

# INTORIS MT



**ANTISHRINKAGE MORTAR FOR CONCRETE RECOVERY THIXOTROPIC FIBER REINFORCED CLASS R3/R4-CC**  
Compliant with UNI EN 1504-3:2005

## DESCRIPTION

INTORIS MT is an anti shrinkage mortar thixotropic fiber reinforced with a special composition of polypropylene fibers with an high mechanical strength and with an high adhesion on iron and on concrete. Impermeable and insensitive to the chemical attack, sulphate resistant.

To apply for the recoveries of the damaged concrete and generally the reinforcement of concrete. INTORIS MT is thixotropic specific for recovery by spray or by trowel for operations of vertical restoration. Available R3-CC and R4-CC and hardening in 60 minutes and 15 minutes.

## COMPOSITION

Special cements sulphate resistant, selected siliceous aggregates, additives tested for the specific use which give to the product a very high adhesion and workability, polypropylene fibers.



## FEATURES

An accurate and selective choice of the main materials made with a perfect grading curve thanks to the use of our own crush system, produce just adding water a mortar very plastic and easily workable with an high compressive strength. Fibers give to the hardened mortar more ductility and resistance to the aggressive agents and to the thermal excursions, improve the distribution of the stresses and reduces micro cracks induced by the external stresses, give more resistance to the vibrations, so it is perfect for the restoration of structural concrete elements.

## USE

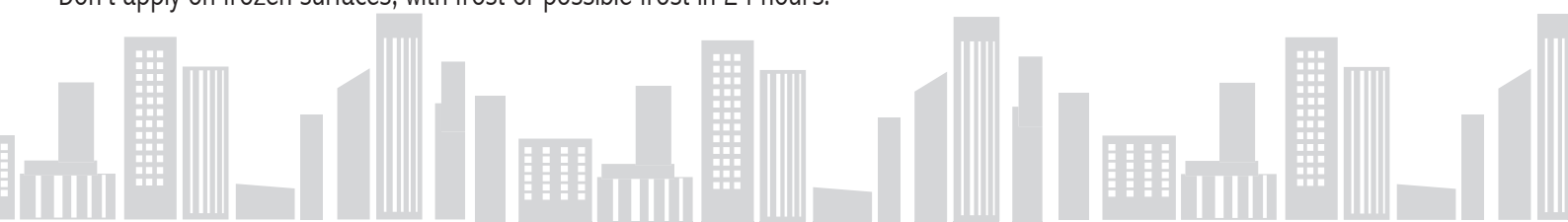
For the recovery of damaged concrete (beams and pillars), for the concrete reinforcement (beams and pillars), repair and restoration of damaged artifact, floors, steps, frames, fronts and balconies. Specific for restoration vertical operations.

## AVIABILITY

<b>R3</b>	Hardening in 60 minutes
<b>R4</b>	Hardening in 60 minutes
<b>R3 R</b>	Hardening in 15 minutes
<b>R4 R</b>	Hardening in 15 minutes

## APPLICATION

- Remove from the surfaces to treat with INTORIS MT the damaged concrete until you obtain an healthy concrete removing any stains of release agents, acids, lime, dust, etc.
- Roughen the surface to be treated by chiseling to allow the application of INTORIS MT for a minimum thickness of 1 cm to ensure a perfect adhesion to the substrate.
- Sandblast carefully the damaged reinforcing bars if not brush vigorously.
- Treat the iron with passivating grout type "INTOFER" or protective mortar type "MALTA FER". It is recommended to perform the treatment even on concrete surfaces to be restored to realize a better adhesion with the following report of pourable antishrinkage mortar "INTORIS MT".
- To apply INTORIS MT within 3 hours from the treatment of the deteriorated bars.
- Moisten with water at continuous jet concrete until saturation before application.
- To mix INTORIS MT by hand, with a mixer at low speed or in a cement mixer, with the right quantity of water to obtain the desired density, with continuity, avoiding interruptions and excessive vibrations.
- To apply within 60 minutes from the preparation for the normal type and 15 minutes for type R.
- INTORIS MT can be applied at different thicknesses, for just one application don't apply thicknesses lower than cm 1,5 and never higher than cm 5. With more applications let the product rest for 1/2 hours at least.
- The maximum thickness of the finished product should not be higher than 5 cm.
- For thicknesses higher than cm 2 to apply rete di contrasto elettrosaldata in the middle of the new concrete cover, Be sure to position at 1 cm at least from the substrate and guarantee a concrete cover of cm 2 at least.
- Protect and observe all precautionary rules to prevent a quick drying.
- Don't apply on frozen surfaces, with frost or possible frost in 24 hours.



# INTORIS MT



- Don't apply on substrates with a low mechanical strength.
- Don't apply on gypsum substrates, synthetic coatings or paintings.
- Don't apply with strong wind or in very sunny days.
- Don't apply with driving rain.
- Don't add any other material to the product.
- We suggest to apply INTORIS MT with a temperature between + 5 ° C and + 30 ° C.

## YIELD

For 1 m3 of mortar you need about kg 1.900 of INTORIS MT.

## PACKAGING

Multi-ply paper sacks with protection of kg. 25 on wood pallets of 17,50 ql. (70 sacks).

## TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 1504-3

	R4	R3
Water content of the mix	~15/17%	~15/17%
Grading EN 1015-1	<1,3mm	<1,3mm
Specific weight ± 5%	1.900 Kg/m <sup>3</sup>	1.900 Kg/m <sup>3</sup>
Pot life	1 hour	1 hour
Chlorides	< 0,05%	< 0,05%
Bending strength after 28 days EN 12190	> 60 MPa (R4)	> 40 MPa (R3)
Carbonatation resistance EN 13925	Pass	Pass
Modulus of elasticity EN 13412	> 20 GPa	> 20 GPa
Adhesion strength EN 1542	> 2,0 MPa	> 2,0 MPa
Thermal compatibility:		
- freeze/thaw EN 13687-1	> 2,0 MPa	> 2,0 MPa
- storms EN 13687-2	> 2,0 MPa	> 2,0 MPa
- dry cycles EN 13687-4	> 2,0 MPa	> 2,0 MPa
Abs. due to capillary action EN 13057	≤ 0,5 Kg/(m <sup>2</sup> •min <sup>0,5</sup> )	≤ 0,5 Kg/(m <sup>2</sup> •min <sup>0,5</sup> )
Fire reaction EN 13501-1	Class "A1"	Class "A1"
Durability	NDP	NDP
Toxicity - Regulation CE 1272/08	Denger	Denger
Classification EN 1504-3*	CC-R4/DOP 22*	CC-R3/DOP 23*

\*AT GUARANTEED PERFORMANCE (2+)

## SUMMARY

The casting of damaged reinforced concrete and the concrete reinforcement, will be done with antishrinkage mortar fiber reinforced with a special composition of polypropylene fibers thixotropic high mechanical strength compliant with EN 1504-3 class R3-CC or R4-CC based on special ciments sulphate-resistant type "INTORIS MT" by MALVIN S.r.l., to apply by hand and to mix just adding water, with a compressive strength after 28 days of class R3 or R4.

*The performance characteristics refer to laboratory tests, values depend on the weather conditions and on the methods of implementations. The operator must verify the suitability of the product depending on the use planned.*



# MALVIN



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