



COST C26: Urban Habitat Constructions under Catastrophic Events
WG2: Earthquake resistance

Workshop, Prague, 30-31 March , 2007

WG 2 Earthquake Resistance Session

INTRODUCTION

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WG2: Earthquake resistance

Research directions

- 1. Characterization and modeling of seismic action**
- 2. Influence of seismic motion typology on the structural response**
- 3. Innovative materials and technologies for existing and new buildings in seismic areas**
- 4. Seismic protection and retrofit of existing buildings: study cases**

SESSION CONTENTS

Keynote Lecture on Topic 1 –

Seismic vulnerability and risk assessment of urban habitat in Southern European cities - by Prof. A. KAPPOS

General Report on Topic2 –

Typology of seismic motion and seismic engineering design –
by E. Mistakidis et al.

General Report on Topic 3 –

Innovative materials and technologies for existing and new buildings in seismic areas - by Prof. A. Mandara ,
2nd Univ. of Naples

Keynote lecture on Topic 4 –

Experimental and numerical investigations on the Mustafa Pasha Mosque large scale model - by L. Krstevska, R. Landolfo et al.

SESSION CONTENTS

Contributions

High strength steel for seismic resistant building frames

(D. Dubina, F. Dinu, V. Ungureanu, R. Zaharia & D. Grecea)- **T3**

Seismic design of cold-formed steel housing: a case study

(O. Iuorio, R. Landolfo, L. Fiorino) - **T3/T4**

Strengthening of masonry walls by innovative metal based techniques

(A. Dogariu, A. Stratan, D. Dubina, T. Nagy-Gyorgy, C. Daescu, V. Stoian)- **T3**

Seismic upgrade of non-seismic r.c. frames using steel dissipative braces

(S. Bordea, A. Stratan, A. Dogariu, D. Dubina)- **T3**

Experimental tests on seismic upgrading techniques for RC buildings

(F. M. Mazzolani, G. Della Corte, E. Barecchia, M. D'Aniello) - **T3**

SESSION CONTENTS

Full-Scale Cyclic Tests of a real masonry infilled RC building for seismic upgrading (F.M. Mazzolani, G. Della Corte, L. Fiorino, E. Barecchia)

Shear panels for seismic upgrading of new and existing structures
(F. M. Mazzolani, G. De Matteis, S. Panico, A. Formisano, G. Brando)-**T3**

Performance-based seismic retrofit of r.c. and masonry buildings
(A.Mandara, A.M. Avossa, M. Ferraioli, F. Ramundo and G. Spina) **T2**

Consolidation, rebuilding and strengthening of the St. Panteleymon Church Ohrid (R.Apostolska & G. Necevska-Cvetanovsk)-**T4**

Earthquake protection of historical buildings
(F.M. Mazzolani)- **T3**