

EUROPASS CERTIFICATE SUPPLEMENT

TITLE OF THE DIPLOMA (ES)

Técnico en Piedra Natural

TRANSLATED TITLE OF THE DIPLOMA (EN)⁽¹⁾

Technician in Natural Stone

(1) This translation has no legal status.

DIPLOMA DESCRIPTION

The holder of this diploma will have acquired the General Competence with regard to:

Extracting and developing natural stone, according to the techniques and processes established, as well as placing and restoring it, managing and maintaining tools and equipment, and complying with the specifications on quality, work safety and environmental protection.

Within this framework, the PROFESSIONAL MODULES and their respective LEARNING OUTCOMES acquired by the holder are listed below:

“Block Cutting”

The holder:

- Receives and stores the block, describing the operations to be performed.
- Performs primary pre-cut and cut of the stone, characterizing the sequence of operations to be performed.
- Makes the secondary cut, relating the material and machinery with the product to be obtained.
- Classifies the resulting products of the cutting, relating the process with the characteristics of the materials.
- Complies with the rules on labour risk prevention and environmental protection, identifying associated risks and the measures and equipment to prevent them.

“Surface Treatments”

The holder:

- Polishes natural stone, relating techniques to the type of material, to obtain the surface finishing with the required quality.
- Applies surface treatments of physical nature, describing the process depending on the characteristics of the rock on which it is applied.
- Makes chemical treatments related to natural stone, identifying techniques and procedures and characterizing the machines, the products and the consumables.
- Classifies and labels products for its storage or shipment, relating their technical, aesthetic and functional features to its applications and destinations.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and equipment to prevent them.

“Production of Pieces”

The holder:

- Cuts boards and thick stone, relating the techniques and the material type with the supplies and the equipment to be used.
- Makes standard and serial production parts, describing and applying machining techniques according to the characteristics, the use and the destination of the final product.
- Makes unique and custom pieces, relating special labour techniques to the material type.
- Carves and exfoliates slate, characterizing the machines and using tools through a manual process.
- Develops and forms pieces with stone and other materials, relating the materials characteristics to the procedures and the desired product.
- Classifies and labels products for its storage or shipment, relating their technical and functional features to their applications and destinations.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks, the measures and the equipment to prevent them.

“Stonework Models”

The holder:

- Characterizes project documents and representations of natural stone works, interpreting the plans representation methodology.
- Prepares sketches and drawings of elements and natural stone works, defining their constructive solutions.
- Draws plans of elements of natural stone works, using graphics design programmes and applying representation rules.
- Makes templates to trace and to verify forms in natural stone works, relating the material used to the manufacturing process.
- Represents elements in three dimensions, identifying the techniques, the tools and the modeling instruments to develop models, molds and scale models.

“Commercialization of Stone works”

The holder:

- Makes measurements of work items relating the units obtained to natural stone elements.
- Analyzes the costs, relating them to the characteristics of the equipment, materials and labor.
- Calculates products and stone work prices, evaluating the costs and benefits.
- Prepares budgets, relating the cost of products and services to the equipment and tools.
- Sets measurements and budgets, using and identifying the specific IT tools.
- Makes the sales process, describing the procedure for product collection and presentation.

“Knowledge and Extraction of Stones”

The holder:

- Classifies rocks, relating their characteristics to natural stone applications.
- Characterizes and applies the techniques for the extraction of natural stone, relating the cutting and drilling machinery to natural stone pulling out blocks.
- Cuts blocks using mechanized pulling out techniques and machinery, describing the process according to the exploitation and machinery characteristics.
- Prepares and performs the necessary drilling for natural stone blocks extraction, relating technical specifications to the operations sequence to be performed.
- Shapes natural stone blocks, characterizing the subdivision techniques with the squaring to be used.

“Sculpture and Assemblage of Natural Stone”

The holder:

- Selects and restates the blocks, relating the characteristics of the material and the type of work to be done to the manufacture of natural stone pieces.
- Roughs and cuts stone, relating the material and the required forms with the techniques, the machinery and the tools.
- Sculpts pieces of natural stone, relating the forms geometry to the use of machines, tools and manuals.
- Assembles sets and pieces of craft in natural stone, characterizing anchor types, mortars, auxiliary systems of placement and sustenance depending on the work to be performed.
- Makes finishing works in natural stone, describing the sequence of operations to be performed and following the specifications and technical documentation.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and equipment to prevent them.

“Restoration of Natural Stone”

The holder:

- Recognizes the main alterations and processes of deterioration, relating them to the intervention techniques in natural stone and its causes.
- Cleans natural stone works, characterizing the techniques and using the appropriate tools on different materials.
- Develops and applies mortar and consolidators with different compositions, textures and colours, characterizing the restoration techniques in surfaces and volumes.
- Replaces pieces and natural stone elements, relating the techniques and the machinery to restitution and anchor proceedings, according to the technical documentation.
- Applies preservative treatments in natural stone elements, following the technical specifications of the products and the instructions.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and the equipment to prevent them.

“Machining Technologies in Natural Stone”

The holder:

- Characterizes machining and natural stone cutting processes, relating the techniques to the machinery and the parts to be manufactured.
- Prepares numerical control programmes, interpreting and analyzing technical documentation, models and materials for stone works machining.
- Prepares numerical control machines, relating the tools and the cutting devices to the techniques and the procedures.
- Controls the machining process, relating the operation of the numerical control programme with the characteristics of the final product.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and equipment to prevent them.

“Assemblage of natural stone”

The holder:

- Reconsiders and conditions the work, describing the operations sequence to be performed according to the technical documentation.
- Builds natural stone factories, relating the techniques and the material type to the tools and the equipment to be used.
- Builds arches and other singular finishings of stonework and ashlar, describing and applying techniques for a stonework constructive resolution of the.
- Places and assembles parts and singular natural stone elements, characterizing the machines and the consumable products.
- Assembles natural stone ventilated facades, relating the techniques and the machinery to anchoring procedures.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and equipment to prevent them.

“Professional Training and Guidance”

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.
- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protective action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.
- Assesses risks derived from his/her activity, analysing the job conditions and the risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan for a small enterprise, identifying the responsibilities of all the agents involved.
- Applies protection and prevention measures, analysing the risk situations in the labour setting of the Technician in Natural Stone.

Business and Entrepreneurial Initiative”

The holder:

- Recognizes the skills related to the entrepreneurial initiative, analysing the requirements derived from the different job positions and business activities.
- Defines the opportunity of creating a small enterprise, assessing the impact on the sphere of action and incorporating ethic values.
- Carries out the activities for the setting-up and the implementation of a company, choosing the legal structure and identifying the associated legal obligations.
- Carries out the basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

“On the Job training”

The holder:

- Identifies the structure and the organization of a company relating both to the different types of services delivered.
- Applies ethical and work habits in the development of his/her professional activity, according to the job characteristics and the procedures established by the company.
- Extracts and shapes natural stone blocks, identifying the techniques and using the resources and machinery available.
- Performs cutting and surface treatments, describing the storage and selection method, using the methods and the equipment of the company.
- Prepares parts and sets, identifying the techniques and using the resources and facilities available for cutting and machining in natural stone.

- Prepares NC programmes, interpreting and analyzing technical documentation, models and materials and using computer tools for stone pieces machining.
- Places pieces and assembles sets of natural stone using adherent materials or mechanical systems, characterizing the machines, the products and the consumables.
- Applies restoration procedures and maintenance for natural stone, following the technical specifications of the products and instructions received.
- Performs models and budgets, defining their constructive solutions, using graphic design programs and applying the rules of representation. Classifies and labels products for its storage or shipment, relating their technical and functional features to their applications and destinations.

RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE DIPLOMA

The Technician in Natural Stone works as an employee or as a self-employed, usually in private, small, medium or large, natural stone or building companies. He/she can also carry on business in craft artistic workshops. He/she develops technical works, following orders and reaching goals set by technicians of a higher level, whom he/she receives instructions from and whom he/she informs.

The most relevant occupations or jobs are the following:

- Stonecutter
- Operator of pulling out and shaping blocks machine
- Chair maker
- Operator of numeric control of natural stone machine
- Milling and stone-turner
- Operator of natural stone cutting machine
- Operator of producing stone machine
- Operator of stone tilling machine
- Operator of rocks polishing machine
- Operator of machinery for stone physical surface treatment
- Carver, cutter and slasher of natural stone
- Operator of chemical treatments for stone
- Packer / packager / labeller
- Operator of placement of handcrafted natural stone sets
- Operator of placement of plates
- Operator of placement of for ventilated facades
- Floor polisher
- Marble worker
- Skilled worker in maintenance and restoration of natural stone
- Worker specialist in jigs, moulds, patterns and models for natural stone work

AWARD, ACCREDITATION AND LEVEL OF THE DIPLOMA

Name of the body awarding the diploma on behalf of the King of Spain: Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

Official duration of the education/ training leading to the diploma: 2000 hours.

Level of the diploma (national or international)

- NATIONAL: Post-Compulsory Secondary Education
- INTERNATIONAL:
 - Level 3 of the International Standard Classification of Education (ISCED3).
 - Level _____ of the European Qualifications Framework (EQF__).

Entry requirements: Holding the Certificate in Compulsory Secondary Education or holding the corresponding access test.

Access to next level of education/training: This diploma may provide access to Higher Technical Cycles provided that an entrance exam is passed.

Legal basis: Basic regulation according to which the diploma is established:

- Minimum teaching requirements established by the State: Royal Decree 1587/2011, of 4 November, according to which the diploma of Technician in Natural Stone and its corresponding minimum teaching requirements are established.

Explanatory note: This document is designed to provide additional information about the specified diploma and does not have any legal status in itself. An Annex I may be added and will be filled in by the corresponding Autonomous Community

INFORMATION ON THE EDUCATION SYSTEM

