BOSSONG

COL MIX EPO FLOW

TECHNICAL DATA SHEET

UPDATE 09-2026



COL MIX EPO FLOW

SUPER-FLUID EPOXY ADHESIVE

EN 1504-5

STORAGE AND CONSERVATION

24 MONTH

+30°
+10°



BCR 4,8K COL MIX EPO FLOW

cod.747803 | 3,8 Kg + 1 Kg

straw-yellow color



BCR 1,2K COL MIX EPO FLOW

cod.747802 | 0,950 Kg + 0,250 Kg

straw-yellow color





COL MIX EPO FLOW is a solvent-free, two-component, ultra-fluid epoxy adhesive designed and formulated to restore and repair cracked concrete or masonry structures via low- or high-pressure injection.

APPLICATIONS

The product is a Type F (Force Transmitting Filling) structural injection epoxy resin compliant with the requirements of the UNI EN 1504-5 standard: Products and systems for the protection and repair of concrete structures – Part 5: Concrete injection.

The standard defines the performance requirements—including durability—for products intended for the injection of cracks, voids, and cavities in concrete, with the aim of restoring structural continuity and load-transfer capacity.

COL MIX EPO FLOW is intended for applications in accordance with the structural reinforcement principle (SS Principle 4):

-Injection of cracks, voids, and interstices, method 4.5.

The main fields of application are:

- Filling of cracks in reinforced and prestressed concrete elements;

- Restoration of the monolithic nature and structural continuity of cracked elements;

- Filling of voids and cavities in the concrete;

- Restoration of the load-transfer capacity within structural elements.

SUBSTRATE PREPARATION

Concrete, stone, and masonry substrates must be structurally sound. In the event of deterioration, the affected areas must be restored using surface repair products, such as the adhesive COL MIX EPOX TIXO..

The surfaces must be dry; slight moisture is tolerated for concrete substrates.

MIXING

Do not begin mixing the two components of COL MIX EPO FLOW if the ambient and/or substrate temperatures are below +5°C or above +35°C.

Mix component A at low speed using a paddle mixer before adding component B. It is essential that components A and B are measured according to the 3.8:1 weight mixing ratio indicated on the packaging. To avoid errors, it is recommended to mix the entire contents of a container of component A with the entire contents of a container of component B.

Mix the two components using a low-speed mixer until a homogeneous mixture of uniform color is obtained.

APPLICATION PROCEDURES

SURFACE CRACK CASTING

COL MIX EPO FLOW can be applied by pouring to treat surface cracks in flooring. Pour the product directly from the container until the crack is completely saturated.

SURFACE CRACK INJECTION

In the event of a surface crack, it is necessary to use packers bonded over the crack. Subsequently, seal the surface of the crack with COL MIX EPOX TIXO resin.

Inject the product into the packers using appropriate injection syringes. Once the fissure is completely saturated, wait for the product to harden, then remove the syringes and packers.

DEEP CRACK INJECTION

In the case of deep cracks, drill holes alongside the crack—properly angled and positioned—to intercept its internal path. Subsequently, thoroughly clean the holes to remove dust and drilling debris.

Then, seal the surface of the crack using COL MIX EPOX TIXO. Install the packers (or injection tubes) in the pre-drilled holes and begin injecting the product using a suitable pump, working from the lowest injection point upwards.

Injection must continue until the resin emerges from the packer or the injection tube immediately above. At this point, seal the exit point to prevent product loss and continue injection from the next packer. This process must be repeated progressively until the fissure is completely saturated and sealed.

The injection pressure must be determined directly on-site based on the geometry of the crack, the existing crack pattern, the condition of the substrate, and its mechanical properties, in order to ensure proper filling without damaging the structure.

EQUIPMENT WASHING

For cleaning metal tools, it is recommended to use solvents before the resin hardens.

TECHNICAL SPECIFICATIONS

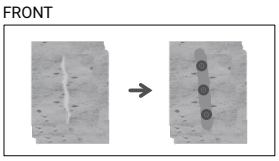
Resin color	-	giallo paglierino
Specific weight (A+B) UNI EN ISO 1183-1	Kg/dm^3	1,15±0,05
Viscosity (measured at 50 revolutions per minute) UNI EN ISO 2555	cPs	600
Working time UNI EN ISO 9514 a 5°C	minutes	360
Working time UNI EN ISO 9514 a 20°C	minutes	85
Working time UNI EN ISO 9514 a 35°C	minutes	55
Glass transition temperature UNI EN 12614	°C	48
Volumetric shrinkage UNI EN 12617-2	%	< 3,00
Bond to concrete under direct tension UNI EN 1542	MPa	> 3 Concrete failure
Determination of injectability using the sand column method, UNI EN 1771 Sand column DRY at the time of application	-	High injectability
Determination of injectability using the sand column method, UNI EN 1771 Sand column MOIST at the time of application	-	High injectability
Tensile bond strength after injection into cracks with widths of 0.3 to 0.5 mm (UNI EN 12618-2); substrate condition: dry at time of injection.	-	Test passed – concrete failure
Tensile bond strength after injection into cracks with widths of 0.3 to 0.5 mm (UNI EN 12618-2); substrate condition: DAMP at time of injection.	-	Test passed – concrete failure
Tensile bond strength after injection into cracks with widths of 0.3 to 0.5 mm (UNI EN 12618-2) and after 24 thermal cycles (UNI EN 13687-3); substrate condition: DRY at time of injection.	-	Test passed – concrete failure
Tensile bond strength after injection into cracks with widths of 0.3 to 0.5 mm (UNI EN 12618-2) and after 24 thermal cycles (UNI EN 13687-3); substrate condition: DAMP at time of injection.	-	Test passed – concrete failure
Tensile bond strength after injection into cracks with a width of 0.5 mm (UNI EN 12618-2)Substrate condition: DRY at time of injection	-	Test passed – concrete failure
Tensile bond strength after injection into cracks of 0.5 mm width (UNI EN 12618-2) Substrate condition: DAMP at time of injection	-	Test passed – concrete failure
Tensile bond strength after injection into cracks with a width of 0.5 mm (UNI EN 12618-2)Substrate condition: WET at the time of injection	-	Test passed – concrete failure
Determination of bond strength – inclined shear method (UNI EN 12618-3) Substrate condition: DRY at time of injection	MPa	> 50 Test passed – concrete failure (monolithic)
Determination of bond strength using the slant shear method (UNI EN 12618-3) Substrate condition at time of injection: DAMP	MPa	> 50 Test passed – concrete failure (monolithic)
Determination of bond strength – Slant shear method (UNI EN 12618-3) Substrate condition at time of injection: WET	MPa	> 50 Test passed – concrete failure (monolithic)
Development of tensile strength (UNI EN 1543) at 5°C	MPa	> 3 a 72 ore
Development of tensile strength (UNI EN 1543) at 40°C	MPa	> 6 a 9 ore

INSTALLATION PROCEDURE FOR SURFACE CRACK INJECTION

1. SUBSTRATE PREPARATION

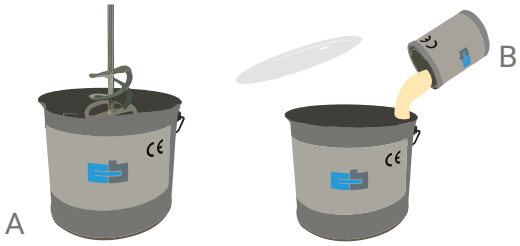
Concrete, stone, and masonry substrates must be structurally sound. Use COL MIX EPOX TIXO to attach the injection packers over the crack and to seal the crack itself.





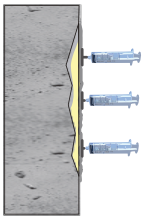
2. MIX THE TWO COMPONENTS

Homogenize Component A using a low-speed whisk mixer. Add Component B to Component A and mix until a uniform color is obtained.



3. FISSURE INJECTION

Iniettare il prodotto nei packer tramite l'uso di apposite siringhe di iniezione fino alla completa saturazione della fessura.



4. FINAL CLEANING FO THE JOINT

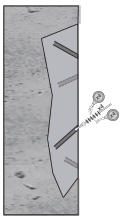
Wait for the product to cure completely, then remove the syringes and packers. At this stage, the surface layer of COL MIX EPOX TIXO resin applied at the start of the operation can also be removed.



INSTALLATION PROCEDURE FOR DEEP-CRACK INJECTION

1. SUBSTRATE PREPARATION

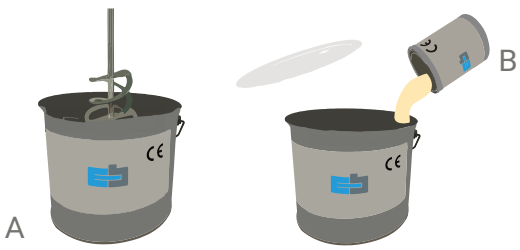
Prepare the fissure by drilling a series of holes alongside it—appropriately angled and positioned—so as to intercept its internal extent.





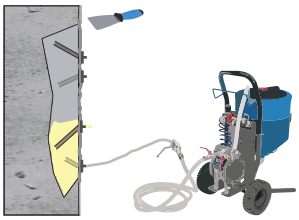
2. MIX THE TWO COMPONENTS

Homogenize Component A using a low-speed whisk mixer. Add Component B to Component A and mix until a uniform color is obtained.



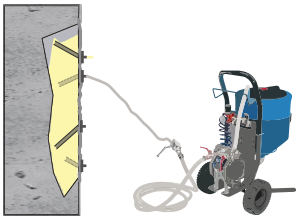
3. FISSURE INJECTION

Seal the surface of the crack with COL MIX EPOX TIXO. Install injection packers or tubes in the prepared holes and begin injection using a suitable pump, working from the lowest injection point upwards until resin emerges from the uppermost packer.



4. COMPLETION OF SEALING

Close the packer to prevent product leakage and continue injection with the next packer. Repeat the process until the fissure is completely sealed.



NOTE: The technical and installation data provided in this document are subject to revision and updates. This version supersedes and replaces all previous versions. It is the customer's responsibility to verify the suitability of Bossong products for the intended application and to ensure that job site conditions, as well as usage and disposal procedures, comply with applicable regulations. To access the most up-to-date technical documentation, please visit www.bossong.com or contact our Technical Department.