CNBOP-PIB

CERTIFICATION DEPARTMENT

REQUIREMENTS FOR FACTORY PRODUCTION CONTROL OF CONSTRUCTION PRODUCTS PLANNED FOR NATIONAL CERTIFICATION OF CONSTANCY OF PERFORMANCE

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CENTRUM NAUKOWO-BADAWCZE
OCHRONY PRZECIWPOŻAROWEJ
im. Józefa Tuliszkowskiego
PAŃSTWOWY INSTYTUT BADAWCZY
ul. Nadwiślańska 213, 05-420 Józefów

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This document is used for the purpose of carrying out the inspection of factory production control of construction products subject to national certification referred to in Art. 5 sec. 2 of the Construction Products Act (construction mark), where the process of national assessment and verification of constancy of performance is carried out on the basis of Polish Standards[1] of a product which do not include requirements related to factory production control and where the requirements related to factory control are not set out in the national technical assessment of the product or in a situation where the manufacturer declares, directly before or during the inspection, an interest in covering the scope of the inspection with additional products for which no national technical specification will be available on the day of the inspection (Polish Standard which does not have the status of a withdrawn standard or national technical assessment).

This document was developed on the basis of the requirements of factory production control set by national technical assessments issued by CNBOP-PIB.

2. Factory Production Control (FPC)

Factory production control (hereafter FPC) means documented permanent and internal control of production at a manufacturing plant. The purpose of FPC is to ensure reproducible production and that products, placed on the market or made available on the national market of construction products, to the extent corresponding to their performance and intended use, will be in accordance with the National Technical Assessment. The manufacturer of the construction product is responsible for organizing the FPC system.

2.1. General provisions

The manufacturer shall establish, implement, document and maintain a factory production control system. All elements of the factory production control adopted by the manufacturer should be subject to systematic review, updating and improvement (if applicable).

Factory production control should include:

a) policies, procedures, instructions, forms, prints (if applicable);
b) inspections, tests, evaluations, verifications, checks (if applicable); and
c) use of the aforementioned to inspect raw materials and other incoming materials or components, equipment, the manufacturing process and the construction product.

Factory production control should take into account the special conditions of the production process of a construction product.

The manufacturer should delegate activities to a person with the appropriate competence and authority to:

a) identify procedures to demonstrate product conformity at appropriate stages;
b) identify and record any case of nonconformity;
c) identify procedures to correct cases of nonconformity.

Where subcontracting occurs, the manufacturer should maintain complete control over the product and ensure that it receives all information (e.g., protocol, report, report, certificate) necessary to fulfill its obligations in accordance with these requirements.

If a construction product is partially designed, manufactured, assembled, packaged, processed and/or labelled under a subcontract, the subcontractor's FPC may be included in the reference to the product in question, where applicable.

NOTE: A manufacturer that subcontracts all of its activities cannot transfer responsibility for them to a subcontractor.

[1] m. in. PN-EN 54-31, PN-EN 13565-1, PN-EN 50291-1, PN-EN 60947-1, PN-EN 60947-3, PN-EN 15276-1

2.2. Supervision over documentation

The manufacturer in the FPC documentation should specify the method of supervision and the duration of documentation storage. The manufacturer should ensure that the documentation:

a) is up-to-date;
b) b) allows for its identification, e.g. through the use of numbers, dates of issue, titles;
c) is on an appropriate medium (e.g., paper or electronic);
d) (d) is subject to periodic review to verify its timeliness, relevance and adequacy.

In addition, the manufacturer should ensure that the documentation is:

a) available where it is needed;
b) adequately protected (e.g., integrity, confidentiality);
c) stored in a manner that ensures that it will not be destroyed or become unreadable;
d) archived and destroyed (if applicable).

2.3. Management reviews

The manufacturer in the FPC documentation should specify the method of planning and implementation of management reviews. Management reviews should be carried out at regular intervals, but not less than once a year. Management reviews should include in their scope at least:

a) issues regarding factory production control;
b) product quality problems;
c) complaints;
d) the need to improve areas related to the production of the product.

2.4. Personnel

The manufacturer in the FPC documentation should specify how to plan and implement training and qualification of personnel. The manufacturer should:

a) identify the position(s) that is (are) responsible for all FPC activities;
b) ensure that personnel performing work affecting product conformity have, in relation to the work undertaken, the necessary knowledge, skills and experience to complete the work in a satisfactory and safe manner;
c) establish the appropriate level of required competence, authority, responsibility and mutual dependence among personnel who manage, verify and perform work affecting the conformity of the product with the National Technical Assessment;
d) establish appropriate methods to ensure the improvement of personnel competence;
e) maintain information on personnel competence, e.g., in the form of documented records of education, training, experience and/or skills.

2.5. Measurement equipment

All equipment used for weighing, measuring and testing shall be calibrated or checked and regularly inspected in accordance with documented procedures, frequencies and criteria, which should at least describe:

a) frequency of calibrations, checks and inspections;
b) criteria for calibrations, checks and inspections;

c) rules for access to measuring equipment;
d) conditions for use of measurement equipment.

For measuring equipment, the following should be specified and available:

a) calibration/check status;
b) calibration/check records;
c) the method of marking the equipment indicating at least the date of the next/next calibration/check; and
d) the identifying symbol from the list of control and measurement equipment.

The manufacturer should specify (if applicable) how to supervise the required environmental conditions that have been specified for monitoring and measurement.

2.6. Manufacturing equipment

Equipment used in the production process should be regularly inspected and maintained to ensure that use, wear or damage will not cause discrepancies in the production process.

The manufacturer should document inspection and maintenance activities, according to the relevant documentation and FPC, and records should be kept for a predefined period of time.

2.7. Supervision of equipment

The manufacturer in the FPC documentation should specify the rules for the use, storage and maintenance of measurement and production equipment. The manufacturer should:

a) have adequate means and equipment to carry out all activities to ensure the proper level (i.e., the level not less than that identified in the test results used by the TAB) of the manufactured construction product, and the measurement equipment used should ensure measurement consistency and the required accuracy;
b) ensure that the means and equipment indicated in a) are maintained in readiness for their intended use; up-to-date instructions on the use, storage and maintenance of the equipment should be readily available to the personnel using the equipment;
c) ensure (when necessary) calibration of the equipment before putting it into service, and thereafter, in accordance with the established schedule, perform periodic calibration/checking of the equipment;
d) ensure that measurement equipment is properly protected against adjuncts that could invalidate measurement results;
e) protect measurement equipment from damage and deterioration during movement, storage and use; defective equipment must be taken out of service and must be stored in a manner that prevents its use;
f) examine the effect of a detected defect in measuring equipment on the results of previously performed measurements to determine their impact on the quality of previously manufactured construction products;
g) ensure that records are made of activities carried out with respect to measurement equipment (e.g., identification, calibration, checking and maintenance); these records should be kept for at least the period of validity of the NTA.

The equipment calibration schedule should be arranged and carried out in such a way as to ensure, where applicable, that the measurements made by the manufacturer are linked to state, international standards of measurement units or national metrological units, if attainable.

The reference standards that the manufacturer owns and uses should be used only for checking. They should be calibrated by a competent unit that can provide a link to the state or international standard of the unit of measurement.

If correlation with state or international standards is not possible, the manufacturer should provide satisfactory proof of correlation or accuracy of measurement results. The certificate of calibration of control and measurement equipment should include the necessary values of uncertainty and expansion factor k. In justified cases, equipment in use should be checked between the dates of subsequent calibrations. In justified cases, stored equipment, to detect deterioration in its condition, should be evaluated at appropriate intervals.

If the manufacturer uses electronically controlled instrumentation in connection with its production, it should ensure:

a) the ability/suitability of the computer software used to measure the specified requirements for its intended use. This should be done prior to use;
b) testing of the computer software to confirm its suitability;
c) establishment and implementation of procedures to protect integrity of data;
d) maintenance of computers and automated equipment in a manner that ensures their proper operation;
e) establishment and implementation of data security procedures.

2.8. Materials and components

The manufacturer shall specify in the FPC documentation the method of inspection to ensure that all accepted materials and components comply with the technical specifications specified by the manufacturer.

The manufacturer should ensure that the inspection and its schedule are documented. When used in a set of supplied subassemblies, the level of conformity assessment of that subassembly should be as specified in the relevant technical specification for that subassembly.

2.9. Design process

The manufacturer in the FPC documentation should specify how to document the stages of product design, its verification and the persons responsible for all stages of design.

The manufacturer should:

a) ensure keeping records of all checks, their results and any corrective actions taken regarding the design process;
b) ensure that the records listed in a) are sufficiently detailed and accurate to demonstrate that all stages of the design phase and all checks have been successfully completed.

2.10. Controls during the production process

The manufacturer in the FPC documentation should specify the manner of planning and implementation of production with appropriate control conditions.

2.11. Testing and assessment of the product

The manufacturer in the FPC documentation should specify a course of action that ensures that the specified performance characteristics (in accordance with the control schedule) are constant.

2.12. Handling, storage and packaging

The manufacturer in the FPC documentation should specify the method of packaging and protection of the construction product to prevent damage or alteration of its performance characteristics specified in the National Technical Assessment. The manufacturer shall:

a) conduct periodic control of the condition of the stored construction product to detect any damage or change in its performance characteristics (if applicable);
b) determine and guarantee the proper environmental conditions for storing the product and monitor them if necessary;
c) determine and guarantee the special conditions of transport.

2.13. Traceability of products

The manufacturer in the FPC documentation should specify how to ensure that individual products and their parts or batches of products are traceable. The manufacturer shall:

a) keep records for individual products or batches of products, including production and testing information;
b) have the ability, based on the records, to reconstruct all relevant information about the product and its production process. These records should be kept for at least the validity period of the NTA.

2.14. Non-compliant products

The manufacturer in the FPC documentation should specify the treatment of non-compliant products. Any instances of nonconformity should be recorded after they arise, and these records should be kept for at least the validity period of the National Technical Assessment. The manufacturer shall keep at least the information that:

a) describe the non-conformity;
b) describe what actions the manufacturer has taken to address the non-conformity;
c) describe whether and what deviations were used;
d) identify the position that determines the actions in relation to the identified non-conformity.

2.15. Corrective actions

The manufacturer in the FPC documentation should specify the course of action to avoid recurrence of non-conformities. The procedure should include activities related to:

a) supervision of non-conformities;
b) correcting non-conformities;
c) consequences of non- conformities.

The procedure should further include activities related to:

a) review and analysis of identified non-conformities;
b) determining (if possible) the causes of the identified non-conformities;
c) determining (if possible) whether the identified non-conformities may have occurred previously.

The manufacturer should ensure that:

a) appropriate actions related to non-conformities will be implemented;
b) corrective actions related to non-conformities will be subject to verification of their effectiveness;
c) compliance of the product with the requirements after removal of non-conformities will be verified;
d) appropriate changes will be made to the factory production control system.

2.16. Complaints

The manufacturer in the FPC documentation should specify how to deal with complaints. FPC documentation should include complaints reported by product customers and submitted by the manufacturer to suppliers of materials and components (subassemblies) used in the production. The manufacturer should:

a) take action on any complaint filed;

b) store and archive records related to the complaints.

The manufacturer should keep all records of product complaints and corrective actions regarding these complaints for at least the validity period of the National Technical Assessment.

2.17. Marking

The manufacturer in the FPC documentation should specify the FPC documentation how to mark the product. The manufacturer shall ensure that:

a) marking of the product will be carried out according to the applicable national technical specification;

b) other marking applied to the product will not be misleading.

THE END