



Ohrid, June 2018.

Knowledge FOR Resilient soCiEty

Textbook

“CONSTRUCTIVE RULES FOR FIRE SAFETY OF BUILDINGS”

for subject

“Constructive Rules for Fire Safety of Buildings”

*University of Banja Luka, Faculty for Architecture
Civil Engineering and Geodesy*



Co-funded by the
Erasmus+ Programme
of the European Union



The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

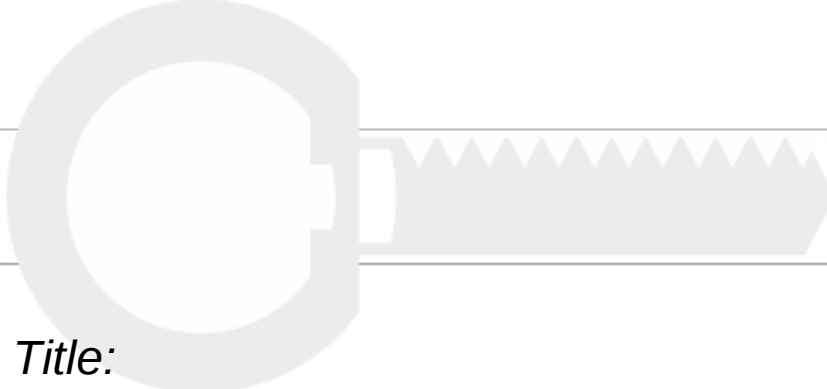


*In scope of subject “Constructive Rules for Fire Safety of Buildings” on Master module of Study program Civil Engineering on Faculty of Architecture, Civil Engineering and Geodesy a Textbook named **“Constructive Rules for Fire Safety of Buildings”** will be published as a obligatory literature for the attending of the subject. Also the book will serve as a scientific and professional literature.*



Co-funded by the
Erasmus+ Programme
of the European Union





Title:

**“Constructive Rules for Fire
Safety of Buildings”**

Naslov:

**“Građevinske mjere zaštite
od požara ”**

Authors:

**Mirjana Laban
Gordana Broćeta
Saša Čvoro
Vinko Babić
Stevo Borojević**

Autori:

**Mirjana Laban
Gordana Broćeta
Saša Čvoro
Vinko Babić
Stevo Borojević**



Co-funded by the
Erasmus+ Programme
of the European Union





Content of the textbook:

Causes of fire. Burning materials.

Common fires. Characteristics of fire and smoke.

Fire architectural building measures.

Fire resistance of construction structures.

Fire characteristics of building materials.

Fire sectors and Fire segments.

Classification and typology of buildings from the aspect of fire safety.

Current legislation in the field of fire protection.

Fire sector, characteristics of fire sector.

*Analysis of existing and planned facilities
(project documentation, analysis of built objects
and examination of applied conceptual solutions
from the aspect of fire protection)*

*Construction measures of fire protection when
changing the purpose of the object.*

Sadržaj udžbenika:

Uzroci nastanka požara i gorive materije.

Standardni požar. Karakteristike požara i dima.

*Arhitektsko građevinske mjere zaštite od
požara.*

Vatrootpornost građevinskih konstrukcija.

Požarne karakteristike građevinskih materijala.

Požarni sektori i požarni segmenti.

*Klasifikacija i tipologija zgrada sa aspekta
požarne bezbednosti.*

*Aktuelna legislativa u oblasti zaštite zgrada od
požara.*

Određivanje požarnog rizika.

*Analiza postojećih i planiranih objekata
(projektne dokumentacije, analiza izgrađenih
objekata i sagledavanje primjenjenih
konceptualnih rješenja sa aspekta zaštite od
požara)*

*Građevinske mjere zaštite od požara pri promjeni
namjene objekta.*

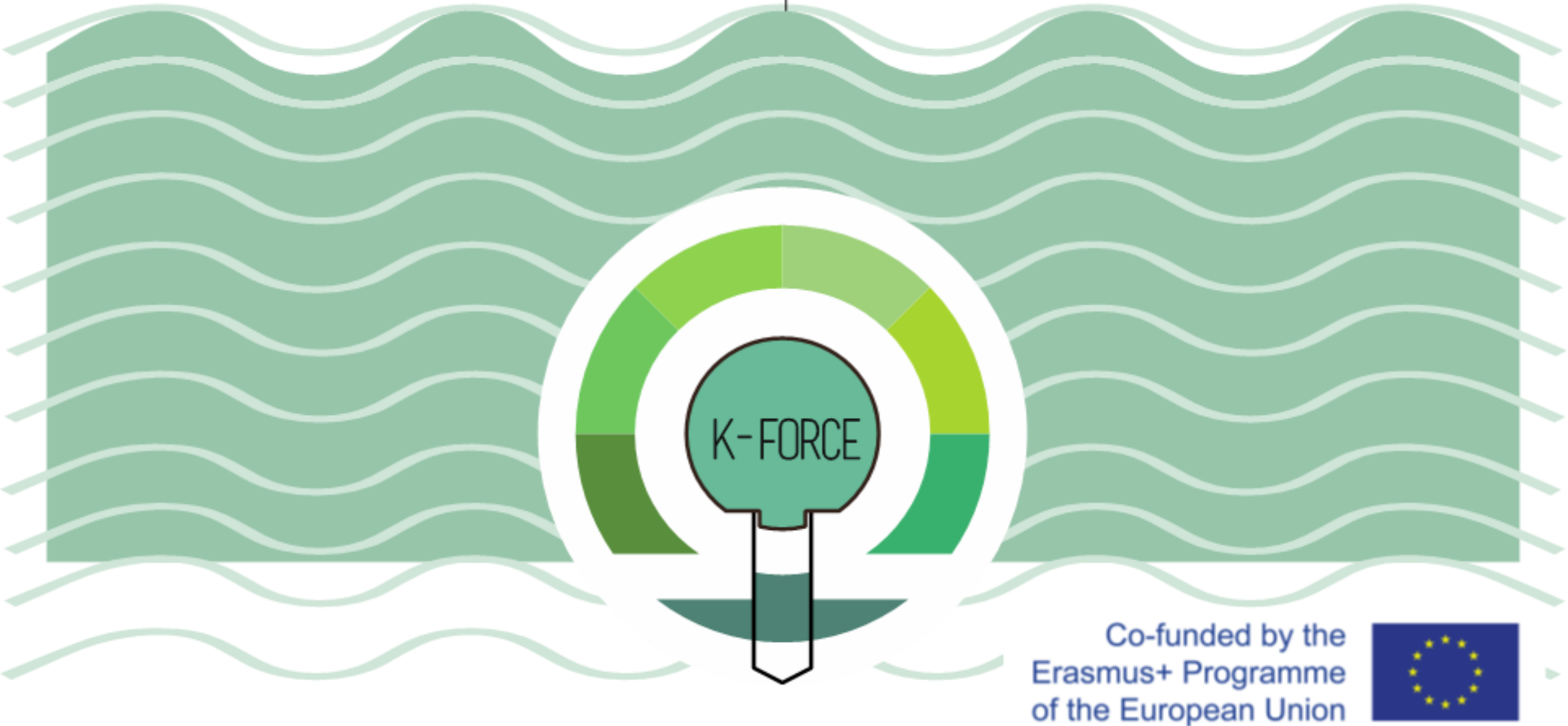


Curriculum:

Physico-chemical basis of the burning process. Definition and conditions for burning. Burning materials. Causes of fire. Combustion of fuel gases, liquids and solid materials. Products of the uncontrolled combustion process. Common fires. Fire sectors. Fire resistance of construction structures. Classification and typology of buildings from the aspect of fire safety (residential, public, commercial, industrial, warehouses, garages, high buildings, buildings - cultural heritage). Current legislation in the field of fire protection. Fire resistance of building materials and constructions. Regulation on Construction Products 305/2011 / EC. Testing methods for the building materials fire resistance according to European standards. Fire protection preventive construction measures. Fire sector, characteristics of fire sector. Evacuation from areas affected by fire. Fire stairs. Evacuation time calculation. Markings and evacuation plan. Fire protection systems in buildings. Smoke extraction. Regular maintenance importance of the building and systems for fire protection. Qualitative and quantitative assessment of the fire risk. Analysis of existing and planned facilities - project documentation, analysis of built objects and examination of applied conceptual solutions from the aspect of fire protection.

Nastavni program:

Fizičko-hemijske osnove procesa gorenja. Definicija i uslovi potrebni za gorenje. Gorive materije. Uzroci nastanka požara. Standardni požar. Karakteristike požara i dima. Arhitektsko građevinske mjere zaštite od požara. Urbanističko planiranje u zaštiti od požara. Stepni otpornosti prema požaru. Vatrootpornost građevinskih konstrukcija. Požarne karakteristike građevinskih materijala. Požarni sektori i požarni segmenti. Komunikacije u zgradama i evakuacija. Dimne zavjese i dimni rezervoari. Prirodno i prinudno odvođenje dima iz objekata (evakuacionih puteva, hodnika, stepeništa, podruma i suterena, vrlo visokih objekata, stambenih i industrijskih objekata, objekata koji rade sa publikom, sa bina). Kontrola kretanja dima. Odvođenje dima iz garaža, tunela i objekata koji imaju atrijume. Vatrogasni liftovi. Klasifikacija i tipologija zgrada sa aspekta požarne bezbednosti (stambene, javne, kulturna baština). Aktuelna legislativa u oblasti zaštite zgrada od požara (domaća, strana i EU). Određivanje požarnog rizika (objekta i sadržaja objekta). Redovno održavanje zgrada i sistema za zaštitu od požara. Analiza postojećih i planiranih objekata – projektne dokumentacije, analiza izgrađenih objekata i sagledavanje primjenjenih konceptualnih rješenja sa aspekta zaštite od požara. Građevinske mjere zaštite od požara pri promjeni namjene objekta.



Thank you for your attention

radovan.vukomanovic@aggf.unibl.org

mladen.slijepcevic@aggf.unibl.org

Knowledge FOR Resilient soCiEty