



Description of learning activity

Title of learning activity

Thermal insulation cladding

The Learning activity takes place in:

Formedil-Bari

Course/subject:

HE-VET in Energy Efficiency and Thermal Energy/Energy Certification of Buildings

Topic

Thermal insulation

Duration (hours):

12

IDENTIFICATION

Description of students:

The target students are enrolled in the third course of the Higher Education VET Course in Energy Efficiency and Solar Thermal Energy.

Learning goals:

To know the insulating materials, prepare them and know how to apply them.

Content:

1. reference legislation
2. ENERGY EFFICIENCY
3. INSULATING MATERIALS
4. BONDING AND SMOOTHING PHASE
5. FINISHING AND MAINTENANCE
6. PANEL BONDING 7. ARMED SHAVING APPLICATION 8. PRIMER AND FINISH

CONTENTS

SDG's :

- 4. Quality Education
- 5. Gender Equality
- 7. Cheap, reliable, sustainable and modern energy
- 12.1 Responsible consumption and production

How are SDG's visible and implemented in learning activity?

- 4. Quality Education
Quality education is the basis for improving people's lives and achieving sustainable development.
- 5. Gender Equality
This activity has no trouble being made for either male or female students.

SDG's

7. Cheap, reliable, sustainable and modern energy

Thermal cladding or cladding insulation is a building technique that allows for high levels of thermal and acoustic insulation to be achieved while also allowing for significant energy savings. This activity helps students to learn about the building technique that allows to achieve high levels of thermal and acoustic insulation and at the same time also considerable energy savings, which are not taken into consideration in traditional constructions but are imposed in energy efficiency standards.

12.1 By 2030, achieve the sustainable management and efficient use of natural resources. It is possible to build or renovate using natural materials such as cork, reducing the energy impact obtaining a low-consumption house, and healthy for those who live there. Cork is an extremely ductile, natural material made from cork bark, that offers excellent performance for thermal and acoustic insulation.

Principles

Energy Efficiency.
Thermal and acoustic insulation of buildings
Energy analysis and energy certification

Methods:

Energy losses in buildings.
Characteristics of the cork panel
Criteria for thermal and acoustic insulation of the envelope.
Installation of a self-expanded brown cork panel, ideal for cladding solutions for the thermal and acoustic insulation of buildings..
Test interpretation.

Teacher's role:

The teacher will introduce the activity, will give the main guidelines and support students who need assistance throughout the process.
The teacher will demonstrate how to install the cork panels

Student's role:

The students will follow the instructions provided and will be able to independently apply the cork panels and the various support materials

Organising:

The students will be organized into five member groups and through the practical module they will install the cork panels

Learning environment:

The training activities begin with the explanation of the UNI 11715:2018 standard, the reading of the technical and safety data sheets of the products, the insulating materials, the gluing and the hints of maintenance. The students, in groups of 5, will proceed to the 8-hour practical module and evaluate the sustainability characteristics of the materials

Feedback and evaluation:

Once the work has been carried out, the students will write a report where they indicate, based on the materials used, the impact on sustainability and energy efficiency and solutions to improve the results.

FORM



SPECIFICHE DEL PRODOTTO

 Riciclabile	 Traspirante
 Fonoassorbente	 Antivibrazione
 Atossico	 Resistente
 Versatile	 Ecologica
 Isolante Acustico	 Reversibile



