Repair, Reinforcement and Restoration Systems

2025

FIXA®

CONSTRUCTION CHEMICALS

FİXA CONSTRUCTION CHEMICALS was founded in İstanbul, Türkiye in 2001 on the principle that modern buildings can only be built with high quality construction materials.

Thanks to our commitment to research and development, FİXA quickly became one of the most important brands in the industry. In the past 24 years, alongside our first factory in Istanbul, the company has established factories in Adana (2009), Ankara (2011) and in 2013 launched a production facility for MS hybrid, polyurethane and silicone products introducing the Turkish construction sector to high technology and innovative solutions.

Through our subsidiary İGLOTEK Thermal Insulation Systems, FİXA has been manufacturing high qualified white and grey EPS insulation boards since 2011, meeting the demands of the thermal insulation industry.

All of FİXA's products are produced in fully computer automated, modern facilities with an annual capacity of 350,000 tons of powder products, 5,000 tons of liquid products, 5,000 tons of silicone sealants-mastics and 350,000 m^3 of EPS.

The 11 main product groups of FİXA are: Waterproofing Systems, Sealants, Repair, Reinforcement and Restoration Systems, Floor Systems, Thermal Insulation Systems, Concrete and Mortar Admixtures, Mold Release Agents and Curing Compounds, Cement Based Plasters and Bonding Mortars, Tile and Ceramic Adhesives, Tile Grouts and Technical Adhesives.

FİXA always places product quality at the forefront to meet customer needs and expectations, invests heavily in R&D, training and quality control systems. All raw materials, semi-finished and finished products are quality controlled before leaving the factory. In addition to CE and TSE quality certificates, FİXA holds ISO 9001:2015 certification and other internationally recognized quality certificates.

With a widespread dealer network across Türkiye, FİXA continues to strengthen its export facilities with the growing distributor network and exports to more than 30 countries from South and Central America to Africa.

In 2022, FİXA Construction Chemicals UK was established to serve the entire European market as a dedicated distribution company.

FİXA emphasizes the correct application of the right product. Our professional sales teams and technical support units are on hand to assist customers ensure proper product selection and application.

As FİXA enters our 25th year, we continue to offer high quality products not only for construction but also for the automotive and various industrial sectors. Driven by our belief in R&D, commitment to product quality and strategic investments, FİXA's advancing toward our goal of becoming the leading brand in construction chemicals. With a quarter century of experience, we will continue to provide reliable, top quality service to the construction industry.

OUR FACTORIES

CONSTRUCTION CHEMICALS

İstanbul Factory

Outdoor Area	11,000 m^2
Closed Area	6,000 m^2
Production Capacity	150,000 ton/year (powder product)
	5,000 ton/year (liquid product)
	5,000 ton/year (MS-silicone sealant)

Adana Factory

Outdoor Area	4,000 m^2
Closed Area	3,000 m^2
Production Capacity	80,000 ton/year (powder product)

Ankara Factory

Outdoor Area	7,200 m^2
Closed Area	4,800 m^2
Production Capacity	120,000 ton/year (powder product)

EPS

İstanbul Factory

Outdoor Area	4,500 m^2
Closed Area	5,000 m^2
Production Capacity	350,000 m^3/year (EPS)

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REPAIR, REINFORCEMENT and RESTORATION

REPAIRFIX® 5
Fine Repair Mortar

Description:
Cement based, single component, polymer added, **fine aggregated** surface repair and smoothing mortar which offers a smooth finishing in concrete surfaces. Complies with **R2** class.

Application Areas:
- Indoor and outdoor,
- Horizontal and vertical applications,
- Restorations,
- Repairing concrete and prefabricated concrete elements,
- Smoothing and repairing wall and ceiling plaster,
- Prior to painting, ceramic covering and waterproofing in order to have a flat and sound surface. **Suitable for static cracks up to 5 mm**.

Advantages:
- Does not cause cracking and dusting.
- Only mixed with water and easy to apply.
- Dries quickly and allows utilization in a short period of time.
- Provides high adherence without primer.
- Resistant to water and freeze-thaw cycle.
- Can be produced as fiber reinforced upon request.

Consumption:
1.5 kg/m^2 (for 1 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored fine powder
Powder Density	: ~ 1.45 kg/L
Water Mixing Ratio	: 5 - 6 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Bond Strength by Pull-off	: ≥ 0.8 N/mm^2 (EN 1542)
Flexural Strength	: ≥ 4 N/mm^2 (EN 196-1)
Compressive Strength	: ≥ 15 N/mm^2 (EN 12190)
Service Temperature	: Between -20°C and +70°C

REPAIRFIX® 5W
Fine Repair Mortar (White)

Description:
White cement based, single component, polymer added, **fine aggregated** surface repair and smoothing mortar which offers a smooth finishing in concrete surfaces. Complies with **R2** class.

Application Areas:
- Indoor and outdoor,
- Horizontal and vertical applications,
- Restorations,
- Repairing concrete and prefabricated concrete elements,
- Smoothing and repairing wall and ceiling plaster,
- Prior to painting, ceramic covering and waterproofing in order to have a flat and sound surface. **Suitable for static cracks up to 5 mm**.

Advantages:
- Decorative due to its white color.
- Does not cause cracking and dusting.
- Only mixed with water and easy to apply.
- Dries quickly and allows utilization in a short period of time.
- Provides high adherence without primer.
- Resistant to water and freeze-thaw cycle.
- Can be produced as fiber reinforced upon request.

Consumption:
1.5 kg/m^2 (for 1 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: White colored fine powder
Powder Density	: ~ 1.45 kg/L
Water Mixing Ratio	: 5.5 - 6.5 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Bond Strength by Pull-off	: ≥ 0.8 N/mm^2 (EN 1542)
Flexural Strength	: ≥ 4 N/mm^2 (EN 196-1)
Compressive Strength	: ≥ 15 N/mm^2 (EN 12190)
Service Temperature	: Between -20°C and +70°C

REPAIRFIX® 30
Coarse Repair Mortar

Description:
Cement based, single component, polymer and fiber added, **coarse aggregated** surface repair and smoothing mortar which offers a smooth finishing in concrete surfaces. Complies with **R2** class.

Application Areas:
- Indoor and outdoor,
- Horizontal and vertical applications,
- Restorations,
- Repairing concrete and prefabricated concrete elements,
- Smoothing and repairing wall and ceiling plaster,
- Prior to painting, ceramic covering and waterproofing in order to have a flat and sound surface. **Suitable for static cracks up to 30 mm**.

Advantages:
- Does not cause cracking and dusting.
- Only mixed with water and easy to apply.
- Dries quickly and allows utilization in a short period of time.
- Provides high adherence without primer.
- Resistant to water and freze-thaw cycle.
- Fiber reinforced.

Consumption:
2 kg/m^2 (for 1 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored coarse powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 4.5 - 5 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Bond Strength by Pull-off	: ≥ 0.8 N/mm^2 (EN 1542)
Flexural Strength	: ≥ 5 N/mm^2 (EN 196-1)
Compressive Strength	: ≥ 15 N/mm^2 (EN 12190)
Service Temperature	: Between -30°C and +80°C

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPAIRFIX® 30W

Coarse Repair Mortar (White)

Description:
White cement based, single component, polymer and fiber added, **coarse aggregated** surface repair and smoothing mortar which offers a smooth finishing in concrete surfaces. Complies with **R2** class.

Application Areas:
- Indoor and outdoor,
- Horizontal and vertical applications,
- Restorations,
- Repairing concrete and prefabricated concrete elements,
- Smoothing and repairing wall and ceiling plaster,
- Prior to painting, ceramic covering and waterproofing in order to have a flat and sound surface. **Suitable for static cracks up to 30 mm**.

Advantages:
- Decorative due to its white color.
- Does not cause cracking and dusting.
- Only mixed with water and easy to apply.
- Dries quickly and allows utilization in a short period of time.
- Provides high adherence without primer.
- Resistant to water and freeze-thaw cycle.
- Fiber reinforced.

Consumption:
2 kg/m^2 (for 1 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: White colored coarse powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 5 - 5.5 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Bond Strength by Pull-off	: ≥ 0.8 N/mm^2 (EN 1542)
Flexural Strength	: ≥ 5 N/mm^2 (EN 196-1)
Compressive Strength	: ≥ 15 N/mm^2 (EN 12190)
Service Temperature	: Between -30°C and +80°C

REPAIRGROUT EXPAN T60

High Strength Shrinkage Compensated Grout Mortar

Description:
Cement based, single component, **shrinkage compensated**, **thixotropic**, **high strength structural** grout mortar. Complies with **R4** class.

Application Areas:
- Indoor and outdoor,
- Horizontal, vertical and overhead repair applications,
- Repairs that require early high strength,
- Repairing reinforced concrete construction elements and floors,
- Repairing concrete with segregation,
- Grouting joints that exist between old and new concrete,
- Grouting tie-rod holes, core holes and chamfering applications,
- Grouting the gaps that exist around the installation pipes and elements.

Advantages:
- Does not shrink, has thixotropic consistency.
- Provides high compressive strength.
- Resistant to impacts and vibrations.
- Provides high adherence to concrete and reinforcement.
- Resistant to water and frost.
- Does not contain corrosive materials.
- Only mixed with water, easy to apply.

Consumption:
Approximately 20 kg/m^2 (for 10 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 3.9 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 45 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 30 N/mm^2 (EN 12190) 7 days : ≥ 50 N/mm^2 (EN 12190) 28 days : ≥ 60 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

REPAIRGROUT EXPAN-S T60

High Strength Sulphate Resistant Shrinkage Compensated Grout Mortar

Description:
Cement based, single component, **sulphate resistant**, **shrinkage compensated**, **thixotrophic**, **high strength structural** grout mortar. Complies with **R4** class.

Application Areas:
- Indoor and outdoor,
- Horizontal, vertical and overhead repair applications,
- Repairing and protecting reinforced concrete surfaces which are exposed to sulphate and corrosive salts,
- Repairing and protecting bridges, canals and ports thanks to its resistance to sulphate,
- Maintenance and repair of marine buildings,
- Repairs that require early high strength,
- Repairing reinforced concrete construction elements and floors,
- Repairing concrete with segregation,
- Grouting joints that exist between old and new concrete,
- Grouting tie-rod holes, core holes and chamfering applications,
- Grouting the gaps that exist around the installation pipes and elements.

Advantages:
- Resistant to sulphate and corrosive salt attacks, protects reinforced concrete buildings against segregation.
- Does not shrink, has thixotropic consistency.
- Provides high compressive strength.
- Resistant to impacts and vibrations.
- Provides high adherence to concrete and reinforcement.
- Resistant to water and frost.
- Does not contain corrosive materials.
- Only mixed with water, easy to apply.

Consumption:
Approximately 20 kg/m^2 (for 10 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 3.9 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 45 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 30 N/mm^2 (EN 12190) 7 days : ≥ 50 N/mm^2 (EN 12190) 28 days : ≥ 60 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPAIRGROUT EXPAN T45

High Strength Shrinkage Compensated Grout Mortar

Description:
Cement based, single component, **shrinkage compensated**, **thixotropic**, **high strength structural** grout mortar. Complies with **R4** class.

Application Areas:
- Indoor and outdoor,
- Horizontal, vertical and overhead repair applications,
- Repairs that require early high strength,
- Repairing reinforced concrete, prefabricated construction elements and floors,
- Repairing concrete with segregation,
- Grouting joints that exist between old and new concrete,
- Grouting tie-rod holes, core holes and chamfering applications,
- Grouting the gaps that exist around the installation pipes and elements,
- Reinforcing the connections of the shear walls and the beams.

Advantages:
- Does not shrink, has thixotropic consistency.
- Provides high compressive strength, can be used in structural repairs.
- Resistant to impacts and vibrations.
- Provides high adherence to concrete and reinforcement.
- Resistant to water and frost.
- Does not contain corrosive materials.
- Only mixed with water, easy to apply.
- Does not cause segregation.
- Economical.

Consumption:
Approximately 20 kg/m^2 (for 10 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 3.9 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 20 N/mm^2 (EN 12190) 7 days : ≥ 35 N/mm^2 (EN 12190) 28 days : ≥ 45 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

REPAIRGROUT EXPAN T35

High Strength Shrinkage Compensated Grout Mortar

Description:
Cement based, single component, **shrinkage compensated**, **thixotropic**, **high strength structural** grout mortar. Complies with **R3** class.

Application Areas:
- Indoor and outdoor,
- Horizontal, vertical and overhead repair applications,
- Repairing reinforced concrete, prefabricated construction elements and floors,
- Repairing concrete with segregation, cracks and deterioration,
- Grouting joints that exist between old and new concrete,
- Grouting the gaps that exist around the installation pipes and elements.

Advantages:
- Does not shrink, has thixotropic consistency.
- Provides high compressive strength.
- Provides adhesion to concrete and reinforcement.
- Resistant to water and frost.
- Does not cause corrosion.
- Only mixed with water, easy to apply.
- Does not cause segregation.
- Economical.

Consumption:
Approximately 20 kg/m^2 (for 10 mm thickness)

Packaging:
25 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 3.9 L water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 20 N/mm^2 (EN 12190) 7 days : ≥ 30 N/mm^2 (EN 12190) 28 days : ≥ 35 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

REPAIRGROUT GP F65

Shrinkage Compensated Flowable Grout and Anchoring Mortar

Description:
Cement based, single component, **shrinkage compensated**, **high strength structural** grout and anchoring mortar in **fluid consistency**. Complies with **R4** class, does not segregate or bleed.

Application Areas:
- Indoor and outdoor,
- Anchoring and bedding of machinery feet,
- As a flowable grout mortar, in hard to access areas,
- Repairs that require early high strength,
- Filling and strengthening the gaps and cavities between column and beam joints,
- Repairs of segregated concrete by using mold.

Advantages:
- Due to its flowability, it can grout gaps which are hard to access and can be applied easily with a pump.
- Prevents shrinkage after setting.
- High strength and flowable concrete can be obtained by mixing with number I clean aggregate by 25%.
- Has early high compressive strength.
- Resistant to oil and water permeability due to its high density.
- Does not contain metallic aggregate and chlorine.
- Only mixed with water, easy to apply.

Consumption:
Appr. 18 - 20 kg/m^2 (for 10 mm thickness)
2 kg powder product is used for 1 L mortar.

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.40 kg/L
Water Mixing Ratio	: 2.80 L water / 20 kg powder
Resting Period	: 2 - 3 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 30 N/mm^2 (EN 12190) 7 days : ≥ 50 N/mm^2 (EN 12190) 28 days : ≥ 65 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPAIRGROUT GP-S F65

Shrinkage Compensated Flowable Sulphate Resistant Grout and Anchoring Mortar

Description:
Cement based, single component, **sulphate resistant**, **shrinkage compensated**, **high strength structural** grout and anchoring mortar in **fluid consistency**. Complies with **R4** class, does not segregate or bleed.

Application Areas:
- Indoor and outdoor,
- As a flowable grout mortar, in hard to access areas (under soil and water etc.) of reinforced concrete buildings which are exposed to sulphate and corrosive salts,
- Repairing bridges, canals and ports thanks to its resistance to the sulphate,
- Maintenance and repair of marine buildings,
- Anchoring and bedding of machinery feet,
- Repairs that require early high strength,
- Filling and strengthening the gaps and cavities between column and beam joints,
- Repairs of segregated concrete by using mold.

Advantages:
- Resistant to sulphate and corrosive salt attacks, protects reinforced concrete buildings against segregation.
- Due to its flowability, it can grout hard to access gaps and can be applied easily with a pump.
- Prevents shrinkage after setting.
- High strength and flowable concrete can be obtained by mixing with number I clean aggregate by 25%.
- Has early high compressive strength.
- Resistant to oil and water permeability due to its high density.
- Does not contain metallic aggregate and chlorine.
- Only mixed with water, easy to apply.

Consumption:
Appr. 18 - 20 kg/m^2 (for 10 mm thickness)
2 kg powder product is used for 1 L mortar.

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.40 kg/L
Water Mixing Ratio	: 2.80 L water / 20 kg powder
Resting Period	: 2 - 3 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 30 N/mm^2 (EN 12190) 7 days : ≥ 50 N/mm^2 (EN 12190) 28 days : ≥ 65 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

REPAIRGROUT GP F50

Shrinkage Compensated Flowable Grout and Anchoring Mortar

Description:
Cement based, single component, **shrinkage compensated**, **high strength structural** grout and anchoring mortar in **fluid consistency**. Complies with **R4** class, does not segregate or bleed.

Application Areas:
- Indoor and outdoor,
- Anchoring and bedding of machinery feet,
- As a flowable grout mortar, in hard to access areas,
- Repairs that require early high strength,
- Filling and strengthening the gaps and cavities between column and beam joints,
- Repairs of segregated concrete by using mold.

Advantages:
- Due to its flowability it can grout gaps which are hard to access and can be applied easily with a pump.
- Prevents shrinkage after setting.
- High strength and flowable concrete can be obtained by mixing with number I clean aggregate by 25%.
- Has early high compressive strength.
- Resistant to oil and water permeability due to its high density.
- Does not contain metallic aggregate and chlorine.
- Economical.
- Only mixed with water, easy to apply.

Consumption:
Appr. 18 - 20 kg/m^2 (for 10 mm thickness)
2 kg powder product is used for 1 L mortar.

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.45 kg/L
Water Mixing Ratio	: 3.36 L water / 20 kg powder
Resting Period	: 2 - 3 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 30 N/mm^2 (EN 12190) 7 days : ≥ 35 N/mm^2 (EN 12190) 28 days : ≥ 50 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

REPAIRGROUT GP F40

Shrinkage Compensated Flowable Grout and Anchoring Mortar

Description:
Cement based, single component, **shrinkage compensated**, **high strength structural** grout and anchoring mortar in **fluid consistency**. Complies with **R3** class, does not segregate or bleed.

Application Areas:
- Indoor and outdoor,
- As a flowable grout mortar, in hard to access areas,
- Repairs that require high strength,
- Filling and strengthening the gaps and cavities between column and beam joints,
- Repairs of segregated concrete by using mold.

Advantages:
- Due to its flowability, it can grout gaps which are hard to access and can be applied easily with a pump.
- Prevents shrinkage after setting.
- High strength and flowable concrete can be obtained by mixing with number I clean aggregate by 25%.
- Has high compressive strength.
- Does not contain metallic aggregate and chlorine.
- Economical.
- Only mixed with water, easy to apply.

Consumption:
Appr. 18 - 20 kg/m^2 (for 10 mm thickness)
2 kg powder product is used for 1 L mortar.

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.50 kg/L
Water Mixing Ratio	: 3.36 L water / 20 kg powder
Resting Period	: 2 - 3 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 20 N/mm^2 (EN 12190) 7 days : ≥ 25 N/mm^2 (EN 12190) 28 days : ≥ 40 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 24 hours

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPAIRGROUT FAST

Fast Setting Shrinkage Compensated Flowable Grout Mortar

Description:
Cement based, single component, **shrinkage compensated**, **fast setting**, **high strength structural** grout mortar in **fluid** consistency which does not segregate or bleed. Complies with **R4** class.

Application Areas:
- Indoor and outdoor,
- Elevating manhole covers,
- Assembling paving stones and curbs,
- Anchoring poles and city furnitures,
- Anchoring machinery feet,
- Repairing concrete slab, runways and heliports,
- Repairs that will be put into use quickly and requires high strength,
- In the joints of prefabricated concrete elements,
- Filling the gaps in places that are hard to access.

Advantages:
- Setting is completed not later than 20 minutes after application. Can be open to use in 1 - 2 hours.
- Due to its flowability it can grout gaps and can be applied easily with a pump.
- Prevents shrinkage after setting.
- High strength and flowable concrete can be obtained by mixing with number I clean aggregate by 25%.
- Resistant to oil and water permeability thanks to its high density.
- Does not contain metallic aggregate and chlorine.
- Only mixed with water, easy to apply.

Consumption:
Appr. 20 kg/m^2 (for 10 mm thickness)

Packaging:
25 kg kraft bags

Tested by ISTON A.Ş. 11.10.2019
Report no: NHHA 1900380 - NHHA 1900381

Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~ 1.40 kg/L
Water Mixing Ratio	: 3.25 - 4 L water / 25 kg powder
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 hour : ≥ 10 N/mm^2 (EN 12190) 28 days : ≥ 45 N/mm^2 (EN 12190)
Application Thickness / Layer	: Min. 10 mm, Max. 50 mm
Walk-on Time	: 2 hours

RENOVAFIX® HK

Natural Hydraulic Lime (NHL 3.5)

Description:
Natural hydraulic lime for **restoration of masonry buildings**, repairing plaster and as a binder in historical building repairing mortars like special Horasan mortar.

Application Areas:
- Indoor and outdoor,
- Restoration of historical buildings,
- Repairing plaster and wall joints,
- Repair mortars,
- Repairing the cracks of masonry buildings, arches, domes and vaults,
- Stone, brick and masonry works of historical buildings,
- Preparing special Horasan mortar.

Advantages:
- Does not contain cement.
- Water vapor permeable, allows the surface to breathe.
- Has 3.5 N/mm^2 compressive strength.
- Easy to prepare and apply.
- Compatible with historial buildings.
- Suitable to use in restoration where optimum pressure is required.
- Can be used both in plasters and in repair mortars.
- Is the most appropriate natural hydraulic lime for restoration of historical buildings.

Consumption:
Varies depending on the application.

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Off white colored powder
Powder Density	: 0.60 ± 0.1 kg/L
Water Mixing Ratio	: Varies depending on the fillers and other additives
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: ≥ 3.5 N/mm^2 (EN 1015-11)

RENOVAFIX® PL

Pozzolanic Lime Based Historical Building Repair Mortar

Description:
Pozzolanic lime based, single component, fiber supported, **cement-free**, high strength, thixotropic repair mortar for historical buildings.

Application Areas:
- Indoor and outdoor,
- Repairing and reinforcing historical masonry buildings,
- Repairing stone, brick or alternating textured walls for reinforcement,
- Repairing or reconstructing masonry buildings, arches, domes and vaults,
- Repairing and strengthening of masonry foundations.

Advantages:
- Does not contain cement.
- Easy to prepare and apply.
- Has high mechanical resistance.
- Has high adhesion strength.
- Water vapor permeable, allows the surface to breathe.
- Has low capillary water absorption.
- Does not crack since it contains fibers.
- Resistant to efflorescence.
- Enviromentally friendly.
- Is the most appropriate product for repairing historical buildings since the water soluble salts in its content is limited.

Consumption:
16 -18 kg/m^2 (for 1 cm thickness)

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Light beige colored powder
Powder Density	: 1.01 ± 0.1 kg/L
Water Mixing Ratio	: 4.4 - 4.8 L water / 20 kg powder
Resting Period	: ~ 5 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: M10 (EN 1015-11)
Application Thickness	: 10 - 50 mm
Complete Curing Time	: 7 days

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

RENOVAFIX® NL

Natural Hydraulic Lime Based Ready-Mixed Plaster

Description:
Natural hydraulic lime based, single component, **cement-free**, fiber supported, special restoration plaster mortar for historical masonry buildings.

Application Areas:
- Indoor and outdoor,
- Smoothing plaster surfaces of historical buildings,
- Plastering the walls for restoration,
- Repairing the plastered surfaces and joints of natural stones and brick walls.

Advantages:
- Does not contain cement.
- Easy to prepare and apply.
- Adheres strongly on plastered surfaces.
- Water vapor permeable, allows the surface to breathe.
- Has low capillary water absorption.
- Does not crack since it contains fibers.
- Resistant to efflorescence.
- Environmentally friendly, does not contain asbestos.
- Is the most appropriate product for restoration of historical buildings since the water soluble salts in its content is limited.

Consumption:
Approximately 1.6 - 1.8 kg/m^2 (for 1 mm thickness)

Packaging:
20 kg kraft bags

Technical Properties	
Appearance	: Light beige colored powder
Powder Density	: 1.00 ± 0.1 kg/L
Water Mixing Ratio	: 4.8 - 5.2 L water / 20 kg powder
Resting Period	: ~ 5 minutes
Pot Life	: ~ 30 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: CS III (EN 1015-11)
Capillary Water Absorption	: W_0 (EN 1015-18)
Application Thickness	: 2 - 20 mm
Complete Curing Time	: 7 days

REPOX® 301

Thixotropic Epoxy Repair Mortar

Description:
Epoxy resin based, three component, solvent-free, **thixotropic** epoxy **mortar** for repairing damaged surfaces.

Application Areas:
- Indoor and outdoor, repairing reinforced concrete structures,
- Abrasion and impact-resistant filling and repairs,
- Sealing of (non-moving) crack fillings and corner repairs,
- As a repair mortar for the maintenance and repair of marine structures (such as piers and bridges) and in high-strength repairs of crane beams and legs,
- Repairing ceilings, columns and beams.

Advantages:
- Provides high mechanical strength.
- Highly resistant to abrasion and impact.
- Provides high adhesion to concrete and steel.
- Resistant to chemicals. Water impermeable.
- Has a high load-bearing capacity. Does not shrink.
- Consistency can be adjusted with its own aggregate, if desired.

Consumption:
Approximately 2 kg/m^2 (for 1 mm thickness)
7.5 L mortar is prepared with 15 kg of product.

Packaging:
Sets of 5 kg and 15 kg (A+B+C) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Liquid - grey Component B (Hardener): Liquid - light yellow Component C (Special size aggregate): Sand color	
Packaging (5 kg)	: Component A: 0.680 kg, Component B: 0.320 kg, Component C: 4 kg	
Packaging (15 kg)	: Component A: 2.040 kg, Component B: 0.960 kg, Component C: 12 kg	
Mixture Density	: 2.00 ± 0.06 g/cm^3 (TS EN ISO 2811-1)	
App. Temperature	: Between +10°C and 30°C	
Compressive Strength	: ≥ 50 N/mm^2 (TS EN 12190) 1 day ≥ 85 N/mm^2 (TS EN 12190) 7 days	
Flexural Strength	: ≥ 25 N/mm^2 (TS EN 12190) 1 day ≥ 30 N/mm^2 (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 2 N/mm^2 - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (5 kg)	: Temperature 10°C 20°C 30°C	Duration (TS EN ISO 9514) 120 minutes 60 minutes 30 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

REPOX® 302

Fluid Epoxy Anchoring and Assembly Mortar

Description:
Epoxy resin based, three component, solvent-free, **fluid**, corrosion-resistant, self-leveling **anchoring**, **assembly** and **casting** mortar with high adhesion, flexural and compressive strength.

Application Areas:
- Indoor and outdoor,
- As a repair and casting mortar,
- Rebar anchoring in reinforced concrete and structural materials,
- Fixing anchoring elements,
- Repairing wide cracks in horizontal,
- Highways, bridges, viaducts, dams,
- Anchoring guardrails on bridges, steel ladders, cranes and viaducts,
- Anchoring rebars to concrete, rock or walls,
- Assembly and anchoring of all types of metal and steel components to reinforced concrete, metal and steel surfaces.

Advantages:
- Provides high mechanical strength.
- Highly resistant to abrasion and impact.
- Provides high adhesion to concrete and steel.
- Has high load-bearing capacity.
- Consistency can be adjusted with its own aggregate, if desired.
- Does not shrink.

Consumption:
For appr. 1.95 kg/m^2 (for 1 mm thickness) 7.7 L mortar is prepared with 15 kg product. In anchoring and installation applications, the consumption varies depending on the hole diameter, depth and rebar diameter.

Rebar Diameter (mm)	Hole Diameter (mm)		Hole Depth (mm)		Epoxy Mortar Needed (g)	
	Min.	Max.	Min.	Max.	Min.	Max.
10	14	16	100	150	7.54	18.37
12	16	18	120	180	10.55	25.43
14	18	20	140	210	14.07	33.63
16	20	22	160	240	18.09	42.96
18	22	24	180	270	22.61	53.41
20	24	26	200	300	27.63	65.00
24	28	30	240	360	39.19	91.56

Packaging:
Sets of 5 kg and 15 kg (A+B+C) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Liquid - grey Component B (Hardener): Liquid - light yellow Component C (Special size aggregate): Sand color	
Packaging (5 kg)	: Component A: 0.685 kg, Component B: 0.315 kg, Component C: 4 kg	
Packaging (15 kg)	: Component A: 2.055 kg, Component B: 0.945 kg, Component C: 12 kg	
Mixture Density	: 1.95 ± 0.06 g/cm^3 (TS EN ISO 2811-1)	
App. Temperature	: Between +10°C and 30°C	
Compressive Strength	: ≥ 50 N/mm^2 (TS EN 12190) 1 day ≥ 85 N/mm^2 (TS EN 12190) 7 days	
Flexural Strength	: ≥ 25 N/mm^2 (TS EN 12190) 1 day ≥ 30 N/mm^2 (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 2 N/mm^2 - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (5 kg)	: Temperature 10°C 20°C 30°C	Duration (TS EN ISO 9514) 120 minutes 60 minutes 30 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPOX® 310

Epoxy Repair, Adhesive and Assembly Mortar

Description:
Epoxy resin based, double component, **solvent free**, **thixotropic**, structural **repair**, **adhesive** and **assembly** mortar.

Application Areas:
- Indoor and outdoor,

In structural adhesive applications:
- On concrete and prefabricated lightweight concrete structural materials,
- On iron, steel and aluminum,
- On wood, hard natural stone, brick, polyester, glass and epoxy surfaces,
- Bonding of expansion tapes.

In repair mortar applications:
- Repair of reinforced concrete structures such as columns, beams and shear walls,
- Repair of corners and edges,
- Repair of wide cracks,
- Repair of cracks and joint edges on industrial floors,
- Filling holes and voids.

Advantages:
- Does not shrink and provides high mechanical strength.
- Very resistant to abrasion and impact.
- Does not contain solvent, resistant to chemicals.
- Does not require primer and bonds well to many structural materials.
- Has high initial and final strength, adheres well.
- Thixotropic, does not sag in vertical applications.
- Combines bonding and filling properties in a single product.
- Components have different colors for mixing control.

Consumption:
For 1.65 - 3.3 kg/m² (for 1 - 2 mm thickness) 4.8 L mortar is prepared with 8 kg product.

Packaging:
Sets of 8 kg (A+B) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Thix. paste - cream Component B (Hardener): Thix. liquid - dark grey	
Packaging	: Component A: 6 kg, Component B: 2 kg	
Mixture Density	: 1.65 ± 0.05 g/cm³ (TS EN ISO 2811-1)	
Application Temperature	: Between +10°C and 30°C	
Compressive Strength	: ≥ 65 N/mm² (TS EN 12190) 7 days	
Flexural Strength	: ≥ 40 N/mm² (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 2 N/mm² - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (8 kg)	: Temperature	Duration (TS EN ISO 9514)
	10°C	60 minutes
	20°C	30 minutes
	30°C	15 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

REPOX® 340

Polyester Chemical Anchoring Adhesive

Description:
Polyester resin based, double component, fast curing, high strength, multi-purpose, chemical anchoring in cartridge.

Application Areas:
- Indoor and outdoor,
- Horizontal and vertical surfaces,
- Anchoring and mounting in areas exposed to extreme loads,
- Embedding and securing reinforcement bars,
- Structural strengthening applications,
- Installation of pipe connections, cable ducts, kitchen and bathroom fittings and window elements,
- Installation of awnings, shutters, sunshades and road signs,
- Assembly of billboards, lamps and lighting systems,
- Assembly of bolts, large screws, heavy-duty nails, satellite dishes, grilles, railings, balustrades and similar materials to surfaces like concrete and stone.

Advantages:
- Cures fast and has high strength.
- Can be applied on concrete, solid and hollow bricks, briquettes, natural stones, marble, granite and rocks.
- Can be applied on vertical and horizontal surfaces.
- Thixotropic, does not sag.
- Resistant to heat up to +80˚C.
- Resistant to most of the chemicals.

Consumption:
Varies depending on the volume of the application area.

Packaging:
300 and 345 ml cartridges

Technical Properties	
Mixture Density	: 1.70 ± 0.10 g/ml
Application Temperature	: Between +5°C and 30°C
Compressive Strength	: 84 MPa
Working Time	: 4 - 8 minutes (23°C, 50% humidity)
Curing Time (80% Strength)	: 45 - 60 minutes (23°C, 50% humidity)
Complete Curing Time (100% Strength)	: 24 hours (23°C)
Service Temperature	: Between -40°C and +80°C

REPOX® 400

Epoxy-Based Thixotropic Adhesive for Fiber-Reinforced Polymer Systems

Description:
Epoxy-based, double component, solvent-free, **thixotropic**, high strength, orange colored **saturating resin** and **adhesive** developed for **CARBOFIX** Systems.

Application Areas:
Indoor and outdoor, in structures to be reinforced with **CARBOFIX** Systems, for bonding of carbon fiber reinforcement fabrics to the surface and as a concrete reinforcement resin.

Advantages:
- Suitable for carbon fiber saturation and bonding applications. Has very high adhesion strength.
- Its orange color ensures ease of application control.
- Easy to mix and apply, penetrates well.
- Does not sag on horizontal and vertical applications.
- Does not contain solvent. Achieves high mechanical and chemical resistance after curing.

Consumption:
0.7 - 1.2 kg/m² for the first layer and 0.6 kg/m² for each subsequent layer of fiber. The consumption of REPOX 400 mixture varies depending on the level of reinforcement, assembly and bonding, as well as the weight and weave density of the carbon fiber fabric to be used.

Packaging:
Sets of 7 kg or 20 kg (A+B) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Thix. liquid - orange Component B (Hardener): Liquid - light yellow	
Packaging (7 kg)	: Component A: 4.52 kg, Component B: 2.48 kg	
Packaging (20 kg)	: Component A: 12.90 kg, Component B: 7.10 kg	
Mixture Density	: 1.03 ± 0.03 g/cm³ (TS EN ISO 2811-1)	
Mixture Viscosity	: 17000 ± 3400 mPas (TS EN ISO 3219-2)	
App. Temperature	: Between +10°C and 30°C	
Hardness (Shore D)	: 75 ± 3 (TS EN ISO 868) 7 days	
Compressive Strength	: ≥ 45 N/mm² (TS EN 12190) 7 days	
Flexural Strength	: ≥ 50 N/mm² (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 3 N/mm² - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (7 kg)	: Temperature	Duration (TS EN ISO 9514)
	10°C	60 minutes
	20°C	30 minutes
	30°C	20 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

REPOX® 400H

Epoxy-Based, Moisture-Tolerant, Thixotropic Adhesive for Fiber-Reinforced Polymer Systems

Description:
Epoxy-based, double component, solvent-free, **thixotropic**, high strength, **moisture-tolerant**, oxide yellow colored **saturating resin** and **adhesive** developed for **CARBOFIX** Systems.

Application Areas:
Indoor and outdoor, in structures to be reinforced with **CARBOFIX** Systems, for bonding of carbon fiber reinforcement fabrics to moist surface and as a concrete reinforcement resin.

Advantages:
- Suitable for carbon fiber saturation and bonding applications. Has very high adhesion strength.
- Can be applied on dry and moist surfaces.
- Its oxide yellow color ensures ease of application control.
- Easy to mix and apply, penetrates well.
- Does not sag on horizontal and vertical applications.
- Does not contain solvent. Achieves high mechanical and chemical resistance after curing.

Consumption:
0.7 - 1.2 kg/m^2 for the first layer and 0.6 kg/m^2 for each subsequent layer of fiber. The consumption of REPOX 400H mixture varies depending on the level of reinforcement, assembly and bonding, as well as the weight and weave density of the carbon fiber fabric to be used.

Packaging:
Sets of 7 kg or 20 kg (A+B) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Thix. liquid - oxide yellow Component B (Hardener): Liquid - brown	
Packaging (7 kg)	: Component A: 4.52 kg, Component B: 2.48 kg	
Packaging (20 kg)	: Component A: 12.90 kg, Component B: 7.10 kg	
Mixture Density	: 1.06 ± 0.03 g/cm^3 (TS EN ISO 2811-1)	
Mixture Viscosity	: 18000 ± 3600 mPas (TS EN ISO 3219-2)	
App. Temperature	: Between +10°C and 30°C	
Hardness (Shore D)	: 75 ± 3 (TS EN ISO 868) 7 days	
Compressive Strength	: ≥ 60 N/mm^2 (TS EN 12190) 7 days	
Flexural Strength	: ≥ 50 N/mm^2 (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 2 N/mm^2 - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (7 kg)	: Temperature	Duration (TS EN ISO 9514)
	10°C	60 minutes
	20°C	30 minutes
	30°C	20 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

REPOX® 405

Epoxy-Based Adhesive for Fiber-Reinforced Polymer Systems

Description:
Epoxy-based, double component, solvent-free, high strength, oxide red colored **saturating resin** and **adhesive** developed for **CARBOFIX** Systems.

Application Areas:
Indoor and outdoor, in structures to be reinforced with **CARBOFIX** Systems, for bonding of carbon fiber reinforcement fabrics to the surface and as a concrete reinforcement resin.

Advantages:
- Suitable for carbon fiber saturation and bonding applications. Has very high adhesion strength.
- Its oxide red color ensures ease of application control.
- Easy to mix and apply, penetrates well.
- Does not contain solvent. Achieves high mechanical and chemical resistance after curing.

Consumption:
0.7 - 1.2 kg/m^2 for the first layer and 0.6 kg/m^2 for each subsequent layer of fiber. The consumption of REPOX 405 mixture varies depending on the level of reinforcement, assembly and bonding, as well as the weight and weave density of the carbon fiber fabric to be used.

Packaging:
Sets of 7 kg or 20 kg (A+B) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Liquid - oxide red Component B (Hardener): Liquid - light yellow	
Packaging (7 kg)	: Component A: 4.46 kg, Component B: 2.54 kg	
Packaging (20 kg)	: Component A: 12.74 kg, Component B: 7.26 kg	
Mixture Density	: 1.04 ± 0.03 g/cm^3 (TS EN ISO 2811-1)	
Mixture Viscosity	: 2000 ± 400 mPas (TS EN ISO 3219-2)	
App. Temperature	: Between +10°C and 30°C	
Hardness (Shore D)	: 75 ± 3 (TS EN ISO 868) 7 days	
Compressive Strength	: ≥ 45 N/mm^2 (TS EN 12190) 7 days	
Flexural Strength	: ≥ 50 N/mm^2 (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 3 N/mm^2 - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (7 kg)	: Temperature	Duration (TS EN ISO 9514)
	10°C	60 minutes
	20°C	30 minutes
	30°C	20 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

REPOX® 410T

Epoxy-Based, Thixotropic Adhesive and Assembly Paste for Carbofix Plate Systems

Description:
Epoxy-based, double component, solvent-free, **thixotropic**, high strength, **adhesive** and **assembly** paste specially developed for **CARBOFIX Plate** Systems.

Application Areas:
Indoor and outdoor, for bonding and assembly of carbon fiber reinforcement plates to surfaces in structures to be reinforced with **CARBOFIX Plate** Systems.

Advantages:
- Suitable for assembly and bonding of carbon plates.
- Does not sag on vertical and overhead applications.
- Has very high adhesion strength.
- Does not contain solvent. Achieves high mechanical and chemical resistance after curing.

Consumption:
The consumption of REPOX 410T mixture varies depending on the level of reinforcement, assembly and bonding. Under low temperature conditions, the viscosity increases and the consumption may also increase.

Packaging:
Sets of 6 kg (A+B) tin buckets

Technical Properties		
Appearance - Color	: Component A (Resin): Paste - cream Component B (Hardener): Liquid - dark grey	
Packaging	: Component A: 3 kg, Component B: 3 kg	
Mixture Density	: 1.60 ± 0.05 g/cm^3	
App. Temperature	: Between +10°C and 30°C	
Compressive Strength	: ≥ 40 N/mm^2 (TS EN 12190) 7 days	
Flexural Strength	: ≥ 20 N/mm^2 (TS EN 12190) 7 days	
Adhesion Strength	: ≥ 3 N/mm^2 - Fracture within the concrete substrate (TS EN 1542) 7 days	
Pot Life (6 kg)	: Temperature	Duration (TS EN ISO 9514)
	10°C	60 minutes
	20°C	30 minutes
	30°C	20 minutes
Complete Curing Time	: 7 days (23°C TS 4317)	
Service Temperature	: Between -10°C and +60°C	

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

CARBOFIX® Tex U 312

300 gr/m² Carbon Fiber Unidirectional Fabric (12K Weaving Density)

Description:
Structural reinforcement fabric made of mainly **carbonized acrylic fiber** (300gr/m² - 12K Weaving Density), **tar** and **thermoplastic yarn woven** unidirectionally. Thanks to its advanced technology, it is 5 times lighter however 3 times more resistant to stress than steel and is one of the most durable materials known. It can easily be shaped thanks to its soft yarn-like structure and gains a rigidity with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Reinforcement of buildings against earthquakes,
- Repair and reinforcement of columns, beams and shear walls of light - medium damaged structures,
- Reinforcing vaults and arches,
- Repair and reinforcement of corroded and damaged bridges, viaducts and overpasses,
- Restoration and repair of historical monuments.

Advantages:
- Increases the flexing capacity of the wrapped columns to a large extent and prevents fractures in the columns.
- Resistant to corrosion, extends the life of the building.
- Does not add extra weight to the structures.
- Very thin, does not cause any loss of space.
- Is a stronger but lighter reinforcement system than steel. Has no corrosion problem compared to steel.
- Easy to shape.
- When wrapped around the stirrup tightening areas of the column, acts as an additional stirrup and thus increases the shear capacity of the column.

Packaging:
Carton box (0.50m width x 50m length)

Technical Properties	
Color	: Black
Fiber Type	: Warp direction carbon yarn, weft direction thermoplastic yarn
Fiber Density	: 1.80 g/cm³
Weight (TS EN 12127)	: 300 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 99%
Weight Ratio in 90° (Weft) Direction	: 1%
Warp Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Weft Density (TS 250 EN 1049-2)	: 10.00 ± 5% ends / 10 cm
Fabric Pattern / Orientation (TS 1635 ISO 2113)	: Unidirectional
Weaving Density	: 12K
Roll Size	: Width 0.50 ± 2.5% m x Length 50 m
Tensile Strength	: > 5500 MPa
Modulus of Elasticity	: ≥ 240000 MPa
Elongation at Break	: 1.8%

CARBOFIX® Tex U 324

300 gr/m² Carbon Fiber Unidirectional Fabric (24K Weaving Density)

Description:
Structural reinforcement fabric made of mainly **carbonized acrylic fiber** (300gr/m² - 24K Weaving Density), **tar** and **thermoplastic yarn woven** unidirectionally. Thanks to its advanced technology, it is 5 times lighter however 3 times more resistant to stress than steel and is one of the most durable materials known. It can easily be shaped thanks to its soft yarn-like structure and gains a rigidity with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Reinforcement of buildings against earthquakes,
- Repair and reinforcement of columns, beams and shear walls of light - medium damaged structures,
- Reinforcing vaults and arches,
- Repair and reinforcement of corroded and damaged bridges, viaducts and overpasses,
- Restoration and repair of historical monuments.

Advantages:
- Increases the flexing capacity of the wrapped columns to a large extent and prevents fractures in the columns.
- Resistant to corrosion, extends the life of the building.
- Does not add extra weight to the structures.
- Very thin, does not cause any loss of space.
- Is a stronger but lighter reinforcement system than steel. Has no corrosion problem compared to steel.
- Easy to shape.
- When wrapped around the stirrup tightening areas of the column, acts as an additional stirrup and thus increases the shear capacity of the column.

Packaging:
Carton box (0.50m width x 50m length)

Technical Properties	
Color	: Black
Fiber Type	: Warp direction carbon yarn, weft direction thermoplastic yarn
Fiber Density	: 1.78 g/cm³
Weight (TS EN 12127)	: 300 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 99%
Weight Ratio in 90° (Weft) Direction	: 1%
Warp Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Weft Density (TS 250 EN 1049-2)	: 10.00 ± 5% ends / 10 cm
Fabric Pattern / Orientation (TS 1635 ISO 2113)	: Unidirectional
Weaving Density	: 24K
Roll Size	: Width 0.50 ± 2.5% m x Length 50 m
Tensile Strength	: 4200 - 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa
Elongation at Break	: 1.8%

CARBOFIX® Tex U 624

600 gr/m² Carbon Fiber Unidirectional Fabric (24K Weaving Density)

Description:
Structural reinforcement fabric made of mainly **carbonized acrylic fiber** (600gr/m² - 24K Weaving Density), **tar** and **thermoplastic yarn woven** unidirectionally. Thanks to its advanced technology, it is 5 times lighter however 3 times more resistant to stress than steel and is one of the most durable materials known. It can easily be shaped thanks to its soft yarn-like structure and gains a rigidity with the epoxy resins it is used with.

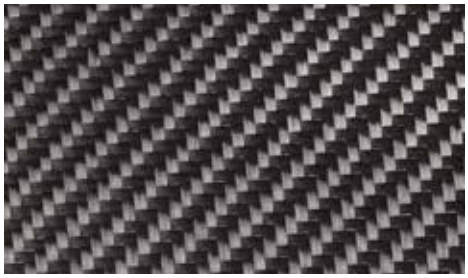
Application Areas:
- Indoor and outdoor,
- Reinforcement of buildings against earthquakes,
- Repair and reinforcement of columns, beams and shear walls of light - medium damaged structures,
- Reinforcing vaults and arches,
- Repair and reinforcement of corroded and damaged bridges, viaducts and overpasses,
- Restoration and repair of historical monuments.

Advantages:
- Increases the flexing capacity of the wrapped columns to a large extent and prevents fractures in the columns.
- Resistant to corrosion, extends the life of the building.
- Does not add extra weight to the structures.
- Very thin, does not cause any loss of space.
- Is a stronger but lighter reinforcement system than steel. Has no corrosion problem compared to steel.
- Easy to shape.
- When wrapped around the stirrup tightening areas of the column, acts as an additional stirrup and thus increases the shear capacity of the column.

Packaging:
Carton box (0.50m width x 50m length)

Technical Properties	
Color	: Black
Fiber Type	: Warp direction carbon yarn, weft direction thermoplastic yarn
Fiber Density	: 1.80 g/cm³
Weight (TS EN 12127)	: 600 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 99%
Weight Ratio in 90° (Weft) Direction	: 1%
Warp Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Weft Density (TS 250 EN 1049-2)	: 10.00 ± 5% ends / 10 cm
Fabric Pattern / Orientation (TS 1635 ISO 2113)	: Unidirectional
Weaving Density	: 24K
Roll Size	: Width 0.50 ± 2.5% m x Length 50 m
Tensile Strength	: > 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa
Elongation at Break	: 1.8%

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.



CARBOFIX® Tex B 612T

600 gr/m² Carbon Fiber Bi-directional Fabric (12K Weaving Density)

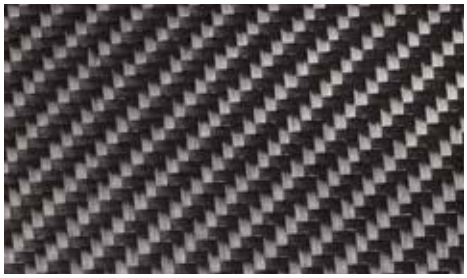
Description:
Structural reinforcement fabric made of mainly **carbonized acrylic fiber** (600gr/m² - 12K Weaving Density), **tar** and **thermoplastic yarn woven** bidirectionally. Thanks to its advanced technology, it is 5 times lighter however 3 times more resistant to stress than steel and is one of the most durable materials known. It can easily be shaped thanks to its soft yarn-like structure and gains a rigidity with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Reinforcement of buildings against earthquakes,
- Repair and reinforcement of columns, beams and shear walls of light - medium damaged structures,
- Reinforcing vaults and arches,
- Repair and reinforcement of corroded and damaged bridges, viaducts and overpasses,
- Restoration and repair of historical monuments.

Advantages:
- Increases the flexing capacity of the wrapped columns to a large extent and prevents fractures in the columns.
- Resistant to corrosion, extends the life of the building.
- Does not add extra weight to the structures.
- Very thin, does not cause any loss of space.
- Is a stronger but lighter reinforcement system than steel. Has no corrosion problem compared to steel.
- Easy to shape.
- When wrapped around the stirrup tightening areas of the column, acts as an additional stirrup and thus increases the shear capacity of the column.

Packaging:
Carton box (1m width x 50m length)

Technical Properties	
Color	: Black
Fiber Type	: Warp direction carbon yarn, weft direction thermoplastic yarn
Fiber Density	: 1.80 g/cm³
Weight (TS EN 12127)	: 600 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 50%
Weight Ratio in 90° (Weft) Direction	: 50%
Warp Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Weft Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Fabric Pattern / Orientation (TS 1635 ISO 2113)	: Twill / Bi-directional
Weaving Density	: 12K
Roll Size	: Width 1 ± 2.5% m x Length 50 m
Tensile Strength	: > 5500 MPa
Modulus of Elasticity	: ≥ 240000 MPa
Elongation at Break	: 1.8%



CARBOFIX® Tex B 624T

600 gr/m² Carbon Fiber Bi-directional Fabric (24K Weaving Density)

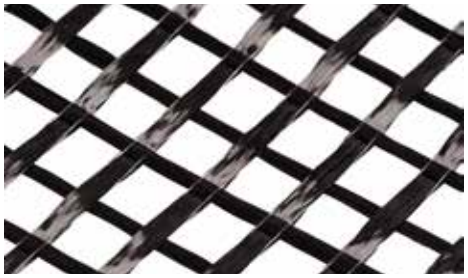
Description:
Structural reinforcement fabric made of mainly **carbonized acrylic fiber** (600gr/m² - 24K Weaving Density), **tar** and **thermoplastic yarn woven** bidirectionally. Thanks to its advanced technology, it is 5 times lighter however 3 times more resistant to stress than steel and is one of the most durable materials known. It can easily be shaped thanks to its soft yarn-like structure and gains a rigidity with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Reinforcement of buildings against earthquakes,
- Repair and reinforcement of columns, beams and shear walls of light - medium damaged structures,
- Reinforcing vaults and arches,
- Repair and reinforcement of corroded and damaged bridges, viaducts and overpasses,
- Restoration and repair of historical monuments.

Advantages:
- Increases the flexing capacity of the wrapped columns to a large extent and prevents fractures in the columns.
- Resistant to corrosion, extends the life of the building.
- Does not add extra weight to the structures.
- Very thin, does not cause any loss of space.
- Is a stronger but lighter reinforcement system than steel. Has no corrosion problem compared to steel.
- Easy to shape.
- When wrapped around the stirrup tightening areas of the column, acts as an additional stirrup and thus increases the shear capacity of the column.

Packaging:
Carton box (1m width x 50m length)

Technical Properties	
Color	: Black
Fiber Type	: Warp direction carbon yarn, weft direction thermoplastic yarn
Fiber Density	: 1.80 g/cm³
Weight (TS EN 12127)	: 600 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 50%
Weight Ratio in 90° (Weft) Direction	: 50%
Warp Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Weft Density (TS 250 EN 1049-2)	: 36.50 ± 5% ends / 10 cm
Fabric Pattern / Orientation (TS 1635 ISO 2113)	: Twill / Bi-directional
Weaving Density	: 24K
Roll Size	: Width 1 ± 2.5% m x Length 50 m
Tensile Strength	: 4200 - 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa
Elongation at Break	: 1.8%



CARBOFIX® Grid K 240/2x2

Carbon Fiber Textile Reinforcement

Description:
Technical **textile reinforcement** produced made of **carbon fiber yarn**, used in the reinforcement of historical buildings, with a special grid-shaped structure that increases adherence and bearing strength. It weighs 240 g/m², it can easily be shaped thanks to its soft yarn-like structure and gains a rigid structure with the epoxy resins it is used with.

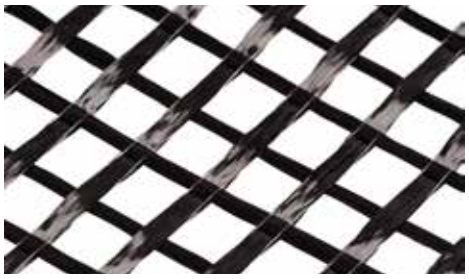
Application Areas:
- Indoor and outdoor,
- Restoration and repair of historical monuments increasing the carrying capacity of vaults, walls and domes of historical buildings,
- Reinforcement of masonry walls,
- Increasing safety measures in excavation areas,
- Retrofitting of historical buildings in accordance with the original,
- Ground stabilization,
- Structural reinforcement of elements such as columns, beams and slabs.

Advantages:
- Suitable for historical building.
- Easy to apply, has a special adherence enhancing coating to work together with reinforcement mortars.
- Used for floor and surface stabilization.
- Flexible, provides resistance against tensile stresses.
- No corrosion problem compared to steel.
- Has very high chemical resistance.

Packaging:
Standard

Technical Properties	
Color	: Black
Fiber Type	: Carbon fiber yarn
Fiber Density	: 1.80 g/cm³
Weight (TS EN 12127)	: 240 ± 5% g/m²
Weight Ratio in 0° (Warp) Direction	: 50%
Weight Ratio in 90° (Weft) Direction	: 50%
Weaving Density	: 24K
Design	: 20 x 20 mm gap distance
Length	: Standard
Width (TS 3427 ISO 5025)	: 1000 mm ± 2.50%
Tensile Strength	: > 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.



CARBOFIX® Grid K 300/2x2
Carbon Fiber Textile Reinforcement

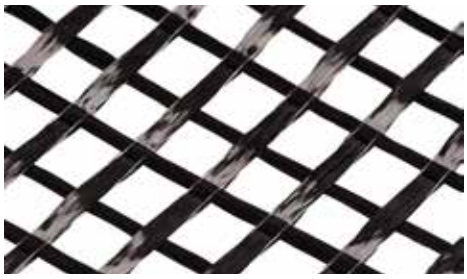
Description:
Technical **textile reinforcement** produced made of **carbon fiber yarn**, used in the reinforcement of historical buildings, with a special grid-shaped structure that increases adherence and bearing strength. It weighs 300 g/m^2, it can easily be shaped thanks to its soft yarn-like structure and gains a rigid structure with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Restoration and repair of historical monuments increasing the carrying capacity of vaults, walls and domes of historical buildings,
- Reinforcement of masonry walls,
- Increasing safety measures in excavation areas,
- Retrofitting of historical buildings in accordance with the original,
- Ground stabilization,
- Structural reinforcement of elements such as columns, beams and slabs.

Advantages:
- Suitable for historical building.
- Easy to apply, has a special adherence enhancing coating to work together with reinforcement mortars.
- Used for floor and surface stabilization.
- Flexible, provides resistance against tensile stresses.
- No corrosion problem compared to steel.
- Has very high chemical resistance.

Packaging:
Standard

Technical Properties	
Color	: Black
Fiber Type	: Carbon fiber yarn
Fiber Density	: 1.80 g/cm^3
Weight (TS EN 12127)	: 300 ± 5% g/m^2
Weight Ratio in 0° (Warp) Direction	: 50%
Weight Ratio in 90° (Weft) Direction	: 50%
Weaving Density	: 24K
Design	: 20 x 20 mm gap distance
Length	: Standard
Width (TS 3427 ISO 5025)	: 1000 mm ± 2.50%
Tensile Strength	: > 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa



CARBOFIX® Grid K 370/2.5x2.5
Carbon Fiber Textile Reinforcement

Description:
Technical **textile reinforcement** produced made of **carbon fiber yarn**, used in the reinforcement of historical buildings, with a special grid-shaped structure that increases adherence and bearing strength. It weighs 370 g/m^2, it can easily be shaped thanks to its soft yarn-like structure and gains a rigid structure with the epoxy resins it is used with.

Application Areas:
- Indoor and outdoor,
- Restoration and repair of historical monuments increasing the carrying capacity of vaults, walls and domes of historical buildings,
- Reinforcement of masonry walls,
- Increasing safety measures in excavation areas,
- Retrofitting of historical buildings in accordance with the original,
- Ground stabilization,
- Structural reinforcement of elements such as columns, beams and slabs.

Advantages:
- Suitable for historical building.
- Easy to apply, has a special adherence enhancing coating to work together with reinforcement mortars.
- Used for floor and surface stabilization.
- Flexible, provides resistance against tensile stresses.
- No corrosion problem compared to steel.
- Has very high chemical resistance.

Packaging:
Standard

Technical Properties	
Color	: Black
Fiber Type	: Carbon fiber yarn
Fiber Density	: 1.80 g/cm^3
Weight (TS EN 12127)	: 370 ± 5% g/m^2
Weight Ratio in 0° (Warp) Direction	: 50%
Weight Ratio in 90° (Weft) Direction	: 50%
Weaving Density	: 24K
Design	: 25 x 25 mm gap distance
Length	: Standard
Width (TS 3427 ISO 5025)	: 1000 mm ± 2.50%
Tensile Strength	: > 4900 MPa
Modulus of Elasticity	: ≥ 240000 MPa

CARBOFIX® Tassel Anchor
Carbon Fiber Based Anchor Structure Reinforcement Element

Description:
Structural reinforcement element made of **carbon acrylic fiber** and **thermoplastic** yarn in the form of **tassels**, used in the reinforcement of historical buildings, domes and reinforced concrete structures, which allows the meshes to work monolithically with the structure enhancing adherence and bearing strength.

Application Areas:
- Masonry, vaults and domes,
- Reinforcement of reinforced concrete structures against earthquakes with carbon fiber,
- Repair and reinforcement of columns, beams and slabs of light - medium damaged structures,
- Repair and reinforcement of deformed and damaged bridges, viaducts and overpasses,
- Renovation and reinforcement of masonry structures,
- Restoration and repair of historical monuments.

Advantages:
- Compatible with **CARBOFIX Tex** and **CARBOFIX Grid** products.
- Full adaptation to the masonry structure.
- High adherence and load carrying properties.
- Easy to apply, reduces laber costs.
- Flexible, provides resistance against shear stresses.
- No corrosion problem compared to steel.
- Easy to shape.
- Easy to apply with epoxy and hydraulic lime mortar.

Packaging:
Requested dimensions

Technical Properties	
Color	: Black
Fiber Type	: Carbon fiber
Design	: Adherence fiber ribbed rod
Length	: Variable
Diameter	: 6 / 8 / 10 / 12 mm
Fiber Length	: Variable
Elongation at Break	: 1.8%
Tensile Strength	: > 4000 MPa
Modulus of Elasticity	: > 240 GPa
Weaving Density	: 12K

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

CARBOFIX® Plate

Carbon Fiber Reinforcement Plate

Description:
Structural reinforcement product made of **carbon acrylic fiber** and **thermoplastic** yarn impregnated with epoxy resin and brought into **plate** form, used in the reinforcement of historical buildings, domes and reinforced concrete structures, enhancing adherence and bearing strength.

Application Areas:
- Indoor and outdoor,
- Reinforcing buildings against earthquakes,
- Repair and reinforcement of columns, beams and slabs of light - medium damaged structures,
- To increase the bearing capacity in slabs, beams and bridges,
- Reinforcement of structural elements against earthquakes in reinforced concrete structures together with carbon fiber fabric,
- Bridges, overpasses and viaducts with increased live load,
- Reduction of steel reinforcement stresses in deformed and deflected openings,
- Reinforcement of vaults and arches,
- Restoration and repair of historical monuments.

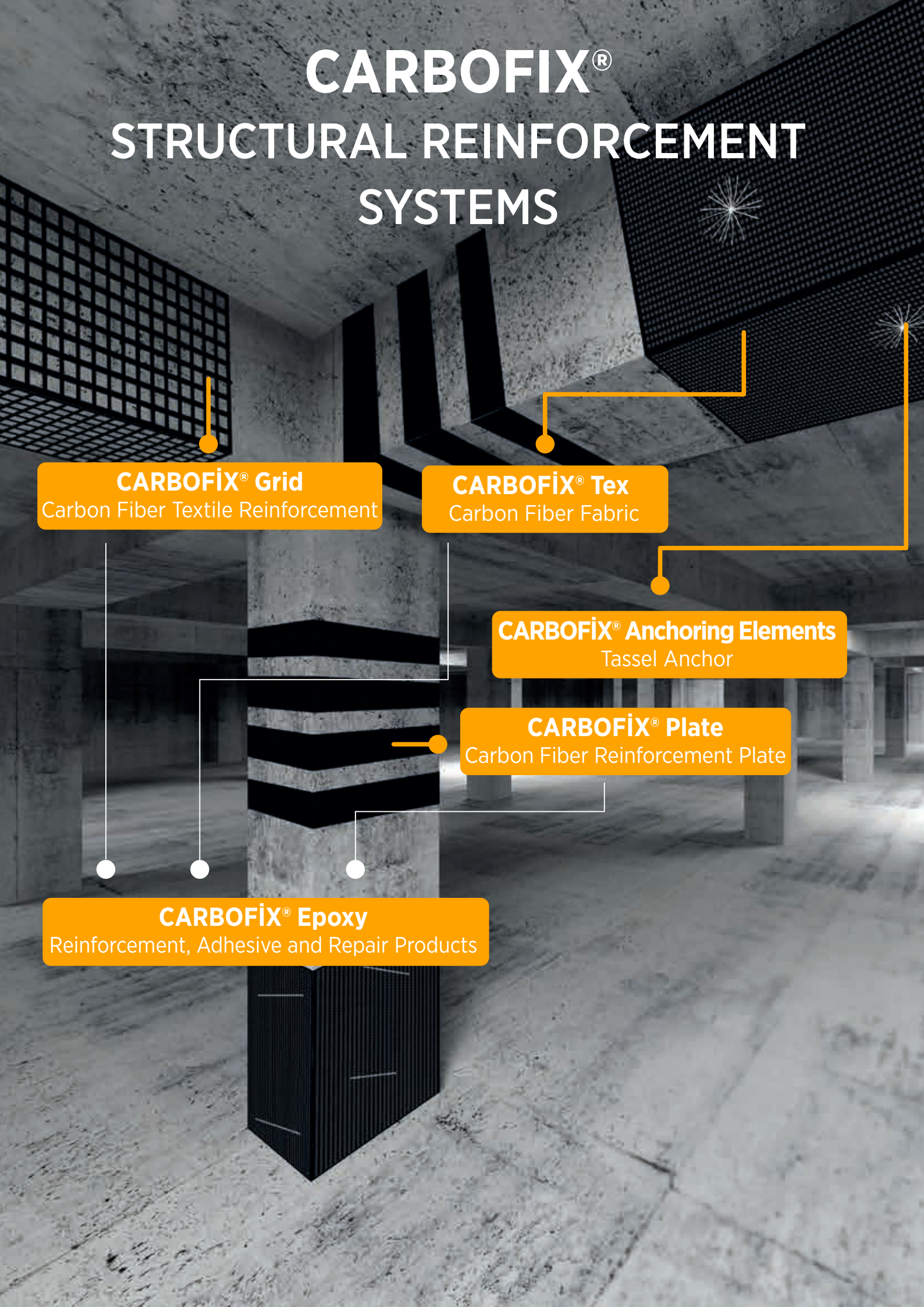
Advantages:
- Very high tensile strength and modulus of elasticity.
- Easy to transport and apply.
- Since it is light and thin, it does not impose a load on the structure and does not form a cross section.
- Can be cut to the required size with industrial scissors.
- No corrosion problem compared to steel.
- Very high chemical resistance.
- Excellent fatigue strength.

Packaging:
Standard

Technical Properties	
Color	: Black
Fiber Type	: Carbon fiber
Design	: In form of plate
Length	: Variable length
Product Width and Thickness	: Width: 50 mm Thickness: 1.2 mm Width: 50 mm Thickness: 1.4 mm Width: 100 mm Thickness: 1.2 mm Width: 100 mm Thickness: 1.4 mm
Fiber Length (Adherence)	: Variable
Elongation at Break	: < 1.7% (ASTM D3039)
Tensile Strength	: > 2400 MPa (ASTM D3039)
Modulus of Elasticity	: > 155 GPa (ASTM D3039)
Hardness	: 91.6 HRP
Water Absorption	: < 0.1%

Application instructions and technical data provided for the products are obtained in line with our experience and testing carried out according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

CARBOFIX®
STRUCTURAL REINFORCEMENT SYSTEMS



CARBOFİX® Grid
Carbon Fiber Textile Reinforcement

CARBOFİX® Tex
Carbon Fiber Fabric

CARBOFİX® Anchoring Elements
Tassel Anchor

CARBOFİX® Plate
Carbon Fiber Reinforcement Plate

CARBOFİX® Epoxy
Reinforcement, Adhesive and Repair Products

FİXA®
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