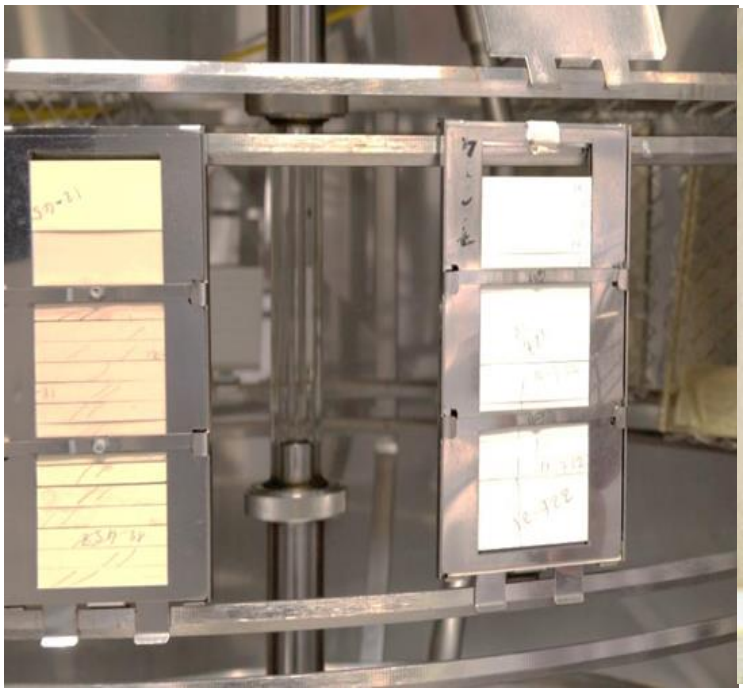
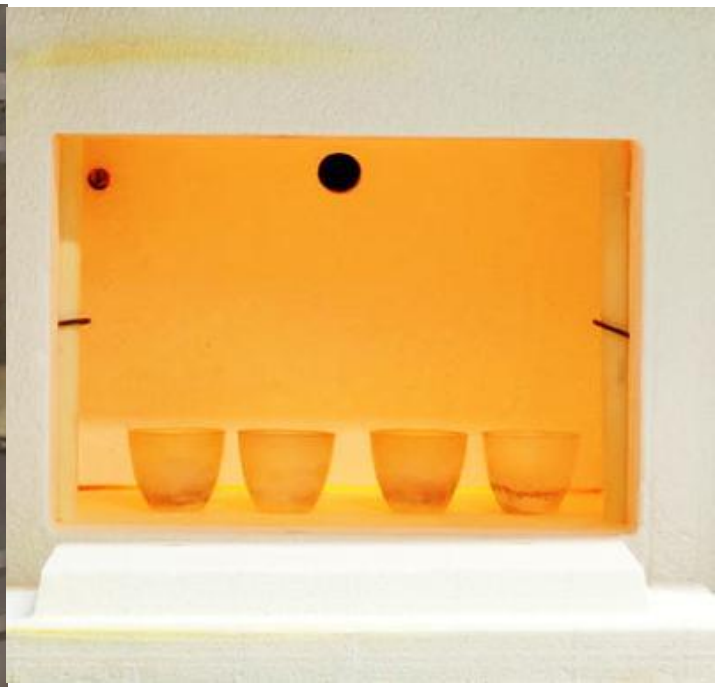
CERTIFICATION

Certification Reference System QB 34

Vinyl Compounds and Their Manufacture for PVC Window Profiles





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This certification reference system was approved by the CSTB Technical Department on 04/03/2020.

It cancels and replaces all previous versions.

As a certifying body accredited by the COFRAC under the number 5-0010, accreditation range available at www.cofrac.fr, CSTB undertakes to draft certification reference systems that guarantee an appropriate level of requirements for the quality of the products, their suitability for use and their durability.

This certification reference system may therefore be revised, in whole or in part, by CSTB, after the interested parties have been consulted in accordance with the requirements in Standard NF X 50-067.

MODIFICATION HISTORY

Modified part	Revision no.	Effective date	Modification made
QB 34	0	13 November 2018	*Transfer of NF 126 reference system activities to QB reference system: - material qualification - certified or reprocessed/recycled vinyl compound production control system certification manufacturing authorisation. *Inclusion of L* < 82 materials designed to be film coated
QB 34	01	18/05/2020	procedures NF EN ISO 9001 2008 to 2015 Part 2 Update of quality management system provisions: reference to version 2015 of Standard ISO 9001 instead of the 2008 version

Part 1
Application

1.1 Scope

This certification reference system concerns:

- Certification of vinyl compounds for PVC window profiles.
- Certification of the manufacture of certified or reprocessed/recycled vinyl compounds.

The QB mark strives to inspect the suitability characteristics of vinyl compounds for making PVC window profiles and the durability of the vinyl compounds and their production as well as any complementary characteristics to enable them to stand out in the market.

The QB mark strives to inspect the safety characteristics for people, pets and goods, the suitability for use and the durability of the products, as well as any complementary characteristics to enable them to stand out in the market.

Certified products benefit from a positive assessment of their suitability for use, in reference to, for example, a DTU (Unified Code of Practice), Technical Appraisal or any other positive technical assessment of a construction procedure including the product and compatible with the other procedures with which this procedure is combined to build a structure.

Note: A construction system covers the whole process from design to execution, leading to the processing of a product or the use of a service for the execution of parts of works.

1.2 Certification added value

Certification is recognition by a third party of the conformity of the vinyl compounds with the requirements of this reference system. Its objectives include:

1. the assessment of the durability of certified vinyl compounds.

2. the constancy of the identification characteristics of certified vinyl compounds.

3. the consistent quality of certified or reprocessed/recycled vinyl compound manufacture.

The certified characteristics are:

With a requirement level greater than the one specified in Standard NF EN 12608-1:

For the vinyl compound:
Identification (material traceability)
Durability: artificial ageing confirmed by natural ageing
Durability in overseas departments and territories (optional)

Other characteristics

For bulk dyed vinyl compounds:
Identification (material traceability)
Mechanical characteristics
Welding factor
Durability: natural ageing

For vinyl compounds designed to be film-coated
Identification (material traceability)
Modulus of elasticity under bending stress
Welding factor
Durability of colorimetric and mechanical characteristics

For the manufacture of certified vinyl compounds
Production performance consistency

For the manufacture of reprocessed/recycled vinyl compounds

Production consistency

CSTB is responsible for assessing these certified characteristics:

For the vinyl compound

	Admission	**Continued monitoring**
- **Design file analysed**	***Yes***	***No***
- **Tests carried out by the certifying body's laboratory**	***Yes***	***No***

For the manufacture of certified or reprocessed/recycled vinyl compounds with the following control measures:

	Admission	Continued monitoring
Production audit carried out by a qualified technical auditor: - Verification that the production inspections and records have been carried out: raw materials, production, finished products, - Verification of the quality management provisions: metrology, packaging, storage, traceability, product marking, handling of non-conformities and customer complaints.	***Yes***	***Yes*** ***Frequency:*** ***2 annual audit(s) (*)***
Tests carried out by a laboratory recognised by the certifying body (independent and competent): – Samples taken by the certifying body and completed on the applicant/holder's site,	***Yes***	***Yes*** ***Frequency:*** ***2 annual test campaign(s)***

(*) the frequency may be reduced to one annual audit

At the holder's request, this provision may only be applied as of the 3rd year following the first admission, under the following conditions:

1. **The holder has been ISO 9001-certified by a certifying body accredited by a member of the European cooperation for Accreditation or by a member of the International Accreditation Forum.**
2. **The results of previous audits (audit and tests) did not result in any critical or non-critical deviation sheets, warnings or sanctions being issued.**
3. **In the event of any deviation observed, warning or sanction or if ISO 9001 certification is lost, the audit frequency shall then be brought back to normal monitoring, being 2 audits per year.**

1.3 Applying for certification

Any legal entity:

- Formulator-Possessor of the vinyl compound formula for PVC window profiles (§ 3.1 to 3.4 of the administrative management appendix)
- Manufacturer of certified vinyl compounds (§ 3.5 of the administrative management appendix)
- Manufacturer of reprocessed/recycled vinyl compounds (§ 3.6 administrative management appendix)

can apply to benefit from a right to use the QB mark.

Such requests are referred to as “applications” while the entities making them are referred to as “applicants”.

Before making their application, applicants must make sure that they meet the conditions defined in this certification reference system concerning their product and the sites concerned. It is the applicants’ responsibility to make sure that the regulations applicable to their product are respected.

They must undertake to meet the same conditions throughout the entire duration of the use of the QB mark.

Part 2
The certification scheme

The certification scheme for the vinyl compounds and their manufacture for PVC window profiles application consists of this certification reference system, which references:

- the QB mark General Requirements, which set the organisation and conditions for use of the mark;
- the standards referred to in § 2.2.1,
- the additional technical requirements referred to in § 2.2.2.

This certification reference system falls under the framework of the certification of non-food-related products and services, as provided for in the French Consumer Code (articles R-433-1 to R 433-2 and L 433-3 to L 433-11). It specifies the conditions for applying the General Requirements of the QB mark to the products defined in Part 1.

2.1 Regulations

The granting of the right to use the QB mark in no way substitutes CSTB's responsibility for the legal responsibility on the company which holds the QB mark usage right.

There is no regulatory requirement regarding the certification of vinyl compounds and manufacture of certified, reprocessed or recycled vinyl compounds designed for extruding PVC window profiles.

2.2 Additional standards and specifications

For the references that indicate a date of implementation or an index, only the version cited is applicable. For references that do not indicate a date of implementation or index, the most recent version of the reference document applies (including any amendments).

2.2.1 APPLICABLE STANDARDS

NF EN 12608-1: Unplasticised poly(vinyl chloride) (PVC-U) profiles for the fabrication of windows and doors – Classification, requirements and test methods

NF EN ISO 527-2: Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics

NF EN ISO 877-1: Methods of exposure to solar radiation - Part 1: General guidance

NF EN ISO 9001: Quality management systems – Requirements.

2.2.2 COMPLEMENTARY SPECIFICATIONS

To complement the requirements set down in the previous paragraphs, the products shall meet the complementary specifications, if applicable, defined in technical documents no. 34.01, 34.02, 34.03.

2.3 Declaration of modifications

This paragraph specifies the information that holders of the right to use the QB mark must provide to CSTB and the procedures they must follow in the event of any modifications to:

- the holder;
- the manufacturing plant;
- the quality organisation of the manufacturing plant;
- the product.

Failure to respect this obligation as observed by CSTB may lead to a suspension or withdrawal of the right to use the QB mark.

In the cases not provided for earlier, CSTB determines whether the modifications bring the certification into question and if it is necessary to carry out a complementary quality assurance operation.

Depending upon the results of the examination, CSTB communicates the appropriate decision.

2.3.1 MODIFICATION CONCERNING THE HOLDER

The holder shall communicate in writing to CSTB any legal modification of their company or any modification in their company name.

In case of merger, liquidation or absorption of the holder, all rights to use the QB mark from which they might benefit shall automatically stop.

A new admission application may be submitted and its examination may be streamlined depending upon the modifications made.

2.3.2. MODIFICATION CONCERNING THE PRODUCTION UNIT

- Production transfer:

Any transfer (in whole or in part) of the manufacturing unit of a certified product to another production site entails an immediate halt in the QB marking by the holder on the affected products.

The holder shall declare this transfer in writing to CSTB which will organise an audit of the new production unit and, as the case may be, have tests carried out.

The visit may be reduced or even cancelled when the new manufacturing unit is already familiar to CSTB.

The procedures of assessment and of renewal decision of the certification are the same as those for admission as described in Part 3 of this certification reference system.

Modification of the production process:

The holder shall prove that the modification of the production process does not have an impact on the performances of the product's certified features (Cf. § 2.4.2: § 8.5.6. 9001 V15) and must inform CSTB of this.

2.3.3 MODIFICATION CONCERNING THE MANUFACTURING UNIT'S QUALITY ORGANISATION

The holder shall declare in writing to CSTB any modification relative to their quality organisation that may affect the conformity of the production to the requirements of this certification reference system.

In particular, it shall declare all modification of certification of its quality management system.

Any temporary halt in internal quality assurance operations for a certified product entails an immediate halt in the QB marking of this product by the holder, who must inform CSTB of this.

CSTB then communicates to the holder a decision to suspend the right to use the QB mark for a specific duration following which, if the right of use cannot be re-established, this holder's right to use the QB mark will be withdrawn.

2.3.4 MODIFICATION CONCERNING THE CERTIFIED PRODUCT

Any modification made to the vinyl compound's characteristics or the other various components in relation to those defined in the initial certification file must be indicated to the mandated body, which will study the question of whether there is a need for additional testing to take place (see technical document 34.01).

2.3.5 TEMPORARY OR DEFINITIVE CESSATION OF PRODUCTION

Any definitive or temporary halt in the manufacture of certified vinyl compounds or any abandonment of a right to use the QB mark shall be declared in writing to CSTB, specifying the time necessary to sell off the inventory of the QB-labelled products. CSTB shall notify the holder of the QB mark of the suspension or withdrawal of the right to use the QB mark. When the period indicated by the holder expires, the manufacturer is removed from the list of certified manufacturers.

Any temporary halt in the manufacture of certified vinyl compounds must be the subject of a suspension of the right to use the QB mark for a maximum period of 6 months, renewable only once. The total duration of the suspension of the right to use the QB mark for these products must not exceed one year. The removal of the suspension may only be announced following one (or several) assessment(s).

2.4 The quality management provisions: audit reference system (applicable to manufacturers)

2.4.1 PURPOSE

Applicants/holders are responsible for satisfying all requirements of the certification under which the right to use the QB mark for the relevant product is granted.

Applicants/holders shall implement all the necessary ways and means to permanently guarantee the product's conformity with this certification reference system. In addition, they must manage their external service providers using all methods to assess all the component elements of a product or external service(s) for which they are the applicant or holder of the right to use the certification mark.

This paragraph sets the minimum provisions that the applicant/holder shall implement in terms of quality management to ensure that the products are manufactured respecting the certification reference system at all times.

The quality system depends in part on the establishment by the applicant/holder of a set of organisational measures ensuring conformity of the delivered products with the standards and additional specifications, if applicable. These measures are described in paragraph 2.4.2 below.

2.4.2 MINIMUM REQUIREMENTS FOR QUALITY MANAGEMENT

Applicants/holders shall have implemented the ways and means that they possess, the existence and effectiveness of which are assessed based on the requirements of standard NF EN ISO 9001:

If the manufacturing unit is not NF EN ISO 9001-certified, the applicant/holder must justify the introduction of a range of organisational provisions and a production control system to control conformity with the standards and additional specifications for the delivered products that meet at least the requirements in this certification reference system.

The audits are carried out according to Table 1 as follows. This table indicates the specific requirements in Standard NF EN ISO 9001 which must be verified in the context of the certification.

As part of an audit, all the necessary requirements identified on the shaded lines in Table 1 below, shall be audited. All the other requirements pertaining to quality management shall be audited over a period of 3 years.

Possible reduction:

If the manufacturing unit has a certified quality management system that conforms to standard NF EN ISO 9001, the audits may be "streamlined". Only the requirements identified on a "shaded" line in Table 1 are to be audited.

This reduction is possible as long as:

- the ISO 9001 certificate includes within its scope and domain the sites and activities covered by the certification mark; and
- the ISO 9001 certificate is issued by a certifying body accredited by the COFRAC or by a member of the EA (European cooperation for Accreditation) or by a member of the IAF (International Accreditation Forum) - see signatories on the COFRAC website www.cofrac.fr; and
- the last ISO 9001 audit report from the body is forwarded to CSTB prior to the body's audit or examined during the body's audit.

Table 1 (Applicable requirements)

§ ISO 9001: 2015	REQUIREMENTS	MINIMUM EVIDENCE EXPECTED	APPLICABLE (NA = not applicable)
5.3.	Organizational roles, responsibilities and authorities	* Organization chart * Description of responsibilities and authorities (examples: organisation chart, job sheets, etc.) * Person appointed to be responsible for organizing and efficiently implementing the production system	■ <To be used for persons responsible for inspection or with a direct impact on critical points in making the product.> All the items except: * ISO 9001 V15: § 5.3 c,d
7.1.4.	Environment for the operation of processes	Evidence of the maintenance of the work environment. Examples: storage of a product and its components to protect them from bad weather, adapted ambient conditions, etc.	■ <To be considered for processes related to the products/services to be provided>
7.1.5.	Monitoring and measuring resources	* List of the inspection, measuring and test equipment used on the product/service production site and/or in the laboratory, * Identification of the equipment used to determine their validity, * Planning for the verification or calibration of the equipment having an impact on the validity of the results (in particular the equipment used to perform tests on certified characteristics), * Evidence of the verification and/or calibration operations (e.g. equipment data sheet, verification or calibration report, etc.), * Evidence of connection to national or international standards (where possible), * Validation of software used to monitor and measure the specified requirements, where appropriate.	■ <To be considered for processes related to the products/services to be provided>
7.2.	Competence	* Compliance with test methods and inspection provisions. * Actions planned to acquire the necessary competencies (training, tutoring, etc.), where appropriate.	■ <To be used for persons responsible for inspection or with a direct impact on critical points in making the product.>

§ ISO 9001: 2008	§ ISO 9001: 2015	REQUIREMENTS	MINIMUM EVIDENCE EXPECTED	APPLICABLE (NA = not applicable)
4.2.	7.5.	Documented information	* List of the internal and external documented information. Examples: Procedures, operating procedures, test methods, inspection instructions, quality records, * Evidence of control of internal and external documents Example: Availability of the applicable version of the test method, the reference system, the inspection provisions, etc.	<To be considered for processes related to the products/services to be provided> All the items except: * ISO 9001 v08: § 4.2.1, 4.2.2 *Note: Quality Manuals are no longer required.*
8. Operation				
7.4.	8.4.	Control of externally provided processes, products and services	* List of service providers * Contract/order defining the requirements of the applicant/holder of the certification * Evidence of the verification of raw materials, components ***(1)***, services purchased * Evidence of the verification of subcontracting conditions: transport, handling, tests, etc.	■ <To be used for raw materials, bought-in components and external services affecting the quality of the product/service > <u>External providers:</u> * supplier of raw materials, components, services integrated into the product/service * Subcontractor of external services (e.g. tests, handling, transport) All the items except: * ISO 9001 v08: § 7.4.1. * ISO 9001 v15: § 8.4.1.
§ ISO 9001: 2008	**§ ISO 9001: 2015**	**REQUIREMENTS**	**MINIMUM EVIDENCE EXPECTED**	**APPLICABLE (NA = not applicable)**
7.5.1 / 7.5.2.	8.5.1.	Control of production and service provision	* Information defining the characteristics of products and services. Examples: product plan / description of the service, etc. * Information defining the activities to be carried out and the results to be obtained. Examples: operating method(s), working instruction(s), test method(s), certification reference system (expected performance) * Monitoring and measurement activities. Examples: monitoring plan, inspection procedures and instruction(s), test method(s), etc. * Conservation of documented information proving the conformity of products/services with the acceptance criteria *(Same as § 8.2.4. ISO 9001 v08 and § 8.6.ISO 9001 v15)*	■

7.5.3.	8.5.2.	Identification and traceability	* Identification/Marking of the product in accordance with the requirements in the certification reference system *Marking of commercial documents in compliance with this certification reference system.	■ <To be considered in all cases for identification (and for traceability, where relevant)>
7.5.5.	8.5.4.	Preservation	Verifying that the product is preserved throughout the production line (identification, handling, storage, packaging, transport).	■
-	8.5.6.	Control of changes *(in production/service provision)*	* Evidence of the control pertaining to the modifications in the manufacturing process / service provision, in particular the impact of modifications on the product's performance ***(2)***: - modification review, - person authorising the modification and all the necessary related actions.	■
§ ISO 9001: 2008	**§ ISO 9001: 2015**	**REQUIREMENTS**	**MINIMUM EVIDENCE EXPECTED**	**APPLICABLE (NA = not applicable)**
8.2.4.	8.6.	Release of products and services	* Provisions for the control of products/services; records of the results of inspections and the conformity with the acceptance criteria ***(3)*** * Name of the persons responsible for releasing the finished products/services	■
8.3.	8.7.	Control of non-conforming outputs	* Provisions for processing non-conformities, including customer complaints, and implementation of those provisions ***(4)*** * No dispensation granted as regards the performance of a certified characteristic	■
10. Improvement				
8.5.2.	10.2.	Nonconformity and corrective action	* Implementation of corrective action to deal with non-conformities pertaining to the certified product, including customer complaints ***(5)*** * Effectiveness of the action taken.	■

(1) Control of the product components

Applicants/holders are required to carry out a control of all components used in the manufacture of their certified products upon reception, and in all cases prior to use.

The "receipt" internal quality control operation specified by the applicant/holder shall cover:

- the inspection methods for products upon receipt that assess compliance and/or regularities in relation to the expected characteristics,
- including, as applicable, rules for collecting product samples.

This inspection shall cover all control actions carried out by the supplier. For example: compliance sheet issued after a systematic pre-delivery inspection, which the applicant/holder requires the supplier to perform; supplier certified according to Standard NF EN ISO 9001 for relevant products or certified supplies; etc.

(3) Inspection during production and on finished products

The applicant/holder shall possess the necessary means for the checks and tests defined by the standards and technical document no. 34-02

Applicants/holders undertake to conduct reliable and regular inspection of their production:

- control of the product components,
- inspection during production,
- verifications and tests carried out on finished products.

<u>During production</u>

Control during production shall be put in place by the applicant/holder. This applies to the product in its intermediate states at the main production stages, as well as compliance with the setting instructions for the production tools (production machines, equipment).

Control instructions shall be formalized and made available to the operators. The results of the controls are recorded at each control. If the results of the controls indicate that the product does not meet the requirements of this Certification Reference System, the necessary corrective actions must be implemented immediately.

<u>On finished products</u>

Applicants/holders are required to verify the characteristics of the finished products before delivery and are responsible for putting this control in place.

The checks and tests conducted on finished products by the applicant/holder are completed in accordance with the standards as well as technical document no. 34-02 and are carried out in the applicant/holder's laboratory, located on the same site as their production unit.

The method for collecting the samples required for testing must be clearly specified in the applicant's/holder's quality plan and must not be left to the sole discretion of the operator.

Applicants/holders shall record the results of the previous inspections. If the results of the standard inspections are inconclusive, the inspections must be reinforced and the causes of the malfunction must be identified in order to correct it by carrying out production controls, if necessary.

(4) Provisions for processing non-conformities

These notably include:

- an analysis for identifying the cause of the anomaly,
- an analysis to determine the impact of the anomaly on production since the previous control,
- management ensuring that the implementation of the corrective actions is effective,
- in the unlikely event that non-compliant products are delivered to a customer, the latter shall be notified immediately so that appropriate measures can be taken.

(5) Customer complaints

The customer complaint record is audited. For this purpose, holders shall keep:

- a record of all the complaints and appeals pertaining to products covered by this certification reference system;
- a record of the corrective measures adopted, in particular when complaints have revealed a manufacturing anomaly.

The holder shall be able to show the auditor extracts from these records relating to complaints that involve products covered by this certification reference system.

2.5 Marking – General provisions

Marking is an integral part of product certification.

Beyond the identification of a certified product and its traceability, the marking of a product with the logo of the collective certification mark ensures optimal protection for users and protects holders against wrongful use and counterfeits.

Under no circumstances is it possible to make reference to the QB mark before the right to use this mark is obtained, or to present counterfeit products for certification.

The reproduction or use of CSTB logos is only authorised through strict application of the QB graphic charter and with the support of the right of use, authorised by a valid certificate or with the prior consent of CSTB.

Furthermore, the purpose of mentioning the main certified characteristics is to ensure that the technical characteristics covered by the certification which is formalised by the QB mark are transparent for consumers and users. It thus enhances the certification and its content.

The purpose of the marking rules described hereafter is to guide the holder in complying with Regulatory Requirements and Certification Requirements. The General Requirements of the QB mark define the conditions of use, the conditions of validity of the right to use the QB mark and the procedures for penalties in the case of wrongful use.

Without prejudice to the penalties provided for in the QB mark General Requirements, any incorrect declaration of the certified characteristics and any fraudulent use of the QB logo will result in legal action against the holder for deceptive marketing.

2.5.1 THE QB LOGO

The QB logo must ensure the identification of each certified product.

The holder undertakes to respect the QB mark's graphic charter. The QB logo and its graphic charter are available from the application administrator.

The certified product must have a distinct designation and identification from non-certified products.

The holder shall not use the QB logo except to single out certified products without there being any risk of confusion whatsoever with other products, especially non-certified products.

To prevent any confusion between certified products and non-certified products, applicants/holders must ensure that the trade names used are not identical or similar (for example: "Prod+" for a certified product and "Prod" for a non-certified product).

It is recommended that the holder remit to CSTB, in advance, any marking projects or material upon which the certification mark appears.

2.5.2 TERMS AND CONDITIONS FOR MARKING

This paragraph describes both the QB logo affixing procedure and the marking of the certified characteristics.

The requirements of article R 115-2 of the French Consumer Code stipulate that marking must comply with the provisions outlined in the following paragraphs, and whenever possible, include the following information:

Name of application

MARK LOGO

http://evaluation.cstb.fr

Identification-Durability –

and/or production consistency

It is recommended that consumers be informed about the primary reasons for and advantages of using a certified product. The certified characteristics must appear on at least one of the materials (product, packaging or communication media).

COFRAC accreditation marking can only be used with the prior written authorisation of CSTB and under the conditions expressed in the following formulation: *'Certification delivered by CSTB, benefiting from COFRAC Certification of Products and Services accreditation no. 5-0010, list of locations and scope available at www.cofrac.fr'*.

2.5.2.1 Marking/data sheets

A certified vinyl compound cannot be physically marked (granules, powder).

2.5.2.1.2 For certified vinyl compounds, manufactured and designed to be marketed *or designed to be supplied to another site of the same group*, marking with the QB logo or the letters QB (should it be proven impossible to apply the QB logo) will be affixed to the data sheet of each compound and/or on the Big Bag as of the date appearing on the approval of the right to use the QB mark.

The marking must be permanently, legibly and indelibly included on the data sheets for the certified vinyl compounds and/or on the label affixed to the Big Bag, when this type of packaging is used, with the following information:

Data sheets (L*<82 designed to be film-coated)	Data sheets (L*<82, L*≥82, non-UV-resistant)	Big Bag (recycling company)
- Identification of the holder - Trade name and/or reference - The identification characteristics - QB 34 reference - the logo or the letters QB 34 - Vinyl compound code (x numbers + Px (film-coated)	- Identification of the holder - Trade name and/or reference - The identification characteristics - Reference of the product standard to be considered (EN 12608-1) - The logo or the letters QB 34 - Vinyl compound code (x numbers (+index if needed))	- Manufacturer's ID - Identification of the manufacturing unit - RMa/ERMa/ERMb name - Production batch number - Reference to the product standard to be considered (EN 12608-1) - The QB logo or the letters QB 34 - Production site code (x numbers)

2.5.2.1.3 For certified vinyl compounds, manufactured and not marketed, which is the case for extruders-formulators (producing their own vinyl compound) *on the same production site*, it is not necessary to affix the QB logo to data sheets for each compound.

2.5.2.2 Marking on communication media and documentation (commercial documents, posters, advertising, websites, etc.) for manufactured vinyl compounds

The generic use of the QB mark through its reproduction in the holders' correspondence is forbidden, unless the holder has the right to use the QB mark.

References to the QB mark in communication material or documentation must be made in a way that does not allow for any confusion between certified products and other products. These references must include all the marking components defined in paragraph 2.5.2.: mark logo, name of the application, reference to the website and list of certified characteristics, if possible.

For the French market, this information must be provided in French (Law No. 94-665 of 4 August 1994 relative to the use of the French language). If necessary, the information can also be given in one or more other languages.

For the proper interpretation of this paragraph, the holder should be advised to submit to CSTB, in advance, all communication materials and documentation where the certification mark is expected to be used.

2.6 Conditions for terminating marking or for removing the mark in the case of suspension, withdrawal or abandonment

If any vinyl compound is produced and non-compliant, its packaging shall not be marked with the QB logo or the logo must be crossed out or concealed to prevent any risk of confusion.

In case of accidental non-compliance observed after the product has been launched on the market:

→ The industrialist is responsible for:

- Immediately informing the CSTB
- Validating the qualities/batch numbers/lead times, etc. involved
- Planning retroactive removal of the mark and possible withdrawal from the market

→ CSTB is responsible for:

- Defining the means for checking removal of the mark (customer commitment, etc.);
- Estimating the risks of improper use of the mark, for example:
  - Certification proof of compliance or failure to comply with the regulations
  - Certification on products/services at risk
  - Highly competitive market with “self-monitoring”
- Based on these risks, possible triggering of an on-site inspection (company or shop) or informing the public authorities;

Offending batch quantities and numbers must be validated.

Part 3
Certification process

3.1 General points

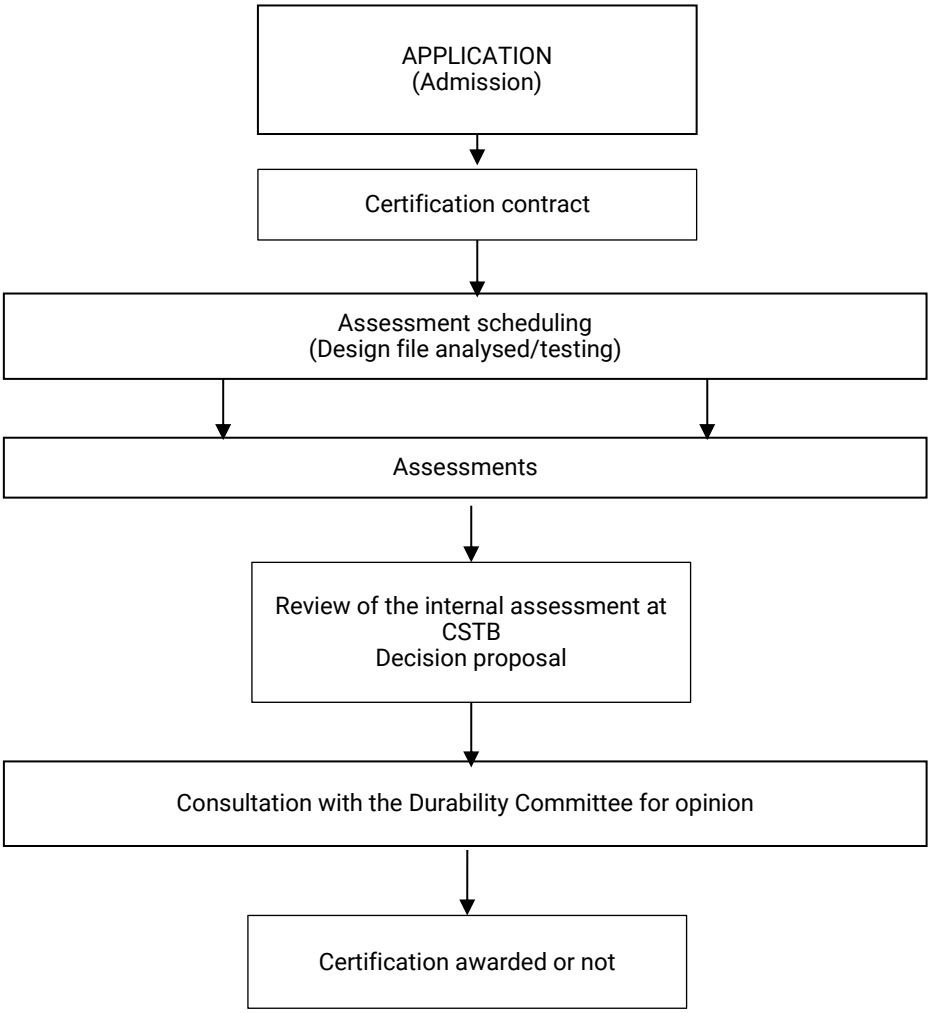
- Definition of the applicant (see part 5);
- Definitions of the different types of applications:

- A vinyl compound certification application originates from an applicant-possessor of the formula for each vinyl compound (§ 3.2 of this reference system and § 3.1 to 3.4 of the administrative appendix). This application meets the specifications in technical document no. 34-03. **This application is a prerequisite of certification applications for the production control system.**
- A vinyl compound manufacturing certification application originates from:
  - Case A: manufacturers of the certified compound, which are themselves the possessors of the formula (benefiting from the certification of the vinyl compound) (§ 3.3.1).
  - Case B: certified compound manufacturers, which are not the possessors of the formula but which are requesting authorisation to produce it (§ 3.3.2).
  - Case C: manufacturers of their own certified compound, which are themselves possessors of their formula as well as extruders.
    Note: This application is made jointly with that of the NF Mark for PVC Window Profiles (§ 3.3.2).
  - Case D: manufacturers of a reprocessed or recycled vinyl compound designed for non-visible parts of window profiles (§ 3.3.3).
- An extension application for certification of certified vinyl compound manufacturing originates from holders-manufacturers and concerns a new certified vinyl compound on the same production site.
- A new application for admission of a site for vinyl compound manufacturing following the right to use the QB mark being withdrawn as a penalty is made in the event of an act of deceptive marketing practices, in application of articles.

  L 121-2 to L 121-5 et seq. of the French Consumer Code and deception in application of Article L 433-9 of the French Consumer Code.

3.2 Certification application handling process for vinyl compounds

FROM FORMULATORS–POSSESSORS OF THE VINYL COMPOUND FORMULA



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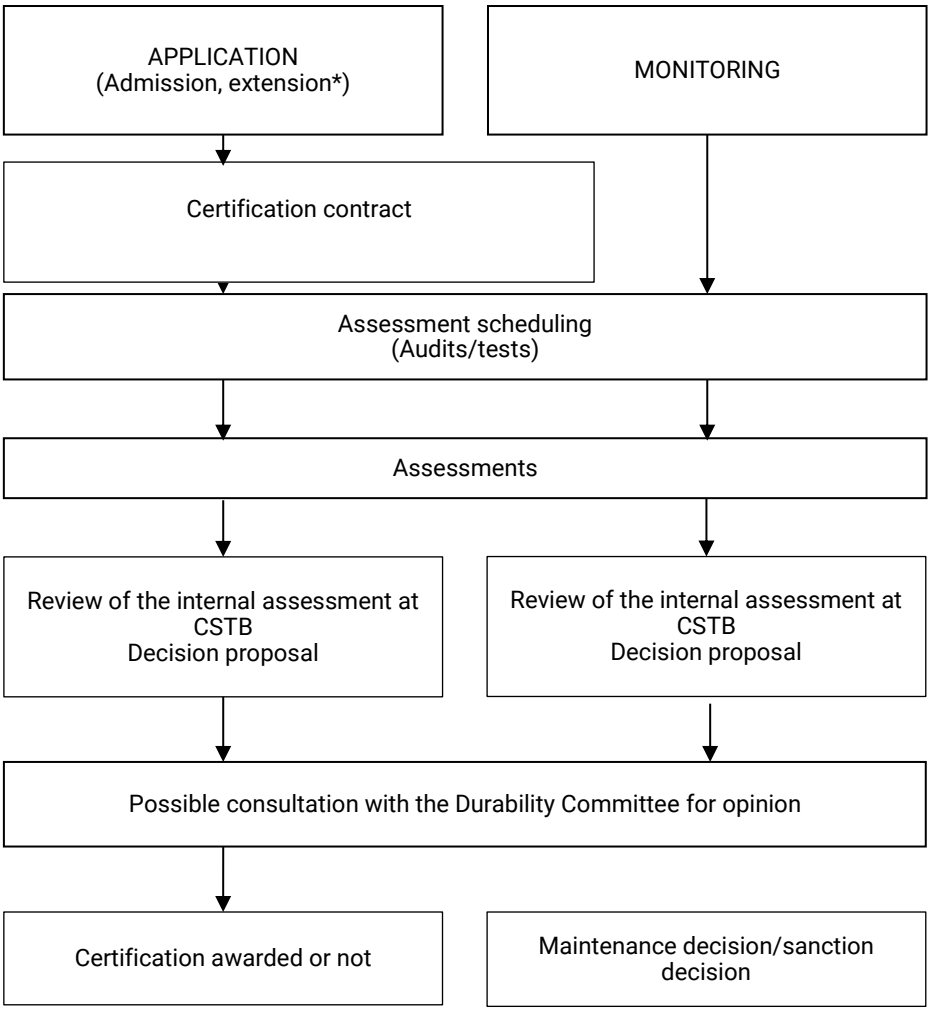
3.3 Certification application handling process for vinyl compound manufacturing

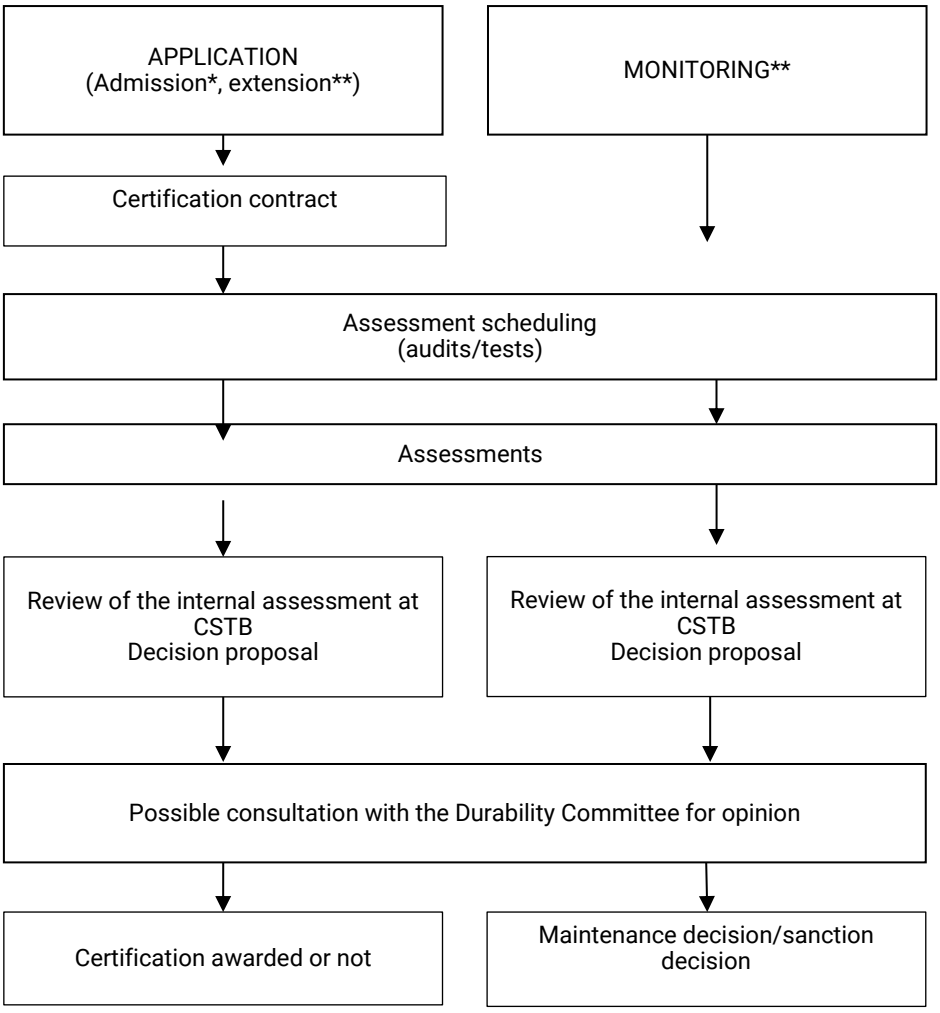
3.3.1 FROM MANUFACTURERS AND POSSESSORS OF THE CERTIFIED VINYL COMPOUND (MARKETED VINYL COMPOUND) CASE A



*any new certified vinyl compound is automatically included in the manufacturing certificate.

3.3.2 FROM CERTIFIED VINYL COMPOUND MANUFACTURERS

CASE B/CASE C



Case B: manufacturers that are not the possessors of the formula (not benefiting from the vinyl compound certificate):

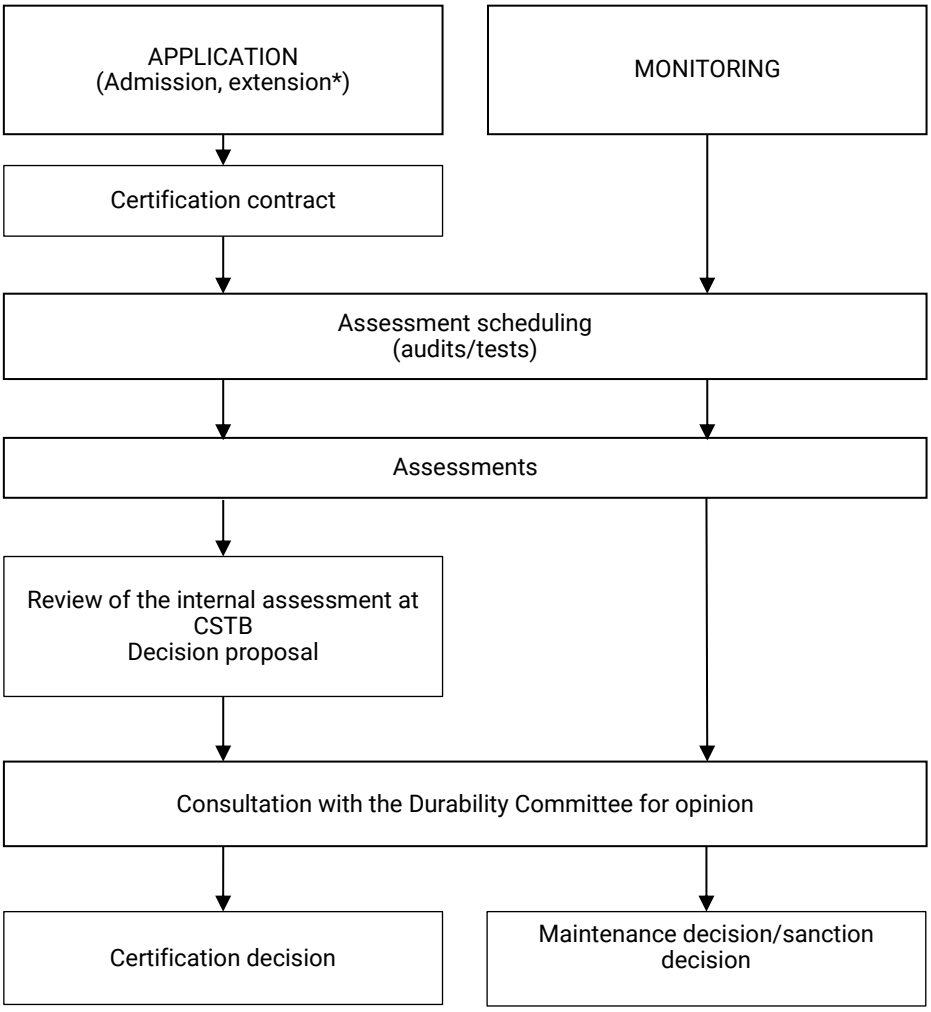
- Admission* jointly with that of the NF Mark - window profiles
- Monitoring*** audits may be carried out together with the NF Mark - window profiles audits

Case C: manufacturers-possessors of their own formula (benefiting from the vinyl compound certificate)/extruders

- Admission* jointly with that of the NF Mark - window profiles
- Extension** any new certified vinyl compound is automatically included in the manufacturing certificate
- Monitoring*** audits may be carried out together with those for the NF Mark - window profiles

3.3.3 FROM MANUFACTURERS OF REPROCESSED OR RECYCLED COMPOUNDS DESIGNED FOR NON-VISIBLE PARTS OF WINDOW PROFILES (RECYCLING SITE) -

CASE D



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*declaration of a new type of reprocessed or recycled material

3.4 Audits as part of the certification application for manufacturing a certified, reprocessed or recycled vinyl compound

3.4.1 ADMISSION AUDITS

These are conducted in the following cases:

CASE A - Initial application from manufacturers and possessors of the certified vinyl compound (marketed vinyl compound).

CASE B - Initial application from certified vinyl compound manufacturers, not possessing the formula.

CASE C - Initial application from the manufacturers and possessors of their own certified vinyl compound/extruders (non-marketed vinyl compound). This audit is conducted together with that taking place as part of the window profile Mark application.

CASE D - Initial application from manufacturers of reprocessed or recycled vinyl compounds designed for non-visible parts of window profiles.

The purpose of the audits is to make sure that the measures defined and implemented by the applicant satisfy the requirements of Part 2 of this certification reference system.

This entails checking, before admission, the existence and effectiveness of the measures taken in the quality field as well as the product quality control operations by the applicant. These are the admission audits conducted by the auditor.

All the ways and means (premises, installations, equipment) enabling the auditor to carry out the mission incumbent upon him/her, shall be placed at his/her disposal free of charge, along with persons qualified to implement them.

In the event of any dangerous situation in relation to the certifying body's safety requirements, the auditor reserves the right to withdraw.

An audit report is prepared and addressed to the applicant.

3.4.1.1 Initial admission application

The audit normally lasts 1 day per manufacturing plant.

The audit duration may be adapted according to the risk: level of development of the quality system, organisation of the company (process, laboratory, etc.).

3.4.1.2 Extension application

CASE A/C → In the case of manufacturers and possessors of certified vinyl compounds or in the case of manufacturers and possessors of their own certified vinyl compound/extruders, the tests taken into consideration are those conducted as part of the vinyl compound certification application.

➔ No extension application needs to be formulated, the reference for the certified vinyl compound is automatically added to the manufacturer's certificate.

➔ There is no audit.

CASE B → In the case of manufacturers of certified vinyl compounds, verification tests on identification characteristics are carried out (to be adapted according to the type of vinyl compound)

➔ There is no audit.

CASE D → Declaration of use of a new type of reprocessed or recycled material
Possible verification tests

➔ There is no audit.

3.4.2 FOLLOW-UP AUDITS

Follow-up audits are intended to check, following admission, that the provisions defined are still being maintained.

CASE B/C → The audit may be conducted jointly with that completed as part of the PVC window profiles Mark.

The audit report is prepared and addressed to the holder.

CASE A/D → An audit report is prepared and addressed to the holder.

Inspections

The auditor carries out at least the following audits, taking into account the information collected during the previous audit, the results of the last checks and any remarks made by the Specific Committee:

- verification of the effective application of the corrective measures announced as a result of any observations made during the previous audit;
- verification of the compliance with the holder's quality requirements set out in this certification reference system;
- verification of the self-inspection records since the last audit, statistically for at least one certified product and for the products sampled for mark laboratory tests;
- verification of the sales documents;
- verification of the changes in the characteristics of the certified products.

The audit normally lasts 1 day per manufacturing unit.

An additional half-day can be scheduled in the case of a production unit for the vinyl compound material where L* < 82, material designed to be film-coated.

The audit duration may be adapted according to the risk: level of development of the quality system, organisation of the company (process, laboratory, etc.).

3.5 Sampling

- The auditor has samples taken from stock or from the production unit as needed for testing.

The samples taken (strips or profiles) are marked with a distinctive symbol by the auditor and are sent by and under the responsibility of the applicant to the mark laboratory responsible for carrying out the tests by the deadline established at the time of sampling, unless the auditor decides to take responsibility for them.

An information sheet recording the sampling carried out is prepared on site and handed over to the applicant/holder.

In Case C, this is a common sheet prepared in the context of the NF Mark window profiles.

A copy of this sampling information sheet is automatically sent to the laboratory in charge of carrying out the tests.

It is accepted that if these samples cannot be taken, the holder will send the sample(s) requested by CSTB to the mark's laboratory, within the time required. If the holders fail to send the sample(s) to the mark's laboratory within the time required by CSTB, penalties may be applied to them (sanction, suspension).

3.6 Tests

3.6.1 ADMISSION TESTS AS PART OF THE VINYL COMPOUND CERTIFICATION APPLICATION

The tests are carried out in accordance with the standards and complementary specifications set out in Part 2 of this certification reference system.

A test report is prepared and remitted to the applicant.

The tests are carried out under the responsibility of the mark laboratory or laboratories.

Vinyl compound where L* ≥ 82

Artificial ageing (see technical document no. 34.03 § 2)

The certification application must be accompanied by samples manufactured using each vinyl compound being assessed:

- 4 x 1 m of main window profile with a chamber at least 25 mm-wide between 2 partition walls,
- 5 welded specimens (see welding factor in technical document no. 34.03 § 1) prepared using the same main profile as the 4 x 1 m pieces.

They will be sent to CSTB by the applicant and under the latter's responsibility.

Natural ageing (see technical document no. 34.03 § 2)

Samples from window profiles (1 m for exposure to ageing and 10 cm as a control*) will be sent to an independent natural ageing site no later than the month prior to examination of the dossier by the Durability Committee.

The profiles shall be marked with a distinctive sign allowing for subsequent authentication. The aged window profiles must be sent by and from the ageing station directly to CSTB for testing.

*the control profile will serve as a way of comparing the colorimetric characteristics (difference in colour and grey scale) with those of the aged sample.

Vinyl compound where L* ≥ 82 designed for overseas departments and territories

See technical document no. 34.03 § 3

Vinyl compounds designed for window profiles used in overseas departments and territories must first be certified according to the conditions defined in technical document no. 34.03.

Next, 6,000 hours of artificial ageing will take place based on moderate weather conditions.

Bulk dyed vinyl compounds where L* < 82

See technical document no. 34.03 § 4.

The following specifications apply to extruded profiles made with bulk dyed vinyl compound where L* < 8, for which durability is ensured by the vinyl compound itself.

The certification application must be accompanied by samples manufactured using each vinyl compound being assessed:

- 4 x 1 m of main window profile with a chamber at least 25 mm-wide between 2 partition walls,

- 5 welded specimens (see welding factor in technical document no. 34.03 § 4) prepared using the same main profile as the 4 x 1 m pieces.

They will be sent to CSTB by the applicant and under the latter's responsibility.

Natural ageing

The profiles shall be marked with a distinctive sign allowing for subsequent authentication. The aged window profiles must be sent by and from the ageing station directly to CSTB for testing.

The control profile (10 cm) will serve as a way of comparing the colorimetric characteristics (difference in colour and grey scale) with those of the aged sample.

Vinyl compound where L* < 82, material designed to be film-coated

See technical document no. 34.03 § 6

- Durability is not guaranteed by the vinyl compound itself.
  Suitability for use of the profiles *(thickness, position of films, etc.)* must be assessed as part of another procedure.
- The certification application must be accompanied by samples manufactured using each vinyl compound being assessed:

Artificial ageing:
- 2 x 1 m of main window profile
- 5 welded specimens (see welding factor in technical document no. 34.03 § 6) prepared using the same main profile

Natural ageing:
- 2 x 1 m of main window profile
- 5 welded specimens (see welding factor in technical document no. 34.03 § 6) prepared using the same main profile
- A control profile (10 cm) will serve as a way of comparing the colorimetric characteristics (difference in colour and grey scale) with those of the aged sample.

The profiles shall be marked with a distinctive sign allowing for subsequent authentication. The aged window profiles must be sent by/from the ageing station directly to CSTB for testing

Non-UV-resistant vinyl compound

- The certification application must be accompanied by samples manufactured using each vinyl compound being assessed:
  - 2 x 1 m of main window profile with a chamber at least 25 mm-wide between 2 partition walls,
  - 5 welded specimens (see welding factor in technical document no. 34.03 § 5) prepared using the same main profile.

3.6.2 ADMISSION TESTS AS PART OF THE CERTIFIED VINYL COMPOUND MANUFACTURE CERTIFICATION APPLICATION

CASE A/CASE B/CASE C

Sample	***Testing***
Main profile or extruded strips	Identification of the vinyl compound*: *DHC, ash content, density, Vicat needle test point temperature* Colorimetry (on profile only) Modulus of elasticity under bending stress *to be adapted according to composition type

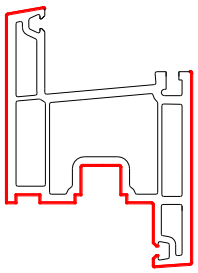
Test results are compared with the identification characteristics of the initially qualified compound.

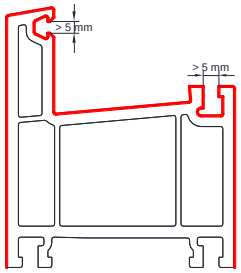
3.6.3 ADMISSION TESTS FOR CERTIFICATION APPLICATIONS FOR MANUFACTURE OF REPROCESSED/RECYCLED COMPOUNDS designed for non-visible parts of window profiles

CASE D

	Sample	***tests***
For ERMa applications	main profile or extruded strip	On the wall in reprocessed material: Vicat needle test point temperature Modulus of elasticity under bending stress
For ERMb/RMa applications	main profile or extruded strip + welded corners	On the wall in reprocessed or recycled material: Vicat needle test point temperature Modulus of elasticity under bending stress Weldability test according to NF EN 514*

**test carried out using an extruded profile containing 100% recycled or reprocessed material or using a co-extruded profile from this configuration.*





3.6.2 FOLLOW-UP TESTS ON THE CERTIFIED PRODUCT

Tests are performed in accordance with the standards and additional specifications set out in Part 2 of the certification reference system.

The tests are carried out in a laboratory of the Mark.

A test report is prepared and remitted to the holder.

CASE A/CASE B

sampling	***tests***
Main profile or extruded strips	Identification of the vinyl compound: *DHC, ash content, density, Vicat needle test point temperature* *Colorimetry: (on profiles only)* Modulus of elasticity under bending stress Identification of the non-UV-resistant vinyl compound: density, Vicat needle test point temperature modulus of elasticity under bending stress, tensile impact strength Identification of the vinyl compound where L* < 82 designed to be film-coated: density, Vicat needle test point temperature, modulus of elasticity under bending stress

CASE C

sampling	***tests***
Main profile	Identification* of the vinyl compound: DHC, *ash content, density, Vicat needle test point temperature* *Colorimetry: -* Identification of the non-UV-resistant vinyl compound: density, Vicat needle test point temperature modulus of elasticity under bending stress, tensile impact strength Identification of the vinyl compound where L* < 82 designed to be film-coated: density, Vicat needle test point temperature, modulus of elasticity under bending stress

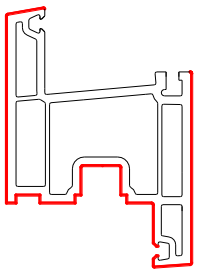
Secondary profile	Identification* of the vinyl compound: DHC, *ash content, density*

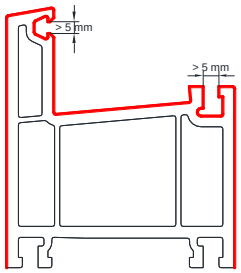
**identification on 1 single profile unless the 2 main profiles sampled were extruded using different vinyl compounds*

CASE D

	Sample	***tests***
For ERMa applications	main profile or extruded strip	On the wall in reprocessed material: Vicat needle test point temperature Modulus of elasticity under bending stress
For ERMb/RMa applications	main profile or extruded strip + welded corners	On the wall in reprocessed or recycled material: Vicat needle test point temperature Modulus of elasticity under bending stress Weldability test according to NF EN 514*

**test carried out using an extruded profile containing 100% recycled or reprocessed material or using a co-extruded profile from this configuration.*





Part 4
The stakeholders

The organisations involved in the procedure for granting the right to use the QB mark and in monitoring the certified products are specified below.

4.1 The certifying body

The QB mark is the property of the CSTB, which is a certifying body. The CSTB specifies the governance rules and the operating conditions applicable to the marks. Furthermore, it takes responsibility for the application of the reference system and the decisions made in this context.

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Baies et Vitrages (Windows and Glazing)
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2
☎: +33 (0)1 64 68 83 66

http://evaluation.cstb.fr/

Application manager chantal.sambin@cstb.fr

4.2 Audit bodies

The audit functions for the manufacturing unit and, as the case may be, on the utilisation premises are carried out by the following body(-ies), designated the audit body(-ies):

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Baies et Vitrages (Windows and Glazing)
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

http://evaluation.cstb.fr/

The auditors have the inspection right on the premises of any applicant or holder within the framework of their missions.

As part of a subcontracting agreement that CSTB has signed with the following body, the latter can conduct QB 34 audits, as requested by CSTB.

AUDIT BODIES AS SUBCONTRACTORS:

BUREAU VERITAS BP 99102 F-95310 CERGY PONTOISE CEDEX Tel. +33 (0)1 34 64 22 83	
Jean-Yves Mahe 9, rue du Vivelay 95740 FREPILLON Tel. +33 (0)7 80 05 96 06	**SKZ - GmbH testing** Friedrich-Bergius-Ring 22 D-97076 WÜRZBURG - Germany Tel. +49 931 4104 526
Kiwa Nederland b.v PO Box 70 2280 A B Rijswijk Netherlands	

Tel. +3188 998 46 16	

4.3 Test bodies

Whenever the quality assurance operations carried out within the framework of QB mark usage include tests on products, such tests are carried out at CSTB's request by the following laboratory, referred to as the laboratory of the mark:

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction DBV
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

http://evaluation.cstb.fr/

4.4 Subcontracting

The different functions described in paragraphs 4.2 and 4.3 may be carried out, after an opinion from the Durability Committee where appropriate, by other recognised auditing bodies or laboratories with which CSTB has established a sub-contracting contract.

The customer is informed of the subcontracting of a service when the assessment activity programme is established. If necessary, the client is formally informed before any activity is started.

4.5 Durability Committee

An impartial consultative authority is established called the Durability Committee, the Secretariat of which is provided by CSTB.

The Durability Committee is requested to give its opinion on the following:

- The initial draft certification reference system or the draft revised version, as specified in the French Consumer Code,
- The preparation of advertising and promotional activities that fall within its competence,
- The selection of bodies participating in the certification process, and the examination and implementation of recognition agreements.

It can be consulted about any other question pertaining to the application concerned, and in particular about any interpretation of the certification reference system with a view to taking decisions regarding dossiers in accordance with the certification reference systems and at CSTB's request.

The composition of the Durability Committee is set to respect representation between the different parties concerned, which does not lead to any of them dominating and which guarantees their relevance.

Its composition is as follows:

- A Chairperson chosen from the members of the colleges defined below;
- A Vice-President: one CSTB representative belonging to the "Technical and Administrative Bodies" College;
- Manufacturers College (Holders): from 5 to 7 representatives;

- Users'/Specifiers' college: from 4 to 6 representatives;
- Technical and Administrative Bodies College (experts): from 5 to 7 representatives.

The Durability Committee issues decision notifications and its members may not receive any remuneration for the functions entrusted to them.

The time span for the appointment of the members is 3 years. This appointment is renewable by tacit agreement for further successive periods of one year, not exceeding three renewals, unless notice of termination is given without due cause by CSTB or the member, by registered letter with acknowledgement of receipt, three months prior to the scheduled end of the ongoing period at the time of renewal.

When the three-year term is over, renewable three times for one year, a member of the committee may of course run for a new term.

The Durability Committee's Chairperson may change yearly.

The members of the Durability Committee formally undertake to maintain the confidentiality of information, particularly personal data, disclosed to them.

When appropriate, the Durability Committee may decide to set up working groups or subcommittees and define their missions and responsibilities. The composition of these working groups must be validated by the Durability Committee. The working groups are composed of at least one representative of the "Manufacturers" College, one representative of the "Users/Advisors" College and one representative of CSTB. It may call upon professionals, external individuals or holders that are not members of the Durability Committee.

Part 5
Glossary

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Admission:	Application by which applicants request for the first time the right to use the QB mark for a product; they declare that they understand this certification reference system and undertake to respect it.
Applicant/Holder:	Legal entity that controls and/or is responsible for respecting all the requirements defined in the QB mark certification reference system. These requirements cover at least the following steps: design, manufacture, assembly, quality control, marking, packing and market release and specify the critical points in the different steps. Any person who modifies the container and/or content of the product (for example, packets or loose cement distribution) becomes an applicant and may not be considered as a retailer. Therefore, this person must make a usage right admission application.
Certification Reference System:	Technical document which defines the characteristics that a product, a service or a combination of products and services shall have, and the methods for inspecting the conformity with these characteristics, as well as the methods for communicating on the certification (including the content of the information).
Certification Scheme:	Specific certification system for well-defined products to which the same specified requirements, and specific rules and procedures apply.
Complementary admission:	Application by which a holder wants to benefit from the right to use the QB mark for a new product or a new production entity.
Extension:	Application by which a holder requests the extension of their right to use the QB mark for a certified product whose characteristics have been modified.
Granting of the right to use the QB mark:	Authorisation granted by CSTB to an applicant to affix the QB mark on the product for which the application has been submitted.
Product:	Element resulting from a process or manufacturing process coming from a specific manufacturing unit, defined by a trademark and/or a specific trade reference with specific technical characteristics.
Receivability:	Study of a dossier which enables the application to be examined. The receivability relates to the administrative and technical parts of the dossier.
Renewal:	Application by which the holder requests the renewal of their right to use the QB mark before the validity of their QB certificate ends.

Representative:	Public body or individual based in the EEA who represents the applicant/holder outside the EEA and has a written mandate from them signifying that they may act on their behalf and specifying under which context (missions and associated responsibilities and financial aspects, complaints, contact for the certifying body, among others) in the QB mark certification process according to the provisions in the certification reference system. The representative may be the distributor or importer; their different functions are clearly identified. The representative concept is vital once applicants are outside the EEA. Depending on the markets, the distributor concept may not be relevant.
Suspension:	Decision communicated by CSTB which cancels the authorisation to use the QB mark temporarily and for a specified period of time. The suspension may be issued as a sanction or in the event that the right to use the QB mark is temporarily abandoned by the holder. Suspension is accompanied by the prohibition on affixing the mark to future production. It shall be for a maximum period of 6 months, renewable once, following which a withdrawal of the right to use the QB mark shall be announced if no action has been initiated by the holder. The sanction notifications which affect the usage right (suspension/withdrawal) are signed by CSTB Management.
Warning:	Non-suspensive penalty notified by CSTB. The product is still marked, but the holder must correct the deviations observed within a defined time period. When a warning is accompanied by an increase in the number of inspections, the actions must be launched within a defined time period. The warning may only be renewed once.
Withdrawal of the usage right:	Decision communicated by CSTB to cancel the right to use the QB mark. A withdrawal may be pronounced as a sanction or in the case of abandonment of the QB mark usage right by the holder.