

ANNEX 2

List of standards

The articles in this Code establish a series of conformity checks for the products and processes covered by its scope which, in many cases, refer to the UNE, UNE-EN or UNE-EN ISO standards.

The list of the corresponding standards applicable in each case is presented below, together with the dates of approval.

1. UNE Standards

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| UNE 7130:1958 | Determination of the total content of soluble substances in mixing water for concrete. |
| UNE 7131:1958 | Determination of the total sulphate content in mixing water for mortar and concrete. |
| UNE 7132:1958 | Qualitative determination of carbohydrates in mixing water for mortar and concrete. |
| UNE 7133:1958 | Determination of clay nodules in aggregates for producing mortar and concrete. |
| UNE 7134:1958 | Determination of soft particles in coarse aggregates for concrete. |
| UNE 7178:1960 | Determination of chlorides contained in the water used for producing mortar and concrete. |
| UNE 7234:1971 | Determination of the acidity of water intended for mixing mortar and concrete, expressed by its pH. |
| UNE 7235:1971 | Determination of the oils and greases contained in the mixing water for mortar and concrete. |
| UNE 7236:1971 | Sampling for chemical analysis of water intended for mixing mortar and concrete. |
| UNE 7295:1976 | Determination of the content, size typical maximum and grain sized unit of the coarse aggregates in the fresh concrete. |
| UNE 7244:1971 | Determination of particles of low specific weight that can contain the aggregates used in concretes. |
| UNE 23093:1981 | Test of the fire resistance of the structures and elements of construction. |
| UNE 23727:1990 | Fire reaction tests for materials used in construction. Classification of materials used in construction |
| UNE 36065:2000-EX | Ribed weldable steel bars with special characteristics of ductibilidad for reinforced concrete reinforcement. |
| UNE 36067:1994 | Ribed austenitic stainless steel wires for reinforced concrete armors. |
| UNE 36094:1997 | Steel wires and strands for prestressed concrete reinfor-cements. |

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| UNE 36831:1997 | Passive steel reinforcement for structural concrete. Cutting, bending and positioning of bars and meshes. Tolerances. Preferred forms for reinforcement. |
| UNE 36832:1997 | Specification for the execution of welded unions of bars for structural concrete. |
| UNE 41184:1990 | Prestressing systems for post-tensioned reinforcements, definitions, characteristics and tests |
| UNE 53981:1998 | Plastics. Expanded polystyrene (EPS) flooring blocks for one-way floor slabs with prefabricated joists. |
| UNE 67036:1999 | Clay brick products. Moisture expansion test |
| UNE 67037:1999 | Clay brick flooring blocks. Bending resistance test. |
| UNE 80303-2:2001 | Cements with additional characteristics. Part 2: Resistant cements to the water of sea. |
| UNE 80305:2001 | White cements. |
| UNE 80307:2001 | Cements for special uses. |
| UNE 83115:1989 EX | Aggregates for concrete. Measurement of the friability coefficient of sand. |
| UNE 83414:1990 EX | Concrete additions. Fly ash. General recommendations for the addition of fly ash to concretes made with cement type I. |
| UNE 83361:2007 | Self-compacting concrete. Description of fluidity. Runoff test. |
| UNE 83362:2007 | Self-compacting concrete. Description of fluidity in the pre-sence of bars. Runoff test with Japanesse ring. |
| UNE 83363:2007 | Self-compacting concrete. Description of fluidity in the presence of bars. L-box method. |
| UNE 83364:2007 | Self-compacting concrete. Determination of flow time. V-funnel test. |
| UNE 83460-2:2005. | Concrete additions. Silica fume. Part 2. General recommen-dations for using silica fume. |
| UNE 83500-1:1989 | Concretes with steel fibers and/or propylene. Classification and definitions. Steel fibers for concrete reinforcement. |
| UNE 83500-2:1989 | Concretes with steel fibers and/or propylene. Classification and definitions. Fibers of propylene for the concrete reinforcement. |
| UNE 83503:2004 | Concretes with fibers. Measurement of the workability by means of the inverted cone. |
| UNE 83510:2004 | Concretes with fibers. Determination of the toughness index and resistance to first crack. |
| UNE 83512-1:2005 | Concretes with fibers. Determination of the steel fiber content. |
| UNE 83512-2:2005 | Concretes with fibers. Determination of the polypropylene fiber content. |
| UNE 83952:2008 | Durability of the concrete. Mixing waters and aggressive waters. Determination of the pH. Potentiometric method. |
| UNE 83954:2008 | Durability of the concrete. Aggressive waters. Determination of the ion ammonium. |
| UNE 83955:2008 | Durability of the concrete. Aggressive waters. Determination of the ion magnesium. |

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| UNE 83956:2008 | Durability of the concrete. Mixing waters and aggressive waters. Determination of the ion sulphate. |
| UNE 83957:2008 | Durability of the concrete. Mixing waters and aggressive waters. Determination of the dry remainder |
| UNE 83962:2008 | Durability of the concrete. Aggressive grounds. Determination of the Baumann-Gully acidity degree. |
| UNE 83963:2008 | Durability of the concrete. Aggressive grounds. Determination of the ion sulphate. |
| UNE 112010:1994 | Corrosion in reinforcements. Determination of chlorides in hardened and placed concrete. |
| UNE 112011:1994 | Corrosion in reinforcements. Determination of the carbonation depth in hardened and placed concrete. |
| UNE 146507-2:1999-EX | Aggregate tests. Determination of the potential reactivity of aggregates. Chemical method. Part 2. Determination of the alkali-carbonate reactivity |
| UNE 146508-2:1999-EX | Aggregate test. Determination of the potential alkali-silica and alkali-silicate reactivity of aggregates. Accelerated method using mortar test specimens. |
| UNE 146509-2:1999-EX | Determination of the potential reactivity of aggregates with alkalines. Concrete prisms method. |
| UNE 146901:2002 | Designation of aggregates |

2. UNE- EN Standards

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| UNE-EN 196-1:2005. | Methods of testing cement. Part 1. Determination of strength. |
| UNE-EN 196-2:2006. | Methods of testing cement. Part 2. Chemical analysis of cement |
| UNE-EN 196-3:2005. | Methods of testing cement. Part 3. Determination of setting time and soundness. |
| UNE-EN 197-1-2000. | Cement. Part 1. Composition, specifications and conformity criteria for common cements. |
| UNE-EN 197-1-2000/A1 :2005. | Cement. Part 1. Composition, specifications and conformity criteria for common cements. |
| UNE-EN 197-4:2005. | Cement. Part 4. Composition, specifications and conformity criteria for low early strength blastfurnace cements |
| UNE-EN 206-1:2000. | Concrete. Part 1:Specifications, performance, production and conformity. |
| UNE-EN 287-1:2004. | Qualification test of welders. Fusion welding. Part 1. Steels. |
| UNE-EN 445:1996. | Grout for prestressing tendons. Test methods. |
| UNE-EN 447:1996. | Grout for prestressing tendons. Specification for common grout |
| UNE-EN 450:1995. | Fly ash for concrete. Definitions, requirements and quality control. |
| UNE-EN 450:2006. | Fly ash for concrete. Part 1. Definitions, specifications and conformity criteria. |
| UNE-EN 451-1:2006. | Method of testing fly ash. Part 1. Determination of free calcium oxide content. |

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| UNE-EN 451-2:1995. | | Method of testing fly ash. Part 2. Determination of fineness by wet sieving. |
| UNE-EN 523:2005. | | Steel strip sheaths for prestressing tendons. Terminology, requirements, quality control. |
| UNE-EN 524:1997. | | Steel strip sheaths for prestressing tendons. Test methods. |
| UNE-EN 933-1:1998. | | Tests for geometrical properties of aggregates.Part 1. Determination of particle size distribution. Sieving method |
| UNE-EN 933-2:1996. | | Tests for geometrical properties of aggregates.Part 2. Determination of particle size distribution. Test sieves, nominal size of apertures |
| UNE-EN 933-3:1997. | | Tests for geometrical properties of aggregates.Part 3. Determination of particle shape. Flakiness index. |
| UNE-EN 933-4:2000. | | Tests for geometrical properties of aggregates.Part 4. Determination of particle shape. |
| UNE-EN 933-8:2000. | | Tests for geometrical properties of aggregates. Part 8. Assessment of fines. Sand equivalent test. |
| UNE-EN 933-9:1999. | | Tests for geometrical properties of aggregates. Part 9. Assessment of fines. Methylene blue test |
| UNE-EN 934-2:2002. | | Admixtures for concrete, mortar and grout. Part 2. Concrete admixtures. Definitions, requirements, conformity, marking and labelling. |
| UNE-EN 2/A1:2005 | 934- | Admixtures for concrete, mortar and grout. Part 2. Concrete admixtures. Definitions, requirements, conformity, marking and labelling. |
| UNE-EN 2/A2:2006 | 934- | Admixtures for concrete, mortar and grout. Part 2. Concrete admixtures. Definitions, requirements, conformity, marking and labelling. |
| UNE-EN 934-6:2002. | | Admixtures for concrete, mortar and grout. Part 6. Sampling, conformity control and evaluation of conformity. |
| UNE-EN 11:2000. | 1015- | Methods of test for mortar for masonry. Part 11. Determination of flexural and compressive strength of hardened mortar. |
| UNE-EN 2:1999. | 1097- | Tests for mechanical and physical properties of aggregates. Part 2. Methods for the determination of resistance to fragmentation. |
| UNE-EN 6:2001. | 1097- | Tests for mechanical and physical properties of aggregates. Part 6. Determination of particle density and water absorption. |
| UNE-EN 1:2000. | 1363- | Fire resistance tests. Part 1. General requirements. |
| UNE-EN 2:2000. | 1363- | Fire resistance tests. Part 2. Alternative and additional procedures. |
| UNE-EN 2:1999. | 1367- | Tests for thermal and weathering properties of aggregates. Magnesium sulfate test. |
| UNE-EN 1:2005. | 1504- | Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity. Part 1. Definitions. |

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| UNE-EN 2:2005. | 1504- | Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity. Part 1. Systems of superficial protection of the concrete. |
| UNE-EN 1504-8:2005 | | Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity. Part 8. Evaluation and quality control of the conformity. |
| UNE-EN 10:2006 | 1504- | Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity. Part 10. Application in situ of products and systems and quality control of the works. |
| UNE-EN 1520:2003. | | Prefabricated reinforced components of lightweight aggregate concrete with open structure. |
| UNE-EN 1542:2000. | | Products and systems for the protection and repair of concrete structures. Test methods. Measurement of bond strength by pull-off. |
| UNE-EN 1:1999. | 1744- | Tests for chemical properties of aggregates. Part 1. Chemical analysis. |
| UNE-EN 1770:1999. | | Products and systems for the protection and repair of concrete structures. Test methods. Determination of the coefficient of thermal expansion. |
| UNE-EN 1990:2003. | | Eurocode. Basis of structural design. |
| UNE-EN 2:2004. | 1991-1- | Eurocode 1. Actions on structures. Part 1-2. General actions. Actions on structures exposed to fire. |
| UNE-EN :2002. | 10002- | Tensile testing of metallic materials. Part 1. Method of test at ambient temperature. |
| UNE-EN 10080:2006. | | Steel for the reinforcement of concrete. Weldable reinforcing steel. General. |
| UNE-EN 1:2006. | 12350- | Testing fresh concrete. Part 1. Sampling. |
| UNE-EN 2:2006. | 12350- | Testing fresh concrete. Part 2. Slump test. |
| UNE-EN 3:2006. | 12350- | Testing fresh concrete. Part 3. Vebe test. |
| UNE-EN 6:2006. | 12350- | Testing fresh concrete. Part 6. Determination of density. |
| UNE-EN 7:2001. | 12350- | Testing fresh concrete. Part 7. Air content. Pressure methods. |
| UNE-EN 1:2001. | 12390- | Testing hardened concrete. Part 1. Shape, dimensions and other requirements for specimens and moulds. |
| UNE-EN 2:2001. | 12390- | Testing hardened concrete. Part 2. Making and curing specimens for strength tests. |
| UNE-EN 3:2003. | 12390- | Testing hardened concrete. Part 3. Compressive strength of test specimens. |
| UNE-EN 5:2001. | 12390- | Testing hardened concrete. Part 5. Flexural strength of test specimens. |
| UNE-EN 6:2001 | 12390- | Testing hardened concrete. Part 6. Tensile splitting strength of test specimens. |

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| UNE-EN 8:2001. | 12390- | Testing hardened concrete. Part 8. Depth of penetration of water under pressure. |
| UNE-EN 1:2001. | 12504- | Testing concrete in structures. Part 1. Cored specimens. Taking, examining and testing in compression. |
| UNE-EN 2:2002. | 12504- | Testing concrete in structures. Part 2. Non-destructive testing. Determination of rebound number. |
| UNE-EN 4:2006. | 12504- | Testing concrete in structures. Part 4. Determination of ultrasonic pulse velocity. |
| UNE-EN 12620:2003. | | Aggregates for concrete. |
| UNE-EN 12620/AC:2004. | | Aggregates for concrete. |
| UNE-EN 12696:2001. | | Cathodic protection of the steel in the concrete. |
| UNE-EN 12794:2006. | | Precast concrete products. Foundation piles. |
| UNE-EN 1:2003. | 13055- | Aggregates light. Part 1: Aggregates for concrete, mortar and injected |
| UNE-EN13224:2005 | | Precast concrete products. Ribbed floor elements. |
| UNE-EN13225:2005 | | Precast concrete products. Linear structural elements. |
| UNE-EN 1:2006 | 13263- | Silica fume for concrete. Part 1. Definitions, requirements and conformity criteria |
| UNE-ENV 3:2004. | 13381- | Test methods for determining the contribution to the fire resistance of structural members. Part 3. Applied protection to concrete members. |
| UNE-EN13501:2002 | | Classification based on the behavior against fire of construction products and elements for the construction. Part 1: Classification from data collected in tests of reaction to the fire. |
| UNE-EN13577:2008 | | Chemical attack to the concrete.Determination of the content of aggressive carbon dioxide in the water. |
| UNE-EN13693:2005 | | Precast concrete products. Special roof elements. |
| UNE-EN 14216:2005. | | Cement. Composition, specifications and conformity criteria for very low heat special cements. |
| UNE-EN 14647:2006. | | Calcium aluminate cement. Composition, specifications and conformity criteria. |
| UNE-EN14651:2007 | | Test method for metallic fibred concrete. Measuring the flexural tensile strength (limit of proportionality (LOP), residual) |
| UNE-EN 14721:2007 | | Test method for metallic fibred concrete.Determination of the content of fibres in fresh and hardened concrete. |
| UNE-EN 45011:1998 | | General requirements for bodies operating product certification systems) |

3. UNE-EN ISO Standards

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| UNE-EN ISO 377:1998. | | | Steel and steel products. Location and preparation of samples and test pieces for mechanical testing. (ISO 377:1997). |
| UNE-EN ISO 9001:2000. | | | Quality management systems. Requirements. (ISO 9001:2000) |
| UNE-EN ISO 14001:2004 | | | Environmental management systems. Requirements with guidance for use. (ISO 14001:2004). |
| UNE-EN ISO 15614-1:2005. | ISO | 15614- | Specification and qualification of welding procedures for metallic materials. Welding procedure test. Part 1: Welding by arc and with gas and welding by arc of nickel and its alloys. (ISO 15614-1: 2004) |
| UNE-EN ISO 15630-1:2003. | ISO | 15630- | Steel for the reinforcement and prestressing of concrete. Test methods. Part 1. Reinforcing bars, wire rod and wire for reinforced concrete. (ISO 15630-1:2002) |
| UNE-EN ISO 15630-2:2003. | ISO | 15630- | Steel for the reinforcement and prestressing of concrete. Test methods. Part 2. Welded fabric. (ISO 15630-2:2002) |
| UNE-EN ISO 15630-3:2003. | ISO | 15630- | Steel for the reinforcement and prestressing of concrete. Test methods. Part 3. Prestressing steel. (ISO 15630-3:2002) |

4. UNE-EN ISO/IEC Standards

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| UNE-EN ISO/IEC 17021:2006. | | | Conformity assessment. Requirements for the auditing and certification of management systems bodies. (ISO/IEC17021: 2006) |
| UNE-EN ISO/IEC 17025:2005. | | | Conformity assessment. General requirements for the competence of testing and calibration laboratories. |