Projects and Products Portal for Leonardo da Vinci

Innovationstransfer von Feuerwiderstandsbewertung der teilweise geschützten Verbunddecken für KMU und Universitäten

2009-1-LU1-LEO05-00219

http://www.adam-europe.eu/adam/project/view.htm?prj=7198

Projektinformationen

Titel:	Innovationstransfer von Feuerwiderstandsbewertung der teilweise geschützten Verbunddecken für KMU und Universitäten
Projektnummer:	2009-1-LU1-LEO05-00219
Jahr:	2009
Projekttyp:	Innovationstransfer
Status:	bewilligt
Land:	LU-Luxemburg
Marketing Text:	Innovationstransfer von Feuerwiderstandsbewertung der teilweise geschützten Verbunddecken für KMU und Universitäten

Zusammenfassung:

This is an innovation transfer project, which aims to promote knowledge and design methodology of partially protected composite floor systems between engineers of various European countries in their own language.

The phenomena of behaviour of the partially protected composite floor system in fire have been observed for the first time during the Cardington natural fire test in 1997. Analysis of the unexpected behaviour of the floor and resistance to fire lead to unveiling of membrane action which is activated in the reinforced slab in fire conditions at the moment when the system cannot rely anymore on the resistance of the unprotected secondary steel beams.

At this moment the industry and the academics have good understanding of the behaviour of such a floor system in fire and they are confident to apply only partial protection to the secondary steel elements. Having in hands the knowledge and tools such as design guide and software developed in the FRACOF project it is time to educate design offices and authorities in number of European countries to utilise in their design all the mechanisms activated in this structure in fire conditions. The added value is in the fact that the results of research currently accessible mainly by researchers will be presented to practising engineers throughout the Europe. Applying this new calculation method, the Safety of the building in case of fire will be increased ; the construction systems will be more cost effective and it will have an impact on the European construction market.
By translating the design guides and software to local languages the partners will access even broader audience.
Additionally, the partners involved in the project have already experience in fire engineering and they are a good reference in this field in their countries. Finally, introducing the methodology in a big part of Europe at the same time follows the systemised approach represented by Eurocode to promote homogeneous design.

Beschreibung:

The objective of this project is to Transfer this Innovation to the key players of the construction market (Engineering offices, Authorities, Firemen, contractors...) in order to make them able to use this design method in other European countries, addressing the potential barriers that may exist due to the nature of local building regulations.
The project was divided in 4 steps :
- Realisation of documentation and software about designing of composite floor system with unprotected secondary beams
- Translation of the documentation and software interface
- Training for partners involved in seminars
- Organisation of the Seminars in the different European countries.
The different documents were realised in English by ArcelorMittal and CTICM:
- A design guide explaining how apply the developed methodologies (document of 57 pages)
- A background document explaining all the laboratory tests performed on membrane action in the last 20 years, summarising all the theoretical development made to define the calculation method (document of 125 pages in hard copy in annex)
- The Software has been prepared to receive new interface’s language
- PowerPoint presentations has been realised to present the different documents and

Projektinformationen

the design methodology.
A Copy in English of theses documents will be provided in annex.
Then the different partners have translated the documents in their national languages (with some "localisation" on the content to fit with local regulations and local good practice.
A seminar was organised by the different partners:
Romania : Seminar in Timisoara, 23 September 2011. 50 participants
Slovenia : Seminar in Ljubjanna, the 11th and the 18th of April 2011. 43 participants
Spain: Seminar in Bilbao, the 6th of July 2011, 70 participants
Luxembourg : Seminar organised the 26th of May 2011 in Luxembourg Kirchberg. More than 80 people coming from different European countries attended the seminar. The guest speaker was Professor Collin Bailey, dean of the University of Manchester in UK. ANEFORE was represented during this meeting.
Czech Republic : Seminar in Prague 7th to 9th of February 2011. 123 participants.
Poland: Seminary organised in Warsaw the 14th of June 2011. 120 participants.

Themen:
*** Nutzung und Verbreitung von Ergebnissen
*** Fernlehre
*** Berufsorientierung und -beratung
*** Weiterbildung

Sektoren:
*** Grundstücks- und Wohnungswesen
*** Baugewerbe/Bau

Produkt Typen:
DVD
Evaluierungsmethoden
Homepage
CD-ROM
Unterlagen für offenen Unterricht

Produktinformation: A website was put online with all the products available in different languages for further dissemination http://people.fsv.cvut.cz/www/wald/fire/fracof/index.htm

Projektwebseite: http://people.fsv.cvut.cz/www/wald/fire/fracof/index.htm

Vertragnehmer

Name:	ArcelorMittal Belval & Differdange S.A.
Stadt:	Esch-sur-Alzette
Land/Region:	Luxembourg (Grand Duché)
Land:	LU-Luxemburg
Organisationstyp:	Großunternehmen (über 250 Mitarbeiter)
Homepage:	http://www.arcelormittal.com/sections

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Partner

Partner 1

Name: Politehnica University Timisoara
Stadt:
Land/Region:
Land:
Organisationstyp: andere
Homepage:

Partner 2

Name: University of Ljubljana
Stadt:
Land/Region:
Land:
Organisationstyp: andere
Homepage: http://www2.fgg.uni-lj.si

Partner 3

Name: Instytut Techniki Budowlanej
Stadt:
Land/Region:
Land:
Organisationstyp: andere
Homepage: http://www.itb.pl

Partner 4

Name: Ceske vysoke uceni technicke v Praze
Stadt:
Land/Region:
Land:
Organisationstyp: andere
Homepage: http://www.cvut.cz

Partner

Partner 5

Name:	Fundacion Labein
Stadt:	
Land/Region:	
Land:	
Organisationstyp:	andere
Homepage:	http://www.labein.es

Partner 6

Name:	Centre Technique Industriel de la Construction Metallique
Stadt:	
Land/Region:	
Land:	
Organisationstyp:	andere
Homepage:	http://www.cticm.com

Produkte

1 Background_Document

2 Design Guide

3 Presentation for Seminar

Produkt 'Background_Document'

Titel:	Background_Document
Produkttyp:	Lehrmaterial
Marketing Text:	FRACOF Engineering Background document – explaining the development of the simple design method and relating the predicted performance from the simple design method to real building behaviour.
Beschreibung:	FRACOF Engineering Background document – explaining the development of the simple design method and relating the predicted performance from the simple design method to real building behaviour.
Zielgruppe:	Engineering offices, authorities, Firemen, students,...
Resultat:	Book
Anwendungsbereich:	Fire resistance of buildings
Homepage:	http://people.fsv.cvut.cz/www/wald/fire/fracof/en/FRACOF_ENGINEERING_BACKGROUND_2011_1.pdf
Produktsprachen:	Englisch

product files

FRACOF_ENGINEERING_BACKGROUND_2011_1.pdf

http://www.adam-europe.eu/prj/7198/prd/1/1/FRACOF_ENGINEERING_BACKGROUND_2011_1.pdf

Produkt 'Design Guide'

Titel:	Design Guide
Produkttyp:	Lehrmaterial
Marketing Text:	FRACOF Design Guide – explaining the method of application for the simple design method. The guide is intended for use in conjunction with the FRACOF software tool
Beschreibung:	FRACOF Design Guide – explaining the method of application for the simple design method. The guide is intended for use in conjunction with the FRACOF software tool
Zielgruppe:	Engineering officies, authorities, firemen, students...
Resultat:	book
Anwendungsbereich:	FIre resistance of buildings
Homepage:	
Produktsprachen:	Englisch

product files

FRACOF_DESIGN_GUIDE_2011_1.pdf

http://www.adam-europe.eu/prj/7198/prd/2/1/FRACOF_DESIGN_GUIDE_2011_1.pdf

Produkt 'Presentation for Seminar'

Titel:	Presentation for Seminar
Produkttyp:	Lehrmaterial
Marketing Text:	This .zip file contain all the ppt presentation performed during the teaching semainars
Beschreibung:	This .zip file contain all the ppt presentation performed during the teaching semainars
Zielgruppe:	Engineering officies, authorities, firemen, students...
Resultat:	PowerPoint presentations
Anwendungsbereich:	Fire engineering of buildings
Homepage:	
Produktsprachen:	Englisch

product files

FRACOF_PPT.zip
http://www.adam-europe.eu/prj/7198/prd/3/1/FRACOF_PPT.zip

Project Tags

The project belongs to the following group(s):

Best Projects (http://www.adam-europe.eu/adam/thematicgroup/MMVII)