Adhesive Bonding Techniques in Hybrid Structures Made from Fibre Reinforced Polymeric Composites and Concrete

Author(s): Ruxandra Oltean • Ciprian Cozmanciuc • Vlad Munteanu

Tomme: LV (LIX) | Fascicle: 3 | 2009

Pages: 67-74 Abstract text:

Mechanical joining techniques are used in construction industry all over the world on a daily basis. A further method of joining has proven to be highly successful – adhesive bonding. Known for thousands of years, adhesive bonding has become as important as other joining techniques as a result of the pace of developments in recent years. In many areas, this bonding technology has become a key technology. Virtually, all solid materials can be connected with one another using adhesives. Although bonding fibre reinforced polymeric composites to the concrete substrate is a relatively simple technique, the proper installation of the fibre reinforced polymeric composites is essential to ensure the adequate performance of the hybrid system. Since the installation procedures differ from one system to another, appropriate specifications will be clearly presented. The paper will include requirements to provide a quality joint assembly, meaning the special pre-treatments of the concrete surface. The material to be bonded is cleaned and prepared so that adhesives can adhere better to them.

Kev Words:

Fibre reinforced polymeric composites (FRP); concrete; adhesive; hybrid structures; bonding techniques.

View full text PDF 🔼

Author(s) Information

Ruxandra Oltean

Affiliation: "Gheorghe Asachi" Technical University, Jassy, Department of Concrete, Materials, Technology and Management.

Email: ruxandraoltean@yahoo.com

Ciprian Cozmanciuc

Affiliation: "Gheorghe Asachi" Technical University, Jassy, Department of Concrete, Materials, Technology and Management. Email: cozmanciucc@ce.tuiasi.ro

Vlad Munteanu

Affiliation: "Gheorghe Asachi" Technical University, Jassy, Department of Civil and Industrial

Engineering.

Email: munteanu@ce.tuiasi.ro

All documents with a 🔁 icon require Adobe Acrobat installed on your computer

Current Issue

T. LVI (LX), Fasc. 3, 2010

Browse by Issues by Authors

For Authors
Preparing Artworks
Manuscript Submission
Manuscript Template
Journals Name Abbreviation
Copyright Transfer Statement

Abstracted & Indexed

The Bulletin of the Polytechnic Institute of Jassy, Construction. Architecture Section is indexed and abstracted in: Index Copernicus, ProQuest, Ebsco, DOAJ, BASE, Scientific Commons, DRIVER, WorldWideScience.org, getCITED,

WorldWideScience.org, getCITED, ResearchGATE, Ovid LinkSolver, Genamics Journalseek, Electronic Journals Library, WorldCat, Intute.

Ranking

The journal is ranked by the National University Research Council as a B+ quality journal (CNCSIS Code 44).

Search in:

