



INGEGNERIA E ARCHITETTURA DEL RESTAURO

## REVERSIBLE CONSOLIDATIONS OF HISTORICAL STRUCTURES

The most significant works  
of Carboniar<sup>®</sup> and IARnet<sup>®</sup> systems



**1996**

**Villa Caldogno-Nordera by A.Palladio** - Caldogno (VI)

First intervention, for our Company, reinforcing historic structures with the use of carbon fiber sheet tapes, **Carboniar<sup>®</sup> system**.



**1996**

**Fortified wall** - Soncino (CR)

Reinforcement of the fortified walls tower vaults, **Carboniar<sup>®</sup> system**.



**1997**

**Upper Basilica of San Francesco** - Assisi (PG)

Emergency intervention to secure the precious vaults of the Upper Basilica, statically compromised by the earthquake, using carbon fiber sheet tapes, **Carboniar<sup>®</sup> system**.



**1998**

**Library of the "La Rocca" complex** - Monselice (PD)

Bandaging of the building by means of carbon fiber sheet tapes, **Carboniar<sup>®</sup> system** and consolidation of the walls by injections of natural hydraulic lime IAR Calx Romana.



**1999 – 2000**

**Basilica of S. Feliciano - Foligno (PG)**

Mixed interventions for structural and anti-seismic reinforcement with carbon fiber sheet tapes, **Carboniar® system** and seismic energy dissipators of vaults, dome, bell tower and tympanum.

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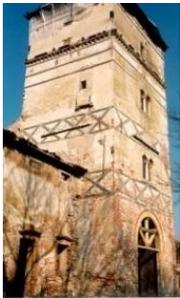


**1999**

**Palazzo Altieri - Rome**

Static consolidation of wooden beams of the coffered decorated attic, with injections of EpoxIAR resin and carbon fiber sheet bandage, **Carboniar® system**.

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**2000**

**15th century tower - Pojana Maggiore (VI)**

Emergency intervention to secure the tower by means of bandage with carbon fiber sheet tapes, **Carboniar® system**.

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**2000**

**Church of Christ - Rovigo**

Structural reinforcement of the Church wall elements utilizing of carbon fiber sheet tapes, **Carboniar® system**.

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**2001**

**Pieve di San Pietro - San Pietro di Feleto (TV)**

Anti-seismic reinforcement of the baptistery vault exquisitely decorated, with carbon fiber sheet tapes, **Carboniar® system** and energy dissipators.

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**2004/2005**

**Church of Santa Maria Assunta - Belfiore (PG)**

Reinforcement of the vaults of the nave and apse with carbon fiber sheet tapes, **Carboniar® system**, applied on guides regularized with epoxy resin mortar.

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**2007**

**Palazzo Cordellina - Vicenza**

Structural reinforcement of vaults and floors by using carbon fiber sheet tapes, **Carboniar® system**. Applied on guides regularized with epoxy resin mortar.

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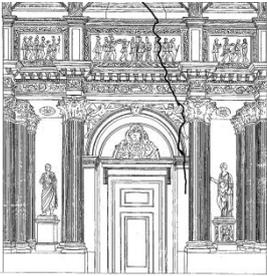


**2005/2008**

**Villa Pisani of the Manfredini complex of Este - (PD)**

Bandage of the villa walls with carbon fiber sheet tapes, **Carboniar® system** and special connections of the spine walls with sheathed steel tie rods.

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**2007**

**Palazzo Cordellina - Vicenza**

Use of the **IARnet®** reinforcement, with carbon fiber sheet mesh, in single layer, embedded in IAR Calx Romana natural hydraulic lime mortar on a frescoed wall.

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**2008**

**11th century Byzantine Church - Hios Island (Greece)**

Bandage of vaults of the Panagia Krina church with **IARnet® system**, carbon fiber sheet tapes embedded in IAR Calx Romana natural hydraulic lime mortar. In the photo the use of connectors is shown.

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**2008**

**Convent of St. Andrew - Island of Rab (Croatia)**

Bandage of the masonry with **IARnet® system**, carbon fiber sheet tapes embedded in IAR Calx Romana natural hydraulic lime mortar.

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**2008**

**Church of SS. Martino and Severo - Crespino (RO)**

Bandage of the perimeter walls of the Canonica house by **IARnet® system**, asymmetrical double-crossed carbon fiber sheet tapes embedded in IAR Calx Romana mortar of natural hydraulic lime.

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**2009**

**Juliet's Tomb - Verona**

Bandage of the building vaults and walls, called Giuletta Hause, with the **IARnet® system**, asymmetrical carbon fiber sheet tapes embedded in IAR Calx Romana natural hydraulic lime mortar.

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**2009**

**Dvor Veliki Tabor Castle - Desinic (Croatia)**

Bandage of the castle vaults and walls, with the **IARnet® system**, asymmetrical carbon fiber sheet tapes embedded in IAR Calx Romana natural hydraulic lime mortar.

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