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Certified solutions for structural reinforcement

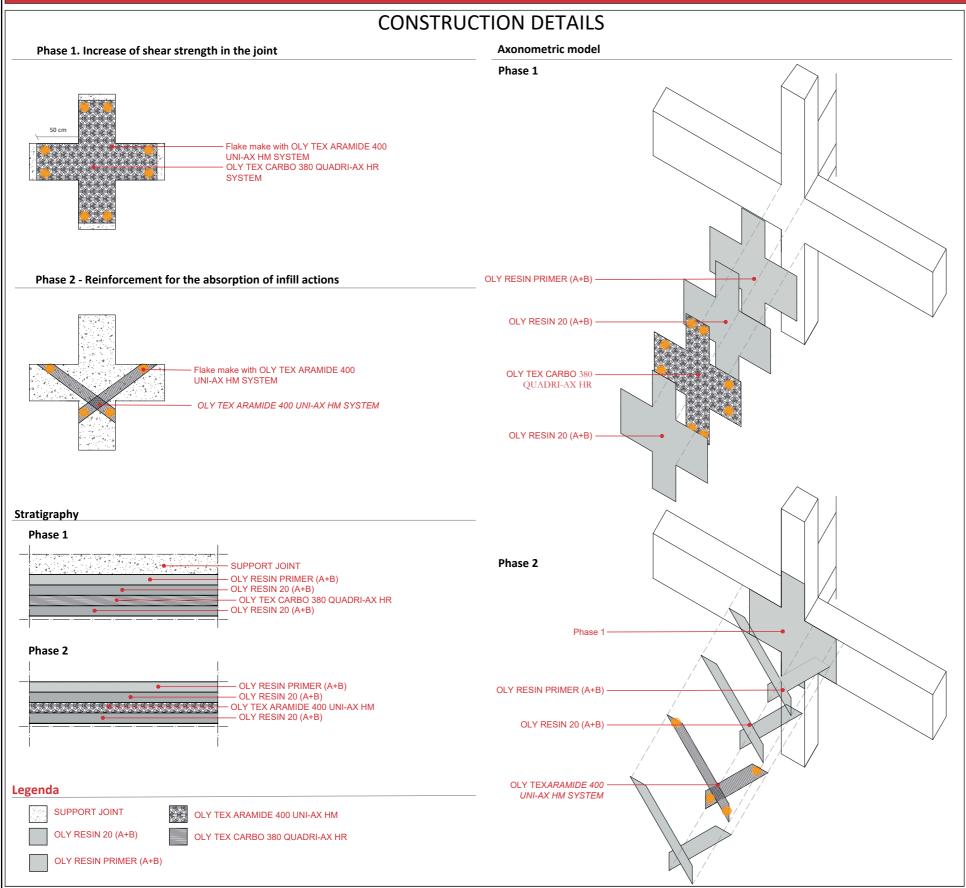
We assist professionals and companies from design to completion of the work

Technical Notebook



OLYMPUS-FRP IMPREGNATED ON SITE - Consolidation of a reinforced concrete beam-column joint





EXECUTION STAGES

Detail diagrams

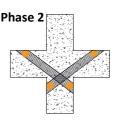
Preparation of the substrate - example: damaged clear cover

All Olympus FRP systems must be laid over the suitable substrates, that are intact and have good mechanical properties. Hence, it is always crucial to check the suitability of the substrate in $advance. \ \ Required \ support \ features \ are: integrity, good \ mechanical \ properties, \ flatness.$

In the case of existing flaws in the substrate, they need to be fixed in advance: by way of example, below are the required operations in case of clear cover detachment by making recourse to the remediation cycle with OLY FER and OLY GROUT T4.

Application of the reinforcement system





Phase 1

- a Preparation and cleaning of the substrate and laying down of a suitable epoxy primer OLY RESIN PRIMER (A+B) (only on non previously treated areas).
- b. Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions reported in the relevant fact sheet.
- c. Laying of the fabric OLY TEX CARBO 380 QUADRI-AX HR in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and subsequent treatment with suitable bubble breaker roller
- d. Laying of a second "fresh" coat of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.
- e. In case a successive application of standard plaster is required, a manual quartz dusting is first recommendable on the still "fresh" layer, so to increase the useful gripping surface.

Phase 2

- Preparation and cleaning of substrate and application of a suitable epoxy primer OLY RESIN PRIMER (A+B).
- b. In the case of uneven surfaces, it is recommendable to level them out with a suitable hydraulic mortar.
- Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions contained in the relevant fact sheet.
- Application of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and successively treatment with suitable bubble breaker roller.
- Laying of a second "fresh" layer of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.

Preparation of the aramid fiber flakes

- a. Cutting of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service based on the length specified in the project.
- b. Roll wrapping and impregnation with OLY RESIN 20 (A+B) of the portion of flake to be inserted in the hole,
- So called grouting (inghisaggio) into the pre-drilled hole of the connector and cutting of the dry portion out of the hole; for hole saturation use OLY RESIN in drums or cartridges.
- Radial arrangement of the fabric strips outside the hole and subsequent impregnation with

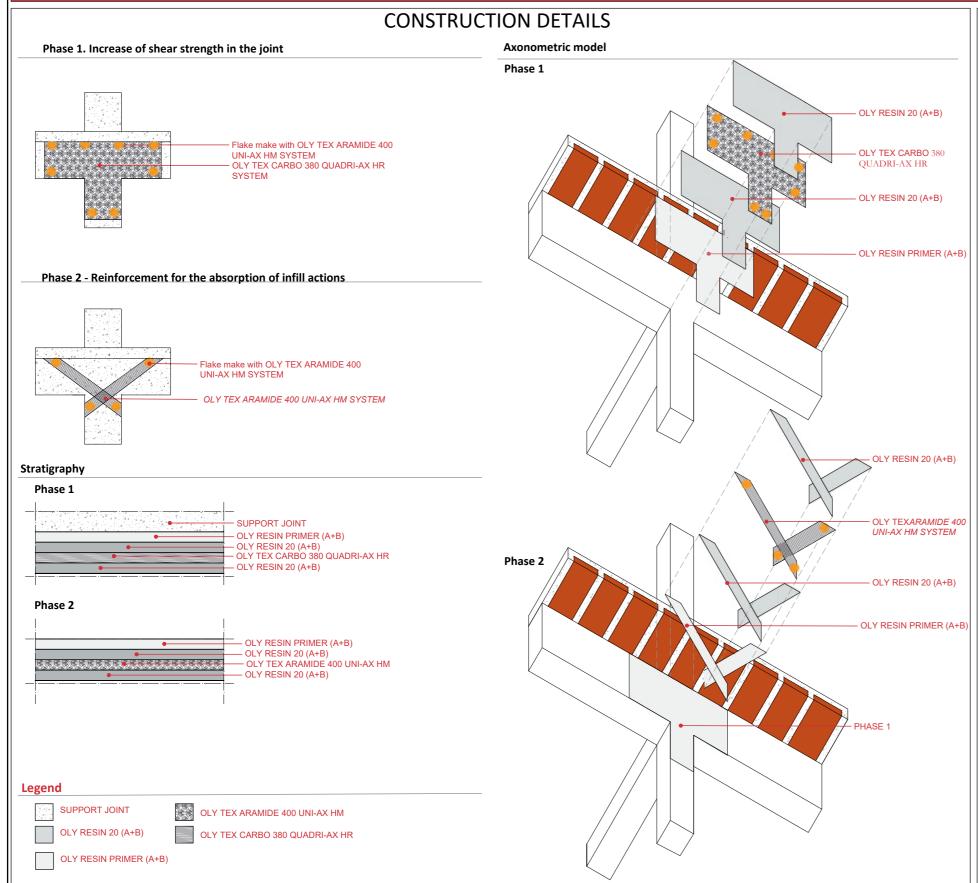






OLYMPUS-FRP IMPREGNATED ON SITE - Consolidation of reinforced concrete beam-pillar joints with cantilevered balcony





EXECUTION STAGES

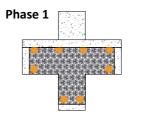
Detail diagrams

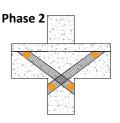
Preparation of the substrate - example: damaged clear cover

All Olympus FRP systems must be laid over the suitable substrates, that are intact and have good mechanical properties. Hence, it is always crucial to check the suitability of the substrate in advance. Required support features are: integrity, good mechanical properties, flatness.

In the case of existing flaws in the substrate, they need to be fixed in advance: by way of example, below are the required operations in case of clear cover detachment by making recourse to the remediation cycle with OLY FER and OLY GROUT T4.

Application of the reinforcement system





Phase 1

- a Preparation and cleaning of the substrate and laying down of a suitable epoxy primer OLY RESIN PRIMER (A+B) (only on non previously treated areas).
- Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions reported in the relevant fact sheet.
- c. Laying of the fabric OLY TEX CARBO 380 QUADRI-AX HR in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and subsequent treatment with suitable bubble breaker roller.
- Laying of a second "fresh" coat of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.
- e. In case a successive application of standard plaster is required, a manual quartz dusting is first recommendable on the still "fresh" layer, so to increase the useful gripping surface.

Phase 2

- Preparation and cleaning of substrate and application of a suitable epoxy primer OLY RESIN PRIMER (A+B).
- In the case of uneven surfaces, it is recommendable to level them out with a suitable hydraulic mortar.
- c. Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions contained in the relevant fact sheet.
- d. Application of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and successively treatment with suitable bubble breaker roller.
- e. Laying of a second "fresh" layer of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.

Preparation of the aramid fiber flakes

- a. Cutting of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service based on the length specified in the project.
- b. Roll wrapping and impregnation with OLY RESIN 20 (A+B) of the portion of flake to be inserted in the hole,
- So called grouting (inghisaggio) into the pre-drilled hole of the connector and cutting of the dry portion out of the hole; for hole saturation use OLY RESIN in drums or cartridges.
- d. Radial arrangement of the fabric strips outside the hole and subsequent impregnation with OLY RESIN 20 (A+B)

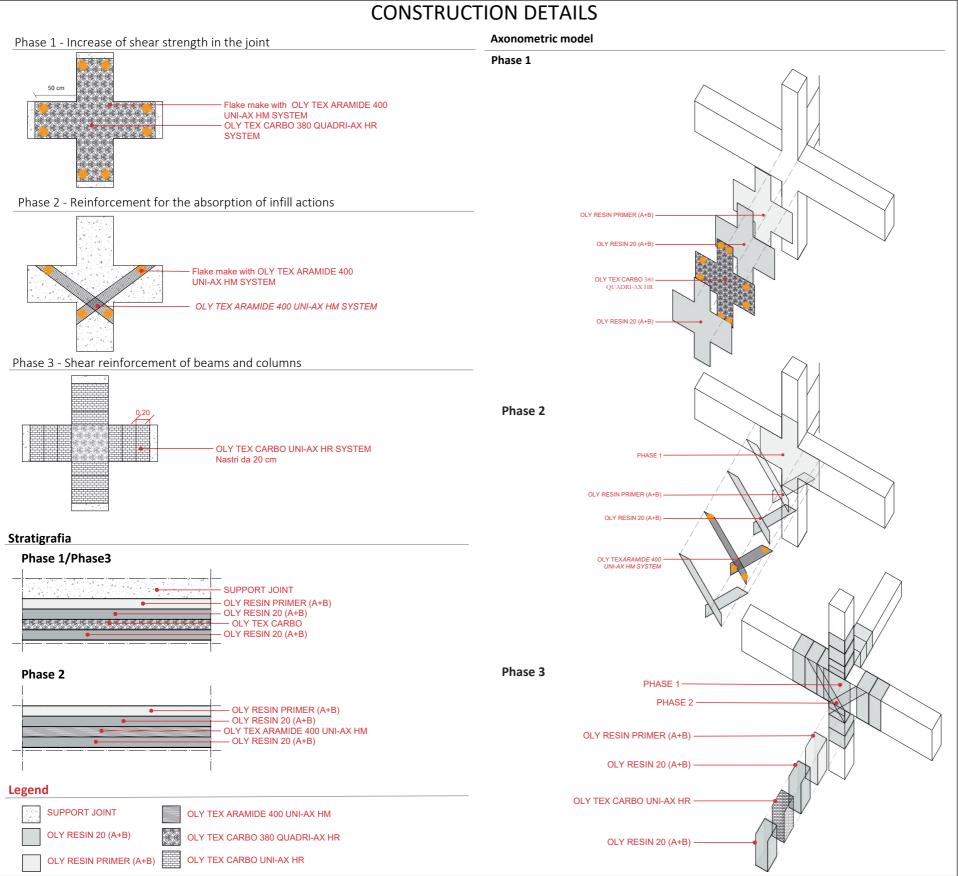






OLYMPUS-FRP IMPREGNATED ON SITE- Consolidation of reinforced concrete beam-pillar joints

JOINTS TAV. 02



EXECUTION STAGES

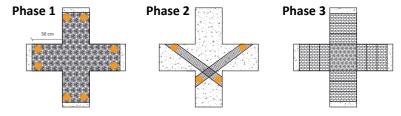
Detail diagrams

Preparation of the substrate - example: damaged clear cover

All Olympus FRP systems must be laid over the suitable substrates, that are intact and have good mechanical properties. Hence, it is always crucial to check the suitability of the substrate in advance. Required support features are: integrity, good mechanical properties, flatness.

In the case of existing flaws in the substrate, they need to be fixed in advance: by way of example, below are the required operations in case of clear cover detachment by making recourse to the remediation cycle with OLY FER and OLY GROUT T4.

Application of the reinforcement system



Phase 1 - Phase3

- a Preparation and cleaning of the substrate and laying down of a suitable epoxy primer OLY RESIN PRIMER (A+B) (only on non previously treated areas).
- b. Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions reported in the relevant fact sheet.
- c. Laying of the fabric OLY TEX CARBO 380 QUADRI-AX HR in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and subsequent treatment with suitable bubble breaker roller.
- d. Laying of a second "fresh" coat of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.

Phase 2

- Preparation and cleaning of substrate and application of a suitable epoxy primer OLY RESIN PRIMER (A+B).
- b. In the case of uneven surfaces, it is recommendable to level them out with a suitable hydraulic mortar.
- c. Brush application of a first coat of two-component epoxy resin OLY RESIN 20 (A+B) following the instructions contained in the relevant fact sheet.
- d. Application of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service with fibers oriented as per design and successively treatment with suitable bubble breaker roller.
- e. Laying of a second "fresh" layer of OLY RESIN 20 (A+B) and successively treatment with suitable bubble breaker roller.

Preparation of the aramid fiber flakes

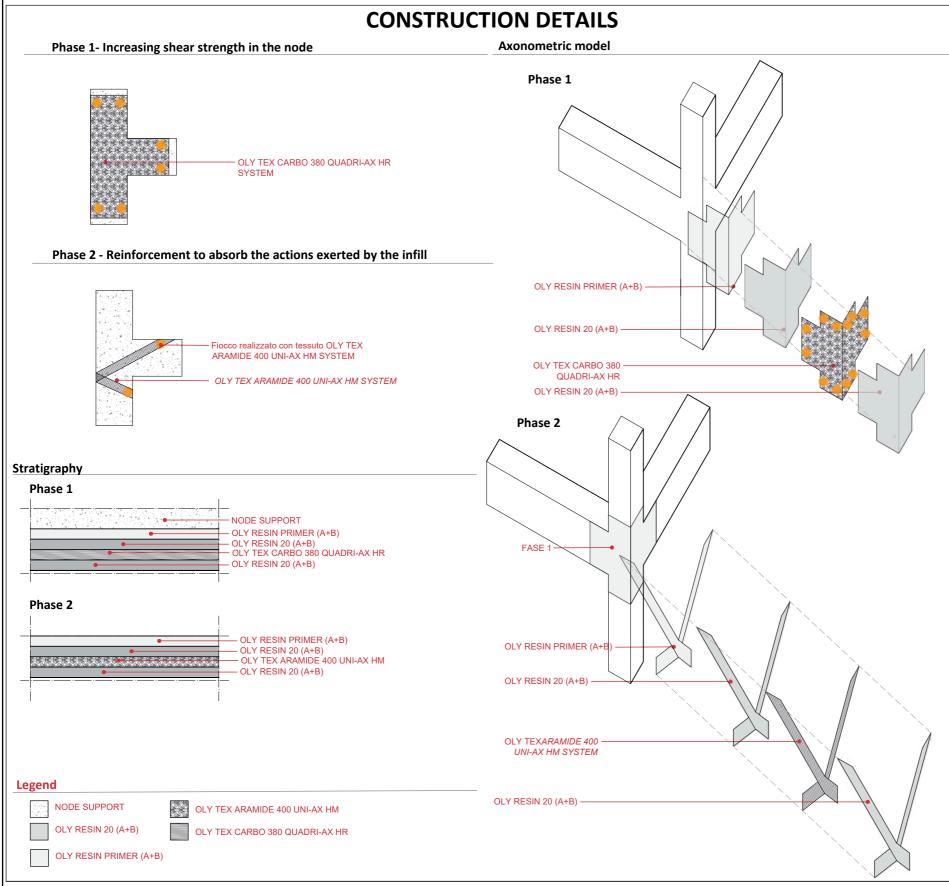
- a. Cutting of the fabric OLY TEX ARAMIDE 400 UNI-AX HM in possession of a CVT issued by the Central Technical Service based on the length specified in the project.
- Roll wrapping and impregnation with OLY RESIN 20 (A+B) of the portion of flake to be inserted in the hole,
- c. So called grouting (inghisaggio) into the pre-drilled hole of the connector and cutting of the dry portion out of the hole; for hole saturation use OLY RESIN in drums or cartridges.
- Radial arrangement of the fabric strips outside the hole and subsequent impregnation with OLY RESIN 20 (A+B).

In case a subsequent installation of standard plasters is required, a manual quartz dusting is first recommendable on the still "fresh" layer, so to increase the useful gripping surface.





OLYMPUS-FRP IMPREGNATED ON SITE - Consolidation of a reinforced concrete beam-pillar corner node



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate - example: deteriorated concrete cover

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate. The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

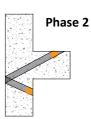
Good mechanical properties - the characteristics of the substrate must always be ascertained during the design phase by means of appropriate in situ investigations

Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, preventive restoration must be carried out: by way of example, the operations to be carried out in the case of concrete cover detachment are shown, using the specific restoration cycle consisting of OLY FER and OLY GROUT T4.

Application of the reinforcement system





Phase 1

- Preparation and cleaning of the substrate and application of suitable epoxy primer OLY RESIN PRIMER (A+B) (only for areas not previously treated).
- b. Application of a first coat of OLY RESIN 20 (A+B) two-component epoxy resin by brush, following the instructions in the relevant technical data sheet.
- c. Laying of OLY TEX CARBO 380 QUADRI-AX HR fabric with CVT issued by the Central Technical Service with fibres oriented as per the project and subsequent treatment with a suitable bubble break roller.
- d. Apply "fresh" a second layer of OLY RESIN 20 (A+B) and subsequent treatment with a suitable bubble break roller.
- e. If the subsequent application of civil plaster is necessary, it is advisable to dust the system while it is still "fresh" by hand with quartz sand to increase the useful adhesion surface.

Phase 12

- a. Preparation and cleaning of the substrate and application of suitable epoxy primer OLY RESIN PRIMER (A+B).
- b. In the case of irregular surfaces, regularise it with suitable hydraulic mortars.
- c. Apply a first coat of OLY RESIN 20 (A+B) two-component epoxy resin by brush, following the instructions in the relevant technical data sheet.
- d. Laying of OLY TEX ARAMIDE 400 UNI-AX HM fabric with CVT issued by the Central Technical Service with fibres oriented as per the project and subsequent treatment with a suitable bubble break roller.
- e. Apply a second "fresh" layer of OLY RESIN 20 (A+B) and subsequent treatment with a suitable bubble break roller.





OLYMPUS-FRP IMPREGNATED IN SITU - Consolidation of a reinforced concrete beam-pillar corner node

CONSTRUCTION DETAILS Axonometric model Phase 1- Increasing shear strength in the node Phase 1 OLY TEX CARBO 380 QUADRI-AX HR Phase 2 - Reinforcement to absorb the actions exerted by the infill Fiocco realizzato con tessuto OLY TEX ARAMIDE 400 UNI-AX HM SYSTEM OLY RESIN 20 (A+B OLY TEX ARAMIDE 400 UNI-AX HM SYSTEM Phase 2 Phase 3 - Reinforcement of beams and columns OLY TEX CARBO 380 QUADRI-AX HR SYSTEM - fasce da 20 cm Stratigraphy Phase 1 / Phase 3 NODE SUPPORT OLY RESIN 20 (A+B) OLY RESIN PRIMER (A+B) - OLY RESIN 20 (A+B) OLY TEX CARBO Phase 3 Phase 2 OLY RESIN PRIMER (A+B) - OLY RESIN 20 (A+B) OLY TEX ARAMIDE 400 UNI-AX HM OLY RESIN 20 (A+B) OLY RESIN PRIMER (A+B) Legend OLY RESIN 20 (A+B) NODE SUPPORT OLY TEX ARAMIDE 400 UNI-AX HM OLY TEX CARBO UNI-AX HR OLY RESIN 20 (A+B) OLY TEX CARBO 380 QUADRI-AX HR OLY RESIN 20 (A+B) OLY RESIN PRIMER (A+B) OLY TEX CARBO UNI-AX HR

EXECUTIVE PHASES

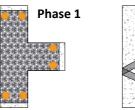
Detail diagrams

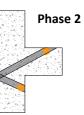
Preparation of the substrate - example: deteriorated concrete cover

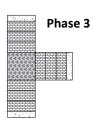
All Olympus FRP systems must be applied on suitable, intact substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate. The characteristics a substrate must have are: integrity, good mechanical properties, flatness.

If these defects in the substrate are found, preventive restoration must be carried out: by way of example, the operations to be carried out in the case of detachment of the cover, using the specific restoration cycle consisting of OLY FER and OLY GROUT T4, are given below.

Application of the reinforcement system







Phase 1 - Phase 3

- a. Preparation and cleaning of the substrate and application of suitable epoxy primer OLY RESIN PRIMER (A+B) (only for areas not previously treated).
- b. Application of a first coat of OLY RESIN 20 (A+B) two-component epoxy resin by brush, following the instructions in the relevant technical data sheet.
- c. Laying of OLY TEX CARBO fabric with CVT issued by the Central Technical Service with fibres oriented as per the project and subsequent treatment with a suitable bubble break
- d. Apply "fresh" a second layer of OLY RESIN 20 (A+B) and subsequent treatment with a suitable bubble break roller.

- a. Preparation and cleaning of the substrate and application of suitable epoxy primer OLY
- b. In the case of irregular surfaces, regularise it with suitable hydraulic mortars.
- Apply a first coat of OLY RESIN 20 (A+B) two-component epoxy resin by brush, following the instructions in the relevant technical data sheet.
- d. Laying of OLY TEX ARAMIDE 400 UNI-AX HM fabric with CVT issued by the Central Technical Service with fibres oriented as per the project and subsequent treatment with a suitable bubble break roller.
- Apply a second "fresh" layer of OLY RESIN 20 (A+B) and subsequent treatment with a suitable bubble break roller.

Preparation of aramid fibre flakes

- a. Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length envisaged by the project.
- b. Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- c. Embedding inside the pre-drilled hole of the connector and cutting the dry part out of the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- d. Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY

In the case of the subsequent laying of civil plaster, it is advisable to dust the still 'fresh' system with quartz sand beforehand in order to increase the useful adhesion surface.

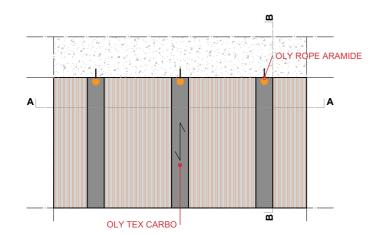


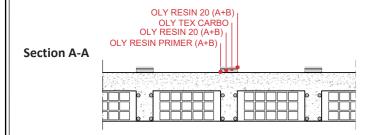
OLYMPUS-FRP IMPREGNATED ON SITE - Extrados slab reinforcement

STAIDL

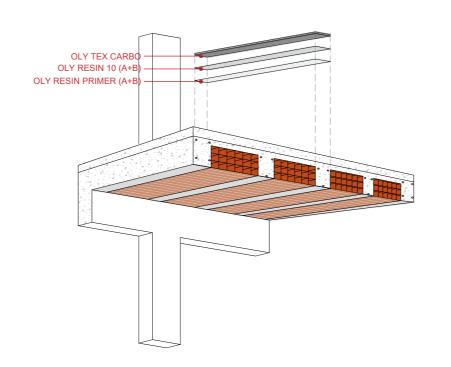
CONSTRUCTION DETAILS Beam bending reinforcement Axonometric model

Extrados carpentry scheme

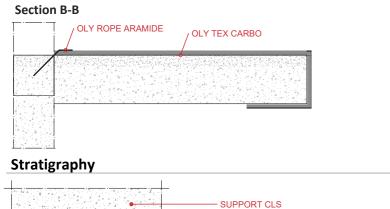




Beam bending reinforcement



Flexural reinforcement of reinforced concrete joists



Legend





EXECUTIVE PHASES

Detail diagrams

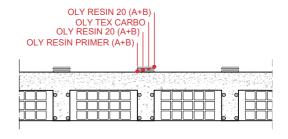
Preparation of the substrate

All Olympus FRP systems must be applied on suitable, intact substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate. The characteristics a substrate must have are: integrity, good mechanical properties,

If these substrate defects are found, a preventive restoration must be carried out.

Application of the reinforcement system scale 1:20

Flexural reinforcement of reinforced concrete joists with the OLY TEX CARBO system



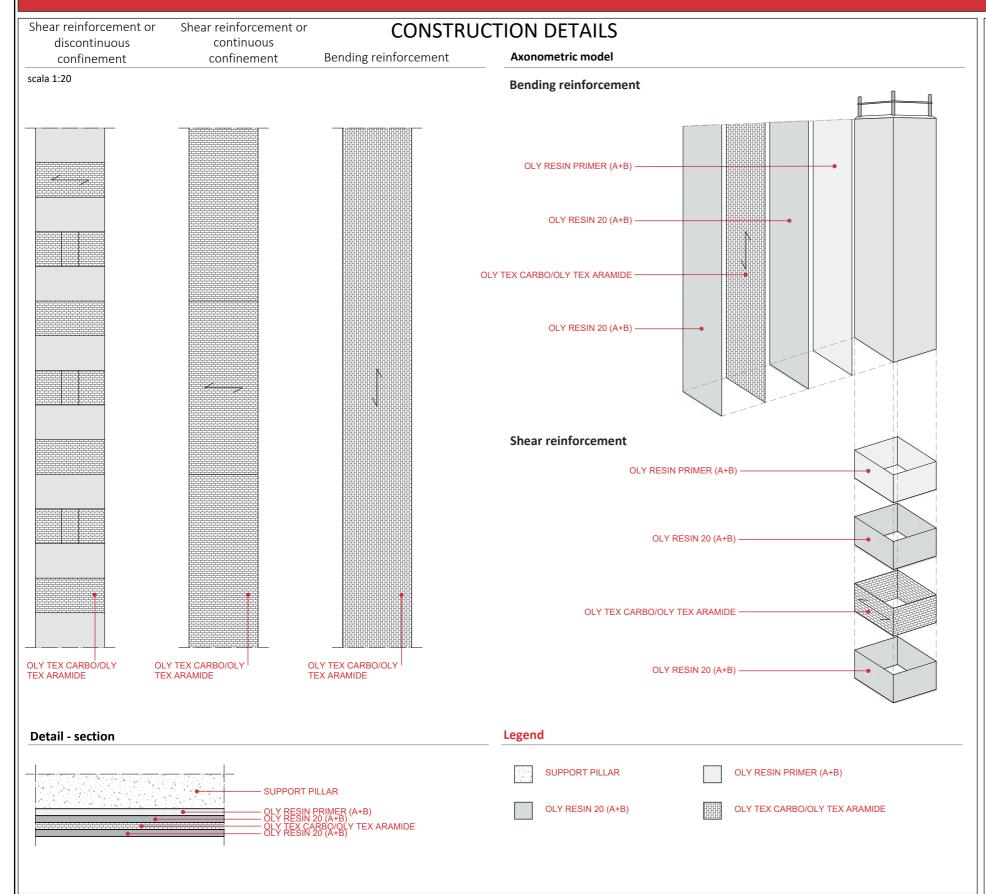
- a) Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- b) Application of OLY RESIN 20 A+B using a short-hair roller or brush on the first layer of primer while still fresh.
- c) Manually lay the OLY TEX CARBO fabric, previously cut to size according to the design diagram, making it adhere to the substrate by pressing with an OLY ROLL roller.
- d) Apply a second layer of OLY RESIN 20 A+B by means of a short-hair roller or brush on the first layer of primer still fresh by applying pressure with an OLY ROLL roller.

Preparation of aramid fibre flakes

- a. Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length envisaged by the project.
- b. Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be
- c. Embedding inside the pre-drilled hole of the connector and cutting the dry part out of the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- d. Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY **RESIN 20 (A+B)**



OLYMPUS-FRP IMPREGNATED ON SITE-Consolidation of reinforced concrete pillars



EXECUTION STAGES

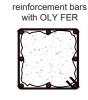
Detail diagrams

Preparation of the substrate - example: deteriorated concrete cover scala 1:20

Pillar to be rehabilitated



Removal of deteriorated



Passivation of

with OLY GROUT T4



All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate. The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

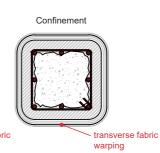
Good mechanical properties - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

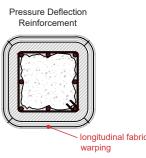
Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, preventive restoration must be carried out: by way of example, the operations to be carried out in the case of concrete cover detachment are shown, using the specific restoration cycle consisting of OLY FER and OLY GROUT T4.

Application of the reinforcement system

scala 1:20 reinforcement transverse fabric warping





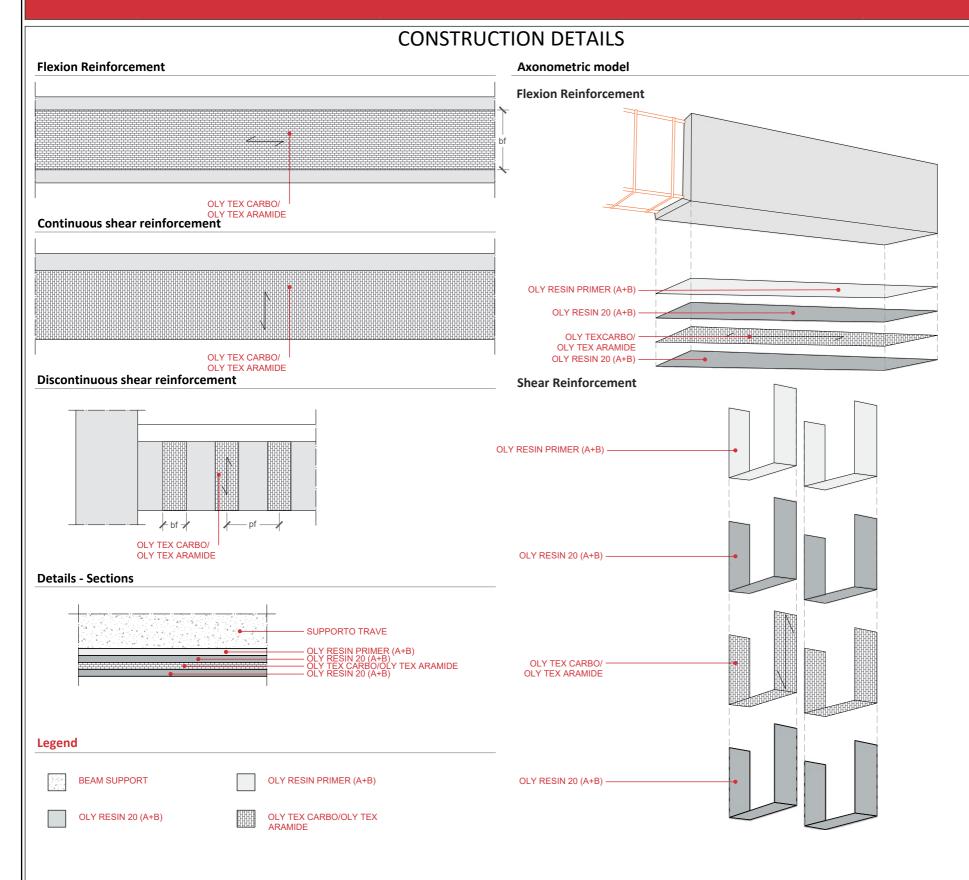
- Application of OLY RESIN PRIMER A+B by short-haired roller or brush
- Application of OLY RESIN 20 A+B by short-haired roller or brush
- Application of the OLY TEX CARBO/OLY TEX ARAMIDE fabric in possession of a CVT of the OLYMPUS FRP line, previously cut to size as per design, having it adhering to the substrate by applying pressure with aluminium OLY ROLL roller
- Application of a second coat of OLY RESIN 20 A+B by short-haired roller or brush
- e) Final treatment with OLY ROLL aluminium roller in the direction of the fibers, avoiding displacement, so to remove the air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.

For subsequent layers, repeat steps (c) to (f).



OLYMPUS-FRP IMPREGNATED ON SITE - Consolidation of reinforced concrete beams

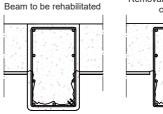
BEAMS

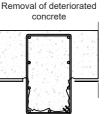


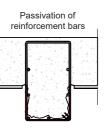
EXECUTION STAGES

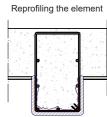
Detail diagrams

Preparation of the substrate - example: deteriorated concrete cover scale 1:20









All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

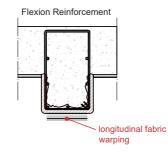
Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

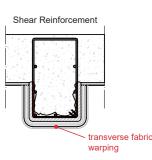
Good mechanical properties - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, preventive restoration must be carried out.

Application of the reinforcement system



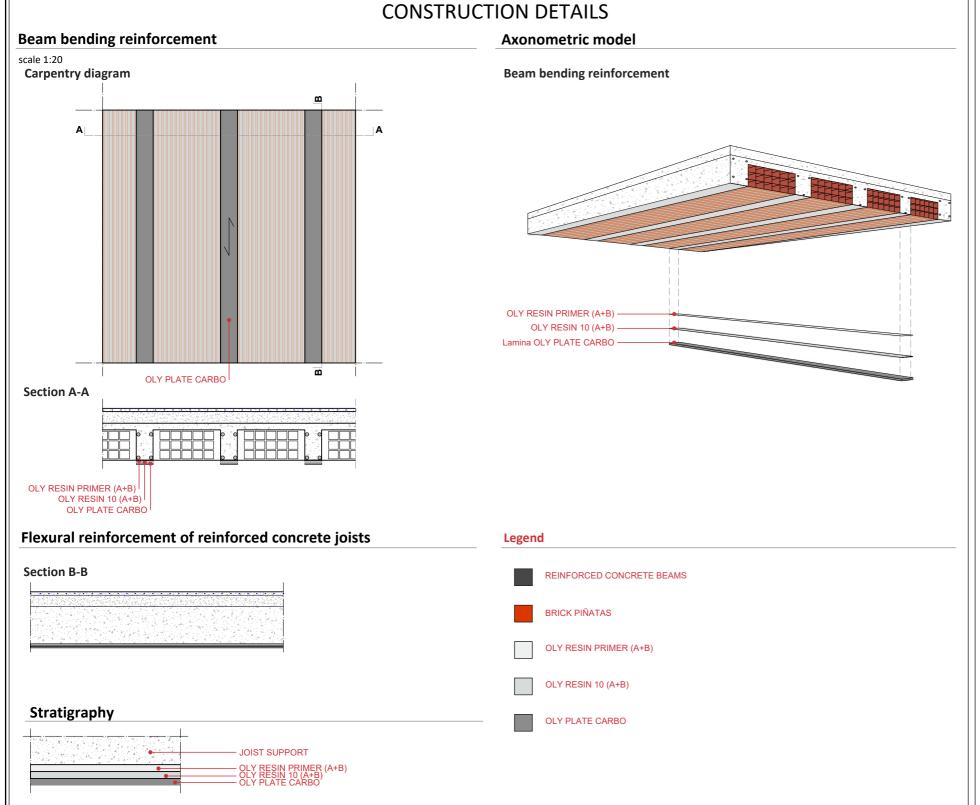


- Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- Application (not compulsory) of OLY RESIN 10 A+B with a metal trowel to a thickness of approximately 1 2 mm on the previous layer of primer while still fresh
- Application of OLY RESIN 20 A+B with a short-hair roller or brush with OLY RESIN PRIMER
- Application of the OLY TEX CARBO/OLLY TEX ARAMIDE fabric with CVT from the OLYMPUS FRP line previously cut to size according to the design diagram, making it adhere to the substrate and pressing with an OLY ROLL aluminium roller
- Application of a second coat of OLY RESIN 20 A+B using a short-hair roller or brush **OLY RESIN PRIMER**
- Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RSIN 20 until the fabric is perfectly impregnated.





OLYMPUS-FRP PREFORMED - Consolidation of a concrete slab



EXECUTION STAGES

Detail diagrams

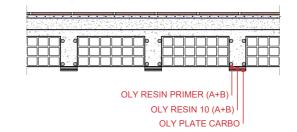
Preparation of the substrate

All Olympus FRP systems must be applied on suitable, intact substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate. The characteristics a substrate must have are: integrity, good mechanical properties, flatness.

If these substrate defects are found, a preventive restoration must be carried out.

Application of the reinforcement system scale 1:20

Flexural reinforcement of reinforced concrete joists with the OLY PLATE CARBO system



- a) Application of OLY RESIN PRIMER A+B by short-hair roller or brush
- b) Application of OLY RESIN 10 A+B by metal trowel on the first layer of primer while
- c) Application of OLY RESIN 10 A+B by metal trowel on the previously cut face of the sheet to be bonded.
- d) Manually lay the OLY PLATE CARBO sheet, previously cut to size according to the design diagram, making it adhere to the substrate by pressing with an OLY ROLL







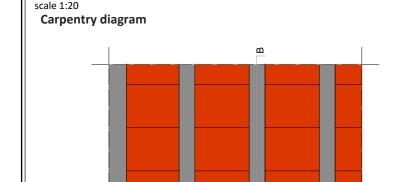


OLYMPUS-FRP PREFORMED - Consolidation of a floor slab with steel girders and floor slabs



STEEL FLOOR AV. EXECUTIVE PHASES

CONSTRUCTION DETAILS

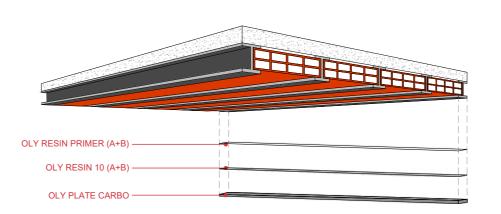


Bending reinforcement of girders

OLY PLATE CARBO

Axonometric model





The characteristics that a substrate must have are:

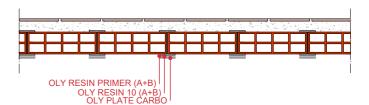
Application of the reinforcement system

Detail diagrams

Preparation of the substrate

restoration must be carried out

Intrados reinforcement with OLY PLATE CARBO system



All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive

Good mechanical characteristics - the characteristics of the substrate must always be

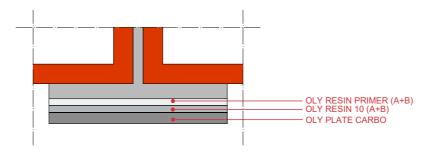
Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

ascertained at the design stage through appropriate in situ investigations

If these substrate defects are found, preventive restoration must be carried out.

- a) Application of OLY RESIN PRIMER A+B by short-hair roller or brush
- b) Application of OLY RESIN 10 A+B by metal trowel on the first layer of primer while still fresh.
- Application of OLY RESIN 10 A+B by metal trowel on the previously cut face of the sheet to be bonded.
- d) Manually lay the OLY PLATE CARBO sheet, previously cut to size according to the design diagram, making it adhere to the substrate by pressing with an OLY ROLL roller

Stratigraphy

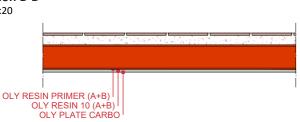


Section B-B scale 1:20

OLY RESIN PRIMER (A+B) OLY RESIN 10 (A+B)
OLY PLATE CARBO

Section A-A

scale 1:20



Legend



OLY RESIN PRIMER (A+B)







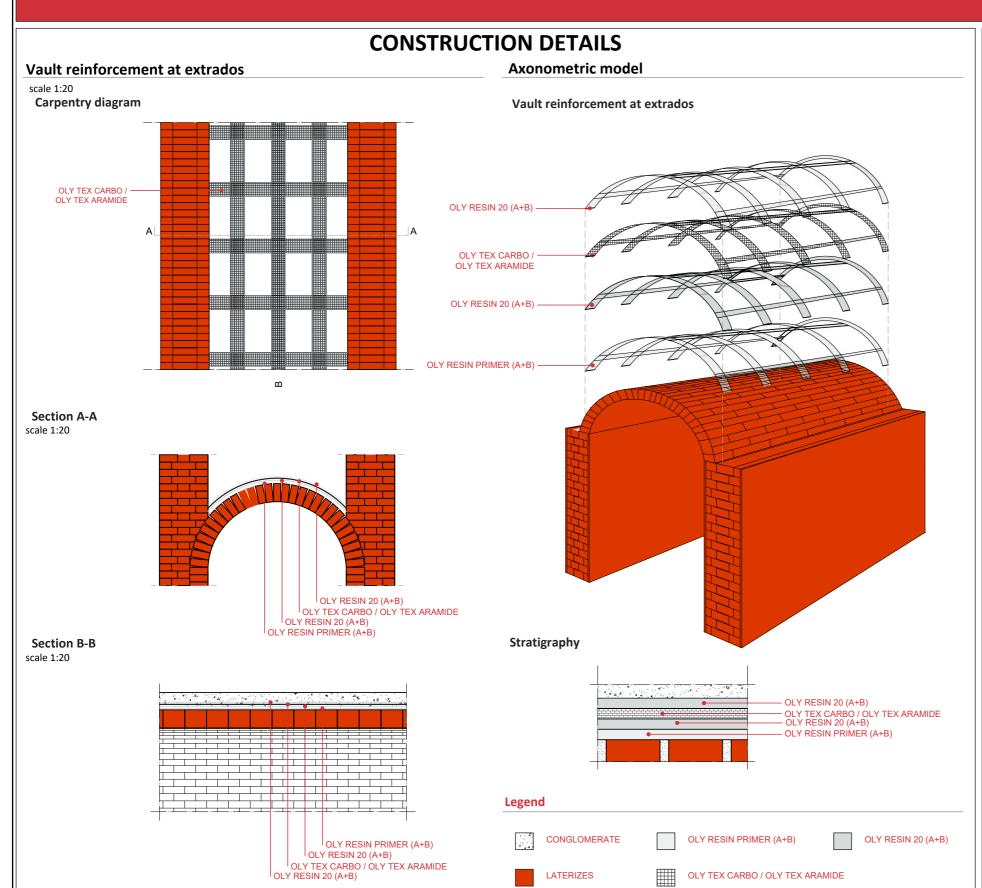
OLY PLATE CARBO





OLYMPUS FRP IMPREGNATED ON SITE - Consolidation at the extrados of a barrel vault

ROUND A BOTTLE TAV. 05



EXECUTIVE PHASES

Detail diagrams

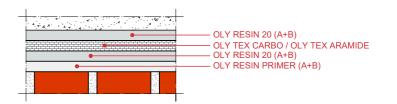
Preparation of the substrate

- All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.
- The characteristics that a substrate must have are:
- **Integrity** there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out
- **Good mechanical characteristics** the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations
- **Flatness** all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off
- If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system



- a) Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- b) Application of OLY RESIN 20 A+B with a short-hair roller or brush
- c) Application of OLY TEX CARBO UNI.AX HR or OLY TEX ARAMIDE 400 UNI-AX HM with a C.V.T. issued by the Central Technical Service of the OLYMPUS FRP line, previously cut to size according to the design diagram, adhering it to the substrate and pressing with an OLY ROLL aluminium roller
- Application of second layer of OLY RESIN 20 A+B using a short-hair roller or brush
- e) Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.

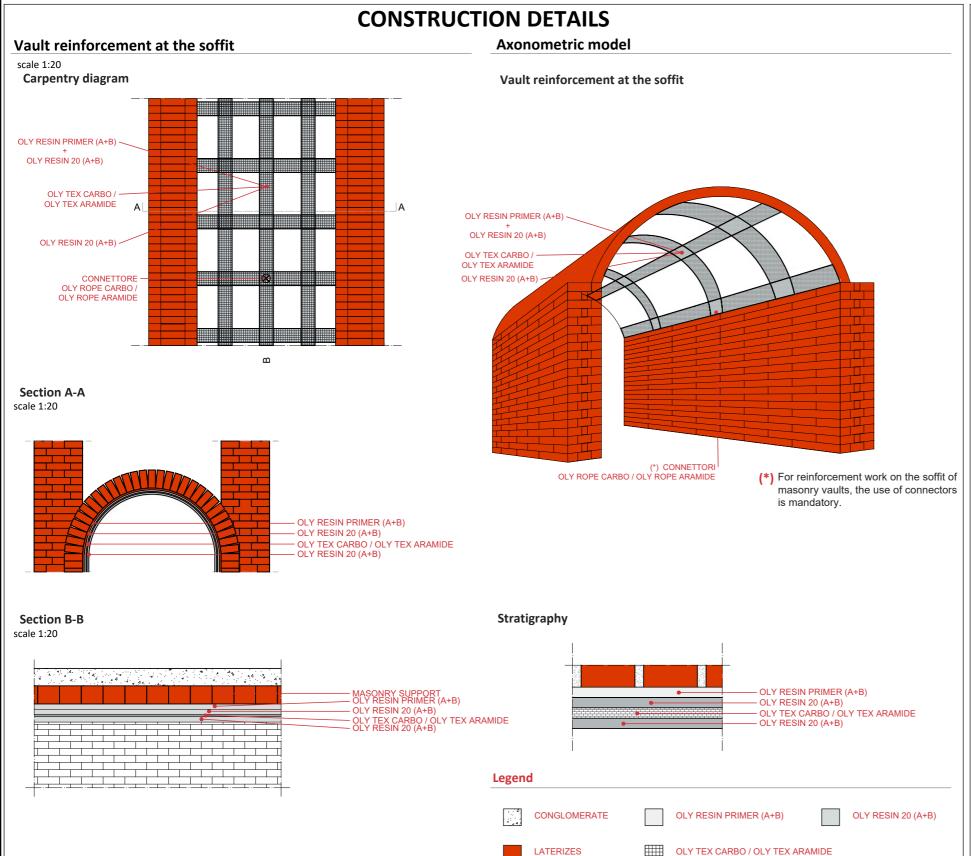




OLYMPUS FRP IMPREGNATED IN SITU - Consolidation of the soffit of a round a bottle

ROUND A BOTTLE

TAV. 10



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

Good mechanical characteristics - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

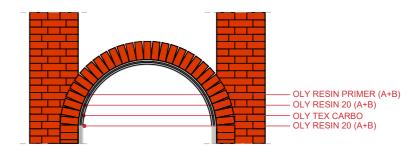
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

Diffuse reinforcement of an intrados vault



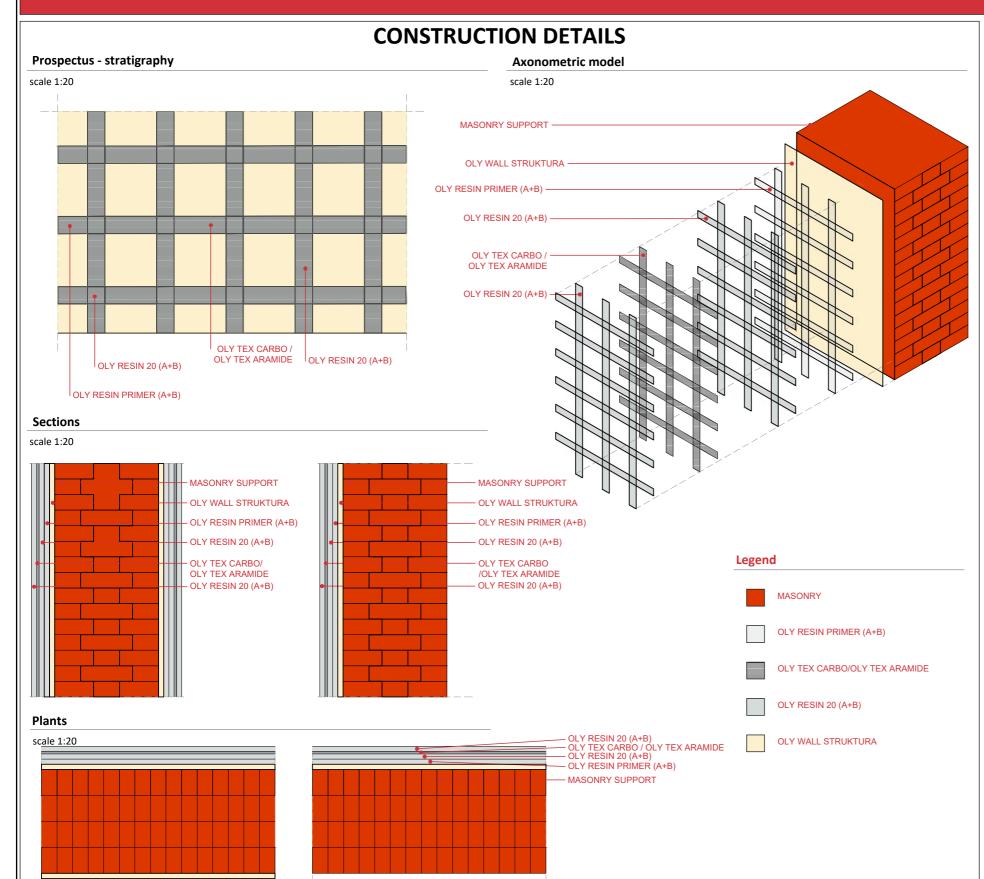
- a) Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- b) Application of OLY RESIN 20 A+B with a short-hair roller or brush
- c) Application of OLY TEX CARBO UNI.AX HR or OLY TEX ARAMIDE 400 UNI-AX HM with a C.V.T. issued by the Central Technical Service of the OLYMPUS FRP line, previously cut to size according to the design diagram, adhering it to the substrate and pressing with an OLY ROLL aluminium roller
- Application of second layer of OLY RESIN 20 A+B using a short-hair roller or brush
- e) Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.





OLYMPUS FRP IMPREGNATED IN SITU - Consolidation of masonry elements

MURATURES TAV



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

Good mechanical characteristics - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

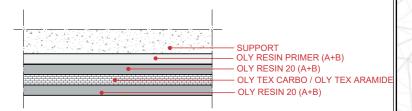
Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system



- Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- Application of OLY RESIN 20 A+B with a short-hair roller or brush
- Application of the OLY TEX CARBO / OLY TEX ARAMIDE fabric from the OLYMPUS FRP range, with CVT issued by the Central Technical Service, previously cut to size according to the design diagram by adhering it to the substrate and pressing with an OLY ROLL aluminium roller
- d) Application of second layer of OLY RESIN 20 A+B by means of a short-hair
- Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding displacement, to eliminate air bubbles. If necessary, repeat the application of

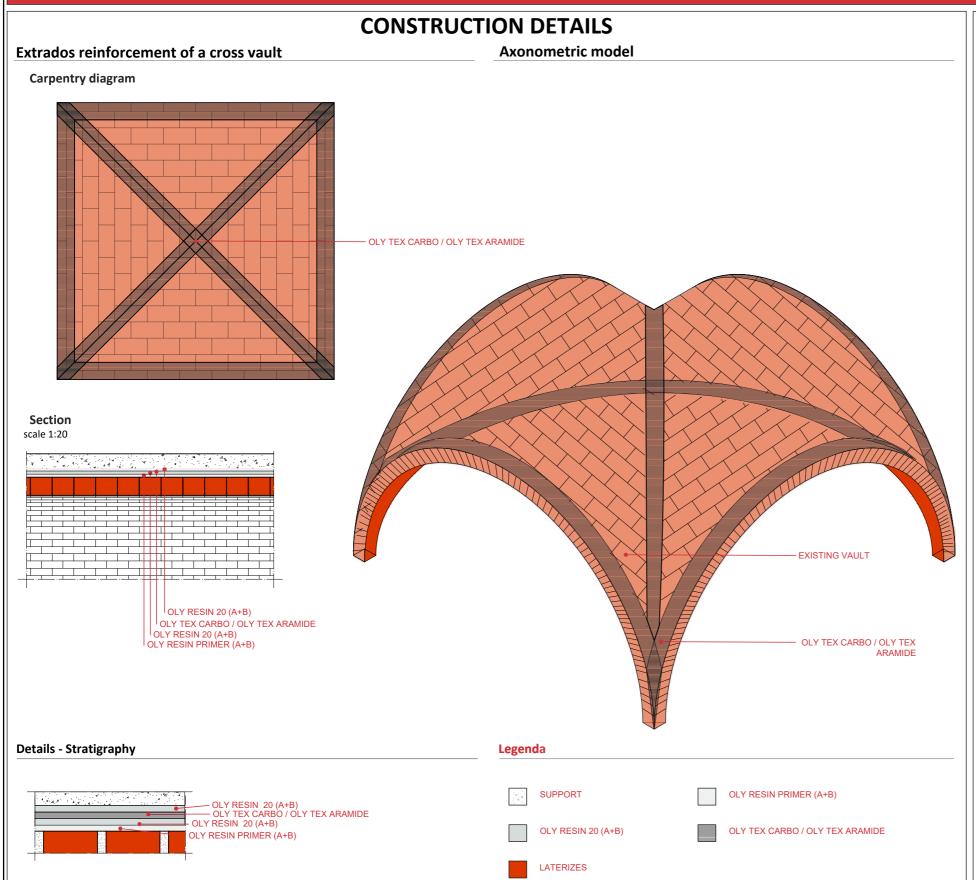
OLY RESIN 20 until the fabric is perfectly impregnated



OLYMPUS FRP IMPREGNATED IN SITU - Consolidation of a cross vault

CROSS VAULT

TAV. **12**-a



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

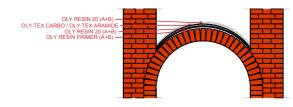
- All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.
- The characteristics that a substrate must have are:
- **Integrity** there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out
- **Good mechanical characteristics** the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations
- **Flatness** all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off
- If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

Diffuse reinforcement of an extrados vault



- a) Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- b) Application of OLY RESIN 20 A+B with a short-hair roller or brush
- c) Application of OLY TEX CARBO UNI.AX HR or OLY TEX ARAMIDE 400 UNI-AX HM with a C.V.T. issued by the Central Technical Service of the OLYMPUS FRP line, previously cut to size according to the design diagram, adhering it to the substrate and pressing with an OLY ROLL aluminium roller
- Application of second layer of OLY RESIN 20 A+B using a short-hair roller or brush
- e) Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.

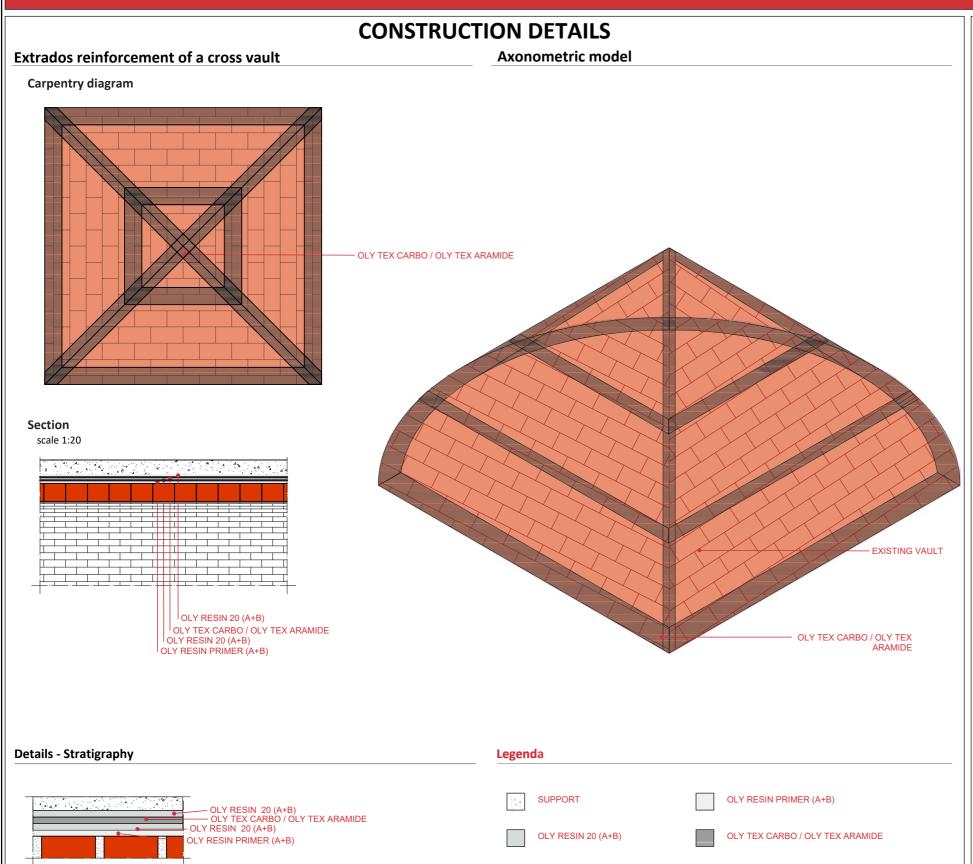




OLYMPUS-FRP IMPREGNATED IN SITU - Consolidation of a pavilion vault

VAULT IN PADIGIONE

таv. **12**-ы



LATERIZES

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

Good mechanical characteristics - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

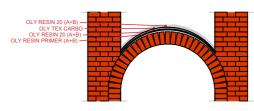
If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

Diffuse reinforcement of an extrados vault



- Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- Application of OLY RESIN 20 A+B with a short-hair roller or brush
- c) Application of OLY TEX CARBO UNI.AX HR or OLY TEX ARAMIDE 400 UNI-AX HM with a C.V.T. issued by the Central Technical Service of the OLYMPUS FRP line, previously cut to size according to the design diagram, adhering it to the substrate and pressing with an OLY ROLL aluminium roller
- Application of second layer of OLY RESIN 20 A+B using a short-hair roller or brush
- e) Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.







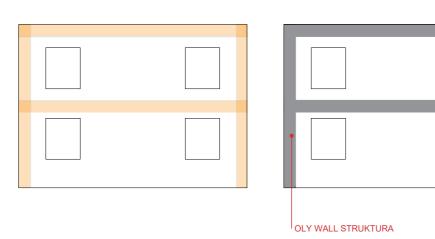
OLYMPUS FRP IMPREGNATED ON SITE - Structural reinforcement on masonry floor kerbs. MURATURES

CONSTRUCTION DETAILS

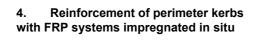
1. Stripping of existing plaster

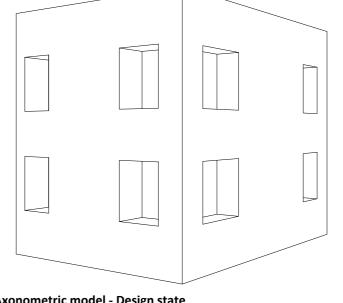
2. Levelling with OLY WALL STRUKTURA structural mortar

Axonometric model - State of affairs

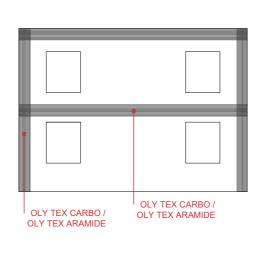


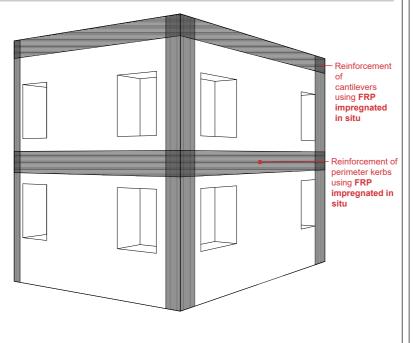
Reinforcement of cantilevers with FRP systems impregnated in situ





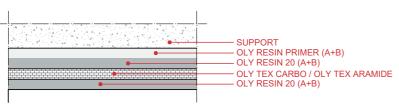
Axonometric model - Design state





Details - Stratigraphy

OLY TEX CARBO



Legend







OLY TEX CARBO / OLY TEX ARAMIDE

EXECUTION STAGES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

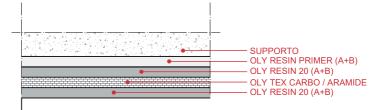
Good mechanical properties - the characteristics of the substrate must always be ascertained at the design stage through appropriate in situ investigations

Flatness - all roughness of the substrate must be eliminated in order to ensure flat surfaces on which Olympus FRP systems can be applied, and sharp edges must be rounded off

If these substrate defects are found, a preventive restoration must be carried out. In the case of application on masonry, it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to ascertain whether preventive rehabilitation work is required with the classic masonry reconstruction, repair and recovery operations.

- Commonly, the operations to be performed are as follows:
- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system



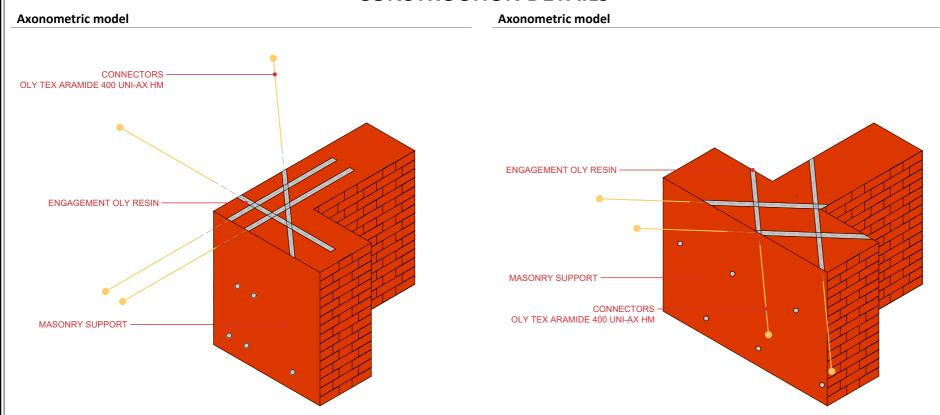
- Application of OLY RESIN PRIMER A+B with a short-hair roller or brush
- Application of OLY RESIN 20 A+B with a short-hair roller or brush
- Application of OLY TEX CARBO UNI.AX HR or OLY TEX ARAMIDE 400 UNI-AX HM with a C.V.T. issued by the Central Technical Service of the OLYMPUS FRP line, previously cut to size according to the design diagram, adhering it to the substrate and pressing with an OLY ROLL
- Application of second layer of OLY RESIN 20 A+B using a short-hair roller
- Final treatment with an OLY ROLL aluminium roller in the direction of the fibres, avoiding moving them, to eliminate air bubbles. If necessary, repeat the application of OLY RESIN 20 until the fabric is perfectly impregnated.



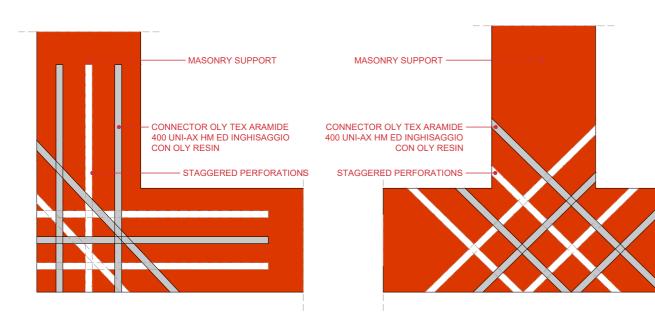


MURATURES TAV. 14-

CONSTRUCTION DETAILS



Sections Legend



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

Good mechanical characteristics - during the design phase, it is always necessary to ascertain the characteristics of the substrate through appropriate in situ investigations

Commonly, the interventions to be carried out are as follows:

- Troweling, joint reinforcement, injections
- Surface cleaning

Application of the reinforcement system

- Drilling of holes in the masonry according to the design scheme at wall intersections with a diameter of at least 20 mm
- Thorough cleaning of the holes by washing and/or compressed air
- Cutting the OLY TEX ARAMIDE 400 UNI-AX HM fabric, with CVT issued by the Central Technical Service, to the length envisaged in the design.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- Embedding inside the pre-drilled hole of the connector and cutting the dry part out of the hole; use OLY RESIN resins in drums or cartridges to saturate the
- Radial arrangement of the fabric strips outside the hole and subsequent impregnation with OLY RESIN 20 (A+B)

Scope of application

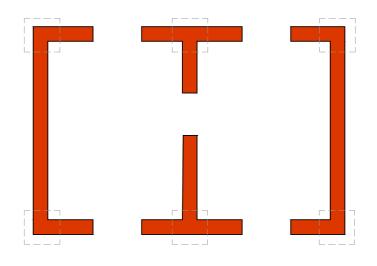
PERFORMANCES

MASONRY

STAGGERED PERFORATIONS AT DIFFERENT

CONNECTOR OLY TEX ARAMIDE 400 UNI-AX HM

Connection of transverse walls in the absence of an adequate buffer

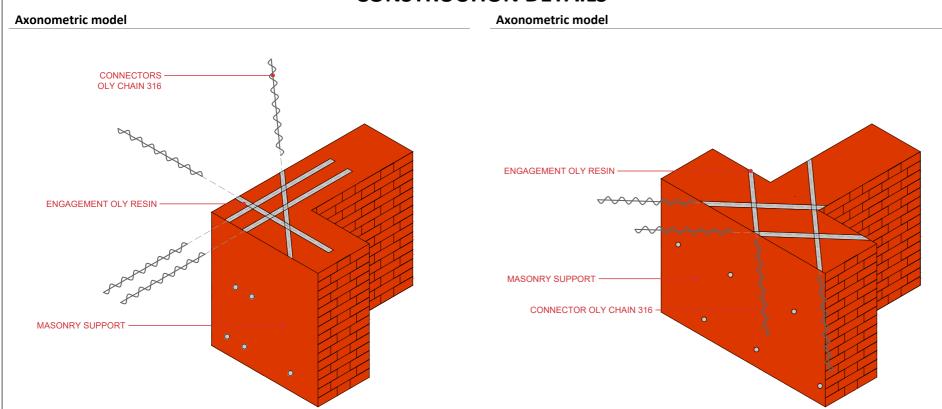




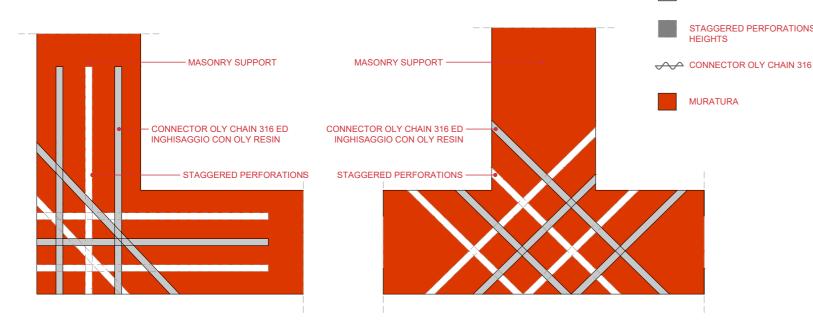
scale1:20

MURATURES TAV. 4

CONSTRUCTION DETAILS



Sections Legend



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All Olympus FRP systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to first check the suitability of the substrate.

The characteristics that a substrate must have are:

Integrity - there must be no detaching parts, cracks or gaps. In this case, a preventive restoration must be carried out

Good mechanical characteristics - during the design phase, it is always necessary to ascertain the characteristics of the substrate through appropriate in situ investigations

Commonly, the interventions to be carried out are as follows:

- Troweling, joint reinforcement, injections
- Surface cleaning

Application of the reinforcement system

- Drilling of holes inside the masonry according to the design scheme to be carried out at wall intersections with a diameter less than the OLY CHAIN connectors of at least 2 mm.
- Thorough cleaning of the holes by washing and/or compressed air
- Preparation of OLY CHAIN dry connectors, consisting of AISI 304/316 stainless steel helical bars. They are to be inserted inside the preholes.
- Before inserting the connector, it should be cut to length with an angle cutter.
- When identifying the cutting length, carefully read the design provisions and always consider at least 10 cm to be folded out of the hole in the case of coupling the FACCIA VISTA system with other systems in the OLYMPUS STONE line. For the insertion of the helical bar, use the special spindle supplied.

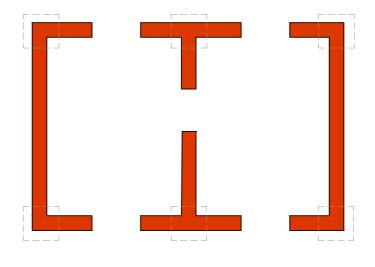
Scope of application

PERFORMANCES

MURATURA

STAGGERED PERFORATIONS AT DIFFERENT

Connection of transverse walls in the absence of an adequate buffer



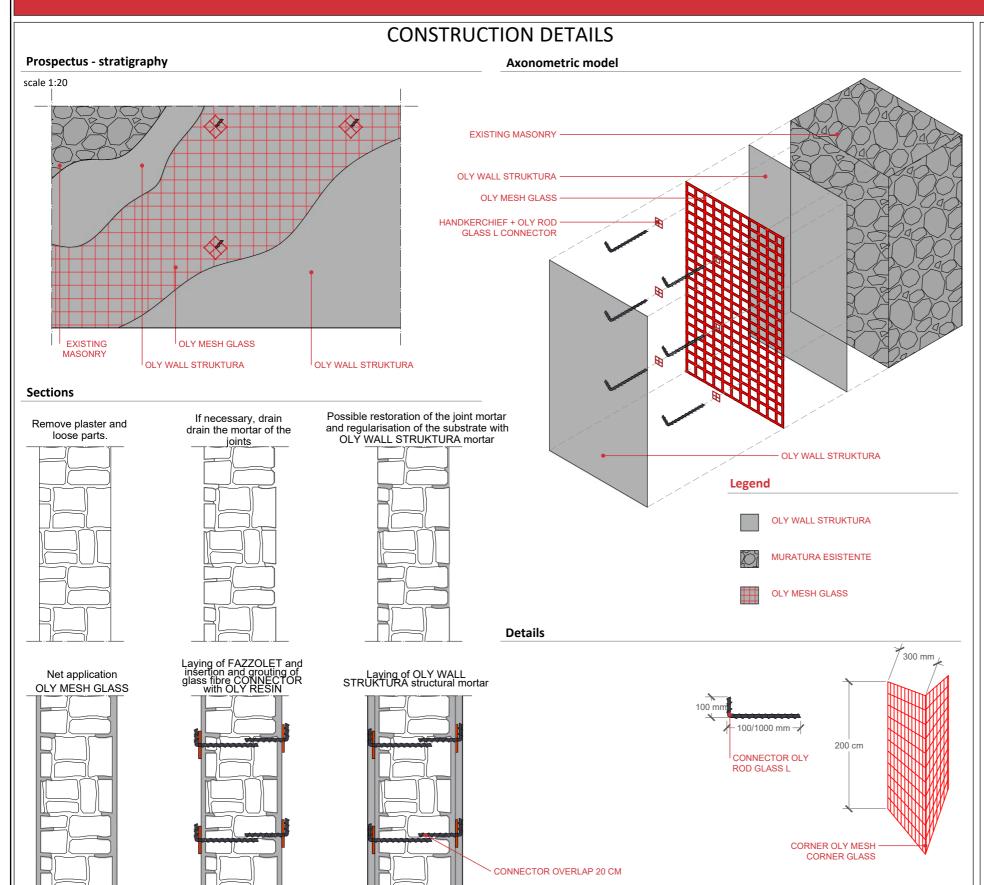


scale 1:20



CRM OLYMPUS-STONE - Consolidation of masonry elements

MURATURES TAV. 5



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

All the steps described below must be carried out fresh on fresh, i.e. within approx. 80% of the potlife time of the mortars. This guarantees a perfect installation and ensures the correct creation of chemical bonds for proper adhesion of the systems. Always check the thermo-hygrometric environmental and substrate conditions to ensure that the work is feasible according to the design indications and that the materials and application procedures chosen are suitable for the environmental exposure conditions of the reinforced structure. Immediately prior to the start of installation, make a final check, verifying that the substrate irregularities are within the permitted tolerances and that the surfaces are clean.

Application of the reinforcement system

- Structural reinforcement of masonry elements with the CRM system from the OLYMPUS STONE line consisting of preformed AR glass fibre mesh OLY MESH GLASS, OLY MESH CORNER GLASS glass fibre angles, OLY ROD GLASS L preformed glass fibre connectors bonded with OLY RESIN epoxy resins and OLY WALL STRUKTURA inorganic lime-based matrix by means of the following operations
- a) demolition of the existing plaster up to the masonry surface for the portion to be reinforced and/or reconstruction of any missing masonry parts;
- b) thorough cleaning from dust, oils and paint of the masonry support to which the reinforcement system is to be applied (to be paid for separately)
- c) washing and wetting of the surface until saturation:
- d) trowel application of a first layer of lime-based structural mortar such as OLY WALL STRUKTURA following the instructions in the technical data sheet for a thickness of approximately 15 mm
- e) application of the bi-directional preformed fibreglass mesh such as OLY MESH GLASS over the layer of mortar previously laid, ensuring an overlap of 10-15cm;
- f) insertion of the OLY ROD GLASS L connectors into the pre-drilled holes and bonding them using OLY RESIN epoxy resin;
- g) completion of the reinforcement by trowel or spray application of a further layer of OLY WALL STRUKTURA lime-based structural mortar for a total reinforcement thickness of 30 mm, englobing the mesh and connectors previously applied.

The nets that can be used are:

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH CORNER GLASS 66X66 W
- OLY MESH CORNER GLASS 99X99

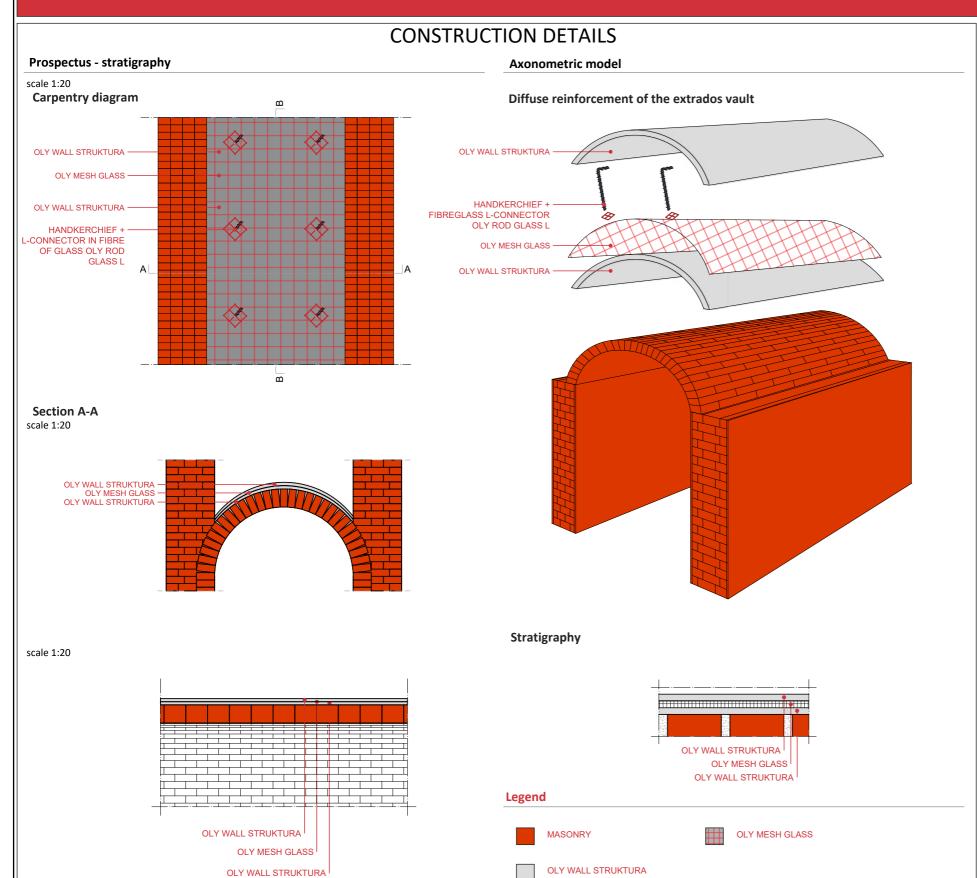
The corner units that can be used are:

- OLY MESH CORNER GLASS 33X33
- OLY MESH GLASS CORNER 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99



CRM OLYMPUS-STONE - Diffuse Consolidation at the Extrados of a Masonry Vault

VOLTAGE A BOTTLE



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

All the steps described below must be carried out fresh on fresh, i.e. within approx. 80% of the potlife time of the mortars. This guarantees a perfect installation and ensures the correct creation of chemical bonds for proper adhesion of the systems. Always check the thermo-hygrometric environmental and substrate conditions to ensure that the work is feasible according to the design indications and that the materials and application procedures chosen are suitable for the environmental exposure conditions of the reinforced structure. Immediately prior to the start of installation, make a final check, verifying that the substrate irregularities are within the permitted tolerances and that the surfaces are clean.

Application of the reinforcement system

Structural reinforcement of masonry elements with the CRM system from the OLYMPUS STONE line consisting of preformed AR glass fibre mesh OLY MESH GLASS, OLY MESH CORNER GLASS glass fibre angles, OLY ROD GLASS L preformed glass fibre connectors bonded with OLY RESIN epoxy resins and OLY WALL STRUKTURA inorganic lime-based matrix by means of the following operations

- a) demolition of the existing plaster up to the masonry surface for the portion to be reinforced and/or reconstruction of any missing masonry parts;
- thorough cleaning from dust, oil and paint of the masonry substrate onto which the reinforcement system is to be applied (to be paid for separately)
- washing and wetting of the surface until saturation:
- trowel application of a first layer of lime-based structural mortar such as OLY WALL STRUKTURA following the instructions in the technical data sheet for a thickness of approximately 15 mm
- application of the bi-directional preformed fibreglass mesh such as OLY MESH GLASS on the layer of mortar previously laid, ensuring an overlap of 10-15cm;
- insertion of the OLY ROD GLASS L connectors into the pre-drilled holes and grouting them with OLY RESIN epoxy resin;
- completion of the reinforcement by trowel or spray application of a further layer of OLY WALL STRUKTURA lime-based structural mortar for a total reinforcement thickness of 30 mm, englobing the mesh and connectors previously applied.

The networks that can be used are:

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS CORNER 66X66 W
- **OLY MESH CORNER GLASS 99X99**

The angles that can be used are:

- OLY MESH CORNER GLASS 33X33
- OLY MESH GLASS CORNER 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99

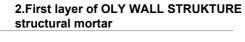


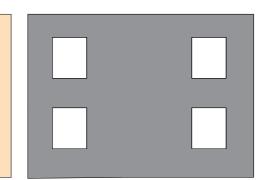
CRM OLYMPUS-STONE - Diffuse structural reinforcement on masonry

MURATURES TAV.

CONSTRUCTION DETAILS

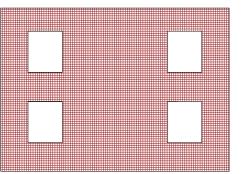


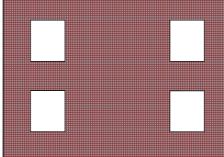




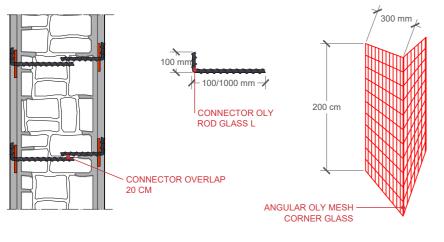
Diffuse reinforcement of the masonry male using CRM **OLYMPUS-STONE OLY MESH** systems

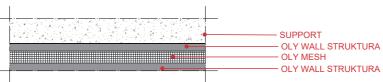
4. Final layer with **OLY WALL STRUKTURE**



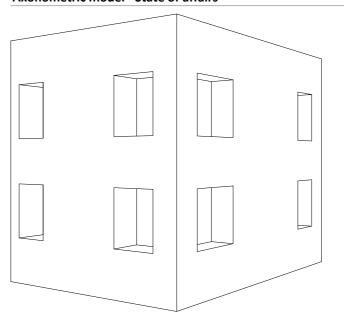


Details

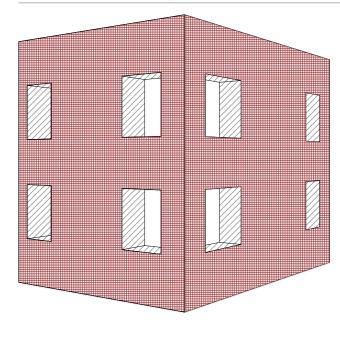




Axonometric model - State of affairs



Axonometric model - Design state



Legend







OLY MESH



OLY WALL STRUKTURA

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All the steps described below must be carried out fresh on fresh, i.e. within approx. 80% of the potlife time of the mortars. This guarantees a perfect installation and ensures the correct creation of chemical bonds for proper adhesion of the systems. Always check the thermo-hygrometric environmental and substrate conditions to ensure that the work is feasible according to the design indications and that the materials and application procedures chosen are suitable for the environmental exposure conditions of the reinforced structure. Immediately prior to the start of installation, make a final check, verifying that the substrate irregularities are within the permitted tolerances and that the surfaces are clean.

Application of the reinforcement system

Structural reinforcement of masonry elements with the CRM system from the OLYMPUS STONE line consisting of preformed AR glass fibre mesh OLY MESH GLASS, OLY MESH CORNER GLASS glass fibre angles, OLY ROD GLASS L preformed glass fibre connectors bonded with OLY RESIN epoxy resins and OLY WALL STRUKTURA inorganic lime-based matrix by means of the following operations

- a) demolition of the existing plaster up to the masonry surface for the portion to be reinforced and/or reconstruction of any missing masonry parts;
- b) thorough cleaning from dust, oil and paint of the masonry support to which the reinforcement system is to be applied (to be paid for separately)
- c) washing and wetting of the surface until saturation:
- d) trowel application of a first layer of lime-based structural mortar such as OLY WALL STRUKTURA following the instructions in the technical data sheet for a thickness of approximately 15 mm
- e) application of the bi-directional preformed fibreglass mesh such as OLY MESH GLASS over the layer of mortar previously laid, ensuring an overlap of 10-15cm;
- f) insertion of the OLY ROD GLASS L connectors into the pre-drilled holes and bonding them using OLY RESIN epoxy resin;
- g) completion of the reinforcement by trowel or spray application of a further layer of OLY WALL STRUKTURA lime-based structural mortar for a total reinforcement thickness of 30 mm, englobing the mesh and connectors previously applied.

The networks that can be used are:

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS CORNER 66X66 W
- **OLY MESH CORNER GLASS 99X99**

The angles that can be used are:

- OLY MESH CORNER GLASS 33X33
- OLY MESH GLASS CORNER 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99

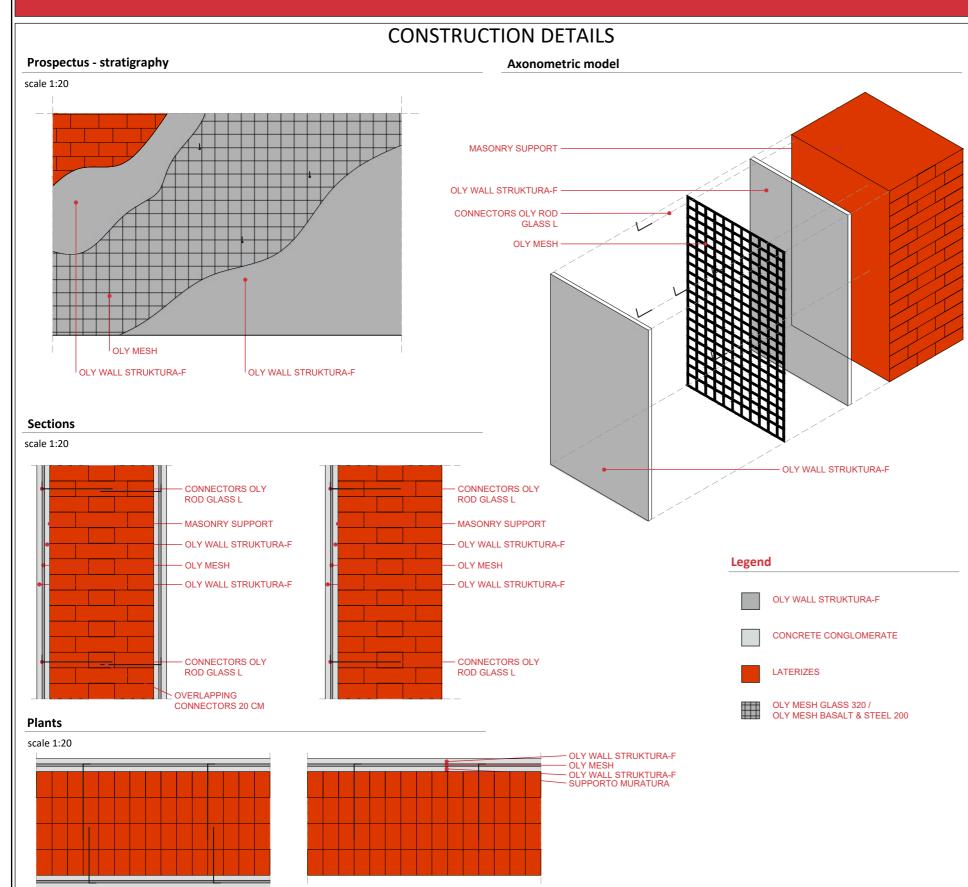






FRCM OLYMPUS-STONE - Consolidation of masonry elements

MURATURES TAV. 18



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate beforehand
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

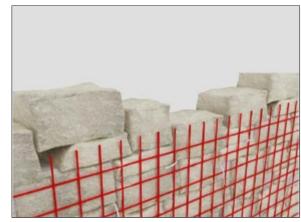
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

All the steps described below must be carried out **fresh on fresh**, i.e. within approx. 80% of the potlife time of the mortars. This guarantees a perfect installation and ensures the correct creation of chemical bonds for proper adhesion of the systems. **Always check the thermo-hygrometric environmental and substrate conditions** to ensure that the work is feasible according to the design indications and that the materials and application procedures chosen are suitable for the environmental exposure conditions of the reinforced structure. Immediately prior to the start of installation, make a final check, verifying that the substrate irregularities are within the permitted tolerances and that the surfaces are clean.



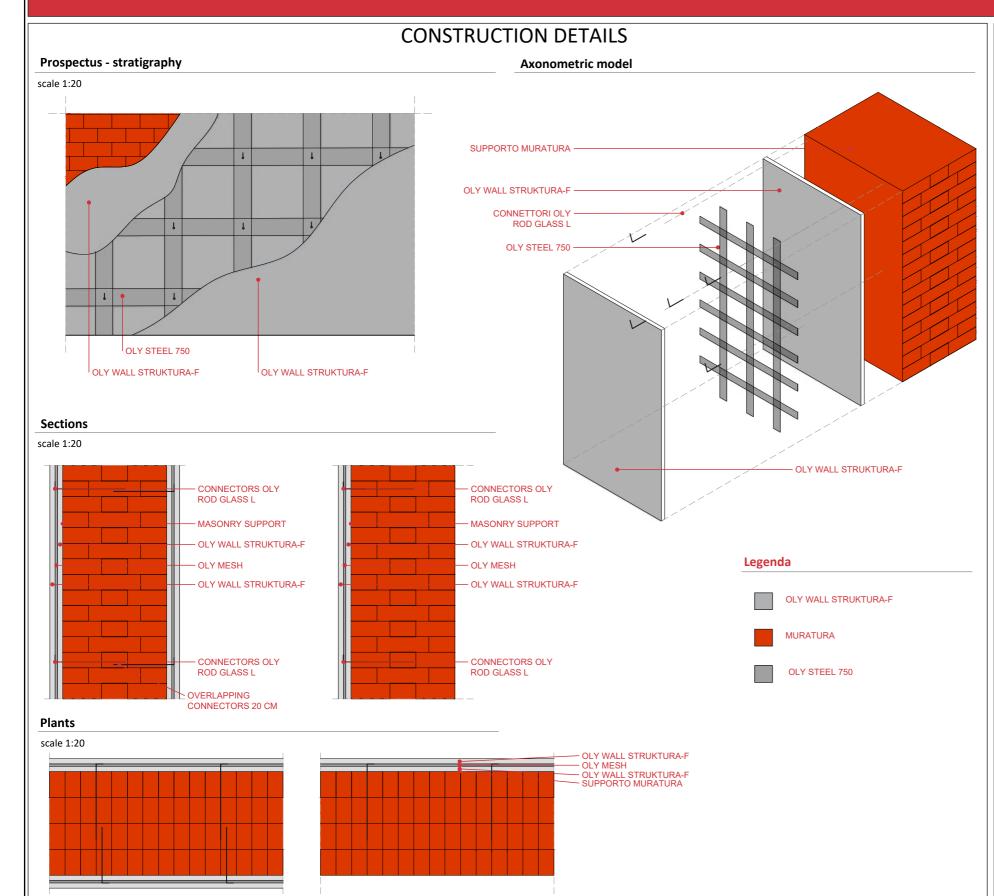
- a) Saturation of the masonry substrate with water, in order to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures on the subsequent layers.
- b) First layer of OLY WALL STRUKTURA-F for a thickness of approximately 5 mm, covering the entire area to be reinforced, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY MESH reinforcement according to the design specifications and lightly penetrating the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Inserting the OLY ROD GLASS L dry connectors.
- e) Final filling with a layer of OLY WALL STRUKTURA-F structural mortar until the total thickness of 10-15 mm is reached, incorporating the mesh and connectors previously applied.





FRCM OLYMPUS-STONE - Consolidation of masonry elements

MURATURES TAV. 19



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate beforehand
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

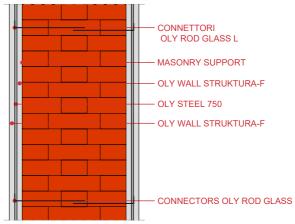
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

All the steps described below must be carried out **fresh on fresh**, i.e. within approx. 80% of the potlife time of the mortars. This guarantees a perfect installation and ensures the correct creation of chemical bonds for proper adhesion of the systems. **Always check the thermo-hygrometric environmental and substrate conditions** to ensure that the work is feasible according to the design indications and that the materials and application procedures chosen are suitable for the environmental exposure conditions of the reinforced structure. Immediately prior to the start of installation, make a final check, verifying that the substrate irregularities are within the permitted tolerances and that the surfaces are clean.

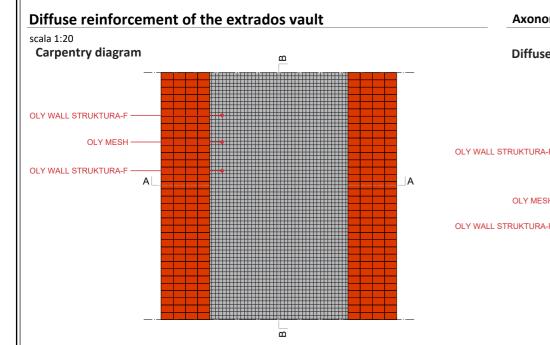


- a) Saturate the masonry substrate with water in order to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Application of the first layer of OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY STEEL 750 reinforcement according to the design specifications and lightly penetrating the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L dry connectors.
- e) Final filling with a layer of OLY WALLSTRUKTURA-F structural mortar until the total thickness of 10-15 mm is reached, incorporating the mesh and connectors previously applied.



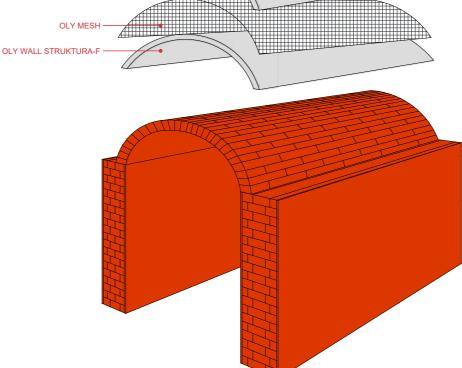
FRCM OLYMPUS-STONE - Diffuse Consolidation at the Extrados of a Barrel Vault

CONSTRUCTION DETAILS



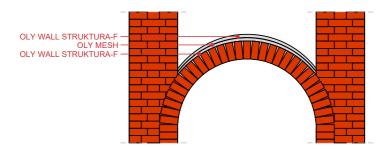
Axonometric model

Diffuse reinforcement of the extrados vault

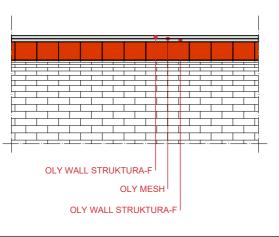


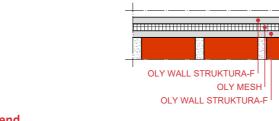
Section A-A scale 1:20

scale 1:20



Stratigraphy





Legend



OLY MESH GLASS 320 /



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

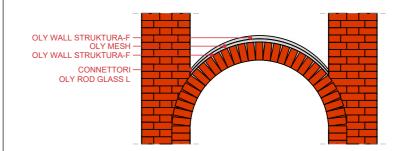
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

Diffuse reinforcement of an extrados vault



- a) Saturate the masonry substrate with water in order to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Application of the first layer of OLY WALL STRUKTURA-F for a thickness of approximately 5 mm, covering the entire area interested by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact
- c) Manual application of the OLY MESH reinforcement according to the design specifications and lightly penetrating the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Inserting the OLY ROD GLASS L dry connectors.
- e) Application of the second layer of OLY WALL STRUKTURA-F for a total thickness of approx. 10-15 mm



FRCM OLYMPUS-STONE - Consolidation at the extrados of a barrel vault

VOLTAGE A BOTTLE

TAV. 21

CONSTRUCTION DETAILS

Diffuse reinforcement of the extrados vault

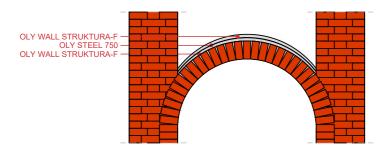
Carpentry diagram

OLY WALL STRUKTURA-F

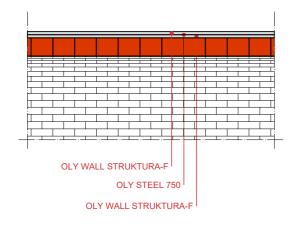
OLY WALL STRUKTURA-F

AL

Section A-A scale 1:20

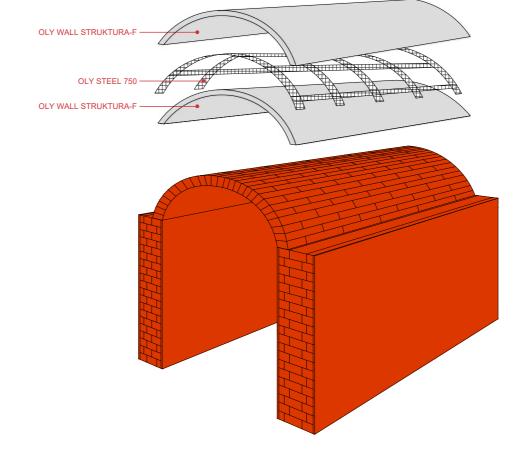


Section B-B scale 1:20

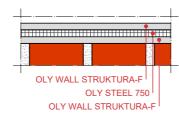


Axonometric model

Rinforzo della volta all'estradosso



Stratigrafia



Legenda







OLY STEEL 750

OLY WALL STRUKTURA-F

EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate beforehand.
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

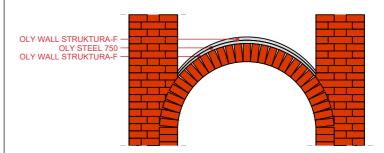
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

Diffuse reinforcement of an extrados vault



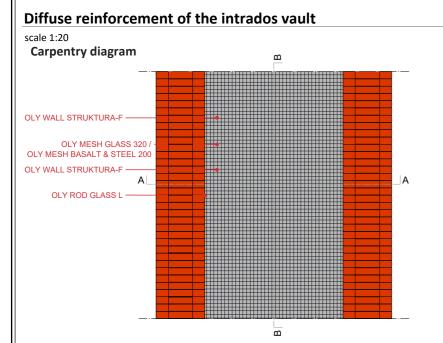
- a) Saturate the masonry substrate with water in order to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Application of the first layer of OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY STEEL 750 reinforcement according to the design specifications and lightly penetrating the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- e) Insertion of OLY ROD GLASS L dry connectors.
- f) Application of the second layer of OLY WALL STRUKTURA-F for a total thickness of approx. 10-15 mm





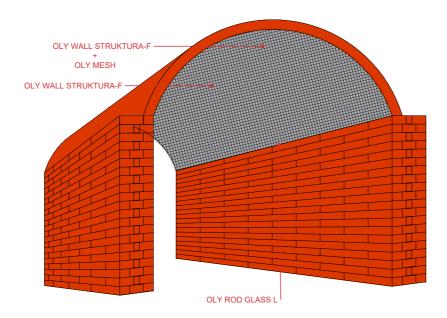
FRCM OLYMPUS-STONE - Diffuse reinforcement at the soffit of a barrel vault





Axonometric model

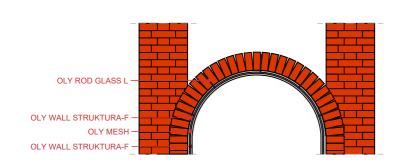
Diffuse soffit reinforcement



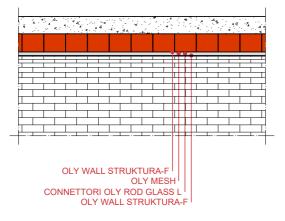
Section A-A scale 1:20

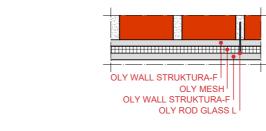
Section B-B

scale 1:20



Stratigraphy





Legend







OLY WALL STRUKTURA-F

EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

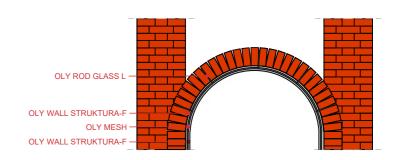
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

Diffuse reinforcement of an intrados vault



- a) Saturation of the masonry substrate with water, to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY MESH reinforcement according to the design specifications and lightly penetrating the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L dry connectors.
- e) Final smoothing with OLY WALL STRUKTURE F for a total thickness of approximately

FRCM OLYMPUS-STONE - Consolidation at the soffit of a barrel vault

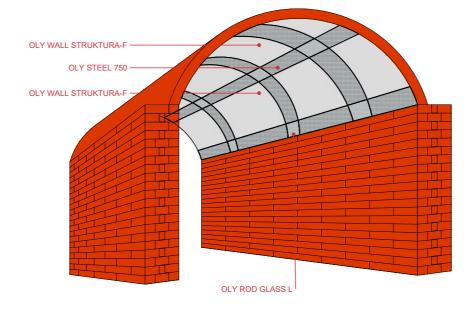
VOLTAGE A BOTTLE TAV

CONSTRUCTION DETAILS

Diffuse reinforcement of the intrados vault **Carpentry diagram** OLY WALL STRUKTURA-F -OLY STEEL 750 OLY WALL STRUKTURA-F OLY ROD GLASS L -

Axonometric model

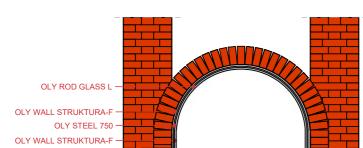
Vault reinforcement at the soffit



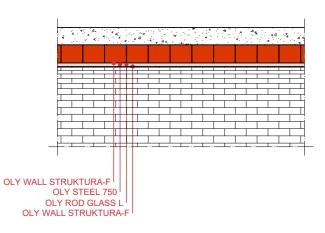
Section A-A scale 1:20

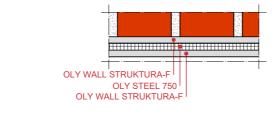
Section B-B

scale 1:20



Stratigraphy





Legend





OLY STEEL 750





OLY WALL STRUKTURA-F

EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

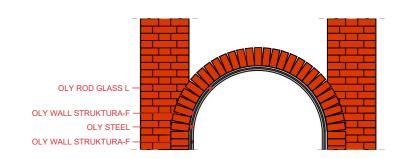
Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

scale 1:20

Diffuse reinforcement of an intrados vault



- a) Saturation of the masonry substrate with water, to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY STEEL 750 reinforcement according to the design specifications, penetrating lightly into the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L dry connectors.
- e) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approximately

CONSTRUCTION DETAILS Extrados reinforcement of a cross vault **Axonometric model Carpentry diagram** OLY STEEL 750 Section scale 1:20 EXISTING TIME OLY WALL STRUKTURA-F OLY STEEL 750 CONNETTORI OLY ROD GLASS L DLY WALL STRUKTURA-F REINFORCED WITH OLY STEEL 750 Stratigraphy **OLY WALL STRUKTURA-F** OLY STEEL 750 OLY WALL STRUKTURA-F Legend CONGLOMERATE **OLY STEEL 750**

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate beforehand.

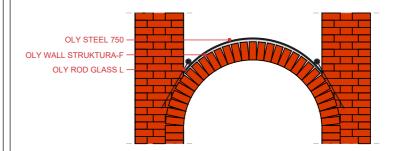
OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

Application of the reinforcement system

Diffuse reinforcement of an extrados vault



- a) Saturation of the masonry substrate with water, to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY STEEL 750 reinforcement according to the design specifications, penetrating lightly into the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L dry connectors.
- e) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approximately

OLY WALL STRUKTURA-F

LATERIZES

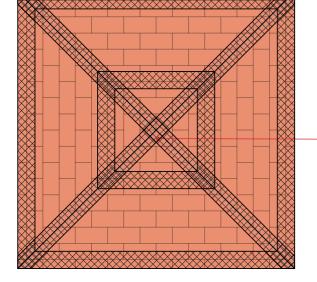
- OLY STEEL 750

CONSTRUCTION DETAILS

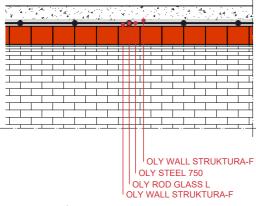
Extrados reinforcement of a cross vault

Axonometric model

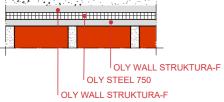
Carpentry diagram



Section scale 1:20



Stratigraphy



Legend



CONGLOMERATE



OLY STEEL 750



LATERIZES



OLY WALL STRUKTURA-F

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

- All OLYMPUS-STONE FRCM systems must be applied on suitable, undamaged substrates with good mechanical properties as their effectiveness is linked to their adhesion to the substrate. Therefore, it is always a good idea to check the goodness of the substrate beforehand
- OLYMPUS-STONE FRCM systems are applied to masonry, so it is necessary to ensure that the masonry to be reinforced is actually suitable for the application of the reinforcement. For this reason, it is always necessary to make sure whether a preventive rehabilitation is required with the classic masonry reconstruction, repair and recovery operations.

Commonly, the operations to be performed are as follows:

- Stripping of existing plaster
- Peeling and stitching, joint reinforcement, injections
- Surface cleaning
- Levelling with OLY WALL STRUKTURA structural mortar

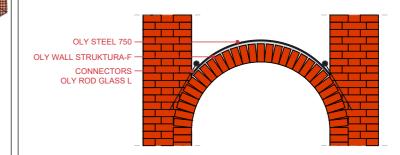
Application of the reinforcement system

scale 1:20

- EXISTING TIME

REINFORCED WITH OLY STEEL 750

Diffuse reinforcement of an extrados vault



- a) Saturation of the masonry substrate with water, to prevent it from absorbing the water used to mix the mortar, forming cracks and fissures in subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement, to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry.
- c) Manual application of the OLY STEEL 750 reinforcement according to the design specifications, penetrating lightly into the first layer of mortar by applying light pressure. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L dry connectors.
- e) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approximately 10 mm.



FRCM OLYMPUS-STONE - Structural Diffuse Reinforcement on Masonry

MURATURES TAV. 2

CONSTRUCTION DETAILS

1. Stripping of existing plaster

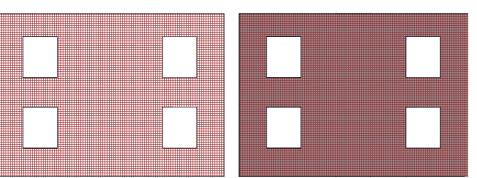


2.First layer of OLY WALL STRUKTURE F

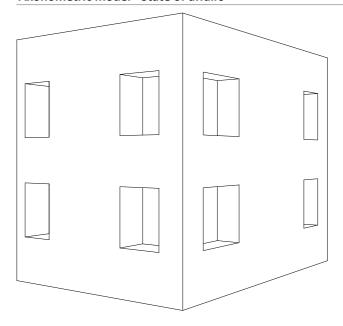
*In case of severe irregularities in the masonry, carry out initial levelling with OLY WALL STRUKTURE mortar

3. Diffuse reinforcement of the masonry male using FRCM OLYMPUS-STONE OLY MESH systems

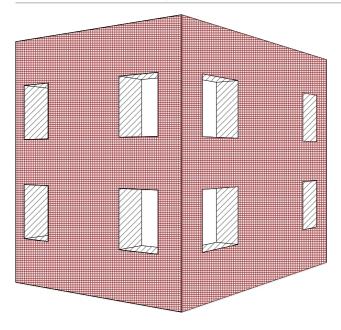
4. Final smoothing with OLY WALL STRUKTURE-F



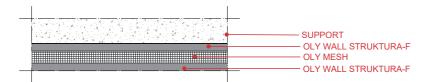
Axonometric model - State of affairs



Axonometric model - Design state



Details - Sections Legend



SUPPORT





FRCM systems with UHTSS (Ultra Tensile Strenght Steel) steel fibre meshes

This manual may apply to the OLYMPUS-STONE FRCM systems listed below and divided into

FRCM systems with steel fibre and basalt mesh
- OLY MESH BASALT & STEEL 200 SYSTEM
FRCM systems with AR glass fibre mesh
- OLY MESH GLASS 320 SYSTEM

Support Preparation

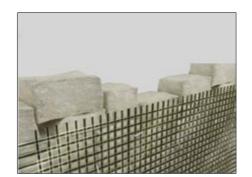
All Olympus FRCM OLYMPUS-STONE systems must be applied on suitable, undamaged substrates with good mechanical properties, therefore it is always advisable to check the suitability of the substrate beforehand.

Some of the most common interventions

- **Stripping of existing plaster**: The FRCM reinforcement should preferably be applied directly on the stone elements. It is therefore always necessary to remove the existing plaster, at least for the portions to be reinforced.
- **Scuci-cuci, joint re-straightening, injections**: if there are gaps or compromised stone elements, it is advisable to carry out a scuci-cuci prior to applying the FRCM reinforcement in order to reconstruct the integrity of the wall face.
- **Surface cleaning**: in the presence of dirt, the surfaces to be treated must be cleaned by sandblasting or high-pressure hydro-washing to remove any residues of paint, dirt, release agents, moss and lichen, dust and friable materials in general that would prevent perfect adhesion of the mortar to the substrate.
- **Levelling with structural mortar:** in some cases, the masonry may be highly irregular and therefore not suitable for levelling the FRCM reinforcement. In these cases, a structural mortar can be used to regularise the substrate. For OLYMPUS-STONE systems, the use of OLY WALL STRUKTURE is recommended.

Application of the systems

- All the steps described below must be carried out fresh on fresh, i.e. within approximately 80% of the mortars pot life.
- a) Saturation of the masonry substrate: in order to prevent the masonry from absorbing the water used to mix the mortar, it is necessary to wet the areas concerned until they are completely saturated. This will prevent the formation of possible cracks and fissures, and the curing process of the mortar can take place with the right amount of water.
- b) Application of the first layer of OLY WALL STRUKTURA-F: in order to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry, it is necessary to first carry out a rendering coat with OLY WALL STRUKTURA-F, covering the entire area to be reinforced. In fact, it is important that the rendering is in the centre of the mortar layer. The total thickness will be approx. 5 mm
- c) Application of the OLY MESH reinforcement: Manually lay the mesh according to the design specifications, fixing it to the masonry and using light pressure to make it penetrate slightly into the first layer of mortar. Provide an overlap of at least 10-15 cm between adjacent strips
- d) Insertion of OLY ROD GLASS L connectors
- e) Final smoothing with OLY WALL STRUKTURA-F: then cover the system with a final layer of OLY WALL STRUKTURA-F structural mortar until a total thickness of 10-15 mm is reached, incorporating the mesh and connectors previously applied. Then apply the desired degree of finish. The mortar can be applied by hand or by spraying.





FRCM OLYMPUS-STONE - Structural reinforcement on masonry floor curbs.

MURATURES TAV. 27

CONSTRUCTION DETAILS 2. Levelling with OLY WALL 1. Stripping of existing STRUKTURA structural mortar Axonometric model - State of affairs plaster Perimeter kerb reinforcement with Reinforcement of cantilevers with FRCM OLYMPUS-STONE OLY STEEL 750 FRCM OLYMPUS-STONE OLY STEEL systems 750 systems Axonometric model - Design state Final smoothing with OLY WALL STRUKTURE-F

Legend

OLY WALL STRUKTURA-F

OLY WALL STRUKTURA-F

SUPPORT

OLY WALL STRUKTURA-F

OLY STEEL 750

EXECUTION STAGES

Detail diagrams

Preparazione del supporto

This manual may apply to the OLYMPUS-STONE FRCM systems listed below and divided into three types:

FRCM systems with UHTSS (Ultra Tensile Strength Steel) steel fibre fabrics

- OLY STEEL 750 G SYSTEM

All Olympus FRCM OLYMPUS-STONE systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to check the suitability of the substrate beforehand.

Some of the most common interventions

- Stripping of existing plaster: The FRCM reinforcement should preferably be applied directly on the stone elements. It is therefore always necessary to remove the existing plaster, at least for the portions to be reinforced.
- Scuci-cuci, joint reinforcement, injections: if there are gaps or compromised stone elements, it is advisable to carry out a scuci-cuci prior to the application of the FRCM reinforcement in order to reconstruct the integrity of the wall face.
- Surface cleaning: in the presence of dirt, the surfaces to be treated must be cleaned by sandblasting or high-pressure hydro-washing to remove any residues of paint, dirt, release agents, moss and lichen, dust and friable materials in general that would prevent perfect adhesion of the mortar to the substrate.
- Levelling with structural mortar: in some cases, the masonry may be highly irregular and therefore not suitable for levelling the FRCM reinforcement. In these cases, a structural mortar can be used to regularise the substrate. For OLYMPUS-STONE systems, the use of OLY WALL STRUKTURE is recommended.

Application of the systems

- All the steps described below must be carried out fresh on fresh, i.e. within approximately 80% of the mortars pot life.
- a) Saturation of the masonry substrate: in order to prevent the masonry from absorbing the water used to mix the mortar, it is necessary to wet the areas concerned until they are completely saturated. This will prevent the formation of possible cracks and fissures, and the mortar curing process can take place with the correct amount of water.
- b) First layer of OLY WALL STRUKTURA-F: in order to prevent the reinforcement mesh or steel fibre fabric from coming into direct contact with the masonry, it is necessary to first carry out a rendering coat with OLY WALL STRUKTURA-F, covering the entire area to be reinforced. In fact, it is important that the rendering is in the centre of the mortar layer. The total thickness will be approx. 5 mm
- c) Application of the OLY STEEL 750 reinforcement: Manually place the mesh or fabric according to the design specifications by fixing it to the masonry and pressing it lightly into the first layer of mortar. Provide an overlap of at least 10-15 cm between adjacent strips.
- d) Insertion of OLY ROD GLASS L connectors
- e) Final smoothing with OLY WALL STRUKTURA-F: then cover the system with a final layer of OLY WALL STRUKTURA-F structural mortar until a total thickness of 10-15 mm is reached, incorporating the mesh and connectors previously applied. Then apply the desired degree of finish. The mortar can be applied by hand or by spraying.

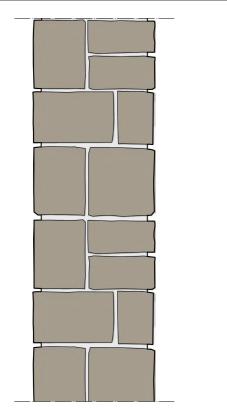




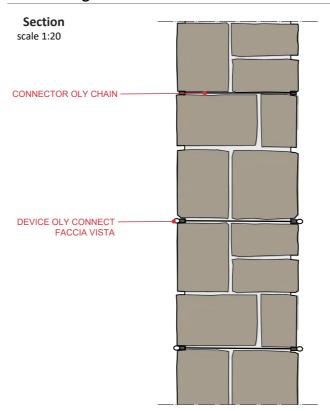
CONSTRUCTION DETAILS

1- Removing mortar from joints

Section scale 1:20

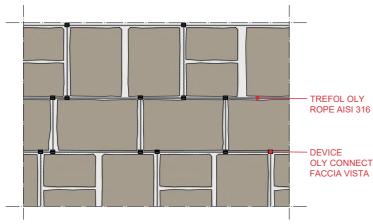


2- Inserting the connectors



3 - Applying the strand

Prospectus scale 1:20



Legend

CONNECTOR OLY CHAIN

TREFOL OLY ROPE AISI 316



DEVICE OLY CONNECT FACCIA VISTA

EXECUTION STAGES

Detail diagrams

Preparation of the substrate

Substrate Preparation

All Olympus FRCM OLYMPUS-STONE systems must be applied on suitable, undamaged substrates with good mechanical properties, so it is always a good idea to check the suitability of the substrate beforehand.

Some of the most common interventions

Stripping of existing plaster: The FRCM reinforcement should preferably be applied directly on the stone elements. It is therefore always necessary to remove the existing plaster, at least for the portions to be reinforced.

Scuci-cuci, joint re-straightening, injections: if there are gaps or compromised stone elements, it is advisable to carry out a scuci-cuci prior to applying the FRCM reinforcement in order to reconstruct the integrity of the wall face.

Surface cleaning: in the presence of dirt, the surfaces to be treated must be cleaned by sandblasting or high-pressure hydro-washing to remove any residues of paint, dirt, release agents, moss and lichen, dust and friable materials in general that would prevent the mortar from adhering perfectly to the substrate.

Levelling with structural mortar: in some cases, the masonry may be highly irregular and therefore not suitable for levelling the FRCM reinforcement. In these cases, a structural mortar can be used to regularise the substrate. For OLYMPUS-STONE systems, the use of OLY WALL STRUKTURE is recommended.

Application of the reinforcement system



- a) Scarification of existing mortar joints
- b) Dry insertion of OLY CHAIN stainless steel helical bars (approx. 3 connectors/sq.m.) using a special mandrel into previously prepared pre-drilled holes
- c) Reinforcement inside the mortar joints with OLY WALL STRUKTURA mortar
- d) Insertion of OLY CONNECT FACE-FACE helical bar connectors
- e) Application of OLY ROPE AISI 316 strand (diameter 3 or 5 mm) inside the joints and slots of the connection devices, making a mesh of at least 30x30 cm. Secure the ends with stainless steel clamps.
- f) Cover the system with a layer of OLY WALL STRUKTURA applied in the mortar joints.

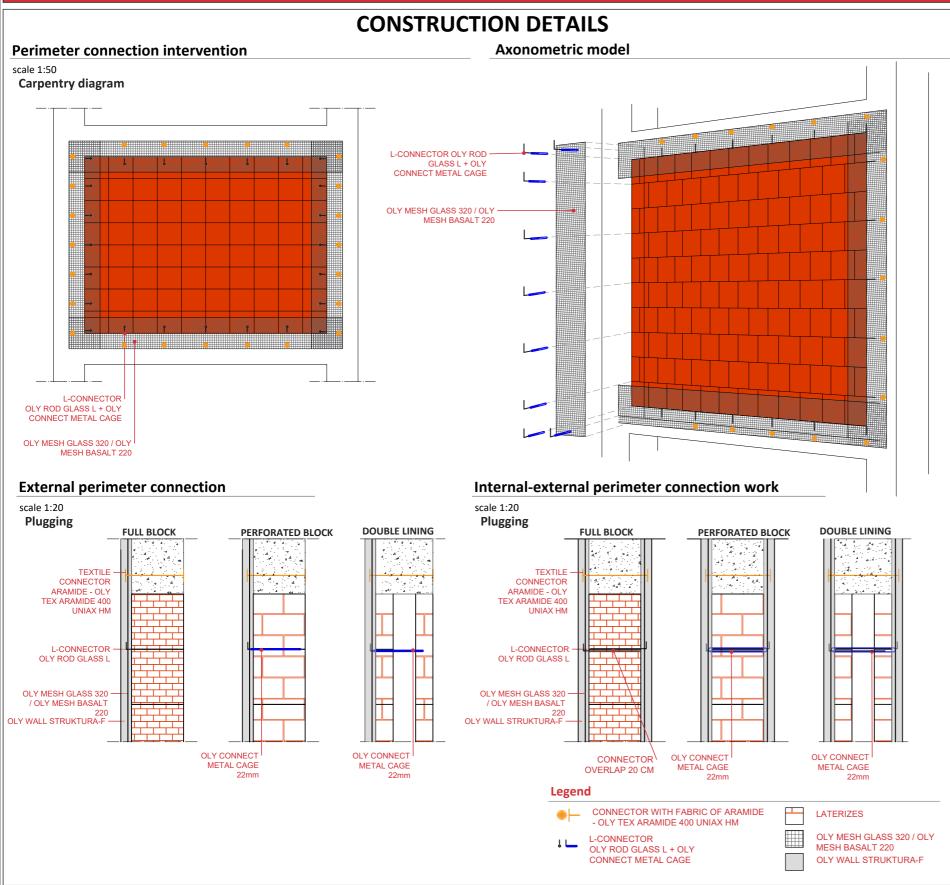
NOTE: The OLYMPUS FACE VIEW system can be applied on one side of the masonry or on both sides. It can also be combined with the FRCM and CRM systems from the OLYMPUS-STONE line.



OLYMPUS-SAFE ANTI-LIFTING - Anti-liftoff system for perimeter connection of external infills or internal partitions

TAMPONATURES

TAV. 29-a



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

- The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills.
- The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.
- When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.
- All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement; it is important that the reinforcement is in the centre of the mortar layer.
- c) Manual application of the OLY MESH GLASS 320 / OLY MESH BASALT 220 reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- d) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- e) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS L connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed.
- f) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approx. 10 mm.

Preparation of aramid fibre flakes

- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)

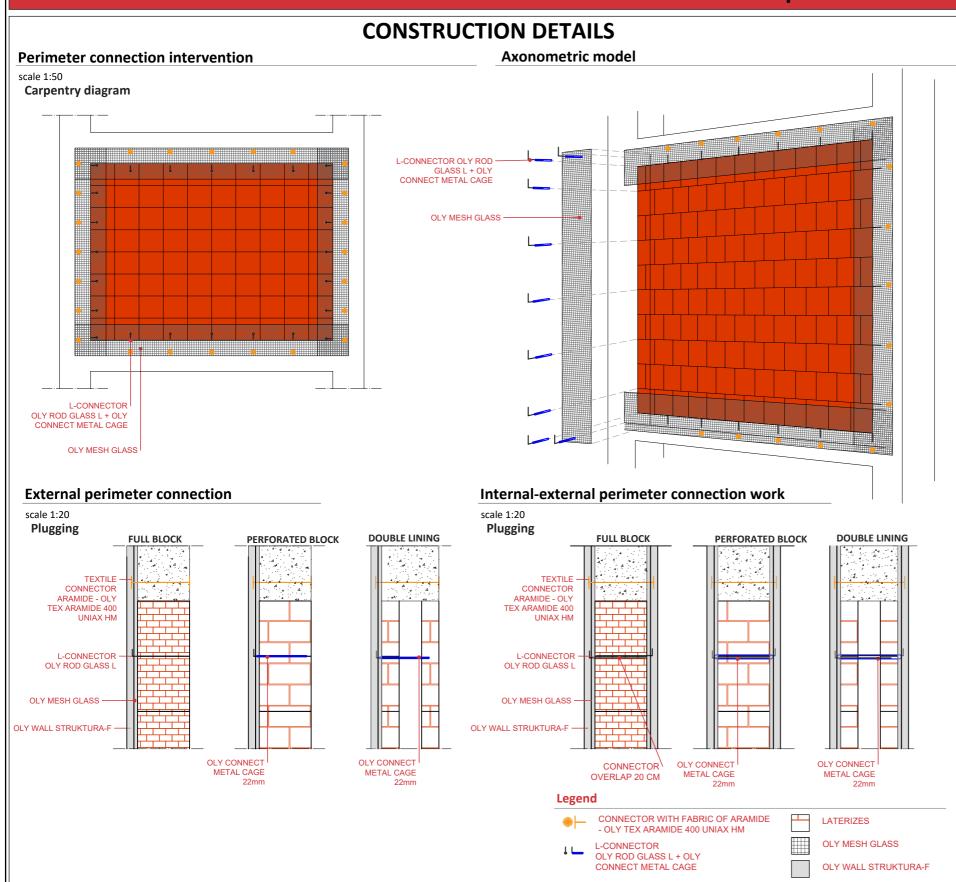




OLYMPUS-SAFE ANTI-LIFTING - Anti-liftoff system for perimeter connection of external infills or internal partitions

TAMPONATURES

тау. 29-ы



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

- The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills.
- The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.
- When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.
- All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement; it is important that the reinforcement is in the centre of the mortar layer.
- c) Manual application of the OLY MESH GLASS reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- d) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- e) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS L connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed.
- f) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approx. 10 mm.

Preparation of aramid fibre flakes

- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)

The networks that can be used are:

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99

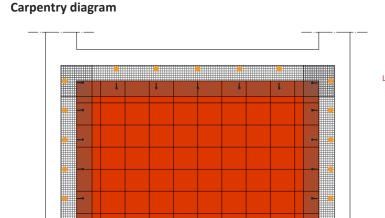




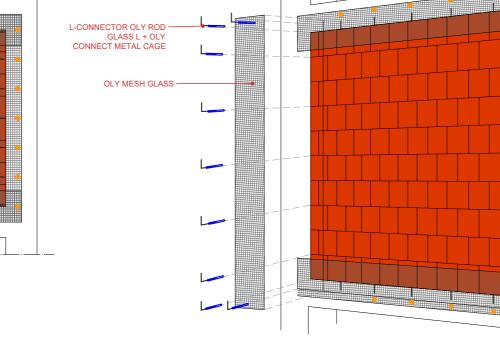
OLYMPUS-SAFE ANTI-LIFTING - Anti-tilt system for the diffuse connection of external infills or internal partitions

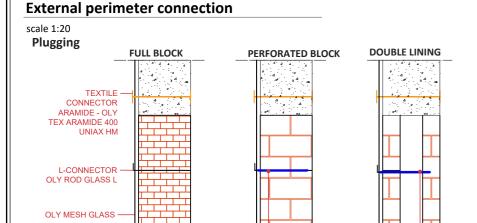
TAMPONATURES

CONSTRUCTION DETAILS Perimeter connection intervention Axonometric model



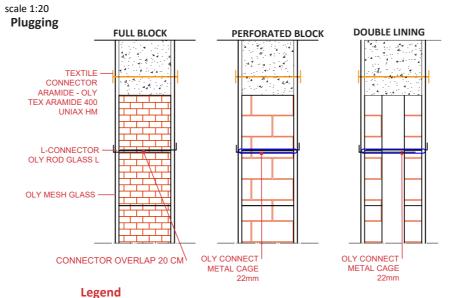






METAL CAGE

OLY CONNECT



CONNECTOR WITH FABRIC OF ARAMIDE OLY TEX ARAMIDE 400 UNIAX HM



LATERIZES



L-CONNECTOR OLY ROD GLASS L + OLY CONNECT METAL CAGE

Internal-external perimeter connection work

OLY MESH GLASS

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills

The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.

When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.

All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent layers.
- b) Manual application of the OLY MESH GLASS reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- c) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- d) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS $\ensuremath{\mathsf{L}}$ connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed.

Preparation of aramid fibre flakes

- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)

The networks that can be used are:

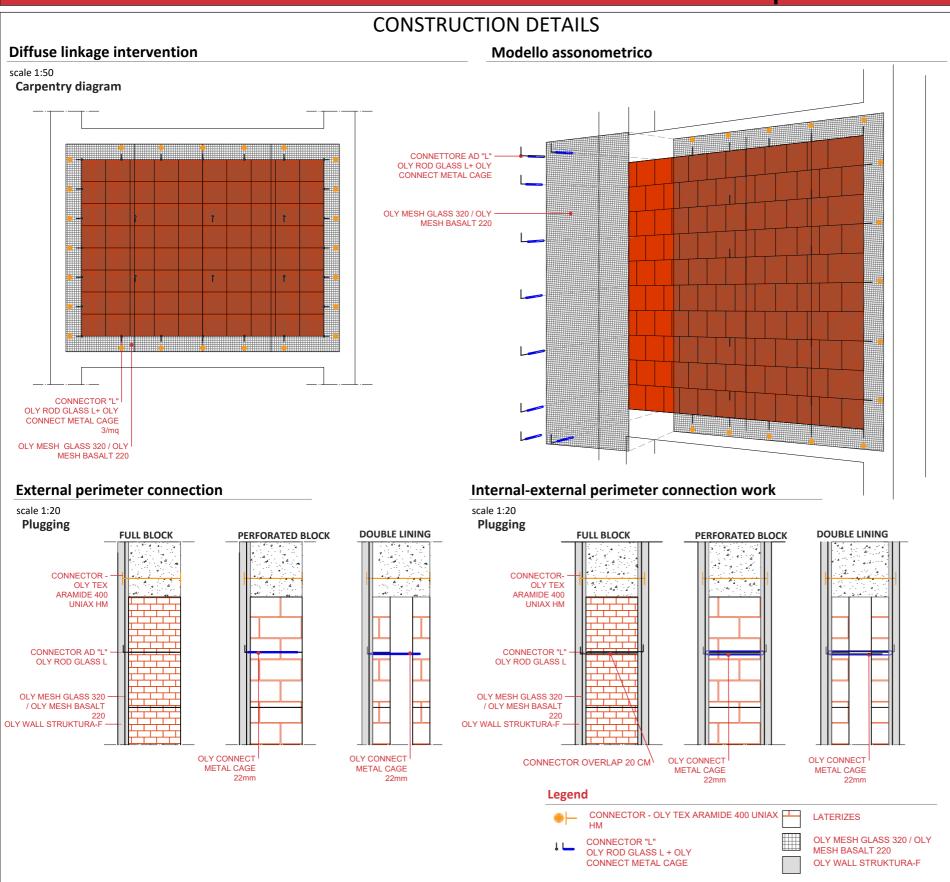
- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99

L-CONNECTOR

OLY MESH GLASS

OLY ROD GLASS L + OLY CONNECT METAL CAGE

OLYMPUS-SAFE ANTI-LIFTING - Anti-tilt system for the diffuse connection of external infills or internal partitions



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

- The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills.
- The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.
- When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.
- All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

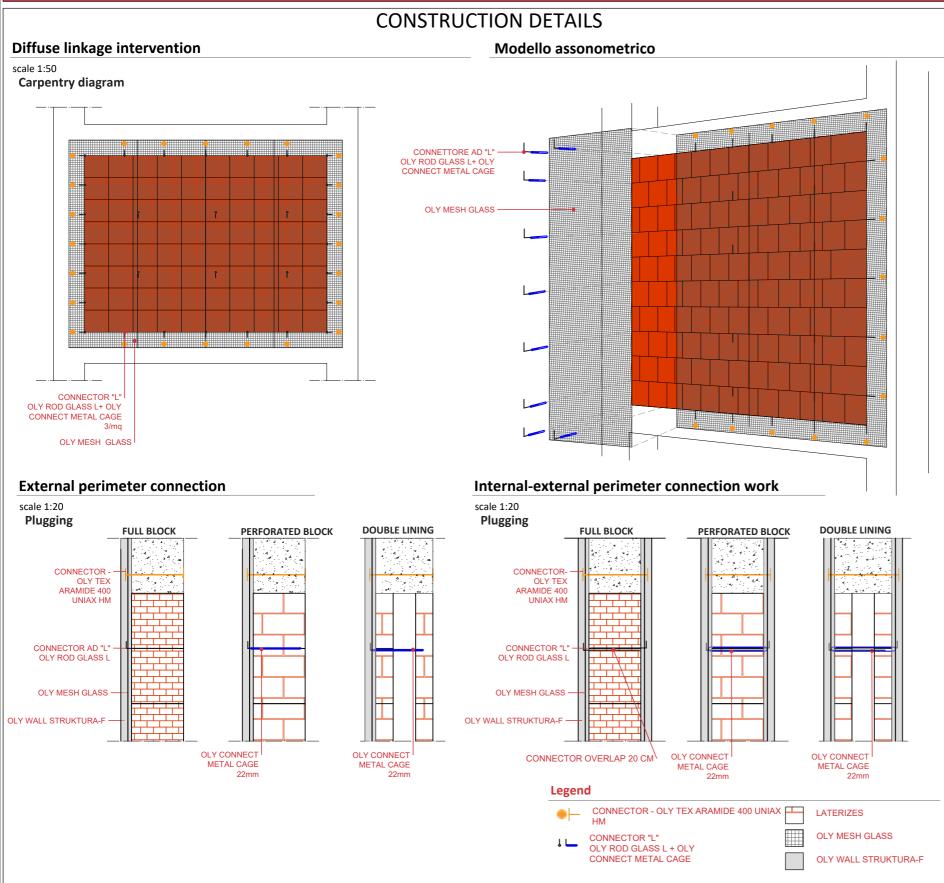
Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent lavers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement; it is important that the reinforcement is in the centre of the mortar layer.
- c) Manual application of the OLY MESH GLASS 320 / OLY MESH BASALT 220 reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- d) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- e) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS L connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed
- f) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approx. 10 mm.

Preparation of aramid fibre flakes

- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)





EXECUTION STAGES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills.

The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.

When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.

All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent layers.
- b) Reinforcement with OLY WALL STRUKTURA-F to a thickness of approximately 5 mm, covering the entire area affected by the reinforcement; it is important that the reinforcement is in the centre of the mortar layer.
- c) Manual application of the OLY MESH GLASS reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- d) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- e) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS L connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed.
- f) Final smoothing with OLY WALL STRUKTURA-F for a total thickness of approx. 10 mm.

Preparation of aramid fibre flakes

- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be inserted in the hole.
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)

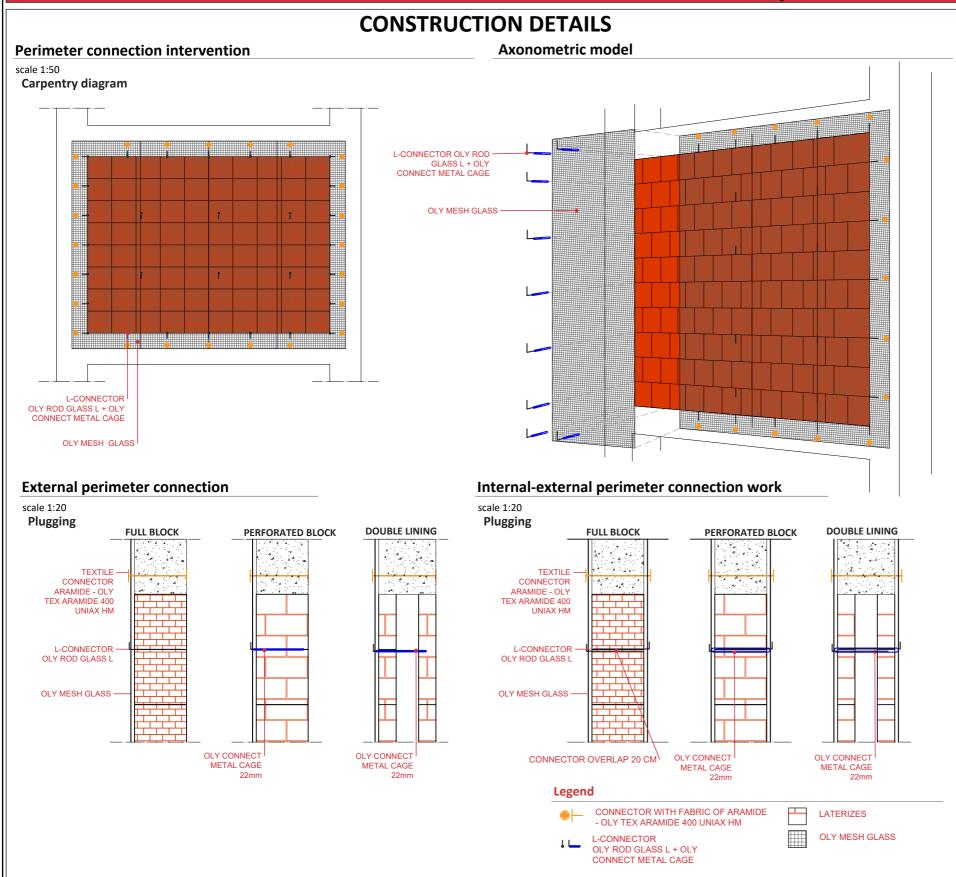
- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99





OLYMPUS-SAFE ANTI-LIFTING - Anti-tilt system for the diffuse connection of external infills or internal partitions





EXECUTION STAGES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-liftoff system is suitable for use on reinforced concrete buildings for the connection of perimeter and internal infills.

The intervention can also be carried out on both faces of the masonry, whatever the type of constituent stone element. The system can be installed dry or embedded in OLY WALL / OLY GROUT structural mortar.

When you want to improve the connection of the tompagno with the structural frame, it is sufficient to reinforce only on the perimeter of the element using 50 cm strips to be installed between the concrete element and the masonry blocks.

All OLYMPUS-SAFE anti-overturning systems must be applied on suitable substrates, intact and with good mechanical characteristics as their effectiveness is linked to their adhesion to the substrate.

Commonly, the operations to be carried out are

- Stripping of existing plaster
- Restoration of deteriorated elements (e.g. removal of detached concrete, cleaning and passivation of reinforcement rods and reprofiling of the element with suitable class R4 OLY FER and OLY GROUT mortars)
- Surface cleaning

Application of the reinforcement system

- a) Saturation of the masonry substrate with water, to prevent it from absorbing the mortar mix water, forming cracks and fissures on the subsequent lavers.
- b) Manual application of the OLY MESH GLASS reinforcement according to the design specifications and lightly penetrating into the first layer of mortar by applying light pressure. Between adjacent strips provide an overlap of at least 10-15 cm.
- c) Inserting the OLY ROD GLASS L connectors into prepared holes and grouting until saturated with OLY RESIN I or OLY RESIN EPO I resin
- d) In the case of double lining or plugging with perforated blocks, OLY ROD GLASS $\ensuremath{\mathsf{L}}$ connectors must be inserted into the hole with OLY METAL CAGE before the OLY ROD GLASS L connectors are installed.

Preparation of aramid fibre flakes

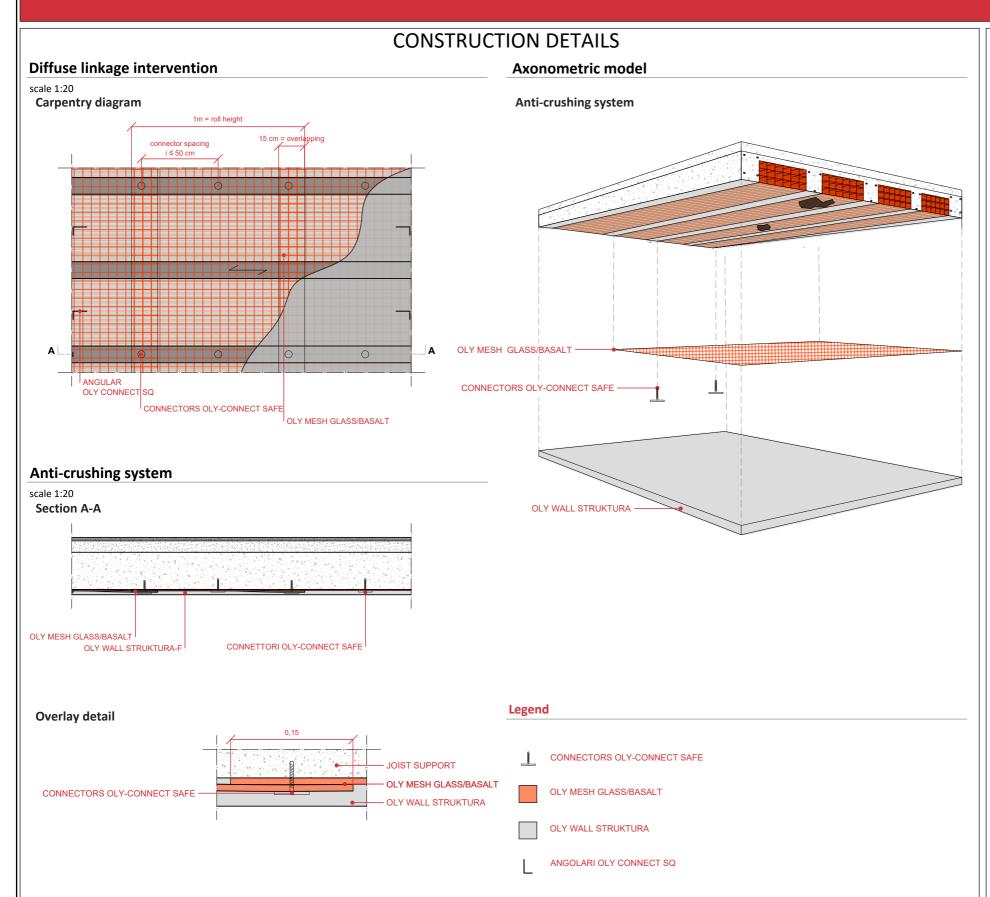
- Cutting OLY TEX ARAMIDE 400 UNI-AX HM fabric in possession of CVT issued by the Central Technical Service, of the length required by the project.
- Rolling and impregnation with OLY RESIN 20 (A+B) of the part of the staple to be
- Embedding inside the pre-drilled hole of the connector and cutting off the dry part outside the hole. To saturate the hole, use OLY RESIN resins in drums or cartridges.
- Arrange the fabric strips radially outside the hole and subsequently impregnate with OLY RESIN 20 (A+B)

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99





OLYMPUS-SAFE ANTI-UNFOLDING - Anti-deflection system for securing hollow core slabs



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-deflection system is intended to prevent possible material detachment phenomena at the soffits. It can be used if such phenomena are already

In any case, a series of checks and operations, at different levels of detail, such as visual, acoustic and thermographic investigations, must be carried out before application.

The performance of the anti-cracking system depends largely on the mechanical connection that is made with the OLY CONNECT SAFE kits. It is therefore essential that these kits are fixed in a suitable support.

It is always advisable to proceed with the following operations, if necessary:

- Removal of detaching or potential detaching elements such as plaster, concrete or
- Cleaning and protective treatment of metal reinforcement or metal beams
- Possible reconstruction of the joists with suitable class R4 mortar (OLY GROUT line)
- In the case of subsequent covering with mortar, filling of the voids with lightening material until a flat surface is obtained.

Application of the reinforcement system

The installation of OLYMPUS-SAFE systems consists of fixing the system to the soffit and then covering it with structural mortar if necessary. For all system variants, an installation diagram must be followed, remembering to

- Mount the mesh orthogonally to the joist frame
- Ensure an overlap of 10-15 cm between adjacent mesh strips
- Use the connection kits in a number of approximately 3 per square metre according to the diagram shown, arranging the connectors on alternate joists/beams with 50 cm spacing and always positioning a connector on the overlap



- a) Installation of the OLY MESH GLASS mesh following the rules indicated above and the assembly diagram
- b) Application of the connector kits, choosing, depending on the structural element to be protected, between
- OLY-CONNECT SAFE for hollow core slabs at the joists
- OLY CONNECT SQ for perimeter wall contact
- c) Covering the system with OLY WALL STRUKTURA structural mortar to a thickness of approx. 1.5 cm, In the case of dry systems, cover with plaster as required or with a false ceiling. The system can still be left exposed.

- OLY MESH GLASS 99X33
- OLY MESH GLASS 66X33
- OLY MESH GLASS 115
- OLY MESH GLASS 250
- OLY MESH BASALT 220





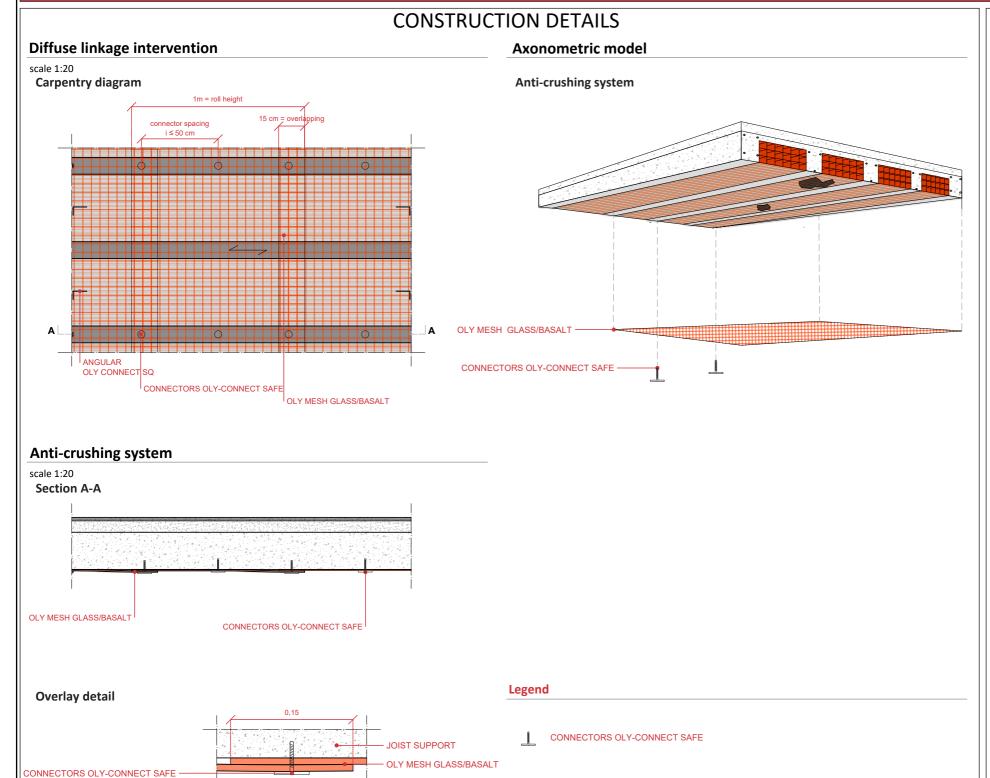


OLYMPUS-SAFE ANTI-UNFOLDING - Anti-deflection system for securing hollow core slabs

OLY MESH GLASS/BASALT

ANGULAR OLY CONNECT SQ

FLOOR TAV. 32



EXECUTION STAGES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-deflection system is intended to prevent possible material detachment phenomena at the soffits. It can be used if such phenomena are already occurring or not.

In any case, a series of checks and operations, at different levels of detail, such as visual, acoustic and thermographic investigations, must be carried out before application.

The performance of the anti-cracking system depends largely on the mechanical connection that is made with the OLY CONNECT SAFE kits. It is therefore essential that these kits are fixed in a suitable support.

- It is always advisable to proceed with the following operations, if necessary:
- Removal of detaching or potential detaching elements such as plaster, concrete or brickwork
- Cleaning and protective treatment of metal reinforcement or metal beams
- Possible reconstruction of the joists with suitable class R4 mortar (OLY GROUT line)
- In the case of subsequent covering with mortar, filling of the voids with lightening material until a flat surface is obtained.

Application of the reinforcement system

cale 1:20

The installation of OLYMPUS-SAFE systems consists of fixing the system to the soffit and then covering it with structural mortar if necessary. For all system variants, an installation diagram must be followed, remembering to

- Mount the mesh orthogonally to the joist frame
- Ensure an overlap of 10-15 cm between adjacent mesh strips
- Use the connection kits in a number of approximately 3 per square metre according to the diagram shown, arranging the connectors on alternate joists/beams with 50 cm spacing and always positioning a connector on the overlap.



Assembly diagram

- a) Installation of the OLY MESH GLASS/BASALT mesh following the rules indicated above and the assembly diagram
- b) Application of the connector kits, choosing, depending on the structural element to be protected, between
- OLY-CONNECT SAFE for hollow core slabs at the joists
- OLY CONNECT SQ for perimeter wall contact

- OLY MESH GLASS 99X33
- OLY MESH GLASS 66X33
- OLY MESH GLASS 115
- OLY MESH GLASS 250
- OLY MESH BASALT 220

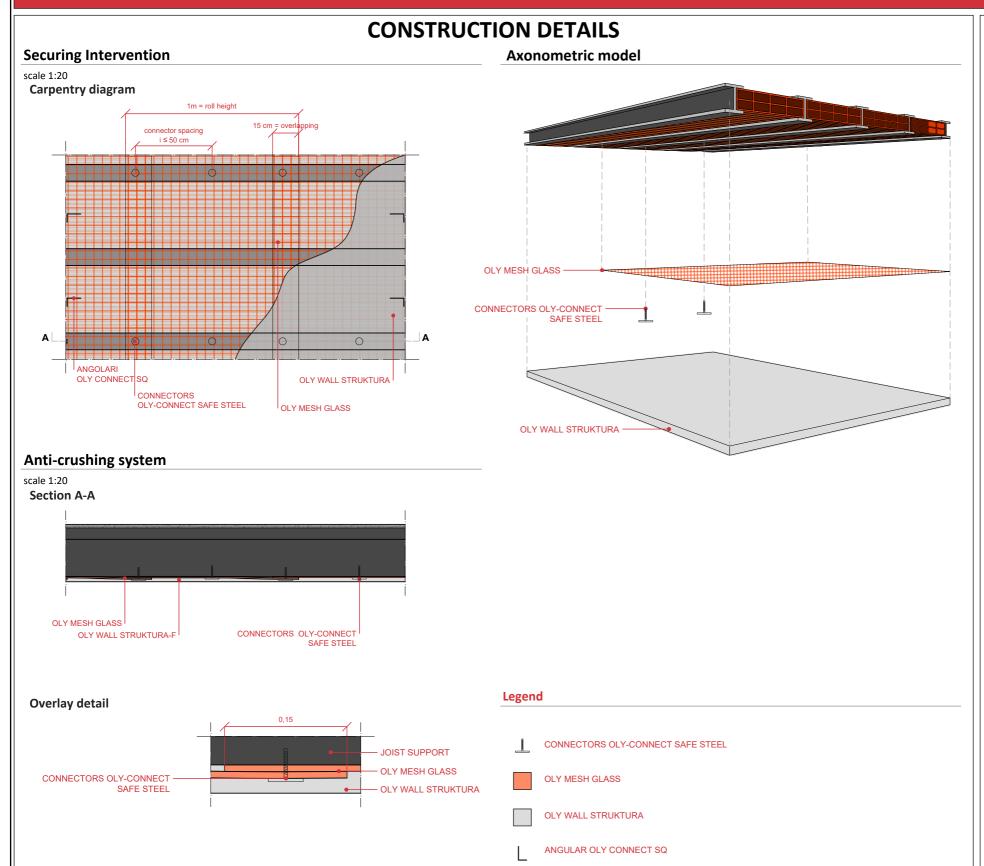




OLYMPUS-SAFE ANTISFONDELLAMENTO - Anti-Seam System for Securing Steel Beam Slabs

STEEL FLOOR

TAV. 33



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-deflection system is intended to prevent possible material detachment phenomena at the soffits. It can be used if such phenomena are already occurring or not.

In any case, a series of checks and operations, at different levels of detail, such as visual, acoustic and thermographic investigations, must be carried out before application.

The performance of the anti-cracking system depends largely on the mechanical connection that is made with the OLY CONNECT SAFE kits. It is therefore essential that these kits are fixed in a suitable support.

It is always advisable to proceed with the following operations, if necessary:

- Removal of detaching or potential detaching elements such as plaster, concrete or brickwork
- Cleaning and protective treatment of metal reinforcement or metal beams
- Possible reconstruction of the joists with suitable class R4 mortar (OLY GROUT line)
- In the case of subsequent covering with mortar, filling of the voids with lightening material until a flat surface is obtained.

Application of the reinforcement system

cale 1:20

The installation of OLYMPUS-SAFE systems consists of fixing the system to the soffit and then covering it with structural mortar if necessary. For all system variants, an installation diagram must be followed, remembering to

- Mount the mesh orthogonally to the joist frame
- Ensure an overlap of 10-15 cm between adjacent mesh strips
- Use the connection kits in a number of approximately 3 per square metre according to the diagram shown, arranging the connectors on alternate joists/beams with 50 cm spacing and always positioning a connector on the overlap.



Assembly diagram

- a) Installation of the OLY MESH GLASS mesh following the rules indicated above and the assembly diagram
- b) Application of the connector kits, choosing, depending on the structural element to be protected, between
- OLY-CONNECT SAFE STEEL for steel floors
- OLY CONNECT SQ for perimeter wall contact
- c) Covering the system with OLY WALL STRUKTURA structural mortar to a thickness of approx. 1.5 cm, In the case of dry systems, cover with plaster as required or with a false ceiling. The system can still be left exposed.

The meshes that can be used are:

- OLY MESH GLASS 115
- OLY MESH GLASS 250







CONSTRUCTION DETAILS Securing Intervention Axonometric model scale 1:20 **Carpentry diagram** connector spacing i ≤ 50 cm OLY MESH GLASS CONNETTORI OLY-CONNECT ANGOLARI SAFE STEEL OLY CONNECT SQ CONNETTORI OLY-CONNECT SAFE OLY MESH GLASS **Anti-crushing system** scale 1:20 Section A-A OLY MESH GLASS CONNECTORS OLY-CONNECT SAFE STEEL Legend Overlay detail CONNECTORS OLY-CONNECT SAFE STEEL OLY MESH GLASS CONNECTORS OLY-CONNECT **OLY MESH GLASS** SAFE STEEL ANGULAR OLY CONNECT SQ

EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

The OLYMPUS-SAFE anti-deflection system is intended to prevent possible material detachment phenomena at the soffits. It can be used if such phenomena are already occurring or not.

In any case, a series of checks and operations, at different levels of detail, such as visual, acoustic and thermographic investigations, must be carried out before application.

The performance of the anti-cracking system depends largely on the mechanical connection that is made with the OLY CONNECT SAFE kits. It is therefore essential that these kits are fixed in a suitable support.

It is always advisable to proceed with the following operations, if necessary:

- Removal of detaching or potential detaching elements such as plaster, concrete or brickwork
- Cleaning and protective treatment of metal reinforcement or metal beams
- Possible reconstruction of the joists with suitable class R4 mortar (OLY GROUT line)
- In the case of subsequent covering with mortar, filling of the voids with lightening material until a flat surface is obtained.

Application of the reinforcement system

cale 1:20

The installation of OLYMPUS-SAFE systems consists of fixing the system to the soffit and then covering it with structural mortar if necessary. For all system variants, an installation diagram must be followed, remembering to

- Mount the mesh orthogonally to the joist frame
- Ensure an overlap of 10-15 cm between adjacent mesh strips
- Use the connection kits in a number of approximately 3 per square metre according to the diagram shown, arranging the connectors on alternate joists/beams with 50 cm spacing and always positioning a connector on the overlap.



Assembly diagram

- a) Installation of the OLY MESH GLASS mesh following the rules indicated above and the
- b) Application of the connector kits, choosing, depending on the structural element to be protected, between
- OLY-CONNECT SAFE STEEL for steel floors
- OLY CONNECT SQ for perimeter wall contact

The meshes that can be used are:

- OLY MESH GLASS 115
- OLY MESH GLASS 250





OLYMPUS-FLOOR - Extradossal reinforcement on hollow core slab

FLOOR TAV. 35

CONSTRUCTION DETAILS Beam bending reinforcement Axonometric model Carpentry diagram Extradossal reinforcement on hollow core slab OLY GROUT 1500 / OLY GROUT 1600 FLOOR CA OLY GROUT 1500 **OLY GROUT 1600 OLY MESH OLY MESH GLASS** Section A-A OLY CONNECT FLOOR CA **OLY MESH GLASS** OLY GROUT 1500 / OLY GROUT 1600 Section B-B OLY CONNECT FLOOR CA **OLY MESH GLASS** OLY GROUT 1500 / OLY GROUT 1600 Stratigraphy Legend TRAVETS IN CLS ARMATO OLY CONNECT FLOOR CA **OLY MESH GLASS** BRICK PIÑATAS OLY CONNECT FLOOR CA

EXECUTION STAGES

Detail diagrams

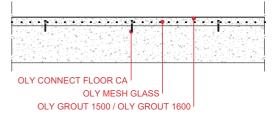
Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

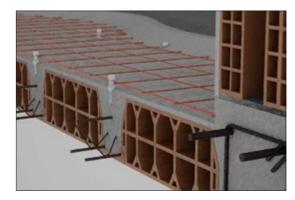
Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Extradossal reinforcement on a hollow core slab with the OLYMPUS-FLOOR system



- a) Application of OLY CONNECT FLOOR CA by pre-drilling with a 14 mm diameter drill bit to the maximum depth and fastening the connector using an impact wrench until the smooth part of the shank is completely inserted.
- b) Application of the OLY MESH GLASS mesh, taking care to overlap adjacent strips by at least 10-15 cm. The net must be tied to the connectors by means of iron wires so that it remains raised during casting, or by preparing suitable spacers.
- c) Perimeter connection with OLY CHAIN if it is necessary to structurally connect the slab to the perimeter walls.
- d) Casting the slab with OLY GROUT 1500 / OLY GROUT 1600 lightweight concrete



The nets that can be used are:

- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L

OLY GROUT 1500/OLYGROUT 1600

- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99



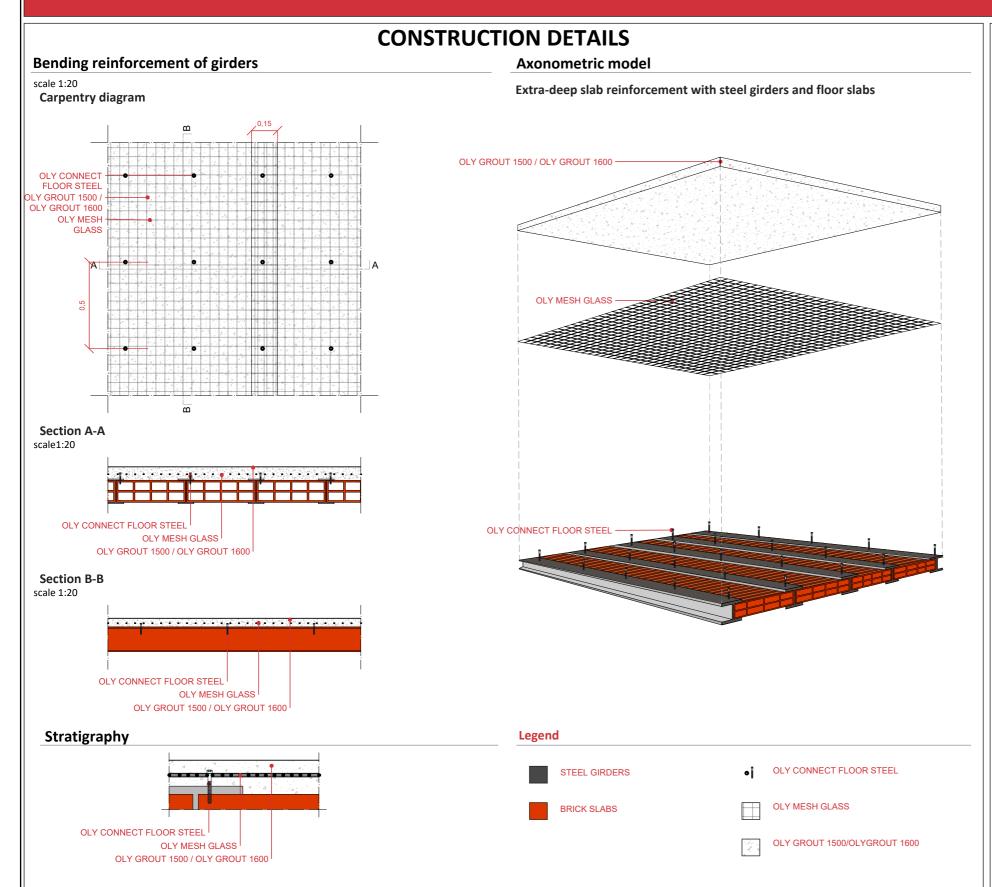
OLY MESH GLASS

OLY GROUT 1500 / OLY GROUT 1600



OLYMPUS-FLOOR - Extradossal slab reinforcement with steel girders and floor slabs

STEEL FLOOR TAV. 36



EXECUTIVE PHASES

Detail diagrams

Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Steel slab extrados reinforcement with OLYMPUS-FLOOR system



- a) Application of OLY CONNECT FLOOR STEEL by pre-drilling with a 11 mm diameter drill to a depth of approximately 20 mm and fastening the connector using an impact wrench until the thread is fully inserted.
- b) Application of the OLY MESH GLASS mesh, taking care to overlap adjacent strips by at least 10-15 cm. The mesh must be tied to the connectors by means of iron wires so that it remains raised during casting, or by preparing suitable spacers.
- c) Perimeter connection with OLY CHAIN if it is necessary to structurally connect the slab to the perimeter walls.
- d) Casting the slab with OLY GROUT 1500 / OLY GROUT 1600 lightweight concrete



- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99





WOODEN FLOOR TAV. 37

CONSTRUCTION DETAILS Bending reinforcement of girders **Axonometric model** Extradossal reinforcement on a wooden slab **Carpentry diagram** OLY GROUT 1500 / OLY GROUT 1600 FLOOR WOOD LY GROUT 1500 / OLY GROUT 1600 **OLY MESH GLASS** OLY MESH GLASS Section A-A scale 1:20 OLY CONNECT FLOOR WOOD OLY CONNECT FLOOR WOOD **OLY MESH GLASS** OLY GROUT 1500 / OLY GROUT 1600 **Section B-B** scale 1:20 OLY CONNECT FLOOR WOOD **OLY MESH GLASS** OLY GROUT 1500 / OLY GROUT 1600 Stratigraphy Legend OLY CONNECT FLOOR WOOD WOODEN STRUCTURE **OLY MESH GLASS** OLY GROUT 1500/OLYGROUT 1600 OLY MESH GLASS

EXECUTIVE PHASES

Detail diagrams

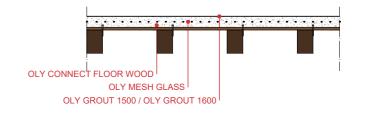
Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Extradossal reinforcement on timber floor with OLYMPUS-FLOOR system



- a) Application of OLY CONNECT FLOOR WOOD by making a pre-drilling hole with a 11.5 mm diameter drill bit and fastening the connector using an impact wrench until the smooth part is completely inserted in the board.
- b) Application of the OLY MESH GLASS mesh, taking care to overlap adjacent strips by at least 10-15 cm. The mesh must be tied to the connectors by means of iron wires so that it remains raised during casting, or by preparing suitable spacers.
- c) Perimeter connection with OLY CHAIN if it is necessary to structurally connect the slab to the perimeter walls.
- d) Casting the slab with OLY GROUT 1500 / OLY GROUT 1600 lightweight concrete



The networks that can be used are:

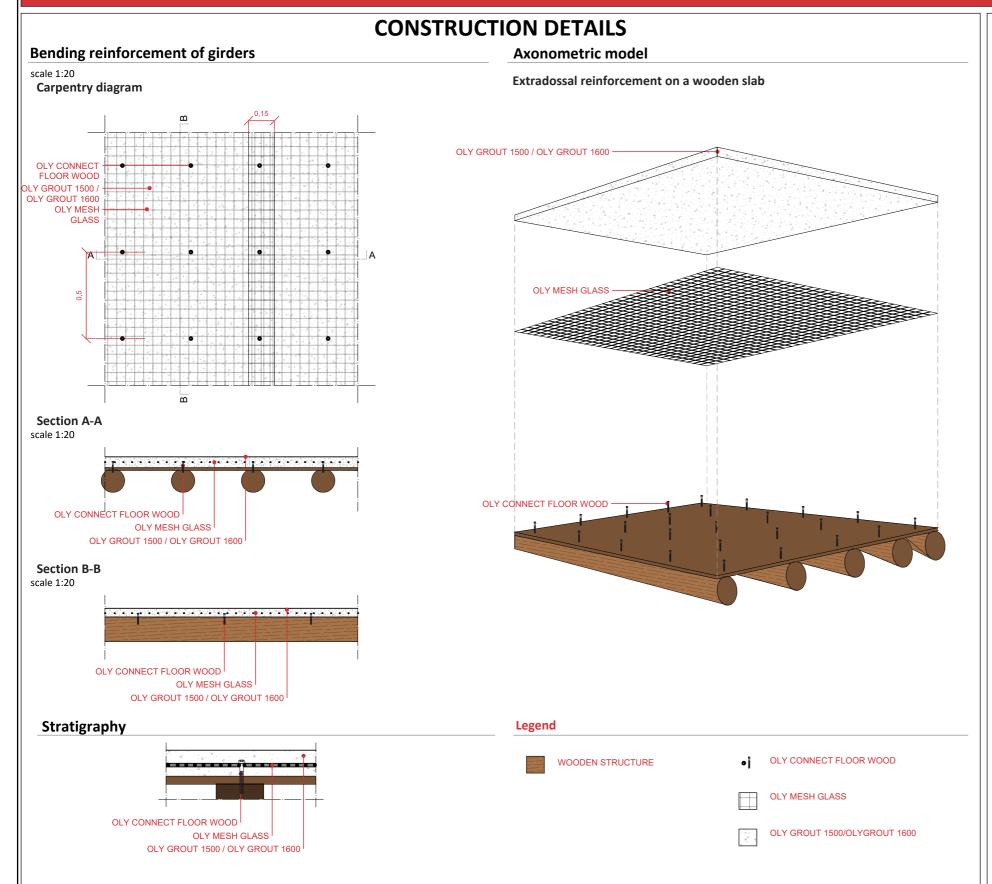
- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99



OLY GROUT 1500 / OLY GROUT 1600



WOODEN FLOOR TAV. 38



EXECUTIVE PHASES

Detail diagrams

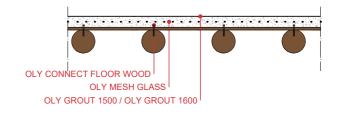
Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Extradossal reinforcement on timber floor with OLYMPUS-FLOOR system



- a) Application of OLY CONNECT FLOOR WOOD by making a pre-drilling hole with a 11.5 mm diameter drill bit and fastening the connector using an impact wrench until the smooth part is completely inserted in the board.
- b) Application of the OLY MESH GLASS mesh, taking care to overlap adjacent strips by at least 10-15 cm. The mesh must be tied to the connectors by means of iron wires so that it remains raised during casting, or by preparing suitable spacers.
- c) Perimeter connection with OLY CHAIN if it is necessary to structurally connect the slab to the perimeter walls.
- d) Casting the slab with OLY GROUT 1500 / OLY GROUT 1600 lightweight concrete



- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99





WOODEN FLOOR TAV. 39

CONSTRUCTION DETAILS Bending reinforcement of girders **Axonometric model** Extradossal reinforcement on a wooden slab **Carpentry diagram** OLY GROUT 1500 / OLY GROUT 1600 DLY GROUT 1500 / OLY GROUT 1600 OLY MESH -Section A-A scale 1:20 **OLY RESIN 20** OLY MESH GLASS OLY GROUT 1500 / OLY GROUT 1600 Section B-B scale 1:20 **OLY RESIN 20** OLY MESH GLASS OLY GROUT 1500 / OLY GROUT 1600 Legend Stratigraphy OLY RESIN 20 (A+B) WOODEN STRUCTURE OLY GROUT 1500/OLYGROUT 1600 OLY MESH GLASS OLY GROUT 1500 / OLY GROUT 1600

EXECUTIVE PHASES

Detail diagrams

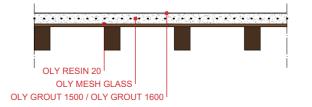
Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Extradossal reinforcement on timber floor with OLYMPUS-FLOOR system

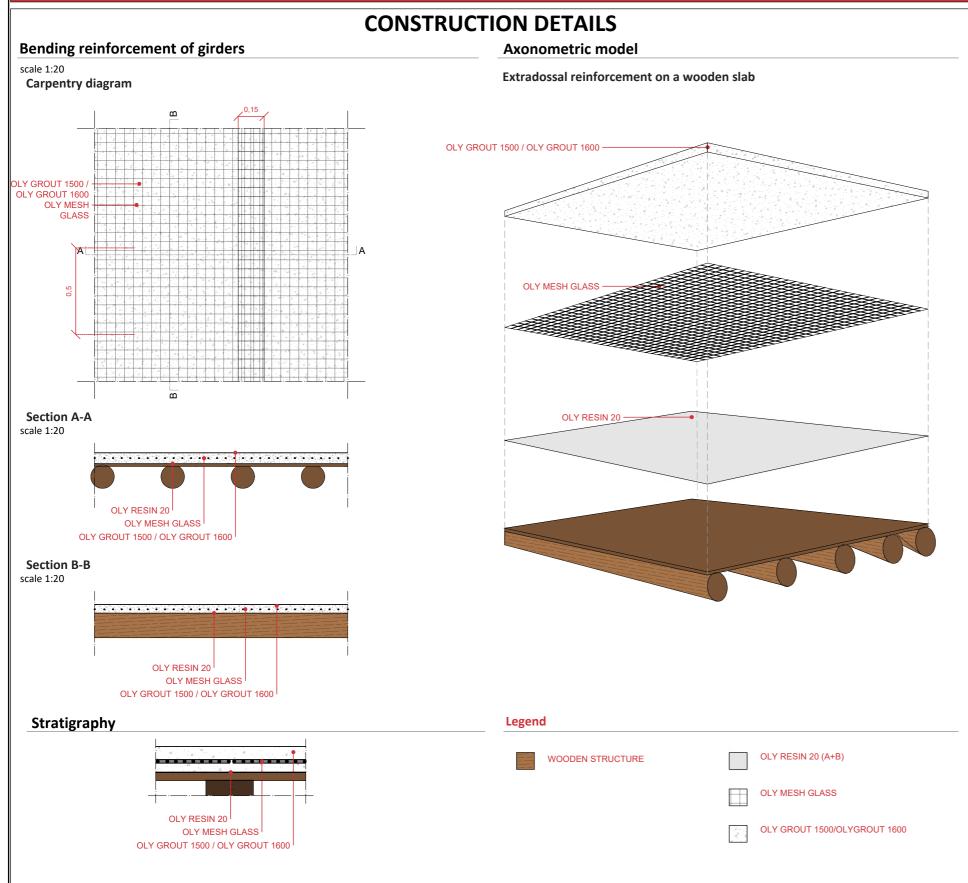




- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99
- OLY MESH GLASS 132x132



WOODEN FLOOR TAV. 40



EXECUTIVE PHASES

Detail diagrams

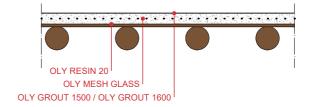
Preparation of the substrate

All OLYMPUS-FLOOR systems must be applied on suitable, intact substrates with good mechanical properties as their effectiveness is linked to the transmission of stresses from the existing structure to the new slab either by adhesion or through the mechanical connection of the connectors.

Before installing the system, it is necessary to ensure that the appropriate preliminary operations have been carried out to prepare the deck. In fact, it is essential to make sure that you work on the load-bearing structure having eliminated any upper layers, such as flooring or non-structural screeds.

Application of the reinforcement system scale 1:20

Extradossal reinforcement on timber floor with OLYMPUS-FLOOR system





- OLY MESH GLASS 33X33
- OLY MESH GLASS 66X66 L
- OLY MESH GLASS 66X66 W
- OLY MESH GLASS 99X99
- OLY MESH GLASS 132x132





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