



Scopus Document details

Back to results | < Previous 17 of 43 Next >

View at Publisher | Export | Download | Add to List | More...

Composites Part B: Engineering
Volume 47, April 2013, Pages 348-356

FRP reinforcement of masonry panels by means of C-fiber strips (Article)

Corbi, I.  

Department of Structural Engineering, University of Naples Federico II, via Claudio 21, 80125 Naples, Italy

[View references \(27\)](#)

Abstract

The paper collocates in the general framework of techniques devoted to the preservation, strengthening and repair of architectural heritage against strong earthquakes, i.e. of approaches suitable for applications to masonry structures of architectural or historical interest under the effect of dynamic load induced by ground motions. Benefits related to the reinforcement of the masonry tissue realized by inserting composite elements are evaluated. © 2012 Elsevier Ltd. All rights reserved.

Author keywords

A. Carbon fibers; B. Stress concentrations; D. Mechanical testing; E. Consolidation

Indexed keywords

Architectural heritage; Composite element; FRP reinforcement; Ground motions; Masonry panels; Masonry structures

Engineering controlled terms: Carbon fibers; Dynamic loads; Masonry materials; Mechanical testing; Stress concentration; Tissue

Engineering main heading: Reinforcement

ISSN: 1359-8368 CODEN: CPBDF Source Type: Journal Original language: English
DOI: 10.1016/j.compositesb.2012.11.005 Document Type: Article

Cited by 29 documents

- Stability of evolutionary brittle-tension 2D solids with heterogeneous resistance Baratta, A., Corbi, I., Corbi, O. (2016) Computers and Structures
- Effect of polyurea reinforced masonry walls for blast loads Wang, J.Q., Ren, H.Q., Wu, X.Y. (2016) Advances in Energy, Environment and Materials Science - Proceedings of the International Conference on Energy, Environment and Materials Science, EEMAS 2015
- Stability assessment of an historical masonry bridge through the LA kinematic theorem for NT structures Corbi, I., Corbi, O., Tosianni, F. (2016) International Journal of Mechanics

[View all 29 citing documents](#)

Inform me when this document is cited in Scopus:
[Set citation alert](#) [Set citation feed](#)

Related documents

- FRP composites retrofitting for protection of monumental and ancient constructions Baratta, A., Corbi, I. (2012) Open Construction and Building Technology Journal
- Placement of fibre reinforced polymer provision in no-tension vaults using the vault inequality system Baratta, A., Corbi, O. (2012) Civil-Comp Proceedings
- About the structural restoration of the S. Domenico's monastery in Matera

ScienceDirect Journals Books Register Sign in

Download PDF Export Search ScienceDirect Advanced search



Article outline Show full outline

Abstract
Keywords
1. Introduction
2. Set up of the experimental investigation
3. Experimental tests on FRP-reinforce...
4. Conclusions
Acknowledgements
References

Figures and tables
Table 1

Composites Part B: Engineering
Volume 47, April 2013, Pages 348-356

FRP reinforcement of masonry panels by means of C-fiber strips

Ileana Corbi  
[Show more](#)

<http://dx.doi.org/10.1016/j.compositesb.2012.11.005> [Get rights and content](#)

Abstract

The paper collocates in the general framework of techniques devoted to the preservation, strengthening and repair of architectural heritage against strong earthquakes, i.e. of approaches suitable for applications to masonry structures of architectural or historical interest under the effect of dynamic load induced by ground motions. Benefits related to the reinforcement of the masonry tissue realized by inserting composite elements are evaluated.

Keywords

D. Mechanical testing; E. Consolidation; A. Carbon fibers; B. Stress concentrations

1. Introduction

In the last 50 years, the need of ensuring safeguard and safety to architectural constructions has inspired a number of more and more sophisticated refurbishment techniques and adaptation interventions, attracting a big interest on the debate about the preservation of monumental heritage from many fields, also relying on the adoption of

Recommended articles

- Buckling failure modes of FRP thin-walled beams 2013, Composites Part B: Engineering [View more](#)
- Numerical analysis of fibre reinforced polymer retro... 2013, Engineering Structures [View more](#)
- Numerical study of the role of mortar joints in the b... 2013, Composites Part B: Engineering [View more](#)

[View more articles >](#)

Citing articles (29)

Related book content

Feedback 