

Building protection against radon risk : corrective and preventive actions



LEARNING OUTCOMES:

At the end of this training, the learner will be able to:

- Master principles of investigation on existing and new buildings
- Identify causes of radon entry and technical measurements
- Identify approaches on building protection for existing and new buildings
- Knowledge on different protection techniques and material to be used

TRAINING RESPONSIBLE: Bernard COLLIGNAN, Research Engineer on radon risk, CSTB

ATTENDANCE PROFILE

Engineering offices
Architects
Building professionals
Radon professionals
building authorities, radiation protection and public health authorities
All stakeholders interested in building protection

PREREQUISITES

None

TEACHING METHODS

- Methodologic approach
- case studies on recommendations of corrective actions
- Feedback

EVALUATION

Satisfaction questionnaire

DOCUMENTATION

Training support

PRACTICAL INFORMATIONS

Schedule 2021 :

- 11th and 12th October 2021

Duration: 14 hours (7 per day)

Price: 800 €

Location : Friburg - Switzerland

YOUR CONTACT

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PROGRAM CONTENT

DAY 1 – 11th october

10h - 11h

Tracy D Gooding, Public Health England - UK

Generalities on radon risk

- Health effect on radon
- Exposure of the population
- Legislation related to the radon issue and public awareness
- Geology and mapping

11h – 13h00

Bernard Collignan, CSTB - France

Radon in buildings

- General points, sources and entry routes of radon
- Causes of radon entry
- Basics of radon measurements in buildings
- Generalities on building
 - Typologies
 - Basements
 - Air permeability
 - Ventilation

14h30 - 17h30

Bernard Collignan, CSTB - France

- First approach on building protection
 - General principles
 - Preventive actions for new buildings
 - Corrective actions for existing buildings
- Examples of corrective actions and efficiency of the different solutions
- Radon and energy efficient buildings

DAY 2 – 12th october

9h - 12h

Connie Box, Terra Nordic Company - Sweden

Radon in existing buildings

- Principles for investigation of a building depending on radon source
- Mitigation techniques among different sources:
 - Soil/Ground sources
 - Houses with crawl space
 - Building material sources
 - Water sources
- Material and products for mitigation techniques

14h-17h

Eamonn Smyth, Technical Adviser, Dept. of Environment - Ireland

Radon in new buildings

- Principles of designing preventive measures
- Design and execution of radon-proof membranes
- Design and execution of sub-slab depressurization
- Air gaps depressurization
- Protecting houses with crawl spaces
- Ventilation measures
- Materials/products applicable to anti-radon measures