mixed with water only. Both the classic grav-ity concrete mixer and pan concrete mixer can be used for preparation. In case of preparation of small amount, the mix can be mixed with a propeller mixer driven by an appropriate electric drilling machine. Add 3,25 – 3,75 l of water to 25 kg of mix (1 bag). This mix can be applied by the so-called dry spraying - in this case it is possible to accelerate beginning of initial setting and hardening of the mix.

Workability of the mix is 50 - 60 minutes under 20° C.

Neither temperature of concrete base nor temperature of ambient air shall be below + 5° C and above + 35° C.

The mix is applied by two methods - by rendering or so called dry spraying. First layer (connecting) needs to be applied in such a way to ensure that no unfilled spaces are created (behind reinforcement, in caverns etc.). After initial application it is recommended to spread the mortar into pores and un-even spaces. This can be done well with flat paint brush with short hair, or by a toothed trowel. Proper adhesion of the material to substrate in application stage is basic condition for good quality adhesion in the final state. In localized repairs it is necessary to pay appropriate attention to edge re-gions or repaired area, where the edge needs to be properly compacted, without entrapped air pockets or other non-homogeneities. The repair is always done from place of deepest degradation, in such a way that the final layer it to be continuous over entire area, if possible.

Surface finalization: After the initial setting standard processes (smoothing by a float, steel trowel or polystyrene finisher) are used for surfacing. No additional water shall be worked up into the surface.

Surface treatment: Concrete surface shall be protected against direct sunshine and wind immediately after completion. Intensive treatment shall be carried out for at least 3 days following the casting. Optimal treatment means to cover the surface with geotextiles permanently moistened.

6. Specific consumption

Specific consumption of dry mortar is 1,8 kg/m² at 1 mm of layer thickness. In spray application, it is necessary to count with loss of 10 / 12 %.

7. Packing and storage

The product is packed into 25 kg PE-lined paper bags. **MONOCRETE MONOMIX XP TH** must be efficiently protected during transportation and storage against moisture Shelf life in undamaged packing is 6 months.

8. Health protection during application

Handling the **MONOCRETE MONOMIX XP TH** dry rehabilitation mortar does not require any extraordinary hygienic precautions. The product contains alkalis and therefore any contamination of mainly eyes or mucous membrane must be prevented. Health and labour safety rules applicable to work with cement or lime mortars are to be adhered to

The product is subject to TPD 47-99/BET specification. Data presented in this document are based on the knowledge and information available to the manufacturer at the time of its issue. This technical specification is superseded by the edition of its amended or updated version. In case of doubt please contact the manufacturer.

Technical Data Sheet No. 4-8

The manufacturer is not responsible for any damages caused by improper use, incorrect application or nonadherence to prescribed technological procedure.

9. Important notice

All information mentioned above, especially advice for processing and application of our products, is based on our knowledge from the development of chemical products and on years of experience with applications in practice at standard conditions, and proper storage and use. Due to the differing conditions during processing, high count of products, varying nature and modifications of base and other external influences, the procedure based on the information provided or on other written or oral recommendations, may not always ensure satisfactory working results. BETOSAN s.r.o. assumes no liability for provided advice or recommendation. The applicator must prove that he submitted complete information on time and in writing which is necessary for a proper detailed assessment by BETOSAN s.r.o. The applicator must test the suitability of the products for the intended application. Proprietary rights of third parties, above all, must be taken into account. All received orders are subject to our current "General sales and delivery conditions". Please always make sure that you follow the most recent issue of the Technical Data Sheet.

It is available, along with other information, at our Technical Department or at www.langeproon.ee or www.betosan.cz.

Issued: June 2017

