

MasterRoc TIX 710

Special fine grain, single-component cement mortar, thixotropic, expansive, suitable for anchoring/bolts, joints and rigid filling/seals also overhead.

Material description

MasterRoc TIX 710 is a single-component cement mortar, with maximum 0.5 mm grain, with plastic/thixotropic consistency that, when mixed with water, gives a mixture of excellent workability with plastic/thixotropic consistency; it can be applied for anchoring bolts, rigid filling such as interspaces between tunnel segments and/or prefabricated elements.

Fields of application

MasterRoc TIX 710 is an anchoring mortar with a plastic consistency, for applications such as:

- anchoring steel or FRP bars and/or bolts inside holes also overhead;
- rigid sealing of joints between prefabricated elements such as tunnel segments.
- filling in general, such as those between the tunnel segments and rock.
- MasterRoc TIX 710 can also be used with wet substrates.

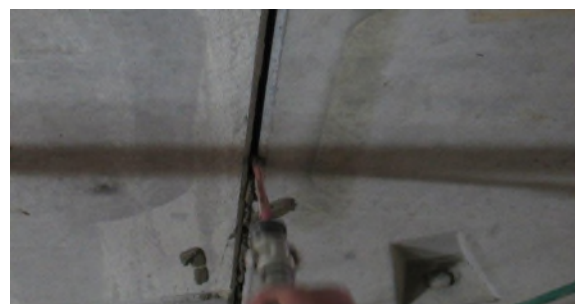
Features and benefits

- Thanks to the special workability, it can also be applied to overhead anchorings/bolts without any subsidence or waste
- It can be pumped to fill the holes, even deep holes, thus ensuring simple filling and maintaining workability for about 90 minutes
- MasterRoc TIX 710 meets the acceptance limits indicated in UNI EN 1504 part 6 (Anchoring of reinforcing steel bar),
- Longer durability, greater adhesion and high mechanical performances in general;
- It can also be applied on damp substrates,
- High resistance to high temperatures (e.g. in case of impact and fire) due to the cement nature of the material.

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking according to UNI EN 1504-3 and 1506 and the relative DoP (Declaration of Performance).

CE I305
EN 1504-3
Cement based mortar (CC) for structural repair of concrete structures
R4 class

CE I305
EN 1504-6
Mortar for structural anchoring of concrete structures.



Consumption

1.73 kg/l of mixture

Packaging

Available in 25 kg bags

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Storage

Keep in a cool and dry place between +5°C and +30°C.

Essential characteristic in accordance to I504-3 and I504-6		Limits and class	Performances
Adhesion to concrete	UNI EN 1542 on MC 0.40 substrate (with w/c ratio = 0.40) according to UNI EN 1766	≥ 1,5 MPa	≥ 2,0 MPa
Adhesion to concrete for shearing	UNI EN 12615		≥ 6,0 MPa
Resistance to freezing-thawing cycles with deicing salts	UNI EN 1542 after cycles UNI EN 13687/1 on MC 0.40 substrate	≥ 2.0 MPa	≥ 2,0 MPa
Expansion in plastic phase in 24 hours	UNI 8996		> 0.4%
Workability time of the mixture			> 90 minutes at 20°C
Water impermeability measured as capillary absorption coefficient	UNI EN 13057	≤ 0,5 kg·m ⁻² ·h ^{-0.5}	≤ 0,5 kg·m ⁻² ·h ^{-0,5}
Elastic modulus	UNI EN 13412	28 gg ≥ 20.000 MPa	22000 MPa
Crack test (O Ring test)	-	-	No crack after 180 days
Compression strength	UNI EN 12190	28 gg ≥ 45 MPa	1 d > 18 MPa 7 d > 40 MPa 28 d > 50 MPa
Impermeability to water measured as resistance to water penetration under direct pressure	UNI EN 12390/8	-	Average penetration depth < 5 mm

Application sheet

Temperature

MasterRoc TIX 710 can be used when the ambient temperature is between +5°C and +30°C.

Mixing

Using a low speed power drill and/or suitable mixer, mix the entire content of the bags with the minimum amount of water

provided (equal to 20%) for 3-4 minutes, until a smooth mixture free of lumps is obtained. Depending on the consistency required, add more water if needed (without exceeding the maximum amount specified of 22%).

Application

For anchoring

First position of the bolt, then fill the hole by pumping the mixed product using the necessary pressure based on the depth and size of the hole.



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For rigid seals

Fill the joint by pumping the mixed product using the necessary pressure based on the depth and size of the joint to be filled.

Safety instruction

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

Other services

For additional technical information, brochures, references, technical reports and technical support please visit

www.master-builders-solutions.com/it-it or alternatively contact infomac@masterbuilders.com.

Scan QR code to visit the product page and download the latest version of this technical data sheet and any additional documentation.



Disclaimer

Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

For further information, please consult the local Technician of Master Builders Solutions. The technical advice on how to use our products, either written or verbally given, are based on the current state of our scientific and practical expertise, and does not imply the assumption of any guarantee and/or responsibility for the final results of works executed using our products.

Therefore, the customer is not exempted from the exclusive task and responsibility of verifying the suitability of our products for the intended use and purposes.

This version supersedes all the previous ones.

Master Builders Solutions Italia Spa

Via Vicinale delle Corti, 21 – 31100 Treviso – Italia

T +39 0422 429200 F +39 0422 421802

www.master-builders-solutions.com/it-it

e-mail: infomac@masterbuilders.com