SPCR 121

SP's rules for

Assessment and Verification of Constancy of Performance according to CPR

SP Sveriges Tekniska Forskningsinstitut
SP Technical Research Institute of Sweden
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Abstract

A manufacturer can apply the CE-mark on Construction Products after performing necessary activities as described in the Regulation (EU) No 305/2011 - Construction products, CPR.

This document describes the activities and products where SP is acting as a Notified Body.

The activities for testing, certification and inspection are in line with ISO/IEC 17025, ISO/IEC 17065 and ISO/IEC 17020.

The technical requirements on the construction products are based on harmonized standards or European Technical Assessments.

Key words: certification, assessment, verification, CE-mark, construction products, CPR, Regulation 305/2011

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Foreword

This document contains rules for assessment and verification of constancy of performance of construction products that are covered by REGULATION (EU) No 305/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, CPR. The document presents the systems that are applied by SP acting as a notified body.

All evaluation and testing is done based on harmonized standard, hEN, or European Technical Assessment, ETA.

The rules are revised as necessary to suit new and revised harmonized standards/European technical assessments/normative documents. Revision may also be necessary if new regulations are introduced or as a consequence of experience gained from the application of the system, within the framework of the Directive.

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1 Introduction

1.1 General

Certification of products and quality systems at SP are conducted in accordance with SS-EN ISO/IEC 17065 or SS-EN ISO/IEC 17021. The tests that are carried out as a basis for certification are carried out in accordance with SS-EN ISO/IEC 17025. Control or inspection of manufacturing processes is conducted according to SS-EN ISO/IEC 17020. SP is a notified body, i.e. with authorisation to perform duties (testing, control/inspection, certification) with respect to various directives and regulations, among which CPR.
In these rules, terms such as *Assessment and verification of constancy of performance* are used, which can be equated with the term certification.

1.2 Assessment of performance according to CPR

Assessment and verification of constancy of performance of construction products, CE marking etc. are controlled by the Regulation (EU) No 305/2011 of the European Parliament and of the Council, also called the Construction Products Regulation or CPR. In this document, the general term CPR is used.

1.3 Scope and definitions

These rules cover procedures according to the following for assessment and verification of constancy of performance of construction products pursuant to CPR, with the aim of issuing basic data the manufacturer can use to prepare a declaration of performance and CE mark the products. The products shall be covered by an harmonized European standard, hEN, or a European Technical Assessment, ETA.
The conditions for the respective procedures are described in the sections 2-4 in this document. The hEN/ETA in question specifies which procedure(s) are applicable for the product. Some hEN/ETAs give the option for different procedures. In which case, it is frequently the application that controls which of the procedures is suitable.

- Systems AVCP 1 and 1+. Assessment of constancy of performance of the construction product according to CPR appendix V 1.1 and 1.2. See section 2 in these rules.

- System AVCP 2+. Assessment of the conformity of the factory production control according to CPR appendix V 1.3. See section 3 in these rules.

- System AVCP 3. Assessment of performance (type testing) according to CPR appendix V 1.4. See section 4 in these rules.

In CPR, there is also System AVCP 4. This system does not have any duties for the notified body and, for this reason, is not discussed in these rules.

2 Systems AVCP 1 and 1+ Assessment of constancy of performance of the construction product

2.1 General

This procedure can be likened to a product certification, where the product is type examined and a review and assessment of the manufacturer's own control is conducted. The procedure follows CPR appendix V, items 1.1 and 1.2 respectively.

The manufacturer

- conducts the factory production control
- conducts further testing of random samples taken from the production plant according to the established sampling plan
- prepares a declaration of performance.

SP, acting as a notified body, conducts

- an assessment of the performance of the construction product on the basis of testing (incl. random testing), calculation, tabulated values or descriptive documentation of the product
- an initial inspection of the production plant and factory production control
- continuous monitoring, assessment and evaluation of the factory production control
- audit testing, where it concerns AVCP +1, of random samples taken by the notified product certification body in the production plant or in the manufacturer's warehouse.

2.2 The assessment process

2.2.1 Applications

Assessment applications shall be in writing. A special application form is available on SP's website. The application shall contain

- the manufacturer's name and address and, if the application is lodged by an authorised representative, his name and address as well.
- information about the product, including reference to the hEN/ETA selected in order to specify the product's performance.

Basic data to describe, among other things, design, production and way of working shall be enclosed with the application. This means that the basic data in appropriate sections shall contain

- a general description of the construction product including drawings and specifications
- test reports, calculations, opinions (if applicable)
- information and address to the production site(s)
- a description of the system for production control/FPC system (can be a quality manual or equivalent)
- information about current certifications
- information about important production conditions, such as, for example, significant subcontractors and outsourced processes.

All documents including drawings, product descriptions, etc. are to be given a name or number and date and date of last revision.

2.2.2 Review of application

When reviewing the application, SP checks that the application is complete and that the application can be handled within SP's duty as notified body. The review may mean that the SP cannot accept the assignment, which is then communicated to the customer with a justification.
If the application is rejected, SP is obliged to inform the applying authority (Swedac) of this.
If the application is adopted, this is communicated to the customer through an order confirmation being sent to the customer. An evaluation plan is established. The hEN/ETA in question constitutes as a rule the evaluation plan. If a subcontractor must be engaged, this is communicated to the customer. The customer is entitled to object to the selected subcontractor.

2.2.3 Evaluation

The evaluation process consists of two parts:

1. Evaluation of the product's performance

Prior to type testing, a sampling plan is prepared. The samples shall be taken by SP or subcontractor appointed by SP. Samples can be taken in connection with the initial inspection of the production plant and factory production control.
The evaluation is performed by means of an assessment of the construction product's performance on the basis of testing, incl. random testing, calculation, tabulated values or descriptive documentation.
During type testing, a check is made that the product meets the performance requirements required by the hEN/ETA. It is the least of the mandated properties that shall be assessed. The process includes tests and examinations that are carried out to the extent specified in the standard. In some cases, previous test results can be used for evaluation. The requirements for these tests include that they shall have been carried out by an accredited independent testing laboratory and that the samples have been taken in a correct manner.
The test results are reported in one or more test reports that become a part of the basis for the evaluation.

2. An initial inspection of the production plant and factory production control

During this process, by means of a visit is to the manufacturer's premises, an assessment and audit is made of the system for self-monitoring (also called FPC, Factory Production Control). The assessment is done by random sampling of the activities. The results are presented in an inspection report, where any nonconformities are presented. The manufacturer shall remedy the nonconformities and report to SP. All nonconformities shall be remedied and the measures taken approved by SP before the process can proceed.

The end phase of the evaluation consists of a comprehensive assessment of the results from the type testing and assessment of the production control. If the results of the evaluation show that the product and the system for factory production control meet the requirements in the standard, the process proceeds to review.

An agreement regarding the continuous monitoring of the factory production control is drawn up between SP and the manufacturer.

Regarding system AVCP 1+, the agreement also included information about the conditions for the audit tests.

2.2.4 Review and decision

The evaluation work is reviewed, and following successful results, the process proceeds to the decision phase. When a decision on certification has been taken, a *Certificate of constancy of performance* is issued and sent to the customer. This can be used as part of the input required to prepare a declaration of performance and CE mark the product.

2.3 Certificate of constancy of performance of the construction product

2.3.1 Validity

Certificates of constancy of performance of the construction product apply until further notice of the condition that

- the continuous monitoring of the manufacturer's system for factory production control is according to the established plan
- the manufacturer's factory production control is conducted according to plan
- the product is unchanged
- the hEN/ETA in question is valid
- the manufacturing conditions are not changed materially.

2.3.2 Changes to certified products and/or FPC

Note that no changes may be made to the certified product, without this being assessed and approved by SP. This applies for the properties assessed by SP during the evaluation. The manufacturer must therefore notify SP of any such planned changes to the certified product. Along with this notification, a description of the changes along with the addition of the technical data is attached. SP will then assess what measures need to be made in order for the certificate to remain in force after such changes have been made. The assessment may result in additional tests having to be performed. In this case, the manufacturer must be notified thereof and may then also be given a price quotation. If the result of the change means that the certificate is still valid, the certificate is revised with the new data.

The same applies for the manufacturer's system for factory production control. Large changes in organisation and/or the system for factory production control shall be reported to SP for assessment. Large changes involve, for example, move of the production, introduction of new technology or new mechanical equipment.

3 System AVCP 2+ Assessment of the conformity of the factory production control

3.1 General

This procedure involves a review and assessment of the manufacturer's factory production control. The procedure follows CPR appendix V, item 1.3.

The manufacturer

- performs an assessment of the performance of the construction product on the basis of testing (incl. random testing), calculation, tabulated values or descriptive documentation of the product
- perform the factory production control
- carries out testing of random samples taken by the manufacturer from the production plant according to the established sampling plan
- prepares a declaration of performance.

SP, acting as a notified body, conducts

- an initial inspection of the production plant and factory production control
- continuous monitoring, assessment and evaluation of the factory production control.

3.2 The assessment process

3.2.1 Applications

Assessment applications shall be in writing. A special application form is available on SP's website. The application shall contain

- the manufacturer's name and address and, if the application is lodged by an authorised representative, his name and address as well.
- information about the product, including reference to the hEN or ETA selected in order to specify the product's performance. If appropriate, a copy of the ETA in question shall be enclosed.

Basic data to describe, among other things, design, production and way of working shall be enclosed with the application. This means that the basic data in appropriate sections shall contain

- information and address to the production site(s)
- a description of the system for production control/FPC system (can be a quality manual or equivalent)
- information about current certifications
- information about important production conditions, such as, for example, significant subcontractors and outsourced processes.

All documents including drawings, product descriptions, are to be given a name or number and date and date of last revision.

3.2.2 Review of application

When reviewing the application, SP checks that the application is complete and that the application can be handled within SP's duty as notified body. The review may mean that the SP cannot accept the assignment, which is then communicated to the customer with a justification.
If the application is rejected, SP is obliged to inform the applying authority (Swedac) of this.

If the application is adopted, this is communicated to the customer through an order confirmation being sent to the customer.

3.2.3 Evaluation

The evaluation consists of an initial inspection of the production plant and factory production control. During this process, by means of a visit is to the manufacturer's premises, an assessment and audit is made of the system for self-monitoring (also called FPC, Factory Production Control). The assessment is done by random sampling of the activities. The results are presented in an inspection report, where any nonconformities are presented. The manufacturer shall remedy the nonconformities and report this to SP. All nonconformities shall be remedied and the measures taken approved by SP before the process can proceed.

If the results of the evaluation show that the product and the system for factory production control meet the requirements in the standard, the process proceeds to review.

An agreement regarding the continuous monitoring of the factory production control is drawn up between SP and the manufacturer.

3.2.4 Review and decision

The evaluation work is reviewed, and following successful results, the process proceeds to the decision phase. When a decision on certification has been taken, a *Certificate of Conformity of the Factory Production Control* is issued and sent to the customer. This can be used as part of the input required to prepare a declaration of performance and CE mark the product.

3.3 Certificate of Conformity of the Factory Production Control

3.3.1 Validity

Certificates of conformity of the factory production control apply until further notice of the condition that

- the continuous monitoring of the manufacturer's system for factory production control is according to the established plan
- the manufacturer's factory production control is conducted according to plan
- the hEN/ETA in question is valid
- the manufacturing conditions are not changed materially.

3.3.2 Changes to the system for factory production control or organisation

Large changes in organisation and/or the system for factory production control shall be reported to SP for assessment. Large changes involve, for example, move of the production, introduction of new technology or new mechanical equipment.

4 System AVCP 3 Assessment of performance (type testing)

4.1 General

This procedure is a type test of specified properties and, in the true meaning of the word, not a certification. The procedure follows CPR appendix V, item 1.4.

The manufacturer

- perform the factory production control
- prepares a declaration of performance.

SP, acting as a notified laboratory, conducts

- an assessment of the performance on the basis of testing (based on random samples taken by the manufacturer), calculation, tabulated values or descriptive documentation of the construction product.

4.2 The testing process

4.2.1 Orders

Assessment orders shall be in writing. A special order form is available on SP's website. The order shall include:

- the manufacturer's name and address and, if the order is placed by an authorised representative, his name and address as well.
- information about the product, including reference to the hEN/ETA selected in order to specify the product's performance

The order shall also contain information on the properties that shall be tested. The manufacturer provides test examples to the extent required.

4.2.2 Testing

The testing or equivalent (calculation, tabulated values or review and assessment of descriptive documentation) of the properties selected by the manufacturer is conducted according to the hEN/ETA in question. The results are presented in both a detailed test report and a summary report, which can include results from several different tests.
The report can be used as part of the input required to prepare a declaration of performance and CE mark the product.
Note, the test results only apply for the examples tested. Any changes to the product or the product type may mean that supplementary testing must be done.

4.3 Marking

The CE marking of construction products is the responsibility of the manufacturer. In those cases where SP has participated in the role of notified body, in system AVCP 3 (also for 1, 1+ and 2+), SP's ID number as notified body (0402) shall be placed adjoining the CE mark. Only the products that comply with the CPR may be marked.
Misuse of SP's ID number could lead to legal action.

5 General terms for systems AVCP 1, 1+ and 2+

5.1 General

The terms below apply for these rules and, in the main, agree with SP's general terms for certification of products. The word Certificate shall be equated with *Certificate of constancy of performance of the construction product* and *Certificate of conformity of the factory production control*. Certification shall be equated with *Assessment of constancy of performance of the construction product* or *Assessment of the conformity of the factory production control*.

5.2 Marking

The CE marking of construction products is the responsibility of the manufacturer. In those cases where SP has participated in the role of notified body, in the systems AVCP 1, 1+ and 2+ (and 3), SP's ID number as notified body (0402) shall be placed adjoining the CE mark. Only the products that comply with the CPR may be marked.
Misuse of SP's ID number could lead to legal action.

5.3 Certificate

The validity of the certificate is based on continuous compliance with the conditions. Certificates are not transferable. Copies of certificates and associated documents may only be reproduced in their entirety, unless otherwise agreed with SP.

5.4 Responsibility

The certificate holder is responsible for

- ensuring that the products covered by the certificate and that are marked, comply with changes according to the current certification.
- complying with all other conditions in the certification and the changes that are announced
- not providing misleading information about the scope of the certification and conditions to prevent trust in the certification and SP from being undermined.

SP is responsible for

- certification rules being updated and up-to-date
- certification being conducted with requisite competence
- announcing changes in certification rules and conditions.

SP has no responsibility for certified products.

5.5 Withdrawal of certificate

SP, either definitely or permanently, can withdraw a certificate if

- the product no longer meets the requirements
- errors in the certificate come to light
- the requirements for continual monitoring are not met
- the factory production control shows serious shortcomings
- short-comings in the factory production control are not remedied in the time prescribed
- failed results in control testing included in the continuous monitoring
- the product is not suited to their end purpose or can cause injury or problems
- change is made to legislation, regulations or similar
- the authorities or coordinating body for a notified body recommends SP to do so

- the holder has used the certificate inappropriately or in connection with products that do not meet the demands of or are not covered by the certificate
- fees are not paid within the time prescribed
- the certificate holder is declared bankrupt, enters into liquidation or transfers the business
- the holder is in breach of the conditions for the certificate.

If the certificate is withdrawn, the holder of the certificate is obliged to cease immediately all reference to the certificate in any declaration of conformity and can no longer cite the certificate as grounds for CE marking its products.

5.6 Changes to products, quality systems, organisation, production conditions

5.6.1 General

Prior to changes in design, material or manufacture, the certificate holder is obliged to inform SP, which will then assess whether the changes are such that new tests and a new assessment are required. This also applies to quality systems where certificates refer to such. See more under 2.3.2 and 3.3.2.

5.6.2 Change to standards

When an hEN is updated to an new issue, the manufacture shall adapt its products and/or FPC system to comply with the requirements according to the new issue of the standard. As a rule, there is a transition period, during which the adaptation shall be done. The new issue of the standard may mean a supplementary evaluation of the product must be done. In this case, the manufacturer applies to SP for supplementary evaluation of the product (AVCP systems 1 & 1+). Adjustment of the FPC system is reviewed during the follow-up control. When SP is sure that the manufacturer has adapted to the new issue of the standard, the certificate is revised and reference made to the new issue. If an adjustment has not been made before the transition period expires, the certificate may be withdrawn.

5.6.3 Break in production

If a manufacturer, for some reason, institutes an extended break in production (longer than approx. 6 months), this shall be reported to SP. If the break in production means that the continuous monitoring cannot be carried out according to plan, the certificate can be declared dormant. This means that the manufacturer cannot cite the certificate before SP has conducted a review of the FPC system on site. In this case, the certificate is not removed from the list of valid certificates. If the break in production lasts longer than 24 months, the certificate is declared to be temporarily withdrawn. In this case, the certificate is removed from the list of valid certificates. A new initial visit is required in order for the certificate to be valid once again.

5.7 Confidentiality

SP keeps a register of certificate holders, certificates, certified products and certified product systems, production sites, validity time for certificates etc. This information may be published, e.g. on SP's websites. SP may provide copies of or publicise certificates. SP may also publicise decisions on the withdrawal of certificates and the misuse of certificates or marking. Other information is protected by confidentiality.
As a notified body, SP is in some cases obliged to reveal information on certificates to other notified bodies and applicable authorities, according to article 53 in CPR.

The manufacturer, or its representative, shall ensure that SP, the control body that SP has approved, or observers (e.g. from the accreditation body) have access to premises and access to documents that are needed to perform the duties described in the sections 2-3.

5.8 Fees

Fees are set according to agreement and shall be paid by the certificate holder. Costs for work resulting from non-conformance in the continuous monitoring shall be paid by the certificate holder.
Application and registration fees are normally not reimbursed when an assignment is cancelled or a certificate cannot be issued. In the case of assignments that are not estimated to be completed within a month of the project start, SP has the right to issue regular (monthly) invoices for costs to date.

5.9 Appeals

Appeals against SP decisions shall be in writing. Decisions on measures necessary as a result of appeals are taken by the SP Certification board.

6 Special terms for systems AVCP 1, 1+ and 3+

According to article 46 in the CPR, in some cases type testing can take place outside the notified body's laboratory, e.g. at the client's or at another location. For this to be possible, it requires among other things

- that there shall be special reasons why the test is not performed in the laboratory
- that the element field testing is included in SP's duties as notified body, for the test in question.

If testing is wanted outside of the laboratory, please contact SP for further information.

7 History

2016-04-13 First issue (In Swedish)
2016-05-24 English version issued, (including some minor changes in the Swedish version)