UBAtc

Union belge pour l'Agrément technique de la Construction asbl

Registered office:
Rue du Lombard 42
1000 Brussels

Corporate office:
Kleine Kloosterstraat 23
1932 Sint-Stevens-Woluwe

VAT BE 0820.344.539 – RLP Brussels

Member of EOTA, UEAtc and WFTAO

Phone: +32 (0)2 716 44 12
info@butgb-ubatc.be
www.butgb-ubatc.be

ATG Technical Approval with Certification

ATG H781

NATURAL STONE - OTHERS

BELGIAN BLUE STONE

Valid from 06/03/2023 until 05/03/2028

Approval and Certification Body

BCCA
Cantersteen 47
1000 Bruxelles
www.bcca.be
info@bcca.be

COPRO
Kranenberg 190
1731 Zellik
www.copro.eu
info@copro.eu

Approval holder -Manufacturer
Les Carrières de La Pierre Bleue Belge S.A.
Rue Mademoiselle Hanicq, 88
B-7060 SOIGNIES, Belgium
E-mail: info@pierrebleuebelge.be
http://www.pierrebleuebelge.be

1 Objective and scope of the technical approval

This Technical Approval with Certification is based on an inspection, which is intended to provide the user with the necessary information, in order to assess the product's suitability for use in the construction of buildings and roads. This inspection is conducted by an independent approval body appointed by the UBAtc.

The assessed properties and identification of structural and visual characteristics are determined according to the uses traditionally prescribed in the Belgian specifications, so that the user is able to specify and monitor the materials/products used on the site. The technical approval mentions the area of application, for which the stone is considered suitable for use, together with guidelines for the manufacture of finished products that are fit for purpose and the use of these products within structures.

For this purpose, the characteristics of the stone and homogeneity of the deposit are thoroughly tested by means of a geological/petrographical test, together with a test programme for representative samples. Structural and visual characteristics are identified, which are specific to the stone and individual deposit. The inspection is conducted by means of a production reliability test, which includes appropriate selection criteria, based on the characteristics of the stone.

This inspection is conducted according to the ATG/BENOR General Approval and Certification Regulation for the decorative natural stone sector issued by the UBAtc, BCCA and COPRO.

The Technical Approval serves as a record of the approval inspection.

In order to guarantee high reliability, the initial procedure for issuing the Technical Approval is accompanied by ATG/BENOR certification of the semi-finished products (blocks and slabs) produced at the quarry. Use of the BENOR mark in addition to the ATG mark is based on the reference to the European standards for semi-finished products.

2 Use of the ATG mark on finished products

Use of the ATG mark can be extended to include finished products in either of the following cases:

- The products are subject to ATG/BENOR certification according to the rules described in an implementation regulation, which is approved by the UBAtc and recorded in the BENOR system. This product certification is in line with the applicable normative documents. "Products" refers to the finished products, which are manufactured for use in the structure. The list of products subject to the certification is included in the manufacturer's Catalogue of Certified Products.
- The products are made by a certified manufacturing plant, according to regulations approved by the UBAtc. This guarantees the traceability of the material and the ability to produce pre-fabricated components according to the appropriate specifications. This also results in numbered and registered quality declarations.

3 Geography / Geology

Carrières de la Pierre Bleue Belge S.A mines blue stone known as "PETIT GRANIT - PIERRE BLEUE DE BELGIQUE ®", which is marketed under the name "LA PIERRE BLEUE BELGE" at three different sites: Soignies (formerly Carrières Gauthier & Wincqz), Neufvilles (formerly Carrières du Clypot) and Tellier des Prés.

The locations in the Province of Hainaut (Belgium) are as follows:

- ***Neufvilles site*** -
  Lambert coordinates: N 50° 34' 43'' E 4° 0' 12''
- ***Soignies site*** -
  Lambert coordinates: N 50° 33' 54'' E 4° 4' 54''
- ***Tellier des Prés site*** -
  Lambert coordinates: N 50° 33' 45'' E 4° 7' 20.816''

The material is used as construction and decorative stone. At the quarry, a carbonate sedimentary rock is mined. It is a fossiliferous limestone rock, with crinoids, compact, non-porous, grey-coloured on the cut side and dark grey-coloured when freshly broken, with stylolitic joints parallel to the stratification. The mined layers form part of the Ecaussinnes Formation (Tn3b), Ivorian period, Tournaisian Series – Mississippian, Lower Carboniferous.

The stone is open-cast mined; the beds have a direction of approx. N100°-105°E and an inclination of 12°S. The total minable thickness is approx. 33 m, across all the sites. At Tellier des Prés, however, the entire thickness is not mined. The approval relates to parts of the quarry that are of comparable quality, in other words, the uniform solid stone-producing beds out of all those that are mined and clearly identified on the section (cf. annexe 1, geological section), which contain few stylolites.

4 Petrography / Lithology

Macroscopic description: "PETIT GRANIT - PIERRE BLEUE DE BELGIQUE ®" is a compact limestone of sedimentary origin, produced by the accumulation of countless crinoid articles cemented in a microcristalline calcite mass. The colour is grey on the cut side and dark grey when freshly broken, due to the organic matter present between the calcite crystals. The stone takes on a medium-grey patina specific to this material. The patina, due to aging and inherent in the composition of the stone, must be taken into account, especially during restoration work.

The limestone contains, in addition to crinoid articles, bryozoan fragments (mainly fenestellae), brachiopod shells and corals (individual and colonial). At the quarry, a sedimentary carbonate rock is mined (2.2.1.2.b in PTV 844 Rock Classifications as part of the standardisation procedure with reference to NBN EN 12670).

Microscopic description: "PETIT GRANIT - PIERRE BLEUE DE BELGIQUE ®" is a bioclastic limestone, dominated by crinoids; the other clasts are bryozoan, brachiopod and coral. The presence of pellets can be observed locally in some beds. It is a packstone, with grainstone in places (DUNHAM classification) or a biomicrite with biosparite in places (FOLK classification, cf. NBN EN 12670). Other lithological characteristics may be present (cf. NIT 220).

Composition (for information): The average composition is 96 - 99% carbonates (minimum calcium carbonate content 88% as an absolute), 0 - 1% quartz, 0.1 – 0.4% iron (mainly as sulphides: pyrite and marcasite) and 0.2 – 0.4% organic carbon.

5 Intrinsic characteristics of the stone

5.1 Technical sheet

	Reference	Units	Average	Standard deviation	n (1)	E- or E+
Apparent bulk density	NBN EN 1936: 2007	kg/m³	2690	15	233	2668
Porosity	NBN EN 1936: 2007	% vol	0.24	0.15	244	-
Water absorption under atmospheric pressure	NBN EN 13755: 2008	% m	0.10	0.0	30	-
Compressive strength	NBN EN 1926: 2007	MPa	157	21	398	124
Bending strength under a centrally placed load	NBN EN 12372: 2007	MPa	17.0	2.5	499	13.4
Wear resistance	NBN EN 14157: 2004	mm	20.5	0.7	21	21.9
Dynamic elasticity modulus	NBN EN 14146: 2004	GPa	77.1	3.2	88	71.6
Sound speed // **⊥**	NBN EN 14579: 2004	km/s	5.77 5.64	0.21 0.45	49 49	5.39 4.79
Identification gel (2)	NBN EN 12371: 2010	cycles	Nc = 168	-	48	-
Heat expansion coefficient	NBN EN 14581: 2005	α [1/°C]	4.9 E-06	5.4 E-07	21	5.84E-06
Capillary water absorption coefficient	NBN EN 1925: 1999	Not applicable, due to the low porosity of the stone				

(1) n is the total number of specimens tested. A sample consists of x specimens (this number varies between 6 -10, according to the reference standard), as this sample often comes from the same slab. Various samples from different beds and/or quarries were tested, in order to arrive at the total number n mentioned in the table.

(2) The test standard for resistance to the identification gel requires a maximum of 168 cycles. All the tests conducted completed the 168 cycles. The approved beds are therefore suitable for all indoor and outdoor uses (cf. NIT 228). A technological test to determine resistance to the gel was conducted according to NBN EN 12371 (56 cycles) on a limited number of specimens from different beds and/or quarries and does not show a loss of flexural strength greater than 20%.

5.2 Structural and visual characteristics

The stone presents structural characteristics like those described in Chapter 5 of NIT 220. If the finished products are manufactured from this stone, Chapter 6 of NIT 220 can be considered when defining acceptance criteria.

6 Marketing

6.1 Products

The material is supplied in the form of products. "Products" refers to intermediate products (blocks or slabs) and finished products. This ATG does not systematically imply that the latter have the associated certification. In order to ensure that this is the case, refer to either of the following documents:

- The Catalogue of ATG/BENOR Certified Products, which is continuously updated by the Certification Body.
- The declarations of the ATG Quality registered with the Certification Body, which issues a unique n° for each delivery/ site.

6.2 Addresses

Carrières de La Pierre Bleue Belge S.A.

- Carrière du Clypot (Neufvilles)
  Chemin des Carrières, 1
  B-7063 Neufvilles (Soignies), Belgium

- Carrière Gauthier Wincqz (Soignies)
  Rue Mademoiselle Hanicq, 88
  B-7060 SOIGNIES, Belgium

- Carrière du Tellier des Prés
  Au lieu-dit Tellier des Prés
  Rue de la Maladrie
  B-7060 SOIGNIES, Belgium

E-mail: info@pierrebleuebelge.be

http://www.pierrebleuebelge.be

The list of manufacturers without the technical approval, which are authorised to use the ATG of the holder, is continuously updated by the certification body.

7 Certification

7.1 ATG/BENOR

For each monitored product, the certification authorises the ATG holder to use the ATG/BENOR marks, the ATG mark concerning the certification of the intrinsic characteristics of the material and the BENOR mark confirms the conformity of the product with the appropriate specification.

The reference specification consists of the approval text and, if the latter exist, technical requirements (PTV) for the product, which also refer to the appropriate standards and include requirements for specific use.

ATG/BENOR certification relates to:

- The continued validity of the initial type tests (ITT), together with the necessary checks and regular inspections;
- Continuous management of the production and self-monitoring processes (FPC), including selection of materials and traceability.

7.2 ATG with Quality Declaration

For each production unit being monitored, the certification authorises, with the agreement of the ATG holder, the manufacturer to use the ATG mark based on a duly registered Quality Declaration.

The Quality Declaration certifies:

- The management of production processes, in order to guarantee the traceability of the material and maintenance of intrinsic characteristics based on an appropriate selection depending on the product;
- The ability of the manufacturer to supply a product that meets the specifications of the supplied customer.

8 Labelling

The ATG mark is always used either:

- In combination with the BENOR mark if it is displayed on the products listed in the Catalogue of Certified Products;
- Or with reference to a Quality Declaration identified by a unique n°, if it is displayed by a duly certified manufacturing unit;
- Or with reference to a batch inspection report, as deliveries are then duly stamped by the inspection body.

The mark always identifies the relevant ATG number(s) and the entity responsible for the marking and therefore the final release of the product.

The ATG/BENOR marks also refer to a product specification.

9 Conditions

A. This technical approval refers exclusively to the product mentioned on the cover page of the technical approval.

B. Only the Approval Holder and, if applicable, the manufacturer or the distributor may assert rights based on the Technical Approval.

C. The approval holder and, if applicable, the manufacturer or the distributor are not permitted, in any way, to use the name of the UBAtc, its logo, the ATG mark, the technical approval or the approval number to demand the evaluation of products that fail to comply with the technical approval or products, equipment or systems, including their properties or characteristics, which do not form the object of the technical approval.

D. Information provided, in any way, by the approval holder or a duly authorised company (manufacturer, distributor), to potential users (e.g. project owners, contractors, architects, consultants, planners, etc.) of the product covered by the Technical Approval must not be incomplete or contradict the content of the Technical Approval or the information, to which the Technical Approval refers.

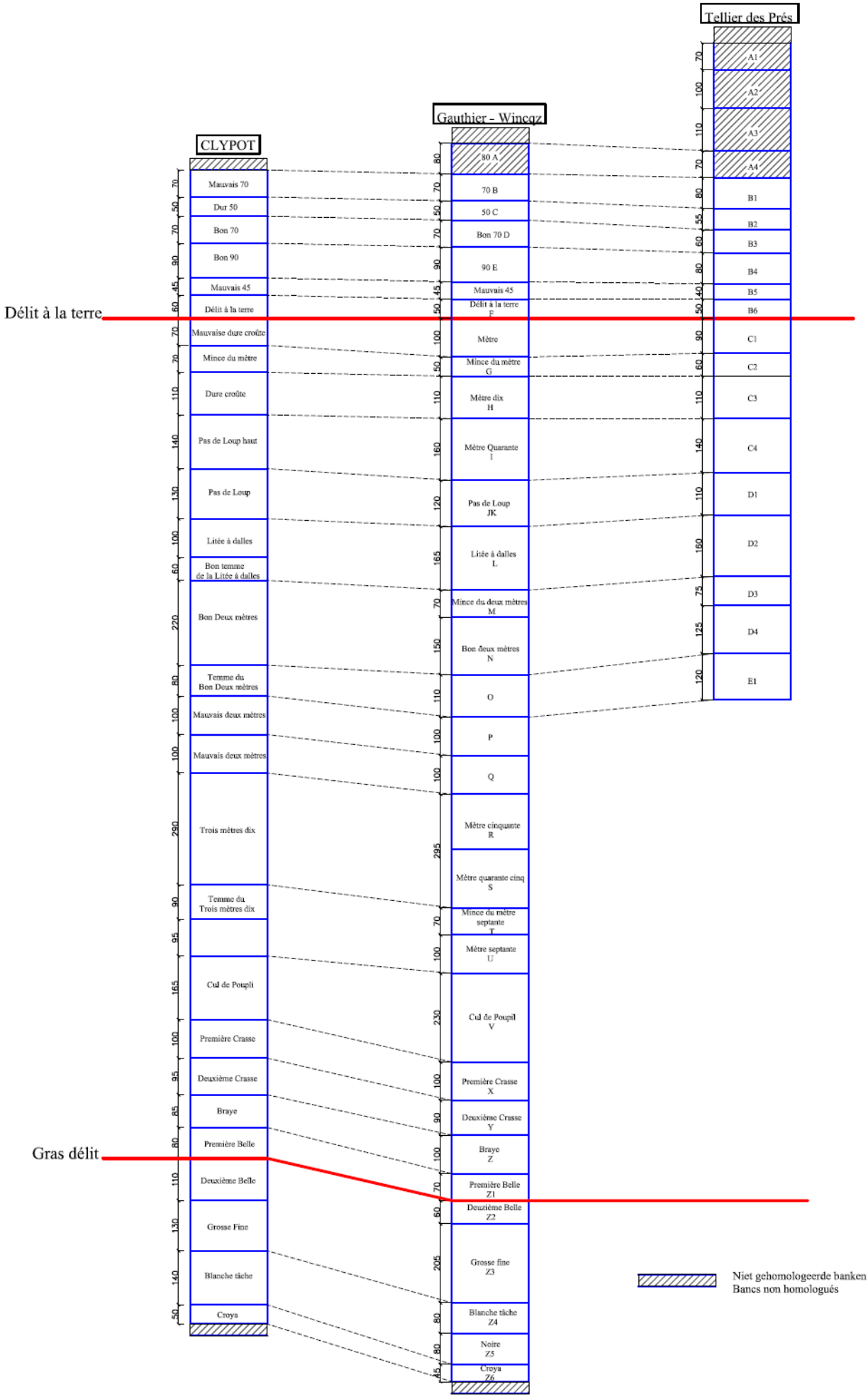
E. The Approval Holder is bound at all times to provide UBAtc, the Approval Body and the Certification Body with prompt or prior notification of any adjustments made to primary materials and products, installation instructions and/or the manufacturing, installation and equipment process. According to the information communicated, the UBAtc, the Approval Body and the Certification Body will judge whether it is necessary to adjust the Technical Approval.

F. The Technical Approval is based on the available knowledge and technical/scientific information, together with information provided by the applicant and complemented by an approval inspection, which takes account of the specific nature of the product. However, users remain responsible for selecting the product, as described in the Technical Approval, for the specific use intended by the user.

G. The intellectual property rights associated with the Technical Approval, including the copyright, belong exclusively to the UBAtc.

H. Any references to the technical approval must be accompanied by an ATG index (ATG H781) and the validity period.

I. The UBAtc, the Approval Body and the Certification Body cannot be held responsible for any damage or adverse consequences suffered by third parties (e.g. the user) that result from the failure of the Approval Holder, manufacturer or distributor to respect the provisions of Article 9.


Tellier des Prés
A1
A2
A3
A4
B1
B2
B3
B4
B5
B6
C1
C2
C3
C4
D1
D2
D3
D4
E1
Gauthier - Wincqz
80 A
70 B
50 C
Bon 70 D
90 E
Mauvais 45
Délit à la terre F
Mètre
Mince du mètre G
Mètre dix H
Mètre Quarante I
Pas de Loup JK
Litée à dalles L
Mince du deux mètres M
Bon deux mètres N
O
P
Q
Mètre cinquante R
Mètre quarante cinq S
Mince du mètre septante T
Mètre septante U
Cul de Poupil V
Première Crasse X
Deuxième Crasse Y
Braye Z
Première Belle Z1
Deuxième Belle Z2
Grosse fine Z3
Blanche tâche Z4
Noire Z5
Croya Z6
CLYPOT
Mauvais 70
Dur 50
Bon 70
Bon 90
Mauvais 45
Délit à la terre
Mauvaise dure croûte
Mince du mètre
Dure croûte
Pas de Loup haut
Pas de Loup
Litée à dalles
Bon femme de la Litée à dalles
Bon Deux mètres
Femme du Bon Deux mètres
Mauvais deux mètres
Mauvais deux mètres
Trois mètres dix
Femme du Trois mètres dix
Cul de Poupli
Première Crasse
Deuxième Crasse
Braye
Première Belle
Deuxième Belle
Grosse Fine
Blanche tâche
Croya
Délit à la terre
Gras délit
Niet gehomologeerde banken
Bancs non homologués

This technical approval has been published by UBAtc, under the responsibility of the approval body BCCA, and based on favourable feedback from the Specialist Group "NATURAL STONE", issued on 12 January 2018.

In addition, the certification body, BCCA, has confirmed that the production process meets the conditions for certification and that a certification agreement was signed by the ATG holder.

Date of issue: 6 March 2023.

This ATG supersedes ATG 781 valid from 06/03/2018 to 05/03/2023. Changes from previous version are listed below:

Changes from previous version
Administrative update

For UBAtc, declaration of the validity of the approval process

Eric Winnepenninckx,
Secretary general

Benny De Blaere,
Director

For the approval and certification operator

Olivier Delbrouck,
Director general

Dirk Van Loo,
CEO

This technical approval shall remain valid, provided that the product, its manufacture and all related processes:

- are maintained, in order to achieve, as a minimum, the examination results specified in this technical approval;
- are continuously monitored by the certification operator, which confirms that the certification continues to be valid;

If these conditions are no longer met, the technical approval shall be suspended or withdrawn and the technical approval shall be removed from the UBAtc website. Technical approvals are regularly updated. It is recommended to always use the version published on the UBAtc website (www.butgb-ubatc.be).

The most recent version of the technical approval may be consulted using the adjacent QR code.

Belgische Unie voor de technische goedkeuring in de bouw
Union belge pour l'Agrément technique de la construction
ATG H781
UBAtc BUtgb

UBAtc asbl is notified by the FPS Economy within the framework of Regulation (EU) 305/2011.
Certification Operators designated by UBAtc asbl operate in compliance with a system that is set to be accredited by BELAC (www.belac.be).

UBAtc asbl is an approval body member of:

European Organisation for Technical Assessment
www.eota.eu

European Union for technical approval in construction
www.ueatc.eu

World Federation of Technical Assessment Organisations
www.wftao.com