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**Naravni kamen - Terminologija**

Natural stone - Terminology

Naturstein - Terminologie

Pierre naturelle - Terminologie

**ITEH STANDARD PREVIEW**  
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01.040.73	Rudarstvo in rudnine (Slovarji)	Mining and minerals (Vocabularies)
01.040.91	Gradbeni materiali in gradnja (Slovarji)	Construction materials and building (Vocabularies)
73.020	Rudarstvo in kamnolomsko izkopavanje	Mining and quarrying
91.100.15	Mineralni materiali in izdelki	Mineral materials and products

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**Natural stone - Terminology**

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This European Standard was approved by CEN on 20 October 2001.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## EN 12670:2001 (E)

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**Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 246 "Natural Stone", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This draft standard is one of a series of standards for natural stone products including denomination, test methods and product standards.

Annexes A and B are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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**EN 12670:2001 (E)****Introduction**

The term Natural Stone groups several rock types with marked geological differences. The extraction elaboration and commerce of Natural Stone have set a very particular vocabulary. Many of these terms have been taken from the popular or quarrymen language, which sometimes is far from scientific definitions; this often results in a great deal of confusion.

This standard establishes the terminological bases for geological and petrologic definitions of Natural Stone and its classification. References to definitions of natural stone products, defined in other European Standards, are provided when necessary. It also incorporates most of the popular or commercial terminology.

The terminology covers the fields of geology, mining, processing, marketing and products of Natural Stone. The included scientific classifications allows to set the scientific name of the stone varieties.

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## 1 Scope

This European Standard defines the recommended terminology covering scientific, and technical terms, test methods, products, and the classification of Natural Stones.

## 2 Terminology of Natural Stone

NOTE For the purposes of this European Standard the following abbreviations apply:

e.g. for example (Latin *exempli gratia*);

i.e. that is (Latin *id est*).

### 2.1 Geological terms

2.1.1 **accessory minerals:** Rock-forming minerals that occur in such small amounts that they are not included in the classification of the rock.

NOTE Accessory minerals can be used to state precisely the name of the rock, e.g. biotite granite. (See also EN 12440).

2.1.2 **acid rock:** Igneous rock that contains more than 65 % of silica.

2.1.3 **actinolite:** Ca-Mg-Fe-amphibole. See amphibole formula.

2.1.4 **agate:** Cryptocrystalline variety of silica, showing a variegated banded structure and waxy luster.

2.1.5 **agglomerate:** Extrusive pyroclastic rock of consolidated or unconsolidated coarse volcanic fragments (with diameters greater than 64 mm), in which rounded pyroclasts predominate.

2.1.6 **alabaster:** Fine grained, compact variety of gypsum, usually white or pale coloured and translucent.

2.1.7 **albite:** Sodium plagioclase, formula  $\text{Na}[\text{AlSi}_3\text{O}_8]$ . See plagioclase.

2.1.8 **alkali feldspar:** The alkali-rich feldspars microcline, orthoclase, sanidine, albite, with less than 5% anorthite. See feldspar and plagioclase.

2.1.9 **allochems:** One of the several varieties of discrete and organized carbonate aggregates that serve as the coarser framework grains in most mechanically deposited limestones. Important allochems include: silt, sand, gravelsize intraclasts ooids; pellets; lumps and fossils or fossil fragments.

2.1.10 **allotriomorphic; anhedral; xenomorphic:** Term applied to minerals which show in thin sections no characteristic or rational faces, suggested by its crystalline structure.

2.1.11 **alteration:** Changes of the mineralogical composition of a rock brought about by physical, chemical or biological means, including actions of hydrothermal solutions and weathering processes. Differs from metamorphism in being milder, more localized and not restricted to high temperatures.

2.1.12 **alumina; corundum:** A mineral, formula  $\text{Al}_2\text{O}_3$ . Used in fine polishing.

2.1.13 **amorphous:** Mineral that does not have a crystalline structure.

2.1.14 **amphibole:** Family of dark ferromagnesian silicate minerals, general formula  $\text{A}_{2-3}\text{B}_5(\text{Si,Al})_8\text{O}_{22}(\text{OH})_2$ , where A= Mg,  $\text{Fe}^{2+}$ , Ca, Na; B=Mg,  $\text{Fe}^{2+}$ ,  $\text{Fe}^{3+}$ , Al.

2.1.15 **amphibolite:** Metamorphic rock consisting mainly of amphibole and plagioclase. See 3.2.3.1

2.1.16 **amygdaloidal:** Fabric of volcanic rocks where vesicles are present, which are full or partially filled with secondary minerals.

2.1.17 **analcime:** A mineral  $\text{Na}[\text{AlSi}_2\text{O}_6]\text{H}_2\text{O}$  of the zeolite group, which can occur in basalts. See

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also zeolite, secondary minerals.

- 2.1.18 **anhedral**: See allotriomorphic.
- 2.1.19 **anisotropy**: Property of some minerals and rocks of having different behaviour in different directions. i.e. hardness in kyanite, thermal expansion in calcite, flexural resistance in slate.
- 2.1.20 **andalusite**: Mineral  $\text{Al}_2\text{SiO}_5$  polymorphous with sillimanite and kyanite.
- 2.1.21 **andesite**: Volcanic rock composed mainly of plagioclase (oligoclase-andesine) and one or more of the dark minerals amphibole, pyroxene, and biotite.
- 2.1.22 **anhydrite**: Sedimentary evaporitic mineral, formula  $\text{CaSO}_4$ .
- 2.1.23 **ankerite**: Mineral of dolomite group with calcium and iron.
- 2.1.24 **anorthite**: Calcic plagioclase,  $\text{Ca} [\text{Al}_2\text{Si}_2\text{O}_8]$ . See plagioclase.
- 2.1.25 **anorthoclase**: Sodium-rich mineral of the alkali feldspar group, formula  $(\text{Na},\text{K})\text{AlSi}_3\text{O}_8$ . Its composition, in term of the mole fraction of the orthoclase component (or) and the albite component (ab) is  ${}_{40}\text{ab}_{60}$  to  ${}_{10}\text{ab}_{90}$ . See feldspar, microcline, plagioclase, orthoclase.
- 2.1.26 **anorthosite**: Plutonic rock mainly composed of plagioclase and little or no dark minerals. See 3.2.1.1.
- 2.1.27 **antiperthite**: Feldspar containing intergrowth lamellae of orthoclase in albite. See also feldspar and perthite.
- 2.1.28 **apatite**: Group of minerals, formula  $\text{Ca}_5(\text{PO}_4)_3(\text{F},\text{OH},\text{Cl})$ .
- 2.1.29 **aplite**: Fine grained dyke rock of granitic composition.
- 2.1.30 **aragonite**: Mineral, polymorphous with calcite, formula  $\text{CaCO}_3$ .
- 2.1.31 **arenite**: Consolidated sedimentary rock mainly composed of sand-size detrital fragments or mineral grains, usually the term is used with a prefix that refers to its composition or genesis, e.g. quartzarenite. See also 3.2.2.4.
- 2.1.32 **argillite**: Consolidated sedimentary rock mainly composed wholly of detrital clay-size particles or clay minerals.
- 2.1.33 **arkose**: Sedimentary detrital rock with less than 75 % quartz and a high content of feldspar grains. See 3.2.2.4.
- 2.1.34 **augen fabric; ocellar fabric**: Fabric in some rocks, usually metamorphic, consisting of ellipsoidal or lens-shaped porphyroblasts, crystals, or fragments, rounded and enveloped by the foliation, resembling eyes (augen) in a cross section.
- 2.1.35 **augite (clinopyroxenes)**: Mineral of the pyroxene group (clinopyroxenes), general formula  $(\text{Ca},\text{Na}) (\text{Mg},\text{Fe}^{2+},\text{Al}) (\text{Si},\text{Al})_2\text{O}_6$
- 2.1.36 **banded**: Rock having alternating nearly parallel layers that differ in colour, fabric or mineral composition, and because of that it shows alternating bands in a cross section.
- 2.1.37 **basalt (basanite)**:
- Scientifically: volcanic rock consisting essentially of plagioclase (labradorite-anorthite) and pyroxene and includes a fine grained to dense fabric (See 3.2.1.3).
  - Commercially: basalt is a natural stone as per the scientific definition of basalt and other rocks such as basalt, picrites, diabases, dolerites and microgabbros.
- 2.1.38 **basic**: Igneous rock with more than 45 % and less than 52 % of silice.
- 2.1.39 **bedding plane**:
- A planar or nearly planar surface that visibly separates the individual beds, layers or strata, especially in sedimentary rocks.



- b) Any surface, even when conspicuously bent or deformed by folding.
- 2.1.40 **bioclastic rock**: Sedimentary rock consisting of fragments and broken remains of organisms; e.g. limestone composed of shell fragments.
- 2.1.41 **biotite**: Black rock-forming mineral of the mica group, formula  $K(Mg,Fe^{2+})_3(Al,Fe^{3+})Si_3O_{10}(OH)_2$ .
- 2.1.42 **blasto**: Prefix used to describe the metamorphic rock fabrics denoting the presence of residual crystals or pre-existing fabric modified by metamorphism, but still recognized; e.g. blastogranular, blastomylonitic.
- 2.1.43 **breccia**:
- a) A coarse-grained clastic sedimentary rock composed by angular rock fragments held together by a mineral cement or in a fine grained matrix.
- b) Rock consisting of highly angular coarse fragments, of whatever origin, for example, volcanic breccia (explosive origin), fault breccia (tectonic crushing origin), intraclastic breccia (sedimentary origin).
- 2.1.44 **Buntsandstein**: The lower part of Triassic Period. See 3.1.
- 2.1.45 **calcarenite**: Limestone consisting predominantly of recycled detrital calcite grains of sand size.
- 2.1.46 **calcareous**: Containing calcium carbonate.
- 2.1.47 **calcilutite**: Limestone consisting predominantly of detrital calcite grains or fragments of silt or clay size.
- 2.1.48 **calcirudite**: Limestone consisting predominantly of detrital calcite grains or fragments larger than sand size. See rudite.
- 2.1.49 **calcisiltite**: Limestone consisting predominantly of detrital calcite grains or fragments of silt size.
- 2.1.50 **calcite**: Mineral, very common in some sedimentary and metamorphic rocks, formula  $CaCO_3$ ; trimorphous with aragonite and vaterite.
- 2.1.51 **calcitic dolomite**: Carbonate rock which 50 % to 89 % of the mineral dolomite. (See also 3.2.2.2).
- 2.1.52 **calcitic marble**: a marble containing more than 90 % of calcite.
- 2.1.53 **calc-silicate marble**: Marble with calcium and partially magnesium silicate minerals. See marble, opicalcrite, 3.2.3.2
- 2.1.54 **calc-schist; carbonate mica-schist**: Schist with carbonate minerals, in a lesser amount than a marble. See schist, 3.2.3.
- 2.1.55 **Cambrian**: The oldest system and period into which the Palaeozoic is divided. See 3.1.
- 2.1.56 **carbonate** : Mineral containing  $CO_3^{2-}$ ; calcite, dolomite, magnesite, and siderite are frequent rock-forming carbonate minerals.
- 2.1.57 **carbonate rock**: Rock consisting chiefly of carbonate minerals, especially a sedimentary rock; limestone, dolomite, and carbonatite are examples of carbonate rocks. See 3.2.2.2.
- 2.1.58 **Carboniferous**: Period and system of the Palaeozoic. See 3.1.
- 2.1.59 **cataclastic**: Pertaining to the structure and texture produced in a rock by severe mechanical stress during dynamic metamorphism; bending, breaking, and fragmentation of the mineral grains are characteristic features; also said of the rocks exhibiting such structure. (See also breccia).
- 2.1.60 **cement**: Mineral materia, usually chemically precipitated, that occurs in the spaces among the individual grains of a consolidated sedimentary rock, thereby binding the grains together as a rigid mass; silica, carbonates and iron oxides are common cements.

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- 2.1.61 **Cenozoic:** Era of geologic time. See 3.1.
- 2.1.62 **chalcedony:** Cryptocrystalline commonly fibrous variety of silica.
- 2.1.63 **chalcopyrite:** Mineral formula  $\text{CuFeS}_2$ .
- 2.1.64 **chalk:** Soft fine-grained limestone, consisting almost wholly of calcitic remains from microorganisms, usually white.
- 2.1.65 **charnockite:** Orthopyroxene-bearing. Member of granite family.
- 2.1.66 **chert:** Hard, compact and dense sedimentary rock, consisting dominantly of cryptocrystalline and/or amorphous silica; flint is a variety of chert.
- 2.1.67 **chlorite:** Group of clay minerals, some of them of green colour, general formula  $(\text{Mg}, \text{Fe}^{2+}, \text{Fe}^{3+})_6\text{AlSi}_3\text{O}_{10}(\text{OH})_8$ .
- 2.1.68 **chloritoid:** Micaceous mineral, formula  $\text{Fe}_2\text{Al}_4\text{Si}_2\text{O}_{10}(\text{OH})_4$ .
- 2.1.69 **chromite:** Mineral formula  $(\text{Fe}, \text{Mg})(\text{Cr}, \text{Al})_2\text{O}_4$ .
- 2.1.70 **cipollino marble:** Calc silicate marble with band coloured structure, consisting in layers of calcite or dolomite grains mixed with variable quantities of silicate minerals.
- 2.1.71 **clast:** mineral or rock fragment composing clastic sedimentary rocks.
- 2.1.72 **clastic:** Pertaining to a rock or sediment composed principally of broken fragments that are derived from preexisting minerals, rocks or organic structures and that have been transported some distance from its original place.
- 2.1.73 **clay:** Loose, extremely fine grained sediment or soft rock composed of particles with diameters less than 0,002 mm, mainly of clay minerals and other minerals, especially quartz, feldspars, and carbonates (see 3.2.2.1).
- 2.1.74 **clay minerals:** Group of minerals, essentially hydrous silicates of aluminium with a layered crystalline structure; iron, magnesium, potassium, and other cations are also present in their formula; the most common clay minerals belong to illite, montmorillonite, and kaolinite mineral subgroups.
- 2.1.75 **clay slate; shale:** A weakly metamorphosed claystone with intermediate character between a claystone and a true slate.
- 2.1.76 **claystone:** A rock with more than 67 % claysized minerals.
- 2.1.77 **cleavage:**
- Tendency of a rock to split along closely spaced planar surfaces, originated by recrystallization and strain during metamorphism and tectonic deformation; the type of rock, strain intensity, and metamorphic grade, control the type of cleavage developed; see slaty cleavage, crenulation cleavage, schistosity, and rough cleavage;
  - The splitting of a mineral along its crystallographic planes, thus reflecting crystal structure.
- 2.1.78 **columnar:** A structure of some volcanic rocks, such as basalt, consisting of parallel, prismatic columns, polygonal in cross section, nearly perpendicular to the top and the bottom of the flow.
- 2.1.79 **comb layering; Willow-Lake layering:** A fabric of igneous rocks consisting of bands of elongated crystals with nearly vertical mineral-elongation relative to the border of the bands.
- 2.1.80 **concretion:** A collective term applied loosely to various primary and secondary segregations of diverse origin, including irregular nodules, spherulites, crystalline aggregates, geodes, septarias and related bodies.
- 2.1.81 **conglomerate:** Coarse-grained sedimentary rock composed of rounded to subangular fragments (pebbles, cobbles, boulders), set in a fine-grained matrix of sand or clay, and commonly cemented.

- 2.1.82 **consertal:** Fabric of rocks showing toothed border lines between two minerals.
- 2.1.83 **contact (between grains):** Mode of relation between grains of rock-forming minerals; i.e. by points, by lines, within the matrix.
- 2.1.84 **coral rock:** Coral reef limestone.
- 2.1.85 **corona:** A fabric of igneous rocks where minerals are surrounded by a seam of one or more other minerals; particular examples are the rapakivi fabric and kelyphitic rims.
- 2.1.86 **cordierite:** A silicate mineral, common in some metamorphic and magmatic rocks, formula  $(\text{Mg,Fe})_2\text{Al}_4\text{Si}_5\text{O}_{18}$ .
- 2.1.87 **Cretaceous:** The youngest of the periods and systems included in the mesozoic. (See 3.1).
- 2.1.88 **cross-bedding:** Cross-stratification with thick individual beds
- 2.1.89 **crossed twinning:** Lamellae of mineral twins after two laws making in thin sections a grid as seen in microcline.
- 2.1.90 **cryptocrystalline:** Composed of crystal so fine that they cannot be recognized even under polarizing microscope.
- 2.1.91 **crystal zoning:** A fabric of igneous rocks with concentric layers in the minerals made by inclusions or variations in chemical composition e.g. in plagioclases.
- 2.1.92 **dacite:** Volcanic rock with quartz, plagioclase, alkali feldspar, and often dark components. (See 3.2.1.3).
- 2.1.93 **dark mineral; mafic mineral:** In thin section dark-coloured rock-forming minerals, e.g. olivine, pyroxenes, amphiboles and biotite.
- 2.1.94 **decussate:** Fabric of granoblastic metamorphic rocks in which the crystals tend to be elongated or prismatic and randomly oriented.
- 2.1.95 **dedolomitization:** The change of dolomite into calcite and periclase (brucite).
- 2.1.96 **deformation fabric; tectonic fabric:** A rock fabric resulting from deformation, as lineations, cleavages, schistosity, folds, preferred orientations of crystals etc. (See fabric).
- 2.1.97 **devitrification:** The process by which glassy parts of rocks change into crystalline minerals.
- 2.1.98 **Devonian:** A system of the Paleozoic Erathem above the Silurian and below the Carboniferous. See also 3.1.
- 2.1.99 **diabase:** Altered basaltic rocks like dolerites.
- 2.1.100 **diagenesis:** Process of mineralogical changes in sediments after deposition which result in a consolidated rock.
- 2.1.101 **diorite:** Plutonic rock mainly composed of plagioclase (oligoclase-andesine), hornblende, and/or biotite.
- 2.1.102 **dip:** Inclination of a bed to the horizontal; the dip is at a right angle to the strike.
- 2.1.103 **dolerite:** Igneous rock with basaltic composition, commonly with ophitic fabric, occurring in dykes. See also diabase.
- 2.1.104 **dolomite:**
- 1) The mineral  $\text{CaMg}(\text{CO}_3)_2$ , commonly with some Fe replacing Mg (ankerite).
  - 2) Carbonate rock with high percentage (90 % to 100 %) of the mineral dolomite. (See 3.2.2.2).
- 2.1.105 **dolomitic limestone:** Carbonate rock with a certain percentage (10 % to 49 %) of the mineral dolomite. (See 3.2.2.2)
- 2.1.106 **dolomitic marble; magnesian marble:** a marble containing dolomite more than 90 % dolomite.

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- 2.1.107 **dyke (or dike):** A tabular or nearly tabular body of igneous rock that cuts across the geological structure of other rocks.
- 2.1.108 **eclogite:** Metamorphic rock consisting essentially of garnet and sodic pyroxene (omphacite)..
- 2.1.109 **elongate fabric:** Fabric of granoblastic metamorphic rocks in which the crystals tend to be elongated with preferred orientation.
- 2.1.110 **epidote:** A mineral  $\text{Ca}_2(\text{Fe,Al})\text{Al}_2[\text{O}(\text{OH})(\text{SiO}_4)(\text{Si}_2\text{O}_7)]$  common in some metamorphic rocks or as alteration product.
- 2.1.111 **equigranular fabric:** Rock containing crystals of a similar size.
- 2.1.112 **erathem:** Chronostratigraphic unit. An erathem consists of several adjacent systems.
- 2.1.113 **essential minerals; main minerals:** Those minerals existing in a rock that are used for its classification in main petrographic families or classes; see quartz, alkali feldspar, plagioclase, feldspathoids. (See also EN 12407).
- 2.1.114 **essexite:** Plutonic rock composed essentially of plagioclase, alkali feldspar, feldspathoids e.g. nepheline, and dark minerals.
- 2.1.115 **eucrystalline; eucrystallized:** Well crystallized igneous rocks.
- 2.1.116 **ehedral; idiomorphic:** A mineral grain in an igneous rock which is bounded entirely by its crystal faces.
- 2.1.117 **exfoliation:** The process by which concentric or parallel scales of rock are spalled from the surface of a large rock mass.
- 2.1.118 **extrusive rocks; volcanic rocks:** Igneous rocks that come to the surface of the earth in a molten condition.
- 2.1.119 **fabric:** Spatial arrangement and geometrical relationships of the rock elements, as observed in hand specimen or by optical microscope.
- 2.1.120 **fabric, depositional:** A fabric resulting from deposition of sediments or gravity differentiation of igneous rocks.
- 2.1.121 **fabric element:** Rock component that acts as a unit in deformation.
- 2.1.122 **fabric, growth:** Fabric grown without stress and movement.
- 2.1.123 **facies:** General appearance or nature of a rock mass, differentiating such unit from adjacent or associated units.
- 2.1.124 **fault:** A fracture with displacement of the sides.
- 2.1.125 **feldspar:** Group of silicate minerals with the chemical composition  $\text{KAISi}_3\text{O}_8$  (orthoclase, microcline),  $\text{NaAlSi}_3\text{O}_8$  (albite),  $\text{CaAl}_2\text{Si}_2\text{O}_8$  (anorthite) with certain miscibility of these components; see anorthite, microcline, orthoclase, sanidine, plagioclase.
- 2.1.126 **feldspathic:** Containing feldspar in a considerable amount.
- 2.1.127 **feldspathic sandstone; subarkose:** A sandstone with less feldspar than an arkose (less than 15 % matrix, between 75 % and 95 % quartz, more feldspar, and less fragments of rocks). (See 3.3.2.2).
- 2.1.128 **fels:** A suffix added to the name of a mineral, indicating a metamorphic rock with more than 80 % of that mineral, e.g. albite-fels, quartz-fels=quartzite. (See 3.2.3.1).
- 2.1.129 **felsic:** Containing feldspar, feldspathoids and other light silicates like quartz.
- 2.1.130 **ferruginous:** Containing iron.
- 2.1.131 **fissile bedding:** Bedding with laminae less than 2 mm in thickness.
- 2.1.132 **fissility:** The property of splitting easily along closely spaced parallel planes.

- 2.1.133 **fissure**: A visible crack or fracture in the rocks.
- 2.1.134 **flint**: Variety of chert.
- 2.1.135 **flow fabric**: Fluidal fabric in the groundmass of rocks shown by a wavy or swirling pattern of the constituent minerals.
- 2.1.136 **fluorite**: A mineral, formula  $\text{CaF}_2$ .
- 2.1.137 **foidite (feldspathoidite)**: A volcanic rock with high percentage (more than 60 %) of foids. (See 3.2.1.3).
- 2.1.138 **foiolite (feldspathoidolite)**: A plutonic rock with high percentage (more than 60 %) of foids. (See 3.2.1.1).
- 2.1.139 **foids (feldspathoids)**: Minerals similar to the feldspars but with less silica content e.g. leucite, nepheline, sodalite.
- 2.1.140 **fold**: A bend in formerly planar or tabular rock bodies.
- 2.1.141 **foliation**: Planar arrangement of components like minerals in any type of rock, especially the planar structure that results from flattening, segregation and other processes undergone by the grains in a metamorphic rock. (See also cleavage).
- 2.1.142 **formation**: The basic stratigraphic unit identified by lithic characteristics and fossils.
- 2.1.143 **fossil**: The remains or marks of animals or plants in sedimentary rocks.
- 2.1.144 **gabbro**: A coarsed grained plutonic rock consisting of plagioclase (labradorite-anorthite), clinopyroxene, and other minerals like orthopyroxene, and olivine. (See 3.2.1.1).
- 2.1.145 **garnet**: A group of minerals of formula  $x_3y_2(\text{SiO}_4)_3$  where  $x=\text{Ca, Mg, Fe}^{2+}, \text{Mn}^{2+}$  and  $y=\text{Al, Fe}^{3+}, \text{Mn}^{3+}, \text{V}^{3+}, \text{Cr}$ . (standards.iteh.ai)
- 2.1.146 **geode**: Globular bodies in sediments often containing fossils and crystals.
- 2.1.147 **geological structure**: [SIST EN 12670:2002](https://standards.iteh.ai/catalog/standards/sist/7def9d6d-9368-4f0a-a25d-38a304040101/7def9d6d-9368-4f0a-a25d-38a304040101)  
<https://standards.iteh.ai/catalog/standards/sist/7def9d6d-9368-4f0a-a25d-38a304040101/7def9d6d-9368-4f0a-a25d-38a304040101>  
 a) A macroscopic feature of a rock mass or rock unit, generally seen best in the outcrop rather than in hand specimen, e.g. columnar structure, blocky fracture, platy parting, bedding.  
 b) The general disposition, attitude, arrangement or relative positions of the rock units of a region or area, resulting from such geological processes as sedimentation, faulting, folding, igneous intrusion, etc.
- 2.1.148 **glass**: Non-crystallized product of the rapid cooling of a magma.
- 2.1.149 **glaucosite**: A green mineral closely related to biotite and essentially an hydrous potassium iron aluminium silicate in sedimentary rocks, formula  $(\text{K, Na})(\text{Al, Fe}^{3+}, \text{Mg})_2(\text{Al, Si})_4\text{O}_{10}(\text{OH})_2$ .
- 2.1.150 **gneiss**: A metamorphic rock mainly consisting of quartz, feldspar and mica, in which bands rich in granular minerals such as feldspar and quartz, alternate with bands of planar minerals like mica. Might derive from an igneous rock (orthogneiss) or from a sedimentary rock (paragneiss). (See leptite and 3.2.3).
- 2.1.151 **gneissose, gneissic fabric**: Fabric in metamorphic rocks in which bands rich in granular minerals alternate with bands of planar minerals.
- 2.1.152 **goethite**: A mineral ( $\alpha\text{-FeO(OH)}$ ).
- 2.1.153 **graded bedding**: Stratification in which each stratum shows a gradation in grain size from coarse to fine.
- 2.1.154 **grain**: Particles of a rock e.g. the crystals in a granite.
- 2.1.155 **grain size**: The predominant diameter of particles in a rock as observed.
- 2.1.156 **granite**:

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- a) Scientifically: Plutonic rock with alkali feldspar, quartz, little quantities of plagioclase, mica, and other minerals. (See 3.2.1.1).
- b) Commercially: Compact and polishable natural stone, used in decoration and building, mainly consisting of minerals with a hardness between 5 and 7 on the Mohs scale, such as quartz and feldspar, e.g. granite as per the scientific definition, other plutonic rocks, volcanic rocks with porphyritic structure, metamorphic rocks with mineralogical composition similar to granitoids such as gneiss, and limestone in some regions of Europe. (See hardness scale).
- 2.1.157 **granite, black**: A commercial term for black or dark coloured igneous rocks. (See gabbro).
- 2.1.158 **granoblastic**: Fabric of metamorphic rocks in which the grains are of nearly equal size.
- 2.1.159 **granodiorite**: A plutonic rock resembling granite but with less alkali feldspar and with more plagioclase. (See 3.2.1.1).
- 2.1.160 **granofelsose**: Fabric of granoblastic metamorphic rocks with little or no foliation or lineation.
- 2.1.161 **granophyric**: A variety of graphic fabric with more or less intergrowth of alkali feldspar and quartz e.g. around plagioclases.
- 2.1.162 **granular**: Term applied to rocks with nearly equal grains.
- 2.1.163 **granulite**: A metamorphic rock with K-feldspar, quartz and garnet and/or different other minerals and no primary muscovite.
- 2.1.164 **graphic**: A fabric of igneous rocks resulting from a regular intergrowth of two minerals and showing graphic patterns in sections, e.g. in graphic granite.
- 2.1.165 **graphite**: Mineral, one of the two natural occurring forms of crystalline carbon, the other being diamond.
- 2.1.166 **greywacke**: A sandstone with abundant (more than 15 %) matrix. (See 3.2.2.5).
- 2.1.167 **greenschist**: A schistose metamorphic rock with albite whose green colour is due to the presence of chlorite, epidote, or actinolite. (See 3.2.3.1).
- 2.1.168 **greenstone**: An altered igneous rock with chlorite, hornblende, epidote, and with comparatively low silica content.
- 2.1.169 **grit**: Sedimentary rock with coarse and angular grains.
- 2.1.170 **groundmass; matrix**: The material between the grains or inclusions in a rock.
- 2.1.171 **growth fabric**: Crystal arrangement determined by more or less free growth from a plane or a centre.
- 2.1.172 **gypsum**: A mineral  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  also called selenite; the dense varieties are called alabaster.
- 2.1.173 **habit**: The characteristic crystal form or combination of forms of a mineral, including characteristic irregularities; i.e. idiomorphic.
- 2.1.174 **heavy minerals**: Accessory minerals with a density greater than  $2,9 \text{ g/cm}^3$ .
- 2.1.175 **hematite**: A mineral,  $\alpha\text{-Fe}_2\text{O}_3$ .
- 2.1.176 **heteroblastic fabric**: Term referring to metamorphic rocks composed of crystals with a range of sizes.
- 2.1.177 **holoblast**: Newly grown mineral.
- 2.1.178 **holocrystalline fabric**: A term generally applied to rocks consisting almost entirely of crystallized minerals.
- 2.1.179 **holohyaline**: A term generally applied to rocks consisting almost entirely of glass.
- 2.1.180 **homeoblastic**: Term referring to metamorphic rocks composed of crystals of approximately equal size.

- 2.1.181 **hornblende**: Monoclinic amphibole with  $\text{Al}_2\text{O}_3$  and  $\text{Fe}_2\text{O}_3$  (See amphibolite).
- 2.1.182 **hornfels**: A nonfoliated often banded, fine-grained, metamorphic rock with quartz, feldspar, and other minerals; typically formed by thermal metamorphism.
- 2.1.183 **host**:
- a) A mineral containing an inclusion.
  - b) A rock body containing other, small bodies which are not indigenous but allochthonous.
- 2.1.184 **hydrothermal**: An adjective applied to processes, formations, and products, usually of magmatic origin, made by hot water or steam.
- 2.1.185 **hypidioblastic fabric**: A mineral constituent of a metamorphic rock which is bounded only in part by its own crystal faces. Analogous to the term subhedral in igneous rocks.
- 2.1.186 **hypidiomorphic; subhedral**: A mineral grain in a rock which is bounded by only some of its crystal faces.
- 2.1.187 **idioblastic**: A mineral constituent of a metamorphic rock which is bounded in part by its own crystal faces. Analogous to the term euhedral in igneous rocks.
- 2.1.188 **igneous rock, eruptive rock**: A rock formed by solidification from molten material (magma).
- 2.1.189 **ignimbrite**: A pyroclastic volcanic rock either welded on deposition or subsequently lithified.
- 2.1.190 **illite**: Micaceous clay mineral of the phyllosilicate group.
- 2.1.191 **impactite**: Finely crystalline or glassy material or breccia produced by a meteorite impact like suevite.
- 2.1.192 **inclusion**: A small crystal, fragment, gas, or liquid filled void within a larger crystal.
- 2.1.193 **intergranular fabric**: A fabric where there is a grain or an aggregation of grains e.g. mostly pyroxene filling the spaces between laths of plagioclases.
- 2.1.194 **intergrowth**: A term applied to the interlocking of different crystals due to simultaneous crystallisation e.g. perthite.
- 2.1.195 **intermediate rock**: Said of an igneous rock that is transitional between acid and basic.
- 2.1.196 **intersertal fabric**: A fabric in igneous rocks where glass and small crystals infill the spaces between laths or plates of plagioclases.
- 2.1.197 **intraclast**: A general term for a component of a limestone, representing a redeposited fragment of a previous sediment.
- 2.1.198 **intrusive rock**: Igneous rocks which have invaded a pre-existing rock.
- 2.1.199 **ironstone**: A clayey or compact rock consisting largely of iron minerals.
- 2.1.200 **Jurassic**: System of Mesozoic (See 3.1).
- 2.1.201 **kaolinite**: A common clay mineral with the general formula  $\text{Al}_4(\text{Si}_4\text{O}_{10})(\text{OH})_8$ .
- 2.1.202 **karst**: Applied to the characteristic landscape and structures developed in limestone, gypsum, and other soluble rocks by the effects of solution weathering.
- 2.1.203 **kelyphytic rims**: Corona structure composed of microcrystalline aggregates of fibrous pyroxene or amphibole developed around olivine or garnet.
- 2.1.204 **K-feldspar**: Potassium feldspar; see microcline, orthoclase, sanidine.
- 2.1.205 **kerf**: Continuous groove cut into the side of a stone unit for the inserting of anchoring devices. (See also anchor).
- 2.1.206 **kyanite; disthene**: A mineral, polymorphous with andalusite and sillimanite, formula  $\text{Al}_2\text{SiO}_5$ .
- 2.1.207 **labradorescence; schiller**: An optical phenomenon consisting of flashes or iridescence